		В	allesti	ra					S	KETC	HES MATERIAL LIST		PRO	J: 1E35	5	REV: 0	13/04/2010
	PUMA5	i		13/04/2	010 11.4	7.03							DOC	: 1E35	5-65-029	•	•
			Bal	lestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp	: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. clas	s Component				Gen. Bolt	Weight (Kg) As.l	bly Branch
1493	1/2	0	In	2,77		mm	,00	7,00	_	202	Pipe ASME B36.10 THRD-M NPT Se	amless API	5L GR. B		Jen 2010	8,86	
1495	1	0	In	3,38		mm	,00	37,70	m	202	Galvanized Pipe ASME B36.10 THRD-M NPT Se	amless API	5L GR. B			94,33	
1497	1+1/2	0	In	3,68		mm	,00	24,00	m	202	Pipe ASME B36.10 THRD-M NPT Se	amless API	5L GR. B			97,18	
254	1	0	In			mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 3 Galvanized	000# Forge	I ASTM A	105		2,20	
2765	1	1/2	In			mm	,00	15,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NP Galvanized	Г 3000# Foi	ged ASTM	A 105		8,55	
2772	1+1/2	1	In			mm	,00	2,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NP Galvanized	Г 3000# For	ged ASTM	A 105		2,56	
1077	1/2	0	In			mm	,00	15,00	NR	202	Coupling TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged	ASTM A 1	05		1,80	
1079	1	0	In			mm	,00	7,00	NR	202	Coupling TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged	ASTM A 1	05		2,10	
1081	1+1/2	0	In			mm	,00	4,00	NR	202	Coupling TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged	ASTM A 1	05		4,00	
1275	1/2	0	In			mm	,00	1,00	NR	202	Union TA 50.7/2 THRD-F NPT 3000# Galvanized	Forged AS	TM A 105			0,30	
4429	1+1/2	1	In			mm	,00	1,00	NR	202	Coupling Reducing TA 50.7/2 THRD-105 Galvanized	F NPT 3000	# Forged A	ASTM A		0,10	
4567	1/2	0	In			mm	,00	1,00	NR	202	Cap TA 50.7/2 THRD-F NPT 3000# F	orged ASTI	M A 105 G	alvanized	i	0,12	
4569	1	0	In			mm	,00	1,00	NR	202	Cap TA 50.7/2 THRD-F NPT 3000# F	orged ASTI	M A 105 G	alvanized	i	0,25	
											M Erection				Total Kg:	222,35	
SX1	SULPHU	REX G	H/F			01101 -	0			SX1	SX1 1	/ 1		-	TOTAL Kg:	222,35	
							Plant SX1		REX	GH/F	Piping Class 202				elding specificati	on	
							Line 01101 Dang. fluid				Fluid			•	stem	0	
							Area SX1	гуре			Coating Sketch Sht 1/1			pe j sometric o	pres	Op tem	Page 1

Zones

		В	allestra	a					S	KETCH	IES MATERIAL LIST		F	PROJ:	1E35		REV:) 13	8/04/2010
	PUMA5	5		13/04/20	010 11.47	7.04							Ī	OC:	1E35	-65-029			
			Balle	estra						SU	LPHUREX GH/F	Size: In	Thk:	mm	Temp:	°C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component					Gen. Bolt	Weight (Kg) As.bly	Branch
1495	1	0	In	3,38		mm	,00	37,90	_	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	mless AP	I 5L G	R. B			94,83	, v	
1497	1+1/2	0	In	3,68		mm	,00	24,00	m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	mless AP	I 5L GI	R. B			97,18		
254	1	0	In			mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forge	d AST	M A 10)5		2,20		
2772	1+1/2	1	In			mm	,00	4,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# Fo	orged A	STM A	A 105		5,12		
4675	1	0	In			mm	,00	4,00	NR	202	Tee Straight TA 50.7/2 THRD-F NPT 3 Galvanized	000# Forg	ged AS	TM A	105		2,28		
1079	1	0	In			mm	,00	7,00	NR	202	Coupling TA 50.7/2 THRD-F NPT 300 Galvanized	0# Forged	ASTN	I A 105	5		2,10		
1081	1+1/2	0	In			mm	,00	4,00	NR	202	Coupling TA 50.7/2 THRD-F NPT 300 Galvanized	0# Forged	ASTN	I A 105	5		4,00		
1171	1	0	In			mm	,00	4,00	NR	202	Plug Hex. TA 50.7/2 THRD-M NPT Fo	rged AST	M A 10	05 Galv	vanized		1,40		
4429	1+1/2	1	In			mm	,00	1,00	NR	202	Coupling Reducing TA 50.7/2 THRD-F 105 Galvanized	NPT 300	0# For	ged AS	STM A		0,10		
4569	1	0	In			mm	,00	1,00	NR	202	Cap TA 50.7/2 THRD-F NPT 3000# Fo	rged AST	M A 1	05 Galv	vanized		0,25		
			•			•	-		_	N	// Erection					Total Kg:	209,46		

Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
Line 01102 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

TOTAL Kg:

209,46

SX1 SX1

SX1

SULPHUREX GH/F

01102 - 0

		В	allest	ra						SK	KETCH	IES MATERIAL LIST		PROJ:	1E35		REV:	0 1	3/04/2010
	PUMA	15		13/04/2	2010 11.4	47.04								DOC:	1E35-	-65-029	•		
			Ba	llestra							SUI	LPHUREX GH/F	Size: In Th	k: mm	Temp:	°C	Pres: BAR		Corr: mm
Mark	S1	S2		T1	Т2		Len mm	ı (Qty 1	Um P	Pip. class	Component				Gen. Bolt	Weight (K	g) As.bly	Branch
1493	1/2	0	In	2,77		mm	,00) (,10	m 2	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	amless API 5L	GR. B			0,1	3	
1495	1	0	In	3,38		mm	,00) 24	,00	m 2	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	amless API 5L	GR. B			60,0	5	
254	1	0	In			mm	,00) 4	,00	NR 2	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged A	STM A 10	5		4,4	0	
2765	1	1/2	In			mm	,00) 11	,00	NR 2	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# Forgeo	i ASTM A	105		6,2	7	
1079	1	0	In			mm	,00) 8	,00	NR 2	202	Coupling TA 50.7/2 THRD-F NPT 300 Galvanized	0# Forged AS	TM A 105			2,4	0	
4567	1/2	0	In			mm	,00) 1	,00	NR 2	202	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged ASTM A	105 Galv	anized		0,1	2	
4569	1	0	In			mm	,00) 1	,00	NR 2	202	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged ASTM A	105 Galv	anized		0,2	5	
	•			*				-			N	1 Erection				Total Kg:	73,6	2	

SX1 SX1

SX1

SULPHUREX GH/F

01103 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	1
Line 01103 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

TOTAL Kg:

73,62

		F	Ballestr	a					S	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13	3/04/2010
	PUMA	.5		13/04/2	010 11.4	7.04	7						DOC:	1E35-65	-029	•		
			Ball	lestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp: °C		Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component			Ge	en. Bolt	Weight (Kg)	As.bly	Branch
1493	1/2	0	In	2,77		mm	,00	0,10	m	202	Pipe ASME B36.10 THRD-M NPT Se Galvanized	amless API	5L GR. B			0,13		
1495	1	0	In	3,38		mm	,00	24,00	m	202	Pipe ASME B36.10 THRD-M NPT Se Galvanized	amless API	5L GR. B			60,05		
254	1	0	In			mm	,00	4,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	000# Forgeo	d ASTM A 10	05		4,40		
4567	1/2	0	In			mm	,00	1,00	NR	202	Cap TA 50.7/2 THRD-F NPT 3000# F	orged ASTI	M A 105 Gal	vanized		0,12		
4569	1	0	In			mm	,00	1,00	NR	202	Cap TA 50.7/2 THRD-F NPT 3000# F	orged ASTI	M A 105 Gal	vanized		0,25		
	,		'		'				•		M Erection			T	otal Kg:	64,95		
SX1	SULPH	UREX C	SH/F			01104	l - 0			SX1	SX1 1	/ 1		TOT	ΓAL Kg:	64,95		

Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
Line 01104 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCH	IES MATERIAL LIST		PRO	1E35	i	REV:	0 1	13/04/2010
	PUMA	.5		13/04/20	010 11.47	7.05							DOC	1E35	5-65-029	•		
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp	: °C	Pres: BAR		Corr: mm
Mark	S1	S2	T1	Т2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (K	g) As.bly	Branch	
1495	1 0 In 3,38 mm					,00	35,00	m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	mless API	5L GR. B			87,5	8		
254	1	0	In			mm	,00	3,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forgeo	l ASTM A	105		3,3	0	
2765	1	1/2	In			mm	,00	7,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# For	ged ASTM	A 105		3,9	9	
1079	1	0	In			mm	,00	6,00	NR	202	Coupling TA 50.7/2 THRD-F NPT 300 Galvanized	0# Forged	ASTM A 1	05		1,8	0	
4569	1	0	In			mm	,00	1,00	NR	202	Cap TA 50.7/2 THRD-F NPT 3000# Fo	rged ASTI	M A 105 G	lvanized	1	0,2	5	
										N	1 Erection				Total Kg:	96,9	2	

SX1 SX1

SX1

SULPHUREX GH/F

01105 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification		
Line 01105 - 0	Fluid	System		
Dang. fluid type	Coating	De pres	Op tem	
Area SX1	Sketch Sht 1/1	Isometric code		Page 1
Zones				

TOTAL Kg:

96,92

		В	allestı	a					S	SKETCH	IES MATERIAL LIST		PROJ:	1E35		REV:	0	13/04/2010
	PUMA	A 5		13/04/20	10 11.47	7.05							DOC:	1E35-	-65-029	•		
			Bal	lestra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR		Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (K	g) As.bly	y Branch
1495	1 0 In 3,38 mm					mm	,00	35,00	m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	mless API	5L GR. B			87,5	8	
3161					,00	4,00	NR	202	Valve Plug ST.46093/1 THRD-F NPT I M 58	PN 10 Cast	DUCTILE II	RON		20,0	0			
254	1	0	In			mm	,00	3,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged	ASTM A 10)5		3,30	0	
2765	1	1/2	In			mm	,00	4,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# For	ged ASTM A	105		2,2	8	
1079	1	0	In			mm	,00	6,00	NR	202	Coupling TA 50.7/2 THRD-F NPT 300 Galvanized	0# Forged A	ASTM A 105	5		1,8	0	
4569	1	0	In			mm	,00,	1,00	NR	202	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged ASTN	1 A 105 Gal	anized		0,2:	5	
								-		N	1 Erection				Total Kg:	115,2	1	

TOTAL Kg:

115,21

SX1

SX1

SULPHUREX GH/F

01106 - 0

SX1

Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	n	
Line 01106 - 0	Fluid	System		
Dang. fluid type	Coating	De pres	Op tem	
Area SX1	Sketch Sht 1/1	Isometric code	Page 1	1
Zones				

		В	allest	ra					S	KETC	HES MATERIAL LIST		PROJ:	1E35		REV:) 13	3/04/2010
	PUMA	.5		13/04/20	010 11.4	7.05							DOC:	1E35-6	55-029			
			Ba	llestra						S	ULPHUREX GH/F	Size: In T	hk: mm	Temp: °	С	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mn	ı Qty	Um	Pip. clas	s Component			(Gen. Bolt	Weight (Kg) As.bly	Branch
1493	1/2	0	In	2,77		mm	,00,	6,00	m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	ımless API 5	L GR. B			7,59		
2828	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port ST.46330/3 THRD- BRASS NICKEL PLATED S 87	F NPT 200	LB Forged			0,30		
252	1/2	0	In			mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged A	ASTM A 10)5		0,80		
2765	1	1/2	In			mm	,00,	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# Forgo	ed ASTM A	105		0,57		
											M Erection			·	Total Kg:	9,26	5	
SX1	SULPHI	UREX GI	H/F			01111	- 0			SX1	SX1 1 /	1		T(OTAL Kg:	9,26		

KV_16.1	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
	Line 01111 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	a				SKETCHES MATERIAL LIST PROJ:						1E35	REV: 0	13/04/2010
	PUMA	15		13/04/2	010 11.47	7.05							DOC:	1E35-65-029		•
			Ball	lestra						(SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. cla	nss Component			Gen. Bolt	Weight (Kg)	s.bly Branch
1493	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10 THRD-M NPT Se Galvanized	amless API	5L GR. B		7,59	
252	1/2	0	In			mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	000# Forge	d ASTM A 10)5	0,80	
2765	1	1/2	In			mm	,00	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NP. Galvanized	7 3000# Fo	rged ASTM A	105	0,57	
											M Erection			Total Kg:	8,96	
SX1	X1 SULPHUREX GH/F 01112 - 0						SX1	SX1 1	/ 1		TOTAL Kg:	8,96				

TV_16.4	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
	Line 01112 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestra	a				SKETCHES MATERIAL LIST PROJ:						: 1E35	REV:	13	/04/2010
	PUMA	5		13/04/20	010 11.47	.05							DOC:	1E35-65-029			
			Balle	estra						S	SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	Т2		Len mn	n Qty	Um	Pip. clas	ss Component			Gen. Bolt	Weight (Kg)	As.bly	Branch
1493	1/2	0	In	2,77		mm	,00	,00 6,00 m 202 Pipe ASME B36.10 THRD-M NPT Seamless API 5L C Galvanized							7,59		
252	1/2	0	In			mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged	I ASTM A 1	05	0,80		
2765	1	1/2	In			mm	,00	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# For	ged ASTM	A 105	0,57		
											M Erection			Total Kg:	8,96		
SX1	X1 SULPHUREX GH/F 01114 - 0							SX1	SX1 1 /	1		TOTAL Kg:	8,96				

TV_16.1	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	1
	Line 01114 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestı	a				SKETCHES MATERIAL LIST PROJ:					1E35	REV:	0 13	3/04/2010	
	PUMA	\ 5		13/04/20	010 11.47	.06							DOC:	1E35-65-029			
			Bal	lestra						S	ULPHUREX GH/F	Size: In	Γhk: mm	Temp: °C	Pres: BAR		Corr: mm
Mark							Len mn	Qty	Um	Pip. clas	Component			Gen. Bo	olt Weight (Kg) As.bly	Branch
1493	1/2	0	In	2,77		mm	,00	1	_	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	ımless API 5	L GR. B		7,59)	
252	1/2	0	In			mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged	ASTM A 10)5	0,80)	
2765	1	1/2	In			mm	,00	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# Forg	ed ASTM A	A 105	0,57	1	
											M Erection			Total 1	Kg: 8,90	5	
SX1	SX1 SULPHUREX GH/F 01115 - 0						SX1	SX1 1 /	1		TOTAL	Kg: 8,90	ó				

TV_16.2	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
	Line 01115 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allesti	a				SKETCHES MATERIAL LIST PROJ:						1E35		REV: 0	13.	/04/2010
	PUMA	.5		13/04/20	010 11.47	7.06							DOC:	1E35-6	55-029	•		
			Bal	lestra						S	SULPHUREX GH/F	Size: In	Thk: mm	Temp: °	С	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. clas	ss Component			(Gen. Bolt	Weight (Kg)	As.bly	Branch
1493	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	ımless API 5	L GR. B			7,59		
252	1/2	0	In			mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged	ASTM A 10)5		0,80		
2765	1	1/2	In			mm	,00	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# Forg	ed ASTM A	105		0,57		
											M Erection				Total Kg:	8,96		
SX1	SX1 SULPHUREX GH/F 01116 - 0 SX					SX1	SX1 1 /	1		TO	OTAL Kg:	8,96						

TV_16.3	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
	Line 01116 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allest	ra				SKETCHES MATERIAL LIST PROJ: 1								REV:	13	/04/2010
	PUMA	.5		13/04/20	010 11.4	7.06							DOC:	1E35-0	65-029			
			Ba	llestra						S	ULPHUREX GH/F	Size: In T	hk: mm	Temp:	°C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mn	ı Qty	Um	Pip. clas	Component			(Gen. Bolt	Weight (Kg)	As.bly	Branch
1493	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	mless API 5	L GR. B			7,59		
2828	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port ST.46330/3 THRD- BRASS NICKEL PLATED S 87	Ball Full Port ST.46330/3 THRD-F NPT 200 LB Forged S NICKEL PLATED S 87						
252	1/2	0	In			mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged A	ASTM A 10	05		0,80		
2765	1	1/2	In			mm	,00,	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# Forgo	ed ASTM A	A 105		0,57		
								M Erection				Total Kg:	9,26					
SX1	SX1 SULPHUREX GH/F 01117 - 0 SX1						SX1	SX1 1 /	1		T	OTAL Kg:	9,26					

KV_16.7	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
	Line 01117 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	a				S	SKETCI	HES MATERIAL LIST		PROJ:	1E35		REV:	0 13	3/04/2010
	PUMA	.5		13/04/2	010 11.47.06							DOC:	1E35-6	65-029			
			Ball	lestra					SU	ULPHUREX GH/F	Size: In	Thk: mm	Temp: °	С	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2	Len mm			Pip. class	•			(Gen. Bolt	Weight (Kg		Branch
1493	1/2	0	In	2,77	mm	,00	6,0	0 m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	mless API	5L GR. B			7,59)	
2828	1/2	0	In		mm	,00	1,0	0 NR	202	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 200) LB Forged			0,30)	
252	1/2	0	In		mm	,00	2,0	0 NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged	ASTM A 10	05		0,80)	
2765	1	1/2	In		mm	,00	1,0	0 NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# For	ged ASTM A	A 105		0,57		
										M Erection				Total Kg:	9,26	5	
SX1	SX1 SULPHUREX GH/F 01118 - 0 SX1						SX1	SX1 1 /	′ 1		TO	OTAL Kg:	9,26	5			

AV_14.1	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
	Line 01118 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

	Ballestra						SKETCHES MATERIAL LIST PROJ:								REV:	0 13	3/04/2010
	PUMA	15		13/04/2	010 11.47.06							DOC:	1E35-6	65-029			
			Ball	lestra					SU	ULPHUREX GH/F	Size: In Th	k: mm	Temp: °	°C	Pres: BAR		Corr: mm
Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component			(Gen. Bolt	Weight (K	g) As.bly	Branch
1493	1/2	0	In	2,77	mm	,00	6,00) m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	ımless API 5L	GR. B			7,59	9	
2828	1/2	0	In		mm	,00	1,00	NR	202	Valve Ball Full Port ST.46330/3 THRD- BRASS NICKEL PLATED S 87	-F NPT 200 L	B Forged			0,30	0	
252	1/2	0	In		mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged A	STM A 10	05		0,8	O	
2765	1	1/2	In		mm	,00	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# Forgeo	i ASTM A	A 105		0,5	7	
]	M Erection				Total Kg:	9,2	6	
SX1	SULPHUREX GH/F 01121 - 0 SY					SX1	SX1 1 /	1		T	OTAL Kg:	9,2	6				

TV_11.1	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
	Line 01121 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

	Ballestra							SKETCHES MATERIAL LIST PROJ. 11						1E35		REV:) 13	8/04/2010
	PUMA	15		13/04/20	010 11.4	7.06							DOC:	1E35-6	5-029		•	
			Ba	llestra						SI	ULPHUREX GH/F	Size: In	Thk: mm	Temp: °	2	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	ı Qty	Um	Pip. class	s Component			(Gen. Bolt	Weight (Kg) As.bly	Branch
1493	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10 THRD-M NPT Se Galvanized	amless API	5L GR. B			7,59		
2828	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 200) LB Forged			0,30		
252	1/2	0	In			mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	000# Forged	ASTM A 10)5		0,80		
2765	1	1/2	In			mm	,00,	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	Γ 3000# Forg	ged ASTM A	A 105		0,57		
							M Erection			'	Total Kg:	9,26	i					
SX1	X1 SULPHUREX GH/F 01122 - 0 SX1						SX1	SX1 1	/ 1		TC	TAL Kg:	9.26					

KV_11.3	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification		
	Line 01122 - 0	Fluid	System		
	Dang. fluid type	Coating	De pres	Op tem	
	Area SX1	Sketch Sht 1/1	Isometric code		Page 1
	Zones				

	Ballestra						SKETCHES MATERIAL LIST PROJ:								REV:	0 13	3/04/2010
	PUMA	15		13/04/2	010 11.47.06							DOC:	1E35-6	65-029			
			Ball	lestra					SU	ULPHUREX GH/F	Size: In Th	k: mm	Temp: °	°C	Pres: BAR		Corr: mm
Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	S Component			(Gen. Bolt	Weight (K	g) As.bly	Branch
1493	1/2	0	In	2,77	mm	,00	6,00) m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	mless API 5L	GR. B			7,59	9	
2828	1/2	0	In		mm	,00	1,00	NR	202	Valve Ball Full Port ST.46330/3 THRD- BRASS NICKEL PLATED S 87	-F NPT 200 L	B Forged			0,30	0	
252	1/2	0	In		mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged A	STM A 10	05		0,8	0	
2765	1	1/2	In		mm	,00	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# Forge	i ASTM A	A 105		0,5	7	
										M Erection				Total Kg:	9,2	6	
SX1	SULPHUREX GH/F 01123 - 0 SY					SX1	SX1 1 /	1		TO	OTAL Kg:	9,2	6				

KV_11.4	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
	Line 01123 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

	Ballestra						SKETCHES MATERIAL LIST PROJ:								REV:	0 13	3/04/2010
	PUMA	.5		13/04/2	010 11.47.07							DOC:	1E35-6	65-029			
			Ball	lestra					SU	ULPHUREX GH/F	Size: In	Thk: mm	Temp: °	С	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2	Len mm			Pip. class	s Component			(Gen. Bolt	Weight (Kg	As.bly	Branch
1493	1/2	0	In	2,77	mm	,00	6,0	0 m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	amless API	5L GR. B	L		7,59)	
2828	1/2	0	In		mm	,00	1,0	0 NR	202	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 200) LB Forged			0,30)	
252	1/2	0	In		mm	,00	2,0	0 NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged	ASTM A 10	05		0,80)	
2765	1	1/2	In		mm	,00	1,0	0 NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# For	ged ASTM A	A 105		0,57		
										M Erection				Total Kg:	9,26	5	
SX1	SULPHU	LPHUREX GH/F 01124 - 0 SX1					SX1	SX1 1 /	′ 1		TO	OTAL Kg:	9,26	5			

KV_11.5	Plant SX1 SULPHUREX GH/F Line 01124 - 0	Piping Class 202 Fluid	Welding specification System		
	Dang. fluid type	Coating	De pres	Op tem	
	Area SX1	Sketch Sht 1/1	Isometric code	Page	1
	Zones				

	Ballestra							SKETCHES MATERIAL LIST PROJ: 11						1E35		REV:) 13	3/04/2010
	PUMA	\ 5		13/04/20	010 11.4	7.07							DOC:	1E35-6	65-029	•	•	
			Ba	llestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp: °	°C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	ı Qty	Um	Pip. class	s Component			(Gen. Bolt	Weight (Kg) As.bly	Branch
1493	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	amless API	5L GR. B			7,59		
2828	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 200) LB Forged			0,30		
252	1/2	0	In			mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	000# Forged	ASTM A 10)5		0,80		
2765	1	1/2	In			mm	,00	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	Γ 3000# Forg	ged ASTM A	A 105		0,57		
							M Erection			,	Total Kg:	9,26	5					
SX1	X1 SULPHUREX GH/F 01125 - 0 SX1						SX1	SX1 1.	/ 1		Т	OTAL Kg:	9.26					

KV_11.6	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
	Line 01125 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	·a			SKETCHES MATERIAL LIST PROJ: 1						1E35		REV: 0	13/0	04/2010
	PUMA	.5		13/04/2	2010 11.47.07							DOC:	1E35-65	5-029			
			Ball	lestra					SU	JLPHUREX GH/F	Size: In T	hk: mm	Temp: °C		Pres: BAR	Co	rr: mm
Mark	S1	S2		T1	Т2	Len mm	ı Qt	y Um	Pip. class	Component			G	en. Bolt	Weight (Kg)	As.bly	Branch
1493	1/2	0	In	2,77	mm	,00	6,0	0 m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	ımless API 5I	GR. B			7,59	-	
2828	1/2	0	In		mm	,00	1,0	0 NR	202	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 200 l	LB Forged			0,30		
252	1/2	0	In		mm	,00	2,0	0 NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged A	STM A 10	05		0,80		
2765	1	1/2	In		mm	,00	1,0	0 NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# Forge	d ASTM A	105		0,57		
									N	M Erection			1	Total Kg:	9,26		
SX1	SULPHU	UREX G	H/F		01127	- 0			SX1 S	SX1 1 /	1		TO	TAL Kg:	9,26		

KV_11.8	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
	Line 01127 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

	Ballestra							SKETCHES MATERIAL LIST PROJ: 1								REV:) 13	3/04/2010
	PUMA	15		13/04/20	010 11.4	7.07							DOC:	1E35-6	5-029		•	
			Ba	llestra						S	SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	2	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	n Qty	Un	n Pip. clas	SS Component			G	Gen. Bolt	Weight (Kg) As.bly	Branch
1493	1/2	0	In	2,77		mm	,00	6,00) m	202	Pipe ASME B36.10 THRD-M NPT Se Galvanized	amless API	5L GR. B			7,59		
2828	1/2	0	In			mm	,00	1,00) NF	R 202	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	0-F NPT 200) LB Forged			0,30		
252	1/2	0	In			mm	,00	2,00) NF	R 202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	000# Forged	ASTM A 10	05		0,80		
2765	1	1/2	In			mm	,00,	1,00) NF	R 202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	Γ 3000# For	ged ASTM A	A 105		0,57		
											M Erection				Total Kg:	9,26	5	
SX1	SULPH	UREX G	H/F			01131	- 0			SX1	SX1 1	/ 1		TO	TAL Kg:	9.26		

KV_11.2	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification		
	Line 01131 - 0	Fluid	System		
	Dang. fluid type	Coating	De pres	Op tem	
	Area SX1	Sketch Sht 1/1	Isometric code		Page 1
	Zones				

	Ballestra							SKETCHES MATERIAL LIST PROJ:								REV:) 13	3/04/2010
	PUMA	\ 5		13/04/20	010 11.4	7.07							DOC:	1E35-0	65-029	•	•	
			Ba	llestra						,	SULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	n Qty	Uı	m Pip. cla	ss Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1493	1/2	0	In	2,77		mm	,00	6,00) n	n 202	Pipe ASME B36.10 THRD-M NPT So Galvanized	eamless API	5L GR. B			7,59		
2828	1/2	0	In			mm	,00	1,00) N	R 202	Valve Ball Full Port ST.46330/3 THRI BRASS NICKEL PLATED S 87	O-F NPT 20	0 LB Forged			0,30		
252	1/2	0	In			mm	,00	2,00) N	R 202	90° Elbow TA 50.7/2 THRD-F NPT 3 Galvanized	000# Forged	ASTM A 10	05		0,80		
2765	1	1/2	In			mm	,00,	1,00) N	R 202	Tee Reducing TA 50.7/2 THRD-F NP Galvanized	T 3000# For	ged ASTM A	A 105		0,57		
											M Erection				Total Kg:	9,26	5	
SX1	X1 SULPHUREX GH/F 01133 -						01133 - 0 SX1 SX1 1/1							Т	OTAL Kg:	9.26		

KV_11.11	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification		
	Line 01133 - 0	Fluid	System		
	Dang. fluid type	Coating	De pres	Op tem	
	Area SX1	Sketch Sht 1/1	Isometric code	1	Page 1
	Zones				

	Ballestra							SKETCHES MATERIAL LIST PROJ:								REV:	0 1	3/04/2010
	PUMA	15		13/04/2	010 11.4	7.07							DOC:	1E35-6	65-029	•		
			Ba	allestra						SI	ULPHUREX GH/F	Size: In Tl	hk: mm	Temp:	°C	Pres: BAR		Corr: mm
Mark	S1	S2		T1	T2		Len mn	n Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (K	g) As.bly	Branch
1493	1/2	0	In	2,77		mm	,00	0 6,00	m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	ımless API 5L	GR. B			7,5	9	
2828	1/2	0	In			mm	,00	0 1,00	NR	202	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 200 I	LB Forged			0,3	0	
252	1/2	0	In			mm	,00	0 2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged A	STM A 10)5		0,8	0	
2765	1	1/2	In			mm	,00	0 1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# Forge	d ASTM A	A 105		0,5	7	
											M Erection				Total Kg:	9,2	26	
SX1	X1 SULPHUREX GH/F 01134 -						4-0 SX1 SX1 1/1							T	OTAL Kg:	9,2	6	

KV_11.12	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
	Line 01134 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

	Ballestra							SKETCHES MATERIAL LIST PROJ. 1								REV:) 13	3/04/2010
	PUMA	\ 5		13/04/20	010 11.4	7.07							DOC:	1E35-6	65-029		•	
			Ba	llestra						SI	ULPHUREX GH/F	Size: In	Thk: mm	Temp: °	°C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	ı Qty	Um	Pip. class	s Component			(Gen. Bolt	Weight (Kg) As.bly	Branch
1493	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	amless API	5L GR. B			7,59		
2828	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 200) LB Forged			0,30		
252	1/2	0	In			mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	000# Forged	ASTM A 10)5		0,80		
2765	1	1/2	In			mm	,00,	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	7 3000# Forg	ged ASTM A	A 105		0,57		
											M Erection			,	Total Kg:	9,26	5	
SX1	X1 SULPHUREX GH/F 01137 - 0						- 0 SX1 SX1 1/1							Т	OTAL Kg:	9.26		

KV_11.18	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
	Line 01137 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

	Ballestra						SKETCHES MATERIAL LIST PROJ								REV:	0 13	3/04/2010
	PUMA	.5		13/04/2	010 11.47.07							DOC:	1E35-6	65-029			
			Ball	lestra					SU	ULPHUREX GH/F	Size: In Th	k: mm	Temp: °	°C	Pres: BAR		Corr: mm
Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component			(Gen. Bolt	Weight (K	g) As.bly	Branch
1493	1/2	0	In	2,77	mm	,00	6,00	m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	ımless API 5L	GR. B			7,59	9	
2828	1/2	0	In		mm	,00	1,00	NR	202	Valve Ball Full Port ST.46330/3 THRD- BRASS NICKEL PLATED S 87	-F NPT 200 L	B Forged			0,30	O	
252	1/2	0	In		mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged A	STM A 10	05		0,8	0	
2765	1	1/2	In		mm	,00	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# Forgeo	i ASTM A	A 105		0,5	7	
]	M Erection				Total Kg:	9,2	6	
SX1	SULPHUREX GH/F 01138 - 0					38 - 0 SX1 SX1 1/1							T	OTAL Kg:	9,2	6	

KV_11.19	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
	Line 01138 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

	Ballestra						SKETCHES MATERIAL LIST PROJ								REV:	0 13	3/04/2010
	PUMA	.5		13/04/2	010 11.47.07							DOC:	1E35-6	65-029			
			Ball	lestra					SU	JLPHUREX GH/F	Size: In Th	k: mm	Temp: °	°C	Pres: BAR		Corr: mm
Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component			(Gen. Bolt	Weight (K	g) As.bly	Branch
1493	1/2	0	In	2,77	mm	,00	6,00) m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	ımless API 5L	GR. B			7,59	9	
2828	1/2	0	In		mm	,00	1,00	NR	202	Valve Ball Full Port ST.46330/3 THRD- BRASS NICKEL PLATED S 87	-F NPT 200 L	B Forged			0,30	O	
252	1/2	0	In		mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged A	STM A 10	05		0,8	O	
2765	1	1/2	In		mm	,00	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# Forgeo	i ASTM A	A 105		0,5	7	
]	M Erection				Total Kg:	9,2	6	
SX1	SULPHUREX GH/F 01139 - 0						9 - 0 SX1 SX1 1/1						TO	OTAL Kg:	9,2	6	

KV_11.9	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
	Line 01139 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	a			SKETCHES MATERIAL LIST PROJ: 1								REV:	0 13	3/04/2010
	PUMA	15		13/04/2	010 11.47.08							DOC:	1E35-6	65-029			
			Ball	lestra					SU	ULPHUREX GH/F	Size: In Th	k: mm	Temp: °	°C	Pres: BAR		Corr: mm
Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component			(Gen. Bolt	Weight (K	g) As.bly	Branch
1493	1/2	0	In	2,77	mm	,00	6,00	m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	ımless API 5L	GR. B			7,59	9	
2828	1/2	0	In		mm	,00	1,00	NR	202	Valve Ball Full Port ST.46330/3 THRD- BRASS NICKEL PLATED S 87	-F NPT 200 L	B Forged			0,30	O	
252	1/2	0	In		mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged A	STM A 10	05		0,8	0	
2765	1	1/2	In		mm	,00	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# Forgeo	i ASTM A	A 105		0,5	7	
]	M Erection				Total Kg:	9,2	6	
SX1	SULPHI	UREX G	H/F		01140	- 0			SX1	SX1 1 /	1		T	OTAL Kg:	9,2	6	

KV_11.10B	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
	Line 01140 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allest	ra				SKETCHES MATERIAL LIST PROJ: 1E3								REV:) 13	3/04/2010
	PUMA	.5		13/04/20	010 11.4	7.08							DOC:	1E35-	65-029			
			Ba	llestra						S	SULPHUREX GH/F	Size: In T	Thk: mm	Temp:	°C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mn	ı Qty	Um	Pip. clas	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1493	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	amless API 5	L GR. B			7,59		
2828	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port ST.46330/3 THRD- BRASS NICKEL PLATED S 87	-F NPT 200	LB Forged			0,30		
252	1/2	0	In			mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged	ASTM A 10)5		0,80	1	
2765	1	1/2	In			mm	,00,	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# Forg	ed ASTM A	A 105		0,57		
											M Erection			,	Total Kg:	9,26	5	
SX1	K1 SULPHUREX GH/F 01141 - 0 S								SX1	SX1 1 /	['] 1		T	OTAL Kg:	9,26	i		

KV_11.10A	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification		
	Line 01141 - 0	Fluid	System		
	Dang. fluid type	Coating	De pres	Op tem	
	Area SX1	Sketch Sht 1/1	Isometric code		Page 1
	Zones				

		В	allestra	a			SKETCHES MATERIAL LIST PROJ. 1						: 1E35		REV: 0	13/04/20	10
	PUMA	15		13/04/2	010 11.47.08							DOC:	1E35-6	55-029		-	
			Balle	estra					st	JLPHUREX GH/F	Size: In	Thk: mm	Temp: °	С	Pres: BAR	Corr: mn	1
Mark								Um	Pip. class	Component			C	Gen. Bolt	Weight (Kg)	s.bly Bran	ch
1493	1/2	0	In	2,77	mm	,00	6,00	m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	ımless API	5L GR. B			7,59		
252	1/2	0	In		mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forge	1 ASTM A 1	05		0,80		
2765	1	1/2	In		mm	,00	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# For	ged ASTM	A 105		0,57		
								M Erection				Total Kg:	8,96				
SX1	1 SULPHUREX GH/F 01142 - 0								SX1	SX1 1 /	′ 1		TC	TAL Kg:	8,96		

Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
Line 01142 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a			SKETCHES MATERIAL LIST PRO								REV:	0 13	3/04/2010
	PUMA	.5		13/04/2	010 11.47.08							DOC:	1E35-0	65-029		•	
			Ball	lestra					S	SULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2	Len mm	Q	ty U	m Pip. clas	ss Component			ļ	Gen. Bolt	Weight (Kg	g) As.bly	Branch
1493	1/2	0	In	2,77	mm	,00	6,	00 n	n 202	Pipe ASME B36.10 THRD-M NPT Se Galvanized	amless API	5L GR. B			7,59)	
2828	1/2	0	In		mm	,00	1,	00 N	R 202	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	0-F NPT 200	0 LB Forged			0,30)	
252	1/2	0	In		mm	,00	2,	00 N	R 202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	000# Forged	ASTM A 10	05		0,80)	
2765	1	1/2	In		mm	,00	1,	00 N	R 202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	Γ 3000# For	ged ASTM A	A 105		0,57	7	
										M Erection			<u>'</u>	Total Kg:	9,20	6	
SX1	SULPHUREX GH/F 01143 - 0								SX1	SX1 1	/ 1		T	OTAL Kg:	9,26	5	

KV_11.1A	Plant SX1 SULPHUREX GH/F Line 01143 - 0	Piping Class 202 Fluid	Welding specification System	_
	Dang. fluid type Area SX1	Coating Sketch Sht 1/1	De pres Isometric code	Op tem Page 1
	Zones			J

	Ballestra						SKETCHES MATERIAL LIST PROJ: 11								REV: 0	13	/04/2010
	PUMA	15		13/04/2	2010 11.47.08							DOC:	1E35-6	5-029		•	
			Ball	lestra					SU	JLPHUREX GH/F	Size: In Th	k: mm	Temp: °C	2	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component			G	en. Bolt	Weight (Kg)	As.bly	Branch
1493	1/2	0	In	2,77	mm	,00	6,00	m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	ımless API 5L	GR. B			7,59		
2828	1/2	0	In		mm	,00	1,00	NR	202	Valve Ball Full Port ST.46330/3 THRD- BRASS NICKEL PLATED S 87	-F NPT 200 L	B Forged			0,30		
252	1/2	0	In		mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged A	STM A 10)5		0,80		
2765	1	1/2	In		mm	,00	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# Forgeo	ASTM A	105		0,57		
]	M Erection			,	Total Kg:	9,26		
SX1	SULPHUREX GH/F 01144 - 0 S					SX1	SX1 1 /	1		ТО	TAL Kg:	9,26					

KV_11.1B	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification		
	Line 01144 - 0	Fluid	System		
	Dang. fluid type	Coating	De pres	Op tem	
	Area SX1	Sketch Sht 1/1	Isometric code		Page 1
	Zones				

	Ballestra							SKETCHES MATERIAL LIST PROJ: 1E								REV:) 13	8/04/2010
	PUMA	15		13/04/20	010 11.4	7.08							DOC:	1E35-6	55-029		•	
			Ba	llestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp: °	С	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	ı Qty	Un	n Pip. clas	s Component			(Gen. Bolt	Weight (Kg) As.bly	Branch
1493	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10 THRD-M NPT Se Galvanized	amless API	5L GR. B			7,59		
2828	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 200) LB Forged			0,30		
252	1/2	0	In			mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	000# Forged	ASTM A 10	05		0,80		
2765	1	1/2	In			mm	,00,	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	Γ 3000# For	ged ASTM A	A 105		0,57		
											M Erection				Total Kg:	9,26	5	
SX1	SULPH	UREX G	H/F			01145	- 0			SX1	SX1 1	/ 1		TC	TAL Kg:	9.26		

KV_12.2	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
	Line 01145 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	Ballest	ra			SKETCHES MATERIAL LIST PROJ. 1E.						1E35		REV:) 13	8/04/2010	
	PUMA	15		13/04/20	010 11.4	7.08							DOC:	1E35-6	5-029		•	
			Ba	llestra						SI	ULPHUREX GH/F	Size: In	Thk: mm	Temp: °C		Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	ı Qty	Um	Pip. class	s Component			G	en. Bolt	Weight (Kg) As.bly	Branch
1493	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	amless API 5	5L GR. B			7,59		
2828	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 200) LB Forged			0,30		
252	1/2	0	In			mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	000# Forged	ASTM A 10)5		0,80		
2765	1	1/2	In			mm	,00	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	Γ 3000# Forg	ged ASTM A	A 105		0,57		
											M Erection			,	Total Kg:	9,26	i	
SX1	SULPH	UREX G	H/F			01146	- 0			SX1	SX1 1.	/ 1		TO	TAL Kg:	9.26		

KV_12.3	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification		
	Line 01146 - 0	Fluid	System		
	Dang. fluid type	Coating	De pres	Op tem	
	Area SX1	Sketch Sht 1/1	Isometric code		Page 1
	Zones				

		В	Ballest	ra			SKETCHES MATERIAL LIST PROJ: 1E.						1E35		REV:) 13	8/04/2010	
	PUMA	15		13/04/20	010 11.4	7.08							DOC:	1E35-6	5-029		•	
			Ba	llestra						SI	ULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	2	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	ı Qty	Um	Pip. class	s Component			G	Gen. Bolt	Weight (Kg) As.bly	Branch
1493	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10 THRD-M NPT Se Galvanized	amless API	5L GR. B			7,59		
2828	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 200) LB Forged			0,30		
252	1/2	0	In			mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	000# Forged	ASTM A 10)5		0,80		
2765	1	1/2	In			mm	,00,	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	Γ 3000# Forg	ged ASTM A	A 105		0,57		
											M Erection				Total Kg:	9,26	i	
SX1	SULPH	UREX G	H/F			01147	- 0			SX1	SX1 1	/ 1		TC	TAL Kg:	9.26		

KV_12.4	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification		
	Line 01147 - 0	Fluid	System		
	Dang. fluid type	Coating	De pres	Op tem	
	Area SX1	Sketch Sht 1/1	Isometric code		Page 1
	Zones				

		В	allesti	a				Sl	KETCH	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	.5		13/04/2	010 11.47.09							DOC:	1E35-65	5-029			
			Bal	lestra					SU	ULPHUREX GH/F	Size: In T	hk: mm	Temp: °C		Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component			G	en. Bolt	Weight (Kg)	As.bly	Branch
1493	1/2	0	In	2,77	mm	,00	6,0	0 m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	ımless API 5I	L GR. B			7,59		
2828	1/2	0	In		mm	,00	1,00	0 NR	202	Valve Ball Full Port ST.46330/3 THRD- BRASS NICKEL PLATED S 87	-F NPT 200	LB Forged			0,30		
252	1/2	0	In		mm	,00	2,00	0 NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged A	ASTM A 10)5		0,80		
2765	1	1/2	In		mm	,00	1,00	0 NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# Forge	ed ASTM A	105		0,57		
									N	M Erection			,	Total Kg:	9,26		
SX1	SULPHU	UREX G	H/F		01148	- 0			SX1 S	SX1 1 /	1		ТО	TAL Kg:	9,26		

KV_12.5	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
	Line 01148 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	a									PROJ	1E35		REV: 0	13.	/04/2010
	PUMA	.5		13/04/20	010 11.47	.09							DOC	1E35-	-65-029			
			Balle	estra							SULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	Т2		Len mn	n Qty	Um	Pip. clas	ss Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1493	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	ımless API	5L GR. B			7,59		
252	1/2	0	In			mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forge	d ASTM A	105		0,80		
2765	1	1/2	In			mm	,00	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# Fo	rged ASTM	A 105		0,57		
											M Erection				Total Kg:	8,96		
SX1	SULPHI	UREX G	H/F			01150	- 0			SX1	SX1 1,	′ 1		Т	OTAL Kg:	8,96		

TV_33.9	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
	Line 01150 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	a				Sl	KETCH	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	.5		13/04/2	010 11.47.09							DOC:	1E35-6	5-029			
			Ball	lestra					SU	LPHUREX GH/F	Size: In T	hk: mm	Temp: °C	2	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component			G	en. Bolt	Weight (Kg)	As.bly	Branch
1493	1/2	0	In	2,77	mm	,00	6,0	0 m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	mless API 5I	L GR. B			7,59		
2828	1/2	0	In		mm	,00	1,0	0 NR	202	Valve Ball Full Port ST.46330/3 THRD- BRASS NICKEL PLATED S 87	F NPT 200	LB Forged			0,30		
252	1/2	0	In		mm	,00	2,0	0 NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged A	ASTM A 10)5		0,80		
2765	1	1/2	In		mm	,00	1,0	0 NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# Forge	ed ASTM A	105		0,57		
									N	M Erection			,	Total Kg:	9,26		
SX1	SULPHU	UREX G	H/F		01151	- 0			SX1 S	SX1 1 /	1		ТО	TAL Kg:	9,26		

KV_33.1	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
	Line 01151 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	a				SKETCHES MATERIAL LIST PROJ:						: 1E35		REV: 0	13.	/04/2010
	PUMA	.5		13/04/20	010 11.47	.09							DOC:	1E35-6	65-029			
			Balle	estra						8	SULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR		orr: mm
Mark	S1	S2		T1	Т2		Len mn	n Qty	Um	Pip. clas	ss Component			(Gen. Bolt	Weight (Kg)	As.bly	Branch
1493	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	ımless API	5L GR. B			7,59		
252	1/2	0	In			mm	,00	2,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forge	d ASTM A	05		0,80		
2765	1	1/2	In			mm	,00	1,00	NR	202	Tee Reducing TA 50.7/2 THRD-F NPT Galvanized	3000# Fo	rged ASTM	A 105		0,57		
											M Erection				Total Kg:	8,96		
SX1	X1 SULPHUREX GH/F 01152 - 0					- 0			SX1	SX1 1,	′ 1		T	OTAL Kg:	8,96			

LV_25.1	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
	Line 01152 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

Ballestra	SKETCHES MATERIAL LIST	PROJ	I: 1E35	REV: 0	13/04/2010
PUMA5 13/04/2010 11.47.09		DOC	1E35-65-029		
Ballestra	SULPHUREX GH/F	Size: In Thk: mm	Temp: °C	Pres: BAR	Corr: mm

Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	s Component			Gen. Bolt	Weight (Kg)	As.bly	Branch
1453	3	0	In	3,18		mm	,00	3,30	m	205	Pipe ASME B36	5.10 PL E.R.W. A	PI 5L GR. B		22,18		
	·				•	•					M Erection			Total Kg:	22,18		
SX1	SULPHI	JREX GH	I/F			03101 -	- 0			SX1	SX1		1 / 1	 TOTAL Kg:	22,18		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	on SP.1406/2-SP.1407/2
Line 03101 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		Ва	allestra	a				SK	ETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0	13.	/04/2010
	PUMA	.5		13/04/20	10 11.47.09							DOC:	1E35-65-0	029			
			Balle	estra					SU	LPHUREX GH/F	Size: In	Thk: mm	Temp: °C		Pres: BAR	C	orr: mm
Mark	S1 S2 T1 T2 mm					Len mm	Qty	Um Pi	ip. class	Component			Gen	ı. Bolt	Weight (Kg)	As.bly	Branch
1438	2	0	In	3,91	mm	,00	60,90	60,90 m 205 Pipe ASME B36.10 PL Seamless API 5L GR. B							331,12		
327	2	0	In	3,91	mm	,00	2,00	NR 20	05	90° Elbow Long Radius ASME B16.9 E GR. WPB	BE Wrought	S ASTM A	234		1,33		
1159	1/2	0	In		mm	,00	1,00	NR 20	05	Coupling Half TA 50.6/1 SW-F 3000# I	Forged AST	M A 105			0,15		
4458	2	0	In	3,91	mm	,00	1,00	NR 20	05	Cap ASME B16.9 BE Seamless ASTM	A 234 GR.	WPB			0,31		
						M Erection							To	tal Kg:	332,92		
SX1	X1 SULPHUREX GH/F 03102 - 0						SX1 SX1 1/1						TOT	AL Kg:	332,92		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specificatio	n SP.1406/2-SP.1407/2
Line 03102 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allesti	ra					S	KETCI	HES MATERIAL LIST		PRO	J: 1E3:	5	REV: 0	13	3/04/2010
	PUMA	A 5		13/04/20	10 11.47	.09							DOC	1E3:	5-65-029			
			Bal	lestra						SU	ULPHUREX GH/F	Size: In	Thk: mm	Tem	p: °C	Pres: BAR	(Corr: mm
	rk \$1 \$2 T1 T2									,								
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1438	2	0	In	3,91		mm	,00	24,00	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				130,49		
327	2	0	In	3,91		mm	,00	2,00	NR	205	90° Elbow Long Radius ASME B16.9 F	BE Wrough	t S ASTM	A 234		1,33		
	·										GR. WPB							
4458	2	0	In	3,91		mm	,00	1,00	NR	205	Cap ASME B16.9 BE Seamless ASTM	A 234 GR.	WPB			0,31		
		·									M Erection				Total Kg:	132,13		
SX1	SX1 SULPHUREX GH/F 03103 -							- 0 SX1 SX1 1 / 1							TOTAL Kg:	132,13		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specificatio	n SP.1406/2-SP.1407/2
Line 03103 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	ra				SKETCHES MATERIAL LIST PR								REV:	0 13	3/04/2010
	PUMA5	;		13/04/20	010 11.47	7.09							DOC:	1E35-6	55-029			
	Ballestra								SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp: °	С	Pres: BAR		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Otv	Um	Pip. class	Component			(Gen. Bolt	Weight (K	g) As.bly	Branch
1437	1+1/2	0	In	3,68		mm	,00		-	205	Pipe ASME B36.10 PL Seamless API 51	GR. B				97,1		
4457	1+1/2	0	In	3,68		mm	,00,	1,00	NR	205	Cap ASME B16.9 BE Seamless ASTM	A 234 GR.	WPB			0,1	8	
							M Erection						•	Total Kg:	97,3	7		

TOTAL Kg:

97,37

SX1

SX1

SX1

SULPHUREX GH/F

03104 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 03104 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		Bal	llestr	a					S	KETC	HES MATERIAL LIST		PR	OJ: 1	E35	REV: 0	13/	/04/2010
	PUMA5			13/04/2	010 11.4	47.10							DO	C : 1	E35-65-029			
			Balle	estra						S	ULPHUREX GH/F	Size: In	Thk: mm	T	`emp: °C	Pres: BAR	C	orr: mm
	T	T						_		1								
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1437	1+1/2	0	In	3,68		mm	,00	24,00	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				97,18		
5797	3	1+1/2	In	3,18	3,68	mm	,00	1,00	NR	205	Reducer Eccentric ASME B16.9 BE E.	R.W. ASTN	M A 234	GR. W	PB	0,57		
1159	1/2	0	In			mm	,00	6,00	NR	205	Coupling Half TA 50.6/1 SW-F 3000#	Forged AST	ΓM A 10	5		0,90		
4457	1+1/2	0	In	3,68		mm	,00	1,00	NR	205	Cap ASME B16.9 BE Seamless ASTM	A 234 GR.	. WPB			0,18		
					·	·		M Erection							Total Kg:	98,84		
SX1	X1 SULPHUREX GH/F 03107 - 0					- 0			SX1	SX1 1	/ 1			TOTAL Kg:	98,84			

Plant SX1 SULPHUREX GH/F Piping Class 205 Welding specification SP.1406/2-SP.1407/2

Line 03107 - 0 Fluid System

Dang. fluid type Coating De pres Op tem

Area SX1 Sketch Sht 1/1 Isometric code Page 1

Zones

		В	allesti	ra					SI	KETCH	HES MATERIAL LIST		PROJ:	1E35	REV:	13	3/04/2010
	PUMA	15		13/04/2	010 11.47	7.10	1						DOC:	1E35-65-029	•		
			Bal	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component			Gen. Bol	t Weight (Kg	As.bly	Branch
1435	1	0	In	3,38		mm	,00	24,00	_		Pipe ASME B36.10 PL Seamless API 5	L GR. B			60,05		
324	1	0	In	3,38		mm	,00	1,00	NR :	205	90° Elbow Long Radius ASME B16.9 E GR. WPB	BE Wrought	S ASTM A	234	0,14		
1159	1/2	0	In			mm	,00	2,00	NR :	205	Coupling Half TA 50.6/1 SW-F 3000# I	Forged AST	M A 105		0,30		
4455	1	0	In	3,38		mm	,00	1,00	NR :	205	Cap ASME B16.9 BE Seamless ASTM	A 234 GR.	WPB		0,10		
	'		•						'	N	M Erection			Total K	g: 60,59		
SX1	X1 SULPHUREX GH/F 03108 - 0						- 0			SX1 S	SX1 1,	1		TOTAL K	g: 60,59]	

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specificatio	n SP.1406/2-SP.1407/2
Line 03108 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					SKETCH	IES MATERIAL LIST		PROJ	1E35	5	REV: 0	13/04/2010
	PUMA5			13/04/20	10 11.4	7.10						DOC:	1E35	5-65-029		
			Bal	lestra					SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp); °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um Pip. class	Component				Gen. Bolt	Weight (Kg) As.bl	y Branch
1433	1/2	0	In	2,77		mm	,00	0,40	m 205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,51	
1434	3/4	0	In	2,87		mm	,00	0,50	m 205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,84	
1435	1	0	In	3,38		mm	,00	0,50	m 205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				1,25	
1437	1+1/2	0	In	3,68		mm	,00	0,30	m 205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				1,21	
1438	2	0	In	3,91		mm	,00	6,00	m 205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				32,62	
1453	3	0	In	3,18		mm	,00	6,00	m 205	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				40,33	
1454	4	0	In	3,18		mm	,00	0,40	m 205	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				3,49	
3112	2	0	In			mm	,00	1,00	NR 205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTN	1 A 105 G 61	1		9,10	
6079	3	0	In			mm	,00	1,00	NR 205	Valve Gate ST.46355/0 FLG 150 LB RI ASTM SA 216 WCB G 68	F (125÷25	0 AARH) Ca	ıst	5201		
3126	1+1/2	0	In			mm	,00	1,00	NR 205	Valve Globe ST.46274/3 SW-F 800# Fo	orged AST	M A 105 D 7	72		10,70	
3190	2	0	In			mm	,00	1,00	NR 205	Strainer Y-Type ST.46276/1 SW-F 800	# Forged A	ASTM A 105	F 69		5,30	
466	3/4	0	In			mm	,00	2,00	NR 205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷25	50 AARH) Fo	orged	5191	1,40	
467	1	0	In			mm	,00	1,00	NR 205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	AF (125÷25	50 AARH) Fo	orged	5192	0,80	
469	1+1/2	0	In			mm	,00	1,00	NR 205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	AF (125÷25	50 AARH) Fo	orged	5193	1,40	
472	3	0	In			mm	,00	2,00	NR 205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷25	50 AARH) Fo	orged	5201	8,20	
297	3	0	In	3,18		mm	,00	2,00	NR 205	90° Elbow Long Radius ASME B16.9 I	BE E.R.W.	ASTM A 23	34 GR.		2,35	
326	1+1/2	0	In	3,68		mm	,00	1,00	NR 205	90° Elbow Long Radius ASME B16.9 I GR. WPB	BE Wrough	ht S ASTM A	A 234		0,37	
327	2	0	In	3,91		mm	,00	2,00	NR 205	90° Elbow Long Radius ASME B16.9 I GR. WPB	BE Wrough	ht S ASTM A	A 234		1,33	
		1							1	OIC. WID				1		

TI_03.1	Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	SP.1406/2-SP.1407/2
PI_03.1	Line 03109 - 0	Fluid	System	
PCV_03.1	Dang. fluid type	Coating	De pres	Op tem
PSV_03.1	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

Reducer Concentric ASME B16.9 BE E.R.W. ASTM A 234 GR. WPB

1645

1+1/2 In

3,18

3,68

mm

,00

3,00 NR 205

1,72

		F	Ballesti	a					S	KETC	HES MATERIAL LIST	PROJ:	: 1E35		REV: 0	13/04/2010
	PUMA5			13/04/2	2010 11.4	17.10						DOC:	1E35	-65-029	<u> </u>	
			Bal	lestra						SU	ULPHUREX GH/F Size: In T	hk: mm	Temp:	°C	Pres: BAR	Corr: mm
										7						
Mark	S1	S2		T1	T2		Len mm			Pip. class				Gen. Bolt	Weight (Kg) As	s.bly Branch
1646	3	2	In	3,18	3,91	mm	,00		-	205	Reducer Concentric ASME B16.9 BE E.R.W. ASTM	I A 234 GF	R. WPB		0,57	
1651	4	3	In	3,18	3,18	mm	,00	2,00	NR	205	Reducer Concentric ASME B16.9 BE E.R.W. ASTM	I A 234 GF	R. WPB		1,72	
1755	1+1/2	3/4	In	3,68	2,87	mm	,00	1,00	NR	205	Reducer Concentric ASME B16.9 BE Wrought S AS WPB	TM A 234	GR.		0,26	
1758	2	3/4	In	3,91	2,87	mm	,00	2,00	NR	205	Reducer Concentric ASME B16.9 BE Wrought S AS WPB	TM A 234	GR.		0,86	
1015	3/4	1/2	In	2,87	2,77	mm	,00	1,00	NR	205	Reducing Insert M/F TA 50.6/1 SW-F x PL 3000# Fc	orged AST	МА		0,11	
1056	1/2	0	In			mm	,00	2,00	NR	205	Coupling TA 50.7/2 THRD-F NPT 3000# Forged AS	STM A 10:	5		0,24	
1058	1	0	In			mm	,00	1,00	NR	205	Coupling TA 50.7/2 THRD-F NPT 3000# Forged AS	STM A 10:	5		0,30	
1159	1/2	0	In			mm	,00	1,00	NR	205	Coupling Half TA 50.6/1 SW-F 3000# Forged ASTM	1 A 105			0,15	
5191	1/2	0	In			mm	65,00	8,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UN	NC/2.2 TA	В. 9		0,88	
							-				ASTM A 193 B7/ASTM A 194 GR.2H					
5192	1/2	0	In			mm	70,00	4,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UI ASTM A 193 B7/ASTM A 194 GR.2H	NC/2.2 TA	B. 9		0,44	
5193	1/2	0	In			mm	75,00	4,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UN	NC/2.2 TA	В. 9		0,48	
											ASTM A 193 B7/ASTM A 194 GR.2H					
5201	5/8	0	In			mm	95,00	8,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UN	NC/2.2 TA	В. 9		1,84	
660	2/4	0	In				00	2.00	NID	205	ASTM A 193 B7/ASTM A 194 GR.2H	250				
660	3/4	0				mm	,00			205	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ E					
661	1 1/2	0	In In			mm	,00,			205	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ E					
663	1+1/2	0				mm	,00			205	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ F					
666	3	0	In			mm	,00	2,00	NR	205	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ F	35C				
											M Erection			Total Kg:	130,77	
SX1	SULPHU	REX C	H/F			03109	- 0			SX1	SX1 1 / 1]	TOTAL Kg:	130,77	
TI_03.1							Plant SX1		REX	GH/F	Piping Class 205			- ·	tion SP.1406/2-SP.14	407/2
PI_03.1	1						Line 0310				Fluid		Syst			
PCV_03 PSV_03.							Dang. fluid	l type			Coating	_	De p		Op ten	
1 3 V _U3.	. 1						Area SX1				Sketch Sht 1/1	Iso	metric c	ode		Page 2

Zones

		В	allestı	ra					S	KETC	HES MATERIAL LIST		PRO	J: 1E3	35	REV: 0	13/04/2010
	PUMA	.5		13/04/20	010 11.47	7.10							DO	C: 1E3	35-65-029		•
			Bal	lestra						SU	ULPHUREX GH/F	Size: In	Thk: mm	Ten	np: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg) As.	bly Branch
1453	3	0	In	3,18		mm	,00	60,00	m	205	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				403,32	
297	3	0	In	3,18		mm	,00	2,00	NR	205	90° Elbow Long Radius ASME B16.9 I WPB	BE E.R.W.	ASTM A	234 GR		2,35	
1159	1/2	0	In			mm	,00	1,00	NR	205	Coupling Half TA 50.6/1 SW-F 3000#	Forged AS'	TM A 105			0,15	
4460	3	0	In	3,18		mm	,00	1,00	NR	205	Cap ASME B16.9 BE Seamless ASTM	A 234 GR	. WPB			0,41	
	'	,	'	,	'	'				1	M Erection				Total Kg:	406,24	
SX1	11 SULPHUREX GH/F 03110 - 0					0			SX1	SX1 1	/ 1			TOTAL Kg:	406,24		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specificatio	n SP.1406/2-SP.1407/2
Line 03110 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	15		13/04/20	010 11.47	.10							DOC:	1E35	-65-029	•	•	
			Ball	estra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	C	orr: mm
										,								
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1438	2	0	In	3,91		mm	,00	40,00	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				217,49		
327	2	0	In	3,91		mm	,00	4,00	NR	205	90° Elbow Long Radius ASME B16.9 E	E Wrough	nt S ASTM A	234		2,66		
											GR. WPB							,
										N	1 Erection	•			Total Kg:	220,15		

SX1 SX1

SX1

SULPHUREX GH/F

03111 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 03111 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

TOTAL Kg:

220,15

		В	Ballestr	a					S	KETC	HES MATERIAL LIST		P	ROJ:	1E35	REV: 0	13	/04/2010
	PUMA5	5		13/04/20	010 11.4	7.10							D	OC:	1E35-65-029			
			Ball	lestra						S	ULPHUREX GH/F	Size: In	Thk: n	nm	Temp: °C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1437	1+1/2	0	In	3,68		mm	,00	40,00	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				161,97		
326	1+1/2	0	In	3,68		mm	,00	6,00	NR	205	90° Elbow Long Radius ASME B16.9 GR. WPB	BE Wrough	nt S AS	TM A	234	2,21		
1756	1+1/2	1	In	3,68	3,38	mm	,00	1,00	NR	205	Reducer Concentric ASME B16.9 BE WPB	Wrought S	ASTM	A 234	GR.	0,26		
1159	1/2	0	In			mm	,00	1,00	NR	205	Coupling Half TA 50.6/1 SW-F 3000#	Forged AS'	TM A 1	05		0,15		
	•									'	M Erection				Total Kg:	164,58		
SX1	SULPHU	REX G	H/F			03112	- 0			SX1	SX1 1	/ 1			TOTAL Kg:	164,58		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 03112 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCH	IES MATERIAL LIST		PR	OJ : 1	E35	REV:	0 1	3/04/2010
	PUMA	.5		13/04/20	010 11.47	7.11							DC	OC: 1	E35-65-029	•		
			Ball	estra						SUI	LPHUREX GH/F	Size: In	Thk: mm	. 7	Гетр: °С	Pres: BAR		Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Otv	Um	Pip. class	Component				Gen. Bolt	Weight (K	g) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00			-	Pipe ASME B36.10 PL Seamless API 5	L GR. B				12,6	•	
3107	1/2	0	In			mm	,00	3,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	A 105 C	G 61		5,1	0	
4949	1/2	0	In			mm	,00	1,00	NR	205	Steam Trap ST.46702/0 THRD-F NPT	PN 25 Forg	ged AISI	304 T	71	4,0	8	
1289	1/2	0	In			mm	,00	2,00	NR	207	Union TA 50.6/1 SW-F 3000# Forged A	STM A 10)5			0,7	6	
4546	1/2	0	In			mm	,00	1,00	NR	205	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged ASTI	M A 105			0,1	2	
	*			•	.		•			N	1 Erection				Total Kg:	22,7	2	

TOTAL Kg:

22,72

SX1 SX1

SX1

SULPHUREX GH/F

03115 - 0

		В	allest	ra					S	KETC	HES MATERIAL LIST		PROJ:	1E35	REV: 0	13	/04/2010
	PUMA	5		13/04/20	010 11.47	'.11							DOC:	1E35-65-029			
			Bal	lestra						st	LPHUREX GH/F	Size: In Th	k: mm	Temp: °C	Pres: BAR	(Corr: mm
										_							
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component			Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	10,00	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B			12,66		
3107	1/2	0	In			mm	,00	3,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM A	105 G 61		5,10		
4949	1/2	0	In			mm	,00	1,00	NR	205	Steam Trap ST.46702/0 THRD-F NPT	PN 25 Forged	AISI 304	T 71	4,08		
		•	•			•					M Erection			Total Kg	21,84		
SX1	SULPHU	JREX G	H/F			03116	- 0			SX1	SX1 1 /	1		TOTAL Kg	21,84		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	SP.1406/2-SP.1407/2
Line 03116 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					5	SKETO	CHES MA	TERIAL LIST		F	PROJ:	1E35		REV:	0 1	3/04/2010
	PUMA	5		13/04/20	010 11.47	7.11								I	OC:	1E35-65	5-029			
			Ball	estra						9	SULPHUREX	GH/F	Size: In	Thk:	mm	Temp: °C		Pres: BAR		Corr: mm
Mark	S1	S2		T1	T2		Len mm	ı Qt	Un	Pip. cla	ss Compon	ent				G	en. Bolt	Weight (Kg	() As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	6,0) m	205	Pipe ASN	IE B36.10 PL Seamless API	5L GR. B					7,59)	
3107	1/2	0	In			mm	,00	3,0) NR	205	Valve Ga	te ST.46270/3 SW-F 800# Fo	orged ASTM	1 A 10:	5 G 61			5,10)	
4949	1/2	0	In			mm	,00	1,0) NR	205	Steam Tr	ap ST.46702/0 THRD-F NP	ΓPN 25 For	rged Al	ISI 304	T 71		4,08	3	
	1		'			<u> </u>					M Erection						Total Kg:	16,7	3	
SX1	SULPHU	JREX GI	H/F			03118	- 0			SX1	SX1		/ 1			ТО	TAL Kg:	16,78	3	

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	SP.1406/2-SP.1407/2
Line 03118 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestra	a					S	KETC	HES MATERIAL LIST		P	ROJ:	1E35	REV: 0	13	/04/2010
	PUMA	5		13/04/20	010 11.47	'.11							D	OC:	1E35-65-029		•	
			Balle	estra						S	SULPHUREX GH/F	Size: In	Thk: r	nm	Temp: °C	Pres: BAR	C	Corr: mm
Mark	S1	S2		Т1	Т2		Len mn	Otv	IIm	Pip. clas	ss Component				Gen. Bolt	Weight (Kg)	Ac bly	Branch
1433	1/2	0	In	2,77	12	mm	.00		+	-	Pipe ASME B36.10 PL Seamless API 5	L GR. B			Gen. Bott	13,04	Asony	Dianch
3107	1/2	0	In	7		mm	,00		NR	205	Valve Gate ST.46270/3 SW-F 800# For		I A 105	G 61		5,10		
4949	1/2	0	In			mm	,00	1,00	NR	205	Steam Trap ST.46702/0 THRD-F NPT	PN 25 For	ged AI	SI 304	Γ71	4,08		
1289	1/2	0	In			mm	,00	2,00	NR	207	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 10	05			0,76		
4546	1/2	0	In			mm	,00,	1,00	NR	205	Cap TA 50.7/2 THRD-F NPT 3000# F	orged AST	M A 10)5		0,12		
	·	•	•			•					M Erection				Total Kg	: 23,1		
SX1	SULPHU	JREX G	H/F			03119	- 0			SX1	SX1 1	/ 1			TOTAL Kg	: 23,1		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification S	SP.1406/2-SP.1407/2
Line 03119 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					5	KETCI	HES MATERIAL LIST		PRO	J: 1E3	5	REV: 0	13	/04/2010
	PUMA	15		13/04/20	010 11.47	7.11							DOC	: 1E3	5-65-029			
			Ball	estra						SU	JLPHUREX GH/F	Size: In	Thk: mm	Tem	p: °C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mn	n Qt	Un	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1453	3	0	In	3,18		mm	,00	9,1	0 m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				61,17		
1457	6	0	In	3,96		mm	,00	17,0	0 m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				272,82		
1460	10	0	In	3,96		mm	,00	34,0	0 m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				893,27		
304	10	0	In	3,96		mm	,00	1,0	0 NR	203	90° Elbow Long Radius ASME B16.9 I WPB	BE E.R.W.	ASTM A 2	34 GR.		15,80		
2086	6	3	In	3,96	3,18	mm	,00	1,0	0 NR	203	Reducer Eccentric ASME B16.9 BE E.I	R.W. ASTN	M A 234 G	R. WPB		2,18		
2102	10	6	In	3,96	3,96	mm	,00	1,0	0 NR	203	Reducer Eccentric ASME B16.9 BE E.I	R.W. ASTN	M A 234 G	R. WPB		4,55		
4460	3	0	In	3,18		mm	,00) 1,0	0 NR	203	Cap ASME B16.9 BE Seamless ASTM	A 234 GR	. WPB			0,41		
4467	10	0	In	3,96		mm	,00	1,0	0 NR	203	Cap ASME B16.9 BE Seamless ASTM	A 234 GR	. WPB			4,28		
			•					•		1	M Erection				Total Kg:	1254,49		
SX1	SULPH	UREX G	H/F			04101	- 0			SX1	SX1 1	/ 1			TOTAL Kg:	1254,49		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	on SP.1406/2-SP.1407/3
Line 04101 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	Ballesti	ra					S	KETCH	HES MATERIAL LIST		P	ROJ:	1E35		REV: 0	13	/04/2010
	PUMA	A 5		13/04/20	010 11.4	7.11							D	OC:	1E35-65	5-029			
			Bal	lestra						SU	LPHUREX GH/F	Size: In	Thk: n	ım	Temp: °C	2	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mn	n Qty	Um	Pip. class	Component				G	en. Bolt	Weight (Kg)	As.bly	Branch
1453	3	0	In	3,18		mm	,00	9,10	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B					61,17		
1458	8	0	In	3,96		mm	,00	17,00	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B					357,16		
1463	14	0	In	6,35		mm	,00	33,70	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B					1.843,03		
307	14	0	In	6,35		mm	,00	1,00	NR	203	90° Elbow Long Radius ASME B16.9 E WPB	BE E.R.W.	ASTM	A 234	GR.		45,34		
2076	4	3	In	3,18	3,18	mm	,00	0 1,00	NR	203	Reducer Eccentric ASME B16.9 BE E.I	R.W. ASTN	M A 23	4 GR.	WPB		0,86		
2090	8	4	In	3,96	3,18	mm	,00	0 1,00	NR	203	Reducer Eccentric ASME B16.9 BE E.I	R.W. ASTN	M A 23	4 GR.	WPB		3,17		
2114	14	8	In	6,35	3,96	mm	,00	0 1,00	NR	203	Reducer Eccentric ASME B16.9 BE E.I	R.W. ASTN	M A 23	4 GR.	WPB		17,97		
4460	3	0	In	3,18		mm	,00	0,00	NR	203	Cap ASME B16.9 BE Seamless ASTM	A 234 GR.	. WPB				0,41		
							'	•	•	1	M Erection				,	Total Kg:	2329,11		
SX1	SULPH	UREX G	H/F			04102	- 0			SX1	SX1 1 /	['] 1			ТО	TAL Kg:	2329,11		

Disk plate \emptyset 230mm thk. 5 mm - Fe 360B-UNI 7070 = n 1 pz

Plant SX1 SULPHUREX GH/F Line 04102 - 0 Dang. fluid type Area SX1 Piping Class 203
Fluid
Coating
Sketch Sht 1/1

Welding specification SP.1406/2-SP.1407/3 System

De pres

Isometric code

Op tem

Page 1

		В	allestr	a					S	KETC	CHES MATERIAL LIST		I	PROJ:	1E35		REV: 0	13	/04/2010
	PUMA	.5		13/04/20	010 11.47	7.11							Ī	OOC:	1E35-0	65-029		•	
			Balle	estra						8	SULPHUREX GH/F	Size: In	Thk:	mm	Temp:	°C	Pres: BAR	C	Corr: mm
										1						Г			
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	ss Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1460	10	0	In	3,96		mm	,00	16,00	m	203	Pipe ASME B36.10 PL E.R.W. API 5I	GR. B					420,36		
304	10	0	In	3,96		mm	,00	1,00	NR	203	90° Elbow Long Radius ASME B16.9	BE E.R.W.	. ASTN	1 A 234	GR.		15,80		
								-			WPB								
4467	10	0	In	3,96		mm	,00	1,00	NR	203	Cap ASME B16.9 BE Seamless ASTM	A 234 GR	R. WPB	}			4,28		
		•	·			•					M Erection					Total Kg:	440,44		
SX1	SULPHU	JREX G	H/F			04103	- 0			SX1	SX1 1	/ 1			T	OTAL Kg:	440,44		

Plant SX1 SULPHUREX GH/F Piping Class 203 Welding specification SP.1406/2-SP.1407/3

Line 04103 - 0 Fluid System

Dang. fluid type Coating De pres Op tem

Area SX1 Sketch Sht 1/1 Isometric code Page 1

Zones

		В	allestr	a				SF	KETCH	IES MATERIAL LIST		PROJ	: 1E35		REV: 0	13	/04/2010
	PUMA	5		13/04/20	10 11.47.11							DOC:	1E35-	-65-029			
			Ball	estra					SU	LPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	C	orr: mm
							ı							1			
Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1463	14	0	In	6,35	mm	,00	16,00	m 2	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				875,03		
307	14	0	In	6,35	mm	,00	1,00	NR 2	203	90° Elbow Long Radius ASME B16.9 I	BE E.R.W.	ASTM A 23	4 GR.		45,34		
										WPB							
4470	14	0	In	6,35	mm	,00	1,00	NR 2	203	Cap ASME B16.9 BE Seamless ASTM	A 234 GR	. WPB			11,37		
		·	·						N	M Erection				Total Kg:	931,74	•	
SX1	SULPHU	JREX GI	H/F		04104	- 0			SX1 S	SX1 1	/ 1		Т	OTAL Kg:	931,74		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 04104 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allest	ra					S	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/04/2	2010
	PUMA	A 5		13/04/2	010 11.4	7.12							DOC:	1E35-	65-029		•	
			Bal	llestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	Corr: 1	nm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	ss Component				Gen. Bolt	Weight (Kg) A	s.bly Bra	anch
1435	1	0	In	3,38		mm	,00	40,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				100,09		
324	1	0	In	3,38		mm	,00	4,00	NR	203	90° Elbow Long Radius ASME B16.9 I GR. WPB	BE Wrought	S ASTM A	234		0,54		
1749	1	1/2	In	3,38	2,77	mm	,00	1,00	NR	203	Reducer Concentric ASME B16.9 BE V WPB	Wrought S A	STM A 234	GR.		0,14		
											M Erection				Total Kg:	100,76		
SX1	SULPH	SULPHUREX GH/F 04					- 0			SX1	SX1 1	/ 1		Т	OTAL Kg:	100,76		

		В	allestr	a						SKI	ETCI	HES MATERIAL LIST		PI	ROJ:	1E35	REV: 0	13	3/04/2010
	PUMA	.5		13/04/20	10 11.47	.12								D	OC:	1E35-65-029	•		
			Ball	estra							SU	JLPHUREX GH/F	Size: In	Thk: m	n	Temp: °C	Pres: BAR	(Corr: mm
Mark	01	S2		Т1	T2		T	. 04	TI	D:		C				Gen. Bolt	W-:-14 (V-)	A = 1-1	Dh
	S1	52			12		Len mn				p. class	•				Gen. Boit	7 7 8 7	•	Branch
1457	6	0	In	3,96		mm	,00	26,5	0 r	m 20	13	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				425,28		
133	6	0	In	3,96		mm	,00),1	0 N	IR 20	13	45° Elbow Long Radius ASME B16.9 I	BE E.R.W.	ASTM	A 234	GR.	2,85		
									_			WPB					-		
301	6	0	In	3,96		mm	,00) 1,0	0 N	IR 20	3	90° Elbow Long Radius ASME B16.9 F WPB	BE E.R.W.	ASTM	A 234	GR.	5,66		
			-				1		_										
4464	6	0	In	3,96		mm	,00	0,1,0	0 N	JR 20	13	Cap ASME B16.9 BE Seamless ASTM	A 234 GR	. WPB			2,02		
	•		•		'			•			N	M Erection				Total Kg	3: 435,82		
SX1	SULPH	UREX G	H/F			04106	- 0			S	SX1 S	SX1 1.	/ 1			TOTAL Kg	g: 435,82		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 04106 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	Ballestr	a					S	KETO	CHES MATERIAL LIST		PROJ	1E35		REV: 0	13/	/04/2010
	PUMA	A 5		13/04/20	010 11.47	.12							DOC:	1E35-6	65-029		•	
			Ball	estra						(SULPHUREX GH/F	Size: In	Thk: mm	Temp: °	°C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. cla	ss Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1457	6	0	In	3,96		mm	,00	26,50	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				425,28		
133	6	0	In	3,96		mm	,00	1,00	NR	203	45° Elbow Long Radius ASME B16.9 E WPB	BE E.R.W.	ASTM A 23	4 GR.		2,85		
301	6	0	In	3,96		mm	,00	1,00	NR	203	90° Elbow Long Radius ASME B16.9 F WPB	BE E.R.W.	ASTM A 23	4 GR.		5,66		
4464	6	0	In	3,96		mm	,00	1,00	NR	203	Cap ASME B16.9 BE Seamless ASTM	A 234 GR	. WPB			2,02		
	1	,	,	1	1					1	M Erection			· ·	Total Kg:	435,82		
SX1	SULPH	UREX G	H/F			04107	- 0			SX1	SX1 1	['] 1		T	OTAL Kg:	435,82		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 04107 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		Ba	allestr	a					5	SKET	СН	ES MATERIAL LIST		PRO	J: 1E	E35	REV: 0	13	3/04/2010
	PUMA5	;		13/04/20	10 11.47.	.12								DOC	: 1E	E35-65-029	•		
			Ball	lestra							SUI	PHUREX GH/F	Size: In	Thk: mm	Te	emp: °C	Pres: BAR	(Corr: mm
							1 -		1			la .							
Mark	S1	S2		TI	T2		Len mm	Qty	Un	n Pip. cla	ass	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1437	1+1/2	0	In	3,68		mm	,00	20,0) m	203		Pipe ASME B36.10 PL Seamless API 5	L GR. B				80,98		
4457	1+1/2	0	In	3,68		mm	,00	1,0	1,00 NR 203 Cap ASME B16.9 BE Seamless AST					R. WPB			0,18		

M Erection

SX1

SX1

05101 - 0

SULPHUREX GH/F

SX1

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 05101 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

Total Kg:

TOTAL Kg:

81,17

81,17

		Ba	llestr	a					S	KETCH	IES MATERIAL LIST		PROJ:	1E35		REV:	0 1	3/04/2010
	PUMA5			13/04/20	10 11.47	.12							DOC:	1E35-6	65-029			
	Ballestra									SU	LPHUREX GH/F	Size: In T	hk: mm	Temp: °	C	Pres: BAR		Corr: mm
		1						T.		_								
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (I	(Kg) As.bly	Branch
1437	1+1/2	0	In	3,68		mm	,00	20,0	m	203	Pipe ASME B36.10 PL Seamless API 51	GR. B				80,	98	
4457	1+1/2	0	In	3,68		mm	,00	1,0	NR	203	Cap ASME B16.9 BE Seamless ASTM	A 234 GR. W	VPB			0,	18	
	•				•			_		N	1 Erection			•	Total Kg:	81,	17	

TOTAL Kg:

81,17

SX1 SX1

SX1

SULPHUREX GH/F

05102 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 05102 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a				SKET	CHES M	ATERIAL LIST		PI	ROJ:	1E35		REV:	13	3/04/2010
	PUMA5			13/04/20	010 11.47.12							D	OC:	1E35-65-	-029		•	
			Ball	estra					SULPHURE	X GH/F	Size: In	Thk: m	m	Temp: °C		Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2	Len mn	n Qty	Um Pip. cl	ass Compo	nent				Ger	n. Bolt	Weight (Kg)	As.bly	Branch
1437	1+1/2	0	In	3,68	mn	,00	24,00	m 203	Pipe AS	SME B36.10 PL Seamless API 5	L GR. B					97,18		
326	1+1/2	0	In	3,68	mn	,00	1,00	NR 203	90° Elb GR. WI	ow Long Radius ASME B16.9 F PB	BE Wrough	nt S AST	ГМ А	234		0,37		
4457	1+1/2	0	In	3,68	mn	,00	1,00	NR 203	Cap AS	ME B16.9 BE Seamless ASTM	A 234 GR	. WPB				0,18		
	1+1/2 0 111 3,00					•			M Erection	n				To	otal Kg:	97,73		
SX1	SULPHU	REX G	H/F		051	03 - 0		SX1	SX1	1.	/ 1			TOT	AL Kg:	97,73]	

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 05103 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allest	ra					S	KETCH	HES MATERIAL LIST		PROJ	: 1E35		REV: 0	13	3/04/2010
	PUMA:	5		13/04/20	010 11.47	7.12							DOC:	1E35	-65-029			,
			Bal	llestra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	(Corr: mm
Mark	S1	S2		Т1	Т2		Len mm	n Otv	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.blv	Branch
1437	1+1/2	0	In	3,68		mm	,00		-	•	Pipe ASME B36.10 PL Seamless API 5	L GR. B				97,18		
326	1+1/2	1+1/2 0 In 3,68 mm				mm	,00	1,00	NR	203	90° Elbow Long Radius ASME B16.9 E GR. WPB	BE Wrought	S ASTM A	234		0,37		
4457	1+1/2 0 In 3,68 mm					mm	,00	1,00	NR	203	Cap ASME B16.9 BE Seamless ASTM	A 234 GR.	WPB			0,18		
	171/2 0 11 3,08									N	M Erection				Total Kg:	97,73		
SX1	SULPHU	REX G	iH/F			05104	- 0			SX1 S	SX1 1,	1		7	TOTAL Kg:	97,73		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 05104 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allesti	· a					SF	KETC	HES MATERIAL LIST		Pl	ROJ:	1E35		REV: 0	13	/04/2010
	PUMA	15		13/04/20	010 11.4	7.12							D	OC:	1E35-6	5-029	•	•	
			Bal	lestra						S	ULPHUREX GH/F	Size: In	Thk: m	m	Temp: °C	2	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um l	Pip. clas	ss Component				C	Gen. Bolt	Weight (Kg)	As.bly	Branch
1435	1	0	In	3,38		mm	,00	24,00	m 2	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B					60,05		
324	1	0	In	3,38		mm	,00	4,00	NR 2	203	90° Elbow Long Radius ASME B16.9	BE Wrough	nt S AST	M A	234		0,54		
		'		'							GR. WPB								
4583	1	0	In			mm	,00	1,00	NR 2	211	Cap TA 50.6/1 SW-F 3000# Forged AS	TM A 105					0,25		
				•							M Erection				•	Total Kg:	60,84	•	
SX1	SULPH	UREX G	H/F			05105	- 0			SX1	SX1 1	/ 1			TC	TAL Kg:	60,84		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 05105 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	Ballesti	ra					S	KETC	HES MATERIAL LIST		PRO	J: 1E3:	5	REV: 0	13	/04/2010
	PUMA	A 5		13/04/20	010 11.4	7.13							DO	C: 1E3:	5-65-029		•	
			Bal	lestra						SU	ULPHUREX GH/F	Size: In	Thk: mm	Temp): ℃	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	ı Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1435	1	0	In	3,38		mm	,00	24,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				60,05	<u> </u>	
324	1	0	In	3,38		mm	,00	4,00	NR	203	90° Elbow Long Radius ASME B16.9 I GR. WPB	BE Wrought	S ASTM	A 234		0,54		
4583	1	0	In			mm	,00,	1,00	NR	211	Cap TA 50.6/1 SW-F 3000# Forged AS	STM A 105				0,25		
		*	•	•	•	*				•	M Erection				Total Kg:	60,84		
SX1	SULPH	UREX G	H/F			05106	- 0			SX1	SX1 1	/ 1			TOTAL Kg:	60.84		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 05106 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	·a					S	KETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	.5		13/04/20	10 11.47	.13							DOC:	1E35-6	65-029			
			Ball	lestra						SUI	LPHUREX GH/F	Size: In Thi	K: mm	Temp:	°C	Pres: BAR	C	orr: mm
		l						_		1								
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component			(Gen. Bolt	Weight (Kg)	As.bly	Branch
1438	2	0	In	3,91		mm	,00	12,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				65,25		
4458	2	0	In	3,91		mm	,00	1,00	NR	203	Cap ASME B16.9 BE Seamless ASTM	A 234 GR. WI	PB			0,31		
	·			•						N	1 Erection				Total Kg:	65,56		

TOTAL Kg:

65,56

SX1 SX1

SULPHUREX GH/F

07101 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	on SP.1406/2-SP.1407/3
Line 07101 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestı	a					S	KETC	HES MATERIAL LIST		PRO)J: 1E3	35	REV: 0	13	/04/2010
	PUMA	A 5		13/04/20	10 11.47	'.13							DO	C: 1E3	35-65-029			
			Bal	lestra						SU	ULPHUREX GH/F	Size: In	Thk: mm	Ten	ıp: ℃	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	Otro	T I	Pip. class	s Component				Gen. Bolt	Weight (Kg)	A a bler	Branch
	91	34			14		-		+	•	•				Gen. Don	0 , 0,	AS.DIY	Drancii
1438	2	0	In	3,91		mm	,00	32,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				173,99		
327	2	0	In	3,91		mm	,00	1,00	NR	203	90° Elbow Long Radius ASME B16.9 I	BE Wrought	t S ASTN	A 234		0,66		
	·										GR. WPB							
4458	2	0	In	3,91		mm	,00	1,00	NR	203	Cap ASME B16.9 BE Seamless ASTM	A 234 GR.	WPB			0,31		
		·			•						M Erection				Total Kg:	174,97		
SX1	SULPH	UREX G	H/F			07102	- 0			SX1	SX1 1	/ 1			TOTAL Kg:	174,97		

		I	Ballestr	a					SKETC	HES MATERIAL LIST		PROJ	1E35	5	REV: 0	13/04/2010
	PUMA	15		13/04/2	010 11.4	7.13						DOC:	1E35	5-65-029		
			Ball	lestra					S	ULPHUREX GH/F	Size: In	Thk: mm	Temp	o: °C	Pres: BAR	Corr: mm
37. 1	S1	62		TD:1	Т2		T	04	TI D' I	C				G . P. 14	W 114 (77) A 111	D 1
Mark 1433	1/2	S2	In	T1 2,77	12	mm	Len mm		Um Pip. clas m 206	S Component Pipe ASME B36.10 PL Seamless API	SI CD B			Gen. Bolt	Weight (Kg) As.bly	Branch
1435	1/2	0	In	3,38		mm	,00		m 206	Pipe ASME B36.10 PL Seamless API					1,25	
1454	1	0	In	3,18		mm	,00	8,70	-	Pipe ASME B36.10 PL E.R.W. API 51					75,81	
5574	14	0	In	4,78		mm	,00		m 206	Pipe ASME B36.10 PL E.R.W. API 51					727,81	
473	4	0	In	7,70		mm	,00		NR 206	Flange Slip-On ASME B16.5 150 LB		0 AARH) Fo	orged	5201	11,20	
							_		-	ASTM A 105						
479	14	0	In			mm	,00	6,00	NR 206	Flange Slip-On ASME B16.5 150 LB ASTM A 105	RF (125÷25	0 AARH) Fo	orged	5249	216,00	
4728	4	0	In			mm	,00	2,00	NR 206	Flange Slip-On x Wafer ASME B16.5 Forged ASTM A 105	150 LB FF	(125÷250 A	ARH)	5201	11,20	
298	4	0	In	3,18		mm	,00	3,00	NR 206	90° Elbow Long Radius ASME B16.9 WPB	BE E.R.W.	ASTM A 23	34 GR.		6,20	
5572	14	0	In	4,78		mm	,00	3,00	NR 206	90° Elbow Long Radius ASME B16.9 WPB	BE E.R.W.	ASTM A 23	34 GR.		102,39	
5632	16	14	In	4,78	4,78	mm	.00	1,00	NR 206	Reducer Concentric ASME B16.9 BE	E.R.W. AS	ГМ A 234 G	R. WPE	3	16,59	
1056	1/2	0	In			mm	.00		NR 206	Coupling TA 50.7/2 THRD-F NPT 30	00# Forged	ASTM A 10)5		0,24	
1058	1	0	In			mm	,00	2,00	NR 206	Coupling TA 50.7/2 THRD-F NPT 30	00# Forged	ASTM A 10)5		0,60	
5201	5/8	0	In			mm	95,00	16,00	NR 206	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2F	ИЕ В18.2.1				3,68	
5249	1	0	In			mm	135,00	48,00	NR 206	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2F	ИЕ В18.2.1	UNC/2.2 TA	AB. 9		82,56	
667	4	0	In			mm	,00	2.00	NR 206	Gasket TA 50.5/31 150 LB RF (125÷2		B5C				
673	14	0	In			mm	.00		NR 206	Gasket TA 50.5/31 150 LB RF (125÷2						
073	17	U					,00	.,00	1414 200	M Erection	3071711(17)			Total Kg:	1255,65	
SX1	SULPH	UREX (SH/F			11001	- 0		SX1	SX1 1	/ 1			TOTAL Kg:	1255,65	
TET_1							Plant SX1	SULPHU	REX GH/F	Piping Class 206			W	elding specificat	ion SP.1406/2-SP.1407/3	3
PI_11.1							Line 1100			Fluid			Sys	stem		
PT_11.	7						Dang. fluid	type		Coating				pres	Op tem	
							Area SX1			Sketch Sht 1/1		Is	ometric (code		Page 1

Zones

		В	Balles	tra						Sl	KETC	HES MATERIAL LIST		PROJ:	1E35	;	REV: 0	13/04/2010
	PUMA	A 5		13/04/2	010 11.4	7.13								DOC:	1E35	5-65-029		
			В	allestra							SI	ULPHUREX GH/F	Size: In	Thk: mm	Temp	: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mn	n (Qty 1	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg) As.h	ly Branch
5574	14	0	In	4,78		mm	,00	8 0	,00	m	206	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				330,82	
5052	14	0	In			mm	,00	0 1	,00	NR	206	Valve Butterfly With Gasket ST.46856/ (125÷250 AARH) Cast DUCTILE IRO		50 LB RF		5258	65,00	
479	14	0	In			mm	,00	0 2	,00	NR	206	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	RF (125÷250	AARH) For	rged	5249	72,00	
5572	14	0	In	4,78		mm	,00	0 2	,00	NR	206	90° Elbow Long Radius ASME B16.9 I WPB	BE E.R.W. A	ASTM A 234	4 GR.		68,26	
5258	1	0	In			mm	215,00	0 12	,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		JNC/2.2 TA	B. 9		26,64	
												M Erection				Total Kg:	562,72	
SX1	SULPH	UREX G	H/F			11002	- 0				SX1	SX1 1	/ 1		,	TOTAL Kg:	562,72	

Plant SX1 SULPHUREX GH/F	Piping Class 206	Welding specificatio	n SP.1406/2-SP.1407/3
Line 11002 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestra	a					5	SKETCH	IES MATERIAL LIST		Pl	ROJ:	1E35		REV: 0	13	/04/2010
	PUMA	.5		13/04/20	10 11.47	.13							D	OC:	1E35	-65-029			
			Balle	estra						SU	LPHUREX GH/F	Size: In	Thk: m	m	Temp	: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	Pip. class	Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,20	m	206	Pipe ASME B36.10 PL Seamless API 5	L GR. B					0,25		
1435	1	0	In	3,38		mm	,00	0,40	m	206	Pipe ASME B36.10 PL Seamless API 5	L GR. B					1,00		
5574	14	0	In	4,78		mm	,00	10,60	m	206	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B					438,34		
479	14	0	In			mm	,00	1,00	NR	206	Flange Slip-On ASME B16.5 150 LB R	RF (125÷25	0 AARI	H) For	ged	5249	36,00		
	ı										ASTM A 105								
5570	14	0	In	4,78		mm	,00	1,00) NR	206	45° Elbow Long Radius ASME B16.9 I	BE E.R.W.	ASTM	A 234	GR.		17,06		
						1			1		WPB								
5572	14	0	In	4,78		mm	,00	2,00	NR	206	90° Elbow Long Radius ASME B16.9 I	BE E.R.W.	ASTM	A 234	GR.		68,26		
					1				-	1	WPB								_
1056	1/2	0	In			mm	,00	1,00) NR	206	Coupling TA 50.7/2 THRD-F NPT 300	00# Forged	ASTM	A 105	i		0,12		
1058	1	0	In			mm	,00	3,00	NR	206	Coupling TA 50.7/2 THRD-F NPT 300	00# Forged	ASTM	A 105			0,90		
1189	1	0	In			mm	,00	1,00	NR	206	Plug Hex. TA 50.7/2 THRD-M NPT 30	000# Forge	d ASTN	1 A 10)5		0,35		
5249	1	0	In			mm	135,00	12,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	IE B18.2.1	UNC/2	.2 TAI	В. 9		20,64		
							'			'	ASTM A 193 B7/ASTM A 194 GR.2H								
673	14	0	In			mm	,00	1,00	NR	206	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH)	_ B5C						
										N	1 Erection					Total Kg:	582,93		

SX1 SX1

SX1

SULPHUREX GH/F

11004 - 0

TET_11.11	Plant SX1 SULPHUREX GH/F	Piping Class 206	Welding specification	SP.1406/2-SP.1407/3
PI_11.3	Line 11004 - 0	Fluid	System	
TI_11.2	Dang. fluid type	Coating	De pres	Op tem
FE_11.1	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

582,93

TOTAL Kg:

Balle	stra	SKETCHES MATERIAL LIST		PROJ:	1E35	REV: 0	13/04/2010
PUMA5	13/04/2010 11.47.13			DOC:	1E35-65-029		
	Ballestra	SULPHUREX GH/F	Size: In Th	hk: mm	Temp: °C	Pres: BAR	Corr: mm

Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	S Component	Gen. Bolt	Weight (Kg) As.bly	Branch
1435	1	0	In	3,38		mm	,00	0,10		206	Pipe ASME B36.10 PL Seamless API 5L GR. B		0,25	
5574	14	0	In	4,78		mm	,00	11,80	m	206	Pipe ASME B36.10 PL E.R.W. API 5L GR. B		487,96	
3025	14	0	In			mm	,00	1,00	NR	206	Valve Check ST.46708/1 WAFER 150 LB RF (125÷250 AARH)	5255	37,00	
		•									Forged ASTM A 105 R 110			<u> </u>
479	14	0	In			mm	,00	8,00	NR	206	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged	5249	288,00	
									_		ASTM A 105			
5570	14	0	In	4,78		mm	,00	1,00	NR	206	45° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 GR.		17,06	
5572	14	0	In	4,78		mm	.00	5,00	NR	206	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 GR.		170,65	
							<u> </u>		-		WPB			
5595	14	10	In	4,78	3,96	mm	,00	2,00	NR	206	Reducer Eccentric ASME B16.9 BE E.R.W. ASTM A 234 GR. WPB		27,05	
1058	1	0	In			mm	,00	1,00	NR	206	Coupling TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 105		0,30	
1124	1/2	0	In			mm	,00	1,00	NR	206	Coupling Half TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 105		0,06	
1159	1/2	0	In			mm	,00	1,00	NR	206	Coupling Half TA 50.6/1 SW-F 3000# Forged ASTM A 105		0,15	
5249	1	0	In			mm	135,00	60,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9		103,20	
	·	•	·								ASTM A 193 B7/ASTM A 194 GR.2H			
5255	1	0	In			mm	175,00	12,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9		23,64	
											ASTM A 193 B7/ASTM A 194 GR.2H			
673	14	0	In			mm	,00	7,00	NR	206	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5C			
							_				M Erection	Total Kg:	1155,33	
SX1	SULPH	UREX G	H/F			11005	- 0			SX1	SX1 1/1	TOTAL Kg:	1155,33	

KV_11.10	Plant SX1 SULPHUREX GH/F	Piping Class 206	Welding specification	SP.1406/2-SP.1407/3
ME_11.1	Line 11005 - 0	Fluid	System	
TET_11.18	Dang. fluid type	Coating	De pres	Op tem
PT_11.18	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
12Y1	Zones			

	Ballestra PUMA5 13/04/2010 11.47.13						1	SKETCHES MATERIAL LIST								E35 REV: E35-65-029		13	3/04/2010
	Ballestra						SULPHUREX GH/F Size: In Thi									Pres: BAR		Corr: mm	
			Dan	icsu a						50.	ET HOREA GIVE	Size. III	THK.		temp.		TTCS. DAK		
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1435	1	0	In	3,38		mm	,00	0,10	m	206	Pipe ASME B36.10 PL Seamless API	5L GR. B					0,25		
1454	4	0	In	3,18		mm	,00	0,80	m	206	Pipe ASME B36.10 PL E.R.W. API 51	L GR. B					6,97		
1458	8	0	In	3,96		mm	,00	0,30	m	206	Pipe ASME B36.10 PL E.R.W. API 51	L GR. B					6,30		
1460	10	0	In	3,96		mm	,00	57,00	m	206	Pipe ASME B36.10 PL E.R.W. API 51	GR. B					1.497,55		
3023	10	0	In			mm	,00	2,00	NR	206	Valve Check ST.46708/1 WAFER 150 Forged ASTM A 105 R 110) LB RF (12	25÷250 A	AARH)		5237	30,00		
5046	4	0	In			mm	,00	1,00	NR	206	Valve Butterfly With Gasket ST.46856 (125÷250 AARH) Cast DUCTILE IRC		150 LB	RF		5210	6,70		
473	4	0	In			mm	,00	2,00	NR	206	Flange Slip-On ASME B16.5 150 LB ASTM A 105	RF (125÷25	0 AARI	H) Forge	ed	5201	11,20		
476	8	0	In			mm	,00	2,00	NR	206	Flange Slip-On ASME B16.5 150 LB ASTM A 105	RF (125÷25	60 AARI	H) Forge	ed	5216	25,20		
477	10	0	In			mm	,00	4,00	NR	206	Flange Slip-On ASME B16.5 150 LB ASTM A 105	RF (125÷25	60 AARI	H) Forge	ed	5232	74,00		
136	10	0	In	3,96		mm	,00	1,00	NR	206	45° Elbow Long Radius ASME B16.9 WPB	BE E.R.W.	ASTM	A 234 C	GR.		8,75		
298	4	0	In	3,18		mm	,00	1,00	NR	206	90° Elbow Long Radius ASME B16.9 WPB	BE E.R.W.	ASTM	A 234 (GR.		2,07		
304	10	0	In	3,96		mm	,00	7,00	NR	206	90° Elbow Long Radius ASME B16.9 WPB	BE E.R.W.	ASTM	A 234 (GR.		110,60		
1679	10	8	In	3,96	3,96	mm	.00	2,00	NR	206	Reducer Concentric ASME B16.9 BE	E.R.W. AS	TM A 2	34 GR.	WPB		9,11		T
1686	12	10	In	4,78	3,96	mm	,00		-	206	Reducer Concentric ASME B16.9 BE						7,55		+
4548	1	0	In		1	mm	,00		-	206	Cap TA 50.7/2 THRD-F NPT 3000#1						0,25		+
5210	5/8	0	In			mm	145,00	8,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2F	ME B18.2.1			9		2,40		
5216	3/4	0	In			mm	110,00	16,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASN ASTM A 193 B7/ASTM A 194 GR.2F	ME B18.2.1	UNC/2	.2 TAB.	9		14,08		
FE_16.1 FV_16.1							Plant SX1		REX	GH/F	Piping Class 206 Fluid				Weld	0.	tion SP.1406/2-SP	.1407/3	

Coating

Sketch Sht 1/1

De pres

Isometric code

Dang. fluid type

Area SX1

Zones

Page 1

Op tem

		В	allesti	ra					S	KETCH	IES MATERIAL LIST		PROJ	1E35		REV:	0	13/04/2010
	PUMA	\ 5		13/04/2	2010 11.4	7.14							DOC:	1E35	-65-029	•		
			Bal	lestra						SUI	LPHUREX GH/F	Size: In	Γhk: mm	Temp	:°C	Pres: BAR		Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (l	Kg) As.bl	y Branch
5237	7/8	0	In			mm	155,00	24,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/ASTM A 194 GR.2H					16,	56	
670	8	0	In			mm	,00	2,00	NR	206	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _	B5C					
671	10	0	In			mm	,00	4,00	NR	206	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _	B5C					
	·				·					N	1 Erection				Total Kg:	1829	54	

TOTAL Kg:

1829,54

SX1 SX1

SULPHUREX GH/F

FE_16.1	Plant SX1 SULPHUREX GH/F	Piping Class 206	Welding specification	SP.1406/2-SP.1407/3
FV_16.1	Line 11006 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 2
	Zones			

		I	Ballesti	ra					SKETO	CHES MATERIAL LIST	PR	OJ: 1E	35	REV: 0	3/04/2010
	PUMA	15		13/04/20	010 11.47	7.14					DO	C: 1E	35-65-029		
			Bal	lestra						SULPHUREX GH/F	Size: In Thk: mm	Ter	mp: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um Pip. cla	ss Component			Gen. Bolt	Weight (Kg) As.bly	Branch
5574	14	0	In	4,78		mm	,00	4,60	m 209	Pipe ASME B36.10 PL E.R.W. API 5I	GR. B			190,22	
5701	14	0	In			mm	,00	2,00	NR 209	Flange Slip-On AWWA C207-TAB.1 (AARH) Forged ASTM A 105	CL.B 86 psi FF (125-	÷250	5211		
5570	14	0	In	4,78		mm	,00	2,00	NR 209	45° Elbow Long Radius ASME B16.9 WPB	BE E.R.W. ASTM A	234 GR		34,13	
5211	3/4	0	In			mm	85,00	24,00	NR 209	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		TAB. 9		18,72	
5702	14	0	In			mm	,00	2,00	NR 209	Gasket TA 50.5/31 86 psi FF (125÷250) AARH) _ B15D FL	AT			
							'	•		M Erection			Total Kg:	243,07	
SX1	X1 SULPHUREX GH/F 11007 - 0						- 0		SX1	SX1 1	/ 1		TOTAL Kg:	243,07	

KV_11.19	Plant SX1 SULPHUREX GH/F	Piping Class 209	Welding specification	SP.1406/2-SP.1407/2
	Line 11007 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		Ba	allestra	a					S	KETCH	IES MATERIAL LIST			PRO.	I: 1E3	5	REV: 0	13/	/04/2010
	PUMA	5		13/04/20	10 11.47	7.14								DOC	1E3	5-65-029	•		
			Balle	estra						SUI	LPHUREX GH/F	Size: In	Thk	: mm	Tem	p: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,40	m	209	Pipe ASME B36.10 PL Seamless API 5	L GR. B					0,51		
1435	1	0	In	3,38		mm	,00	0,30	m	209	Pipe ASME B36.10 PL Seamless API 5	L GR. B					0,75		
5574	14	0	In	4,78		mm	,00	2,50	m	209	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B					103,38		
3155	1/4	0	In			mm	,00	2,00	NR	209	Valve Plug ST.46019/1 THRD-F NPT GR. F316 M 53	PN 16 For	ged A	ASTM A	A 182		0,41		
5701	14	0	In			mm	,00	5,00	NR	209	Flange Slip-On AWWA C207-TAB.1 C AARH) Forged ASTM A 105	CL.B 86 ps	i FF (125÷25	50	5211			
5570	14	0	In	4,78		mm	,00	1,00	NR	209	45° Elbow Long Radius ASME B16.9 I WPB	BE E.R.W.	. AST	M A 2	34 GR.		17,06		
5572	14	0	In	4,78		mm	,00	3,00	NR	209	90° Elbow Long Radius ASME B16.9 I WPB	BE E.R.W.	. AST	M A 2	34 GR.		102,39		
918	1/2	1/4	In			mm	,00	2,00	NR	209	Reducing Insert M/F TA 50.7/2 THRD-Forged ASTM A 105	M NPT x	THR	D-F 30	00#		0,12		
1056	1/2	0	In			mm	,00	1,00	NR	209	Coupling TA 50.7/2 THRD-F NPT 300	00# Forged	l AST	M A 1	05		0,12		
1058	1	0	In			mm	,00	3,00	NR	209	Coupling TA 50.7/2 THRD-F NPT 300	00# Forged	l AST	M A 1	05		0,90		
5211	3/4	0	In			mm	85,00	54,00	NR	209	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	IE B18.2.1	UNG	C/2.2 T	AB. 9		42,12		

Gasket TA 50.5/31 86 psi FF (125÷250 AARH) _ B15D FLAT

1 / 1

,00

mm

11008 - 0

5,00 NR 209

5702

SX1

SULPHUREX GH/F

KV_11.3	Plant SX1 SULPHUREX GH/F	Piping Class 209	Welding specification	SP.1406/2-SP.1407/2
KV_11.6	Line 11008 - 0	Fluid	System	
11Y1	Dang. fluid type	Coating	De pres	Op tem
TI_11.8	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
TET_11.10	Zones			G

M Erection

SX1 SX1

Total Kg:

TOTAL Kg:

267,76

		Ba	llestr	a					S	KETCH	ES MATERIAL LIST		PROJ:	1E35	REV: 0	13/	04/2010
	PUMA	.5		13/04/20	10 11.47	.14							DOC:	1E35-65-029			
			Ball	estra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	Co	orr: mm
Mark	Mark S1 S2 T1 T2 Len							Qty	Um	Pip. class	Component			Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,15	m	209	Pipe ASME B36.10 PL Seamless API 5	L GR. B			0,19		

Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. clas	SS Component	Gen. Bolt	Weight (Kg) As	.bly	Branch
1433	1/2	0	In	2,77	mm	,00	0,15	_	209	Pipe ASME B36.10 PL Seamless API 5L GR. B		0,19		
1435	1	0	In	3,38	mm	,00	0,30	m	209	Pipe ASME B36.10 PL Seamless API 5L GR. B		0,75		
5574	14	0	In	4,78	mm	,00	0,30	m	209	Pipe ASME B36.10 PL E.R.W. API 5L GR. B		12,41		
3155	1/4	0	In		mm	,00	1,00	NR	209	Valve Plug ST.46019/1 THRD-F NPT PN 16 Forged ASTM A 182 GR. F316 M 53		0,20		
5701	14	0	In		mm	,00	4,00	NR	209	Flange Slip-On AWWA C207-TAB.1 CL.B 86 psi FF (125÷250 AARH) Forged ASTM A 105	5211			
594	16	0	In		mm	,00	1,00	NR	209	Flange Slip-On AWWA C207-TAB.1 CL.B 86 psi FF (125÷250 AARH) Forged ASTM A 105	5211	19,00		
5572	14	0	In	4,78	mm	,00	1,00	NR	209	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 GR. WPB		34,13		
5632	16	14	In	4,78	4,78 mm	,00	1,00	NR	209	Reducer Concentric ASME B16.9 BE E.R.W. ASTM A 234 GR. WPI	3	16,59		
918	1/2	1/4	In		mm	,00	1,00	NR	209	Reducing Insert M/F TA 50.7/2 THRD-M NPT x THRD-F 3000# Forged ASTM A 105		0,06		
1058	1	0	In		mm	,00	2,00	NR	209	Coupling TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 105		0,60		
5211	3/4	0	In		mm	85,00	64,00	NR	209	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/ASTM A 194 GR.2H		49,92		
5702	14	0	In		mm	,00	4,00	NR	209	Gasket TA 50.5/31 86 psi FF (125÷250 AARH) _ B15D FLAT				
801	16	0	In		mm	,00	1,00	NR	209	Gasket TA 50.5/31 86 psi FF (125÷250 AARH) _ B15D FLAT				
			*	•					•	M Erection	Total Kg:	133,85		
SX1	SULPHUREX GH/F 11009 - 0			- 0			SX1	SX1 1 / 1	TOTAL Kg:	133,85				

KV_11.11	Plant SX1 SULPHUREX GH/F	Piping Class 209	Welding specification	SP.1406/2-SP.1407/2
KV_11.18	Line 11009 - 0	Fluid	System	
TET	Dang. fluid type	Coating	De pres	Op tem
TI_11.7	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	a					S	KETC	HES MATERIAL LIST		PRO	J: 11	E35	REV: 0	13/	/04/2010
	PUMA5	5		13/04/20	010 11.4	7.14	1						DOC	: 11	E35-65-029		l a l	
			Balle	estra						SU	JLPHUREX GH/F	Size: In	Thk: mm	Т	emp: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1437	1+1/2	0	In	3,68		mm	,00	1,50		209	Pipe ASME B36.10 PL Seamless API 5	L GR. B				6,07	<u> </u>	
5574	14	0	In	4,78		mm	,00	4,80	m	209	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				198,49		
469	1+1/2	0	In			mm	,00	2,00	NR	209	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷25	50 AARH) F	orge	d 5193	2,80		
5701	14	0	In			mm	,00	2,00	NR	209	Flange Slip-On AWWA C207-TAB.1 C AARH) Forged ASTM A 105	L.B 86 ps	i FF (125÷25	50	5211			
284	1+1/2	0	In	3,68		mm	,00	2,00	NR	209	90° Elbow Long Radius ASME B16.9 F GR. WPB	BE Seamle	ess ASTM A	234		0,74		
5572	14	0	In	4,78		mm	,00	1,00	NR	209	90° Elbow Long Radius ASME B16.9 I WPB	BE E.R.W.	ASTM A 2	34 G	R.	34,13		
5193	1/2	0	In			mm	75,00	8,00	NR	209	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2 T	AB.	9	0,96		
5211	3/4	0	In			mm	85,00	24,00	NR	209	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2 T	AB.	9	18,72		
752	1+1/2	0	In			mm	,00	2,00	NR	209	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5D FLA	Т				
5702	14	0	In			mm	,00	2,00	NR	209	Gasket TA 50.5/31 86 psi FF (125÷250	AARH) _	B15D FLA	Γ				
			ı				· L		I		M Erection	, –			Total Kg:	261,91		
SX1	SULPHU	REX G	H/F			11010	- 0			SX1	SX1 1.	['] 1			TOTAL Kg:	261,91		

KV_11.5	Plant SX1 SULPHUREX GH/F	Piping Class 209	Welding specification	SP.1406/2-SP.1407/2
KV_11.4	Line 11010 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	a					S	KETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0	13/04/2010
	PUMA	.5		13/04/20)10 11.4	7.14							DOC:	1E35-	-65-029	•	
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bl	y Branch
1462	12	0	In	4,78		mm	,00	2,00	m	209	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				75,21	
2953	12	0	In			mm	,00	1,00	NR	209	Valve Butterfly ST.46562/2 WAFER 1: Forged ASTM A 105 B 83	50 LB RF (1	25÷250 AAI	RH)	5241	50,00	
478	12	0	In			mm	,00	1,00	NR	209	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷250	AARH) For	ged	5232	28,00	
4718	12	0	In			mm	,00	1,00	NR	209	Flange Slip-On x Wafer ASME B16.5 Forged ASTM A 105	150 LB RF (125÷250 AA	RH)	5232	28,00	
306	12	0	In	4,78		mm	,00	1,00	NR	209	90° Elbow Long Radius ASME B16.9 I WPB	BE E.R.W. A	ASTM A 234	GR.		27,10	
5598	14	12	In	4,78	4,78	mm	,00	1,00	NR	209	Reducer Concentric ASME B16.9 BE I	E.R.W. ASTI	M A 234 GR	. WPB		13,53	
5232	7/8	0	In			mm	120,00	12,00	NR	209	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		JNC/2.2 TAI	B. 9		7,08	
5241	7/8	0	In			mm	200,00	12,00	NR	209	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		JNC/2.2 TAI	B. 9		9,72	
761	12	0	In			mm	,00	3,00	NR	209	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _	B5D FLAT				
		,				•				N	// Erection				Total Kg:	238,64	

TOTAL Kg:

238,64

SX1 SX1

SULPHUREX GH/F

CHAIN mt. 4	Plant SX1 SULPHUREX GH/F	Piping Class 209	Welding specification	SP.1406/2-SP.1407/2
	Line 11011 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	a					S	KETC	HES MATERIAL LIST		PROJ	: 1E35		REV: 0	13	3/04/2010
	PUMA	.5		13/04/20	010 11.47	7.14							DOC:	1E35-	65-029		•	
			Ball	estra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,10	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,13		
1453	3	0	In	3,18		mm	,00	0,20	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				1,34		
1454	4	0	In	3,18		mm	,00	1,70	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				14,81		
5024	4	0	In			mm	,00	1,00	NR	203	Valve Butterfly With Gasket ST.46373/. (125÷250 AARH) Cast DUCTILE IRON		150 LB RF		5210	4,50		
473	4	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250	0 AARH) Fo	orged	5201	5,60		
298	4	0	In	3,18		mm	,00	2,00	NR	203	90° Elbow Long Radius ASME B16.9 E WPB	BE E.R.W.	ASTM A 23	4 GR.		4,13		
2076	4	3	In	3,18	3,18	mm	,00	1,00	NR	203	Reducer Eccentric ASME B16.9 BE E.I	R.W. ASTN	A 234 GR	. WPB		0,86		
4546	1/2	0	In			mm	,00	1,00	NR	203	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged ASTI	M A 105			0,12		
5210	5/8	0	In			mm	145,00	8,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	AB. 9		2,40		
											M Erection				Total Kg:	33,9		
SX1	SULPH	UREX G	H/F			11012	- 0			SX1	SX1 1 /	/ 1		T	OTAL Kg:	33,9		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	on SP.1406/2-SP.1407/3
Line 11012 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		Ва	allestr	a					5	SKETCI	HES MATERIAL LIST		P	ROJ	: 1E35		REV: 0	13/04/2010
	PUMA	5		13/04/20	10 11.47	7.15							D	OC:	1E35	-65-029		
			Ball	lestra						SU	LPHUREX GH/F	Size: In	Thk: 1	nm	Temp	: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	Pip. class	Component					Gen. Bolt	Weight (Kg) As.l	oly Branch
1433	1/2	0	In	2,77		mm	,00	0,50	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B					0,63	
1435	1	0	In	3,38		mm	,00	0,10	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B					0,25	
1438	2	0	In	3,91		mm	,00	0,20	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B					1,09	
1454	4	0	In	3,18		mm	,00	4,60	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B					40,08	
5024	4	0	In			mm	,00,	1,00	NR	203	Valve Butterfly With Gasket ST.46373/		150 L	B RF		5210	4,50	
											(125÷250 AARH) Cast DUCTILE IRON	N B 74					•	
298	4	0	In	3,18		mm	,00	2,00	NR	203	90° Elbow Long Radius ASME B16.9 E	BE E.R.W.	ASTM	I A 23	4 GR.		4,13	
											WPB							
1649	4	2	In	3,18	3,91	mm	,00	1,00	NR	203	Reducer Concentric ASME B16.9 BE E	R.W. AST	ГМ А 2	234 GI	R. WPB		0,86	
1056	1/2	0	In			mm	,00	2,00	NR	203	Coupling TA 50.7/2 THRD-F NPT 300	0# Forged	ASTM	I A 10	5		0,24	
1058	1	0	In			mm	,00	1,00	NR	203	Coupling TA 50.7/2 THRD-F NPT 300	0# Forged	ASTM	I A 10	5		0,30	
5201	5/8	0	In			mm	95,00	-8,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	E B18.2.1	UNC/2	2.2 TA	В. 9		-1,84	

5210

667

SX1

5/8

0

0

SULPHUREX GH/F

In

In

145,00

.00

mm

mm

11013 - 0

8,00 NR 203

-1,00 NR 203

ASTM A 193 B7/ASTM A 194 GR.2H

ASTM A 193 B7/ASTM A 194 GR.2H

Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9

1 / 1

Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5C

TI_11.5	Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	SP.1406/2-SP.1407/3
PI_11.6	Line 11013 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

M Erection

SX1

SX1

2,40

52,65

52,65

Total Kg:

TOTAL Kg:

		В	Ballesti	ra						\mathbf{S}	KETCI	HES MATERIAL LIST		PROJ	: 1E35	5	REV: 0	3/04/2010
	PUMA	.5		13/04/20	010 11.4	7.15								DOC:	1E35	5-65-029		
			Bal	lestra							SU	JLPHUREX GH/F	Size: In	Thk: mm	Temp): °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mn	1 ()ty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00) (,10	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,13	
1454	4	0	In	3,18		mm	,00) 6	,00	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				52,28	
473	4	0	In			mm	,00) 1	,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250) AARH) Fo	orged	5201	5,60	
298	4	0	In	3,18		mm	,00) 4	,00	NR	203	90° Elbow Long Radius ASME B16.9 F WPB	BE E.R.W.	ASTM A 23	4 GR.		8,27	
4546	1/2	0	In			mm	,00) 1	,00	NR	203	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged ASTN	M A 105			0,12	
5201	5/8	0	In			mm	95,00) 8	,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2 TA	AB. 9		1,84	
667	4	0	In			mm	,00) 1	,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)_	B5C				
								•]	M Erection				Total Kg:	68,24	
SX1	SULPHI		11014	- 0				SX1	SX1 1.	/ 1		ı	TOTAL Kg:	68,24				

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	on SP.1406/2-SP.1407/3
Line 11014 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCI	HES MATERIAL LIST	PRO	J: 1E3	5	REV: 0	13/	04/2010
	PUMA	.5		13/04/2	010 11.47	.15						DOC	1E3	5-65-029			
			Ball	estra						SU	ULPHUREX GH/F	Size: In Thk: mm	Tem	p: °C	Pres: BAR	Co	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	s Component			Gen. Bolt	Weight (Kg)	s.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,10	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B			0,13		
1453	3	0	In	3,18		mm	,00	0,20	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B			1,34		
1454	4	0	In	3,18		mm	,00	1,40	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B			12,20		
5024	4 0 In mm					mm	,00	1,00	NR	203	Valve Butterfly With Gasket ST.46373, (125÷250 AARH) Cast DUCTILE IRO		7	5210	4,50		
473	4	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷250 AARH) l	Forged	5201	5,60		
298	4	0	In	3,18		mm	,00	1,00	NR	203	90° Elbow Long Radius ASME B16.9 I WPB	BE E.R.W. ASTM A	234 GR.		2,07		
4546	1/2	0	In			mm	,00	1,00	NR	203	Cap TA 50.7/2 THRD-F NPT 3000# F	orged ASTM A 105			0,12		
5210	5/8	0	In			mm	145,00	8,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	IE B18.2.1 UNC/2.2	AB. 9		2,40		
							-				ASTM A 193 B7/ASTM A 194 GR.2H						
											M Erection			Total Kg:	28,36		
SX1	SULPH	UREX G	H/F			11015 -	- 0			SX1	SX1 1	/ 1		TOTAL Kg:	28,36		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 11015 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCH	IES MATERIAL LIST		PROJ	: 1E35		REV: 0 1:	3/04/2010
	PUMA	.5		13/04/20	10 11.47	.15							DOC:	1E35-	-65-029		
			Ball	lestra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2	L	en mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,40	m	203	Pipe ASME B36.10 PL Seamless API 51	L GR. B				0,51	
1435	1	0	In	3,38		mm	,00	1,50	m	203	Pipe ASME B36.10 PL Seamless API 51	L GR. B				3,75	
1438	2	0	In	3,91		mm	,00	0,20	m	203	Pipe ASME B36.10 PL Seamless API 51	L GR. B				1,09	
1454	4	0	In	3,18		mm	,00	5,80	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				50,54	
2830	1	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRD-BRASS NICKEL PLATED S 87	-F NPT 20	0 LB Forged	1		0,60	
5024	4	0	In			mm	,00	1,00	NR	203	Valve Butterfly With Gasket ST.46373/3 (125÷250 AARH) Cast DUCTILE IRON		150 LB RF		5210	4,50	
473	4	0	In			mm	,00	5,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷25	0 AARH) Fo	rged	5201	28,00	

90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 GR.

Reducer Concentric ASME B16.9 BE E.R.W. ASTM A 234 GR. WPB

Reducer Concentric ASME B16.9 BE E.R.W. ASTM A 234 GR. WPB

Coupling Half TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 105

Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9

Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9

Coupling TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 105

Coupling TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 105

ASTM A 193 B7/ASTM A 194 GR.2H

ASTM A 193 B7/ASTM A 194 GR.2H

2,00 NR 203

1,00 NR 203

1,00 NR 203

2,00 NR 203

2,00 NR 203

1,00 NR 203

16,00 NR 203

8,00 NR 203

.00

.00

,00

,00

.00

95,00

145,00

298

1649

1650

1056

1058

1126

5201

5210

3,18

3,18

3,18

2+1/2

0

0

In

In

1/2

5/8

5/8

3,91

3,18

mm

mm

mm

mm

mm

mm

667	4	0	In	r	mm	,00	2,00	NR	203		asket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5C			
				 						ME	ection	Total Kg:	101,91	
SX1	SULPHU	REX GI	H/F	 1	1016 -	0			SX1	SX	1/1	TOTAL Kg:	101,91	
_11.6	i					Plant SX1	SULPHU	REX	GH/F		Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3	
_11.5						Line 11016	j - 0				Fluid	System		
						Dang. fluid	type				Coating	De pres	Op tem	
				Area SX1					Sketch Sht 1/1	Isometric code	P	age 1		
														uge .

4,13

0,86

0,86

0,24

0,60

0,15

3,68

		В	allestr	a					S	KETCH	IES MATERIAL LIST		PRO	J: 1E35	5	REV: 0	13/	/04/2010
	PUMA	15		13/04/2	010 11.4	7.15							DOC	1E35	5-65-029		•	
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp); °C	Pres: BAR	Co	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,20	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,25		
1453	3	0	In	3,18		mm	,00	3,80	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				25,54		
472	3	0	In			mm	,00,	3,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷25	60 AARH) I	Forged	5201	12,30		
297	3	0	In	3,18		mm	,00,	2,00	NR	203	90° Elbow Long Radius ASME B16.9 F WPB	BE E.R.W.	ASTM A 2	34 GR.		2,35		
4546	1/2	0	In			mm	,00	2,00	NR	203	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged AST	M A 105			0,24		
5201	5/8	0	In			mm	95,00	8,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 T	AB. 9		1,84		
666	3	0	In			mm	,00	2,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5C					
								•		N	1 Erection				Total Kg:	42,53		
SX1	SULPH	UREX G	H/F			11017 - 0	0			SX1 S	SX1 1 ,	/ 1			TOTAL Kg:	42,53		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	on SP.1406/2-SP.1407/3
Line 11017 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestra	a				SKETCHES MATERIAL LIST PROJ: 11						1E35	í	REV: 0	13/	/04/2010
	PUMA	15		13/04/20)10 11.4	7.15							DOC:	1E35	5-65-029	•	•	
			Balle	estra						SI	ULPHUREX GH/F	Size: In	Thk: mm	Temp	: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1453	3	0	In	3,18		mm	,00	0,20	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				1,34		
1454	4	0	In	3,18		mm	,00	0,20	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				1,74		
472	3	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷250	AARH) For	ged	5201	4,10		
473	4	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷250	AARH) For	ged	5201	5,60		
297	3	0	In	3,18		mm	,00	1,00	NR	203	90° Elbow Long Radius ASME B16.9 WPB	BE E.R.W. A	ASTM A 234	GR.		1,18		
1651	4	3	In	3,18	3,18	mm	,00	1,00	NR	203	Reducer Concentric ASME B16.9 BE I	E.R.W. AST	M A 234 GR	. WPB		0,86		
5201	5/8	0	In			mm	95,00	12,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		JNC/2.2 TA	B. 9		2,76		
666	3	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _	B5C					
667	4	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _	B5C					
	, 	, , , , , , , , , , , , , , , , , , ,	'	'						1	M Erection				Total Kg:	17,58		
SX1	SULPH	UREX G	H/F			11018	- 0			SX1	SX1 1	/ 1			TOTAL Kg:	17,58		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	on SP.1406/2-SP.1407/3
Line 11018 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allest	ra					5	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	04/2010
	PUMA	\ 5		13/04/20	010 11.4	7.15							DOC:	1E35-65-	-029		•	
			Ba	llestra						S	SULPHUREX GH/F	Size: In	Γhk: mm	Temp: °C		Pres: BAR	С	orr: mm
Mark	S1	S2		T1	Т2		Len mm	ı Qt	Un	Pip. clas	ss Component			Ge	en. Bolt	Weight (Kg)	As.bly	Branch
1453	3	0	In	3,18		mm	,00	3,0	0 m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				20,17		
472	3	0	In			mm	,00	1,0	0 NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250	AARH) For	ged 520	01	4,10		
297	3	0	In	3,18		mm	,00	1,0	0 NR	203	90° Elbow Long Radius ASME B16.9 E WPB	BE E.R.W. A	STM A 234	GR.		1,18		
5201	5/8	0	In			mm	95,00	4,0	0 NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1 U	INC/2.2 TAI	B. 9		0,92		
666	3	0	In			mm	,00	1,0	0 NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _	B5C					
	•				•	•		•		•	M Erection			Т	otal Kg:	26,36		
SX1	SULPH	UREX GI	H/F			11019	- 0			SX1	SX1 1 /	′ 1		тот	ΓAL Kg:	26,36		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 11019 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

	Ballestra							SKETCHES MATERIAL LIST PROJ:							J: 1E3	5	REV: 0	13.	/04/2010
	PUMA	15		13/04/20	010 11.47	7.16								DOC	: 1E3	5-65-029			
			Ball	estra						S	JLPHUREX GH/F	Size: In	Thl	K: mm	Tem	p: ℃	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	n Pip. clas	Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,15	m	206	Pipe ASME B36.10 PL Seamless API 5	L GR. B					0,19		
5574	14	0	In	4,78		mm	,00	2,40	m	206	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B					99,25		
479	14	0	In			mm	,00	3,00	NF	R 206	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷25	50 A	ARH) F	orged	5249	108,00		
5570	14	0	In	4,78		mm	,00	1,00	NF	R 206	45° Elbow Long Radius ASME B16.9	BE E.R.W	. AST	ГМ А 2	34 GR.		17,06		
5572	14	0	In	4,78		mm	,00	1,00	NF	R 206	90° Elbow Long Radius ASME B16.9 WPB	BE E.R.W	. AST	ΓM A 2	34 GR.		34,13		
4398	1/2	1/4	In			mm	,00	1,00	NF	R 206	Coupling Reducing TA 50.7/2 THRD-I	F NPT 300	00# F	orged A	ASTM A	A	0,03		
5249	1	0	In			mm	135,00	36,00	NF	R 206	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		l UN	C/2.2 T	AB. 9		61,92		
673	14	0	In			mm	,00	3,00	NF	R 206	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH)) _ B5	5C					
									•		M Erection					Total Kg:	320,58		

TOTAL Kg:

320,58

SX1 SX1

SULPHUREX GH/F

KV_11.1A	Plant SX1 SULPHUREX GH/F	Piping Class 206	Welding specification	n SP.1406/2-SP.1407/3
	Line 11020 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	a				SKETCHES MATERIAL LIST PROJ: 1							1E35	5	REV: 0	13/	/04/2010
	PUMA	\ 5		13/04/20	010 11.47	7.16								DOC:	1E35	5-65-029	•	•	
			Ball	estra						S	JLPHUREX GH/F	Size: In	Thk	mm	Temp): °C	Pres: BAR	С	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	n Pip. clas	Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,15	m	206	Pipe ASME B36.10 PL Seamless API 5	SL GR. B					0,19		
5574	14	0	In	4,78		mm	,00	4,00	m	206	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B					165,41		
479	14	0	In			mm	,00	3,00	NF	R 206	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷25	50 AA	RH) F	orged	5249	108,00		
5570	14	0	In	4,78		mm	,00	1,00	NF	R 206	45° Elbow Long Radius ASME B16.9 WPB	BE E.R.W	. AST	M A 23	34 GR.		17,06		
5572	14	0	In	4,78		mm	,00	1,00	NF	R 206	90° Elbow Long Radius ASME B16.9 WPB	BE E.R.W	. AST	M A 23	84 GR.		34,13		
4398	1/2	1/4	In			mm	,00	1,00	NF	R 206	Coupling Reducing TA 50.7/2 THRD-1	F NPT 300	00# Fc	orged A	STM A		0,03		
5249	1	0	In			mm	135,00	36,00	NF	R 206	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC	2/2.2 TA	AB. 9		61,92		
673	14	0	In			mm	,00	3,00	NF	R 206	Gasket TA 50.5/31 150 LB RF (125÷2:	50 AARH)	_ B50	C					
	•	•	•		•	•					M Erection					Total Kg:	386,75		

TOTAL Kg:

386,75

SX1 SX1

SULPHUREX GH/F

KV_11.1B	Plant SX1 SULPHUREX GH/F	Piping Class 206	Welding specification	SP.1406/2-SP.1407/3
	Line 11021 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allest	ra					S	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	A 5		13/04/20	010 11.47	7.16							DOC:	1E35-6	5-029	•	•	
			Ba	llestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp: °	3	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	S Component			C	Gen. Bolt	Weight (Kg)	As.bly	Branch
5574	14	0	In	4,78		mm	,00	2,40	m	206	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				99,25		
479	14	0	In			mm	,00	2,00	NR	206	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	aF (125÷250) AARH) For	ged 5	249	72,00		
5572	14	0	In	4,78		mm	,00,	2,00	NR	206	90° Elbow Long Radius ASME B16.9 F WPB	BE E.R.W.	ASTM A 234	GR.		68,26		
5249	1	0	In			mm	135,00	24,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TAI	B. 9		41,28		
673	14	0	In			mm	,00	2,00	NR	206	Gasket TA 50.5/31 150 LB RF (125÷25	60 AARH) _	B5C					
							•		•	M Erection				Total Kg:	280,79			
SX1	SULPH	UREX G	H/F			11022	- 0			SX1	SX1 1.	/ 1		TC	TAL Kg:	280,79		

KV_11.9	Plant SX1 SULPHUREX GH/F	Piping Class 206	Welding specification	SP.1406/2-SP.1407/3
	Line 11022 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestra	a					SKETO	CHES MATERIAL LIST		PROJ:	1E35	REV: 0	13/04/2010
	PUMA	.5		13/04/20	10 11.47	.16						DOC:	1E35-65-029		
			Balle	estra						SULPHUREX GH/F	Size: In	T hk: mm	Temp: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um Pip. cla	iss Component			Gen. Bolt	Weight (Kg) As.l	oly Branch
1433	1/2	0	In	2,77		mm	,00	4,50	m 206	Pipe ASME B36.10 PL Seamless API 5I	L GR. B			5,70	
465	1/2	0	In			mm	,00	2,00	NR 206	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250	AARH) For	ged 5191	0,80	
5191	1/2	0	In			mm	65,00	8,00	NR 206	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1 U	NC/2.2 TA	B. 9	0,88	
659	1/2	0	In			mm	,00	2,00	NR 206	Gasket TA 50.5/31 150 LB RF (125÷25)	0 AARH) _	B5C			
	'		<u>'</u>		' 	1	1		1	M Erection			Total Kg	g: 7,38	-
SX1	SULPHU	JREX G	H/F			11023	- 0		SX1	SX1 1 /	1		TOTAL K	g: 7,38	

KV_11.9	Plant SX1 SULPHUREX GH/F	Piping Class 206	Welding specification	SP.1406/2-SP.1407/3
	Line 11023 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	· a					S	KETC	HES MATERIAL LIST		PRO	J: 1E3	35	REV: 0	13/	/04/2010
	PUMA	15		13/04/20	010 11.47	7.16							DOC	: 1E3	35-65-029			
			Ball	lestra						S	SULPHUREX GH/F	Size: In	Thk: mm	Ten	np: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	ss Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,20	m	209	Pipe ASME B36.10 PL Seamless API 5	5L GR. B				0,25		
5574	14	0	In	4,78		mm	,00	8,00	m	209	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				330,82		
5701	14	0	In			mm	,00	2,00	NR	209	Flange Slip-On AWWA C207-TAB.1 C AARH) Forged ASTM A 105	CL.B 86 psi	FF (125÷2	50	5211			
5572	14	0	In	4,78		mm	,00	4,00	NR	209	90° Elbow Long Radius ASME B16.9 WPB	BE E.R.W.	ASTM A	34 GR		136,52		
918	1/2	1/4	In			mm	,00	1,00	NR	209	Reducing Insert M/F TA 50.7/2 THRD Forged ASTM A 105	-M NPT x	THRD-F 3	000#		0,06		
5211	3/4	0	In			mm	85,00	24,00	NR	209	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2	AB. 9		18,72		
5702	14	0	In			mm	,00	2,00	NR	209	Gasket TA 50.5/31 86 psi FF (125÷250	AARH)_	B15D FLA	Т				
									•		M Erection				Total Kg:	486,37		
SX1	SULPH	UREX G	H/F			11024	- 0			SX1	SX1 1	/ 1			TOTAL Kg:	486,37		

KV_11.2	Plant SX1 SULPHUREX GH/F	Piping Class 209	Welding specification	SP.1406/2-SP.1407/2
	Line 11024 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	a				SKETCHES MATERIAL LIST PROJ: 1					1E35	REV: 0	13	/04/2010		
	PUMA	15		13/04/20	10 11.47	.16							DO	C:	1E35-65-029		•	
			Ball	lestra						S	ULPHUREX GH/F	Size: In	Thk: mm		Temp: °C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
5574	14	0	In	4,78		mm	,00	1,50	m	209	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				62,03		
5701	14	0	In			mm	,00	2,00	NR	209	Flange Slip-On AWWA C207-TAB.1 C AARH) Forged ASTM A 105	L.B 86 psi	FF (125-	-250	5211			
5211	3/4	0	In			mm	85,00	24,00	NR	209	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2	TAB	. 9	18,72		
5702	14	0	In			mm	,00	2,00	NR	209	Gasket TA 50.5/31 86 psi FF (125÷250	AARH)_	B15D FL	AT				
	•	•	•	*	*	•					M Erection				Total Kg:	80,75		
SX1	SULPHI	UREX G	H/F			11025	- 0			SX1	SX1 1.	/ 1			TOTAL Kg:	80,75		

KV_11.12	Plant SX1 SULPHUREX GH/F	Piping Class 209	Welding specification	SP.1406/2-SP.1407/2
	Line 11025 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

	•	В	allestr	·a		•			5	SKETCH	IES MATERIAL LIST	•	PRO)J: 1	E35	REV: 0 13	3/04/2010
	PUMA	A 5		13/04/20	10 11.47	.16							DO	C: 1	E35-65-029		
			Ball	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	T	emp: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00		+	203	Pipe ASME B36.10 PL Seamless API 51	L GR. B				0,13	
1454	4	0	In	3,18		mm	,00	8,70	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				75,81	
5024	4	0	In			mm	,00	1,00	NR	203	Valve Butterfly With Gasket ST.46373/: (125÷250 AARH) Cast DUCTILE IRON		150 LB R	F	5210	4,50	
3181	4	0	In			mm	,00	1,00	NR	203	Strainer Y-Type ST.46349/3 FLG 150 L ASTM A 216 GR. WCB F 71		5÷250 AA	RH) C	ast 5201	34,00	
473	4	0	In			mm	,00,	4,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷25	0 AARH)	Forge	d 5201	22,40	
298	4	0	In	3,18		mm	,00	3,00	NR	203	90° Elbow Long Radius ASME B16.9 E WPB	BE E.R.W.	ASTM A	234 G	R.	6,20	
4546	1/2	0	In			mm	,00	1,00	NR	203	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged AST	M A 105			0,12	
5201	5/8	0	In			mm	95,00	16,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2	TAB.	9	3,68	
5210	5/8	0	In			mm	145,00	8,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2	TAB.	9	2,40	
667	4	0	In			mm	,00	3,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5C				

M Erection

1 / 1

SX1 SX1

SX1

SULPHUREX GH/F

11101 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	on SP.1406/2-SP.1407/3
Line 11101 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

Total Kg:

TOTAL Kg:

149,24

		F	allestr	a					S	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0 13	3/04/2010
	PUMA	15		13/04/20	010 11.47	'.17							DOC:	1E35	-65-029		
			Ball	lestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp	: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,10	m	203	Pipe ASME B36.10 PL Seamless API 5	SL GR. B				0,13	
1454	4	0	In	3,18		mm	,00	6,40	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				55,77	
3007	4	0	In			mm	,00	1,00	NR	203	Valve Check ST.46357/5 WAFER 150 ASTM A 36 CADMIUM PLATED R 8	,	÷250 AARH	I) Cast	5204	2,00	
473	4	0	In			mm	,00	2,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	RF (125÷250	AARH) For	rged	5201	11,20	
298	4	0	In	3,18		mm	,00	3,00	NR	203	90° Elbow Long Radius ASME B16.9 I WPB	BE E.R.W. A	ASTM A 234	4 GR.		6,20	
4546	1/2	0	In			mm	,00	1,00	NR	203	Cap TA 50.7/2 THRD-F NPT 3000# F	Forged ASTM	I A 105			0,12	
5204	5/8	0	In			mm	110,00	8,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		JNC/2.2 TA	B. 9		2,00	
667	4	0	In			mm	,00	2,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _	B5C				
	,	,	,		•	•					M Erection				Total Kg:	77,42	
SX1	SULPH	UREX C	H/F			11102 -	- 0			SX1	SX1 1	/ 1		7	ГОТАL Kg:	77,42	

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	on SP.1406/2-SP.1407/3
Line 11102 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		I	Ballestr	a					SKE	TCHES	MATERIAL I	LIST		PROJ:	1E35		REV: 0	13/04/2010
	PUMA5	;		13/04/2	010 11.4	17.17	1							DOC:	1E35	-65-029	<u> </u>	
			Ball	lestra						SULPH	UREX GH/F		Size: In	Thk: mm	Temp	:°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Otv	Um Pip.	class Co	mponent					Gen. Bolt	Weight (Kg) As.	bly Branch
1453	3	0	In	3,18		mm	,00		m 203		oe ASME B36.10 PL E	E.R.W. API 5L	GR. B				57,14	
5023	3	0	In			mm	,00	1,00	NR 203		lve Butterfly With Gas 25÷250 AARH) Cast I			150 LB RF		5209	3,50	
471	2+1/2	0	In			mm	,00	1,00	NR 203	Fla	ange Slip-On ASME B			0 AARH) For	rged	5200	3,60	
472	3	0	In			mm	,00	4,00	NR 203	Fla	ange Slip-On ASME B	16.5 150 LB R	F (125÷25	0 AARH) For	rged	5201	16,40	
473	4	0	In			mm	,00	1,00	NR 203	Fla	ange Slip-On ASME B	16.5 150 LB R	F (125÷25	0 AARH) For	rged	5201	5,60	
296	2+1/2	0	In	3,18		mm	,00	1,00	NR 203		Elbow Long Radius	ASME B16.9 E	BE E.R.W.	ASTM A 234	4 GR.		0,80	
297	3	0	In	3,18		mm	,00	5,00	NR 203	90° WI	° Elbow Long Radius . PB	ASME B16.9 E	BE E.R.W.	ASTM A 234	4 GR.		5,88	
298	4	0	In	3,18		mm	,00	1,00	NR 203	90° WI	° Elbow Long Radius . PB	ASME B16.9 E	BE E.R.W.	ASTM A 234	4 GR.		2,07	
1651	4	3	In	3,18	3,18	mm	,00	1,00	NR 203	Re	ducer Concentric ASM	1E B16.9 BE E	R.W. AS	ΓM A 234 GF	R. WPB		0,86	
5200	5/8	0	In			mm	90,00	2,00	NR 203		nd Bolt + 2 Nuts TA 50 TM A 193 B7/ASTM		E B18.2.1	UNC/2.2 TA	B. 9		0,44	
5201	5/8	0	In			mm	95,00	16,00	NR 203		nd Bolt + 2 Nuts TA 50 TM A 193 B7/ASTM		E B18.2.1	UNC/2.2 TA	B. 9		3,68	
5209	5/8	0	In			mm	140,00	4,00	NR 203		nd Bolt + 2 Nuts TA 50 TM A 193 B7/ASTM		E B18.2.1	UNC/2.2 TA	B. 9		1,16	
665	2+1/2	0	In			mm	,00	1,00	NR 203	Ga	sket TA 50.5/31 150 I	B RF (125÷25	0 AARH)	_ B5C				
666	3	0	In			mm	,00	2,00	NR 203	Ga	sket TA 50.5/31 150 I	B RF (125÷25	0 AARH)	_B5C				
667	4	0	In			mm	,00	1,00	NR 203	Ga	sket TA 50.5/31 150 I	B RF (125÷25	0 AARH)	_B5C				
										M Ere	ection					Total Kg:	101,12	
SX1	SULPHU	REX C	H/F			11103	- 0		SX	X1 SX1		1 /	/ 1		,	ГОТАL Kg:	101,12	
							Plant SX1		REX GH/F			Class 203				- ·	tion SP.1406/2-SP.14	07/3
							Line 11103 Dang. fluid					Fluid pating			Sys De 1	tem	0- 1	
							Area SX1	гуре				ch Sht 1/1		Iso	ן שם metric o		Op tem	Page 1
							Zones				~	, -						

		В	allestr	a										J: 1E	35	REV: 0	13/	04/2010
	PUMA	15		13/04/2	010 11.4	7.17							DOC	: 1E	35-65-029	•		
			Ball	estra						5	SULPHUREX GH/F	Size: In	Thk: mm	Ter	mp: °C	Pres: BAR	Co	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	ss Component				Gen. Bolt	Weight (Kg) A	s.bly	Branch
1453	3	0	In	3,18		mm	,00	2,30	m	203	Pipe ASME B36.10 PL E.R.W. API 5I	GR. B				15,46		
3006	3	0	In			mm	,00	1,00	NR	203	Valve Check ST.46357/5 WAFER 150 ASTM A 36 CADMIUM PLATED R 8	,	5÷250 AA	RH) Ca	st 5204	1,60		
472	3	0	In			mm	,00	4,00	NR	203	Flange Slip-On ASME B16.5 150 LB I ASTM A 105	RF (125÷25	0 AARH) I	Forged	5201	16,40		
473	4	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB I ASTM A 105	RF (125÷25	0 AARH) I	Forged	5201	5,60		
297	3	0	In	3,18		mm	,00	2,00	NR	203	90° Elbow Long Radius ASME B16.9 WPB	BE E.R.W.	ASTM A 2	234 GR		2,35		
1651	4	3	In	3,18	3,18	mm	,00	1,00	NR	203	Reducer Concentric ASME B16.9 BE	E.R.W. AST	ГМ А 234	GR. W	PB	0,86		
5201	5/8	0	In			mm	95,00	16,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2F		UNC/2.2 T	AB. 9		3,68		
5204	5/8	0	In			mm	110,00	4,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	ME B18.2.1	UNC/2.2 7	AB. 9		1,00		
			1		1	1				1	ASTM A 193 B7/ASTM A 194 GR.2F	I				1		
666	3	0	In			mm	,00	4,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷2	50 AARH)	_ B5C					
667	4	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷2	50 AARH)	_ B5C					
							•				M Erection				Total Kg:	46,95		
SX1	SULPH	UREX G	H/F			11104	- 0			SX1	SX1 1	/ 1			TOTAL Kg:	46,95		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	on SP.1406/2-SP.1407/3
Line 11104 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	Ballesti	a					S	KETC	HES MATERIAL LIST		PRO	J: 1E3	35	REV: 0	13/	/04/2010
	PUMA	A 5		13/04/20	010 11.47	7.17							DOC	1E3	35-65-029			
			Bal	lestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Ten	ıp: ℃	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1453	3	0	In	3,18		mm	,00	10,90	m	205	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				73,27		
3129	3	0	In			mm	,00	1,00	NR	205	Valve Globe ST.46348/4 FLG 150 LB I ASTM A 216 GR. WCB D 79	RF (125÷25	0 AARH)	Cast	5201	30,00		
472	3	0	In			mm	,00	3,00	NR	205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	RF (125÷250) AARH) I	Forged	5201	12,30		
297	3	0	In	3,18		mm	,00	7,00	NR	205	90° Elbow Long Radius ASME B16.9 I WPB	BE E.R.W.	ASTM A 2	34 GR.		8,24		
1159	1/2	0	In			mm	,00	1,00	NR	205	Coupling Half TA 50.6/1 SW-F 3000#	Forged AS7	M A 105			0,15		
5201	5/8	0	In			mm	95,00	12,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 T	AB. 9		2,76		
666	3	0	In			mm	,00	3,00	NR	205	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _	B5C					
	'								•		M Erection				Total Kg:	126,72		
SX1	SULPH	UREX G	H/F			11107	- 0			SX1	SX1 1	/ 1			TOTAL Kg:	126,72		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specificatio	n SP.1406/2-SP.1407/2
Line 11107 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCI	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/04/2010
	PUMA	.5		13/04/2	010 11.4	7.17							DOC:	1E35-	65-029		
			Ball	estra						SU	JLPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bl	y Branch
1433	1/2	0	In	2,77		mm	,00	10,00	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				12,66	
3107	1/2	0	In			mm	,00	2,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	A 105 G 61			3,40	
4949	1/2	0	In			mm	,00	1,00	NR	205	Steam Trap ST.46702/0 THRD-F NPT	PN 25 Forgo	ed AISI 304	T 71		4,08	
1289	1/2	0	In			mm	,00	1,00	NR	207	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 105	5			0,38	
		,	•	1]	M Erection				Total Kg:	20,52	
SX1	SULPHU	JREX G	H/F			11108	5 - 0			SX1	SX1 1	/ 1		T	OTAL Kg:	20,52	

Plant SX1 SULPHUREX GH/F Piping Class 205 Welding specification SP.1406/2-SP.1407/2

Line 11108 - 0 Fluid System

Dang. fluid type Coating De pres Op tem

Area SX1 Sketch Sht 1/1 Isometric code Page 1

Zones

		В	allestr	ra					Sl	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/04/20	10
	PUMA5	5		13/04/20	010 11.4	7.17							DOC:	1E35	-65-029	•	•	
			Ball	lestra						SI	ULPHUREX GH/F	Size: In	Thk: mm	Temp	: °C	Pres: BAR	Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg) As	bly Branc	ch
1452	2+1/2	0	In	3,18		mm	,00	0,20	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				1,10		
1453	3	0	In	3,18		mm	,00	7,80	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				52,43		
471	2+1/2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷250	AARH) For	rged	5200	3,60		
472	3	0	In			mm	,00	2,00	NR	203	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷250	AARH) Foi	rged	5201	8,20		
297	3	0	In	3,18		mm	,00	5,00	NR	203	90° Elbow Long Radius ASME B16.9 WPB	BE E.R.W. A	ASTM A 234	4 GR.		5,88		
5200	5/8	0	In			mm	90,00	4,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		JNC/2.2 TA	B. 9		0,88		
5201	5/8	0	In			mm	95,00	4,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		JNC/2.2 TA	B. 9		0,92		
665	2+1/2	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _	B5C					
666	3	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _	B5C					
		•									M Erection				Total Kg:	73,01	,	
SX1	SULPHU	REX G	H/F			11109	- 0			SX1	SX1 1	/ 1		7	TOTAL Kg:	73,01		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 11109 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		Ba	llestr	a					SKETCH	ES MATERIAL LIST		PROJ:	: 1E35		REV: 0 13	3/04/201
	PUMA5			13/04/20	10 11.4	7.17	1					DOC:	1E35	-65-029		
			Ball	estra					SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR	Corr: mm
N. 1	S1	G2		T1	T2		T	04	TI D' I	G				Gen. Bolt	W . 14 (W) A . 11	ъ .
Mark 1433	1/2	S2	In	2,77	12	mm	Len mm		Um Pip. class m 203	Component Pipe ASME B36.10 PL Seamless API 5	I CD B			Gen. Bolt	Weight (Kg) As.bly	Brancl
1452	2+1/2	0	In	3,18		mm	.00	0,30	-	Pipe ASME B36.10 PL E.R.W. API 5L					1.64	
1453	3	0	In	3,18		mm	,00		m 203	Pipe ASME B36.10 PL E.R.W. API 5L					60,50	
3006	3	0	In	3,10		mm	.00		NR 203	Valve Check ST.46357/5 WAFER 150		5±250 AARI	T) Cast	5204	1.60	
3000	3	U				111111	,00	1,00	11K 203	ASTM A 36 CADMIUM PLATED R 8	,	7-230 AAKI	1) Cast	3204	1,00	
3129	3	0	In			mm	,00	1,00	NR 205	Valve Globe ST.46348/4 FLG 150 LB I	RF (125÷25	0 AARH) C	ast	5201	30,00	
									-	ASTM A 216 GR. WCB D 79						
471	2+1/2	0	In			mm	,00	1,00	NR 203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250) AARH) Fo	rged	5200	3,60	
472	3	0	In			mm	,00	4,00	NR 203	Flange Slip-On ASME B16.5 150 LB R	F (125÷250) AARH) Fo	rged	5201	16,40	
	·									ASTM A 105						
129	3	0	In	3,18		mm	,00	1,00	NR 203	45° Elbow Long Radius ASME B16.9 I WPB	BE E.R.W.	ASTM A 23	4 GR.		0,60	
231	1/2	0	In			mm	,00	1.00	NR 203	90° Elbow TA 50.7/2 THRD-F NPT 30	100# Forge	I ASTM A 1	05		0,40	
296	2+1/2	0	In	3,18		mm	,00		NR 203	90° Elbow Long Radius ASME B16.9 F					0,80	
270	2+1/2	U		3,10		111111	,00	1,00	14K 203	WPB	DL L.K. W.	ASTWIA 25	TOIX.		0,80	
297	3	0	In	3,18		mm	,00	6,00	NR 203	90° Elbow Long Radius ASME B16.9 I	BE E.R.W.	ASTM A 23	4 GR.		7,06	
										WPB						
1647	3	2+1/2	In	3,18	3,18	mm	,00	1,00	NR 203	Reducer Concentric ASME B16.9 BE E	E.R.W. AST	M A 234 GI	R. WPB		0,57	
5200	5/8	0	In			mm	90,00	4,00	NR 203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	E B18.2.1	UNC/2.2 TA	В. 9		0,88	
	- 10	T _a			1	_		4.00		ASTM A 193 B7/ASTM A 194 GR.2H						
5201	5/8	0	In			mm	95,00	4,00	NR 203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2 TA	В. 9		0,92	
5201	5/8	0	In			mm	95,00	4.00	NR 205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	E B18 2 1	LINC/2 2 TA	R 9		0.92	
3201	370	0					75,00	.,00	144 203	ASTM A 193 B7/ASTM A 194 GR.2H	L D10.2.1	0110/2.2 17	ш.)		0,72	
5204	5/8	0	In			mm	110,00	4,00	NR 203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	E B18.2.1	UNC/2.2 TA	В. 9		1,00	
										ASTM A 193 B7/ASTM A 194 GR.2H						
665	2+1/2	0	In			mm	,00	1,00	NR 203	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_B5C				
							Plant SX1 S	SULPHU	REX GH/F	Piping Class 203			We	lding specifica	ation SP.1406/2-SP.1407/3	
							Line 11110	- 0		Fluid				tem		
							Dang. fluid t			Coating				ores		

Sketch Sht 1/1

Isometric code

Area SX1

Zones

Page 1

		В	allest	ra						S	KETC	HES M	ATERIAL LIST				PROJ:	1E35		REV:	0	13/04/2010
	PUMA	.5		13/04/2	2010 11.47	7.17											DOC:	1E35	-65-029			
			Ba	llestra							S	ULPHURE	X GH/F		Size: In	Thk	: mm	Temp:	°C	Pres: BAR		Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qt	y l	Um	Pip. clas	s Compo	nent						Gen. Bolt	Weight (K	g) As.bl	y Branch
666	3	0	In			mm	,00	3,0	00]	NR	203	Gasket	TA 50.5/31 150 LB RF (125÷250) AARH)	_ B50	C					
666	3	0	In			mm	,00	1,0	00]	NR	205	Gasket	TA 50.5/31 150 LB RF (125÷250) AARH)	_ B5	С					
		,		,	'			•				M Erectio	n						Total Kg:	128,7	9	
SX1	SULPHI	UREX G	H/F			11110	- 0				SX1	SX1		1 /	1			1	TOTAL Kg:	128,7	9	

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	SP.1406/2-SP.1407/3
Line 11110 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 2
Zones			

		В	allestr	a					Sl	KETCH	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13	/04/2010
	PUMA	\ 5		13/04/2	010 11.4	7.18							DOC:	1E35-65-	029			
			Balle	estra						SU	LPHUREX GH/F	Size: In Th	k: mm	Temp: °C		Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	Component			Gei	n. Bolt	Weight (Kg)	As.bly	Branch
1435	1	0	In	3,38		mm	,00	1,00	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				2,50		
1453	3	0	In	3,18		mm	,00	0,50	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				3,36		
3125	1	0	In			mm	,00	1,00	NR	205	Valve Globe ST.46274/3 SW-F 800# F6	orged ASTM A	105 D 72	2		5,40		
6084	3	1	In	3,18	3,38	mm	,00	1,00	NR	203	Reducer Concentric ASME B16.9 BE I	E.R.W. ASTM	A 234 GR	. WPB		0,57		
	,	'	'	'	'	'		'		N	M Erection			To	otal Kg:	11,84		
SX1	SULPH	UREX G	H/F			11111 -	0			SX1 S	SX1 1	/ 1		TOT	AL Kg:	11,84		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specificatio	n SP.1406/2-SP.1407/2
Line 11111 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCH	ES MATERIAL LIST		PROJ	1E35		REV: 0	13	3/04/2010
	PUMA	5		13/04/20	10 11.47	.18							DOC:	1E35-65-029	ı			
			Ball	lestra		-				SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp: °C		Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	Otv	Um	Pip. class	Component			Gen. B	olt	Weight (Kg)	As.blv	Branch
1433	1/2	0	In	2,77		mm	,00		1	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B		- Guir 2		11,39		
1453	3	0	In	3,18		mm	,00	0,50	m	205	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				3,36		
3107	1/2	0	In			mm	,00	2,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	A 105 G 61			3,40		
4949	1/2	0	In			mm	,00	1,00	NR	205	Steam Trap ST.46702/0 THRD-F NPT	PN 25 Forg	ged AISI 304	T 71		4,08		
266	1/2	0	In			mm	,00	6,00	NR	207	90° Elbow TA 50.6/1 SW-F 3000# Forg	ed ASTM	A 105			1,50		
1289	1/2	0	In			mm	,00	1,00	NR	207	Union TA 50.6/1 SW-F 3000# Forged A	STM A 10)5			0,38		
4460	3	0	In	3,18		mm	,00	1,00	NR	205	Cap ASME B16.9 BE Seamless ASTM	A 234 GR.	WPB			0,41		
								-		N	I Erection			Total	Kg:	24,53		

TOTAL Kg:

24,53

SX1 SX1

SX1 SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specificatio	n SP.1406/2-SP.1407/2
Line 11113 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	Ballestr	a					SKETO	CHES MATERIAL LIST		PROJ:	1E35	REV: 0 1	3/04/2010
	PUMA	.5		13/04/2	010 11.4	7.18						DOC:	1E35-65-029		
	Ballestra									SULPHUREX GH/F	: mm	Temp: °C	Pres: BAR	Corr: mm	
Mark	S1	S2		T1	Т2		Len mm	Qty	Um Pip. cla	ss Component			Gen. Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	8,00	m 203	Pipe ASME B36.10 PL Seamless API	5L GR. B			10,13	
2828	1/2	0	In			mm	,00	1,00	NR 203	Valve Ball Full Port ST.46330/3 THRI BRASS NICKEL PLATED S 87	D-F NPT 200 LE	3 Forged		0,30	
465	1/2	0	In			mm	,00	2,00	NR 203	Flange Slip-On ASME B16.5 150 LB I ASTM A 105	RF (125÷250 AA	RH) Forg	ged 5191	0,80	
1289	1/2	0	In			mm	,00	1,00	NR 203	Union TA 50.6/1 SW-F 3000# Forged	ASTM A 105			0,38	
5191	1/2	0	In			mm	65,00	8,00	NR 203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		C/2.2 TAB	3. 9	0,88	
659	1/2	0	In			mm	,00	2,00	NR 203	Gasket TA 50.5/31 150 LB RF (125÷2	50 AARH) _ B50	С			
					1		1	-		M Erection			Total Kg:	12,49	
SX1	SULPHI	JREX G	H/F			11114	- 0		SX1	SX1 1	/ 1		TOTAL Kg:	12.49	

KY_11.14	Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	on SP.1406/2-SP.1407/3
	Line 11114 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

	Ballestra							SKETCHES MATERIAL LIST PROJ: 1E35							REV: 0	13	/04/2010	
	PUMA	15		13/04/2	010 11.4	7.18							DOC:	1E35-	65-029		•	
	Ballestra							SULPHUREX GH/F Size: In Thk: mm Temp:						: °C Pres: BAR		Corr: mm		
Mark	S1	S2		T1	Т2		Len mm	ı Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	8,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				10,13		
6021	1/2	0	In			mm	,00	1,00	NR	203	Valve Check ST.46396/3 THRD-F NP 96	T 150 LB Fo	rged BRO	NZE R		0,37		
1289	1/2	0	In			mm	,00	1,00	NR	203	Union TA 50.6/1 SW-F 3000# Forged	ASTM A 105				0,38		
	*	•	•		•	•				•	M Erection				Total Kg:	10,88		
SX1	SULPH	UREX G	H/F			11115	- 0			SX1	SX1 1	/ 1		Т	OTAL Kg:	10.88		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 11115 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

Ballestra								SKETCHES MATERIAL LIST PROJ: 1E							REV: 0	13/04/2010	
	PUMA5	5		13/04/20	10 11.4	7.18							DOC:	1E35-65-029	E35-65-029		
			Ball	estra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um l	Pip. clas	Component			Gen. Bo	olt Weight (Kg)	As.bly Branch	
1477	16	0	In	4,78		mm	,00	10,00	m 2	219	Pipe ASME B36.10 PL E.R.W. ASTM	A 312 TP 3	304H RX 20%	,	483,05		
1514	1	0	In	3,38		mm	,00	0,40	m 2	219	Pipe ASME B36.19 PL Seamless ASTM	M A 312 TF	304H		1,02		
569	16	0	In			mm	,00	1,00	NR 2	219	Flange Slip-On ASME B16.5 300 LB S ASTM A 182 GR. F304H	ST (63÷125	AARH) Forgo	ed 5369	91,83		
386	16	0	In	4,78		mm	,00	4,00	NR 2	219	90° Elbow Long Radius ASME B16.9 I WP304H RX 20%	BE Welded	ASTM A 403	GR.	182,80		
1066	1	0	In			mm	,00	2,00	NR 2	219	Coupling TA 50.7/2 THRD-F NPT 300 F304H	00# Forged	ASTM A 182	GR.	0,61		
5369	1+1/4	0	In			mm	190,00	20,00	NR 2	219	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 GR. B8 CL.2/A194 GR.		UNC/2.2 TAI	3.9	73,00		
797	16	0	In			mm	,00	1,00	NR 2	219	Gasket TA 50.5/31 300 LB ST-SG (63- WOUND F16L	÷125AARH) _ F16L SPII	RAL			
											M Erection			Total I	Kg: 832,31		
SX1	SULPHU	REX C	GH/F			12001	- 0			SX1	SX1 1	/ 1		TOTAL I	Kg: 832,31		

TET_12.1.1B	Plant SX1 SULPHUREX GH/F	Piping Class 219	Welding specification	SP.1406/2-SP.1408/2
TET_12.1.1A	Line 12001 - 0	Fluid	System	
12Y12	Dang. fluid type	Coating	De pres	Op tem
12Y13	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
12Y14	Zones			

Ballestra							SKETCHES MATERIAL LIST PROJ: 1E35						5	REV: 0	13/	/04/2010			
	PUMA	.5		13/04/20	010 11.4	7.18								DOC	1E3	5-65-029	•		
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk	: mm	Tem	p: ℃	Pres: BAR	С	orr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,20	m	207	Pipe ASME B36.10 PL Seamless API 5I	GR. B					0,25		
1435	1	0	In	3,38		mm	,00	0,10	m	207	Pipe ASME B36.10 PL Seamless API 5I	GR. B					0,25		
5697	16	0	In	4,78		mm	,00	8,20	m	207	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B RX	X 20%				388,20		
3155	1/4	0	In			mm	,00	1,00	NR	207	Valve Plug ST.46019/1 THRD-F NPT I	PN 16 For	ged A	STM A	A 182		0,20		
		·				·					GR. F316 M 53								
527	16	0	In			mm	,00	1,00	NR	207	Flange Slip-On ASME B16.5 150 LB S	Γ (63÷125	5 AAI	RH) For	ged	5250	46,00		
									т і		ASTM A 105								
5606	16	0	In	4,78		mm	,00	1,00	NR	207	90° Elbow Long Radius ASME B16.9 B	E E.R.W.	. AST	M A 2.	34 GR.		44,79		
1058	1	0	In			mm	00	1.00	NR	207	WPB Coupling TA 50.7/2 THRD-F NPT 300	O# Foresed	1 4 6 7	TN / A 1/	15		0,30		
	1	~	111				,00				1 0								
4398	1/2	1/4	In			mm	,00	1,00	NR	207	Coupling Reducing TA 50.7/2 THRD-F	NPT 300)0# F	orged A	STM A	A	0,03		
5250	1	0	In			mm	140,00	16,00	NR	207	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	E B18.2.1	UNC	C/2.2 T	AB. 9		28,00		
						-					ASTM A 193 B7/ASTM A 194 GR.2H								
778	16	0	In			mm	,00	1,00	NR	207	Gasket TA 50.5/31 150 LB ST-SG (63÷	125AARF	H) _ E	211H C	orrugat	e			
				*							Metal Gasket E11H								· · · · · · · · · · · · · · · · · · ·
										N	1 Erection					Total Kg:	508,02		

TOTAL Kg:

508,02

SX1 SX1

SX1

SULPHUREX GH/F

TET_12.1.9	Plant SX1 SULPHUREX GH/F	Piping Class 207	Welding specification	SP.1406/2-SP.1407/2
	Line 12002 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

	Ballestra						SKETCHES MATERIAL LIST PROJ: 1E35						35	REV: 0	13.	/04/2010		
	PUMA	\ 5		13/04/20	010 11.47	7.18							DC	C: 1E	35-65-029	•	•	
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk: mm	Te	mp: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,20	_		Pipe ASME B36.10 PL Seamless API 5I	L GR. B				0,25		
1435	1	0	In	3,38		mm	,00	0,10	m	207	Pipe ASME B36.10 PL Seamless API 5I	L GR. B				0,25		
5696	14	0	In	4,78		mm	,00	6,30	m	207	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B RX	20%			260,52		
3155	1/4	0	In			mm	,00	1,00	NR	207	Valve Plug ST.46019/1 THRD-F NPT I	PN 16 For	ged AST	M A 182		0,20		
									1		GR. F316 M 53							
526	14	0	In			mm	,00	2,00	NR	207	Flange Slip-On ASME B16.5 150 LB ST ASTM A 105	Γ (63÷125	AARH)	Forged	5249	72,00		
5572	14	0	In	4,78		mm	,00	2,00	NR	207	90° Elbow Long Radius ASME B16.9 B WPB	BE E.R.W.	ASTM A	234 GF	R	68,26		
1058	1	0	In			mm	,00	1,00	NR	207	Coupling TA 50.7/2 THRD-F NPT 300	0# Forged	ASTM A	105		0,30		
4398	1/2	1/4	In			mm	,00	1,00	NR	207	Coupling Reducing TA 50.7/2 THRD-F	NPT 300	0# Forge	d ASTM	A	0,03		
5249	1	0	In			mm	135,00	24,00	NR	207	Stud Bolt + 2 Nuts TA 50.48B/28 ASMI ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2	2 TAB. 9		41,28		
777	14	0	In			mm	,00	2,00	NR	207	Gasket TA 50.5/31 150 LB ST-SG (63÷ Metal Gasket E11H	125AARH	I) _ E11I	I Corrug	ate			
										N	M Erection				Total Kg:	443,1		

TOTAL Kg:

443,1

SX1 SX1

SX1

SULPHUREX GH/F

12Y18	Plant SX1 SULPHUREX GH/F	Piping Class 207	Welding specification	SP.1406/2-SP.1407/2
TET_12.1.10	Line 12003 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

Balle	estra	SKETCHES MATERIAL LIST	PROJ:	1E35	REV: 0	13/04/2010
PUMA5	13/04/2010 11.47.19		DOC:	1E35-65-029		
	Ballestra	SULPHUREX GH/F	Size: In Thk: mm	Temp: °C	Pres: BAR	Corr: mm

1433 1/2 1435 1 1461 10 1462 12 3155 1/4 477 10 478 12 306 12 1687 12 1056 1/2 1058 1 4398 1/2 5232 7/8	0 0 0 0 0	In In In In In In In	2,77 3,38 4,78 4,78	mm mm mm mm	00, 00, 00, 00, 00,	0,60 0,60 1,50 25,00	m 212 m 212	Pipe ASME B36.10 PL Seamless API 5L GR. B Pipe ASME B36.10 PL Seamless API 5L GR. B Pipe ASME B36.10 PL E.R.W. API 5L GR. B		0,76 1,50 47,42	
1461 10 1462 12 3155 1/4 477 10 478 12 306 12 1687 12 1056 1/2 1058 1 4398 1/2	0	In In In	4,78	mm mm	,00,	1,50	m 212	1		,- ·	
1462 12 3155 1/4 477 10 478 12 306 12 1687 12 1056 1/2 1058 1 4398 1/2	0	In In	7	mm	,00			Pipe ASME B36.10 PL E.R.W. API 5L GR. B		47.42	
3155 1/4 477 10 478 12 306 12 1687 12 1056 1/2 1058 1 4398 1/2	0	In	4,78			25,00	212			47,42	
477 10 478 12 306 12 1687 12 1056 1/2 1058 1 4398 1/2				mm	,00		m 212	Pipe ASME B36.10 PL E.R.W. API 5L GR. B		940,11	
478	0	In				1,00	NR 212	Valve Plug ST.46019/1 THRD-F NPT PN 16 Forged ASTM A 182		0,20	
478	0	In					-	GR. F316 M 53			
306 12 1687 12 1056 1/2 1058 1 4398 1/2				mm	,00	2,00	NR 212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged	5232	37,00	
306 12 1687 12 1056 1/2 1058 1 4398 1/2								ASTM A 105			
1687 12 1056 1/2 1058 1 4398 1/2	0	In		mm	,00	1,00	NR 212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged	5232	28,00	
1687 12 1056 1/2 1058 1 4398 1/2								ASTM A 105			
1056 1/2 1058 1 4398 1/2	0	In	4,78	mm	,00	6,00	NR 212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 GR.		162,62	
1056 1/2 1058 1 4398 1/2					•		•	WPB			
1058 1 4398 1/2	10	In	4,78	4,78 mm	,00	1,00	NR 212	Reducer Concentric ASME B16.9 BE E.R.W. ASTM A 234 GR. WPB		7,55	
4398 1/2	0	In		mm	,00	3,00	NR 212	Coupling TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 105		0,36	
	0	In		mm	,00	1,00	NR 212	Coupling TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 105		0,30	
5232 7/8	1/4	In		mm	,00	1,00	NR 212	Coupling Reducing TA 50.7/2 THRD-F NPT 3000# Forged ASTM A		0,03	
5232 7/8	-	1					. '	105	'		
	0	In		mm	120,00	30,00	NR 212	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9		17,70	
	1	1		1				ASTM A 193 B7/ASTM A 194 GR.2H	'	l l	
703 10	0	In		mm	,00	2,00	NR 212	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5B			
704 12	0	In		mm	,00	1,00	NR 212	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5B			
	1		1	1			N	M Erection	Total Kg:	1243,56	
SX1 SULPHU		LI/E		12004	0		SX1 S	SX1 1/1 7	TOTAL Kg:	1243,56	

FE_16.2	Plant SX1 SULPHUREX GH/F	Piping Class 212	Welding specification	SP.1406/2-SP.1407/3
TET_12.1.12	Line 12004 - 0	Fluid	System	
PISH_12.1	Dang. fluid type	Coating	De pres	Op tem
PI_12.2	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
PT_16.1	Zones			
FV_16.2				

		В	Ballestr	llestra							PROJ:	1E35		REV: 0	13.	/04/2010		
	PUMA	15		13/04/20	010 11.47	7.19							DOC:	1E35-	65-029		•	
			Ball	lestra						S	SULPHUREX GH/F	Size: In T	Thk: mm	Temp:	°C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. clas	ss Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,20	m	206	Pipe ASME B36.10 PL Seamless API 5	5L GR. B				0,25		
1435	1	0	In	3,38		mm	,00	0,10	m	206	Pipe ASME B36.10 PL Seamless API 5	5L GR. B				0,25		
1467	24	0	In	6,35		mm	,00	24,00	m	206	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				2.267,12		
3155	1/4	0	In			mm	,00	2,00	NR	206	Valve Plug ST.46019/1 THRD-F NPT GR. F316 M 53	PN 16 Forge	d ASTM A	182		0,41		
311	24	0	In	6,35		mm	,00	2,00	NR	206	90° Elbow Long Radius ASME B16.9° WPB	BE E.R.W. A	STM A 234	GR.		269,24		
1058	1	0	In			mm	,00	1,00	NR	206	Coupling TA 50.7/2 THRD-F NPT 300	00# Forged A	STM A 105	5		0,30		
1189	1	0	In			mm	,00	1,00	NR	206	Plug Hex. TA 50.7/2 THRD-M NPT 3	3000# Forged	ASTM A 10	05		0,35		
4398	1/2	1/4	In			mm	,00	1,00	NR	206	Coupling Reducing TA 50.7/2 THRD-l	F NPT 3000#	Forged AS	TM A		0,03		
											M Erection				Total Kg:	2537,96		
SX1	SULPH	UREX G	H/F			12005	- 0			SX1	SX1 1	/ 1		Т	OTAL Kg:	2537,96		

		В	allestra	a					S	KETCH	IES MATERIAL LIST		P	ROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	.5		13/04/2	010 11.4	7.19							D	OC:	1E35	-65-029	•		
			Balle	estra						SU	LPHUREX GH/F	Size: In	Thk: n	nm	Temp	: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		Т1	Т2		Len mm	Otv	Um	Pip. class	Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1460	10	0	In	3,96		mm	,00	5,80	m	206	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B					152,38		
3155	1/4	0	In			mm	,00	1,00	NR	206	Valve Plug ST.46019/1 THRD-F NPT GR. F316 M 53	PN 16 For	ged AS	ГМ А	182		0,20		
5050	10	0	In			mm	,00	1,00	NR	206	Valve Butterfly With Gasket ST.46856/ (125÷250 AARH) Cast DUCTILE IRO		R 150 LF	3 RF		5239	28,80		
477	10	0	In			mm	,00	3,00	NR	206	Flange Slip-On ASME B16.5 150 LB R ASTM A 105		50 AAR	H) For	ged	5232	55,50		
136	10	0	In	3,96		mm	,00	1,00	NR	206	45° Elbow Long Radius ASME B16.9 H WPB	BE E.R.W	. ASTM	A 234	GR.		8,75		
304	10	0	In	3,96		mm	,00	2,00	NR	206	90° Elbow Long Radius ASME B16.9 I WPB	BE E.R.W	. ASTM	A 234	GR.		31,60		
1122	1/4	0	In			mm	,00	1,00	NR	206	Coupling Half TA 50.7/2 THRD-F NP	Γ 3000# F	orged A	STM A	A 105		0,03		
5232	7/8	0	In			mm	120,00	12,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2	.2 TAI	B. 9		7,08		
5239	7/8	0	In			mm	190,00	12,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2	.2 TAI	B. 9		9,36		
671	10	0	In			mm	.00	1,00	NR	206	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	B5C						
			l	1			, , , ,		J		A Erection					Total Kg:	293,71		

Plant SX1 SULPHUREX GH/F	Piping Class 206	Welding specificatio	n SP.1406/2-SP.1407/3
Line 12006 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

TOTAL Kg:

293,71

SX1 SX1

12006 - 0

SULPHUREX GH/F

SX1

		В	allestr	a					SKETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0	13/04/2010
	PUMA	.5		13/04/20	10 11.4	7.19	1					DOC:	1E35	-65-029	•	
			Ball	estra					SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp	°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Otv	Um Pip. class	Component				Gen. Bolt	Weight (Kg) As.bl	v Branch
1433	1/2	0	In	2,77		mm	,00	0,20		Pipe ASME B36.10 PL Seamless API	5L GR. B				0,25	,
1460	10	0	In	3,96		mm	,00	0,90	m 206	Pipe ASME B36.10 PL E.R.W. API 5	L GR. B				23,65	
1462	12	0	In	4,78		mm	,00	2,80	m 206	Pipe ASME B36.10 PL E.R.W. API 5	L GR. B				105,29	
5608	16	0	In	4,78		mm	,00	0,50	m 206	Pipe ASME B36.10 PL E.R.W. API 5	L GR. B				23,67	
3155	1/4	0	In			mm	,00	1,00	NR 206	Valve Plug ST.46019/1 THRD-F NPT GR. F316 M 53	ΓPN 16 Foi	rged ASTM A	182		0,20	
5050	10	0	In			mm	,00	1,00	NR 206	Valve Butterfly With Gasket ST.46856 (125÷250 AARH) Cast DUCTILE IRO		R 150 LB RF		5239	28,80	
477	10	0	In			mm	,00	2,00	NR 206	Flange Slip-On ASME B16.5 150 LB ASTM A 105		50 AARH) Fo	rged	5232	37,00	
480	16	0	In			mm	,00	1,00	NR 206	Flange Slip-On ASME B16.5 150 LB ASTM A 105	RF (125÷2:	50 AARH) Fo	rged	5250	46,00	
136	10	0	In	3,96		mm	,00	1,00	NR 206	45° Elbow Long Radius ASME B16.9 WPB	BE E.R.W	. ASTM A 234	4 GR.		8,75	
138	12	0	In	4,78		mm	,00	1,00	NR 206	45° Elbow Long Radius ASME B16.9 WPB	BE E.R.W	. ASTM A 234	4 GR.		13,58	
306	12	0	In	4,78		mm	,00	3,00	NR 206	90° Elbow Long Radius ASME B16.9 WPB	BE E.R.W	. ASTM A 234	4 GR.		81,31	
5606	16	0	In	4,78		mm	,00	1,00	NR 206	90° Elbow Long Radius ASME B16.9 WPB	BE E.R.W	. ASTM A 234	4 GR.		44,79	
1686	12	10	In	4,78	3,96	mm	.00	1,00	NR 206	Reducer Concentric ASME B16.9 BE	E.R.W. AS	TM A 234 GF	R. WPB		7,55	
5627	16	12	In	4,78	4.78	mm	,00		NR 206	Reducer Concentric ASME B16.9 BE					16,59	
4398	1/2	1/4	In	,	,	mm	,00		NR 206	Coupling Reducing TA 50.7/2 THRD-	F NPT 300	00# Forged AS	STM A		0,03	
5239	7/8	0	In			mm	190,00	12,00	NR 206	Stud Bolt + 2 Nuts TA 50.48B/28 ASI ASTM A 193 B7/ASTM A 194 GR.2I		UNC/2.2 TA	В. 9		9,36	
5250	1	0	In			mm	140,00	16,00	NR 206	Stud Bolt + 2 Nuts TA 50.48B/28 ASI ASTM A 193 B7/ASTM A 194 GR.2I	ME B18.2.1	UNC/2.2 TA	В. 9		28,00	
12Y11 CHAIN	1						Plant SX1		REX GH/F	Piping Class 206 Fluid			We Sys	o .	tion SP.1406/2-SP.1407/	3

Coating

Sketch Sht 1/1

De pres

Isometric code

Dang. fluid type

Area SX1

Zones

Page 1

Op tem

Balle	estra	SKETCHES MATERIAL LIST		PROJ:	1E35	REV: 0	13/04/2010
PUMA5	13/04/2010 11.47.19			DOC:	1E35-65-029		
	Ballestra	SULPHUREX GH/F	Size: In T	hk: mm	Temp: °C	Pres: BAR	Corr: mm

Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	s Component			Gen. Bolt	Weight (Kg)	As.bly	Branch
674	16	0	In			mm	,00	1,00	NR	206	Gasket TA 50.5/	31 150 LB RF (125÷250 AARH) _ B	5C				
					•	•					M Erection			Total Kg:	474,82		
SX1	SULPHI	UREX GE	I/F			12009	- 0			SX1	SX1	1 / 1	Т	OTAL Kg:	474,82		

12Y11	Plant SX1 SULPHUREX GH/F	Piping Class 206	Welding specification	SP.1406/2-SP.1407/3
CHAIN mt. 4	Line 12009 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 2
	Zones			

		В	allestr	a					S	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	.5		13/04/2	010 11.4	7.19							DOC:	1E35	-65-029			
			Ball	lestra						SI	ULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Otv	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg) A	s.blv	Branch
1447	14	0	In	4,78		mm	,00	3,00	+	244	Pipe ASME B36.10 PL E.R.W. ASTM	312 TP 3	04		John Bott	126,58	.51.51	
1504	1/2	0	In	2,77		mm	,00	1,50	m	244	Pipe ASME B36.19 PL Seamless ASTN	A 312 TP	304			1,94		
3155	1/4	0	In			mm	,00	2,00	NR	244	Valve Plug ST.46019/1 THRD-F NPT GR. F316 M 53	N 16 Forg	ed ASTM A	182		0,41		
513	16	0	In			mm	,00	1,00	NR	244	Flange Slip-On ASME B16.5 150 LB S ASTM A 182 GR. F304	Γ (63÷125 Δ	AARH) Forg	ed	5351	46,94		
372	14	0	In	4,78		mm	,00	2,00	NR	244	90° Elbow Long Radius ASME B16.9 F WP304	E Welded	ASTM A 403	3 GR.		69,65		
373	16	0	In	4,78		mm	,00	1,00	NR	244	90° Elbow Long Radius ASME B16.9 F WP304	E Welded	ASTM A 403	3 GR.		45,70		
2335	16	14	In	4,78	4,78	mm	,00	1,00	NR	244	Reducer Eccentric ASME B16.9 BE Wo	lded ASTM	1 A 403 GR.			16,92		
3	1/2	0	In			mm	,00	1,00	NR	244	Cross Straight TA 50.7/2 THRD-F NPT GR. F304	3000# For	ged ASTM A	A 182		0,29		
1156	1/2	0	In			mm	,00	1,00	NR	244	Coupling Half TA 50.6/1 SW-F 3000# I	orged AST	M A 182 GF	R. F304		0,15		
1180	1/2	0	In			mm	,00	2,00	NR	244	Plug Hex. TA 50.7/2 THRD-M NPT 30 F304	00# Forged	ASTM A 18	82 GR.		0,27		
4390	1/2	1/4	In			mm	,00	1,00	NR	244	Coupling Reducing TA 50.7/2 THRD-F 182 GR. F304	NPT 3000	# Forged AS	TM A		0,03		
5351	1	0	In			mm	140,00	16,00	NR	244	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 320 GR B8 CL.2 / A194 GR 8		JNC/2.2 TA	B. 9		28,00		
778	16	0	In			mm	,00	1,00	NR	244	Gasket TA 50.5/31 150 LB ST-SG (63: Metal Gasket E11H	125AARH)	_E11H Cor	rrugate				
											M Erection				Total Kg:	336,87		
SX1	SULPH	UREX G	H/F			12010	- 0			SX1	SX1 1,	1		7	TOTAL Kg:	336,87		

Plant SX1 SULPHUREX GH/F	Piping Class 244	Welding specification	on SP.1406/2-SP.1408/2
Line 12010 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			
	Line 12010 - 0 Dang, fluid type Area SX1	Line 12010 - 0 Fluid Dang. fluid type Coating Area SX1 Sketch Sht 1/1	Line 12010 - 0FluidSystemDang, fluid typeCoatingDe presArea SX1Sketch Sht 1/1Isometric code

Balle	estra	SKETCHES MATERIAL LIST		PROJ:	1E35	REV: 0	13/04/2010
PUMA5	13/04/2010 11.47.19			DOC:	1E35-65-029		
	Ballestra	SULPHUREX GH/F	Size: In Th	k: mm	Temp: °C	Pres: BAR	Corr: mm

Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	s Component	Gen. Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,20	m	206	Pipe ASME B36.10 PL Seamless API 5L GR. B		0,25	
1460	10	0	In	3,96		mm	,00	2,90	m	206	Pipe ASME B36.10 PL E.R.W. API 5L GR. B		76,19	
1462	12	0	In	4,78		mm	,00	1,60	m	206	Pipe ASME B36.10 PL E.R.W. API 5L GR. B		60,17	
3155	1/4	0	In			mm	,00	1,00	NR	206	Valve Plug ST.46019/1 THRD-F NPT PN 16 Forged ASTM A 182 GR. F316 M 53		0,20	
5050	10	0	In			mm	,00	1,00	NR	206	Valve Butterfly With Gasket ST.46856/0 WAFER 150 LB RF (125÷250 AARH) Cast DUCTILE IRON B 109	5239	28,80	
477	10	0	In			mm	,00	2,00	NR	206	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	5232	37,00	
478	12	0	In			mm	,00	1,00	NR	206	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	5232	28,00	
304	10	0	In	3,96		mm	,00	2,00	NR	206	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 GR. WPB		31,60	
1686	12	10	In	4,78	3,96	mm	,00	1,00	NR	206	Reducer Concentric ASME B16.9 BE E.R.W. ASTM A 234 GR. WPE		7,55	
4398	1/2	1/4	In			mm	,00	1,00	NR	206	Coupling Reducing TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 105		0,03	
5232	7/8	0	In			mm	120,00	12,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/ASTM A 194 GR.2H		7,08	
5239	7/8	0	In			mm	190,00	12,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/ASTM A 194 GR.2H		9,36	
672	12	0	In			mm	,00	1,00	NR	206	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5C			
	1			1	1	1				1	M Erection	Total Kg:	286,24	1
SX1	SULPH	UREX G	H/F			12011	- 0			SX1	SX1 1 / 1	TOTAL Kg:	286,24	

CHAIN mt. 4	Plant SX1 SULPHUREX GH/F	Piping Class 206	Welding specification	SP.1406/2-SP.1407/3
	Line 12011 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	a					Sl	KETCH	ES MATERIAL LIST		PRO	J: 1E3	35	REV: 0	13.	/04/2010
	PUMA	5		13/04/20	10 11.47	.20							DO	C: 1E3	35-65-029			
			Balle	estra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Ten	np: °C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,20	m	209	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,25		
1435	1	0	In	3,38		mm	,00	0,10	m	209	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,25		
5574	14	0	In	4,78		mm	,00	2,00	m	209	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				82,71		
3155	1/4	0	In			mm	,00	1,00	NR	209	Valve Plug ST.46019/1 THRD-F NPT I GR. F316 M 53	PN 16 Forg	ged ASTM	A 182		0,20		
5701	14	0	In			mm	,00	1,00	NR	209	Flange Slip-On AWWA C207-TAB.1 C AARH) Forged ASTM A 105	L.B 86 psi	FF (125÷	250	5211			
5572	14	0	In	4,78		mm	,00	1,00	NR	209	90° Elbow Long Radius ASME B16.9 E	BE E.R.W.	ASTM A	234 GR.		34,13		
1058	1	0	In			mm	,00	1,00	NR	209	Coupling TA 50.7/2 THRD-F NPT 300	0# Forged	ASTM A	105		0,30		T
1189	1	0	In			mm	,00	1,00	NR	209	Plug Hex. TA 50.7/2 THRD-M NPT 30	000# Forge	1 ASTM A	105		0,35		+
4398	1/2	1/4	In			mm	,00	1,00	NR	209	Coupling Reducing TA 50.7/2 THRD-F	NPT 3000)# Forged	ASTM A	A	0,03		
5211	3/4	0	In			mm	85,00	12,00	NR	209	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2	ГАВ. 9		9,36		
5702	14	0	In			mm	.00	1.00	NR	209	Gasket TA 50.5/31 86 psi FF (125÷250	AARH)	B15D FL/	ΛT				T
		-					,50	,,,,	1 [I Erection	/ = -	23		Total Kg:	127,58		

12Y6	Plant SX1 SULPHUREX GH/F	Piping Class 209	Welding specification	SP.1406/2-SP.1407/2
	Line 12012 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

TOTAL Kg:

127,58

SX1

SX1

SX1

SULPHUREX GH/F

Balle	estra	SKETCHES MATERIAL LIST		PROJ:	1E35	REV:	0	13/04/2010
PUMA5	13/04/2010 11.47.20			DOC:	1E35-65-029			
	Ballestra	SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR		Corr: mm

3.6 1	61	CO.		TD:1	TD2		т		**	D: 1		C. D.V	XX * 14 (XZ) A 11	n
Mark	S1	S2		T1	T2		Len mm	Qty	_	Pip. clas	_	Gen. Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,20	m	206	Pipe ASME B36.10 PL Seamless API 5L GR. B		0,25	
1460	10	0	In	3,96		mm	,00	2,90	m	206	Pipe ASME B36.10 PL E.R.W. API 5L GR. B		76,19	
1462	12	0	In	4,78		mm	,00	1,60	m	206	Pipe ASME B36.10 PL E.R.W. API 5L GR. B		60,17	
3155	1/4	0	In			mm	,00	1,00	NR	206	Valve Plug ST.46019/1 THRD-F NPT PN 16 Forged ASTM A 182 GR. F316 M 53		0,20	
5050	10	0	In			mm	,00	1,00	NR	206	Valve Butterfly With Gasket ST.46856/0 WAFER 150 LB RF (125÷250 AARH) Cast DUCTILE IRON B 109	5239	28,80	
477	10	0	In			mm	,00	2,00	NR	206	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	5232	37,00	
478	12	0	In			mm	,00	1,00	NR	206	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	5232	28,00	
304	10	0	In	3,96		mm	,00	2,00	NR	206	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 GR. WPB		31,60	
1686	12	10	In	4,78	3,96	mm	,00	1,00	NR	206	Reducer Concentric ASME B16.9 BE E.R.W. ASTM A 234 GR. WPF	3	7,55	
4398	1/2	1/4	In			mm	,00	1,00	NR	206	Coupling Reducing TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 105		0,03	
5232	7/8	0	In			mm	120,00	12,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/ASTM A 194 GR.2H		7,08	
5239	7/8	0	In			mm	190,00	12,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/ASTM A 194 GR.2H		9,36	
672	12	0	In			mm	,00	1,00	NR	206	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5C			
			-	1		1	, <u>-</u>			1	M Erection	Total Kg:	286,24	1
SX1	SULPH	UREX G	H/F			12013	- 0			SX1	SX1 1 / 1	TOTAL Kg:	286,24	

CHAIN mt. 4	Plant SX1 SULPHUREX GH/F	Piping Class 206	Welding specification	SP.1406/2-SP.1407/3
	Line 12013 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	a					S	KETCH	IES MATERIAL LIST		P	ROJ	1E35		REV: 0	13/	/04/2010
	PUMA	.5		13/04/20	10 11.47	7.20							I	OC:	1E35	5-65-029			
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk:	nm	Temp	: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,20	m	209	Pipe ASME B36.10 PL Seamless API 5	L GR. B					0,25		
1435	1	0	In	3,38		mm	,00	0,10	m	209	Pipe ASME B36.10 PL Seamless API 5	L GR. B					0,25		
5574	14	0	In	4,78		mm	,00	2,40	m	209	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B					99,25		
3155	1/4	0	In			mm	,00	1,00	NR	209	Valve Plug ST.46019/1 THRD-F NPT GR. F316 M 53	PN 16 For	ged AS	ТМ А	182		0,20		
5701	14	0	In			mm	,00	1,00	NR	209	Flange Slip-On AWWA C207-TAB.1 C AARH) Forged ASTM A 105	CL.B 86 psi	i FF (12	25÷25()	5211			
5572	14	0	In	4,78		mm	,00	2,00	NR	209	90° Elbow Long Radius ASME B16.9 I WPB	BE E.R.W.	ASTM	I A 23	4 GR.		68,26		
1058	1	0	In			mm	,00	1,00	NR	209	Coupling TA 50.7/2 THRD-F NPT 300	00# Forged	ASTM	I A 10:	5		0,30		
1189	1	0	In			mm	,00	1,00	NR	209	Plug Hex. TA 50.7/2 THRD-M NPT 30	000# Forge	d AST	M A 1	05		0,35		
4398	1/2	1/4	In			mm	,00	1,00	NR	209	Coupling Reducing TA 50.7/2 THRD-F	F NPT 300	0# For	ged AS	STM A		0,03		
5211	3/4	0	In			mm	85,00	12,00	NR	209	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	IE B18.2.1	UNC/	2.2 TA	В. 9		9,36		
5702	14	0	In			mm	,00	1,00	NR	209	Gasket TA 50.5/31 86 psi FF (125÷250	AARH) _	B15D	FLAT					T
	'	'				1				N	1 Erection					Total Kg:	178,25		

12Y20	Plant SX1 SULPHUREX GH/F	Piping Class 209	Welding specification	SP.1406/2-SP.1407/2
	Line 12014 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

TOTAL Kg:

178,25

SX1

SX1

SX1

SULPHUREX GH/F

		В	allestr	a					S	KETC	HES MATERIAL LIST		PROJ	: 1E35	5	REV: 0	13	/04/2010
	PUMA	15		13/04/20)10 11.4	7.20							DOC:	1E35	5-65-029	•	•	
			Ball	estra						SI	ULPHUREX GH/F	Size: In	Thk: mm	Temp); °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	S Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1457	6	0	In	3,96		mm	,00	2,50	_	206	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				40,12		
3155	1/4	0	In			mm	,00	1,00	NR	206	Valve Plug ST.46019/1 THRD-F NPT GR. F316 M 53	PN 16 Forgo	ed ASTM A	182		0,20		
5048	6	0	In			mm	,00	1,00	NR	206	Valve Butterfly With Gasket ST.46856 (125÷250 AARH) Cast DUCTILE IRO		150 LB RF		5223	10,30		
475	6	0	In			mm	,00	2,00	NR	206	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷250) AARH) Fo	orged	5214	15,00		
133	6	0	In	3,96		mm	,00	1,00	NR	206	45° Elbow Long Radius ASME B16.9 WPB	BE E.R.W.	ASTM A 23	4 GR.		2,85		
301	6	0	In	3,96		mm	,00	1,00	NR	206	90° Elbow Long Radius ASME B16.9 WPB	BE E.R.W.	ASTM A 23	4 GR.		5,66		
1122	1/4	0	In			mm	,00	1,00	NR	206	Coupling Half TA 50.7/2 THRD-F NP	T 3000# For	rged ASTM	A 105		0,03		
5223	3/4	0	In			mm	155,00	8,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	AB. 9		8,48		
											M Erection				Total Kg:	82,65		
SX1	SULPH	UREX G	H/F			12015	- 0			SX1	SX1 1	/ 1			TOTAL Kg:	82,65		

12Y4	Plant SX1 SULPHUREX GH/F	Piping Class 206	Welding specification	SP.1406/2-SP.1407/3
	Line 12015 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allest	ra					S	KETC	HES MATERIAL LIST		PRO.	J: 1E	35	REV: 0	13.	/04/2010
	PUMA	15		13/04/20	010 11.4	7.20							DOC	: 1E	35-65-029		•	
			Bal	lestra						SU	ULPHUREX GH/F	Size: In	Thk: mm	Tei	mp: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	n Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1457	6	0	In	3,96		mm	,00	3,80	m	206	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				60,98		
475	6	0	In			mm	,00	1,00	NR	206	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	AF (125÷25	0 AARH) F	orged	5214	7,50		
133	6	0	In	3,96		mm	,00	2,00	NR	206	45° Elbow Long Radius ASME B16.9 E WPB	BE E.R.W.	ASTM A 2	34 GR	2.	5,70		
301	6	0	In	3,96		mm	,00	2,00	NR	206	90° Elbow Long Radius ASME B16.9 E WPB	BE E.R.W.	ASTM A 2	34 GR	2.	11,33		
5214	3/4	0	In			mm	100,00	8,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 T	AB. 9		6,72		
669	6	0	In			mm	,00	1,00	NR	206	Gasket TA 50.5/31 150 LB RF (125÷25	O AARH)	_B5C					
	'			<u>'</u>	1	'	1			1	M Erection				Total Kg:	92,23		
SX1	SULPH	UREX G	H/F			12016	- 0			SX1	SX1 1 /	/ 1			TOTAL Kg:	92,23		

12Y5	Plant SX1 SULPHUREX GH/F	Piping Class 206	Welding specification SP.14	406/2-SP.1407/3
	Line 12016 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		Ba	allestra	a					5	KETC	HES MATERIAL LIST		PROJ	: 1E35	j	REV: 0 11	3/04/2010
	PUMA	15		13/04/20	10 11.47	.20							DOC:	1E35	5-65-029		
			Balle	estra		-				S	ULPHUREX GH/F	Size: In	Thk: mm	Temp	: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2	I	Len mm	Qty	Un	Pip. clas	s Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,10		212	Pipe ASME B36.10 PL Seamless API 5	5L GR. B				0,13	
1434	3/4	0	In	2,87		mm	,00	1,80	m	212	Pipe ASME B36.10 PL Seamless API 5	5L GR. B				3,04	
2839	3/4	0	In			mm	,00	1,00	NR	212	Valve Ball Full Port ST.46590/3 LUG Forged ASTM A 105 S 127	150 LB RF	(125÷250 A	ARH)	5373	1,90	
466	3/4	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷25	0 AARH) Fo	orged	5191	0,70	
1290	3/4	0	In			mm	,00	1,00	NR	211	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 10)5			0,46	
4400	3/4	1/2	In			mm	,00	1,00	NR	212	Coupling Reducing TA 50.7/2 THRD-I	F NPT 300	0# Forged A	STM A		0,03	
5191	1/2	0	In			mm	65,00	2,00	NR	212	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	AB. 9		0,22	
692	3/4	0	In			mm	,00	2,00	NR	212	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH)	_ B5B				
5373	1/2	0	In			mm	30,00	16,00	NR	212	Screws for valves ASME B 18.2.1 /UN	IC ASTM A	193 B7			1,28	
							•				M Erection				Total Kg:	7,75	

TOTAL Kg:

7,75

SX1 SX1

12018 - 0

SX1

SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 212	Welding specificatio	n SP.1406/2-SP.1407/3
Line 12018 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCH	IES MATERIAL LIST		PROJ:	1E35	REV: 0	13/	04/2010
	PUMA	.5		13/04/20	010 11.47	7.20							DOC:	1E35-65-029			
			Ball	lestra						SU	LPHUREX GH/F	Size: In Th	k: mm	Temp: °C	Pres: BAR	Co	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component			Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00,	4,00	m	212	Pipe ASME B36.10 PL Seamless API 5	L GR. B			5,06		
1289	1/2	0	In			mm	,00	2,00	NR	212	Union TA 50.6/1 SW-F 3000# Forged A	STM A 105			0,76		
	M Erection												Total Kg:	5,82			

SX1 SX1

SULPHUREX GH/F

12019 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 212	Welding specification	n SP.1406/2-SP.1407/3
Line 12019 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

5,82

	Ballestra PUMA5 13/04/2010 11.47.20							SKETCHES MATERIAL LIST PRODOC										/04/2010
	10111		Balle							SUI	LPHUREX GH/F	Size: In	Thk: mm	Tem		Pres: BAR	Co	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) A	s.bly	Branch
1509	2	0	In	3,91		mm	,00	3,30	•	_	Pipe ASME B36.19 PL Seamless ASTM	Л А 312 ТР	304			18,31		
2858	2	0	In			mm	,00	2,00	NR	215	Valve Ball Full Port ST.46586/3 LUG 1 Cast ASTM A 351 CF8 S 123	50 LB RF	(125÷250 A	ARH)	5384	13,26		
4898	2	0	In			mm	,00	1,00	NR	215	Sight Glass ST.46353/1 FLG 150 LB RI ASTM A 351 GR. CF8M FG 64	F (125÷250	AARH) C	ast	5133	11,53		
451	2	0	In			mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	mooth Forg	ged	5135	2,20		
164	2	0	In	3,91		mm	,00	2,00	NR	215	45° Elbow Long Radius ASME B16.9 E GR. WP304	BE Wrough	t S ASTM	A 403		0,64		
332	2	0	In	3,91		mm	,00	1,00	NR	215	90° Elbow Long Radius ASME B16.9 E GR. WP304	BE Wrough	t S ASTM	A 403		0,68		
1212	2	0	In	3,91		mm	,00	1,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ght S ASTM	1 A 403 GR			0,48		
5133	5/8	0	In			mm	85,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 T	AB. 9		0,84		
5135	5/8	0	In			mm	95,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 T	AB. 9		0,92		

Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F

Screws for valves ASME B 18.2.1 /UNC ASTM A 193 B7 Galvanized

1 / 1

4,00 NR 215

32,00 NR 215

mm

mm

12020 - 0

40,00

715

5384

SX1

5/8

0

SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	n SP.1406/2-SP.1408/3
Line 12020 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

M Erection

SX1

SX1

4,80

53,66

53,66

Total Kg:

		В	allestr	a				SKETCH				IES MATERIAL LIST		PRO	J: 1E35	5	REV: 0	13	/04/2010
	PUMA	A 5		13/04/2	010 11.4	7.21								DOC	: 1E35	5-65-029			
			Ball	estra							SU	LPHUREX GH/F	Size: In	Thk: mm	Temp): °C	Pres: BAR		Corr: mm
Mark	S1	S2		T1	T2		Len mn	1 ()ty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1509	2	0	In	3,91		mm	,00) 2	,60	m	215	Pipe ASME B36.19 PL Seamless ASTN	M A 312 TP	304			14,42		
2858	2	0	In			mm	,00) 2	,00	NR	215	Valve Ball Full Port ST.46586/3 LUG Cast ASTM A 351 CF8 S 123	150 LB RF (125÷250 A	AARH)	5384	13,26		
4898	2	0	In			mm	,00) 1	,00	NR	215	Sight Glass ST.46353/1 FLG 150 LB R ASTM A 351 GR. CF8M FG 64	RF (125÷250	AARH) C	ast	5133	11,53		
451	2	0	In			mm	,00) 4	,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	mooth For	ged	5135	8,80		
5072	2	0	In			mm	,00) 1	,00	NR	215	Flange Blind + Disk ASME B16.5 - TA (125÷250 AARH) Forged FLG: ASTM A240 TYPE 304				5135	2,80		
332	2	0	In	3,91		mm	,00) 1	,00	NR	215	90° Elbow Long Radius ASME B16.9 GR. WP304	BE Wrough	t S ASTM	A 403		0,68		
1212	2	0	In	3,91		mm	,00) 4	,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ight S ASTM	I A 403 GI	₹.		1,92		

Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9

Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9

Screws for valves ASME B 18.2.1 /UNC ASTM A 193 B7 Galvanized

1 / 1

Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F

ASTM A 193 B7/A194 2H Galvanized

ASTM A 193 B7/A194 2H Galvanized

5133

5135

715

5384

5/8

5/8

5/8

0

0

0

SULPHUREX GH/F

In

In

In

85,00

95,00

,00

40,00

mm

mm

mm

mm

12021 - 0

4,00 NR 215

16,00 NR 215

7,00 NR 215

32,00 NR 215

KV_12.4	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specificatio	n SP.1406/2-SP.1408/3
	Line 12021 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

M Erection

SX1

SX1

0,84

3,68

4,80

62,73

62,73

Total Kg:

PUMA5 13/04/2010 11.47.21 DOC: 1E35-65-029 Ballestra SULPHUREX GH/F Size: In Thk: mm Temp: °C Pres: BAR Corr: mm	Balle	stra	SKETCHES MATERIAL LIST		PROJ:	1E35	REV: 0	13/04/2010
Ballestra SULPHUREX GH/F Size: In Thk; mm Temp: °C Pres: BAR Corr: mm	PUMA5	13/04/2010 11.47.21			DOC:	1E35-65-029		
]	Ballestra	SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	Corr: mm

Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	s Component	Gen. Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77	mm	,00	0,20	_	206	Pipe ASME B36.10 PL Seamless API 5L GR. B		0,25	
1460	10	0	In	3,96	mm	,00	0,90	m	206	Pipe ASME B36.10 PL E.R.W. API 5L GR. B		23,65	
1462	12	0	In	4,78	mm	,00	1,60	m	206	Pipe ASME B36.10 PL E.R.W. API 5L GR. B		60,17	
3155	1/4	0	In		mm	,00	1,00	NR	206	Valve Plug ST.46019/1 THRD-F NPT PN 16 Forged ASTM A 182 GR. F316 M 53		0,20	
5050	10	0	In		mm	,00	1,00	NR	206	Valve Butterfly With Gasket ST.46856/0 WAFER 150 LB RF (125÷250 AARH) Cast DUCTILE IRON B 109	5239	28,80	
477	10	0	In		mm	,00	2,00	NR	206	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	5232	37,00	
478	12	0	In		mm	,00	1,00	NR	206	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	5232	28,00	
1686	12	10	In	4,78	3,96 mm	,00	1,00	NR	206	Reducer Concentric ASME B16.9 BE E.R.W. ASTM A 234 GR. WPB		7,55	
4398	1/2	1/4	In		mm	,00	1,00	NR	206	Coupling Reducing TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 105		0,03	
5232	7/8	0	In		mm	120,00	12,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/ASTM A 194 GR.2H		7,08	
5239	7/8	0	In		mm	190,00	12,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/ASTM A 194 GR.2H		9,36	
672	12	0	In		mm	,00	1,00	NR	206	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5C			
	•	'		*	'			•		M Erection	Total Kg:	202,09	
SX1	11 SULPHUREX GH/F 12023 - 0 SX1 SX1								SX1	SX1 1/1	TOTAL Kg:	202,09	

Plant SX1 SULPHUREX GH/F	Piping Class 206	Welding specification	n SP.1406/2-SP.1407/3
Line 12023 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page
Zones			

	Ballestra								S	KETCH	IES MATERIAL LIST		PROJ	: 1E35	5	REV: 0	13	/04/2010
	PUMA	15		13/04/20	10 11.4	7.21							DOC:	1E35	5-65-029			
			Ball	estra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp); °C	Pres: BAR	Corr: mm	
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1504	1/2	0	In	2,77		mm	,00	1,00	_	215	Pipe ASME B36.19 PL Seamless ASTM	1 A 312 TP	304			1,29		
1506	1	0	In	3,38		mm	,00	12,00	m	215	Pipe ASME B36.19 PL Seamless ASTM	1 A 312 TP	304			30,64		
2862	1/2	0	In			mm	,00	2,00	NR	215	Valve Ball Full Port ST.46545/1 THRD A 182 GR. F316 S 99	-F NPT 800	# Forged A	STM		1,43		
4909	1	0	In			mm	,00	1,00	NR	215	Sight Glass ST.46354/2 FLG 150 LB RI ASTM A 351 GR. CF8M FG 65	F (125÷250	AARH) Ca	st	5126	5,71		
448	1	0	In			mm	,00	4,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face Sr	nooth Forge	ed	5128	3,20		
329	1	0	In	3,38		mm	,00	4,00	NR	215	90° Elbow Long Radius ASME B16.9 E GR. WP304	BE Wrought	S ASTM A	403		0,55		
1209	1	0	In	3,38		mm	,00	4,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ght S ASTM	A 403 GR.			0,65		
5126	1/2	0	In			mm	70,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 U	JNC/2.2 TA	В. 9		0,44		
5128	1/2	0	In			mm	80,00	12,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 U	JNC/2.2 TA	В. 9		1,44		
712	1	0	In			mm	,00	4,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)_	B5F					
	*	*	•	*	•					N	1 Erection				Total Kg:	45,35		

KV_12.3	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specificatio	n SP.1406/2-SP.1408/3
	Line 12024 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

TOTAL Kg:

45,35

SX1 SX1

SULPHUREX GH/F

SX1

	Ballestra								S	KETCH	IES MATERIAL LIST		PRO	J: 1E35	5	REV: 0	13/	/04/2010
	PUMA	.5		13/04/20	010 11.47	.21							DOC	: 1E35	5-65-029	•	•	
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp	o: °C	Pres: BAR	Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1448	16	0	In	4,78		mm	,00	2,50	m	244	Pipe ASME B36.10 PL E.R.W. ASTM	A 312 TP 3	04			120,76		
1504	1/2	0	In	2,77		mm	,00	0,20	m	244	Pipe ASME B36.19 PL Seamless ASTM	1 A 312 TP	304			0,26		
1506	1	0	In	3,38		mm	,00	0,30	m	244	Pipe ASME B36.19 PL Seamless ASTM	1 A 312 TP	304			0,77		
3155	1/4	1/4 0 In mm					,00	1,00	NR	244	Valve Plug ST.46019/1 THRD-F NPT PN 16 Forged ASTM A 182 GR. F316 M 53					0,20		
513	16	0	In			mm	,00	3,00	NR	244	Flange Slip-On ASME B16.5 150 LB S ASTM A 182 GR. F304	T (63÷125	AARH) Fo	rged	5351	140,81		
541	16	0	In			mm	,00	1,00	NR	244	Flange Slip-On ASME B16.5 150 LB S ASTM A 182 GR. F304	G (63÷125	AARH) Fo	orged	5351	46,94		
373	16	0	In	4,78		mm	,00	2,00	NR	244	90° Elbow Long Radius ASME B16.9 E WP304	BE Welded	ASTM A 4	103 GR.		91,40		
1051	1	0	In			mm	,00	2,00	NR	244	Coupling TA 50.7/2 THRD-F NPT 300 F304	0# Forged	ASTM A 1	82 GR.		0,61		
4390	1/2	1/4	In			mm	,00	1,00	NR	244	Coupling Reducing TA 50.7/2 THRD-F 182 GR. F304	NPT 3000)# Forged A	ASTM A		0,03		
5351	1	0	In			mm	140,00	48,00	NR	244	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 320 GR B8 CL.2 / A194 GR 8		UNC/2.2 T	AB. 9		84,00		
778	16	0	In			mm	,00	3,00	NR	244	Gasket TA 50.5/31 150 LB ST-SG (63: Metal Gasket E11H	125AARH)_E11H(Corrugate	*			
										N	M Erection				Total Kg:	485,78		

TET_12.5.A	Plant SX1 SULPHUREX GH/F	Piping Class 244	Welding specification SP.1406/2-SP.1408/2				
TET_12.5.B	Line 12025 - 0	Fluid	System				
GC_36	Dang. fluid type	Coating	De pres	Op tem			
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1			
	Zones						

TOTAL Kg:

485,78

SX1 SX1

SULPHUREX GH/F

Ball	estra	SKETCHES MATERIAL LIST	PROJ:	1E35	REV: 0	13/04/2010
PUMA5	13/04/2010 11.47.21		DOC:	1E35-65-029		
	Ballestra	SULPHUREX GH/F	Size: In Thk: mm	Temn• °C	Pres: BAR	Corr. mm

Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg) As.bly	Branch
1448	16	0	In	4,78	mm	,00	1,00	m	244	Pipe ASME B36.10 PL E.R.W. ASTM A 312 TP 304		48,30	
1451	24	0	In	6,35	mm	,00	4,10	m	244	Pipe ASME B36.10 PL E.R.W. ASTM A 312 TP 304		395,18	
1504	1/2	0	In	2,77	mm	,00	1,50	m	244	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 304		1,94	
1506	1	0	In	3,38	mm	,00	1,00	m	244	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 304		2,55	
3155	1/4	0	In		mm	,00	2,00	NR	244	Valve Plug ST.46019/1 THRD-F NPT PN 16 Forged ASTM A 182 GR. F316 M 53		0,41	
513	16	0	In		mm	,00	1,00	NR	244	Flange Slip-On ASME B16.5 150 LB ST (63÷125 AARH) Forged ASTM A 182 GR. F304	5351	46,94	
373	16	0	In	4,78	mm	,00	1,00	NR	244	90° Elbow Long Radius ASME B16.9 BE Welded ASTM A 403 GR. WP304		45,70	
376	24	0	In	6,35	mm	,00	1,00	NR	244	90° Elbow Long Radius ASME B16.9 BE Welded ASTM A 403 GR. WP304		137,36	
3	1/2	0	In		mm	,00	1,00	NR	244	Cross Straight TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 182 GR. F304		0,29	
1051	1	0	In		mm	,00	1,00	NR	244	Coupling TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 182 GR. F304		0,31	
1156	1/2	0	In		mm	,00	1,00	NR	244	Coupling Half TA 50.6/1 SW-F 3000# Forged ASTM A 182 GR. F304		0,15	
1180	1/2	0	In		mm	,00	2,00	NR	244	Plug Hex. TA 50.7/2 THRD-M NPT 3000# Forged ASTM A 182 GR. F304		0,27	
1182	1	0	In		mm	,00	1,00	NR	244	Plug Hex. TA 50.7/2 THRD-M NPT 3000# Forged ASTM A 182 GR. F304		0,36	
4390	1/2	1/4	In		mm	,00	2,00	NR	244	Coupling Reducing TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 182 GR. F304		0,06	
5351	1	0	In		mm	140,00	16,00	NR	244	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 320 GR B8 CL.2 / A194 GR 8		28,00	
778	16	0	In		mm	,00	1,00	NR	244	Gasket TA 50.5/31 150 LB ST-SG (63÷125AARH) _ E11H Corrugate Metal Gasket E11H			

12Y7	Plant SX1 SULPHUREX GH/F	Piping Class 244	Welding specification	SP.1406/2-SP.1408/2
Disk plate ø 630mm. Thk.5mm -AISI 304 = n 1 pz	Line 12026 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

PUMA5 13/04/2010 11.47.21 DOC: 1E35-65-029 Ballestra SULPHUREX GH/F Size: In Thk: mm Temp: °C Pres: BAR Corr: mm	Balle	stra	SKETCHES MATERIAL LIST	PROJ:	1E35	REV: 0	13/04/2010
Ballestra SULPHUREX GH/F Size: In Thk; mm Temp: °C Pres: BAR Corr; mm	PUMA5	13/04/2010 11.47.21		DOC:	1E35-65-029		
]	Ballestra	SULPHUREX GH/F	Size: In Thk: mm	Temp: °C	Pres: BAR	Corr: mm

Mark		S2	T1	T2	Len mm	Qty Um Pip. clas	Component		Gen. Bolt	Weight (Kg)	As.bly	Branch
							M Erection		Total Kg:	707,81		
SX1	SULPHURE	EX GH/I	7		12026 - 0	SX1	SX1	1 / 1 T (OTAL Kg:	707,81		

12Y7	Plant SX1 SULPHUREX GH/F	Piping Class 244	Welding specification	SP.1406/2-SP.1408/2
Disk plate ø 630mm. Thk.5mm -AISI 304 = n 1 pz	Line 12026 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 2
	Zones			

		I	Ballestra	1		SKETCHES MATERIAL LIST PROJ: 1E3				1E35	REV: 0	13/	/04/2010						
	PUMA	A 5		13/04/20	10 11.47.21							DOC:	1E35-65-029	5-65-029					
			Balle	stra					S	ULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR		orr: mm			
Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	s Component			Gen. Bolt	Weight (Kg)	As.bly	Branch			
1462	12	0	In	4,78	mm	,00	9,00	m	209	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B			338,44					
306	12	0	In	4,78	mm	,00,	3,00	NR	209	90° Elbow Long Radius ASME B16.9 F	BE E.R.W.	ASTM A 234	GR.	81,31					
5211	3/4	0	In		mm	85,00	28,00	NR	209	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TAB	. 9	21,84					
5702	14	0	In		mm	,00	1,00	NR	209	Gasket TA 50.5/31 86 psi FF (125÷250	AARH) _ l	B15D FLAT							
801	16	0	In		mm	,00	1,00	NR	209	Gasket TA 50.5/31 86 psi FF (125÷250	AARH) _ l	B15D FLAT							
						1	M Erection						Total Kg:	441,59					
SX1	X1 SULPHUREX GH/F 12027 - 0					- 0			SX1	SX1 1.	/ 1		TOTAL Kg:	441,59					

BLIND FLANGE 14" - ANSI 150# DRILLED \emptyset 12"- ASTM A 105 Gr I = N 1pz BLIND FLANGE 16" - ANSI 150# DRILLED \emptyset 12"- ASTM A 105 Gr I = N 1pz

Plant SX1 SULPHUREX GH/F Line 12027 - 0 Dang. fluid type Area SX1

Zones

Piping Class 209
Fluid
Coating
Sketch Sht 1/1

Welding specification SP.1406/2-SP.1407/2
System
De pres Op tem

Isometric code

em Page 1

		В	allest	ra					S	KETC	HES MATERIAL LIST		PRO.	J: 1E35	5	REV: 0	13/04/2010
	PUMA	15		13/04/20	010 11.47	7.22							DOC	: 1E35	5-65-029		
			Bal	lestra						S	GULPHUREX GH/F	Size: In	Thk: mm	Temp): ℃	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	ss Component				Gen. Bolt	Weight (Kg) A	s.bly Branch
1438	2	0	In	3,91		mm	,00	6,00	m	206	Pipe ASME B36.10 PL Seamless API 5	L GR. B				32,62	
3121	2	0	In			mm	,00	1,00	NR	206	Valve Globe ST.46004/3 THRD-F NPT	200 LB F	orged BRO	NZE D		4,70	
470	2	0	In			mm	,00	1,00	NR	206	51 Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷25	0 AARH) F	orged	5199	2,20	
159	2	0	In	3,91		mm	,00	1,00	NR	206	45° Elbow Long Radius ASME B16.9 E GR. WPB	BE Wrough	t S ASTM	A 234		0,31	
327	2	0	In	3,91		mm	,00	3,00	NR	206	90° Elbow Long Radius ASME B16.9 E GR. WPB	BE Wrough	t S ASTM	A 234		1,99	
5199	5/8	0	In			mm	85,00	4,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2 T	AB. 9		0,84	
664	2	0	In			mm	,00	1,00	NR	206	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5C				
			*								M Erection				Total Kg:	42,67	
SX1	1 SULPHUREX GH/F 12028 - 0				- 0			SX1	SX1 1 /	′ 1			TOTAL Kg:	42,67			

Plant SX1 SULPHUREX GH/F	Piping Class 206	Welding specification	on SP.1406/2-SP.1407/3
Line 12028 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					Sl	KETCH	IES MATERIAL LIST		PRO	J: 1E3	5	REV: 0	13.	/04/2010
	PUMA	15		13/04/20	010 11.47	7.22							DO	C: 1E3	5-65-029	•	•	
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk: mm	Tem	p: ℃	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,20	_		Pipe ASME B36.10 PL Seamless API 5I	L GR. B				0,25		
1435	1	0	In	3,38		mm	,00	0,10	m	207	Pipe ASME B36.10 PL Seamless API 5I	L GR. B				0,25		
5695	12	0	In	4,78		mm	,00	6,50	m	207	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B RX	20%			244,43		
3155	1/4	0	In			mm	,00	1,00	NR	207	Valve Plug ST.46019/1 THRD-F NPT I GR. F316 M 53	PN 16 Forg	ged ASTM	A 182		0,20		
525	12	0	In			mm	,00	2,00	NR	207	Flange Slip-On ASME B16.5 150 LB ST ASTM A 105	Γ (63÷125	AARH) F	orged	5232	56,00		
306	12	0	In	4,78		mm	,00	2,00	NR	207	90° Elbow Long Radius ASME B16.9 B WPB	E E.R.W.	ASTM A	234 GR.		54,21		
1058	1	0	In			mm	,00	1,00	NR	207	Coupling TA 50.7/2 THRD-F NPT 300	0# Forged	ASTM A	105		0,30		
4398	1/2	1/4	In			mm	,00	1,00	NR	207	Coupling Reducing TA 50.7/2 THRD-F	NPT 300	0# Forged	ASTM A	Λ	0,03		
5232	7/8	0	In			mm	120,00	24,00	NR	207	Stud Bolt + 2 Nuts TA 50.48B/28 ASMI ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2	ГАВ. 9		14,16		
776	12	0	In			mm	,00	2,00	NR	207	Gasket TA 50.5/31 150 LB ST-SG (63÷ Metal Gasket E11H	125AARH)_E11H	Corrugat	e			
										N	M Erection				Total Kg:	369,83		

TOTAL Kg:

369,83

SX1 SX1

SX1

SULPHUREX GH/F

12Y19	Plant SX1 SULPHUREX GH/F	Piping Class 207	Welding specification	SP.1406/2-SP.1407/2
TET_12.1.11	Line 12029 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

	Ballestra								S	KETC	HES MATERIAL LIST		PROJ:	: 1E35	5	REV: 0	13/	/04/2010
	PUMA	.5		13/04/20	10 11.47	7.22							DOC:	1E35	5-65-029		•	
			Ball	estra						SI	ULPHUREX GH/F	Size: In	Thk: mm	Temp): °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
5574	14	0	In	4,78		mm	,00	16,00	m	209	Pipe ASME B36.10 PL E.R.W. API 5L	L GR. B				661,65		
5703	14	0	In			mm	,00	1,00	NR	209	Valve Butterfly ST.46562/2 WAFER 80 Forged ASTM A 105 B 83	36 psi FF (12	5÷250 AAR	H)	5225			
5701	14	0	In			mm	,00	4,00	NR	209	Flange Slip-On AWWA C207-TAB.1 C AARH) Forged ASTM A 105	CL.B 86 psi	FF (125÷250	0	5211			
5570	14	0	In	4,78		mm	,00	2,00	NR	209	45° Elbow Long Radius ASME B16.9 I WPB	BE E.R.W.	ASTM A 23	4 GR.		34,13		
5572	14	0	In	4,78		mm	,00	3,00	NR	209	90° Elbow Long Radius ASME B16.9 I WPB	BE E.R.W.	ASTM A 23	4 GR.		102,39		
5211	3/4	0	In			mm	85,00	36,00	NR	209	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	В. 9		28,08		
5225	3/4	0	In			mm	170,00	12,00	NR	209	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	В. 9		13,44		
5702	14	0	In			mm	,00	4,00	NR	209	Gasket TA 50.5/31 86 psi FF (125÷250	0 AARH) _ I	B15D FLAT					
	'	<u>'</u>		*	'			•		1	M Erection				Total Kg:	839,68		
SX1	SULPH	UREX GI	H/F			12030	- 0			SX1	SX1 1	. / 1			TOTAL Kg:	839,68		

12Y15	Plant SX1 SULPHUREX GH/F	Piping Class 209	Welding specification	SP.1406/2-SP.1407/2
KV_11.8	Line 12030 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

Ball	estra	SKETCHES MATERIAL LIST		PROJ:	1E35	REV:	0	13/04/2010
PUMA5	13/04/2010 11.47.22			DOC:	1E35-65-029			
	Ballestra	SULPHUREX GH/F	Size: In	Γhk: mm	Temp: °C	Pres: BAR		Corr: mm

Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. clas	s Component	Gen. Bolt	Weight (Kg) As.bly	Branch
1454	4	0	In	3,18	mm	,00	3,50	m	206	Pipe ASME B36.10 PL E.R.W. API 5L GR. B		30,50	
1528	4	0	In	2,11	mm	,00	3,00	m	215	Pipe ASME B36.19 PL E.R.W. ASTM A 312 TP 304		17,87	
2862	1/2	0	In		mm	,00	1,00	NR	215	Valve Ball Full Port ST.46545/1 THRD-F NPT 800# Forged ASTM A 182 GR. F316 S 99		0,71	
5046	4	0	In		mm	,00	2,00	NR	206	Valve Butterfly With Gasket ST.46856/0 WAFER 150 LB RF (125÷250 AARH) Cast DUCTILE IRON B 109	5210	13,40	
454	4	0	In		mm	,00	2,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5138	11,20	
473	4	0	In		mm	,00	3,00	NR	206	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	5201	16,80	
298	4	0	In	3,18	mm	,00	2,00	NR	206	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 GR. WPB		4,13	
340	4	0	In	2,11	mm	,00	1,00	NR	215	90° Elbow Long Radius ASME B16.9 BE Wrought W ASTM A 403 GR. WP304		1,40	
1159	1/2	0	In		mm	,00	1,00	NR	206	Coupling Half TA 50.6/1 SW-F 3000# Forged ASTM A 105		0,15	
1221	4	0	In	2,11	mm	,00	2,00	NR	215	Stub-End MSS SP-43 FLG x BE Wrought W ASTM A 403 GR. WP304 Type A		1,25	
5210	5/8	0	In		mm	145,00	16,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/ASTM A 194 GR.2H		4,80	
5138	5/8	0	In		mm	110,00	16,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H Galvanized		4,00	
718	4	0	In		mm	,00	2,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F			
	,	1	,	1					1	M Erection	Total Kg:	106,21	1
SX1	SULPH	UREX G	H/F		12032	- 0			SX1	SX1 1/1	TOTAL Kg:	106,21	

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	on SP.1406/2-SP.1408/3
Line 12032 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allest	ra									PROJ:	: 1E35		REV: 0	13	/04/2010
	PUMA	.5		13/04/20)10 11.47	7.22							DOC:	1E35-	65-029			
			Ba	llestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	cs Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	2,50	m	212	Pipe ASME B36.10 PL Seamless API 51	L GR. B				3,16		
465	1/2	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250	AARH) Fo	rged	5191	0,40		
1289	1/2	0	In			mm	,00	1,00	NR	212	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 105	5			0,38		
5191	1/2	0	In			mm	65,00	4,00	NR	212	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1 U	JNC/2.2 TA	В. 9		0,44		
691	1/2	0	In			mm	,00	1,00	NR	212	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)_	B5B					
	•	•			•	•					M Erection				Total Kg:	4,38		
SX1	X1 SULPHUREX GH/F 12033 - 0					- 0			SX1	SX1 1 /	/ 1		Т	OTAL Kg:	4,38			

Plant SX1 SULPHUREX GH/F	Piping Class 212	Welding specification	n SP.1406/2-SP.1407/3
Line 12033 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestra	a			SKETCHES MATERIAL LIST PROJ:)J: 1	E35	REV: 0	13/	/04/2010		
	PUMA	5		13/04/20	10 11.47	.22							DO	C: 1	E35-65-029			
			Balle	estra						(SULPHUREX GH/F	Size: In	Thk: mm	T	Temp: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		Т1	T2		Len mm	Otv	Um	Pip. cla	ss Component				Gen. Bolt	Weight (Kg)	As.blv	Branch
1433	1/2	0	In	2,77		mm	,00		_	212	Pipe ASME B36.10 PL Seamless API 5	L GR. B			gem zon	5,19	110001	21 1111011
465	1/2	0	In			mm	,00	2,00	NR	212	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	RF (125÷25)	0 AARH)	Forge	ed 5191	0,80		
5191	1/2	0	In			mm	65,00	8,00	NR	212	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2	TAB.	9	0,88		
691	1/2	0	In			mm	,00	2,00	NR	212	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH)	_ B5B					
				•	*			_		•	M Erection				Total Kg:	6,87		
SX1	X1 SULPHUREX GH/F 12034 - 0				- 0			SX1	SX1 1	/ 1			TOTAL Kg:	6,87				

Plant SX1 SULPHUREX GH/F	Piping Class 212	Welding specification	SP.1406/2-SP.1407/3
Line 12034 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCI	IES MATERIAL LIST		PROJ	1E35		REV: 0	13	/04/2010	
	PUMA	15		13/04/2	010 11.47	7.22							DOC:	1E35-	65-029				
			Ball	estra						SU	LPHUREX GH/F	Size: In	Γhk: mm	Temp:	°C	Pres: BAR	C	Corr: mm	
	C1 C2 T1 T2									_									
Mark	S1	S2		T1	T2		Len mm	n Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch	
1467	24	0	In	6,35		mm	,00	1,20	m	209	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				113,36			
1556	36	0	In	6,0		mm	,00	47,00	m	209	Pipe TA 50.83/6 PL Welded ASTM A	515 GRADE	70			6.314,34			
3211	36	0	In	6,0		mm	,00	1,00	NR	209	90° Miter TA 50.84/6 BE Welded AST	M A 515 GR	ADE 70 R	=1.5 D		303,60			
	·		•	·	·	•				1	M Erection				Total Kg:	6731,3			
SX1	SULPHUREX GH/F 12035						- 0 SX1 SX1 1 / 1							Т	OTAL Kg:	6731,3			

12Y23
12Y24
WIRE NET FOR MESH 2,54x1mm - C.S. GALV. =
mq 4,0

Plant SX1 SULPHUREX GH/F Line 12035 - 0 Dang. fluid type Area SX1 Zones Piping Class 209
Fluid
Coating
Sketch Sht 1/1

Welding specification SP.1406/2-SP.1407/2
System
De pres Op tem
Isometric code Page 1

	DIDI		Ballestr		240 44 48	7.00			SKETC	HES MATERIAL LIST		PROJ:		5.020	REV: 0	13/04/2010
	PUMA	15		13/04/20	010 11.47	1.23						DOC:	1E35-6	5-029		
			Ball	lestra					S	SULPHUREX GH/F	Size: In	Thk: mm	Temp: °	3	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um Pip. clas	s Component			G	Gen. Bolt	Weight (Kg) As.bly	y Branch
1453	3	0	In	3,18		mm	,00	1,00	m 206	Pipe ASME B36.10 PL E.R.W.	API 5L GR. B				6,72	
1504	1/2	0	In	2,77		mm	,00	0,60	m 215	Pipe ASME B36.19 PL Seamless	s ASTM A 312 TI	P 304			0,77	
1527	3	0	In	2,11		mm	,00	1,10	m 215	Pipe ASME B36.19 PL E.R.W. A	ASTM A 312 TP 3	304			5,07	
2862	1/2	0	In			mm	,00	1,00	NR 215	Valve Ball Full Port ST.46545/1 A 182 GR. F316 S 99	THRD-F NPT 80	00# Forged A	STM		0,71	
5045	3	0	In			mm	,00	2,00	NR 206	Valve Butterfly With Gasket ST. (125÷250 AARH) Cast DUCTIL		150 LB RF	5	209	10,40	
453	3	0	In			mm	,00	2,00	NR 215	Flange Lap-Joint ASME B16.5 1 ASTM A 105 Galvanized	50 LB Flat Face S	Smooth Forge	ed 5	137	8,20	
472	3	0	In			mm	,00	3,00	NR 206	Flange Slip-On ASME B16.5 15 ASTM A 105	0 LB RF (125÷25	0 AARH) For	rged 5	201	12,30	
297	3	0	In	3,18		mm	,00	2,00	NR 206	90° Elbow Long Radius ASME I WPB	B16.9 BE E.R.W.	ASTM A 234	4 GR.		2,35	
339	3	0	In	2,11		mm	,00	1,00	NR 215	90° Elbow Long Radius ASME I GR. WP304	B16.9 BE Wrough	t W ASTM A	A 403		0,80	
1159	1/2	0	In			mm	,00	1,00	NR 206	Coupling Half TA 50.6/1 SW-F	3000# Forged AS	ΓM A 105			0,15	
1220	3	0	In	2,11		mm	,00	2,00	NR 215	Stub-End MSS SP-43 FLG x BE WP304 Type A	Wrought W AST	M A 403 GR			0,80	
5209	5/8	0	In			mm	140,00	8,00	NR 206	Stud Bolt + 2 Nuts TA 50.48B/2 ASTM A 193 B7/ASTM A 194 0		UNC/2.2 TA	.B. 9		2,32	
5137	5/8	0	In			mm	105,00	8,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/2 ASTM A 193 B7/A194 2H Galv		UNC/2.2 TA	В. 9		1,92	
717	3	0	In			mm	,00	2,00	NR 215	Gasket TA 50.5/31 150 LB RF (_ B5F				
									LI	M Erection				Total Kg:	52,52	l .
SX1	SULPH	UREX C	GH/F			12036	- 0		SX1	SX1	1 / 1		TC	TAL Kg:	52,52	
							Plant SX1 S	SULPHU	REX GH/F	Piping Class 2	15		Weldi	ing specificat	ion SP.1406/2-SP.1408/	3

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
Line 12036 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	SKETCH	IES MATERIAL LIST		PRO	J: 1E	35	REV: 0 13	3/04/2010
	PUMA	A 5		13/04/20	010 11.4	7.23							DOC	: 1E	35-65-029		
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk: mm	Ter	np: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,20	m	209	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,25	
1435	1	0	In	3,38		mm	,00	0,10	m	209	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,25	
5574	14	0	In	4,78		mm	,00	2,40	m	209	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				99,25	
3155	1/4	0	In			mm	,00	1,00	NR	209	Valve Plug ST.46019/1 THRD-F NPT I GR. F316 M 53	A 182		0,20			
5701	14	0	In			mm	,00	1,00	NR	209	Flange Slip-On AWWA C207-TAB.1 C AARH) Forged ASTM A 105	L.B 86 psi	FF (125÷2	50	5211		
5572	14	0	In	4,78		mm	,00	2,00	NR	209	90° Elbow Long Radius ASME B16.9 E	BE E.R.W.	ASTM A 2	34 GR		68,26	
1058	1	0	In			mm	,00	1,00	NR	209	Coupling TA 50.7/2 THRD-F NPT 300	0# Forged	ASTM A	.05		0,30	
1189	1	0	In			mm	,00	1,00	NR	209	Plug Hex. TA 50.7/2 THRD-M NPT 30	000# Forge	d ASTM A	105		0,35	
4398	1/2	1/4	In			mm	,00	1,00	NR	209	Coupling Reducing TA 50.7/2 THRD-F	NPT 300	0# Forged	ASTM	A	0,03	
5211	3/4	0	In			mm	85,00	12,00	NR	209	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2 T	AB. 9		9,36	
5702	14	0	In			mm	,00	1,00	NR	209	Gasket TA 50.5/31 86 psi FF (125÷250	AARH) _	B15D FLA	Т			

M Erection

1 / 1

SX1 SX1

SULPHUREX GH/F

SX1

12037 - 0

12Y21	Plant SX1 SULPHUREX GH/F	Piping Class 209	Welding specification	SP.1406/2-SP.1407/2
	Line 12037 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

Total Kg:

TOTAL Kg:

178,25

178,25

		В	allestr	a					S	KETCH	IES MATERIAL LIST		J	PROJ:	1E35		REV: 0	13	/04/2010
	PUMA	.5		13/04/2	2010 11.47.23]	OOC:	1E35	-65-029			
			Balle	estra						SU	LPHUREX GH/F	Size: In	Thk:	mm	Temp	:°C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2	Len mi	n	Qty	Um	Pip. class	Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1509	2	0	In	3,91	mm	,0		3,00		215	Pipe ASME B36.19 PL Seamless ASTM	I A 312 TI	P 304				16,64		
2858	2	0	In		mm	,0	0	2,00	NR	215	Valve Ball Full Port ST.46586/3 LUG 13	50 LB RF	(125÷	250 AA	RH)	5384	13,26		
											Cast ASTM A 351 CF8 S 123								
4898	2	0	In		mm	,0	0	1,00	NR	215	Sight Glass ST.46353/1 FLG 150 LB RF	F (125÷25	0 AAR	H) Cas	t	5133	11,53		
											ASTM A 351 GR. CF8M FG 64								
451	2	0	In		mm	,0	0	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB l	Flat Face S	Smoot	h Forge	d	5135	2,20		
											ASTM A 105 Galvanized								
164	2	0	In	3,91	mm	,0	0	1,00	NR	215	45° Elbow Long Radius ASME B16.9 B	E Wrough	ht S A	STM A	403		0,32		
							_				GR. WP304								
332	2	0	In	3,91	mm	,0	0	2,00	NR	215	90° Elbow Long Radius ASME B16.9 B	E Wrough	ht S As	STM A	403		1,36		
					·						GR. WP304								
1212	2	0	In	3,91	mm	,0	0	1,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug	ht S ASTI	M A 40)3 GR.			0,48		

WP304 Type A

M Erection

SX1

ASTM A 193 B7/A194 2H Galvanized

ASTM A 193 B7/A194 2H Galvanized

Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9

Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9

Screws for valves ASME B 18.2.1 /UNC ASTM A 193 B7 Galvanized

1 / 1

Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F

85,00

95,00

,00

40,00

mm

mm

mm

mm

12038 - 0

4,00 NR 215

4,00 NR 215

4,00 NR 215

SX1

32,00 NR 215

5133

5135

715

5384

SX1

5/8

5/8

5/8

0

0

0

0

SULPHUREX GH/F

In

In

In

In

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specificatio	n SP.1406/2-SP.1408/3
Line 12038 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1

0,84

0,92

4,80 **52,35**

52,35

Total Kg:

		В	allesti	ra				SKETCHES MATERIAL LIST PROJ						1E35		REV: 0	13/	/04/2010
	PUMA	15		13/04/20	010 11.47	7.23							DOC:	1E35-	65-029			
			Bal	lestra						S	SULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. clas	ss Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	2,50	m	212	Pipe ASME B36.10 PL Seamless API 5	L GR. B				3,16		
465	1/2	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷25	O AARH) For	rged	5191	0,40		
1289	1/2	0	In			mm	,00	1,00	NR	212	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 10)5			0,38		
5191	1/2	0	In			mm	65,00	4,00	NR	212	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	В. 9		0,44		
691	1/2	0	In			mm	,00	1,00	NR	212	Gasket TA 50.5/31 150 LB RF (125÷25	O AARH)	_B5B					
			•								M Erection			•	Total Kg:	4,38		
SX1	X1 SULPHUREX GH/F 12101 - 0					- 0			SX1	SX1 1.	/ 1		Т	OTAL Kg:	4,38			

Plant SX1 SULPHUREX GH/F	Piping Class 212	Welding specification	SP.1406/2-SP.1407/3
Line 12101 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allesti	ra				SKETCHES MATERIAL LIST PROJ:						1E35		REV: 0	13	/04/2010
	PUMA	.5		13/04/20	10 11.47	.23							DOC:	1E35-6	5-029			
			Bal	lestra						S	SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	C	Pres: BAR		orr: mm
Mark	S1	S2		T1	T2		Len mm	ı Qty	Un	Pip. clas	ss Component			G	Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	5,00	m	212	Pipe ASME B36.10 PL Seamless API 5	L GR. B				6,33		
465	1/2	0	In			mm	,00	1,00) NR	212	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	AF (125÷250) AARH) For	rged 5	191	0,40		
1289	1/2	0	In			mm	,00	1,00) NR	212	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 10	5			0,38		
5191	1/2	0	In			mm	65,00	4,00) NR	212	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	B. 9		0,44		
691	1/2	0	In			mm	,00	1,00) NR	212	Gasket TA 50.5/31 150 LB RF (125÷25	60 AARH) _	B5B					
	· .					•	<u>'</u>				M Erection			·	Total Kg:	7,55		
SX1	SULPHUREX GH/F 12102 - 0					- 0			SX1	SX1 1	/ 1		TC	TAL Kg:	7,55			

Plant SX1 SULPHUREX GH/F	Piping Class 212	Welding specification SP.1406/2-SP.1407/3				
Line 12102 - 0	Fluid	System				
Dang. fluid type	Coating	De pres	Op tem			
Area SX1	Sketch Sht 1/1	Isometric code	Page 1			
Zones						

Ballestra PUMA5 13/04/2010 11.47.23					SKETCHES MATERIAL LIST PROJ: 1E35					1E35	REV: 0	13/04/2010				
											DOC:	1E35-65-029		-		
	Ballestra						SULPHUREX GH/F Size: In Thk: mm				Temp: °C	Pres: BAR	Corr: mm			
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component			Gen. Bolt	Weight (Kg) A	s.bly Branch
1493	1/2	0	In	2,77		mm	,00	9,00	m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	amless API	5L GR. B		11,39	
2828	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 20	0 LB Forged		0,30	
1077	1/2	0	In			mm	,00	1,00	NR	202	Coupling TA 50.7/2 THRD-F NPT 300 Galvanized	00# Forged	ASTM A 105	5	0,12	
1275	1/2	0	In			mm	,00	1,00	NR	202	Union TA 50.7/2 THRD-F NPT 3000# Galvanized	Forged AS	TM A 105		0,30	
]	M Erection			Total Kg:	12,11	
SX1	SULPHU	UREX G	H/F			12103	- 0			SX1	SX1 1 /	/ 1		TOTAL Kg:	12,11	

Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	ı	
Line 12103 - 0	Fluid	System		
Dang. fluid type	Coating	De pres	Op tem	
Area SX1	Sketch Sht 1/1	Isometric code		Page 1
Zones				

Ballestra PUMA5 13/04/2010 11.47.23 Ballestra						SKETCHES MATERIAL LIST PRO					PROJ	1E35	5	REV:	0 1	13/04/2010		
											DOC:	1E35	5-65-029					
						SULPHUREX GH/F Size:					Thk: mm	nk: mm Temp: °C		; °C Pres: BAR		Corr: mm		
Mark	S1	S2		T1	T2		Len mm	Qty	Uı	m Pip. class	Component				Gen. Bolt	Weight (K	g) As.bly	y Branch
1493	1/2	0	In	2,77		mm	,00	5,00	n	n 202	Pipe ASME B36.10 THRD-M NPT Seamless API 5L GR. B Galvanized					6,3	3	
390	1/2	0	In			mm	,00	1,00	N	R 202	Flange ASME B16.5 THRD-F NPT 150 Forged ASTM A 105 Galvanized) LB RF (1	25÷250 AAI	RH)	5125	0,4	0	
1077	1/2	0	In			mm	,00	1,00	N	R 202	Coupling TA 50.7/2 THRD-F NPT 300 Galvanized	0# Forged	ASTM A 10	5		0,1	2	
1275	1/2	0	In			mm	,00	1,00	N	R 202	Union TA 50.7/2 THRD-F NPT 3000# Galvanized	Forged AS	TM A 105			0,3	0	
5125	1/2	0	In			mm	65,00	4,00	N	R 202	Stud Bolt + 2 Nuts TA 50.48B/28 ASMI ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 TA	В. 9		0,4	4	
659	1/2	0	In			mm	.00	1,00	N	R 202	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	B5C					

M Erection

SX1 SX1

12104 - 0

SULPHUREX GH/F

SX1

Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	n	
Line 12104 - 0	Fluid	System		
Dang. fluid type	Coating	De pres	Op tem	
Area SX1	Sketch Sht 1/1	Isometric code	Page 1	
Zones				

Total Kg:

TOTAL Kg:

1 / 1

7,59

7,59

		F	Ballestra	a					S	KETC	HES MATERIAL LIST		PROJ:	1E35	REV: 0	13/	/04/2010
	PUMA	.5		13/04/2	010 11.4	7.24							DOC:	1E35-65-029		•	
			Balle	estra						S	JLPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	Component			Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	15,50	m	205	Pipe ASME B36.10 PL Seamless API	5L GR. B			19,62	<u> </u>	
3107	1/2	0	In			mm	,00	2,00	NR	205	Valve Gate ST.46270/3 SW-F 800# Fo	rged ASTM	A 105 G 61		3,40		
4949	1/2	0	In			mm	,00	1,00	NR	205	Steam Trap ST.46702/0 THRD-F NPT	PN 25 For	ged AISI 304	T 71	4,08		
266	1/2	0	In			mm	,00	9,00	NR	207	90° Elbow TA 50.6/1 SW-F 3000# For	ged ASTM	A 105		2,25		
1289	1/2	0	In			mm	,00	2,00	NR	207	Union TA 50.6/1 SW-F 3000# Forged	ASTM A 10)5		0,76		
	'	-	'	1	1	1				1	M Erection			Total Kg:	30,11		
SX1	SULPHI	UREX C	iH/F			12105	- 0			SX1	SX1 1	/ 1		TOTAL Kg:	30,11		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specificatio	n SP.1406/2-SP.1407/2
Line 12105 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	Ballesti	ra					,	SKETC	HES MATERIAL LIST		PROJ:	1E35	REV: 0	13/04/2010
	PUMA	15		13/04/20	010 11.47	7.24							DOC:	1E35-65-029		
			Bal	lestra						SI	JLPHUREX GH/F	Size: In T	hk: mm	Temp: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qt	Un	n Pip. class	Component			Gen. Bolt	Weight (Kg) As.bl	y Branch
1493	1/2	0	In	2,77		mm	,00	16,0	0 m	202	Pipe ASME B36.10 THRD-M NPT Se	amless API 51	L GR. B		20,25	
2828	1/2	0	In			mm	00	1.0	0 NE	202	Galvanized Valve Ball Full Port ST 46330/3 THRE	LE NPT 200	I R Forged		0.30	

Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg) As.bly	Branch
1493	1/2	0	In	2,77	mm	,00	16,00	m	202	Pipe ASME B36.10 THRD-M NPT Seamless API 5L GR. B Galvanized		20,25	
2828	1/2	0	In		mm	,00	1,00	NR	202	Valve Ball Full Port ST.46330/3 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30	
390	1/2	0	In		mm	,00	4,00	NR	202	Flange ASME B16.5 THRD-F NPT 150 LB RF (125÷250 AARH) Forged ASTM A 105 Galvanized	5125	1,60	
252	1/2	0	In		mm	,00	8,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		3,20	
1077	1/2	0	In		mm	,00	2,00	NR	202	Coupling TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,24	
5125	1/2	0	In		mm	65,00	8,00	NR	202	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H Galvanized		0,88	
659	1/2	0	In		mm	,00	2,00	NR	202	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5C			
	'	'		1						M Erection	Total Kg:	26,47	'
SX1	SULPH	UREX GI	H/F		12106	- 0			SX1	SX1 1/1	TOTAL Kg:	26,47	

PCV_12.2	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
KY_12.1	Line 12106 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		J	Ballestr	a					SKETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/04/2010
	PUMA	15		13/04/2	010 11.47.	.24						DOC:	1E35-6	65-029		
			Ball	lestra					S	ULPHUREX GH/F	Size: In	Thk: mm	Temp: °	°C	Pres: BAR	Corr: mm
	-						_							~ [
Mark	S1	S2	-	T1	T2		Len mm		Um Pip. clas		a 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		(Gen. Bolt	Weight (Kg) As.bl	y Branch
1493	1/2	0	In	2,77		mm	,00	14,00	m 202	Pipe ASME B36.10 THRD-M NPT Galvanized	Seamless API	5L GR. B			17,72	
1504	1/2	0	In	2,77		mm	.00	1,00	m 215	Pipe ASME B36.19 PL Seamless AS	TM A 312 TI	2304			1,29	
2828	1/2	0	In	2,77		mm	,00		NR 202	Valve Ball Full Port ST.46330/3 TH			1		0,30	
2020	1/2	U	111			11111	,00	1,00	NK 202	BRASS NICKEL PLATED S 87	KD-1. M1 1 2(10 LD Porgeu	·		0,30	
4999	1/2	0	In			mm	,00	1,00	NR 215	"Y" Valve Check ST.46360/5 FLG 1	50 LB RF (12	25÷250 AARI	H) 5	5125	3,06	
									<u> </u>	Forged ASTM A 182 GR. F304 R 92	2		<i>'</i>		· · · · · · · · · · · · · · · · · · ·	
446	1/2	0	In			mm	,00	4,00	NR 215	Flange Lap-Joint ASME B16.5 150	LB Flat Face S	Smooth Forge	ed 5	5127	1,60	
										ASTM A 105 Galvanized						
84	1/2	0	In			mm	,00	1,00	NR 202	45° Elbow TA 50.7/2 THRD-F NPT	3000# Forge	d ASTM A 1	05		0,32	
224	1 /2	0	In				00	1.00	ND 215	Galvanized	2000# E	JACTIMA 1	92 CD	1	0.41	
224	1/2	U	In			mm	,00	1,00	NR 215	90° Elbow TA 50.7/2 THRD-F NPT F304	3000# Forge	d ASTM A I	82 GK.		0,41	
252	1/2	0	In			mm	.00	7.00	NR 202	90° Elbow TA 50.7/2 THRD-F NPT	3000# Forge	d ASTM A 10	05		2,80	
232	172	U					,00	7,00	1414 202	Galvanized	3000# 10150	G 715 111 71 11			2,00	
1077	1/2	0	In			mm	,00	2,00	NR 202	Coupling TA 50.7/2 THRD-F NPT	3000# Forged	ASTM A 10:	5		0,24	
										Galvanized				1		
1207	1/2	0	In	2,77		mm	,00	4,00	NR 215	Stub-End MSS SP-43 FLG x BE Wr	ought S ASTN	M A 403 GR.			0,34	
										WP304 Type A						
5125	1/2	0	In			mm	65,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 A		UNC/2.2 TA	В. 9		0,44	
5107	1 /0	0	In				75.00	12.00	ND 015	ASTM A 193 B7/A194 2H Galvaniz		IDIC/O O TA	D 0		1.44	
5127	1/2	0	In			mm	75,00	12,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 A ASTM A 193 B7/A194 2H Galvaniz		UNC/2.2 TA	ъ. 9		1,44	
710	1/2	0	In			mm	,00	4.00	NR 215	Gasket TA 50.5/31 150 LB RF (125-		R5F				
710	172	U					,00	.,00	1410	M Erection	. 230 / 11 11(17)	_ B31		Total Kg:	29,96	
															27,70	
SX1	SULPH	UREX (GH/F		1	12107 -	0		SX1	SX1	1 / 1		T	OTAL Kg:	29,96	
PICV_1	12.1						Plant SX1	SULPHU	REX GH/F	Piping Class 215			Weld	ling specificat	tion SP.1406/2-SP.1408/	3
KV_12	.2						Line 12107	- 0		Fluid			Syste	em		
							Dang. fluid	type		Coating			De pr	es	Op tem	
							Area SX1			Sketch Sht 1/1		Iso	metric co	de		Page 1

Zones

		В	allestr	a					S	KETCH	IES MATERIAL LIST		PROJ	1E35	5	REV: 0	13/	04/2010
	PUMA	15		13/04/20)10 11.4	7.24							DOC:	1E35	5-65-029			
			Ball	estra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp); °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	Т2		Len mm	Otv	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1463	14	0	In	6,35		mm	,00	4,00	_	212	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				218,76	•	
413	14	0	In			mm	,00	1,00	NR	212	Flange Blind ASME B16.5 150 LB RF ASTM A 105	(125÷250 A	ARH) Forg	ged	5249	59,00		
479	14	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250	AARH) F	orged	5249	36,00		
480	16	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250	AARH) F	orged	5250	46,00		
307	14	0	In	6,35		mm	,00	1,00	NR	212	90° Elbow Long Radius ASME B16.9 E WPB	BE E.R.W.	ASTM A 23	34 GR.		45,34		
1699	16	14	In	6,35	6,35	mm	,00	1,00	NR	212	Reducer Concentric ASME B16.9 BE E	R.W. AST	M A 234 G	R. WPE	3	22,03		
1124	1/2	0	In			mm	,00	1,00	NR	212	Coupling Half TA 50.7/2 THRD-F NPT	Γ 3000# Fo	ged ASTM	A 105		0,06		
5249	1	0	In			mm	135,00	12,00	NR	212	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1 1	JNC/2.2 TA	AB. 9		20,64		
5250	1	0	In			mm	140,00	16,00	NR	212	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	JNC/2.2 TA	AB. 9		28,00		
705	14	0	In			mm	,00	1,00	NR	212	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _	B5B					
706	16	0	In			mm	,00	1,00	NR	212	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _	B5B					
		'							•	N	1 Erection				Total Kg:	475,83		-

PI_14.1	Plant SX1 SULPHUREX GH/F	Piping Class 212	Welding specification	SP.1406/2-SP.1407/3
	Line 14001 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

TOTAL Kg:

475,83

SX1 SX1

14001 - 0

SX1

SULPHUREX GH/F

		F	Ballestr	a					S	KETC	HES MATERIAL LIST		PROJ	: 1E35		REV: 0	13/04/2010
	PUMA	15		13/04/2	010 11.4	7.24							DOC:	1E35-6	65-029		
			Ball	lestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	s Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1454	4	0	In	3,18		mm	,00	3,90	m	206	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				33,98	
5046	4	0	In			mm	,00	1,00	NR	206	Valve Butterfly With Gasket ST.46856 (125÷250 AARH) Cast DUCTILE IRO		150 LB RF	-	5210	6,70	
473	4	0	In			mm	,00	1,00	NR	206	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷25	60 AARH) Fo	rged 5	5201	5,60	
130	4	0	In	3,18		mm	,00	1,00	NR	206	45° Elbow Long Radius ASME B16.9 WPB	BE E.R.W.	ASTM A 23	4 GR.		1,02	
298	4	0	In	3,18		mm	,00	2,00	NR	206	90° Elbow Long Radius ASME B16.9 WPB	BE E.R.W.	ASTM A 23	4 GR.		4,13	
1124	1/2	0	In			mm	,00	1,00	NR	206	Coupling Half TA 50.7/2 THRD-F NP	T 3000# Fo	orged ASTM	A 105		0,06	
5210	5/8	0	In			mm	145,00	8,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	В. 9		2,40	
											M Erection				Total Kg:	53,9	
SX1	SULPH	UREX C	iH/F			14006	- 0			SX1	SX1 1	/ 1		T	OTAL Kg:	53,9	

14Y1	Plant SX1 SULPHUREX GH/F	Piping Class 206	Welding specification	SP.1406/2-SP.1407/3
PI_14.2	Line 14006 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

]	Ballesti	·a					SKETCH	ES MATERIAL LIST		PROJ	: 1E35	5	REV: 0 1	3/04/2010
	PUMA	\ 5		13/04/20	010 11.4	7.25	1					DOC:	1E35	5-65-029		
			Bal	lestra					SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp): °C	Pres: BAR	Corr: mm
	0.1	G2		m.	ma		- I		T. D. 1	a .				G B I	W 11.07 \ 1.11	- ·
Mark 1435	S1	S2	In	T1	T2	mm	Len mm	- •	Um Pip. class m 209	Component Pipe ASME B36.10 PL Seamless API 51	CD D			Gen. Bolt	Weight (Kg) As.bly	Branch
1433	2	0	In	3,91		mm	,00		m 209	Pipe ASME B36.10 PL Seamless API 51					67,96	
1454	4	0	In	3,18		mm	,00		m 209	Pipe ASME B36.10 PL Seamless API 51					53,15	
	1/4	0	In	3,18						1		1 A CITY 4 A	100		· · ·	
3155	1/4	U	III			mm	,00	1,00	NR 209	Valve Plug ST.46019/1 THRD-F NPT I GR. F316 M 53	PN 16 Forg	ged ASTM A	. 182		0,20	
470	2	0	In			mm	,00	2,00	NR 209	Flange Slip-On ASME B16.5 150 LB R	F (125÷250	0 AARH) Fo	rged	5199	4,40	
										ASTM A 105						
473	4	0	In			mm	,00	1,00	NR 209	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250	0 AARH) Fo	rged	5201	5,60	
117	2	0	In	3,91		mm	,00	2,00	NR 209	45° Elbow Long Radius ASME B16.9 E	E Seamles	s ASTM A 2	234		0,63	
							1			GR. WPB					·	
130	4	0	In	3,18		mm	,00	1,00	NR 209	45° Elbow Long Radius ASME B16.9 E	BE E.R.W.	ASTM A 23	4 GR.		1,02	
205	2	0	In	2.01		mm	00	4.00	NR 209	WPB	F C1	- ACTIMA A	12.4		2.66	
285	2	U	111	3,91		111111	,00	4,00	NK 209	90° Elbow Long Radius ASME B16.9 E GR. WPB	se seamles	SS ASTMIA 2	234		2,66	
298	4	0	In	3,18		mm	.00	3.00	NR 209	90° Elbow Long Radius ASME B16.9 E	BE E.R.W.	ASTM A 23	4 GR.		6,20	
	-			-,			,	- ,		WPB					-,	
1649	4	2	In	3,18	3,91	mm	,00	2,00	NR 209	Reducer Concentric ASME B16.9 BE E	R.W. AST	TM A 234 G	R. WPE	3	1,72	
1058	1	0	In			mm	,00	1,00	NR 209	Coupling TA 50.7/2 THRD-F NPT 300	0# Forged	ASTM A 10	5		0,30	
1122	1/4	0	In			mm	,00	1,00	NR 209	Coupling Half TA 50.7/2 THRD-F NPT	Г 3000# Fo	rged ASTM	A 105		0,03	
5199	5/8	0	In			mm	85,00	8,00	NR 209	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2 TA	B. 9		1,68	
5201	5/8	0	In			mm	95,00	8,00	NR 209	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	E B18.2.1	UNC/2.2 TA	B. 9		1,84	
753	2	0	In			mm	.00	2.00	NR 209	ASTM A 193 B7/ASTM A 194 GR.2H Gasket TA 50.5/31 150 LB RF (125÷25	0 A A D LL\	R5D EI AT	,			
756	4	0	In			mm	.00		NR 209	Gasket TA 50.5/31 150 LB RF (125+25) Gasket TA 50.5/31 150 LB RF (125+25)		_				
730	4	U	111			111111	,00	1,00		· ·	U AAKI) _	_ DOD FLAT		T. 4. 1 T.	147.64	
									N	1 Erection				Total Kg:	147,64	
TI_14.2	I 14 2				Plant SX1	SULPHU	REX GH/F	Piping Class 209			W	elding specifica	tion SP.1406/2-SP.1407/2			
	1_14.2			Line 14007			Fluid				stem					
							Dang. fluid	type		Coating			De j	pres	Op tem	
						4 0371			(1) (1) (1) (1)							

Sketch Sht 1/1

Isometric code

Area SX1

Zones

Page 1

		Ba	allest	ra				SKETCHES MATERIAL LIST		PROJ:	1E35	REV: 0	13/04	4/2010
	PUMA	.5		13/04/20	10 11.4	7.25				DOC:	1E35-65-029			
	Ballestra							SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	Corr	r: mm
Mark	urk S1 S2 T1 T2						Len mm	Qty Um Pip. class Component			Gen. Bolt	Weight (Kg)	As.bly B	Branch
SX1	SX1 SULPHUREX GH/F 1400°					14007 -	0	SX1 SX1 1	/ 1		TOTAL Kg:	147,64		

_14.2	Plant SX1 SULPHUREX GH/F	Piping Class 209	Welding specification	SP.1406/2-SP.1407/2
	Line 14007 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 2
	Zones			

		В	Ballestr	a					S	KETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0 13	3/04/2010
	PUMA	15		13/04/20	010 11.4	7.25							DOC:	1E35	-65-029		
			Ball	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp	: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,30	m	212	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,38	
1438	2	0	In	3,91		mm	,00	1,30	m	212	Pipe ASME B36.10 PL Seamless API 5	L GR. B				7,07	
1453	3	0	In	3,18		mm	,00	0,20	m	212	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				1,34	
2843	2	0	In			mm	,00	1,00	NR	212	Valve Ball Full Port ST.46590/3 LUG 1 Forged ASTM A 105 S 127	50 LB RF (125÷250 AA	ARH)	5376	10,50	
470	2	0	In			mm	,00	2,00	NR	212	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	RF (125÷250	AARH) For	rged	5199	4,40	
472	3	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	RF (125÷250	AARH) For	rged	5201	4,10	
1646	3	2	In	3,18	3,91	mm	,00	1,00	NR	212	Reducer Concentric ASME B16.9 BE E	E.R.W. AST	M A 234 GR	R. WPB		0,57	
5199	5/8	0	In			mm	85,00	4,00	NR	212	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		JNC/2.2 TA	B. 9		0,84	
5201	5/8	0	In			mm	95,00	4,00	NR	212	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		JNC/2.2 TA	B. 9		0,92	
696	2	0	In			mm	,00	2,00	NR	212	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _	B5B				
698	3	0	In			mm	,00	1,00	NR	212	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _	B5B				
5376	5/8	0	In			mm	40,00	16,00	NR	212	Screws for valves ASME B 18.2.1 /UNG	C ASTM A	193 B7			2,40	

Plant SX1 SULPHUREX GH/F	Piping Class 212	Welding specification	on SP.1406/2-SP.1407/3
Line 14010 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

M Erection

1 / 1

SX1 SX1

14010 - 0

SX1

SULPHUREX GH/F

32,52

32,52

Total Kg:

TOTAL Kg:

		В	Ballestr	a					S	KETC	CHES MATERIAL LIST		PROJ:	1E35		REV: 0	13/04/2010
	PUMA	15		13/04/20	010 11.4	7.25							DOC:	1E35-6	5-029		
			Ball	lestra						S	SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	ss Component			G	Gen. Bolt	Weight (Kg) As.b	y Branch
1433	1/2	0	In	2,77		mm	,00	12,70	m	203	Pipe ASME B36.10 PL Seamless API 5	5L GR. B				16,08	
1435	1	0	In	3,38		mm	,00	0,20	m	203	Pipe ASME B36.10 PL Seamless API 5	5L GR. B				0,50	
3116	1/2	0	In			mm	,00	1,00	NR	203	Valve Globe ST.46004/3 THRD-F NP	PT 200 LB F	orged BRONZ	ZE D		0,70	
	,		,		,	,					51						
467	1	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷250) AARH) For	ged 5	192	0,80	
1749	1	1/2	In	3,38	2,77	mm	,00	1,00	NR	203	Reducer Concentric ASME B16.9 BE WPB	Wrought S A	ASTM A 234	GR.		0,14	
4546	1/2	0	In			mm	.00	1.00	NR	203	Cap TA 50.7/2 THRD-F NPT 3000# F	Forged ASTN	Л А 105			0,12	
5192	1/2	0	In			mm	70,00		_	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM			R 9		0,44	
3172	1/2	U					70,00	1,00		203	ASTM A 193 B7/ASTM A 194 GR.2H		0110/2.2 171	D. 7		0,44	
661	1	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷2:	250 AARH) _	B5C				
			1	1			'			1	M Erection				Total Kg:	18,77	1
SX1	SULPH	UREX G	H/F			14014	- 0			SX1	SX1 1	1 / 1		TO	TAL Kg:	18,77	

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 14014 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCH	IES MATERIAL LIST		PRO	J: 1E3	35	REV: 0	13/	/04/2010
	PUMA	15		13/04/2	010 11.4	7.25							DOC	: 1E3	35-65-029			
			Ball	estra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Ten	np: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	12,30	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				15,57		
1435	1	0	In	3,38		mm	,00	0,30	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,75		
3107	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	51		1,70				
467	1	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250) AARH) I	Forged	5192	0,80		
1749	1	1/2	In	3,38	2,77	mm	,00	1,00	NR	205	Reducer Concentric ASME B16.9 BE W	Vrought S A	ASTM A 2	34 GR.		0,14		
5192	1/2	0	In			mm	70,00	4,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2 T	AB. 9		0,44		
661	1	0	In			mm	,00	1,00	NR	205	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _	B5C					
							M Erection								19,39	1		
SX1	SX1 SULPHUREX GH/F 14101 - 0					0	0 SX1 SX1 1/1							TOTAL Kg:	19,39			

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 14101 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allesti	ra					S	KETCH	IES MATERIAL LIST		PR	OJ:	1E35		REV: 0	13	/04/2010
	PUMA	.5		13/04/20	010 11.4	7.26							DO	OC:	1E35-	65-029	•		
			Bal	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	1	Temp:	°C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	14,00	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B					17,72		
1435	1	0	In	3,38		mm	,00	0,20	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B					0,50		
3107	1/2	0	In			mm	,00	2,00 NR 205 Valve Gate ST.46270/3 SW-F 800# Forged ASTM A 105 G 61									3,40		
4949	1/2	0	In			mm	,00								Γ71		4,08		
467	1	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷25	0 AARH) Forg	ged	5192	0,80		
1749	1	1/2	In	3,38	2,77	mm	,00	1,00	NR	205	Reducer Concentric ASME B16.9 BE V WPB	Vrought S	ASTM A	234 (GR.		0,14		
5192	1/2	0	In			mm	70,00	4,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.	2 TAB	3. 9		0,44		
661	1	0	In			mm	,00	1,00	NR	205	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5C						
				`			· ·			N	1 Erection					Total Kg:	27,08		

TOTAL Kg:

27,08

SX1 SX1

SULPHUREX GH/F

SX1

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 14102 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allesti	ra					S	KETC	CHES MATERIAL LIST		PROJ	: 1E3:	5	REV: 0 1	3/04/2010
	PUMA	.5		13/04/20	010 11.4	7.26							DOC:	1E3:	5-65-029		
			Bal	lestra						S	SULPHUREX GH/F	Size: In	Thk: mm	Tem	p: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	SS Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	12,40	m	203	Pipe ASME B36.10 PL Seamless API 5I	GR. B				15,70	
1435	1	0	In	3,38		mm	,00	0,20	m	203	Pipe ASME B36.10 PL Seamless API 5I	GR. B				0,50	
2828	1/2	0	In			mm	,00	1,00 NR 203 Valve Ball Full Port ST.46330/3 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87						l		0,30	
467	1	0	In			mm	,00						AARH) Fo	rged	5192	0,80	
1749	1	1/2	In	3,38	2,77	mm	,00	1,00	NR	203	Reducer Concentric ASME B16.9 BE W WPB	rought S A	STM A 234	GR.		0,14	
4546	1/2	0	In			mm	,00	1,00	NR	203	Cap TA 50.7/2 THRD-F NPT 3000# Fo	rged ASTN	1 A 105			0,12	
5192	1/2	0	In			mm	70,00	4,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASMI ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1 U	JNC/2.2 TA	В. 9		0,44	
661	1	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷250	AARH) _	B5C				
							M Erection								17,99		
SX1	X1 SULPHUREX GH/F 14103 - 0					-0 SX1 SX1 1/1							TOTAL Kg:	17,99			

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	on SP.1406/2-SP.1407/3
Line 14103 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

										HES MA	TERIAL LIST			PROJ:	1E35		REV:) 13	3/04/2010	
	PUMA	5		13/04/20	010 11.47	.26									DOC:	1E35-6	65-029			
	Ballestra									S	ULPHUREX G	GH/F	Size: In	Thk	: mm	Temp: °	C	Pres: BAR		Corr: mm
										_										
Mark	S1	S2		T1	T2		Len mn	n Qty	Um	Pip. clas	Compone	nt				(Gen. Bolt	Weight (Kg	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	6,00	m	203	Pipe ASM	E B36.10 PL Seamless API	5L GR. B					7,59		
2828	1/2	0	In			mm	,00	1,00	NR	203	Valve Bal	Full Port ST.46330/3 THR	O-F NPT 2	00 LE	3 Forged			0,30		
		,		, , , , , , , , , , , , , , , , , , ,	'		· ·			'	BRASS N	ICKEL PLATED S 87					,		_	
											M Erection						Total Kg:	7,89)	
SX1	SULPHU	JREX GI	H/F			14105	- 0	0 SX1 SX1 1/1							TO	OTAL Kg:	7,89			

	Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
	Line 14105 - 0	Fluid	System	
1	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
\mathbf{z}	ones			

		В	allesti	a					S	KETCI	HES MATERIAL LIST		PROJ:	1E35		REV:	0 13	3/04/2010
	PUMA	15		13/04/2	010 11.47	7.26							DOC:	1E35-	65-029			
			Bal	lestra						st	JLPHUREX GH/F	Size: In T	Thk: mm	Temp:	°C	Pres: BAR		Corr: mm
						1												
Mark	S1	S2		T1	T2		Len mm	n Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg	(a) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	9,00	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				11,39)	
3107	1/2	0	In			mm	,00	3,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM A	A 105 G 61			5,10)	
4546	1/2	0	In			mm	,00	1,00	NR	205	Cap TA 50.7/2 THRD-F NPT 3000# F	orged ASTM	A 105			0,12	2	
	·		•								M Erection			•	Total Kg:	16,6	1	
SX1	SULPHI	UREX G	H/F			14107	- 0			SX1	SX1 1	/ 1		Т	OTAL Kg:	16,61	l	

	Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	SP.1406/2-SP.1407/2
	Line 14107 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Z	ones			

		В	allest	ra					S	KETCI	HES MATERIAL LIST		PROJ:	1E35	REV: 0	13/04/2010
	PUMA	.5		13/04/2	010 11.4	17.26							DOC:	1E35-65-029		-
			Bal	llestra						SU	ULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component			Gen. Bolt	Weight (Kg) A	s.bly Branch
1493	1/2	0	In	2,77		mm	,00	8,00	m	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	amless API	5L GR. B		10,13	
2828	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 20	0 LB Forged		0,30	
252	1/2	0	In			mm	,00	5,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forgeo	l ASTM A 10)5	2,00	
1077	1/2	0	In			mm	,00	2,00	NR	202	Coupling TA 50.7/2 THRD-F NPT 300 Galvanized	0# Forged	ASTM A 105	5	0,24	
											M Erection			Total Kg:	12,67	
SX1	SULPHU	JREX G	H/F			14108	5 - 0			SX1	SX1 1 /	/ 1		TOTAL Kg:	12,67	

Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	n
Line 14108 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		1	Ballesti	a				SKETCH	IES MATERIAL LIST		PROJ	: 1E35	5	REV: 0 13	3/04/2010
	PUMA5			13/04/2	010 11.47.26						DOC:	1E35	5-65-029		
			Bal	lestra				SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp) : ℃	Pres: BAR	Corr: mm
		~-							T~				7~		
Mark	S1 1+1/2	S2	In	T1	T2	Len mm		Um Pip. class	Component	CD D			Gen. Bolt	Weight (Kg) As.bly	Branch
1437 1508	1+1/2	0	In	3,68	mm	,00		m 212 m 215	Pipe ASME B36.10 PL Seamless API 51 Pipe ASME B36.19 PL Seamless ASTM		204			89,08 4,54	
		0	In	3,08					1			ADII)	5382		
2857	1+1/2	U	111		mm	,00	1,00	NR 215	Valve Ball Full Port ST.46586/3 LUG 1 Cast ASTM A 351 CF8 S 123	50 LB KF (125÷250 A	AKH)	5382	7,14	
5003	1+1/2	0	In		mm	,00	1,00	NR 215	"Y" Valve Check ST.46360/5 FLG 150	LB RF (125	5÷250 AAR	H)	5127	9,18	
									Forged ASTM A 182 GR. F304 R 92						
6035	1+1/2	0	In		mm	,00	1,00	NR 215	Strainer Y-Type ST.46350/5 FLG 150 L ASTM A 351 GR. CF8M F 72	B RF (125-	÷250 AARH	I) Cast	5127	6,33	
450	1+1/2	0	In		mm	,00	5,00	NR 215	Flange Lap-Joint ASME B16.5 150 LB	Flat Face S	mooth Forge	ed	5129	7,00	
		1							ASTM A 105 Galvanized		C				
469	1+1/2	0	In		mm	,00	1,00	NR 212	Flange Slip-On ASME B16.5 150 LB R	F (125÷250	AARH) Fo	rged	5193	1,40	
						_		-	ASTM A 105						
158	1+1/2	0	In	3,68	mm	,00	1,00	NR 212	45° Elbow Long Radius ASME B16.9 E	BE Wrought	S ASTM A	. 234		0,18	
226	1 . 1 /0	0	In	2.60	mm	00	5.00	ND 212	GR. WPB	NE 337 1 1	C ACTIVE A	224		1.04	
326	1+1/2	U	111	3,68	111111	,00	3,00	NR 212	90° Elbow Long Radius ASME B16.9 E GR. WPB	E wrought	S ASIM A	. 234		1,84	
331	1+1/2	0	In	3,68	mm	,00,	1,00	NR 215	90° Elbow Long Radius ASME B16.9 E	BE Wrought	S ASTM A	403		0,38	
									GR. WP304					· .	
1211	1+1/2	0	In	3,68	mm	,00	5,00	NR 215	Stub-End MSS SP-43 FLG x BE Wroug	ht S ASTM	I A 403 GR.			1,43	
								-	WP304 Type A						
5193	1/2	0	In		mm	75,00	4,00	NR 212	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	E B18.2.1 U	UNC/2.2 TA	В. 9		0,48	
5105	1 /2	0	Y			75.00	0.00	ND 015	ASTM A 193 B7/ASTM A 194 GR.2H	E D 10 2 1 1	DIC O O TA	D 0		0.06	
5127	1/2	0	In		mm	75,00	8,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 (UNC/2.2 TA	ъ. 9		0,96	
5129	1/2	0	In		mm	85,00	10.00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	F R18 2 1 I	INC/2 2 TA	R 9		1,20	
312)	1/2	U				05,00	10,00	213	ASTM A 193 B7/A194 2H Galvanized	L D10.2.1 V	0110/2.2 17	ш.)		1,20	
695	1+1/2	0	In		mm	,00,	1,00	NR 212	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _	B5B				
714	1+1/2	0	In		mm	,00	6,00	NR 215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _	B5F				
PI_06.1						Plant SX1	SIII PHIII	REX GH/E	Piping Class 215			W	alding specifies	ation SP.1406/2-SP.1408/3	
1_00.1						Line 1600		KLA GIVI	Fluid				stem	11-100/2-31.1-100/3	
						Dang. fluid			Coating				pres	Op tem	
1							~ .		9				-	- 1	

Sketch Sht 1/1

Isometric code

Area SX1

Zones

Page 1

Balle	estra	SKETCHES MATERIAL LIST		PROJ:	1E35	REV:	0	13/04/2010
PUMA5	13/04/2010 11.47.26			DOC:	1E35-65-029			
	Ballestra	SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR		Corr: mm

Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component		Gen. Bolt	Weight (Kg) As.bly	Branch
5382	1/2	0	In		m	35,00	16,00	NR	215	Screws for valves	ASME B 18.2.1 /UNC ASTM A 193 B7 Galvani	zed	1,28	
										M Erection		Total Kg:	132,43	
SX1	SULPHU	JREX GH	/F		16	001 - 0			SX1	SX1	1 / 1	TOTAL Kg:	132,43	

PI_06.1	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
	Line 16001 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 2
	Zones			

	DIDE		allestr		010 11 1	III 24			S	KETCH	IES MATERIAL LIST		PROJ			REV: 0	13/	04/2010
	PUMA5	•		13/04/20	010 11.4	7.26							DOC:	1E35	5-65-029			
			Ball	estra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp): °C	Pres: BAR	Co	orr: mm
Mark	S1	S2		T1	T2		Len mm	Otv	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As	s.blv	Branch
1437	1+1/2	0	In	3,68		mm	,00	24,00	-	212	Pipe ASME B36.10 PL Seamless API 5	L GR. B				97,18		
1508	1+1/2	0	In	3,68		mm	,00	1,50	m	215	Pipe ASME B36.19 PL Seamless ASTM	Л А 312 ТЕ	304			6,20		
2857	1+1/2	0	In			mm	,00	1,00	NR	215	Valve Ball Full Port ST.46586/3 LUG 1 Cast ASTM A 351 CF8 S 123	50 LB RF	(125÷250 A	ARH)	5382	7,14		
5003	1+1/2	0	In			mm	,00	1,00	NR	215	"Y" Valve Check ST.46360/5 FLG 150 Forged ASTM A 182 GR. F304 R 92	LB RF (12	5÷250 AAR	H)	5127	9,18		
6035	1+1/2	0	In			mm	,00	1,00	NR	215	Strainer Y-Type ST.46350/5 FLG 150 I ASTM A 351 GR. CF8M F 72	LB RF (125	÷250 AARI	I) Cast	5127	6,33		
450	1+1/2	0	In			mm	,00	5,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth Forg	ed	5129	7,00		
469	1+1/2	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	RF (125÷25	0 AARH) Fo	orged	5193	1,40		
326	1+1/2	0	In	3,68		mm	,00	5,00	NR	212	90° Elbow Long Radius ASME B16.9 I GR. WPB	BE Wrough	t S ASTM A	234		1,84		
331	1+1/2	0	In	3,68		mm	,00	1,00	NR	215	90° Elbow Long Radius ASME B16.9 I GR. WP304	BE Wrough	t S ASTM A	403		0,38		
1211	1+1/2	0	In	3,68		mm	,00	5,00	NR	215	Stub-End MSS SP-43 FLG x BE Wrouş WP304 Type A	ght S ASTN	1 A 403 GR	,		1,43		
5193	1/2	0	In			mm	75,00	4,00	NR	212	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	AB. 9		0,48		
5127	1/2	0	In			mm	75,00	8,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized		UNC/2.2 TA	AB. 9		0,96		
5129	1/2	0	In			mm	85,00	12,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	IE B18.2.1	UNC/2.2 TA	AB. 9		1,44		
695	1+1/2	0	In			mm	,00	1,00	NR	212	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5B					
714	1+1/2	0	In			mm	,00	7,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH)	_ B5F					
5382	1/2	0	In			mm	35,00	16,00	NR	215	Screws for valves ASME B 18.2.1 /UN	C ASTM A	. 193 B7 Gal	vanized		1,28		
PI_06.3							Plant SX1		REX	GH/F	Piping Class 215 Fluid				elding specifica	tion SP.1406/2-SP.14	408/3	

Coating

Sketch Sht 1/1

De pres

Isometric code

Dang. fluid type

Area SX1

Zones

Page 1

Op tem

Ballestra	SKETCHES MATERIAL LIST	PROJ:	1E35	REV: 0	13/04/2010
PUMA5 13/04/2010 11.47.27		DOC:	1E35-65-029		
Ballestra	SULPHUREX GH/F	Size: In Thk: mm	Temp: °C	Pres: BAR	Corr: mm

Mark	S1 S2	T1	T2	Len mm	Qty Um Pip. cla	s Component		Gen. Bolt	Weight (Kg) As.bly	Branch
						M Erection		Total Kg:	142,23	
SX1	SULPHUREX GH/F			16002 - 0	SX1	SX1	1 / 1 T (OTAL Kg:	142,23	

PI_06.3	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
	Line 16002 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 2
	Zones			

	Balle	estra		SKETCHES MATERIAL LIST		PROJ:	1E35	REV: 0	13/04/2010
	PUMA5	13/04/2010 11.47.27				DOC:	1E35-65-029		
		Ballestra		SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	Corr: mm
Mark	S1 S2	T1 T2	Len mm	Oty Um Pip. class Component			Gen. Bolt	Weight (Kg) As	.bly Branch

Mark	S1	S2		T1	T2	Len mm	Otv	Um	Pip. class	s Component	Gen. Bolt	Weight (Kg) As.bly	Branch
1508	1+1/2	0	In	3.68	mm	,00	25,00	-	•	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 304	Gen. Doit	103.29	Drunen
2857	1+1/2	0	In	2,00	mm	,00		NR		Valve Ball Full Port ST.46586/3 LUG 150 LB RF (125÷250 AARH)	5382	7,14	
		-				,				Cast ASTM A 351 CF8 S 123		.,	
5003	1+1/2	0	In		mm	,00	1,00	NR	215	"Y" Valve Check ST.46360/5 FLG 150 LB RF (125÷250 AARH)	5127	9,18	
										Forged ASTM A 182 GR. F304 R 92			
6035	1+1/2	0	In		mm	,00	1,00	NR	215	Strainer Y-Type ST.46350/5 FLG 150 LB RF (125÷250 AARH) Cast	5127	6,33	
										ASTM A 351 GR. CF8M F 72			
450	1+1/2	0	In		mm	,00	6,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged	5129	8,40	
			1						ı	ASTM A 105 Galvanized			
163	1+1/2	0	In	3,68	mm	,00	2,00	NR	215	45° Elbow Long Radius ASME B16.9 BE Wrought S ASTM A 403		0,38	
				_						GR. WP304			
331	1+1/2	0	In	3,68	mm	,00	5,00	NR	215	90° Elbow Long Radius ASME B16.9 BE Wrought S ASTM A 403		1,88	
				_						GR. WP304			
1211	1+1/2	0	In	3,68	mm	,00	6,00	NR	215	Stub-End MSS SP-43 FLG x BE Wrought S ASTM A 403 GR.		1,71	
										WP304 Type A			
5127	1/2	0	In		mm	75,00	8,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9		0,96	
			1_							ASTM A 193 B7/A194 2H Galvanized			
5129	1/2	0	In		mm	85,00	12,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9		1,44	
		1.	-				5 .00			ASTM A 193 B7/A194 2H Galvanized			
714	1+1/2	0	In		mm	,00	7,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F			
5382	1/2	0	In		mm	35,00	16,00	NR	215	Screws for valves ASME B 18.2.1 /UNC ASTM A 193 B7 Galvanized		1,28	
										M Erection	Total Kg:	141,99	
SX1	SULPHU	REX G	H/F		16003 -	0			SX1	SX1 1/1	TOTAL Kg:	141,99	

PI_06.2	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
	Line 16003 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

	Ballestra								S	KF	ЕТСН	IES MATERIAL LIST		PROJ:	1E35	5	REV: 0	13/04/2010
	PUMA	5		13/04/20	010 11.4	7.27								DOC:	1E35	5-65-029		
			Balle	estra							SUI	LPHUREX GH/F	Size: In Th	ık: mm	Temp	o; °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip	o. class	Component				Gen. Bolt	Weight (Kg) As.h	oly Branch
1504	1/2	0	In	2,77		mm	,00	0,30	m	215	5	Pipe ASME B36.19 PL Seamless ASTM	I A 312 TP 30)4			0,39	
1509	2	0	In	3,91		mm	,00	7,00	m	215	5	Pipe ASME B36.19 PL Seamless ASTM	I A 312 TP 30)4			38,83	
2858	2	0	In			mm	,00	1,00	NR	215	5	Valve Ball Full Port ST.46586/3 LUG 1. Cast ASTM A 351 CF8 S 123	50 LB RF (12	5÷250 AA	RH)	5384	6,63	
2862	1/2	0	In			mm	,00	1,00	NR	215	5	Valve Ball Full Port ST.46545/1 THRD-A 182 GR. F316 S 99	-F NPT 800#	Forged AS	STM		0,71	
451	2	0	In			mm	,00	3,00	NR	215	5	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face Smo	ooth Forgeo	d	5135	6,60	
332	2	0	In	3,91		mm	,00	1,00	NR	215	5	90° Elbow Long Radius ASME B16.9 B GR. WP304	E Wrought S	ASTM A	403		0,68	
1775	2	1+1/2	In	3,91	3,68	mm	,00	2,00	NR	215	5	Reducer Concentric ASME B16.9 BE W WP304	rought S AS	ΓM A 403	GR.		0,88	
1212	2	0	In	3,91		mm	,00	3,00	NR	215	5	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ht S ASTM A	403 GR.			1,44	
5135	5/8	0	In			mm	95,00	8,00	NR	215	5	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 UN	IC/2.2 TAI	B. 9		1,84	
715	2	0	In			mm	,00	3,00	NR	215	5	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _ B	5F				
5384	5/8	0	In			mm	40,00	16,00	NR	215	5	Screws for valves ASME B 18.2.1 /UNC	C ASTM A 19	3 B7 Galv	anized	1	2,40	
	'				•					•	N	1 Erection				Total Kg:	60,4	

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	on SP.1406/2-SP.1408/3
Line 16004 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

TOTAL Kg:

60,4

SX1 SX1

SULPHUREX GH/F

	Ballestra						SKETCHES MATERIAL LIST PROJ:								REV: 0	13/	/04/2010	
	PUMA	15		13/04/20	010 11.47	7.27							DOC:	1E35-6	55-029			
			Ball	lestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp: °	С	Pres: BAR	C	orr: mm
Mark	S1	S2		Т1	Т2		Len mm	Otr	Um	Pip. class	s Component			(Gen. Bolt	Weight (Kg)	a blv	Branch
	21	32			12				_	_					zen. Don	0 , 0,	AS.DIY	brancii
1453	3	0	In	3,18		mm	,00	0,20	m	206	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				1,34		
1454	4	0	In	3,18		mm	,00	4,50	m	206	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				39,21		
298	4	0	In	3,18		mm	,00	2,00	NR	206	90° Elbow Long Radius ASME B16.9 E	BE E.R.W.	ASTM A 234	4 GR.		4,13		
							_				WPB					-		
1651	4	3	In	3,18	3,18	mm	,00	1,00	NR	206	Reducer Concentric ASME B16.9 BE E	E.R.W. AST	M A 234 GF	R. WPB		0,86		
	·		•								M Erection			•	Total Kg:	45,55		
SX1	SULPH	UREX G	H/F			16005	- 0			SX1	SX1 1,	/ 1		T(OTAL Kg:	45,55		

Plant SX1 SULPHUREX GH/F	Piping Class 206	Welding specificatio	n SP.1406/2-SP.1407/3
Line 16005 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a						SKETCH	IES MATERIAL LIST		PRO	J: 1E3	35	REV: 0	13/	/04/2010
	PUMA	15		13/04/2	010 11.4	7.27							DOC	: 1E3	35-65-029			
			Balle	estra						SU	LPHUREX GH/F	Size: In	Thk: mm	Ten	ıp: ℃	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1509	2	0	In	3,91		mm	,00	3,00	m	215	Pipe ASME B36.19 PL Seamless ASTM	A 312 TP	304			16,64		
2858	2	0	In			mm	,00	1,00	NR	215	Valve Ball Full Port ST.46586/3 LUG 15 Cast ASTM A 351 CF8 S 123	0 LB RF	(125÷250 .	AARH)	5384	6,63		
451	2	0	In			mm	,00	3,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB F ASTM A 105 Galvanized	Flat Face S	mooth Foi	ged	5135	6,60		
164	2	0	In	3,91		mm	,00	1,00	NR	215	45° Elbow Long Radius ASME B16.9 BI GR. WP304	E Wrough	t S ASTM	A 403		0,32		
332	2	0	In	3,91		mm	,00	2,00	NR	215	90° Elbow Long Radius ASME B16.9 BI GR. WP304	E Wrough	t S ASTM	A 403		1,36		
1212	2	0	In	3,91		mm	,00	3,00	NR	215	Stub-End MSS SP-43 FLG x BE Wrough WP304 Type A	nt S ASTM	I A 403 G	R.		1,44		
5135	5/8	0	In			mm	95,00	8,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASME ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 T	TAB. 9		1,84		
715	2	0	In			mm	,00	3,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷250) AARH) _	_B5F					T
5384	5/8	0	In			mm	40,00	16,00	NR	215	Screws for valves ASME B 18.2.1 /UNC	ASTM A	193 B7 G	alvanize	ed	2,40		
	'	'		'	,	ı			•	N	// Erection				Total Kg:	37,23		

SX1 SX1

SX1

SULPHUREX GH/F

16006 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	on SP.1406/2-SP.1408/3
Line 16006 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

37,23

TOTAL Kg:

		Ba	allesti	a					SKETCH	IES MATERIAL LIST		PROJ	: 1E35	5	REV: 0 1	3/04/2010
	PUMA:	5		13/04/2	010 11.4	7.27	1					DOC:	1E35	5-65-029	<u> </u>	
			Bal	lestra					SU	LPHUREX GH/F	Size: In	Thk: mm	Temp); °C	Pres: BAR	Corr: mm
	94	g.		m4			- I	0.		a .					**********	
Mark	S1	S2	In	T1	T2	mm	Len mm		Um Pip. class	Component	f A 212 TD	204		Gen. Bolt	Weight (Kg) As.bly	Branch
1506	1	0	In	3,38			,00		m 215	Pipe ASME B36.19 PL Seamless ASTN					1,28	
1528	4	0		2,11		mm	,00		m 215	Pipe ASME B36.19 PL E.R.W. ASTM			A DII)	5205	32,76	
6032	4	0	In			mm	,00	2,00	NR 215	Valve Ball Full Port ST.46586/3 LUG 1 Cast ASTM A 351 CF8 S 123	50 LB RF (125÷250 A.	ARH)	5385	42,85	
2864	1	0	In			mm	,00	1,00	NR 215	Valve Ball Full Port ST.46545/1 THRD A 182 GR. F316 S 99	-F NPT 800)# Forged A	STM		1,43	
452	2+1/2	0	In			mm	,00	3,00	NR 215	Flange Lap-Joint ASME B16.5 150 LB	Flat Face Sr	nooth Forg	ed	5136	10,80	
		_				-				ASTM A 105 Galvanized						
454	4	0	In			mm	,00		NR 215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face St	mooth Forg	ed	5138	16,80	
2491	2+1/2	0	In			mm	,00	3,00	NR 215	Drip Ring TA 50.65/3 WAFER 150 LB ASTM A 182 GR. F304	FF (125÷25	50 AARH) l	Forged	5140	6,73	
340	4	0	In	2,11		mm	,00	6,00	NR 215	90° Elbow Long Radius ASME B16.9 F GR. WP304	BE Wrought	W ASTM	A 403		8,40	
1794	4	2+1/2	In	2,11	2,11	mm	,00	3,00	NR 215	Reducer Concentric ASME B16.9 BE V WP304	Vrought W	ASTM A 40	3 GR.		1,74	
1795	4	3	In	2,11	2,11	mm	,00	1,00	NR 215	Reducer Concentric ASME B16.9 BE V	Vrought W	ASTM A 40	3 GR.		0,58	
1219	2+1/2	0	In	2,11		mm	,00	3,00	NR 215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ht W ASTM	1 A 403 GR			0,97	
1221	4	0	In	2,11		mm	,00	3,00	NR 215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ht W ASTM	1 A 403 GR			1,87	
5134	5/8	0	In			mm	90,00	-12,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 U	JNC/2.2 TA	B. 9		-2,64	
5136	5/8	0	In			mm	100,00	12,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 U	JNC/2.2 TA	В. 9		2,76	
5138	5/8	0	In			mm	110,00	16,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 U	JNC/2.2 TA	В. 9		4,00	
							Plant SX1	SIII PHIII	RFX GH/F	Piping Class 215			W	elding specifics	ation SP.1406/2-SP.1408/3	
							Line 1600	r					System			
							Dang. fluid			Coating				pres	Op tem	
							4 0371			GI - 1 GI				-	•	

Sketch Sht 1/1

Isometric code

Area SX1

Zones

Page 1

		В	allestr	a				SKETCHES MATERIAL LIST PROJ: 1E3								REV:	0	13/04/2010
	PUMA5	;		13/04/20	010 11.47	.27							DOC:	1E35-	-65-029			
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR		Corr: mm
Mark	S1	S2		T1	T2		Len mn	n Qty	Um	Pip. class	Component				Gen. Bolt	Weight (K	g) As.bly	y Branch
5140	5/8	0	In			mm	125,00		12,00 NR 215 Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H Galvanized							3,2	4	
716	2+1/2	0	In			mm	,00	6,0) NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _	B5F					
718	4	0	In			mm	,00	4,0) NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _	B5F					
5385	5/8	0	In			mm	45,00	64,0) NR	215	Screws for valves ASME B 18.2.1 /UNG	C ASTM A	193 B7 Galv	anized		10,2	4	
				•			*			N	// Erection				Total Kg:	143,8	32	

SX1 SX1

SX1

SULPHUREX GH/F

16007 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specificatio	n SP.1406/2-SP.1408/3
Line 16007 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 2
Zones			

143,82

TOTAL Kg:

		В	allestr	a					5	SKETCH	IES MATERIAL LIST		PRO	J: 1E3	5	REV: 0	13/	/04/2010
	PUMA	A 5		13/04/2	010 11.4	7.28							DOC	C: 1E3	5-65-029	•		
			Ball	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	Tem	p: ℃	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1509	2	0	In	3,91		mm	,00	13,00	m	215	Pipe ASME B36.19 PL Seamless ASTM	I A 312 TI	304			72,12		
2858	2	0	In			mm	,00	2,00	NR	215	Valve Ball Full Port ST.46586/3 LUG 1: Cast ASTM A 351 CF8 S 123	50 LB RF	(125÷250	AARH)	5384	13,26		
451	2	0	In			mm	,00	5,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth Fo	rged	5135	11,00		
332	2	0	In	3,91		mm	,00	7,00	NR	215	90° Elbow Long Radius ASME B16.9 B GR. WP304	E Wrough	t S ASTM	A 403		4,75		
1773	2	1	In	3,91	3,38	mm	,00	2,00	NR	215	Reducer Concentric ASME B16.9 BE W WP304	rought S	ASTM A 4	03 GR.		0,88		
1212	2	0	In	3,91		mm	,00	5,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ht S ASTN	Л A 403 G	R.		2,39		
5135	5/8	0	In			mm	95,00	12,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2	ГАВ. 9		2,76		
715	2	0	In			mm	,00	5,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25)	0 AARH)	_ B5F					
5384	5/8	0	In			mm	40,00	32,00	NR	215	Screws for valves ASME B 18.2.1 /UNC	C ASTM A	. 193 B7 G	alvanize	d	4,80		
										N	1 Erection				Total Kg:	111,97		

TOTAL Kg:

111,97

SX1 SX1

SX1

SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	n SP.1406/2-SP.1408/3
Line 16008 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

PUMA5 13/04/2010 11.47.28					
1 UMAS 15/04/2010 11.47.20		DOC:	1E35-65-029		
Ballestra SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	Corr: mm

Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg) As.bly	Branch
1504	1/2	0	In	2,77	mm	,00	5,30	m	215	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 304		6,85	
1506	1	0	In	3,38	mm	,00	0,10	m	215	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 304		0,26	
1508	1+1/2	0	In	3,68	mm	,00	1,10	m	215	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 304		4,54	
1509	2	0	In	3,91	mm	,00	7,40	m	215	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 304		41,05	
1528	4	0	In	2,11	mm	,00	0,40	m	215	Pipe ASME B36.19 PL E.R.W. ASTM A 312 TP 304		2,38	
2858	2	0	In		mm	,00	5,00	NR	215	Valve Ball Full Port ST.46586/3 LUG 150 LB RF (125÷250 AARH) Cast ASTM A 351 CF8 S 123	5384	33,16	
2862	1/2	0	In		mm	,00	1,00	NR	215	Valve Ball Full Port ST.46545/1 THRD-F NPT 800# Forged ASTM A 182 GR. F316 S 99		0,71	
446	1/2	0	In		mm	,00	6,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5127	2,40	
448	1	0	In		mm	,00	4,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5128	3,20	
451	2	0	In		mm	,00	10,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5135	22,00	
332	2	0	In	3,91	mm	,00	9,00	NR	215	90° Elbow Long Radius ASME B16.9 BE Wrought S ASTM A 403 GR. WP304		6,10	
1773	2	1	In	3,91	3,38 mm	,00	5,00	NR	215	Reducer Concentric ASME B16.9 BE Wrought S ASTM A 403 GR. WP304		2,19	
1775	2	1+1/2	In	3,91	3,68 mm	,00	1,00	NR	215	Reducer Concentric ASME B16.9 BE Wrought S ASTM A 403 GR. WP304		0,44	
2218	4	2	In	2,11	3,91 mm	,00	2,00	NR	215	Reducer Eccentric ASME B16.9 BE Wrought W ASTM A 403 GR. WP304		1,16	
1049	1/2	0	In		mm	,00	1,00	NR	215	Coupling TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 182 GR. F304		0,12	
1051	1	0	In		mm	,00	1,00	NR	215	Coupling TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 182 GR. F304		0,31	

TET_16.2	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
FV_16.3	Line 16009 - 0	Fluid	System	
FE_16.3	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		Ba	allestr	a					SK	KETCI	HES MATERIAL LIST		PROJ	: 1E35		REV: 0	13/	/04/2010
	PUMA5	5		13/04/2	010 11.47	7.28							DOC:	1E35-	-65-029	•	•	
			Ball	estra						SU	ULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um I	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1207	1/2	0	In	2,77		mm	,00	6,00	NR 2	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	tht S ASTM	A 403 GR.			0,51		
1209	1	0	In	3,38		mm	,00	4,00	NR 2	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	tht S ASTM	A 403 GR.			0,65		
1212	2	0	In	3,91		mm	,00	10,00	NR 2	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	tht S ASTM	A 403 GR.			4,79		
1286	1/2	0	In			mm	,00	7,00	NR 2	215	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 18	2 GR. F304			2,71		
4543	1+1/2	0	In			mm	,00	1,00	NR 2	215	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged ASTN	A 182 GR	. F304		0,77		
5127	1/2	0	In			mm	75,00	24,00	NR 2	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 U	JNC/2.2 TA	В. 9		2,88		
5128	1/2	0	In			mm	80,00	16,00	NR 2	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 U	UNC/2.2 TA	В. 9		1,92		
5135	5/8	0	In			mm	95,00	20,00	NR 2	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 U	JNC/2.2 TA	В. 9		4,60		
710	1/2	0	In			mm	,00	6,00	NR 2	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)_	B5F					
712	1	0	In			mm	,00		NR 2		Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	B5F					
715	2	0	In			mm	,00	10,00	NR 2	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _	B5F					
5384	5/8	0	In			mm	40,00	80,00	NR 2	215	Screws for valves ASME B 18.2.1 /UNC	C ASTM A	193 B7 Gal	vanized		12,00		
		-1	1	1	1	1					M Erection				Total Kg:	157,71		
SX1	SULPHU	REX GI	I/F			16009	- 0			SX1	SX1 1 /	/ 1		1	OTAL Kg:	157,71		

TET_16.2	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
FV_16.3	Line 16009 - 0	Fluid	System	
FE_16.3	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 2
	Zones			

		В	allestr	a					5	SKETCE	IES MATERIAL LIST		PR	OJ:	1E35		REV: 0	13	8/04/2010
	PUMA5	;		13/04/2	010 11.4	7.28							DC	C:	1E35-6	65-029			
			Ball	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	_	Temp: °	°C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	Pip. class	Component				(Gen. Bolt	Weight (Kg)	As.bly	Branch
1526	2+1/2	0	In	2,11		mm	,00	1,00) m	215	Pipe ASME B36.19 PL E.R.W. ASTM	A 312 TP 3	304				3,76		
452	2+1/2	0	In			mm	,00	1,00) NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth F	orged	-	5136	3,60		
2491	2+1/2	0	In			mm	,00	1,00) NR	215	Drip Ring TA 50.65/3 WAFER 150 LB ASTM A 182 GR. F304	FF (125÷2	50 AAR	H) Fo	rged 5	5140	2,24		<u> </u>
1219	2+1/2	0	In	2,11		mm	,00	1,00) NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	tht W AST	M A 403	GR.			0,32		
5134	5/8	0	In			mm	90,00	-4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2	2 TAB	3. 9		-0,88		
5136	5/8	0	In			mm	100,00	4,00) NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2	2 TAB	3. 9		0,92		
5140	5/8	0	In			mm	125,00	4,00) NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2	2 TAB	3. 9		1,08		
716	2+1/2	0	In			mm	,00	2,00) NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5F						
	1			1	1					N	M Erection				ı	Total Kg:	11,05	1	

TOTAL Kg:

11,05

SX1 SX1

SX1

SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	on SP.1406/2-SP.1408/3
Line 16010 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allesti	a					S	KETCH	HES MATERIAL LIST		PROJ	I: 1E35	5	REV: 0 1	3/04/2010
	PUMA5	5		13/04/2	010 11.4	7.28							DOC:	1E35	5-65-029		
			Bal	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp): °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1526	2+1/2	0	In	2,11		mm	,00	0,20	m	215	Pipe ASME B36.19 PL E.R.W. ASTM	A 312 TP 3	04			0,75	
452	2+1/2	0	In			mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face Si	mooth Forg	ed	5136	3,60	
2491	2+1/2	0	In			mm	,00	1,00	NR	215	Drip Ring TA 50.65/3 WAFER 150 LB ASTM A 182 GR. F304	FF (125÷25	50 AARH)	Forged	5140	2,24	
1219	2+1/2	0	In	2,11		mm	,00	1,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ght W ASTN	/I A 403 GI	₹.		0,32	
5134	5/8	0	In			mm	90,00	-4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	IE B18.2.1 U	JNC/2.2 TA	AB. 9		-0,88	
5136	5/8	0	In			mm	100,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	IE B18.2.1 U	JNC/2.2 TA	AB. 9		0,92	
5140	5/8	0	In			mm	125,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	IE B18.2.1 U	JNC/2.2 TA	AB. 9		1,08	
716	2+1/2	0	In			mm	,00	2,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _	B5F				
		1	1		'		<u> </u>			·	M Erection				Total Kg:	8,04	

TOTAL Kg:

8,04

SX1 SX1

SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	on SP.1406/2-SP.1408/3
Line 16011 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allest	tra					S	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	\ 5		13/04/20	010 11.4	7.28							DOC:	1E35-	65-029		•	
			Ba	allestra						S	ULPHUREX GH/F	Size: In T	hk: mm	Temp:	°C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1453	3	0	In	3,18		mm	,00	4,50	m	206	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				30,25		
472	3	0	In			mm	,00	2,00	NR	206	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250 A	AARH) For	ged	5201	8,20		
297	3	0	In	3,18		mm	,00	4,00	NR	206	90° Elbow Long Radius ASME B16.9 E WPB	BE E.R.W. A	STM A 234	GR.		4,71		
5201	5/8	0	In			mm	95,00	8,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1 U	NC/2.2 TAI	B. 9		1,84		
666	3	0	In			mm	,00	2,00	NR	206	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _ I	B5C					
	'	•		•	'		•	•	-	•	M Erection				Total Kg:	45,		
SX1	SULPH	UREX G	H/F			16012	- 0			SX1	SX1 1,	/ 1		Т	OTAL Kg:	45,		

KV_16.20	Plant SX1 SULPHUREX GH/F	Piping Class 206	Welding specification S	SP.1406/2-SP.1407/3
	Line 16012 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestra	a						SKETCH	HES MATERIAL LIST		F	ROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	15		13/04/20	010 11.4	7.28							Ι	OC:	1E35	-65-029	•	•	
			Balle	estra						SU	LPHUREX GH/F	Size: In	Thk:	nm	Temp	: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	n Pip. class	Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1504	1/2	0	In	2,77		mm	,00	0,20	m	215	Pipe ASME B36.19 PL Seamless ASTM	/I A 312 TI	P 304				0,26		
1506	1	0	In	3,38		mm	,00	0,10	m	215	Pipe ASME B36.19 PL Seamless ASTM	/I A 312 TI	P 304				0,26		
1533	12	0	In	3,96		mm	,00	4,00	m	215	Pipe ASME B36.19 PL E.R.W. ASTM	A 312 TP 3	304				127,48		
3155	1/4	0	In			mm	,00	1,00	NF	215	Valve Plug ST.46019/1 THRD-F NPT GR. F316 M 53	PN 16 Forg	ged AS	TM A	182		0,20		
459	12	0	In			mm	,00	4,00	NF	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth	Forge	d	5158	112,00		
345	12	0	In	3,96		mm	,00	2,00	NF	215	90° Elbow Long Radius ASME B16.9 I GR. WP304	BE Wrough	nt W A	STM A	403		45,82		
1051	1	0	In			mm	,00	1,00	NF	215	Coupling TA 50.7/2 THRD-F NPT 300 F304	00# Forged	ASTN	A 182	2 GR.		0,31		
1226	12	0	In	3,96		mm	,00	4,00	NF	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ght W AST	M A 4)3 GR.			23,60		
4390	1/2	1/4	In			mm	,00	1,00	NF	215	Coupling Reducing TA 50.7/2 THRD-F 182 GR. F304	F NPT 300	0# For	ged AS	TM A		0,03		
5158	7/8	0	In			mm	140,00	48,00	NF	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/	2.2 TA	B. 9		30,72		

Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F

1 / 1

,00

16013 - 0

4,00 NR 215

723

SX1

12

SULPHUREX GH/F

KV_16.1	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
	Line 16013 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

M Erection

SX1 SX1

Total Kg:

TOTAL Kg:

340,67

340,67

		В	allestr	a					S	KETCE	IES MATERIAL LIST		PROJ	: 1E35	5	REV: 0 13	3/04/2010
	PUMA	A 5		13/04/20	10 11.47	.29							DOC:	1E35	5-65-029	•	
			Ball	lestra		-				SU	LPHUREX GH/F	Size: In	Thk: mm	Temp); °C	Pres: BAR (Corr: mm
Mark	S1	S2		T1	T2	Le	en mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1506	1	0	In	3,38		mm	,00	1,20	m	215	Pipe ASME B36.19 PL Seamless ASTM	I A 312 TP	304			3,06	
1534	14	0	In	3,96		mm	,00	1,50	m	215	Pipe ASME B36.19 PL E.R.W. ASTM	A 312 TP 3	304			52,56	
2864	1	0	In			mm	,00	1,00	NR	215	Valve Ball Full Port ST.46545/1 THRD- A 182 GR. F316 S 99	-F NPT 80	0# Forged A	ASTM		1,43	
460	14	0	In			mm	,00	2,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	mooth Forg	ed	5168	84,00	
1119	1	0	In			mm	,00	1,00	NR	215	Coupling Half TA 50.7/2 THRD-F NPT GR. F304	Γ 3000# Fo	rged ASTM	A 182		0,15	
1227	14	0	In	3,96		mm	,00	2,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ht W AST	M A 403 GF	₹.		13,01	
5168	1	0	In			mm]	155,00	24,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASMI ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 TA	AB. 9		44,16	
724	14	0	In			mm	,00	2,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25)	0 AARH)	_ B5F				
	,				•		-			N	A Erection				Total Kg:	198,37	

TOTAL Kg:

198,37

SX1 SX1

SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	n SP.1406/2-SP.1408/3
Line 16014 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					5	SKETCH	HES MATERIAL LIST		PROJ	1E35	5	REV: 0	13/04/20
	PUMA	15		13/04/20	010 11.4	7.29							DOC:	1E35	5-65-029	•	•
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp): °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Un	Pip. class	Component				Gen. Bolt	Weight (Kg) A	s.bly Bran
1534	14	0	In	3,96		mm	,00	2,4	_	215	Pipe ASME B36.19 PL E.R.W. ASTM	A 312 TP 3	304			84,09	
3155	1/4	0	In			mm	,00	1,0) NR	215	Valve Plug ST.46019/1 THRD-F NPT GR. F316 M 53	PN 16 Forg	ged ASTM A	182		0,20	
460	14	0	In			mm	,00	3,0) NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth Forge	ed	5168	126,00	
346	14	0	In	3,96		mm	,00	1,0) NR	215	90° Elbow Long Radius ASME B16.9 GR. WP304	BE Wrough	t W ASTM A	A 403		28,85	
1115	1/4	0	In			mm	,00	1,0) NR	215	Coupling Half TA 50.7/2 THRD-F NP GR. F304	T 3000# Fo	rged ASTM	A 182		0,03	
1119	1	0	In			mm	,00	1,0) NR	215	Coupling Half TA 50.7/2 THRD-F NP GR. F304	T 3000# Fo	rged ASTM	A 182		0,15	
1227	14	0	In	3,96		mm	,00	3,0) NR	215	Stub-End MSS SP-43 FLG x BE Wrou WP304 Type A	ght W AST	M A 403 GR			19,52	
5168	1	0	In			mm	155,00	24,0) NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized		UNC/2.2 TA	В. 9		44,16	
724	14	0	In			mm	,00	2,0) NR	215	Gasket TA 50.5/31 150 LB RF (125÷2:	50 AARH)	_ B5F				
			-	'	'	-				·	M Erection				Total Kg:	303,	

TOTAL Kg:

303,

16Y1	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
	Line 16015 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

SX1 SX1

SULPHUREX GH/F

SX1

		В	allesti	ra					SF	KETC	CHES MATERIAL LIST		PROJ:	1E35		REV: 0 1	3/04/2010
	PUMA	A 5		13/04/20	010 11.4	7.29							DOC:	1E35-0	65-029		
			Bal	lestra						S	SULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um I	Pip. clas	ss Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1463	14	0	In	6,35		mm	,00	19,80	m 2	212	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				1.082,85	
1464	16	0	In	6,35		mm	,00	0,30	m 2	212	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				18,79	
480	16	0	In			mm	,00	1,00	NR 2	212	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷25	0 AARH) For	rged 5	5250	46,00	
307	14	0	In	6,35		mm	,00	1,00	NR 2	212	90° Elbow Long Radius ASME B16.9° WPB	BE E.R.W.	ASTM A 234	4 GR.		45,34	
308	16	0	In	6,35		mm	,00	1,00	NR 2	212	90° Elbow Long Radius ASME B16.9° WPB	BE E.R.W.	ASTM A 234	4 GR.		59,50	
1699	16	14	In	6,35	6,35	mm	,00	1,00	NR 2	212	Reducer Concentric ASME B16.9 BE I	E.R.W. AS	TM A 234 GR	R. WPB		22,03	
5250	1	0	In			mm	140,00	16,00	NR 2	212	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	B. 9		28,00	
706	16	0	In			mm	,00	1,00	NR 2	212	Gasket TA 50.5/31 150 LB RF (125÷2:	50 AARH)	_ B5B				
	ı	1		ı	1	1					M Erection			I	Total Kg:	1302,52	
SX1	SULPH	UREX G	H/F			16016	- 0			SX1	SX1 1	. / 1		T	OTAL Kg:	1302,52	

Plant SX1 SULPHUREX GH/F	Piping Class 212	Welding specification	on SP.1406/2-SP.1407/3
Line 16016 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

S2	Ball In In In In In In In In	T1 2,77 3,38 2,11 2,11	T2		,00 ,00 ,00	0,10	Um Pip. class m 215	Component Pipe ASME B36.19 PL Seamless AS	Size: In T	hk: mm	1E35-65-029 Temp: °C Gen. Bolt	Pres: BAR Weight (Kg) As.bly 0.13	Corr: mm Branch
0 0 0 0	In In In In	T1 2,77 3,38 2,11	T2	mm mm	,00 ,00 ,00	0,10	Um Pip. class m 215	Component Pipe ASME B36.19 PL Seamless AS			•	Weight (Kg) As.bly	
0 0 0 0	In In In In	2,77 3,38 2,11	T2	mm mm	,00 ,00 ,00	0,10	m 215	Pipe ASME B36.19 PL Seamless AS	ГМ А 312 TP 3	604	Gen. Bolt	8 (8)	Brancl
U	In In In In	3,38 2,11		mm mm	,00,	0,10		1	ГМ A 312 TP 3	104		0.12	
U	In In In	2,11		mm	,00	-, -	m 215	D' 4 CD FE DOC 10 DI C 1 1 CC		.01		0,13	
U	In In					0.60		Pipe ASME B36.19 PL Seamless AS	ГМ A 312 TP 3	04		0,26	
U	In	2,11		mm		0,00	m 215	Pipe ASME B36.19 PL E.R.W. ASTN	M A 312 TP 30	4		2,76	
U					,00	2,00	m 215	Pipe ASME B36.19 PL E.R.W. ASTN	M A 312 TP 30	4		11,91	
0	In			mm	,00	1,00	NR 215	Sight Glass ST.46353/1 FLG 150 LB ASTM A 351 GR. CF8M FG 64	RF (125÷250 A	AARH) Cast	5135	26,53	
0				mm	,00	1,00	NR 215	Flange Lap-Joint ASME B16.5 150 L ASTM A 105 Galvanized	B Flat Face Sm	ooth Forged	5135	2,20	
	In			mm	,00	2,00	NR 215	Flange Lap-Joint ASME B16.5 150 L ASTM A 105 Galvanized	B Flat Face Sm	ooth Forged	5137	8,20	
3	In	2,11	2,11	mm	,00	1,00	NR 215	Reducer Concentric ASME B16.9 BE WP304	E Wrought W A	STM A 403	GR.	0,58	
2	In	2,11	3,91	mm	,00	1,00	NR 215	Reducer Eccentric ASME B16.9 BE WP304	Wrought W AS	TM A 403 (GR.	0,58	
0	In			mm	,00	1,00	NR 215	Coupling TA 50.7/2 THRD-F NPT 3 F304	000# Forged A	STM A 182	GR.	0,31	
0	In			mm	,00	1,00	NR 215	Coupling Half TA 50.7/2 THRD-F N GR. F304	PT 3000# Forg	ged ASTM A	A 182	0,15	
0	In	3,91		mm	,00	1,00	NR 215	Stub-End MSS SP-43 FLG x BE Wro WP304 Type A	ought S ASTM	A 403 GR.		0,48	
0	In	2,11		mm	,00	2,00	NR 215		ught W ASTM	A 403 GR.		0,80	
0	In			mm	,00	1,00	NR 215	Cap TA 50.7/2 THRD-F NPT 3000#	Forged ASTM	A 182 GR.	F304	0,12	
0	In			mm	95,00	8,00	NR 215			NC/2.2 TAI	3.9	1,84	
0	In			mm	105,00	8,00	NR 215			NC/2.2 TAI	3.9	1,92	
0	In			mm	,00	1,00	NR 215			B5F			
	0	0 In 0 In 0 In	0 In 0 In 0 In	0 In 0 In 0 In	0	0 In mm ,00 0 In mm 95,00 0 In mm 105,00	0 In mm ,00 1,00 0 In mm 95,00 8,00 0 In mm 105,00 8,00 0 In mm ,00 1,00	0 In mm ,00 1,00 NR 215 0 In mm 95,00 8,00 NR 215 0 In mm 105,00 8,00 NR 215 0 In mm ,00 1,00 NR 215	0 In 2,11 mm ,00 2,00 NR 215 Stub-End MSS SP-43 FLG x BE Wro WP304 Type A 0 In mm ,00 1,00 NR 215 Cap TA 50.7/2 THRD-F NPT 3000# 0 In mm 95,00 8,00 NR 215 Stud Bolt + 2 Nuts TA 50.48B/28 AS ASTM A 193 B7/A194 2H Galvanize ASTM A 193 B7/A194 2H Galvanize 0 In mm ,00 1,00 NR 215 Gasket TA 50.5/31 150 LB RF (125÷	0 In 2,11 mm ,00 2,00 NR 215 Stub-End MSS SP-43 FLG x BE Wrought W ASTM WP304 Type A 0 In mm ,00 1,00 NR 215 Cap TA 50.7/2 THRD-F NPT 3000# Forged ASTM OF THRD-F NPT 3000# Forged ASTM ASTM A 193 B7/A194 2H Galvanized 0 In mm 95,00 8,00 NR 215 Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UASTM A 193 B7/A194 2H Galvanized 0 In mm 105,00 8,00 NR 215 Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UASTM A 193 B7/A194 2H Galvanized 0 In mm ,00 1,00 NR 215 Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ 1	0 In 2,11 mm ,00 2,00 NR 215 Stub-End MSS SP-43 FLG x BE Wrought W ASTM A 403 GR. WP304 Type A 0 In mm ,00 1,00 NR 215 Cap TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 182 GR. 0 In mm 95,00 8,00 NR 215 Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAI ASTM A 193 B7/A194 2H Galvanized 0 In mm 105,00 8,00 NR 215 Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAI ASTM A 193 B7/A194 2H Galvanized 0 In mm ,00 1,00 NR 215 Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F	0 In 2,11 mm ,00 2,00 NR 215 Stub-End MSS SP-43 FLG x BE Wrought W ASTM A 403 GR. WP304 Type A 0 In mm ,00 1,00 NR 215 Cap TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 182 GR. F304 0 In mm 95,00 8,00 NR 215 Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H Galvanized 0 In mm 105,00 8,00 NR 215 Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H Galvanized 0 In mm ,00 1,00 NR 215 Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F	0 In 2,11 mm ,00 2,00 NR 215 Stub-End MSS SP-43 FLG x BE Wrought W ASTM A 403 GR. WP304 Type A 0 In mm ,00 1,00 NR 215 Cap TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 182 GR. F304 0,12 0 In mm 95,00 8,00 NR 215 Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 1,84 ASTM A 193 B7/A194 2H Galvanized 0 In mm 105,00 8,00 NR 215 Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 1,92 ASTM A 193 B7/A194 2H Galvanized 0 In mm ,00 1,00 NR 215 Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F

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LT_16.1	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	sP.1406/2-SP.1408/3
TET_16.7	Line 16017 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

Balle	stra	SKETCHES MATERIAL LIST	PROJ	: 1E35	REV: 0	13/04/2010
PUMA5	13/04/2010 11.47.29		DOC:	1E35-65-029		
	Ballestra	SULPHUREX GH/F	Size: In Thk: mm	Temp: °C	Pres: BAR	Corr: mm

3.7. 1	01	G2		TD1	Т2		T		T T	D' I	G		G . D . I	TT. 1.14 (TZ.)	A . 1.1	n 1
Mark	S1	S2		T1	12		Len mm	Qty	Um	Pip. clas	s Component		Gen. Bolt	Weight (Kg)	As.bly	Branch
717	3	0	In			mm	,00	3,00	NR	215	Gasket TA 50.5/31	150 LB RF (125÷250 AARH) _ B5F				
	·		•								M Erection		Total Kg:	58,78		
SX1	SULPHI	UREX GI	I/F			16017	- 0		-	SX1	SX1	1 / 1	TOTAL Kg:	58,78		

LT_16.1	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
TET_16.7	Line 16017 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 2
	Zones			

	Ballestra								SKE	TCHES MATERIAL LIST		PROJ:	1E35		REV: 0	13	/04/2010
	PUMA5	;		13/04/2	2010 11.4	47.29						DOC:	1E35-	-65-029	•		
			Ball	lestra						SULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um Pip.	class Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1504	1/2	0	In	2,77		mm	,00	0,60	-	Pipe ASME B36.19 PL Seamless A	STM A 312 TI	P 304			0,77		
1509	2	0	In	3,91		mm	,00	12,20	m 215	Pipe ASME B36.19 PL Seamless A	STM A 312 TI	2 304			67,68		
2858	2	0	In			mm	,00	5,00	NR 215	Valve Ball Full Port ST.46586/3 LU Cast ASTM A 351 CF8 S 123	JG 150 LB RF	(125÷250 AA	RH)	5384	33,16		
2862	1/2	0	In			mm	,00	1,00	NR 215	Valve Ball Full Port ST.46545/1 TF A 182 GR. F316 S 99	IRD-F NPT 80	00# Forged AS	TM		0,71		
451	2	0	In			mm	,00	11,00	NR 215	Flange Lap-Joint ASME B16.5 150 ASTM A 105 Galvanized	LB Flat Face S	Smooth Forged	l	5135	24,20		
332	2	0	In	3,91		mm	,00	7,00	NR 215	90° Elbow Long Radius ASME B16 GR. WP304	6.9 BE Wrough	nt S ASTM A	403		4,75		
1773	2	1	In	3,91	3,38	mm	,00	1,00	NR 215	Reducer Concentric ASME B16.9 E WP304	BE Wrought S	ASTM A 403	GR.		0,44		
1775	2	1+1/2	In	3,91	3,68	mm	,00	2,00	NR 215	Reducer Concentric ASME B16.9 E	BE Wrought S	ASTM A 403	GR.		0,88		
1049	1/2	0	In			mm	,00	1,00	NR 215	Coupling TA 50.7/2 THRD-F NPT F304	3000# Forged	ASTM A 182	GR.		0,12		
1212	2	0	In	3,91		mm	,00	11,00	NR 215	Stub-End MSS SP-43 FLG x BE W WP304 Type A	rought S ASTN	M A 403 GR.			5,27		
5129	1/2	0	In			mm	85,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 A ASTM A 193 B7/A194 2H Galvani		UNC/2.2 TAI	3. 9		0,48		
5135	5/8	0	In			mm	95,00	24,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 A ASTM A 193 B7/A194 2H Galvani		UNC/2.2 TAI	3. 9		5,52		
714	1+1/2	0	In			mm	,00	1,00	NR 215	Gasket TA 50.5/31 150 LB RF (125	5÷250 AARH)	_ B5F					
715	2	0	In			mm	,00	11,00	NR 215	Gasket TA 50.5/31 150 LB RF (125	5÷250 AARH)	_ B5F					
5384	5/8	0	In			mm	40,00	80,00	NR 215	Screws for valves ASME B 18.2.1 /	UNC ASTM A	193 B7 Galv	anized		12,00		
		•	•		,				'	M Erection				Total Kg:	155,99		
SX1	SULPHU	REX GI	I/F			16018	- 0		SX	1 SX1	1 / 1		Т	TOTAL Kg:	155,99		
PI_16.4							Plant SX1		REX GH/F	Piping Class 215			Wel	lding specificat	tion SP.1406/2-SP	.1408/3	
FE_16.4							Line 16018			Fluid			Syst				
							Dang. fluid	type		Coating		_	De p		Op t		
							Area SX1 Zones			Sketch Sht 1/1		Ison	netric co	ode		P	age 1
							Lones										

		В	allest	tra					S	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	\ 5		13/04/20	010 11.47	7.29							DOC:	1E35-6	65-029	•	•	
			Ba	illestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	Т2		Len mm	ı Qty	Um	Pip. clas	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1435	1	0	In	3,38		mm	,00	2,50	m	212	Pipe ASME B36.10 PL Seamless API 5	L GR. B				6,26		
467	1	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250) AARH) For	rged 5	5192	0,80		
324	1	0	In	3,38		mm	,00	1,00	NR	212	90° Elbow Long Radius ASME B16.9 I GR. WPB	BE Wrought	S ASTM A	234		0,14		
5192	1/2	0	In			mm	70,00	4,00	NR	212	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2 TAI	B. 9		0,44		
693	1	0	In			mm	,00	1,00	NR	212	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)_	B5B					
	'	'	,	'	'	1	1			1	M Erection				Total Kg:	7,63		
SX1	SULPH	UREX G	H/F			16019	- 0			SX1	SX1 1.	/ 1		Т	OTAL Kg:	7,63		

Plant SX1 SULPHUREX GH/F	Piping Class 212	Welding specificatio	n SP.1406/2-SP.1407/3
Line 16019 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allesti	a					S	KETCH	IES MATERIAL LIST		PF	ROJ:	1E35	5	REV: 0	13/04/2010
	PUMA	15		13/04/20	010 11.47	.30							DO	OC:	1E35	5-65-029		
			Bal	lestra						SU	LPHUREX GH/F	Size: In	Thk: mr	n	Temp	:°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component					Gen. Bolt	Weight (Kg) As.b	y Branch
1509	2	0	In	3,91		mm	,00	3,70	m	215	Pipe ASME B36.19 PL Seamless ASTM	I A 312 TI	P 304				20,53	
2858	2	0	In			mm	,00	2,00	NR	215	Valve Ball Full Port ST.46586/3 LUG 1: Cast ASTM A 351 CF8 S 123	50 LB RF	(125÷25	60 AA	RH)	5384	13,26	
4898	2	0	In			mm	,00	1,00	NR	215	Sight Glass ST.46353/1 FLG 150 LB RF ASTM A 351 GR. CF8M FG 64	F (125÷250) AARH) Cast	t	5133	11,53	
451	2	0	In			mm	,00	5,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth 1	Forgeo	1	5135	11,00	
332	2	0	In	3,91		mm	,00	3,00	NR	215	90° Elbow Long Radius ASME B16.9 B GR. WP304	BE Wrough	nt S AST	M A	403		2,03	
1212	2	0	In	3,91		mm	,00	5,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ht S ASTN	A 403	GR.			2,39	
5133	5/8	0	In			mm	85,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.	2 TAI	B. 9		0,84	
5135	5/8	0	In			mm	95,00	12,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASMI ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.	2 TAI	B. 9		2,76	
715	2	0	In			mm	,00	6,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25)	0 AARH)	_ B5F					
5384	5/8	0	In			mm	40,00	32,00	NR	215	Screws for valves ASME B 18.2.1 /UNC	C ASTM A	193 B7	Galv	anized		4,80	
	*	*	•	`		,				N	1 Erection					Total Kg:	69,15	

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	on SP.1406/2-SP.1408/3
Line 16020 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

TOTAL Kg:

69,15

SX1 SX1

SULPHUREX GH/F

SX1

	Ballestra								S	SKETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13	/04/2010
	PUMA5	1		13/04/2	010 11.4	47.30							DOC:	1E35	-65-029	•	•	
			Ball	lestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR	C	Corr: mm
Mark	S1	S2	T	T1	Т2		Len mm	Otv	Un	ı Pip. clas	s Component				Gen. Bolt	Weight (Kg)	As hlv	Branch
1504	1/2	0	In	2,77	12	mm	,00	0,60		215	Pipe ASME B36.19 PL Seamless ASTM	I A 312 TP	304		Gen. Bon	0.77	113.DI	Dranen
1508	1+1/2	0	In	3,68		mm	,00		1	215	Pipe ASME B36.19 PL Seamless ASTM					80,57		+
2857	1+1/2	0	In	7,00		mm	,00		-	215	Valve Ball Full Port ST.46586/3 LUG 13			ARH)	5382	21,43		+
							7				Cast ASTM A 351 CF8 S 123			,		, -		
2862	1/2	0	In			mm	,00	1,00	NR	215	Valve Ball Full Port ST.46545/1 THRD- A 182 GR. F316 S 99	F NPT 80	0# Forged A	STM		0,71		
5003	1+1/2	0	In			mm	,00	1,00	NR	215	"Y" Valve Check ST.46360/5 FLG 150 Forged ASTM A 182 GR. F304 R 92	LB RF (12	5÷250 AARI	H)	5127	9,18		
450	1+1/2	0	In			mm	,00	9,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB I ASTM A 105 Galvanized	Flat Face S	mooth Forge	d	5129	12,60		
163	1+1/2	0	In	3,68		mm	,00	2,00	NR	215	45° Elbow Long Radius ASME B16.9 B GR. WP304	E Wrough	t S ASTM A	403		0,38		
331	1+1/2	0	In	3,68		mm	,00	12,00	NR	215	90° Elbow Long Radius ASME B16.9 B GR. WP304	E Wrough	t S ASTM A	403		4,51		
1775	2	1+1/2	In	3,91	3,68	mm	,00	1,00	NR	215	Reducer Concentric ASME B16.9 BE W WP304	rought S A	ASTM A 403	GR.		0,44		
1211	1+1/2	0	In	3,68		mm	,00	9,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ht S ASTM	1 A 403 GR.			2,57		
4539	1/2	0	In			mm	.00	1,00	NR	215	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged ASTI	M A 182 GR.	F304		0,12		T
5127	1/2	0	In			mm	75,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASMI ASTM A 193 B7/A194 2H Galvanized					0,48		
5129	1/2	0	In			mm	85,00	24,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASMI ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 TA	B. 9		2,88		
714	1+1/2	0	In			mm	,00	10,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷250	0 AARH)	B5F					\top
5382	1/2	0	In			mm	35,00	48,00	NR	215	Screws for valves ASME B 18.2.1 /UNC	C ASTM A	193 B7 Galv	anized		3,84		
											M Erection				Total Kg:	140,48		
SX1	SULPHU	REX GH	/F			16024	- 0			SX1	SX1 1/	1		,	TOTAL Kg:	140,48		
PCV_33							Plant SX1		REX	GH/F	Piping Class 215				- ·	tion SP.1406/2-SF	2.1408/3	
FO_33.1 PI 33.11							Line 16024				Fluid			•	tem			
F1_33.11	1						Dang. fluid Area SX1	type			Coating Sketch Sht 1/1		Y	De p metric c		Op		1
							Zones				Sketch Sht 1/1		180	шетыс С	oue		P	age 1

		F	Ballesti	ra					S	KETCH	IES MATERIAL LIST		PRO	J: 11	E35	REV: 0 13	3/04/2010
	PUMA	A 5		13/04/2	010 11.4	17.30							DOC	: 1I	E35-65-029		
			Bal	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	To	emp: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1506	1	0	In	3,38		mm	,00	8,00	m	215	Pipe ASME B36.19 PL Seamless ASTM	1 A 312 TF	P 304			20,43	
2855	1	0	In			mm	,00	1,00	NR	215	Valve Ball Full Port ST.46586/3 LUG 1 Cast ASTM A 351 CF8 S 123	50 LB RF	(125÷250 z	AARI	H) 5381	2,86	
5001	1	0	In			mm	,00	1,00	NR	215	"Y" Valve Check ST.46360/5 FLG 150 Forged ASTM A 182 GR. F304 R 92	LB RF (12	25÷250 AA	RH)	5126	4,59	
448	1	0	In			mm	,00	4,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth For	ged	5128	3,20	
329	1	0	In	3,38		mm	,00	4,00	NR	215	90° Elbow Long Radius ASME B16.9 E GR. WP304	BE Wrough	nt S ASTM	A 403	3	0,55	
1773	2	1	In	3,91	3,38	mm	,00	1,00	NR	215	Reducer Concentric ASME B16.9 BE W WP304	Vrought S	ASTM A 4)3 GF	₹.	0,44	
1209	1	0	In	3,38		mm	,00	4,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ght S ASTM	Л A 403 GI	₹.		0,65	
5126	1/2	0	In			mm	70,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 T	AB.	9	0,44	
5128	1/2	0	In			mm	80,00	8,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 T	AB.	9	0,96	
712	1	0	In			mm	.00	4,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5F				

Screws for valves ASME B 18.2.1 /UNC ASTM A 193 B7 Galvanized

1 / 1

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	on SP.1406/2-SP.1408/3
Line 16025 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

M Erection

SX1

16,00 NR 215

SX1

30,00

16025 - 0

5381

SX1

SULPHUREX GH/F

1,28

35,39

35,39

Total Kg:

TOTAL Kg:

		В	allestra	1					S	KETCH	ES MATERIAL LIST		PROJ:	1E35	REV:) 13	3/04/2010
	PUMA	.5		13/04/2	010 11.47	.30							DOC:	1E35-65-029		•	
			Balle	stra						SUL	PHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	Component			Gen. Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,40	m	212	Pipe ASME B36.10 PL Seamless API 5	L GR. B			0,51		
1453	3	0	In	3,18		mm	,00	1,50	m	212	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B			10,08		
			-														+

Mark	S1	S2		T1	T2	Len mm	Otv	Um	Pip. clas	s Component	Gen. Bolt	Weight (Kg) As.bly	Branch
	1/2	0	In		mm			-	-	•	GCII. BOIL	0 , 0	Dianch
1433	1/2	U	111	2,77	111111	,00	0,40		212	Pipe ASME B36.10 PL Seamless API 5L GR. B		0,51	
1453	3	0	In	3,18	mm	,00	1,50	m	212	Pipe ASME B36.10 PL E.R.W. API 5L GR. B		10,08	
399	1/2	0	In		mm	,00	1,00	NR	212	Flange Blind ASME B16.5 150 LB RF (125÷250 AARH) Forged	5191	0,40	
		-							1	ASTM A 105		1	
465	1/2	0	In		mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged	5191	0,40	
										ASTM A 105			
472	3	0	In		mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged	5201	4,10	
		_	_							ASTM A 105			
297	3	0	In	3,18	mm	.00	5,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 GR.		5,88	
		_	_	-						WPB			
4546	1/2	0	In		mm	,00	1,00	NR	212	Cap TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 105		0,12	
5191	1/2	0	In		mm	65,00	4,00	NR	212	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9		0,44	
										ASTM A 193 B7/ASTM A 194 GR.2H		,	
5201	5/8	0	In		mm	95,00	4,00	NR	212	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9		0,92	
										ASTM A 193 B7/ASTM A 194 GR.2H		,	
691	1/2	0	In		mm	,00	1,00	NR	212	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5B			
698	3	0	In		mm	,00	1,00	NR	212	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5B			
				,		•				M Erection	Total Kg:	22,85	
SX1	SULPH	UREX G	H/F		16026 -	0			SX1	SX1 1/1	TOTAL Kg:	22,85	

Plant SX1 SULPHUREX GH/F	Piping Class 212	Welding specification	on SP.1406/2-SP.1407/3
Line 16026 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		a					S	KETCH	IES MATERIAL LIST	P	ROJ: 1E3	5	REV: 0	13/04/2010		
	PUMA	.5		13/04/20	010 11.4	7.30						D	OC: 1E3	5-65-029	•	•
			Ball	estra						SUI	LPHUREX GH/F	Size: In Thk: m	m Tem	p: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component			Gen. Bolt	Weight (Kg) As.	bly Branch
1504	1/2	0	In	2,77		mm	,00	0,50	m	215	Pipe ASME B36.19 PL Seamless ASTM	1 A 312 TP 304			0,65	
1527	3	0	In	2,11		mm	,00	1,00	m	215	Pipe ASME B36.19 PL E.R.W. ASTM	A 312 TP 304			4,61	
6030	3	0	In			mm	,00	1,00	NR	215	Valve Ball Full Port ST.46586/3 LUG 1 Cast ASTM A 351 CF8 S 123	50 LB RF (125÷2	50 AARH)	5385	14,28	
2862	1/2	0	In			mm	,00	1,00	NR	215	Valve Ball Full Port ST.46545/1 THRD A 182 GR. F316 S 99	-F NPT 800# For	ged ASTM		0,71	
453	3	0	In			mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face Smooth	Forged	5137	4,10	
171	3	0	In	2,11		mm	,00	2,00	NR	215	45° Elbow Long Radius ASME B16.9 E GR. WP304	BE Wrought W AS	TM A 403		0,82	
1220	3	0	In	2,11		mm	,00	1,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	tht W ASTM A 40	3 GR.		0,40	
5137	5/8	0	In			mm	105,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 UNC/2	.2 TAB. 9		0,96	
717	3	0	In			mm	,00	2,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _ B5F				
5385	5/8	0	In			mm	45,00	16,00	NR	215	Screws for valves ASME B 18.2.1 /UNG	C ASTM A 193 B	7 Galvanize	d	2,56	
	'	1			,	•				N	1 Erection			Total Kg:	29,09	1

TOTAL Kg:

29,09

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	on SP.1406/2-SP.1408/3
Line 16027 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

SX1 SX1

SX1

SULPHUREX GH/F

		В	allestr	a					S	KETCH	IES MATERIAL LIST		PRO.			REV: 0	13/	/04/2010
	PUMA5	5		13/04/2	010 11.4	7.30							DOC	: 1E35	5-65-029			
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp	: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As blv	Branch
1507	1+1/4	0	In	3,56	1.2	mm	,00	0,20	-	215	Pipe ASME B36.19 PL Seamless ASTM	1 A 312 TI	P 304		Jen. Bon	0,69	15.01	Drunen
1508	1+1/2	0	In	3,68		mm	,00	10,50	m	215	Pipe ASME B36.19 PL Seamless ASTN	1 A 312 TI	P 304			43,38		
1509	2	0	In	3,91		mm	,00	4,80	m	215	Pipe ASME B36.19 PL Seamless ASTM	1 A 312 TI	P 304			26,63		
2858	2	0	In			mm	,00	2,00	NR	215	Valve Ball Full Port ST.46586/3 LUG 1 Cast ASTM A 351 CF8 S 123	50 LB RF	(125÷250 A	ARH)	5384	13,26		
5004	2	0	In			mm	,00	1,00	NR	215	"Y" Valve Check ST.46360/5 FLG 150 Forged ASTM A 182 GR. F304 R 92	LB RF (12	25÷250 AAF	RH)	5133	11,22		
447	3/4	0	In			mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth Forg	ged	5127	0,70		
449	1+1/4	0	In			mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth Forg	ged	5128	1,10		
450	1+1/2	0	In			mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth Forg	ged	5129	1,40		
451	2	0	In			mm	,00	6,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth Forg	ged	5135	13,20		
2491	2+1/2	0	In			mm	,00	1,00	NR	215	Drip Ring TA 50.65/3 WAFER 150 LB ASTM A 182 GR. F304	FF (125÷2	250 AARH)	Forged	5140	2,24		
331	1+1/2	0	In	3,68		mm	,00	1,00	NR	215	90° Elbow Long Radius ASME B16.9 E GR. WP304	BE Wrough	nt S ASTM	A 403		0,38		
332	2	0	In	3,91		mm	,00	1,00	NR	215	90° Elbow Long Radius ASME B16.9 F GR. WP304	BE Wrough	nt S ASTM	A 403		0,68		
1769	1+1/2	3/4	In	3,68	2,87	mm	,00	1,00	NR	215	Reducer Concentric ASME B16.9 BE V WP304	Vrought S	ASTM A 40	3 GR.		0,26		
											+					-		

PI_16.8	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
	Line 16028 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

WP304

Reducer Concentric ASME B16.9 BE Wrought S ASTM A 403 GR. WP304

Reducer Concentric ASME B16.9 BE Wrought S ASTM A 403 GR.

1774

1775

1+1/4 In

1+1/2 In

3,91

3,91

3,56

3,68

mm

,00

,00

1,00 NR 215

1,00 NR 215

0,44

	Ballestra PUMA5 13/04/2010 11.47.30								SKETCH	ES MATERIAL LIST		PROJ:	1E35	5	REV: 0 1	3/04/2010
	PUMA5	;		13/04/2	010 11.4	17.30						DOC:	1E35	5-65-029		
			Ball	estra					SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp): °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1790	2+1/2	2	In	2,11	3,91	mm	,00	2,00	NR 215	Reducer Concentric ASME B16.9 WP304	BE Wrought W	ASTM A 403	3 GR.		0,65	
1208	3/4	0	In	2,87		mm	,00	1,00	NR 215	Stub-End MSS SP-43 FLG x BE V WP304 Type A	Wrought S ASTM	I A 403 GR.			0,10	
1210	1+1/4	0	In	3,56		mm	,00	1,00	NR 215	Stub-End MSS SP-43 FLG x BE V WP304 Type A	Wrought S ASTM	I A 403 GR.			0,22	
1211	1+1/2	0	In	3,68		mm	,00	1,00	NR 215	Stub-End MSS SP-43 FLG x BE V WP304 Type A	Wrought S ASTM	I A 403 GR.			0,29	
1212	2	0	In	3,91		mm	,00	6,00	NR 215	Stub-End MSS SP-43 FLG x BE V WP304 Type A	Wrought S ASTM	I A 403 GR.			2,87	
5127	1/2	0	In			mm	75,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASTM A 193 B7/A194 2H Galvar		UNC/2.2 TA	B. 9		0,48	
5128	1/2	0	In			mm	80,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASTM A 193 B7/A194 2H Galvar		UNC/2.2 TAI	B. 9		0,48	
5129	1/2	0	In			mm	85,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASTM A 193 B7/A194 2H Galvar		UNC/2.2 TA	B. 9		0,48	
5133	5/8	0	In			mm	85,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASTM A 193 B7/A194 2H Galvar		UNC/2.2 TAI	B. 9		0,84	
5134	5/8	0	In			mm	90,00	-4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASTM A 193 B7/A194 2H Galvar		UNC/2.2 TAI	B. 9		-0,88	
5135	5/8	0	In			mm	95,00	12,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASTM A 193 B7/A194 2H Galvar		UNC/2.2 TAI	B. 9		2,76	
5136	5/8	0	In			mm	100,00	2,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASTM A 193 B7/A194 2H Galvar		UNC/2.2 TAI	B. 9		0,46	
5140	5/8	0	In			mm	125,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASTM A 193 B7/A194 2H Galvar	ASME B18.2.1	UNC/2.2 TA	B. 9		1,08	
711	3/4	0	In			mm	,00	1,00	NR 215	Gasket TA 50.5/31 150 LB RF (12		B5F				
713	1+1/4	0	In			mm	,00		NR 215	Gasket TA 50.5/31 150 LB RF (12	25÷250 AARH) _	B5F				

713	1+1/4	0	In	I	mm	,00	1,0	00 NR	215	Ga	asket TA 50.5/31 1	50 LB RF (125÷2	250 AARH) ₋	_ B5F					
PI_16.8						Plant SX1	SULPH	IUREX	GH/F		Pi	ping Class 215			Weld	ling specifica	ation SP.1406/2	2-SP.1408/3	
						Line 160	28 - 0					Fluid			Syste	m			
						Dang. flui	d type					Coating			De pr	es		Op tem	
						Area SX1						Sketch Sht 1/1		Ison	netric co	de		Pag	ge 2
						Zones													

	Ballestra								S	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13	/04/2010
	PUMA5			13/04/20	10 11.47	.31							DOC:	1E35-65-	029		-	
			Balles	stra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp: °C		Pres: BAR	C	Corr: mm
																	1	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component			Ger	n. Bolt	Weight (Kg)	As.bly	Branch
714	1+1/2	0	In			mm	,00	1,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _	_B5F					
715	2	0	In			mm	,00	6,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _	_B5F					
716	2+1/2	0	In			mm	,00	2,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _	_B5F					
5384	5/8	0	In			mm	40,00	32,00	NR	215	Screws for valves ASME B 18.2.1 /UN	C ASTM A	193 B7 Galv	anized		4,80		
											M Erection			To	otal Kg:	130,66		
SX1	SULPHUI	REX GI	H/F			16028	- 0			SX1	SX1 1	/ 1		TOT	AL Kg:	130,66		

PI_16.8	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
	Line 16028 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 3
	Zones			

		В	allestr	·a					SI	KETCH	IES MATERIAL LIST		PROJ	: 1E35	5	REV: 0 13	3/04/2010
	PUMA	A 5		13/04/2	010 11.4	7.31							DOC:	1E35	5-65-029		
			Ball	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp	o: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1509	2	0	In	3,91		mm	,00	22,50	m	215	Pipe ASME B36.19 PL Seamless ASTM	1 A 312 TF	P 304			124,83	
2858	2	0	In			mm	,00	1,00	NR	215	Valve Ball Full Port ST.46586/3 LUG 1. Cast ASTM A 351 CF8 S 123	50 LB RF	(125÷250 A	ARH)	5384	6,63	
451	2	0	In			mm	,00	3,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth Forg	ed	5135	6,60	
164	2	0	In	3,91		mm	,00	2,00	NR	215	45° Elbow Long Radius ASME B16.9 B GR. WP304	BE Wrough	nt S ASTM A	403		0,64	
332	2	0	In	3,91		mm	,00	5,00	NR	215	90° Elbow Long Radius ASME B16.9 B GR. WP304	BE Wrough	nt S ASTM A	403		3,39	
1212	2	0	In	3,91		mm	,00	3,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	tht S ASTN	M A 403 GR			1,44	
5135	5/8	0	In			mm	95,00	8,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 TA	AB. 9		1,84	
715	2	0	In			mm	,00	3,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5F				
5384	5/8	0	In			mm	40,00	16,00	NR	215	Screws for valves ASME B 18.2.1 /UNC	C ASTM A	. 193 B7 Gal	vanized		2,40	
				'		1				N	1 Erection				Total Kg:	147,76	

SX1 SX1

SX1

SULPHUREX GH/F

16029 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	on SP.1406/2-SP.1408/3
Line 16029 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

147,76

TOTAL Kg:

]	Ballestr	a					SKETCH	IES MATERIAL LIST		PROJ	: 1E35	i	REV: 0	13/04/2010
	PUMA	15		13/04/2	010 11.4	47.31	1					DOC:	1E35	5-65-029		
			Bal	lestra					SU	LPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Otro	Um Pip. class	Component				Gen. Bolt	Weight (Kg) As.bl	v Branch
1506	1	0	In	3,38	12	mm	,00	0,50		Pipe ASME B36.19 PL Seamless AST	л A 312 TP	304		Gen. Don	1,28	y branch
1509	2.	0	In	3,91		mm	,00	19,50		Pipe ASME B36.19 PL Seamless AST					108,18	
2855	1	0	In	3,71		mm	,00		NR 215	Valve Ball Full Port ST.46586/3 LUG			ARH)	5381	2,86	
2033	1	U					,00	1,00	1410	Cast ASTM A 351 CF8 S 123	130 ED RI	123.23071	11(11)	3301	2,00	
2858	2	0	In			mm	,00	2,00	NR 215	Valve Ball Full Port ST.46586/3 LUG Cast ASTM A 351 CF8 S 123	150 LB RF (125÷250 A.	ARH)	5384	13,26	
4898	2	0	In			mm	,00	1,00	NR 215	Sight Glass ST.46353/1 FLG 150 LB R ASTM A 351 GR. CF8M FG 64	F (125÷250	AARH) Ca	st	5133	11,53	
448	1	0	In			mm	,00	2,00	NR 215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face St	mooth Forgo	ed	5128	1,60	
451	2	0	In			mm	,00	12,00	NR 215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face St	mooth Forgo	ed	5135	26,40	
329	1	0	In	3,38		mm	,00	1,00	NR 215	90° Elbow Long Radius ASME B16.9 GR. WP304	BE Wrought	S ASTM A	403		0,14	
332	2	0	In	3,91		mm	,00	6,00	NR 215	90° Elbow Long Radius ASME B16.9 GR. WP304	BE Wrought	S ASTM A	403		4,07	
1773	2	1	In	3,91	3,38	mm	,00	1,00	NR 215	Reducer Concentric ASME B16.9 BE WP304	Wrought S A	STM A 403	3 GR.		0,44	
1209	1	0	In	3,38		mm	,00	2,00	NR 215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ght S ASTM	A 403 GR.			0,32	
1212	2	0	In	3,91		mm	,00	12,00	NR 215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ght S ASTM	A 403 GR.			5,75	
5128	1/2	0	In			mm	80,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	IE B18.2.1 U	JNC/2.2 TA	AB. 9		0,48	
5133	5/8	0	In			mm	85,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	IE B18.2.1 U	JNC/2.2 TA	AB. 9		0,84	
5135	5/8	0	In			mm	95,00	32,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	IE B18.2.1 U	JNC/2.2 TA	AB. 9		7,36	
T/T/ 10							DI CONT	OT IT PATE	DEV CHE	W. J. Cl. 215			***	11	41	2
KV_12.5	•						Plant SX1 Line 16030		REX GH/F	Piping Class 215 Fluid				elding specifica stem	tion SP.1406/2-SP.1408/	3
							Dang. fluid			Coating				ores	Op tem	
							Area SX1	F -		Sketch Sht 1/1		Iso	ometric o		op am	Page 1

Zones

		В	allestr	a					S	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13	3/04/2010
	PUMA	.5		13/04/2	2010 11.4	7.31							DOC:	1E35-65-0	029			
			Balle	estra						S	JLPHUREX GH/F	Size: In	Thk: mm	Temp: °C		Pres: BAR	(Corr: mm
										1							I	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	Component			Gen	. Bolt	Weight (Kg)	As.bly	Branch
712	1	0	In			mm	,00	2,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷2	50 AARH)	_ B5F					
715	2	0	In			mm	,00	11,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷2.	50 AARH)	_ B5F					
5381	1/2	0	In			mm	30,00	16,00	NR	215	Screws for valves ASME B 18.2.1 /UN	C ASTM A	A 193 B7 Galv	anized		1,28		
5384	5/8	0	In			mm	40,00	32,00	NR	215	Screws for valves ASME B 18.2.1 /UN	C ASTM A	A 193 B7 Galv	anized		4,80		
	·										M Erection			То	tal Kg:	190,59		
SX1	SULPHU	JREX G	H/F			16030	- 0			SX1	SX1 1	/ 1		TOTA	AL Kg:	190,59		

KV_12.5	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	n SP.1406/2-SP.1408/3
	Line 16030 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 2
	Zones			

	DVD 7:		allestr		04044	·= 24	4		SKETCH	IES MATERIAL LIST		PROJ			REV: 0	13/04/2010
	PUMA	15		13/04/2	010 11.4	17.31						DOC:	1E35	5-65-029		
			Ball	lestra					SU	LPHUREX GH/F	Size: In	Thk: mm	Temp): °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1504	1/2	0	In	2,77		mm	,00	3,00	m 215	Pipe ASME B36.19 PL Seamless ASTM	A 312 TI	P 304			3,87	
1505	3/4	0	In	2,87		mm	,00	18,50	m 215	Pipe ASME B36.19 PL Seamless ASTM	A 312 TI	P 304			31,84	
1506	1	0	In	3,38		mm	,00	2,00	m 215	Pipe ASME B36.19 PL Seamless ASTM	A 312 TI	P 304			5,11	
2863	3/4	0	In			mm	,00	1,00	NR 215	Valve Ball Full Port ST.46545/1 THRD-I A 182 GR. F316 S 99	F NPT 80	00# Forged A	ASTM		0,92	
4894	3/4	0	In			mm	,00	1,00	NR 215	Sight Glass ST.46353/1 FLG 150 LB RF ASTM A 351 GR. CF8M FG 64	(125÷250	0 AARH) Ca	ıst	5125	4,59	
4999	1/2	0	In			mm	,00	1,00	NR 215	"Y" Valve Check ST.46360/5 FLG 150 L Forged ASTM A 182 GR. F304 R 92	B RF (12	25÷250 AAR	H)	5125	3,06	
446	1/2	0	In			mm	,00	3,00	NR 215	Flange Lap-Joint ASME B16.5 150 LB F ASTM A 105 Galvanized	lat Face S	Smooth Forg	ed	5127	1,20	
447	3/4	0	In			mm	,00	2,00	NR 215	Flange Lap-Joint ASME B16.5 150 LB F ASTM A 105 Galvanized	lat Face S	Smooth Forg	ed	5127	1,40	
448	1	0	In			mm	,00	1,00	NR 215	Flange Lap-Joint ASME B16.5 150 LB F ASTM A 105 Galvanized	lat Face S	Smooth Forg	ed	5128	0,80	
160	3/4	0	In	2,87		mm	,00	1,00	NR 215	45° Elbow Long Radius ASME B16.9 BI GR. WP304	E Wrough	nt S ASTM A	403		0,03	
224	1/2	0	In			mm	,00	1,00	NR 215	90° Elbow TA 50.7/2 THRD-F NPT 300 F304	00# Forge	d ASTM A 1	82 GR.		0,41	
328	3/4	0	In	2,87		mm	,00	9,00	NR 215	90° Elbow Long Radius ASME B16.9 BI GR. WP304	E Wrough	nt S ASTM A	403		0,79	
329	1	0	In	3,38		mm	,00	1,00	NR 215	90° Elbow Long Radius ASME B16.9 BI GR. WP304	E Wrough	nt S ASTM A	403		0,14	
1762	3/4	1/2	In	2,87	2,77	mm	,00	2,00	NR 215	Reducer Concentric ASME B16.9 BE W WP304	rought S	ASTM A 40	3 GR.		0,12	
1207	1/2	0	In	2,77		mm	,00	3,00	NR 215	Stub-End MSS SP-43 FLG x BE Wrough WP304 Type A	nt S ASTN	M A 403 GR			0,25	

PSV_16.3	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
	Line 16032 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allest	ra						SKETC	HES MATERIAL LIST		PROJ	1E3	5	REV: 0	13/	/04/2010
	PUMA	15		13/04/2	010 11.4	7.31							DOC:	1E3	5-65-029	•		
			Bal	llestra						SI	JLPHUREX GH/F	Size: In	Thk: mm	Tem	p: °C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Ur	n Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1208	3/4	0	In	2,87		mm	,00	2,00	NI	R 215	Stub-End MSS SP-43 FLG x BE Wrou WP304 Type A	ght S ASTN	1 A 403 GR.			0,20	•	
1209	1	0	In	3,38		mm	,00	1,00	NI	R 215	Stub-End MSS SP-43 FLG x BE Wrou WP304 Type A	ght S ASTN	1 A 403 GR.			0,16		
5125	1/2	0	In			mm	65,00	8,00	NI	R 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized		UNC/2.2 TA	B. 9		0,88		
5127	1/2	0	In			mm	75,00	16,00	NI	R 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized		UNC/2.2 TA	B. 9		1,92		
5128	1/2	0	In			mm	80,00	4,00	NI	R 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized		UNC/2.2 TA	B. 9		0,48		
710	1/2	0	In			mm	,00	4,00	NI	R 215	Gasket TA 50.5/31 150 LB RF (125÷2.		_ B5F					T
711	3/4	0	In			mm	,00	2,00	NI	R 215	Gasket TA 50.5/31 150 LB RF (125÷2.	50 AARH)	_ B5F					
712	1	0	In			mm	,00	1,00	NI	R 215	Gasket TA 50.5/31 150 LB RF (125÷2	50 AARH)	B5F					

M Erection

1 / 1

SX1

SX1

SULPHUREX GH/F

16032 - 0

PSV_16.3	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	n SP.1406/2-SP.1408/3
	Line 16032 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 2
	Zones			

Total Kg:

TOTAL Kg:

58,17

		В	allestr	a					5	SKE	TCH	ES MATERIAL LIST]	PROJ	1E3	5	REV: 0	13/	/04/2010
	PUMA	15		13/04/20	010 11.4	7.31]	DOC:	1E3	5-65-029		•	
			Balle	estra							SUI	PHUREX GH/F	Size: In	Thk:	mm	Tem	p: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	n Pip.	class	Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1506	1	0	In	3,38		mm	,00	4,00	m	215		Pipe ASME B36.19 PL Seamless ASTM	1 A 312 TI	P 304				10,21		
2855	1	0	In			mm	,00	1,00	NF	215		Valve Ball Full Port ST.46586/3 LUG 1 Cast ASTM A 351 CF8 S 123	50 LB RF	(125÷	-250 A	ARH)	5381	2,86		
448	1	0	In			mm	,00	2,00	NF	215		Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smoot	h Forg	ed	5128	1,60		
329	1	0	In	3,38		mm	,00	1,00	NF	215		90° Elbow Long Radius ASME B16.9 E GR. WP304	BE Wrough	nt S A	STM A	A 403		0,14		
1209	1	0	In	3,38		mm	,00	2,00	NF	215		Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ht S ASTN	M A 4	03 GR	-		0,32		
5128	1/2	0	In			mm	80,00	4,00	NF	R 215		Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC	/2.2 TA	AB. 9		0,48		
712	1	0	In			mm	,00	2,00	NF	215		Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5F	7					
5381	1/2	0	In			mm	30,00	16,00	NF	215		Screws for valves ASME B 18.2.1 /UNO	C ASTM A	193	B7 Gal	lvanize	d	1,28		
											M	1 Erection					Total Kg:	16,89		

TOTAL Kg:

16,89

SX1 SX1

SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	n SP.1406/2-SP.1408/3
Line 16033 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

Balle	estra	SKETCHES MATERIAL LIST	PROJ:	1E35	REV: 0	13/04/2010
PUMA5	13/04/2010 11.47.32		DOC:	1E35-65-029		
	Ballestra	SULPHUREX GH/F	Size: In Thk: mm	Temp: °C	Pres: BAR	Corr: mm

25.1	G1	G2		m.	TD2	-	04	**	D: 1		G D H	***	
Mark	S1	S2		T1	T2	Len mm		_	Pip. class	s Component	Gen. Bolt	Weight (Kg) As.bly	Branch
1504	1/2	0	In	2,77	mm	,00	0,80	m	215	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 304		1,03	
1506	1	0	In	3,38	mm	,00	0,40	m	215	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 304		1,02	
1528	4	0	In	2,11	mm	,00	7,50	m	215	Pipe ASME B36.19 PL E.R.W. ASTM A 312 TP 304		44,67	
2862	1/2	0	In		mm	,00	1,00	NR	215	Valve Ball Full Port ST.46545/1 THRD-F NPT 800# Forged ASTM A 182 GR. F316 S 99		0,71	
454	4	0	In		mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5138	5,60	
172	4	0	In	2,11	mm	,00	2,00	NR	215	45° Elbow Long Radius ASME B16.9 BE Wrought W ASTM A 403 GR. WP304		1,38	
340	4	0	In	2,11	mm	,00	1,00	NR	215	90° Elbow Long Radius ASME B16.9 BE Wrought W ASTM A 403 GR. WP304		1,40	
1051	1	0	In		mm	,00	3,00	NR	215	Coupling TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 182 GR. F304		0,92	
1156	1/2	0	In		mm	,00	1,00	NR	215	Coupling Half TA 50.6/1 SW-F 3000# Forged ASTM A 182 GR. F304		0,15	
1221	4	0	In	2,11	mm	,00	1,00	NR	215	Stub-End MSS SP-43 FLG x BE Wrought W ASTM A 403 GR. WP304 Type A		0,62	
5138	5/8	0	In		mm	110,00	8,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H Galvanized		2,00	
718	4	0	In		mm	,00	1,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F			
	*			•					•	M Erection	Total Kg:	59,51	
SX1	SULPH	UREX G	H/F		16035	- 0			SX1	SX1 1/1	ГОТАL Kg:	59,51	

TET_16.11	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
	Line 16035 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

Ball	estra	SKETCHES MATERIAL LIST		PROJ:	1E35	REV: 0	13/04/2010
PUMA5	13/04/2010 11.47.32			DOC:	1E35-65-029		
	Ballestra	SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	Corr: mm

Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	s Component	Gen. Bolt	Weight (Kg) As.bly	Branch
1504	1/2	0	In	2,77	mm	,00	0,80	m	215	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 304		1,03	
1506	1	0	In	3,38	mm	,00	0,10	m	215	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 304		0,26	
1528	4	0	In	2,11	mm	,00	2,00	m	215	Pipe ASME B36.19 PL E.R.W. ASTM A 312 TP 304		11,91	
2862	1/2	0	In		mm	,00	1,00	NR	215	Valve Ball Full Port ST.46545/1 THRD-F NPT 800# Forged ASTM A 182 GR. F316 S 99		0,71	
4901	4	0	In		mm	,00	2,00	NR	215	Sight Glass ST.46353/1 FLG 150 LB RF (125÷250 AARH) Cast ASTM A 351 GR. CF8M FG 64	5135	73,47	
454	4	0	In		mm	,00	5,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5138	28,00	
340	4	0	In	2,11	mm	,00	1,00	NR	215	90° Elbow Long Radius ASME B16.9 BE Wrought W ASTM A 403 GR. WP304		1,40	
1051	1	0	In		mm	,00	1,00	NR	215	Coupling TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 182 GR. F304		0,31	
1156	1/2	0	In		mm	,00	1,00	NR	215	Coupling Half TA 50.6/1 SW-F 3000# Forged ASTM A 182 GR. F304	4	0,15	
1221	4	0	In	2,11	mm	,00	5,00	NR	215	Stub-End MSS SP-43 FLG x BE Wrought W ASTM A 403 GR. WP304 Type A		3,12	
5135	5/8	0	In		mm	95,00	16,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H Galvanized		3,68	
5138	5/8	0	In		mm	110,00	24,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H Galvanized		6,00	
718	4	0	In		mm	,00	5,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F			
					1	· •				M Erection	Total Kg:	130,04	1
SX1	SULPH	UREX G	H/F		16036	- 0			SX1	SX1 1 / 1	TOTAL Kg:	130,04	

TET_16.15	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specificatio	n SP.1406/2-SP.1408/3
	Line 16036 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		F	Ballestı	ra					SK	ETCI	HES MATERIAL LIST	Γ		PROJ	: 1E3	5	REV: 0	13/04/2010
	PUMA	15		13/04/2	2010 11.4	47.32								DOC:	1E3:	5-65-029	, , ,	
			Bal	lestra						SU	JLPHUREX GH/F	Size	e: In	Thk: mm	Temp): ℃	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Otv	Um Pi	ip. class	Component					Gen. Bolt	Weight (Kg) As.bl	y Branch
1504	1/2	0	In	2,77		mm	,00	6,00		•	Pipe ASME B36.19 PL Seamle	ess ASTM A 3	12 TP	304			7,75	5
1506	1	0	In	3,38		mm	,00	0,50	m 21	15	Pipe ASME B36.19 PL Seamle	ess ASTM A 3	12 TP	304			1,28	
1509	2	0	In	3,91		mm	,00	0,20			Pipe ASME B36.19 PL Seamle	ess ASTM A 3	12 TP	304			1,11	
1527	3	0	In	2,11		mm	,00	2,00	m 21	15	Pipe ASME B36.19 PL E.R.W	. ASTM A 312	TP 3	04			9,22	
2862	1/2	0	In			mm	,00	1,00	NR 21	15	Valve Ball Full Port ST.46545 A 182 GR. F316 S 99	/1 THRD-F N	PT 80	0# Forged A	STM		0,71	
2864	1	0	In			mm	,00	1,00	NR 21	15	Valve Ball Full Port ST.46545 A 182 GR. F316 S 99	/1 THRD-F N	PT 80	0# Forged A	STM		1,43	
451	2	0	In			mm	,00	2,00	NR 21	15	Flange Lap-Joint ASME B16.5 ASTM A 105 Galvanized	5 150 LB Flat F	ace S	mooth Forg	ed	5135	4,40	
171	3	0	In	2,11		mm	,00	1,00	NR 21	15	45° Elbow Long Radius ASMI GR. WP304	E B16.9 BE W	rough	t W ASTM	A 403		0,41	
329	1	0	In	3,38		mm	,00	1,00	NR 21	15	90° Elbow Long Radius ASMI GR. WP304	E B16.9 BE W	rough	t S ASTM A	403		0,14	
339	3	0	In	2,11		mm	,00	1,00	NR 21	15	90° Elbow Long Radius ASMI GR. WP304	E B16.9 BE W	rough	t W ASTM	A 403		0,80	
1791	3	2	In	2,11	3,91	mm	,00	2,00	NR 21	15	Reducer Concentric ASME B1 WP304	6.9 BE Wroug	ht W	ASTM A 40)3 GR.		0,78	
1117	1/2	0	In			mm	,00	1,00	NR 21	15	Coupling Half TA 50.7/2 THR GR. F304	D-F NPT 300	0# Fo	rged ASTM	A 182		0,06	
1212	2	0	In	3,91		mm	,00	2,00	NR 21	15	Stub-End MSS SP-43 FLG x E WP304 Type A	BE Wrought S	ASTM	I A 403 GR.	•		0,96	
5135	5/8	0	In			mm	95,00	8,00	NR 21	15	Stud Bolt + 2 Nuts TA 50.48B ASTM A 193 B7/A194 2H Ga		8.2.1	UNC/2.2 TA	AB. 9		1,84	
715	2	0	In			mm	,00	2,00	NR 21	15	Gasket TA 50.5/31 150 LB RF	7 (125÷250 AA	RH) _	B5F				
		'	'	'	_	'			'		M Erection					Total Kg:	30,87	
SX1	SULPH	UREX C	SH/F			16037	- 0			SX1	SX1	1 / 1				TOTAL Kg:	30,87	
PI_16.7							Plant SX1 S		REX GH	//F	Piping Class	215			W	elding specificat	ion SP.1406/2-SP.1408/	/3
							Line 16037				Fluid				•	stem		
							Dang. fluid Area SX1	type			Coating Sketch Sht				De ometric	pres	Op tem	

Zones

			Ballestr						SKETCH	IES MATERIAL LIST		PROJ:			REV: 0 1	3/04/2010
	PUMA	15		13/04/2	010 11.4	7.32						DOC:	1E35	5-65-029		
			Ball	estra					SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp) : ℃	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1506	1	0	In	3,38		mm	,00	0,20	m 215	Pipe ASME B36.19 PL Seamless A	STM A 312 TF	304			0,51	
1527	3	0	In	2,11		mm	,00	1,00	m 215	Pipe ASME B36.19 PL E.R.W. AS	TM A 312 TP 3	304			4,61	
1528	4	0	In	2,11		mm	,00	1,00	m 215	Pipe ASME B36.19 PL E.R.W. AS	TM A 312 TP 3	304			5,96	
6030	3	0	In			mm	,00	1,00	NR 215	Valve Ball Full Port ST.46586/3 LU Cast ASTM A 351 CF8 S 123	JG 150 LB RF	(125÷250 AA	ARH)	5385	14,28	
451	2	0	In			mm	,00	1,00	NR 215	Flange Lap-Joint ASME B16.5 150 ASTM A 105 Galvanized	LB Flat Face S	mooth Forge	ed	5135	2,20	
453	3	0	In			mm	,00	2,00	NR 215	Flange Lap-Joint ASME B16.5 150 ASTM A 105 Galvanized	LB Flat Face S	mooth Forge	ed	5137	8,20	
339	3	0	In	2,11		mm	,00	1,00	NR 215	90° Elbow Long Radius ASME B10 GR. WP304	6.9 BE Wrough	t W ASTM A	A 403		0,80	
1793	4	2	In	2,11	3,91	mm	,00	1,00	NR 215	Reducer Concentric ASME B16.9 I WP304	BE Wrought W	ASTM A 40	3 GR.		0,58	
1795	4	3	In	2,11	2,11	mm	,00	1,00	NR 215	Reducer Concentric ASME B16.9 I WP304	BE Wrought W	ASTM A 40	3 GR.		0,58	
1051	1	0	In			mm	,00	1,00	NR 215	Coupling TA 50.7/2 THRD-F NPT F304	3000# Forged	ASTM A 18	2 GR.		0,31	
1212	2	0	In	3,91		mm	,00	1,00	NR 215	Stub-End MSS SP-43 FLG x BE W WP304 Type A	rought S ASTN	1 A 403 GR.			0,48	
1220	3	0	In	2,11		mm	,00	2,00	NR 215	Stub-End MSS SP-43 FLG x BE W WP304 Type A	rought W AST	M A 403 GR			0,80	
5135	5/8	0	In			mm	95,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 A ASTM A 193 B7/A194 2H Galvani		UNC/2.2 TA	В. 9		0,92	
5137	5/8	0	In			mm	105,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 A ASTM A 193 B7/A194 2H Galvani	ASME B18.2.1	UNC/2.2 TA	В. 9		0,96	
715	2	0	In			mm	,00	1,00	NR 215	Gasket TA 50.5/31 150 LB RF (125		_B5F				
717	3	0	In			mm	,00		NR 215	Gasket TA 50.5/31 150 LB RF (125						
5385	5/8	0	In			mm	45,00	16,00	NR 215	Screws for valves ASME B 18.2.1	UNC ASTM A	193 B7 Galv	anized		2,56	

TI_16.3	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specificati	on SP.1406/2-SP.1408/3
	Line 16038 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

Ballestra	SKETCHES MATERIAL LIST	PROJ:	1E35	REV: 0	13/04/2010
PUMA5 13/04/2010 11.47.32		DOC:	1E35-65-029		
Ballestra	SULPHUREX GH/F	Size: In Thk: mm	Temp: °C	Pres: BAR	Corr: mm

Mark	S1 S2	T1	T2	Len mm	Qty Um Pip. cla	ss Component		Gen. Bolt	Weight (Kg) As	.bly	Branch
						M Erection		Total Kg:	43,74		
SX1	SULPHUREX GH/F			16038 - 0	SX1	SX1	1 / 1 T 0	OTAL Kg:	43,74		

TI_16.3	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
	Line 16038 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 2
	Zones			

]	Ballestr	a					SKETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0 1	3/04/2010
	PUMA	\ 5		13/04/2	010 11.4	7.32						DOC:	1E35-	-65-029		
			Ball	lestra					SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Otv	Um Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1504	1/2	0	In	2,77	12	mm	.00	0,20		Pipe ASME B36.19 PL Seamless AST	M A 312 TP	304		Gen. Bon	0,26	Dianen
1505	3/4	0	In	2,87		mm	,00	1,00		Pipe ASME B36.19 PL Seamless AST					1,72	
1506	1	0	In	3,38		mm	,00	0,20	m 215	Pipe ASME B36.19 PL Seamless AST	TM A 312 TP	304			0,51	
1509	2	0	In	3,91		mm	,00	3,10	m 215	Pipe ASME B36.19 PL Seamless AST	TM A 312 TP	304			17,20	
4898	2	0	In			mm	,00	1,00	NR 215	Sight Glass ST.46353/1 FLG 150 LB ASTM A 351 GR. CF8M FG 64	RF (125÷250	AARH) Cas	st	5133	11,53	
447	3/4	0	In			mm	,00	1,00	NR 215	Flange Lap-Joint ASME B16.5 150 LI ASTM A 105 Galvanized	B Flat Face S	mooth Forge	d	5127	0,70	
448	1	0	In			mm	,00	1,00	NR 215	Flange Lap-Joint ASME B16.5 150 LI ASTM A 105 Galvanized	B Flat Face S	mooth Forge	d	5128	0,80	
451	2	0	In			mm	,00	1,00	NR 215	Flange Lap-Joint ASME B16.5 150 LI ASTM A 105 Galvanized	B Flat Face S	mooth Forge	d	5135	2,20	
328	3/4	0	In	2,87		mm	,00	1,00	NR 215	90° Elbow Long Radius ASME B16.9 GR. WP304	BE Wrough	t S ASTM A	403		0,09	
332	2	0	In	3,91		mm	,00	2,00	NR 215	90° Elbow Long Radius ASME B16.9 GR. WP304	BE Wrough	t S ASTM A	403		1,36	
1773	2	1	In	3,91	3,38	mm	,00	1,00	NR 215	Reducer Concentric ASME B16.9 BE WP304	Wrought S A	ASTM A 403	GR.		0,44	
1049	1/2	0	In			mm	,00	1,00	NR 215	Coupling TA 50.7/2 THRD-F NPT 30 F304	000# Forged	ASTM A 182	2 GR.		0,12	
1208	3/4	0	In	2,87		mm	,00	1,00	NR 215	Stub-End MSS SP-43 FLG x BE Wrot WP304 Type A	ught S ASTM	I A 403 GR.			0,10	
1209	1	0	In	3,38		mm	,00	1,00	NR 215	Stub-End MSS SP-43 FLG x BE Wrot WP304 Type A	ught S ASTM	I A 403 GR.			0,16	
1212	2	0	In	3,91		mm	,00	1,00	NR 215	Stub-End MSS SP-43 FLG x BE Wrot WP304 Type A	ught S ASTM	I A 403 GR.			0,48	
5127	1/2	0	In			mm	75,00	2,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASI ASTM A 193 B7/A194 2H Galvanized		UNC/2.2 TA	B. 9		0,24	
PSV_16. PI_16.8	.1						Plant SX1 S Line 16039		REX GH/F	Piping Class 215 Fluid			Wel Syst	- ·	tion SP.1406/2-SP.1408/3	3
							Dang. fluid	type		Coating			De p	res	Op tem	

Sketch Sht 1/1

Area SX1

Zones

Page 1

Isometric code

		В	allestra	1					S	KETCH	ES MATERIAL LIST		PRO.	1E3:	5	REV: 0	13/	/04/2010
	PUMA:	5		13/04/20)10 11.4	7.32							DOC	1E3:	5-65-029	•		
			Balle	stra						SUI	PHUREX GH/F	Size: In	Thk: mm	Tem): °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	n Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
5128	1/2	0	In			mm	80,00	2,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 T	AB. 9		0,24		
5133	5/8	0	In			mm	85,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 T	AB. 9		0,84		
5135	5/8	0	In			mm	95,00	2,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	E B18.2.1	UNC/2.2 T	AB. 9		0,46		

ASTM A 193 B7/A194 2H Galvanized

Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F

Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F

Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F

			M Erection		Total Kg:	39,45
SX1	SUI PHUREX GH/E	16039 - 0	SX1 SX1	1 / 1	TOTAL Ko:	39 45

1,00 NR 215

1,00 NR 215

2,00 NR 215

mm

mm

,00

711

712

715

3/4

PSV_16.1	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
PI_16.8	Line 16039 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 2
	Zones			

		В	allestr	a					S	KETCH	IES MATERIAL LIST		PROJ	1E35	5	REV: 0	13/	/04/2010
	PUMA	5		13/04/2	010 11.4	7.33	1						DOC:	1E35	5-65-029	•		
			Ball	estra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR	С	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) A	s.bly	Branch
1504	1/2	0	In	2,77		mm	,00	0,10	m	215	Pipe ASME B36.19 PL Seamless ASTM	A 312 TP	304			0,13		
1509	2	0	In	3,91		mm	,00	2,20	m	215	Pipe ASME B36.19 PL Seamless ASTM	A 312 TP	304			12,21		
1527	3	0	In	2,11		mm	,00	1,00	m	215	Pipe ASME B36.19 PL E.R.W. ASTM	312 TP 3	04			4,61		
1528	4	0	In	2,11		mm	,00	0,50	m	215	Pipe ASME B36.19 PL E.R.W. ASTM	312 TP 3	04			2,98		
2858	2	0	In			mm	,00	1,00	NR	215	Valve Ball Full Port ST.46586/3 LUG 1 Cast ASTM A 351 CF8 S 123	50 LB RF ((125÷250 A	ARH)	5384	6,63		
451	2	0	In			mm	,00	2,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	mooth Forge	ed	5135	4,40		
454	4	0	In			mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	mooth Forge	ed	5138	5,60		
332	2	0	In	3,91		mm	,00	1,00	NR	215	90° Elbow Long Radius ASME B16.9 E GR. WP304	E Wrough	t S ASTM A	403		0,68		
2218	4	2	In	2,11	3,91	mm	,00	1,00	NR	215	Reducer Eccentric ASME B16.9 BE Wi WP304	ought W A	STM A 403	GR.		0,58		
2220	4	3	In	2,11	2,11	mm	,00	1,00	NR	215	Reducer Eccentric ASME B16.9 BE Wi WP304	ought W A	STM A 403	GR.		0,58		
1212	2	0	In	3,91		mm	,00	2,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ht S ASTM	I A 403 GR.			0,96		
1221	4	0	In	2,11		mm	,00	1,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ht W ASTI	M A 403 GR			0,62		
4539	1/2	0	In			mm	,00	1,00	NR	215	Cap TA 50.7/2 THRD-F NPT 3000# Fo	rged ASTN	M A 182 GR	. F304		0,12		
5135	5/8	0	In			mm	95,00	8,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized					1,84		
5138	5/8	0	In			mm	110,00	8,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	E B18.2.1	UNC/2.2 TA	В. 9		2,00		

LT_16.4	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	on SP.1406/2-SP.1408/3
	Line 16040 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

Screws for valves ASME B 18.2.1 /UNC ASTM A 193 B7 Galvanized

Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F

Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F

ASTM A 193 B7/A194 2H Galvanized

5/8

715

718

5384

mm

mm

,00

,00

40,00

3,00 NR 215

1,00 NR 215

16,00 NR 215

Balle	estra	SKETCHES MATERIAL LIST		PROJ:	1E35	REV:	13/04/2010
PUMA5	13/04/2010 11.47.33			DOC:	1E35-65-029		
	Ballestra	SULPHUREX GH/F	Size: In Th	k: mm	Temp: °C	Pres: BAR	Corr: mm

Mark	S1	S2	T1	T2	Len mm	Qty Um Pip. clas	s Component		Gen. Bolt	Weight (Kg) As.h	ly Branch
							M Erection		Total Kg:	46,34	
SX1	SULPHI	JREX GH/F	7	16	5040 - 0	SX1	SX1	1/1	OTAL Kg:	46,34	

LT_16.4	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
	Line 16040 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 2
	Zones			

		Ва	allestr	a					S	KETC	HES MATERIAL LIST		PROJ:	: 1E35		REV:	0 1	3/04/2010
	PUMA	15		13/04/20	10 11.4	7.33							DOC:	1E35-	65-029			
			Ball	lestra						SI	LPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR		Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (K	g) As.bly	Branch
1509	2	0	In	3,91		mm	,00,	0,50	m	215	Pipe ASME B36.19 PL Seamless AST	M A 312 T	P 304			2,7	7	

Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	s Component	Gen. Bolt	Weight (Kg) As.bly	Branch
1509	2	0	In	3,91	mm	,00	0,50	m	215	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 304		2,77	
1528	4	0	In	2,11	mm	,00	0,50	m	215	Pipe ASME B36.19 PL E.R.W. ASTM A 312 TP 304		2,98	
2858	2	0	In		mm	,00	1,00	NR	215	Valve Ball Full Port ST.46586/3 LUG 150 LB RF (125÷250 AARH) Cast ASTM A 351 CF8 S 123	5384	6,63	
451	2	0	In		mm	,00	2,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5135	4,40	
454	4	0	In		mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5138	5,60	
2218	4	2	In	2,11	3,91 mm	,00	1,00	NR	215	Reducer Eccentric ASME B16.9 BE Wrought W ASTM A 403 GR. WP304		0,58	
1212	2	0	In	3,91	mm	,00	2,00	NR	215	Stub-End MSS SP-43 FLG x BE Wrought S ASTM A 403 GR. WP304 Type A		0,96	
1221	4	0	In	2,11	mm	,00	1,00	NR	215	Stub-End MSS SP-43 FLG x BE Wrought W ASTM A 403 GR. WP304 Type A		0,62	
5135	5/8	0	In		mm	95,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H Galvanized		0,92	
5138	5/8	0	In		mm	110,00	8,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H Galvanized		2,00	
715	2	0	In		mm	,00	2,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F			
718	4	0	In		mm	,00	1,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F			
5384	5/8	0	In		mm	40,00	16,00	NR	215	Screws for valves ASME B 18.2.1 /UNC ASTM A 193 B7 Galvanized		2,40	
	•	'								M Erection	Total Kg:	29,87	
SX1	SULPH	UREX G	H/F		16041	- 0			SX1	SX1 1/1	ΓΟΤΑL Kg:	29,87	

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	on SP.1406/2-SP.1408/3
Line 16041 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCH	IES MATERIAL LIST		PROJ	J : 11	E35	REV: 0	13/0	4/2010
	PUMA	.5		13/04/20	010 11.4	7.33							DOC:	1I	E35-65-029	<u> </u>		
			Balle	estra						SU	LPHUREX GH/F	Size: In	Thk: mm	To	emp: °C	Pres: BAR	Cor	r: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) A	s.bly I	Branch
1506	1	0	In	3,38		mm	,00			215	Pipe ASME B36.19 PL Seamless ASTM	1 A 312 TI	304			8,43		
448	1	0	In			mm	,00	2,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	mooth Forg	ged	5128	1,60		
451	2	0	In			mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	mooth Forg	ged	5135	2,20		
329	1	0	In	3,38		mm	,00	2,00	NR	215	90° Elbow Long Radius ASME B16.9 E GR. WP304	BE Wrough	t S ASTM A	A 403	3	0,28		
1209	1	0	In	3,38		mm	,00	2,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	tht S ASTN	1 A 403 GR			0,32		
1212	2	0	In	3,91		mm	,00	1,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	tht S ASTN	1 A 403 GR			0,48		
5128	1/2	0	In			mm	80,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 TA	AB. 9	9	0,48		
5135	5/8	0	In			mm	95,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galyanized	E B18.2.1	UNC/2.2 TA	AB. 9	9	0,92		
712	1	0	In			mm	,00	1,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5F					
715	2	0	In			mm	,00	1,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5F					
		1		L	1	1				N	M Erection				Total Kg:	14,7		

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	n SP.1406/2-SP.1408/3
Line 16042 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

TOTAL Kg:

14,7

SX1 SX1

SULPHUREX GH/F

SX1

		В	allestr	a					S	KETCH	IES MATERIAL LIST	PROJ:	1E35	REV: 0 1	3/04/2010
	PUMA	.5		13/04/20	010 11.4	7.33						DOC:	IE35-65-029		
			Ball	estra						SUI	LPHUREX GH/F	Size: In Thk: mm	Гетр: °С	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component		Gen. Bolt	Weight (Kg) As.bly	Branch
1504	1/2	0	In	2,77		mm	,00	6,70	m	215	Pipe ASME B36.19 PL Seamless ASTM	1 A 312 TP 304		8,65	
1506	1	0	In	3,38		mm	,00	1,30	m	215	Pipe ASME B36.19 PL Seamless ASTM	I A 312 TP 304		3,32	
2853	1/2	0	In			mm	,00	1,00	NR	215	Valve Ball Full Port ST.46586/3 LUG 1 Cast ASTM A 351 CF8 S 123	50 LB RF (125÷250 AAF	(H) 5381	1,63	
446	1/2	0	In			mm	,00	2,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face Smooth Forged	5127	0,80	
224	1/2	0	In			mm	,00	3,00	NR	215	90° Elbow TA 50.7/2 THRD-F NPT 30 F304	00# Forged ASTM A 182	GR.	1,22	
1763	1	1/2	In	3,38	2,77	mm	,00	1,00	NR	215	Reducer Concentric ASME B16.9 BE W WP304	Vrought S ASTM A 403 C	iR.	0,14	
1207	1/2	0	In	2,77		mm	,00	2,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ht S ASTM A 403 GR.		0,17	
5127	1/2	0	In			mm	75,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 UNC/2.2 TAB	. 9	0,48	
710	1/2	0	In			mm	,00	2,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _ B5F			
5381	1/2	0	In			mm	30,00	16,00	NR	215	Screws for valves ASME B 18.2.1 /UNC	C ASTM A 193 B7 Galva	nized	1,28	
	1			1			<u> </u>		1	N	I Erection		Total Kg:	17,7	

TOTAL Kg:

17,7

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	on SP.1406/2-SP.1408/3
Line 16043 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

SX1 SX1

SX1

SULPHUREX GH/F

Ball	estra		SKETCH	ES MATERIAL LIST		PROJ:	1E35	REV: 0	13/04/2010
PUMA5	13/04/2010	0 11.47.33				DOC:	1E35-65-029		
	Ballestra		SUI	LPHUREX GH/F	Size: In Thk:	• mm	Temp: °C	Pres: BAR	Corr: mm
	Dunestru		561	311101111111111111111111111111111111111	Size. iii Tiik.	• 111111	remp. c	TTCS. Drift	Corr.

Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg) As.bly	Branch
1527	3	0	In	2,11	mm	,00	18,00	m	215	Pipe ASME B36.19 PL E.R.W. ASTM A 312 TP 304		82,94	
339	3	0	In	2,11	mm	,00	4,00	NR	215	90° Elbow Long Radius ASME B16.9 BE Wrought W ASTM A 403		3,19	
		,								GR. WP304		,	

			M Erection		Total Kg:	86,13
SX1	SULPHUREX GH/F	16048 - 0	SX1 SX1	1 / 1	TOTAL Kg:	86,13

Plant SX1 SULPHUREX GH/F Piping Class 215 Welding specification SP.1406/2-SP.1408/3

Line 16048 - 0 Fluid System

Dang. fluid type Coating De pres Op tem

Area SX1 Sketch Sht 1/1 Isometric code Page 1

Zones

		Ba	llestr	a						SKETCH	IES MATERIAL LIST			PRO.	J: 1E:	35	REV: 0	13/04/2010
	PUMA	15		13/04/20	010 11.4	7.33								DOC	1E	35-65-029		
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk	ζ: mm	Ter	mp: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	U	m Pip. class	Component					Gen. Bolt	Weight (Kg) As.bl	y Branch
1509	2	0	In	3,91		mm	,00	10,00) r	n 215	Pipe ASME B36.19 PL Seamless ASTM	A 312 T	P 304	1			55,48	
2858	2	0	In			mm	,00	2,00) N	R 215	Valve Ball Full Port ST.46586/3 LUG 15 Cast ASTM A 351 CF8 S 123	50 LB RF	(125	÷250 A	ARH)	5384	13,26	
5004	2	0	In			mm	,00	1,00) N	IR 215	"Y" Valve Check ST.46360/5 FLG 150 I Forged ASTM A 182 GR. F304 R 92	LB RF (12	25÷2	50 AAF	RH)	5133	11,22	
451	2	0	In			mm	,00	4,00) N	IR 215	Flange Lap-Joint ASME B16.5 150 LB F ASTM A 105 Galvanized	Flat Face	Smoo	oth Forg	ged	5135	8,80	
332	2	0	In	3,91		mm	,00	5,00) N	IR 215	90° Elbow Long Radius ASME B16.9 B GR. WP304	E Wrougl	ht S A	ASTM A	A 403		3,39	
1775	2	1+1/2	In	3,91	3,68	mm	,00	1,00) N	IR 215	Reducer Concentric ASME B16.9 BE W WP304	rought S	AST	M A 40	3 GR.		0,44	
1212	2	0	In	3,91		mm	,00	4,00) N	IR 215	Stub-End MSS SP-43 FLG x BE Wrough WP304 Type A	ht S ASTI	M A	403 GR			1,92	
5133	5/8	0	In			mm	85,00	4,00) N	IR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASME ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNG	C/2.2 T	AB. 9		0,84	
5135	5/8	0	In			mm	95,00	8,00) N	IR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASME ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNO	C/2.2 T	AB. 9		1,84	
715	2	0	In			mm	,00	5,00) N	IR 215	Gasket TA 50.5/31 150 LB RF (125÷250) AARH)	_ B5	ίF				

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	on SP.1406/2-SP.1408/3
Line 16049 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

M Erection

SX1

Screws for valves ASME B 18.2.1 /UNC ASTM A 193 B7 Galvanized

1 / 1

32,00 NR 215

SX1

40,00

mm

16049 - 0

5384

SX1

SULPHUREX GH/F

4,80

101,99

101,99

Total Kg:

TOTAL Kg:

		E	Ballestr	a					SKETCH	ES MATERIAL LIST		PROJ:	1E35	REV: 0	13/0	04/201
	PUMA	.5		13/04/20	10 11.4	7.34]					DOC:	1E35-65-029		•	
			Balle	estra					SUI	PHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	Cor	rr: mm
Mark	S1	S2		T1	Т2		Len mm	Otv	Um Pip. class	Component			Gen. Bolt	Weight (Kg) A	s.hlv	Branc
1457	6	0	In	3,96	1	mm	,00	4,00		Pipe ASME B36.10 PL E.R.W. API 5L G	R. B		Gem Bon	64,19	5.01y	Drune
1460	10	0	In	3,96		mm	,00	11,30	m 203	Pipe ASME B36.10 PL E.R.W. API 5L G	R. B			296,88		
5026	6	0	In			mm	,00	1,00	NR 203	Valve Butterfly With Gasket ST.46373/5 (125÷250 AARH) Cast DUCTILE IRON		150 LB RF	5223	7,00		
5028	10	0	In			mm	,00	1,00	NR 203	Valve Butterfly With Gasket ST.46373/5 (125÷250 AARH) Cast DUCTILE IRON		150 LB RF	5239	28,80		
3184	10	0	In			mm	,00	1,00	NR 203	Strainer Y-Type ST.46349/3 FLG 150 LB ASTM A 216 GR. WCB F 71	RF (125	÷250 AARH)	Cast 5232	162,00		
475	6	0	In			mm	,00	4,00	NR 203	Flange Slip-On ASME B16.5 150 LB RF ASTM A 105	(125÷250) AARH) Forg	ged 5214	30,00		
477	10	0	In			mm	,00	4,00	NR 203	Flange Slip-On ASME B16.5 150 LB RF ASTM A 105	(125÷250) AARH) Forg	ged 5232	74,00		
136	10	0	In	3,96		mm	,00	1,00	NR 203	45° Elbow Long Radius ASME B16.9 BE	E E.R.W.	ASTM A 234	GR.	8,75		
301	6	0	In	3,96		mm	,00	1,00	NR 203	90° Elbow Long Radius ASME B16.9 BE	E E.R.W.	ASTM A 234	GR.	5,66		
304	10	0	In	3,96		mm	,00	5,00	NR 203	90° Elbow Long Radius ASME B16.9 BE	E E.R.W.	ASTM A 234	GR.	79,00		
1677	10	6	In	3,96	3,96	mm	,00	1,00	NR 203	Reducer Concentric ASME B16.9 BE E.R	R.W. AST	M A 234 GR.	WPB	4,55		
5214	3/4	0	In			mm	100,00	16,00	NR 203	Stud Bolt + 2 Nuts TA 50.48B/28 ASME ASTM A 193 B7/ASTM A 194 GR.2H	B18.2.1	UNC/2.2 TAB	3. 9	13,44		
5223	3/4	0	In			mm	155,00	8,00	NR 203	Stud Bolt + 2 Nuts TA 50.48B/28 ASME ASTM A 193 B7/ASTM A 194 GR.2H	B18.2.1	UNC/2.2 TAB	3. 9	8,48		
5232	7/8	0	In			mm	120,00	24,00	NR 203	Stud Bolt + 2 Nuts TA 50.48B/28 ASME ASTM A 193 B7/ASTM A 194 GR.2H	B18.2.1	UNC/2.2 TAB	3.9	14,16		
5239	7/8	0	In			mm	190,00	12,00	NR 203	Stud Bolt + 2 Nuts TA 50.48B/28 ASME ASTM A 193 B7/ASTM A 194 GR.2H	B18.2.1	UNC/2.2 TAB	3.9	9,36		
669	6	0	In			mm	,00	2,00	NR 203	Gasket TA 50.5/31 150 LB RF (125÷250	AARH) _	_B5C				
TV_16.4 Disk plat	te - Fe 360	0B - UN	I 7070 -	ø 320mm	- thk= 1	0mm =	Plant SX1		REX GH/F	Piping Class 203 Fluid			Welding specific	ation SP.1406/2-SP.1	407/3	
n. 1 pz			,		_		Dang. fluid			Coating			De pres	Op tei	n	

	Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	SP.1406/2-SP.1407/3
- Fe 360B - UNI 7070 -ø 320mm - thk= 10mm =	Line 16101 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zonos			

Balle	stra	SKETCHES MATERIAL LIST	PI	ROJ:	1E35	REV:	0 13/04/2010
PUMA5	13/04/2010 11.47.34		DO	OC:	1E35-65-029		
]	Ballestra	SULPHUREX GH/F	Size: In Thk: mr	m	Temp: °C	Pres: BAR	Corr: mm

										1						
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component		Gen. Bolt	Weight (Kg)	As.bly	Branch
671	10	0	In			mm	,00	3,00	NR	203	Gasket TA 50.5/31 150 LB RF (12	25÷250 AARH) _ B5C				
											M Erection		Total Kg:	806,29		
SX1	SULPHU	JREX GI	I/F			16101 -	- 0			SX1	SX1	1 / 1	TOTAL Kg:	806,29		

TV_16.4	
Disk plate - Fe 360	B - UNI 7070 -ø 320mm - thk= 10mm =
n. 1 pz	

Plant SX1 SULPHUREX GH/F Line 16101 - 0 Dang, fluid type Area SX1 Zones Piping Class 203
Fluid
Coating
Sketch Sht 1/1

Welding specification SP.1406/2-SP.1407/3 System

System De pres

Isometric code

Op tem
Page 2

		В	allestr	a					Sl	KETC	HES MATERIAL LIST		PROJ:	1E35	;	REV: 0	13/	/04/2010
	PUMA	.5		13/04/2	010 11.4	17.34	1						DOC:	1E35	5-65-029	<u> </u>		
			Ball	lestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. clas	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1435	1	0	In	3,38		mm	,00	0,10		_	Pipe ASME B36.10 PL Seamless API 5	SL GR. B				0,25		
1457	6	0	In	3,96		mm	,00	1,50	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				24,07		
1458	8	0	In	3,96		mm	,00	0,30	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				6,30		
1460	10	0	In	3,96		mm	,00	4,90	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				128,74		
5028	10	0	In			mm	,00	1,00	NR	203	Valve Butterfly With Gasket ST.46373 (125÷250 AARH) Cast DUCTILE IRO		150 LB RF		5239	28,80		
475	6	0	In			mm	,00	2,00	NR	203	Flange Slip-On ASME B16.5 150 LB I ASTM A 105		0 AARH) Foi	rged	5214	15,00		
477	10	0	In			mm	,00	4,00	NR	203	Flange Slip-On ASME B16.5 150 LB I ASTM A 105	RF (125÷25	0 AARH) For	rged	5232	74,00		
301	6	0	In	3,96		mm	,00	2,00	NR	203	90° Elbow Long Radius ASME B16.9 WPB	BE E.R.W.	ASTM A 234	4 GR.		11,33		
1677	10	6	In	3,96	3,96	mm	.00	2,00	NR	203	Reducer Concentric ASME B16.9 BE	E.R.W. AS	ГМ A 234 GR	R. WPB	3	9,11		
1058	1	0	In	7-7-	7-7-	mm	.00		NR		Coupling TA 50.7/2 THRD-F NPT 30					0,30		
1124	1/2	0	In			mm	.00		NR		Coupling Half TA 50.7/2 THRD-F NP					0,06		
4464	6	0	In	3,96		mm	,00		NR		Cap ASME B16.9 BE Seamless ASTM	I A 234 GR	. WPB			2,02		
5214	3/4	0	In			mm	100,00	16,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	B. 9		13,44		
5232	7/8	0	In			mm	120,00	12,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	1E B18.2.1	UNC/2.2 TA	B. 9		7,08		
5239	7/8	0	In			mm	190,00	12,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	1E B18.2.1	UNC/2.2 TA	B. 9		9,36		
669	6	0	In			mm	,00	2,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷2.	50 AARH)	_ B5C					
671	10	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷2							
		1		'							M Erection				Total Kg:	329,86		
SX1	SULPHI	UREX G	H/F			16102	- 0			SX1	SX1 1	/ 1		,	TOTAL Kg:	329,86		
PI_16.9							Plant SX1		REX C	GH/F	Piping Class 203				- ·	ion SP.1406/2-SP.	1407/3	
TET_16.	.4						Line 16102				Fluid			•	stem			
FI_16.5							Dang. fluid	type			Coating		•	De j	-	Op to		
							Area SX1 Zones				Sketch Sht 1/1		Iso	metric o	coae		Pa	ige 1
L							Lones											

Ballestra								SKETCHES MATERIAL LIST PROJ: 1E3							1E35		REV: 0	13.	/04/2010
		13/04/2	010 11.4	7.34							D	OC:	1E35-	-65-029		•			
	Bal	lestra				SULPHUREX GH/F Size: In Thk: mm						Temp:	°C	Pres: BAR	C	orr: mm			
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1453	3	0	In	3,18		mm	,00	2,40	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B					16,13		
1454	4	0	In	3,18		mm	,00	0,30	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B					2,61		
473	4	0	In			mm	,00	2,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	AF (125÷25	0 AARI	H) For	ged	5201	11,20		
298	4	0	In	3,18		mm	,00	2,00	NR	203	90° Elbow Long Radius ASME B16.9 E WPB	BE E.R.W.	ASTM	A 234	GR.		4,13		
1651	4	3	In	3,18	3,18	mm	,00	2,00	NR	203	Reducer Concentric ASME B16.9 BE E	E.R.W. AST	ΓM A 2	34 GR	. WPB		1,72		
5201	5/8	0	In			mm	95,00	16,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2	2 TAE	3. 9		3,68		
667	4	0	In			mm	,00	2,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	O AARH)	_ B5C						
	'							•		N	1 Erection					Total Kg:	39,48		
SX1	SX1 SULPHUREX GH/F 16103 -					0			SX1 S	X1 1 /	/ 1			T	OTAL Kg:	39,48			

FI_16.4	Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification SP.1406	/2-SP.1407/3
	Line 16103 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestra	a					SKETC	E35	REV: 0 13	3/04/2010		
	PUMA	15		13/04/20	10 11.47	7.34					DOC: 1	E35-65-029		
			Balle	estra					S	SULPHUREX GH/F	Гетр: °С	Pres: BAR	Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um Pip. clas	ss Component		Gen. Bolt	Weight (Kg) As.bly	Branch
1453	3	0	In	3,18		mm	,00	4,00	m 203	Pipe ASME B36.10 PL E.R.W. API 5L	Pipe ASME B36.10 PL E.R.W. API 5L GR. B			
5023	3	0	In			mm	,00	2,00	NR 203	•	Valve Butterfly With Gasket ST.46373/5 WAFER 150 LB RF (125÷250 AARH) Cast DUCTILE IRON B 74			
472	3	0	In			mm	,00	4,00	NR 203	Flange Slip-On ASME B16.5 150 LB I ASTM A 105	RF (125÷250 AARH) Forge	ed 5201	16,40	
297	3	0	In	3,18		mm	,00	2,00	NR 203	90° Elbow Long Radius ASME B16.9 WPB	BE E.R.W. ASTM A 234 C	GR.	2,35	
1661	6	3	In	3,96	3,18	mm	,00	1,00	NR 203	Reducer Concentric ASME B16.9 BE	Reducer Concentric ASME B16.9 BE E.R.W. ASTM A 234 GR. WPB			
1677	10	6	In	3,96	3,96	mm	,00	1,00	NR 203	Reducer Concentric ASME B16.9 BE	Reducer Concentric ASME B16.9 BE E.R.W. ASTM A 234 GR. WPB			
5209	5/8	0	In			mm	140,00	8,00	NR 203	Stud Bolt + 2 Nuts TA 50.48B/28 ASN		9	2,32	
										ASTM A 193 B7/ASTM A 194 GR.2H	<u> </u>	T. 4. 1. 17	(1.(0	
										M Erection		Total Kg:	61,69	
SX1	SX1 SULPHUREX GH/F 16104 -						- 0		SX1	TOTAL Kg:	61,69			

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 16104 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	Ballestr	a					S	KETCI	HES MATERIAL LIST		PROJ:	1E35	REV: 0	13/04/2010
	PUMA	.5		13/04/20	010 11.47	.34							DOC:	1E35-65-029	•	•
			Ball	estra						SU	JLPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component			Gen. Bolt	Weight (Kg)	s.bly Branch
1431	1/4	0	In	2,24		mm	,00	1,00	m	203	Pipe ASME B36.10 PL Seamless API 5	SL GR. B			0,63	
1433	1/2	0	In	2,77		mm	,00	1,00	m	203	Pipe ASME B36.10 PL Seamless API 5	SL GR. B			1,27	
2828	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	D-F NPT 20	0 LB Forged		0,30	
264	1/4	0	In			mm	,00	1,00	NR	207	90° Elbow TA 50.6/1 SW-F 3000# Forg	ged ASTM	A 105		0,09	
266	1/2	0	In			mm	,00	1,00	NR	207	90° Elbow TA 50.6/1 SW-F 3000# Forg	ged ASTM	A 105		0,25	
1287	1/4	0	In			mm	,00	1,00	NR	203	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 10)5		0,15	
4447	1/2	1/4	In			mm	,00	1,00	NR	203	Coupling Reducing TA 50.6/1 SW-F 30	000# Forge	ASTM A 10)5	0,03	
	'									•	M Erection			Total Kg:	2,72	
SX1	SULPHI	JREX G	H/F			16105	- 0			SX1	SX1 1	/ 1		TOTAL Kg:	2,72	

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 16105 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	Ballestr	a					S	KETCI	HES MATERIAL LIST		PROJ	: 1E35	5	REV: 0	13/0	04/2010
	PUMA	15		13/04/2	010 11.4	7.34							DOC:	1E35	5-65-029			
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR	Co	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As	.bly	Branch
1435	1	0	In	3,38		mm	,00	0,10	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,25		
1457	6	0	In	3,96		mm	,00	0,20	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				3,21		
1458	8	0	In	3,96		mm	,00	1,00	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				21,01		
475	6	0	In			mm	,00,	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷250	AARH) Fo	orged	5214	7,50		
1670	8	6	In	3,96	3,96	mm	,00	1,00	NR	203	Reducer Concentric ASME B16.9 BE I	E.R.W. AST	M A 234 G	R. WPE	3	3,17		
1058	1	0	In			mm	,00	1,00	NR	203	Coupling TA 50.7/2 THRD-F NPT 300	00# Forged A	ASTM A 10	15		0,30		
5214	3/4	0	In			mm	100,00	8,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		JNC/2.2 TA	AB. 9		6,72		
669	6	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _	B5C					
	1	-		1	1			•]	M Erection				Total Kg:	42,16		
SX1	SULPH	UREX G	H/F			16106 -	. 0			SX1	SX1 1	/ 1			TOTAL Kg:	42,16		

TET_16.5	Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	SP.1406/2-SP.1407/3
	Line 16106 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	a					S	KETC	HES MATERIAL LIST		PROJ:	1E35	5	REV: 0	13/04/2010
	PUMA	15		13/04/2	010 11.4	7.35	1						DOC:	1E35	5-65-029	•	
			Ball	lestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp); °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	ss Component				Gen. Bolt	Weight (Kg) A	s.bly Branch
1435	1	0	In	3,38		mm	,00	0,10	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,25	
1457	6	0	In	3,96		mm	,00	1,00	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				16,05	
5026	6	0	In			mm	,00	1,00	NR	203	Valve Butterfly With Gasket ST.46373/ (125÷250 AARH) Cast DUCTILE IRO		150 LB RF		5223	7,00	
475	6	0	In			mm	,00	3,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	RF (125÷250) AARH) For	rged	5214	22,50	
1058	1	0	In			mm	,00	1,00	NR	203	Coupling TA 50.7/2 THRD-F NPT 300	00# Forged	ASTM A 10:	5		0,30	
5214	3/4	0	In			mm	100,00	8,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	В. 9		6,72	
5223	3/4	0	In			mm	155,00	8,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	В. 9		8,48	
669	6	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _	B5C				
	'	'	'		'					•	M Erection				Total Kg:	61,3	
SX1	SULPH	UREX G	H/F			16107	- 0			SX1	SX1 1	/ 1			TOTAL Kg:	61,3	

TET_16.6	Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
	Line 16107 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allest	ra					5	SKETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	A 5		13/04/20	010 11.4	7.35							DOC:	1E35-6	65-029	•	•	
			Ba	llestra						S	ULPHUREX GH/F	Size: In T	Γ hk: mm	Temp: °	°C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mn	n Qt	Un	ı Pip. clas	s Component			(Gen. Bolt	Weight (Kg)	As.bly	Branch
1435	1	0	In	3,38		mm	,00	1,4	0 m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				3,50		
1463	14	0	In	6,35		mm	,00	11,4	0 m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				623,46		
307	14	0	In	6,35		mm	,00	2,0	0 NR	203	90° Elbow Long Radius ASME B16.9 I WPB	BE E.R.W. A	STM A 234	GR.		90,68		
324	1	0	In	3,38		mm	,00	3,0	0 NR	203	90° Elbow Long Radius ASME B16.9 I GR. WPB	BE Wrought	S ASTM A	234		0,41		
2116	14	10	In	6,35	3,96	mm	,00	1,0	0 NR	203	Reducer Eccentric ASME B16.9 BE E.I	R.W. ASTM	A 234 GR.	WPB		17,97		
		'		•		'					M Erection				Total Kg:	736,02		
SX1	SULPH	UREX G	H/F			16108	- 0			SX1	SX1 1	/ 1		TO	OTAL Kg:	736,02		

Disk plate - Fe 360B-UNI 7070- ø 400mm - thk 10mm = n. $1\ pz$ Plant SX1 SULPHUREX GH/F Piping Class 203 Welding specification SP.1406/2-SP.1407/3 Line 16108 - 0 Fluid System Dang. fluid type Coating De pres Op tem Area SX1 Sketch Sht 1/1 Isometric code Page 1 Zones

		В	allestı	a					S	KETCI	HES MATERIAL LIST]	PROJ:	1E35		REV:) 1	3/04/2010
	PUMA	5		13/04/20	010 11.47	.35]	DOC:	1E35-6	55-029			
			Bal	lestra						st	JLPHUREX GH/F	Size: In	Thk:	mm	Temp: °	С	Pres: BAR		Corr: mm
				1	1	_		ı		1									
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				(Gen. Bolt	Weight (Kg) As.bly	Branch
1462	12	0	In	4,78		mm	,00	1,00	m	203	Pipe ASME B36.10 PL E.R.W. API 5	L GR. B					37,60	1	
306	12	0	In	4,78		mm	,00	1,00	NR	203	90° Elbow Long Radius ASME B16.	BE E.R.W.	ASTN	Л A 234	GR.		27,10		
	'					,	'				WPB								
											M Erection					Total Kg:	64,71		
SX1	SULPHU	JREX GI	H/F			16109	- 0			SX1	SX1	1 / 1			TO	OTAL Kg:	64,71		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	on SP.1406/2-SP.1407/3
Line 16109 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a						S	KETC	HES MATERIAL LIST		P	ROJ:	1E35	REV: 0	13	/04/2010
	PUMA	15		13/04/20	010 11.47	7.35								D	OC:	1E35-65-029			
			Ball	estra							S	GULPHUREX GH/F	Size: In	Thk: n	nm	Temp: °C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	Т2		Len mn	n Q	ty I	Um	Pip. clas	ss Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1435	1	0	In	3,38		mm	,00	16,	00	m	205	Pipe ASME B36.10 PL Seamless API 5	SL GR. B				40,04		
2986	1	0	In			mm	,00	0 1,	1 00	NR	205	Valve Check ST.46275/1 SW-F 800# F	Forged ASTN	M A 10)5 R 83		4,80		
3109	1	0	In			mm	,00	0 1,	00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	rged ASTM	A 105	G 61		3,30		
324	1	0	In	3,38		mm	,00	8,	00	NR	205	90° Elbow Long Radius ASME B16.9 GR. WPB	BE Wrought	t S AS	TM A 2	234	1,08		
												M Erection				Total K	g: 49,22		
SX1	SULPH	UREX G	H/F			16110	- 0				SX1	SX1 1	/ 1			TOTAL K	g: 49,22		

		P	Ballestı	ra					S	KETC	HES MATERIAL LIST		PRO	J: 1E35	5	REV: 0	13	/04/2010
	PUMA	15		13/04/20	010 11.4	7.35							DOC	: 1E35	5-65-029			
			Bal	lestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp): ℃	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	Otv	Um	Pip. clas	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1463	14	0	In	6,35		mm	,00	7,30	_	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				399,23		
139	14	0	In	6,35		mm	,00	3,00	NR	203	45° Elbow Long Radius ASME B16.9 E WPB	BE E.R.W.	ASTM A 2	34 GR.		68,01		
307	14	0	In	6,35		mm	,00	1,00	NR	203	90° Elbow Long Radius ASME B16.9 E WPB	BE E.R.W.	ASTM A 2	34 GR.		45,34		
											M Erection				Total Kg:	512,58		
SX1	SULPH	UREX G	SH/F			16111	- 0			SX1	SX1 1	/ 1			TOTAL Kg:	512,58		

Disk plate - Fe 360B - UNI 7070 - \emptyset 400mm- thk 10mm = n. 1 pz Funnel ST 46250 - Fe 42B - 14" = n. 1 pz Plant SX1 SULPHUREX GH/F Line 16111 - 0 Dang, fluid type Area SX1 Zones Piping Class 203
Fluid
Coating
Sketch Sht 1/1

Welding specification SP.1406/2-SP.1407/3
System
De pres Op tem

Isometric code

Page 1

		В	allestr	a					S	KETC	HES MATERIAL LIST		PR	O J : 1	1E35	REV: 0	13/	/04/2010
	PUMA	15		13/04/20	10 11.4	7.35							DO	C : 1	IE35-65-029	•	•	
			Ball	lestra						S	ULPHUREX GH/F	Size: In	Thk: mm	7	Гетр: °С	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	s Component				Gen. Bolt	Weight (Kg)	s.bly	Branch
1434	3/4	0	In	2,87		mm	,00	5,60	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				9,44		
1435	1	0	In	3,38		mm	,00	0,20	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,50		
2830	1	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87)-F NPT 20	00 LB For	ged		0,60		
467	1	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	RF (125÷25	0 AARH)	Forge	ed 5192	0,80		
1750	1	3/4	In	3,38	2,87	mm	,00	1,00	NR	203	Reducer Concentric ASME B16.9 BE V WPB	Wrought S	ASTM A	234 G	iR.	0,14		
5192	1/2	0	In			mm	70,00	4,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2	TAB.	. 9	0,44		
661	1	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH)	_ B5C					
	•		*	*	•	•				•	M Erection				Total Kg:	11,92		
SX1	SULPH	UREX G	H/F			16120	- 0			SX1	SX1 1	/ 1			TOTAL Kg:	11,92		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 16120 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a						SKETCI	HES MATERIAL LIST		PROJ	1E3	35	REV: 0	13/04/2010
	PUMA	.5		13/04/2	010 11.4	7.35							DOC	1E3	35-65-029		
			Ball	estra						st	LPHUREX GH/F	Size: In	Thk: mm	Ten	ıp: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Ots	I I m	n Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly Branch
1434	3/4	0	In	2,87	12	mm	,00			203	Pipe ASME B36.10 PL Seamless API 5	SL GR. B			Gen. Bon	7,08	is.biy branch
1435	1	0	In	3,38		mm	,00	0,20) m	203	Pipe ASME B36.10 PL Seamless API 5					0,50	
3118	1	0	In			mm	,00	1,00) NF	R 203	Valve Globe ST.46004/3 THRD-F NP	T 200 LB F	orged BRO	NZE D		1,70	
467	1	0	In			mm	,00	1,00) NF	R 203	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷25	0 AARH) F	orged	5192	0,80	
1750	1	3/4	In	3,38	2,87	mm	,00	1,00) NF	R 203	Reducer Concentric ASME B16.9 BE V	Wrought S	ASTM A 23	4 GR.		0,14	
5192	1/2	0	In			mm	70,00	4,00) NF	R 203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 T	AB. 9		0,44	
661	1	0	In			mm	,00	1,00) NF	R 203	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH)	_B5C				
	•	•	•	•	*	*					M Erection				Total Kg:	10,66	<u> </u>
SX1	SULPH	JLPHUREX GH/F 16121					- 0			SX1	SX1 1	/ 1			TOTAL Kg:	10,66	

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 16121 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a						SK	KETCH	IES MATERIAL LIST		PRO	1E35	5	REV: 0	13	/04/2010
	PUMA	.5		13/04/20	010 11.47	7.35								DOC	1E35	5-65-029	•	•	
			Ball	estra							SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp	o: °C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	y U	Jm F	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1495	1	0	In	3,38		mm	,00	6,0	0 1	m 2	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	amless API	5L GR. B			15,01		
6025	1	0	In			mm	,00	1,0	0 N	NR 2	203	Valve Check ST.46396/3 THRD-F NPT 96	T 150 LB F	Forged BRO	NZE R		0,81		
392	1	0	In			mm	,00	1,0	0 N	NR 2	202	Flange ASME B16.5 THRD-F NPT 150 Forged ASTM A 105 Galvanized	0 LB RF (1	25÷250 AA	RH)	5126	0,90		
254	1	0	In			mm	,00	6,0	0 N	NR 2	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	000# Forge	d ASTM A	105		6,60		
1277	1	0	In			mm	,00	2,0	0 N	NR 2	202	Union TA 50.7/2 THRD-F NPT 3000# Galvanized	Forged AS	TM A 105			1,30		
4569	1	0	In			mm	,00	1,0	0 N	NR 2	202	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged AST	M A 105 Ga	lvanize	d	0,25		
5126	1/2	0	In			mm	70,00	4,0	0 N	NR 2	202	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 T.	AB. 9		0,44		

M Erection

SX1 SX1

Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5C

1 / 1

,00

mm

16122 - 0

1,00 NR 202

661

SX1

SULPHUREX GH/F

HV_16.18	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	1
	Line 16122 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

Total Kg:

TOTAL Kg:

25,31

25,31

			Ballesti	·a					SKETC	HES MATERIAL LIST		PR	OJ : 1	E35	REV: 0	13/04/2010
	PUMA	A 5		13/04/2	010 11.4	47.36						DC	OC: 1	E35-65-029	, , ,	
			Bal	lestra					S	ULPHUREX GH/F	Size: In	Thk: mm	7	emp: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um Pip. clas	s Component				Gen. Bolt	Weight (Kg) As.bly	y Branch
1493	1/2	0	In	2,77		mm	,00		m 202	Pipe ASME B36.10 THRD-M NPT Se Galvanized	amless AP	5L GR.	В		7,59	
1504	1/2	0	In	2,77		mm	,00	0,50	m 215	Pipe ASME B36.19 PL Seamless ASTN	M A 312 TI	2 304			0,65	
2828	1/2	0	In			mm	,00	1,00	NR 202	Valve Ball Full Port ST.46330/3 THRE BRASS NICKEL PLATED S 87	O-F NPT 20	00 LB Fo	rged		0,30	
4999	1/2	0	In			mm	,00	1,00	NR 215	"Y" Valve Check ST.46360/5 FLG 150 Forged ASTM A 182 GR. F304 R 92	LB RF (12	25÷250 A	ARH)	5125	3,06	
390	1/2	0	In			mm	,00	2,00	NR 202	Flange ASME B16.5 THRD-F NPT 15 Forged ASTM A 105 Galvanized	00 LB RF (125÷250	AARH	5125	0,80	
446	1/2	0	In			mm	,00	1,00	NR 215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth F	orged	5127	0,40	
252	1/2	0	In			mm	,00	8,00	NR 202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	000# Forge	d ASTM	A 105		3,20	
4673	1/2	0	In			mm	,00	1,00	NR 202	Tee Straight TA 50.7/2 THRD-F NPT Galvanized	3000# Forg	ged ASTN	A 10	5	0,28	
1207	1/2	0	In	2,77		mm	,00	1,00	NR 215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ght S ASTI	M A 403	GR.		0,08	
5125	1/2	0	In			mm	65,00	4,00	NR 202	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	IE B18.2.1	UNC/2.2	TAB.	9	0,44	
5125	1/2	0	In			mm	65,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	IE B18.2.1	UNC/2.2	TAB.	9	0,44	
5127	1/2	0	In			mm	75,00	6,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	IE B18.2.1	UNC/2.2	TAB.	9	0,72	
659	1/2	0	In			mm	,00	1,00	NR 202	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH)	B5C				
710	1/2	0	In			mm	,00	3,00	NR 215	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH)	_ _ B5F				
		'			'				-	M Erection				Total Kg:	17,97	'
SX1	SULPH	UREX (GH/F			16123	- 0		SX1	SX1 1	/ 1			TOTAL Kg:	17,97	
KV_16.	XV_16.17				Plant SX1 S	SULPHU	REX GH/F	Piping Class 215				Welding specifica	tion SP.1406/2-SP.1408/3	3		
	10.17			Line 16123	- 0		Fluid				System					
							Dang. fluid	type		Coating				De pres	Op tem	
						Area SX1			Sketch Sht 1/1			Isome	tric code		Page 1	

Zones

		В	allestra	a						SK	ETCH	IES MATERIAL LIST			PRC	J: 1	E35		REV:	0 1.	3/04/2010
	PUMA5			13/04/20	010 11.4	7.36									DOC	: 1	E35-65-	029	•		
			Balle	estra							SUI	LPHUREX GH/F	Size: In	Th	k: mm	Т	emp: °C		Pres: BAR		Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Uı Uı	m P	ip. class	Component					Gei	n. Bolt	Weight (K	g) As.bly	Branch
1437	1+1/2	0	In	3,68		mm	,00	8,0) n	n 20	03	Pipe ASME B36.10 PL Seamless API 5	L GR. B						32,3	9	
2832	1+1/2	0	In			mm	,00	3,0) N	IR 20	03	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 20	00 L	B Forg	ed			4,5	0	
3120	1+1/2	0	In			mm	,00	1,0) N	IR 2	03	Valve Globe ST.46004/3 THRD-F NPT	Г 200 LB F	Forge	d BRO	NZE	E D		3,4	5	
3178	1+1/2	0	In			mm	,00	1,00) N	IR 20	03	Strainer Y-Type ST.46326/4 THRD-F	NPT 200 L	B F	orged l	BRON	NZE		2,2	0	
469	1+1/2	0	In			mm	,00	3,0) N	IR 2	03	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷25	50 A.	ARH)	Forge	d 519	93	4,2	0	
326	1+1/2	0	In	3,68		mm	,00	5,0) N	IR 2	03	90° Elbow Long Radius ASME B16.9 I GR. WPB	BE Wrough	ht S	ASTM	A 23	4		1,8	4	
4656	1+1/2	0	In			mm	,00	1,0) N	IR 20	03	Tee Straight TA 50.7/2 THRD-F NPT 3	3000# Forg	ged A	ASTM	A 105	5		1,2	8	
5193	1/2	0	In			mm	75,00	12,0) N	IR 20	03	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UN	C/2.2	ГАВ.	9		1,4	4	
663	1+1/2	0	In			mm	,00	3,0) N	IR 20	03	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B:	5C						
		1			-	-1	· L				N	1 Erection					To	otal Kg:	51,3		

TOTAL Kg:

51,3

SX1 SX1

SX1

SULPHUREX GH/F

TCV_16.1	Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	SP.1406/2-SP.1407/3
	Line 16125 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allesti	· a					S	KETC	HES MATERIAL LIST		PROJ	1E3	5	REV: 0	13/	/04/2010
	PUMA5	5		13/04/20	010 11.4	17.36							DOC:	1E3	5-65-029			
			Bal	lestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Tem	p: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	s Component				Gen. Bolt	Weight (Kg)	s.bly	Branch
1437	1+1/2	0	In	3,68		mm	,00	0,40	m	203	Pipe ASME B36.10 PL Seamless API 5	5L GR. B				1,62		
1438	2	0	In	3,91		mm	,00	6,90	m	203	Pipe ASME B36.10 PL Seamless API 5	5L GR. B				37,52		
469	1+1/2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷25	0 AARH) F	orged	5193	1,40		
327	2	0	In	3,91		mm	,00	5,00	NR	203	90° Elbow Long Radius ASME B16.9 GR. WPB	BE Wrough	t S ASTM A	A 234		3,32		
1758	2	3/4	In	3,91	2,87	mm	,00	1,00	NR	203	Reducer Concentric ASME B16.9 BE WPB	Wrought S	ASTM A 23	4 GR.		0,43		
5193	1/2	0	In			mm	75,00	4,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	AB. 9		0,48		
663	1+1/2	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH)	_B5C					
	•									•	M Erection				Total Kg:	44,77		
SX1	SULPHU	REX G	H/F			16127	- 0			SX1	SX1 1	/ 1			TOTAL Kg:	44,77		

		Е	allestr	a				SKETC	HES MATERIAL LIST		PROJ	: 1E35		REV: 0	13	/04/2010
	PUMA	\ 5		13/04/2	010 11.47.36						DOC:	1E35-	65-029	•		
			Ball	lestra				S	ULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2	Len mm	Qty	Um Pip. clas	S Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1434	3/4	0	In	2,87	mm	,00	4,00	m 203	Pipe ASME B36.10 PL Seamless API 5	SL GR. B				6,75		
3117	3/4	0	In		mm	,00	1,00	NR 203	Valve Globe ST.46004/3 THRD-F NP	T 200 LB F	orged BRON	IZE D		0,80		
	-	-		1					51					1		
466	3/4	0	In		mm	,00	1,00	NR 203	Flange Slip-On ASME B16.5 150 LB I	RF (125÷25	0 AARH) Fo	rged	5191	0,70		
						_		_	ASTM A 105							
323	3/4	0	In	2,87	mm	,00	3,00	NR 203	90° Elbow Long Radius ASME B16.9	BE Wrough	t S ASTM A	234		0,26		
		·							GR. WPB			Ī				
5191	1/2	0	In		mm	65,00	4,00	NR 203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	ME B18.2.1	UNC/2.2 TA	AB. 9		0,44		
									ASTM A 193 B7/ASTM A 194 GR.2H	[Ì				
660	3/4	0	In		mm	,00	1,00	NR 203	Gasket TA 50.5/31 150 LB RF (125÷2:	50 AARH)	_ B5C					
	,				, I			,	M Erection			'	Total Kg:	8,94		
SX1	SULPH	LPHUREX GH/F 16129 - 0						SX1	SX1 1	/ 1		T	OTAL Kg:	8,94		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 16129 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		Е	Ballestr	a					5	SKETC	HES MATERIAL LIST		PROJ	1E3	5	REV: 0	13/04	4/2010
	PUMA	\ 5		13/04/20	010 11.4	7.36							DOC	1E3	5-65-029	•		
			Ball	lestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Tem	p: °C	Pres: BAR	Corr	r: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	Pip. clas	s Component				Gen. Bolt	Weight (Kg)	As.bly F	Branch
1434	3/4	0	In	2,87		mm	,00	3,00	m	203	Pipe ASME B36.10 PL Seamless API 5I	GR. B				5,06		
6023	3/4	0	In			mm	,00	1,00	NF	203	Valve Check ST.46396/3 THRD-F NPT 96	150 LB F	Forged BRO	NZE R		0,46		
466	3/4	0	In			mm	,00	1,00	NF	203	Flange Slip-On ASME B16.5 150 LB RI ASTM A 105	F (125÷250	0 AARH) F	orged	5191	0,70		
155	3/4	0	In	2,87		mm	,00	2,00	NF	203	45° Elbow Long Radius ASME B16.9 B GR. WPB	E Wrough	t S ASTM A	A 234		0,06		
323	3/4	0	In	2,87		mm	,00	2,00	NF	203	90° Elbow Long Radius ASME B16.9 B GR. WPB	E Wrough	t S ASTM A	A 234		0,17		
5191	1/2	0	In			mm	65,00	4,00	NF	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASMI ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2 T	AB. 9		0,44		
660	3/4	0	In			mm	,00	1,00	NF	203	Gasket TA 50.5/31 150 LB RF (125÷250	O AARH)	_B5C					
		'	,						_	·	M Erection				Total Kg:	6,89		
SX1	SULPH	SULPHUREX GH/F 16130 -								SX1	SX1 1 /	1			TOTAL Kg:	6,89		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	on SP.1406/2-SP.1407/3
Line 16130 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		Ba	llestr	a									PROJ:	1E35		REV: 0	13/04/2010
	PUMA5			13/04/2	010 11.4	7.36							DOC:	1E35	-65-029	•	•
			Ball	estra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp	: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	s Component				Gen. Bolt	Weight (Kg) A	s.bly Branch
1437	1+1/2	0	In	3,68		mm	,00	4,00	m	203	Pipe ASME B36.10 PL Seamless API 5	5L GR. B				16,20	
3120	1+1/2	0	In			mm	,00	1,00	NR	203	Valve Globe ST.46004/3 THRD-F NP	T 200 LB Fo	rged BRON	ZE D		3,45	
	,										51						
470	2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB F	RF (125÷250	AARH) For	ged	5199	2,20	
											ASTM A 105						
326	1+1/2	0	In	3,68		mm	,00	4,00	NR	203	90° Elbow Long Radius ASME B16.9	BE Wrought	S ASTM A	234		1,47	
											GR. WPB						
1761	2	1+1/2	In	3,91	3,68	mm	,00	1,00	NR	203	Reducer Concentric ASME B16.9 BE V	Wrought S A	STM A 234	GR.		0,43	
	'						-				WPB						
1258	1+1/2	0	In			mm	,00	1,00	NR	203	Union TA 50.7/2 THRD-F NPT 3000#	Forged AS	ΓM A 105			1,26	
5199	5/8	0	In			mm	85,00	4,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	ИЕ В18.2.1 U	JNC/2.2 TA	B. 9		0,84	
	ı			1							ASTM A 193 B7/ASTM A 194 GR.2H]				"	
664	2	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _	B5C				
		•		·	·	·					M Erection				Total Kg:	25,85	·
SX1	SULPHU	REX GF	I/F			16131	- 0			SX1	SX1 1	/ 1		,	TOTAL Kg:	25,85	

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 16131 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	· a					S	KETC	HES MATERIAL LIST		PR	OJ: 11	E35	REV: 0	13/	/04/2010
	PUMA5	5		13/04/20	010 11.4	7.36							DO	C: 11	E35-65-029		•	
			Ball	lestra						S	ULPHUREX GH/F	Size: In	Thk: mm	T	emp: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1437	1+1/2	0	In	3,68		mm	,00	10,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				40,49		
6028	1+1/2	0	In			mm	,00	1,00	NR	203	Valve Check ST.46396/3 THRD-F NP 96	T 150 LB F	Forged BF	ONZE	ER	1,50		
469	1+1/2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷25	0 AARH)	Forge	d 5193	1,40		
326	1+1/2	0	In	3,68		mm	,00	10,00	NR	203	90° Elbow Long Radius ASME B16.91 GR. WPB	BE Wrough	t S ASTN	I A 23	4	3,68		
1258	1+1/2	0	In			mm	,00	1,00	NR	203	Union TA 50.7/2 THRD-F NPT 3000#	Forged AS	STM A 10	5		1,26		
5193	1/2	0	In			mm	75,00	4,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2	TAB.	9	0,48		
663	1+1/2	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH)	_ B5C					
			•		•	•					M Erection				Total Kg:	48,81		
SX1	SULPHU	REX G	H/F			16132	- 0			SX1	SX1 1	/ 1			TOTAL Kg:	48,81		

		В	allestr	a					S	KETC	HES MATER	IAL LIST		PROJ	: 1E35		REV:	0 1	13/04/2010	
	PUMA	.5		13/04/20	010 11.47	7.37								DOC:	1E35-65-	029	-			
			Ball	estra						S	ULPHUREX GH/F		Size: In	Thk: mm	Temp: °C		Pres: BAR		Corr: mm	
										,										
Mark	S1	S2		T1	T2		Len mm	ı Qty	Um	Pip. clas	s Component				Gei	n. Bolt	Weight (K	g) As.bly	y Branch	
1431	1/4	0	In	2,24		mm	,00	9,00	m	205	Pipe ASME B36	.10 PL Seamless API 51	L GR. B				5,7	0		
3107	1/2	0	In			mm	,00	2,00	NR	205	Valve Gate ST.4	5270/3 SW-F 800# For	ged ASTM	A 105 G 61			3,4	0		
4687	1/2	0	In			mm	,00	1,00	NR	205	Tee Straight TA	50.6/1 SW-F 3000# For	rged ASTN	1 A 105			0,2	8		
		'		,	•		•			1	M Erection				To	otal Kg:	9,3	8		
SX1	X1 SULPHUREX GH/F 16136 - 0				- 0 SX1 SX1 1/1					TOT	AL Kg:	9,3	8							

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	on SP.1406/2-SP.1407/2
Line 16136 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		I	Ballesti	ra					5	SKETC	HES MATERIAL LIST		PROJ:	: 1E35	5	REV: 0	13/	/04/2010
	PUMA5	5		13/04/20	010 11.4	7.37							DOC:	1E35	5-65-029			
			Bal	lestra						SU	ULPHUREX GH/F	Size: In	Thk: mm	Temp): °C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	Т2		Len mn	ı Qty	Un	ı Pip. class	S Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1437	1+1/2	0	In	3,68		mm	,00	9,70	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				39,28		
469	1+1/2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	RF (125÷25	0 AARH) Fo	rged	5193	1,40		
158	1+1/2	0	In	3,68		mm	,00	2,00	NR	203	45° Elbow Long Radius ASME B16.9 I GR. WPB	BE Wrough	t S ASTM A	234		0,37		
326	1+1/2	0	In	3,68		mm	,00	3,00	NR	203	90° Elbow Long Radius ASME B16.9 I GR. WPB	BE Wrough	t S ASTM A	234		1,10		
5193	1/2	0	In			mm	75,00	4,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	В. 9		0,48		
663	1+1/2	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH)	_B5C					
	'		'	'	'	'		•		·	M Erection				Total Kg:	42,63		
SX1	SULPHU	REX (GH/F			16137	- 0			SX1	SX1 1	/ 1			TOTAL Kg:	42,63		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 16137 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allest	ra					S	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	A 5		13/04/20	010 11.47	7.37							DOC:	1E35-6	65-029			
			Ba	llestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	S Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1435	1	0	In	3,38		mm	,00	0,60) m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				1,50		
467	1	0	In			mm	,00	1,00) NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250	AARH) For	ged 5	5192	0,80		
324	1	0	In	3,38		mm	,00	1,00) NR	203	90° Elbow Long Radius ASME B16.9 I GR. WPB	BE Wrought	S ASTM A	234		0,14		
5192	1/2	0	In			mm	70,00	4,00) NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1 U	JNC/2.2 TAI	В. 9		0,44		
661	1	0	In			mm	,00	1,00) NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)_	B5C					
	'		-	'	'	1	1			'	M Erection			'	Total Kg:	2,88		
SX1	SULPH	UREX G	H/F			16138	- 0			SX1	SX1 1.	/ 1		Т	OTAL Kg:	2,88		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 16138 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		Ba	allestr	a				SKET	CHI	ES MATERIAL LIST		PRO	J: 1E35		REV:) 13	3/04/2010
	PUMA	5		13/04/20	010 11.47.37							DOC	: 1E35	-65-029			
			Ball	estra					SULI	PHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2	Len mn	n Qty	Um Pip. c	lass	Component				Gen. Bolt	Weight (Kg	As.bly	Branch
1433	1/2	0	In	2,77	mm	,00	4,50	m 205]	Pipe ASME B36.10 PL Seamless API 5	L GR. B				5,70		
3107	1/2	0	In		mm	,00	1,00	NR 205		Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	A 105 G 6	1		1,70		
266	1/2	0	In		mm	,00	2,00	NR 207		90° Elbow TA 50.6/1 SW-F 3000# Forg	ged ASTM A	A 105			0,50		
	*		•	•			-		M	Erection				Total Kg:	7,9		
SX1	SULPHUREX GH/F 16139 - 0				- 0		SX1	SX	ζ1 1,	/ 1		,	ΓΟΤΑL Kg:	7,9			

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 16139 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		B	Ballest	ra				SKETCHES MATERIAL LIST PROJ:					1E35	REV: 0	13	3/04/2010		
	PUMA	15		13/04/2	010 11.4	7.37							DOC:	1E35-65-029	•	•		
			Bal	llestra						SI	ULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	C	Corr: mm	
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	s Component			Gen. Bo	lt Weight (Kg)	As.bly	Branch	
1433	1/2	0	In	2,77		mm	,00	4,60	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B			5,82			
3107	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	A 105 G 61		1,70			
465	1/2	0	In			mm	,00	2,00	NR	205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	RF (125÷250	AARH) For	ged 5191	0,80			
4546	1/2	0	In			mm	,00	1,00	NR	205	Cap TA 50.7/2 THRD-F NPT 3000# Fe	orged ASTN	1 A 105		0,12			
5191	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		JNC/2.2 TAI	B. 9	0,44			
659	1/2	0	In			mm	,00	1,00	NR	205	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _	B5C					
	'	,	'	'		'				1	M Erection			Total I	Kg: 8,88			
SX1	SULPH	UREX G	iH/F			25101	- 0			SX1	SX1 1.	/ 1		TOTAL I	ζg: 8.88			

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 25101 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allest	ra					SI	KETCH	HES MATERIAL LIST		PRO	J: 1E35	i	REV: 0	13/	/04/2010
	PUMA5	5		13/04/2	010 11.47	7.37							DOC	: 1E35	5-65-029	•	•	
			Bal	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR	С	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1435	1	0	In	3,38		mm	,00	14,70	m	205	Pipe ASME B36.10 PL Seamless API 5I	L GR. B				36,78		
324	1	0	In	3,38		mm	,00	3,00	NR 2	205	90° Elbow Long Radius ASME B16.9 B GR. WPB	BE Wrought	S ASTM	A 234		0,41		
1756	1+1/2	1	In	3,68	3,38	mm	,00	1,00	NR 2	205	Reducer Concentric ASME B16.9 BE W WPB	Vrought S A	STM A 23	34 GR.		0,26		
4654	1	0	In			mm	,00	1,00	NR 2	205	Tee Straight TA 50.7/2 THRD-F NPT 3	3000# Forge	d ASTM	A 105		0,57		
4548	1	0	In			mm	,00	1,00	NR 2	205	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged ASTN	1 A 105			0,25		
	'	'	,	'		'	1			N	M Erection				Total Kg:	38,27		
SX1	SULPHU	REX G	H/F			25102 -	- 0			SX1 S	SX1 1 /	1		,	TOTAL Kg:	38,27		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specificatio	n SP.1406/2-SP.1407/2
Line 25102 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allest	ra			SKETCHES MATERIAL LIST PROJ:					: 1E35		REV: 0	13.	/04/2010		
	PUMA	\ 5		13/04/20	010 11.47	.37							DOC:	1E35-6	65-029		•	
			Bal	lestra						SU	ULPHUREX GH/F	Size: In	Thk: mm	Temp: °	°C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	s Component			(Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	2,00	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				2,53		
3107	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	A 105 G 61			1,70		
465	1/2	0	In			mm	,00	2,00	NR	205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷25)) AARH) Fo	orged 5	5191	0,80		
5191	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2 TA	AB. 9		0,44		
659	1/2	0	In			mm	,00	1,00	NR	205	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_B5C					
	'				'			,	<u>'</u>		M Erection			'	Total Kg:	5,47		
SX1	SULPH	UREX G	H/F			25103	- 0			SX1	SX1 1,	['] 1		TO	OTAL Kg:	5,47		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specificatio	n SP.1406/2-SP.1407/2
Line 25103 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allesti	a						SKI	ЕТСН	IES MATERIAL LIST		PRC	J: 1E	E35	REV: 0	13	/04/2010
	PUMA	.5		13/04/20	010 11.4	7.37								DOC	: 1E	E35-65-029			
			Bal	lestra							SUI	LPHUREX GH/F	Size: In	Thk: mm	Te	emp: °C	Pres: BAR		Corr: mm
Mark	S1	S2		T1	T2		Len mm	Q	yU	m Pir	o. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	6,	00 1	m 205	5	Pipe ASME B36.10 PL Seamless API 5	L GR. B				7,59		
3107	1/2	0	In			mm	,00	3,	00 N	JR 205	5	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	A 105 G	51		5,10		
4949	1/2	0	In			mm	,00	1,00 NR 205 Steam Trap ST.46702/0 THRD-F NPT PN 25 Forged AISI 304 T 71						1	4,08				
465	1/2	0	In			mm	,00	1,	00 N	JR 205	5	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250) AARH)	Forged	5191	0,40		
4687	1/2	0	In			mm	,00	2,	00 N	JR 205	5	Tee Straight TA 50.6/1 SW-F 3000# Fo	rged ASTM	I A 105			0,56		
1289	1/2	0	In			mm	,00	2,	00 N	JR 203	3	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 10)5			0,76		
5191	1/2	0	In			mm	65,00	4,	00 N	NR 205	5	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2	ГАВ. 9)	0,44		
659	1/2	0	In			mm	,00	1,	00 N	JR 205	5	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)_	_B5C					
	•	*		•		•		•			N	1 Erection				Total Kg:	18,94		

SX1 SX1

SULPHUREX GH/F

SX1

25104 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specificatio	n SP.1406/2-SP.1407/2
Line 25104 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

18,94

TOTAL Kg:

		В	allestr	a					S	KETCH	IES MATERIAL LIST		PRO.	J: 1E3	5	REV: 0 13	3/04/2010
	PUMA5	;		13/04/20	10 11.47	.38							DOC	: 1E3	5-65-029		
			Ball	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	Tem	p: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2	Le	en mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,20	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,25	
1435	1	0	In	3,38		mm	,00	0,20	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,50	
1437	1+1/2	0	In	3,68		mm	,00	14,00	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				56,69	
1438	2	0	In	3,91		mm	,00	1,50	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				8,16	
3111	1+1/2	0	In			mm	,00	1,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	rged ASTM	I A 105 G 6	1		7,00	
326	1+1/2	0	In	3,68		mm	,00	8,00	NR	205	90° Elbow Long Radius ASME B16.9 I GR. WPB	BE Wrough	nt S ASTM	A 234		2,94	
4656	1+1/2	0	In			mm	,00	1,00	NR	205	Tee Straight TA 50.7/2 THRD-F NPT	3000# Forg	ged ASTM A	105		1,28	
1056	1/2	0	In			mm	,00	1,00	NR	205	Coupling TA 50.7/2 THRD-F NPT 300	00# Forged	ASTM A 1	05		0,12	
1058	1	0	In			mm	,00	1,00	NR	205	Coupling TA 50.7/2 THRD-F NPT 300	00# Forged	ASTM A 1	05		0,30	
4458	2	0	In	3,91		mm	,00	2,00	NR	205	Cap ASME B16.9 BE Seamless ASTM	A 234 GR	. WPB			0,63	
4550	1+1/2	0	In			mm	,00	3,00	NR	205	Cap TA 50.7/2 THRD-F NPT 3000# F	orged AST	M A 105			2,25	
										l	M Erection				Total Kg:	80,12	

TOTAL Kg:

80,12

SX1 SX1

SX1

SULPHUREX GH/F

PI_24.2	Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	SP.1406/2-SP.1407/2
TET_24.1	Line 25105 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allest	ra					S	KETC	HES MATERIAL LIST		PRO	J: 1E3	35	REV: 0	13	/04/2010
	PUMA	15		13/04/20	010 11.47	7.38							DOC	: 1E3	35-65-029			
			Ba	llestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Ten	ıp: ℃	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,10	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,13		
1435	1	0	In	3,38		mm	,00	3,20	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				8,01		
3109	1	0	In			mm	,00	1,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	A 105 G	51		3,30		
467	1	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB R	F (125÷25	0 AARH)	Forged	5192	0,80		
	· ·										ASTM A 105							
324	1	0	In	3,38		mm	,00	2,00	NR	205	90° Elbow Long Radius ASME B16.9 E	E Wrough	t S ASTM	A 234		0,27		
									_		GR. WPB							
4546	1/2	0	In			mm	,00	1,00	NR	205	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged AST	M A 105			0,12		
5192	1/2	0	In			mm	70,00	4,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2	AB. 9		0,44		
661	1	0	In			mm	,00	1,00	NR	205	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_B5C					
						•	•	•		•	M Erection				Total Kg:	13,06		
SX1	SULPH	UREX G	H/F			25106	- 0			SX1	SX1 1 /	1			TOTAL Kg:	13,06		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 25106 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCI	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/0	4/2010
	PUMA	5		13/04/20	010 11.47	7.38							DOC:	1E35-	-65-029	•		
			Ball	estra						SU	JLPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	Cor	r: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As	.bly	Branch
1433	1/2	0	In	2,77		mm	,00									4,43		
3107	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	A 105 G 61			1,70		
266	1/2	0	In			mm	,00	3,00	NR	207	90° Elbow TA 50.6/1 SW-F 3000# Forg	ged ASTM	A 105			0,75		
4546	1/2	0	In			mm	,00	1,00	NR	205	Cap TA 50.7/2 THRD-F NPT 3000# F	orged ASTN	M A 105			0,12		
											M Erection				Total Kg:	7,		
SX1	1 SULPHUREX GH/F 25107									SX1	SX1 1	/ 1		1	TOTAL Kg:	7,		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specificatio	n SP.1406/2-SP.1407/2
Line 25107 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a				SKETO	CHES MATERIAL LIST		PROJ	: 1E35		REV: 0	13.	/04/2010
	PUMA	.5		13/04/2	010 11.47.38						DOC:	1E35-	65-029	•		
			Ball	estra				\$	SULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2	Len mm	Qty	Um Pip. cla	ss Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77	mm	,00	1,20	m 205	Pipe ASME B36.10 PL Seamless API 5	SL GR. B				1,52		
3107	1/2	0	In		mm	,00	1,00	NR 205	Valve Gate ST.46270/3 SW-F 800# Fo	rged ASTM	A 105 G 61			1,70		
3186	1/2	0	In		mm	,00	1,00	NR 205	Strainer Y-Type ST.46276/1 SW-F 800	# Forged AS	STM A 105	F 69		0,50		
919	1/2	3/8	In		mm	,00	1,00	NR 205	Reducing Insert M/F TA 50.7/2 THRD Forged ASTM A 105	-M NPT x 7	ΓHRD-F 300)0#		0,06		
									M Erection				Total Kg:	3,78		
SX1	SULPHI	UREX G	H/F		25108	- 0		SX1	SX1 1	/ 1		Т	OTAL Kg:	3,78		

Plant SX1 SULPHUREX GH/F Piping Class 205 Welding specification SP.1406/2-SP.1407/2

Line 25108 - 0 Fluid System

Dang. fluid type Coating De pres Op tem

Area SX1 Sketch Sht 1/1 Isometric code Page 1

Zones

		Ba	allestr	·a					S	KETCH	ES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	5		13/04/20	10 11.47	.38							DOC:	1E35-65	5-029			
			Ball	lestra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp: °C	3	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	n Qty	Um	Pip. class	Component			G	en. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,80	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				1,01		
3107	1/2	0	In			mm	00	1.00	NR	205	Valve Gate ST 46270/3 SW-F 800# For	oed ASTN	1 A 105 G 61			1.70		

M Erection

SX1 SX1

SX1

SULPHUREX GH/F

25109 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 25109 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1 / 1	Isometric code	Page 1

Total Kg:

TOTAL Kg:

2,71

2,71

		В	allest	ra						SKETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	.5		13/04/2	010 11.4	7.38							DOC:	1E35-6	55-029	•		
			Bal	llestra						SU	LPHUREX GH/F	Size: In Th	k: mm	Temp: °	С	Pres: BAR	С	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	Pip. class	Component			(Gen. Bolt	Weight (Kg) A	s.bly	Branch
1433	1/2	0	In	2,77		mm	,00	3,7	0 m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				4,68		
3107	1/2	0	In			mm	,00	1,0	0 NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM A	105 G 61			1,70		
465	1/2	0	In			mm	,00	1,0	0 NR	205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250 A	ARH) For	ged 5	5191	0,40		
266	1/2	0	In			mm	,00	3,0	0 NR	207	90° Elbow TA 50.6/1 SW-F 3000# Forg	ged ASTM A 1	05			0,75		
4687	1/2	0	In			mm	,00	1,0	0 NR	205	Tee Straight TA 50.6/1 SW-F 3000# Fo	rged ASTM A	105			0,28		
4546	1/2	0	In			mm	,00	1,0	0 NR	205	Cap TA 50.7/2 THRD-F NPT 3000# F	orged ASTM A	A 105			0,12		
5191	1/2	0	In			mm	65,00	4,0	0 NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1 UN	C/2.2 TAI	В. 9		0,44		
659	1/2	0	In			mm	,00	1,0	0 NR	205	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _ B	5C					
	,	'			'		•			N	M Erection			<u>'</u>	Total Kg:	8,37		

TOTAL Kg:

8,37

SX1 SX1

SULPHUREX GH/F

SX1

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 25110 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCH	ES MATERIAL LIST		PROJ:	1E35		REV: 0 1	3/04/2010
	PUMA	.5		13/04/20	010 11.47	.38							DOC:	1E35	-65-029		
			Ball	estra						SUI	LPHUREX GH/F	Size: In T	hk: mm	Temp	: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	4,70) m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				5,95	
3107	1/2	0	In			mm	,00	2,00) NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM A	105 G 61			3,40	
465	1/2	0	In			mm	,00	1,00) NR	205	Flange Slip-On ASME B16.5 150 LB R	F (125÷250 A	AARH) For	ged	5191	0,40	
	,	,		,							ASTM A 105					<u>'</u>	
266	1/2	0	In			mm	,00	6,00) NR	207	90° Elbow TA 50.6/1 SW-F 3000# Forg	ed ASTM A	105			1,50	
4687	1/2	0	In			mm	,00	1,00) NR	205	Tee Straight TA 50.6/1 SW-F 3000# Fo	rged ASTM A	105			0,28	
4546	1/2	0	In			mm	,00	2,00) NR	205	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged ASTM	A 105			0,24	
5191	1/2	0	In			mm	65,00	4,00) NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	E B18.2.1 UI	NC/2.2 TAI	3. 9		0,44	
	-	-	1		1	1				-1	ASTM A 193 B7/ASTM A 194 GR.2H						
659	1/2	0	In			mm	,00	1,00) NR	205	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _ E	35C				
										N	1 Erection				Total Kg:	12,21	

TOTAL Kg:

12,21

SX1 SX1

SX1

SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	SP.1406/2-SP.1407/2
Line 25111 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		Ва	allestra	a				SKETC	CHES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	04/2010
	PUMA	5		13/04/20	010 11.47.38						DOC:	1E35-6	5-029			
			Balle	estra				S	SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2	Len mm	n Qty	Um Pip. clas	ss Component			G	Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77	mm	,00	3,50	m 205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				4,43		
3107	1/2	0	In		mm	,00	1,00	NR 205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	A 105 G 61			1,70		
3186	1/2	0	In		mm	,00	1,00	NR 205	Strainer Y-Type ST.46276/1 SW-F 800	# Forged AS	STM A 105 I	F 69		0,50		
266	1/2	0	In		mm	,00	3,00	NR 207	90° Elbow TA 50.6/1 SW-F 3000# Forg	ged ASTM A	A 105			0,75		
919	1/2	3/8	In		mm	,00	1,00	NR 205	Reducing Insert M/F TA 50.7/2 THRD- Forged ASTM A 105	M NPT x T	HRD-F 300	00#		0,06		
4546	1/2	0	In		mm	,00	1,00	NR 205	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged ASTN	1 A 105			0,12		
									M Erection				Total Kg:	7,56		
SX1	SULPHU	JREX GI	H/F		25112	- 0		SX1	SX1 1	/ 1		TO	TAL Kg:	7,56		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	on SP.1406/2-SP.1407/2
Line 25112 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCH	IES MATERIAL LIST		P	ROJ	1E35	j	REV:	0 13	3/04/2010
	PUMA	15		13/04/20	10 11.47	7.39							D	OC:	1E35	5-65-029			
			Ball	lestra						SU	LPHUREX GH/F	Size: In	Thk: n	ım	Temp	: °C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component					Gen. Bolt	Weight (Kg	g) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00,	3,40	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B					4,30	0	
1435	1	0	In	3,38		mm	,00	4,70	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B					11,70	6	
3107	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	I A 105	G 61			1,70	О	
465	1/2	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷25	0 AAR	H) Fo	rged	5191	0,40	0	
324	1	0	In	3,38		mm	,00	3,00	NR	205	90° Elbow Long Radius ASME B16.9 F GR. WPB	BE Wrough	nt S AS	ГМ А	234		0,4	1	
4687	1/2	0	In			mm	,00	1,00	NR	205	Tee Straight TA 50.6/1 SW-F 3000# Fo	rged ASTN	M A 105	5			0,28	8	
4455	1	0	In	3,38		mm	,00	1,00	NR	205	Cap ASME B16.9 BE Seamless ASTM	A 234 GR	. WPB				0,10	0	
4546	1/2	0	In			mm	,00	2,00	NR	205	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged AST	M A 10)5			0,24	4	
5191	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2	.2 TA	В. 9		0,44	4	
659	1/2	0	In			mm	,00	1,00	NR	205	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5C						
	-		1	-	1					N	1 Erection					Total Kg:	19,63	3	

TOTAL Kg:

19,63

SX1 SX1

SX1

SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification SP.1406/2-SP.1407/2					
Line 25113 - 0	Fluid	System					
Dang. fluid type	Coating	De pres	Op tem Page 1				
Area SX1	Sketch Sht 1/1	Isometric code					
Zones							

Ballestra						SKETCHES MATERIAL LIST PROJ: 1E35					1E35		REV:	0	13/04/2010					
	PUMA	5		13/04/20	010 11.47	.39		DOC: 1E3.							1E35-65-029					
Ballestra					SULPHUREX GH/F Size: In Thk: mm Temp					Temp: °C Pres: BAR			Corr: mm							
										_										
Mark	S1	S2		T1	T2		Len mm	ı Qty	Um	Pip. clas	s Componer	nt				Gen.	. Bolt	Weight (K	g) As.bl	y Branch
1433	1/2	0	In	2,77		mm	,00	1,20	m	205	Pipe ASMI	E B36.10 PL Seamless API	5L GR. B					1,5	2	
3107	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate	ST.46270/3 SW-F 800# F	orged ASTM	A 1	05 G 61			1,7	C	
4687	1/2	0	In			mm	,00	1,00	NR	205	Tee Straigh	nt TA 50.6/1 SW-F 3000# I	Forged ASTN	1 A 1	105			0,2	8	
				'	'			•		•	M Erection					Tot	al Kg:	3,5		
SX1	SULPHU	JREX G	H/F			25114	- 0			SX1	SX1		1 / 1			TOTA	L Kg:	3,5		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification SP.1406/2-SP.1407/2					
Line 25114 - 0	Fluid	System					
Dang. fluid type	Coating	De pres	Op tem				
Area SX1	Sketch Sht 1/1	Isometric code	Page 1				
Cones							

Ballestra						SKETCHES MATERIAL LIST PROJ: 1E35					1E35		REV: 0	13	/04/2010			
PUMA5 13/04/2010 11.47.39											DOC:	1E35-	65-029		•			
	Ballestra						SULPHUREX GH/F Size: In Thk: mm Temp:						Temp:	°C	Pres: BAR	C	Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,80	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				1,01		
3107	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM A 1	105 G 61			1,70		
465	1/2	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250 A	ARH) For	ged :	5191	0,40		
266	1/2	0	In			mm	,00	2,00	NR	207	90° Elbow TA 50.6/1 SW-F 3000# Forg	ged ASTM A 10	05			0,50		
5191	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1 UN	C/2.2 TAI	В. 9		0,44		
659	1/2	0	In			mm	,00	1,00	NR	205	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _ B5	5C					
			'							1	M Erection			'	Total Kg:	4,05		
SX1	SULPH	UREX G	H/F			25115	- 0			SX1	SX1 1,	/ 1		T	OTAL Kg:	4,05		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification SP.1406/2-SP.1407/2					
Line 25115 - 0	Fluid	System					
Dang. fluid type	Coating	De pres	Op tem				
Area SX1	Sketch Sht 1/1	Isometric code	Page 1				
Zones							

		E	Ballesti	ra						SKETC	HES MATERIAL LIST		PROJ	: 1E35	5	REV: 0 1	3/04/2010
	PUMA	15		13/04/2	010 11.4	7.39							DOC:	1E35	5-65-029		
			Bal	lestra						S	JLPHUREX GH/F	Size: In	Thk: mm	Temp); °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qt	y U	m Pip. clas	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	4,7	0 r	n 205	Pipe ASME B36.10 PL Seamless API	SL GR. B				5,95	
3107	1/2	0	In			mm	,00	1,0	0 N	R 205	Valve Gate ST.46270/3 SW-F 800# Fo	rged ASTM	A 105 G 61			1,70	
465	1/2	0	In			mm	,00	2,0	0 N	R 205	Flange Slip-On ASME B16.5 150 LB	RF (125÷250) AARH) Fo	orged	5191	0,80	
266	1/2	0	In			mm	,00,	6,0	0 N	R 207	ASTM A 105 90° Elbow TA 50.6/1 SW-F 3000# For	ged ASTM	A 105			1,50	
4687	1/2	0	In			mm	,00,	1,0	0 N	R 205	Tee Straight TA 50.6/1 SW-F 3000# F	orged ASTM	I A 105			0,28	
4546	1/2	0	In			mm	,00	1,0	0 N	R 205	Cap TA 50.7/2 THRD-F NPT 3000# I	Forged ASTI	M A 105			0,12	
5191	1/2	0	In			mm	65,00	8,0	0 N	R 205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM		UNC/2.2 TA	AB. 9		0,88	
											ASTM A 193 B7/ASTM A 194 GR.2F	I					
659	1/2	0	In			mm	,00	2,0	0 N	R 205	Gasket TA 50.5/31 150 LB RF (125÷2	50 AARH) _	_B5C				
											M Erection	<u>'</u>			Total Kg:	11,23	

TOTAL Kg:

11,23

SX1 SX1

SX1

SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specificatio	n SP.1406/2-SP.1407/2
Line 25116 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCE	IES MATERIAL LIST		PR)J: 11	E35	REV: 0	13/04/2010
	PUMA	.5		13/04/20	10 11.47	7.39							DO	C: 11	E35-65-029		
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk: mm	T	emp: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bol	t Weight (Kg) As.bl	y Branch
1433	1/2	0	In	2,77		mm	,00	6,50	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				8,23	
1435	1	0	In	3,38		mm	,00	0,20	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,50	
3107	1/2	0	In			mm	,00	3,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	A 105 G	61		5,10	
4949	1/2	0	In			mm	,00	1,00	NR	205	Steam Trap ST.46702/0 THRD-F NPT	PN 25 For	ged AISI	304 T 7	71	4,08	
467	1	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷25	0 AARH)	Forge	1 5192	0,80	
1749	1	1/2	In	3,38	2,77	mm	,00	1,00	NR	205	Reducer Concentric ASME B16.9 BE V	Vrought S	ASTM A	234 GF	R	0,14	
					1		1			T	WPB						
4687	1/2	0	In			mm	,00	2,00	NR	205	Tee Straight TA 50.6/1 SW-F 3000# Fo:	rged ASTN	I A 105			0,56	
1289	1/2	0	In			mm	,00	2,00	NR	203	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 10)5			0,76	
5192	1/2	0	In			mm	70,00	4,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2	TAB.)	0,44	
661	1	0	In			mm	,00	1,00	NR	205	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_B5C				
		1	-		1	1	1			N	M Erection				Total K	g: 20,6	

TOTAL Kg:

20,6

SX1 SX1

SX1

SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specificatio	n SP.1406/2-SP.1407/2
Line 25119 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a						S	KETC	HES MATERIAL LIST		PR	OJ:	1E35		REV: 0	13	3/04/2010
	PUMA	A 5		13/04/20	10 11.4	7.39								DO	OC:	1E35-6	65-029		•	
			Ball	lestra							S	ULPHUREX GH/F	Size: In	Thk: mn	n	Temp: °	°C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mn	n	Qty	Um	Pip. class	s Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00)	5,00	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B					6,33		
3107	1/2	0	In			mm	,00)	3,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	A 105 (G 61			5,10		
4949	1/2	0	In			mm	,00)	1,00	NR	205	Steam Trap ST.46702/0 THRD-F NPT	PN 25 For	ged AIS	304	T 71		4,08		
465	1/2	0	In			mm	,00)	2,00	NR	205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	RF (125÷25)	0 AARH	I) For	ged 5	5191	0,80		
4687	1/2	0	In			mm	,00)	2,00	NR	205	Tee Straight TA 50.6/1 SW-F 3000# Fo	rged ASTN	A 105				0,56		
1289	1/2	0	In			mm	,00)	2,00	NR	203	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 10)5				0,76		
5191	1/2	0	In			mm	65,00)	4,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.	2 TAI	B. 9		0,44		
659	1/2	0	In			mm	,00)	1,00	NR	205	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH)	_ B5C						
					1						1	M Erection				1	Total Kg:	18,07		
SX1	SULPH	UREX G	H/F			25120	- 0				SX1	SX1 1.	/ 1			T	OTAL Kg:	18,07		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	SP.1406/2-SP.1407/2
Line 25120 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCI	HES MATERIAL LIST		PROJ	1E35	5	REV: 0	13/04/2010
	PUMA	.5		13/04/2	010 11.4	7.39							DOC	1E35	5-65-029		
			Ball	estra						SU	JLPHUREX GH/F	Size: In	Thk: mm	Temp): °C	Pres: BAR	Corr: mm
16.1	G4	G2		m.	TD2		T -	1 0	**	D: 1					G P 1	W 11/77 1 11	n 1
Mark	S1	S2		T1	T2		Len mm	ı Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bl	y Branch
1433	1/2	0	In	2,77		mm	,00	6,50	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				8,23	
4949	1/2	0	In			mm	,00	1,00	NR	205	Steam Trap ST.46702/0 THRD-F NPT	PN 25 For	ged AISI 30	4 T 71		4,08	
4687	1/2	0	In			mm	,00	3,00	NR	205	Tee Straight TA 50.6/1 SW-F 3000# Fo	rged ASTN	1 A 105			0,84	
1289	1/2	0	In			mm	,00	2,00	NR	203	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 10)5			0,76	
	,			,	'		•				M Erection				Total Kg:	13,91	
SX1	SULPHU	UREX GH/F 2512					- 0			SX1	SX1 1	/ 1			TOTAL Kg:	13,91	

Plant SX1 SULPHUREX GH/F Piping Class 205 Welding specification SP.1406/2-SP.1407/2

Line 25123 - 0 Fluid System

Dang. fluid type Coating De pres Op tem

Area SX1 Sketch Sht 1/1 Isometric code Page 1

Zones

		В	allesti	a						SI	KETCH	IES MATERIAL LIST		PRO)J: 1	E35	REV: 0	13	/04/2010
	PUMA	.5		13/04/20	010 11.4	7.40								DO	C: 1	E35-65-029	•		
			Bal	lestra							SUI	LPHUREX GH/F	Size: In	Thk: mm	Т	`emp: °C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	Q	ty	U m	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	8.	70	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				11,01		
3107	1/2	0	In			mm	,00	3.	00]	NR :	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	A 105 G	61		5,10		
4949	1/2	0	In			mm	,00	1.	00]	NR :	205	Steam Trap ST.46702/0 THRD-F NPT	PN 25 Forg	ged AISI 3	804 T	71	4,08		
465	1/2	0	In			mm	,00	1.	00	NR :	205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250) AARH)	Forge	d 5191	0,40		
4687	1/2	0	In			mm	,00	4.	00]	NR :	205	Tee Straight TA 50.6/1 SW-F 3000# Fo	rged ASTM	I A 105			1,12		
1289	1/2	0	In			mm	,00	2.	00	NR :	203	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 10)5			0,76		
5191	1/2	0	In			mm	65,00	4.	00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2	TAB.	9	0,44		
659	1/2	0	In			mm	,00	1.	00]	NR :	205	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)_	B5C					
	•			•	•	•				·	N	1 Erection				Total Kg:	22,91		

SX1 SX1

SULPHUREX GH/F

SX1

25124 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 25124 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

22,91

		В	allestr	a						SKETCI	HES MATERIAL LIST		PRO	J: 1E3	35	REV: 0	13	/04/2010
	PUMA	.5		13/04/20	010 11.47	7.40							DOC	: 1E3	35-65-029		•	
			Ball	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	Tem	ıp: ℃	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	ı Qt	y U	n Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	6,0	0 n	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				7,59		
3107	1/2	0	In			mm	,00	3,0	0 N	R 205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	I A 105 G	51		5,10		
4949	1/2	0	In			mm	,00	1,0	0 N	R 205	Steam Trap ST.46702/0 THRD-F NPT	PN 25 For	ged AISI 3	04 T 71		4,08		
465	1/2	0	In			mm	,00	1,0	0 N	R 205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	RF (125÷25	0 AARH)	Forged	5191	0,40		
4687	1/2	0	In			mm	,00	3,0	0 N	R 205	Tee Straight TA 50.6/1 SW-F 3000# Fo	rged ASTN	M A 105			0,84		
1289	1/2	0	In			mm	,00	2,0	0 N	R 203	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 10	05			0,76		
4546	1/2	0	In			mm	,00	1,0	0 N	R 205	Cap TA 50.7/2 THRD-F NPT 3000# F	orged AST	M A 105			0,12		
5191	1/2	0	In			mm	65,00	4,0	0 N	R 205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2	TAB. 9		0,44		
659	1/2	0	In			mm	,00	1,0	0 N	R 205	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH)	_ B5C					
	·	·	•	•	•		•]	M Erection				Total Kg:	19,34		

TOTAL Kg:

19,34

SX1 SX1

SULPHUREX GH/F

SX1

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specificatio	n SP.1406/2-SP.1407/2
Line 25125 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a						SKI	ETCH	IES MATERIAL LIST		PROJ	: 1E35	5	REV: 0	13.	/04/2010
	PUMA	.5		13/04/20	010 11.47	7.40								DOC:	1E35	5-65-029	•		
			Ball	estra							SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp): °C	Pres: BAR	С	Corr: mm
Mark	S1	S2		T1	T2		Len mn	ı Qı	y U	Jm Pij	p. class	Component				Gen. Bolt	Weight (Kg) A	s.bly	Branch
1433	1/2	0	In	2,77		mm	,00	6,	00 1	m 205	5	Pipe ASME B36.10 PL Seamless API 5	L GR. B				7,59		
3107	1/2	0	In			mm	,00) 3,	00 N	NR 205	5	Valve Gate ST.46270/3 SW-F 800# For	rged ASTM	A 105 G 61			5,10		
4949	1/2	0	In			mm	,00) 1,	00 N	NR 205	5	Steam Trap ST.46702/0 THRD-F NPT	PN 25 For	ged AISI 304	4 T 71		4,08		
465	1/2	0	In			mm	,00	1,	00 N	NR 205	5	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	RF (125÷25	0 AARH) Fo	orged	5191	0,40		
4687	1/2	0	In			mm	,00	3,	00 N	NR 205	5	Tee Straight TA 50.6/1 SW-F 3000# Fo	orged ASTN	1 A 105			0,84		\top
1289	1/2	0	In			mm	,00	2,0	00 N	NR 203	3	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 10)5			0,76		
4546	1/2	0	In			mm	,00) 1,0	00 N	NR 205	5	Cap TA 50.7/2 THRD-F NPT 3000# F	orged AST	M A 105			0,12		
5191	1/2	0	In			mm	65,00	4,	00 N	NR 205	5	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	AB. 9		0,44		
659	1/2	0	In			mm	,00	1,	00 N	NR 205	5	Gasket TA 50.5/31 150 LB RF (125÷25		_ B5C					
		1	1			1					N	1 Erection	, -			Total Kg:	19,34		

TOTAL Kg:

19,34

SX1 SX1

SULPHUREX GH/F

SX1

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specificatio	n SP.1406/2-SP.1407/2
Line 25126 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		Ba	allestr	a					S	KETCH	ES MATERIAL LIST		P	ROJ:	1E35		REV:	0 1	3/04/2010
	PUMA	5		13/04/20	10 11.47	.40							D	OC:	1E35-0	65-029	•		
			Ball	estra		•				SUI	LPHUREX GH/F	Size: In	Thk: m	m	Temp:	°C	Pres: BAR		Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component					Gen. Bolt	Weight (F	(g) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00,	6,60	m	205							8,3	35	
3107	1/2	0	In			mm	,00	3,00 NR 205 Valve Gate ST.46270/3 SW-F 800# Forged ASTM A 105 G 61								5,	10		
4949	1/2	0	In			mm	,00	1,00 NR 205 Steam Trap ST.46702/0 THRD-F NPT PN 25 Forged AISI 304 T 71						T 71		4,0	08		
266	1/2	0	In			mm	,00	4,00	NR	207	90° Elbow TA 50.6/1 SW-F 3000# Forgo	ed ASTM	A 105				1,0	00	
4687	1/2	0	In			mm	,00	3,00	NR	205	Tee Straight TA 50.6/1 SW-F 3000# For	ged ASTN	M A 105	í			0,8	84	
919	1/2	3/8	In			mm	,00,	1,00	NR	205	Reducing Insert M/F TA 50.7/2 THRD-I	M NPT x	THRD-	F 300	0#		0,0	06	
	-										Forged ASTM A 105								
1289	1/2	0	In			mm	,00	2,00 NR 207 Union TA 50.6/1 SW-F 3000# Fo				STM A 10	05				0,	76	
4546	1/2	0	In			mm	,00	1,00	NR	205	Cap TA 50.7/2 THRD-F NPT 3000# Fo	rged AST	M A 10	5			0,	12	

M Erection

SX1

SX1

SULPHUREX GH/F

25127 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 25127 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

Total Kg:

TOTAL Kg:

20,32

		В	allesti	ra					S	KETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	.5		13/04/20	010 11.47	.40							DOC:	1E35-	65-029	•		
			Bal	llestra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	n Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	5,90	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				7,47		
3107	1/2	0	In			mm	,00	3,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	A 105 G 61			5,10		
4949	1/2	0	In			mm	,00	1,00	NR	205	Steam Trap ST.46702/0 THRD-F NPT	PN 25 For	ged AISI 304	T 71		4,08		
266	1/2	0	In			mm	,00	4,00	NR	207	90° Elbow TA 50.6/1 SW-F 3000# Forg	ed ASTM	A 105			1,00		
4687	1/2	0	In			mm	,00	3,00	NR	205	Tee Straight TA 50.6/1 SW-F 3000# For	rged ASTN	1 A 105			0,84		
919	1/2	3/8	In			mm	,00	1,00	NR	205	Reducing Insert M/F TA 50.7/2 THRD-Forged ASTM A 105	M NPT x	THRD-F 300	0#		0,06		
1289	1/2	0	In			mm	,00	2,00	NR	207	Union TA 50.6/1 SW-F 3000# Forged A	STM A 10)5			0,76		
4546	1/2	0	In			mm	,00	1,00	NR	205	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged AST	M A 105			0,12		
	·				•					N	// Erection				Total Kg:	19,43		

SX1 SX1

SULPHUREX GH/F

25128 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 25128 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

19,43

		В	allest	ra						SK	ETCH	HES MATERIAL LIST		PROJ	1E35		REV:) 13	3/04/2010
	PUMA	15		13/04/2	010 11.4	47.40								DOC:	1E35-	-65-029			
			Ba	llestra							SU	JLPHUREX GH/F	Size: In T	hk: mm	Temp:	°C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	ı Qt	y L	Jm Pi	ip. class	Component				Gen. Bolt	Weight (Kg	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	4,6	0 1	m 20)3	Pipe ASME B36.10 PL Seamless API 5	L GR. B				5,82		
3116	1/2	0	In			mm	,00	1,0	0 N	NR 20)3	Valve Globe ST.46004/3 THRD-F NPT	200 LB For	ged BRON	ZE D		0,70		
	<u>'</u>					,						51							
3174	1/2	0	In			mm	,00	1,0	0 N	NR 20)3	Strainer Y-Type ST.46326/4 THRD-F	NPT 200 LB	Forged BR	ONZE		0,50		
					,	,						F 70							
266	1/2	0	In			mm	,00	4,0	0 N	NR 20)7	90° Elbow TA 50.6/1 SW-F 3000# Forg	ed ASTM A	105			1,00		
919	1/2	3/8	In			mm	,00	1,0	0 1	NR 20)3	Reducing Insert M/F TA 50.7/2 THRD-	M NPT x TH	HRD-F 300	0#		0,06		
							_					Forged ASTM A 105							
4546	1/2	0	In			mm	,00,	1,0	0 N	NR 20)3	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged ASTM	A 105			0,12		
	•	•	•		•		•	•		,	N	M Erection				Total Kg:	8,2		
SX1	SULPH	ILPHUREX GH/F 25129 - 0					- 0				SX1 S	SX1 1	′ 1		T	OTAL Kg:	8,2]	

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 25129 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestra	a					S	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13	3/04/2010
	PUMA	.5		13/04/20	010 11.47	.40							DOC:	1E35	-65-029	•		
			Balle	estra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp	°C	Pres: BAR	(Corr: mm
Mark	S1	S2		Т1	T2		Len mm	Otv	Um	Pip. class	S Component				Gen. Bolt	Weight (Kg)	As.blv	Branch
1433	1/2	0	In	2,77		mm	,00	Cop - Process								3,54		
266	1/2	0	In			mm	,00	3,00	NR	207	90° Elbow TA 50.6/1 SW-F 3000# For	ged ASTM	A 105			0,75		
919	1/2	3/8	In			mm	,00	1,00	NR	203	Reducing Insert M/F TA 50.7/2 THRD Forged ASTM A 105	-M NPT x	THRD-F 300	0#		0,06		
								M Erection								4,35		
SX1	SULPHUREX GH/F 25130 - 0) - 0			SX1	SX1 1	/ 1		7	TOTAL Kg:	4,35			

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 25130 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

	Ballestra									SKE	ГСН	HES MATERIAL LIST		PR	OJ:	1E35		REV:	13	3/04/2010
	PUMA	.5		13/04/20	010 11.4	7.40								DO	C : 1	1E35-6	65-029		•	
			Bal	lestra							SU	LPHUREX GH/F	Size: In	Thk: mm		Temp: °	°C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mn	n Qt	y U	m Pip. o	class	Component				(Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0 12,0	00 n	n 203		Pipe ASME B36.10 PL Seamless API 5	L GR. B					15,19		
3116	1/2	0	In			mm	,00	0 1,0	00 N	R 203		Valve Globe ST.46004/3 THRD-F NP7	Γ 200 LB F	orged BF	RONZI	ED		0,70		
3174	1/2	0	In			mm	,00	0 1,0	00 N	R 203		Strainer Y-Type ST.46326/4 THRD-F 1 F 70	NPT 200 L	B Forged	BRO	NZE		0,50		
266	1/2	0	In			mm	,00	0 5,0	0 N	R 207		90° Elbow TA 50.6/1 SW-F 3000# Forg	ged ASTM	A 105				1,25		
1749	1	1/2	In	3,38	2,77	mm	,00	0 1,0	00 N	R 203		Reducer Concentric ASME B16.9 BE V WPB	Vrought S	ASTM A	234 G	GR.		0,14		
919	1/2	3/8	In			mm	,00	0 1,0	00 N	R 203		Reducing Insert M/F TA 50.7/2 THRD- Forged ASTM A 105	M NPT x	THRD-F	3000#	#		0,06		
4546	1/2	0	In			mm	,00	0 1,0	00 N	R 203		Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged AST	M A 105				0,12		
	•	*	•	•	*	•		•			N	M Erection				•	Total Kg:	17,95		
SX1	SULPHU	UREX G	H/F			25131	- 0			SX	1 S	SX1 1.	/ 1			T	OTAL Kg:	17,95		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 25131 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETC	HES MATERIAL LIST		PROJ:	1E35		REV:	13	3/04/2010
	PUMA	5		13/04/20	010 11.47	7.41							DOC:	1E35	-65-029		•	
			Balle	estra						SU	JLPHUREX GH/F	Size: In	Thk: mm	Temp	: °C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	2,80 m 203 Pipe ASME B36.10 PL Seamless API 5L GR. B								3,54		
266	1/2	0	In			mm	,00	3,00	NR	207	90° Elbow TA 50.6/1 SW-F 3000# Forg	ged ASTM	A 105			0,75		
919	1/2	3/8	In			mm	,00	1,00	NR	203	Reducing Insert M/F TA 50.7/2 THRD-Forged ASTM A 105	-M NPT x	THRD-F 300	0#		0,06		
								M Erection							Total Kg:	4,35		
SX1	SULPHUREX GH/F 25132 - 0					2 - 0			SX1	SX1 1	/ 1		,	ГОТАL Kg:	4,35]		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 25132 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCH	HES MATERIAL LIST		PROJ:	1E35		REV: 0 1	3/04/2010
	PUMA	.5		13/04/20	010 11.4	7.41							DOC:	1E35-	65-029		
			Ball	estra						SU	LPHUREX GH/F	Size: In The	C: mm	Temp:	°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	1,00	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				1,27	
3107	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM A 1	05 G 61			1,70	
465	1/2	0	In			mm	,00	2,00	NR	205	Flange Slip-On ASME B16.5 150 LB R	F (125÷250 AA	ARH) Forg	ed :	5191	0,80	
4687	1/2	0	In			mm	.00	1.00	ND	205	ASTM A 105 Tee Straight TA 50.6/1 SW-F 3000# For	rged ASTM A	105			0,28	
5191	1/2	0	In			mm	65,00	4,00		1	Stud Bolt + 2 Nuts TA 50.48B/28 ASM			Q		0,44	
3171	1/2	U					03,00	.,00	1111	203	ASTM A 193 B7/ASTM A 194 GR.2H	L D10.2.1 C1W	3/2.2 TAB	. /		0,44	
659	1/2	0	In			mm	,00	1,00	NR	205	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _ B5	C				
									N	M Erection				Total Kg:	4,49		
SX1	SULPHI	UREX G	H/F			25133	- 0			SX1 S	SX1 1 /	′ 1		T	OTAL Kg:	4,49	

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specificatio	n SP.1406/2-SP.1407/2
Line 25133 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	Ballestr	a					S	KETC	HES MATERIAL LIST		PRO	J: 1E3	5	REV: 0	13/04	1/2010
	PUMA	.5		13/04/20	010 11.47	.41							DOC	: 1E3	5-65-029			
			Ball	estra						S	ULPHUREX GH/F	Size: In	Thk: mm	Tem	p: ℃	Pres: BAR	Corr	:: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	s Component				Gen. Bolt	Weight (Kg)	As.bly B	ranch
1433	1/2	0	In	2,77		mm	,00	0,20	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,25		
1435	1	0	In	3,38		mm	,00	5,80	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				14,51		
3109	1	0	In			mm	,00	1,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	rged ASTM	A 105 G	51		3,30		
467	1	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷25	0 AARH)	Forged	5192	0,80		
324	1	0	In	3,38		mm	,00	4,00	NR	205	90° Elbow Long Radius ASME B16.9 I GR. WPB	BE Wrough	t S ASTM	A 234		0,54		
4546	1/2	0	In			mm	,00	2,00	NR	205	Cap TA 50.7/2 THRD-F NPT 3000# F	orged AST	M A 105			0,24		
5192	1/2	0	In			mm	70,00	4,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2	ГАВ. 9		0,44		
661	1	0	In			mm	,00	1,00	NR	205	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH)	_B5C					
							-		•	M Erection				Total Kg:	20,09	<u>'</u>		
SX1	X1 SULPHUREX GH/F 25134 - 0					- 0			SX1	SX1 1	/ 1			TOTAL Kg:	20,09			

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 25134 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					:	SKETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0 1	3/04/2010
	PUMA	.5		13/04/20	010 11.47	7.41	1						DOC:	1E35	-65-029		
			Ball	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp	:℃	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Un	n Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	1,6) m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				2,03	
3107	1/2	0	In			mm	,00	1,0) NI	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	A 105 G 61			1,70	
465	1/2	0	In			mm	,00	2,0) NI	205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250) AARH) For	ged	5191	0,80	
4687	1/2	0	In			mm	,00	1,0) NI	R 205	Tee Straight TA 50.6/1 SW-F 3000# For	rged ASTN	I A 105			0,28	
4546	1/2	0	In			mm	,00	1,0) NI	205	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged ASTI	M A 105			0,12	
5191	1/2	0	In			mm	65,00	4,00) NI	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	B. 9		0,44	
659	1/2	0	In			mm	,00	1,0) NI	205	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)_	B5C				
	'			,		'	•	•		N	M Erection				Total Kg:	5,37	

SX1 SX1

25135 - 0

SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specificatio	n SP.1406/2-SP.1407/2
Line 25135 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

5,37

	Ballestra							S	KETCH	HES MATERIAL LIST		PR	OJ:	1E35		REV: 0	13	/04/2010	
	PUMA	15		13/04/20	10 11.47	7.41							DO	C:	1E35-	-65-029		•	
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk: mm	m Temp: °C		°C	Pres: BAR		orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	7,60	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B					9,62		
3107	1/2	0	In			mm	,00	3,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	rged ASTM	I A 105 G	61			5,10		
4949	1/2	0	In			mm	,00	1,00	NR	205	Steam Trap ST.46702/0 THRD-F NPT	PN 25 For	ged AISI	304 7	Γ71		4,08		
465	1/2	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	RF (125÷25	0 AARH) Forg	ged	5191	0,40		
266	1/2	0	In			mm	,00	4,00	NR	207	90° Elbow TA 50.6/1 SW-F 3000# Forg	ged ASTM	A 105				1,00		
4687	1/2	0	In			mm	,00	3,00	NR	205	Tee Straight TA 50.6/1 SW-F 3000# Fo	orged ASTN	M A 105				0,84		
1289	1/2	0	In			mm	,00	2,00	NR	207	Union TA 50.6/1 SW-F 3000# Forged	ASTM A 10	05				0,76		
4546	1/2	0	In			mm	,00	1,00	NR	205	Cap TA 50.7/2 THRD-F NPT 3000# F	orged AST	M A 105				0,12		
5191	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2	TAB	3. 9		0,44		
659	1/2	0	In			mm	,00	1,00	NR	205	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH)	_ B5C						
	•	*								N	M Erection					Total Kg:	22,36		

TOTAL Kg:

22,36

SX1 SX1

SULPHUREX GH/F

SX1

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 25136 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					5	SKETCH	IES MATERIAL LIST		PROJ:	1E35	;	REV:	0 1	3/04/2010
	PUMA	15		13/04/20	010 11.4	7.41							DOC:	1E35	5-65-029	•		
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR		Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	Pip. class	Component				Gen. Bolt	Weight (Kg	g) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	4,80	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				6,08	3	
3107	1/2	0	In			mm	,00	2,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	A 105 G 61			3,40)	
465	1/2	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	RF (125÷250	AARH) For	ged	5191	0,40)	
266	1/2	0	In			mm	,00	6,00	NR	207	90° Elbow TA 50.6/1 SW-F 3000# Forg	ged ASTM A	105			1,50)	
4687	1/2	0	In			mm	,00	1,00	NR	205	Tee Straight TA 50.6/1 SW-F 3000# Fo	rged ASTM	A 105			0,28	3	
4546	1/2	0	In			mm	,00	2,00	NR	205	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged ASTM	I A 105			0,24	4	
5191	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		JNC/2.2 TA	B. 9		0,44	4	
659	1/2	0	In			mm	,00	1,00	NR	205	Gasket TA 50.5/31 150 LB RF (125÷25		B5C					
	•	*		*		•				N	1 Erection				Total Kg:	12,34	4	

SX1 SX1

SX1

SULPHUREX GH/F

25137 - 0

1 / 1

TOTAL Kg:

12,34

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	on SP.1406/2-SP.1407/2
Line 25137 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCH	ES MATERIAL LIST		PROJ:	1E35		REV: 0 13	3/04/2010
	PUMA	.5		13/04/2	010 11.4	7.42							DOC:	1E35-65-0	29		
			Ball	lestra						SUI	LPHUREX GH/F	Size: In T	hk: mm	Temp: °C		Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component			Gen.	Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	5,90	m	205	Pipe ASME B36.10 PL Seamless API 51	GR. B				7,47	
3107	1/2	0	In			mm	,00	3,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM A	105 G 61			5,10	
4949	1/2	0	In			mm	,00	1,00	NR	205	Steam Trap ST.46702/0 THRD-F NPT	PN 25 Forge	d AISI 304	Т 71		4,08	
266	1/2	0	In			mm	,00	4,00	NR	207	90° Elbow TA 50.6/1 SW-F 3000# Forg	ed ASTM A	105			1,00	
4687	1/2	0	In			mm	,00	3,00	NR	205	Tee Straight TA 50.6/1 SW-F 3000# For	ged ASTM	A 105			0,84	
1289	1/2	0	In			mm	,00	2,00	NR	207	Union TA 50.6/1 SW-F 3000# Forged A	STM A 105				0,76	
4546	1/2	0	In			mm	,00	1,00	NR	205	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged ASTM	A 105			0,12	
	•	*	•	•	•	•	-			N	I Erection			Tot	al Kg:	19,37	

TOTAL Kg:

19,37

SX1 SX1

SX1

SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 25138 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCH	ES MATERIAL LIST		PROJ	: 1E35	;	REV: 0	13/	/04/2010
	PUMA5	5		13/04/20	010 11.4	7.42							DOC:	1E35	5-65-029	•	•	
			Ball	lestra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,10	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,13		
1435	1	0	In	3,38		mm	,00	4,70	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				11,76		
1437	1+1/2	0	In	3,68		mm	,00,	3,00	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				12,15		
3111	1+1/2	0	In			mm	,00	1,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	A 105 G 61			7,00		
324	1	0	In	3,38		mm	,00	2,00	NR	205	90° Elbow Long Radius ASME B16.9 E GR. WPB	BE Wrough	t S ASTM A	234		0,27		
326	1+1/2	0	In	3,68		mm	,00	3,00	NR	205	90° Elbow Long Radius ASME B16.9 F GR. WPB	BE Wrough	t S ASTM A	234		1,10		
1756	1+1/2	1	In	3,68	3,38	mm	,00	1,00	NR	205	Reducer Concentric ASME B16.9 BE V WPB	Vrought S	ASTM A 234	GR.		0,26		
4455	1	0	In	3,38		mm	,00	1,00	NR	205	Cap ASME B16.9 BE Seamless ASTM	A 234 GR.	. WPB			0,10		
4546	1/2	0	In			mm	,00,	1,00	NR	205	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged AST	M A 105			0,12		
			•	•			•		-	N	I Erection				Total Kg:	32,89		

TOTAL Kg:

32,89

SX1

SX1

SX1

SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 25140 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allesti	a					S	KETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0	13	/04/2010
	PUMA	.5		13/04/20)10 11.4	7.42							DOC:	1E35	-65-029	•		
			Bal	lestra						SUI	LPHUREX GH/F	Size: In Th	k: mm	Temp	: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	9,50	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				12,02		
1435	1	0	In	3,38		mm	,00	0,20	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,50		
3107	1/2	0	In			mm	,00	3,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM A	105 G 61			5,10		
4949	1/2	0	In			mm	,00	1,00	NR	205	Steam Trap ST.46702/0 THRD-F NPT	PN 25 Forged	AISI 304	T 71		4,08		
1749	1	1/2	In	3,38	2,77	mm	,00	2,00	NR	205	Reducer Concentric ASME B16.9 BE W WPB	Vrought S AST	ГМ А 234	GR.		0,27		
4687	1/2	0	In			mm	,00	3,00	NR	205	Tee Straight TA 50.6/1 SW-F 3000# Fo	rged ASTM A	105			0,84		
1289	1/2	0	In			mm	,00	2,00	NR	203	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 105				0,76		
4546	1/2	0	In			mm	,00	1,00	NR	205	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged ASTM A	A 105			0,12		
				•	•	•				N	1 Erection				Total Kg:	23,7		

TOTAL Kg:

23,7

SX1 SX1

SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 25142 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		E	Ballest	ra					S	KETCH	IES MATERIAL LIST		PROJ:	1E35	5	REV: 0 1	3/04/2010
	PUMA	15		13/04/2	010 11.4	7.42							DOC:	1E35	5-65-029	•	
			Bal	lestra						SUI	LPHUREX GH/F	Size: In	Γhk: mm	Temp	:°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	4,70	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				5,95	
3107	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	A 105 G 61			1,70	
465	1/2	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250	AARH) For	rged	5191	0,40	
266	1/2	0	In			mm	,00	4,00	NR	207	90° Elbow TA 50.6/1 SW-F 3000# Forg	ged ASTM A	105			1,00	
4687	1/2	0	In			mm	,00	1,00	NR	205	Tee Straight TA 50.6/1 SW-F 3000# Fo	rged ASTM	A 105			0,28	
4546	1/2	0	In			mm	,00	1,00	NR	205	Cap TA 50.7/2 THRD-F NPT 3000# F	orged ASTM	I A 105			0,12	
5191	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM		JNC/2.2 TA	В. 9		0,44	
									_		ASTM A 193 B7/ASTM A 194 GR.2H						
659	1/2	0	In			mm	,00	1,00	NR	205	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)_	B5C				
										N	A Erection	<u>'</u>	·		Total Kg:	9,89	

TOTAL Kg:

9,89

SX1 SX1

SX1

SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specificatio	n SP.1406/2-SP.1407/2
Line 25143 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	Ballestr	a					S	KETC	HES MATERIAL LIST		PROJ	: 1E35		REV: 0	13	/04/2010
	PUMA	.5		13/04/20	010 11.47	7.42							DOC:	1E35-	65-029		•	
			Balle	estra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. clas	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	5,90	m	205	Pipe ASME B36.10 PL Seamless API	5L GR. B				7,47		
3107	1/2	0	In			mm	,00	3,00	NR	205	Valve Gate ST.46270/3 SW-F 800# F6	orged ASTM	I A 105 G 61			5,10		
4949	1/2	0	In			mm	,00	1,00	NR	205	Steam Trap ST.46702/0 THRD-F NP	T PN 25 For	ged AISI 304	T 71		4,08		
266	1/2	0	In			mm	,00	4,00	NR	207	90° Elbow TA 50.6/1 SW-F 3000# Fo	orged ASTM	A 105			1,00		
4687	1/2	0	In			mm	,00	3,00	NR	205	Tee Straight TA 50.6/1 SW-F 3000# F	Forged ASTN	M A 105			0,84		
1289	1/2	0	In			mm	,00	2,00	NR	207	Union TA 50.6/1 SW-F 3000# Forged	ASTM A 10	05			0,76		
4546	1/2	0	In			mm	,00	1,00	NR	205	Cap TA 50.7/2 THRD-F NPT 3000#	Forged AST	M A 105			0,12		
	•										M Erection			'	Total Kg:	19,37		
SX1	SULPHU	JREX G	H/F			25144 - (0			SX1	SX1	1 / 1		T	OTAL Kg:	19,37		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specificatio	n SP.1406/2-SP.1407/2
Line 25144 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCH	IES MATERIAL LIST		PRO.	J: 1E3	5	REV: 0	13	/04/2010
	PUMA	.5		13/04/20	010 11.4	7.42							DOC	: 1E3	5-65-029	•		
			Ball	estra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Tem	p: °C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	7,60	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				9,62		
3107	1/2	0	In			mm	,00	3,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	A 105 G 6	1		5,10		
4949	1/2	0	In			mm	,00	1,00	NR	205	Steam Trap ST.46702/0 THRD-F NPT	PN 25 For	ged AISI 30	4 T 71		4,08		
465	1/2	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷25	0 AARH) F	orged	5191	0,40		
266	1/2	0	In			mm	,00	4,00	NR	207	90° Elbow TA 50.6/1 SW-F 3000# Forg	ged ASTM	A 105			1,00		
4687	1/2	0	In			mm	,00	3,00	NR	205	Tee Straight TA 50.6/1 SW-F 3000# Fo	rged ASTN	1 A 105			0,84		
1289	1/2	0	In			mm	,00	2,00	NR	207	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 10)5			0,76		
4546	1/2	0	In			mm	,00	1,00	NR	205	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged AST	M A 105			0,12		
5191	1/2	0	In			mm	65,00	2,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2 T	AB. 9		0,22		
659	1/2	0	In			mm	,00	1,00	NR	205	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_B5C					
										N	1 Erection				Total Kg:	22,14		

TOTAL Kg:

22,14

SX1 SX1

SULPHUREX GH/F

SX1

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	sp.1406/2-Sp.1407/2
Line 25145 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a						SKETO	HES MATERIAL LIST		PROJ	: 1E35		REV: 0	13/04/2010
	PUMA	.5		13/04/20	010 11.4	7.43							DOC:	1E35	-65-029	•	
			Ball	estra							SULPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mn	ı Qt	y Uı	n Pip. cla	ss Component				Gen. Bolt	Weight (Kg) As.	bly Branch
1433	1/2	0	In	2,77		mm	,00	6,9	0 n	205	Pipe ASME B36.10 PL Seamless API	5L GR. B				8,73	
3107	1/2	0	In			mm	,00	3,0	0 N	R 205	Valve Gate ST.46270/3 SW-F 800# Fo	orged ASTM	A 105 G 61			5,10	
4949	1/2	0	In			mm	,00	1,0	0 N	R 205	Steam Trap ST.46702/0 THRD-F NPT	ΓPN 25 Forg	ged AISI 304	T 71		4,08	
465	1/2	0	In			mm	,00,	1,0	0 N	R 205	Flange Slip-On ASME B16.5 150 LB	RF (125÷250	0 AARH) Fo	rged	5191	0,40	
											ASTM A 105						
4687	1/2	0	In			mm	,00	3,0	0 N	R 205	Tee Straight TA 50.6/1 SW-F 3000# F	orged ASTM	1 A 105			0,84	
1289	1/2	0	In			mm	,00	2,0	0 N	R 203	Union TA 50.6/1 SW-F 3000# Forged	ASTM A 10)5			0,76	
4546	1/2	0	In			mm	,00) 1,0	0 N	R 205	Cap TA 50.7/2 THRD-F NPT 3000# I	Forged ASTI	M A 105			0,12	
5191	1/2	0	In			mm	65,00	4,0	0 N	R 205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	ME B18.2.1	UNC/2.2 TA	В. 9		0,44	
	,	·	·			,	·				ASTM A 193 B7/ASTM A 194 GR.2F	I					
659	1/2	0	In			mm	,00	1,0	0 NI	R 205	Gasket TA 50.5/31 150 LB RF (125÷2	50 AARH) _	_B5C				
						-					M Erection				Total Kg:	20,48	

TOTAL Kg:

20,48

SX1 SX1

SULPHUREX GH/F

SX1

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 25146 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

	Ballestra									SKETC	HES MATERIAL LIST		PROJ	: 1E35		REV: 0	13/04/2010
	PUMA	5		13/04/20	010 11.47	7.43							DOC:	1E35	5-65-029	•	•
			Ball	estra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mn	ı Qt	y Uı	n Pip. clas	s Component				Gen. Bolt	Weight (Kg) As.	bly Branch
1433	1/2	0	In	2,77		mm	,00	6,9	0 n	205	Pipe ASME B36.10 PL Seamless API 5	5L GR. B				8,73	
3107	1/2	0	In			mm	,00	3,0	0 N	R 205	Valve Gate ST.46270/3 SW-F 800# Fo	rged ASTM	A 105 G 61			5,10	
4949	1/2	0	In			mm	,00	1,0	0 N	R 205	Steam Trap ST.46702/0 THRD-F NPT	ΓPN 25 For	ged AISI 304	4 T 71		4,08	
465	1/2	0	In			mm	,00	1,0	0 N	R 205	Flange Slip-On ASME B16.5 150 LB I	RF (125÷25	0 AARH) Fo	orged	5191	0,40	
											ASTM A 105						
4687	1/2	0	In			mm	,00	3,0	0 N	R 205	Tee Straight TA 50.6/1 SW-F 3000# Fe	orged ASTN	4 A 105			0,84	
1289	1/2	0	In			mm	,00	2,0	0 N	R 203	Union TA 50.6/1 SW-F 3000# Forged	ASTM A 10)5			0,76	
4581	1/2	0	In			mm	,00	1,0	0 N	R 205	Cap TA 50.6/1 SW-F 3000# Forged AS	STM A 105				0,12	
5191	1/2	0	In			mm	65,00	4,0	0 N	R 205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	ME B18.2.1	UNC/2.2 TA	AB. 9		0,44	
		·	·			,	·				ASTM A 193 B7/ASTM A 194 GR.2H	I					
659	1/2	0	In			mm	,00	1,0	0 NI	205	Gasket TA 50.5/31 150 LB RF (125÷2.	50 AARH)	_B5C				
								•			M Erection				Total Kg:	20,48	

TOTAL Kg:

20,48

SX1 SX1

SULPHUREX GH/F

SX1

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	on SP.1406/2-SP.1407/2
Line 25147 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allest	ra					S	KETC	HES MATERIAL LIST		PROJ	: 1E35		REV: 0	13	/04/2010
	PUMA	\ 5		13/04/20	010 11.47	.43							DOC:	1E35-6	65-029			
			Bal	lestra						SI	ULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	2,00	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				2,53		
3107	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	A 105 G 61			1,70		
465	1/2	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	AF (125÷25)	O AARH) Fo	orged 5	5191	0,40		
5191	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	AB. 9		0,44		
659	1/2	0	In			mm	,00	1,00	NR	205	Gasket TA 50.5/31 150 LB RF (125÷25	O AARH)	_B5C					
	'				,					1	M Erection				Total Kg:	5,07		
SX1	SULPH	UREX G	H/F			25148	- 0			SX1	SX1 1.	/ 1		Т	OTAL Kg:	5.07		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 25148 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

	Ballestra									S	KETCH	ES MATERIAL LIST		PROJ	: 1E35		REV: 0	13/	/04/2010
	PUMA	.5		13/04/20	010 11.47	7.43								DOC:	1E35	-65-029	•	•	
			Ball	estra							SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp	: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	ı (ty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	s.bly	Branch
1433	1/2	0	In	2,77		mm	,00	7	,00	m	205	Pipe ASME B36.10 PL Seamless API 5	L GR. B				8,86		
3107	1/2	0	In			mm	,00) 3	,00	NR	205	Valve Gate ST.46270/3 SW-F 800# For	ged ASTM	A 105 G 61			5,10		
4949	1/2	0	In			mm	,00) 1	,00	NR	205	Steam Trap ST.46702/0 THRD-F NPT	PN 25 Forg	ed AISI 304	T 71		4,08		
465	1/2	0	In			mm	,00) 1	,00	NR	205	Flange Slip-On ASME B16.5 150 LB R	F (125÷250	AARH) Fo	rged	5191	0,40		
												ASTM A 105							
266	1/2	0	In			mm	,00	4	,00	NR	207	90° Elbow TA 50.6/1 SW-F 3000# Forg	ged ASTM A	A 105			1,00		
4687	1/2	0	In			mm	,00) 2	,00	NR	205	Tee Straight TA 50.6/1 SW-F 3000# For	rged ASTM	A 105			0,56		
1289	1/2	0	In			mm	,00) 2	,00	NR	203	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 10	5			0,76		
5191	1/2	0	In			mm	65,00) 4	,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	E B18.2.1 U	JNC/2.2 TA	В. 9		0,44		
			,	,								ASTM A 193 B7/ASTM A 194 GR.2H				·			
659	1/2	0	In			mm	,00) 1	,00	NR	205	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)_	B5C					
											N	1 Erection				Total Kg:	21,2		

TOTAL Kg:

21,2

SX1 SX1

SULPHUREX GH/F

SX1

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 25150 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allest	ra						SKETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	.5		13/04/20	010 11.47	.43							DOC:	1E35-	65-029	•		
			Bal	llestra						SU	JLPHUREX GH/F	Size: In The	: mm	Temp:	°C	Pres: BAR	Co	orr: mm
Mark	S1	S2		T1	Т2		Len mm	Qt	y Uı	n Pip. class	Component				Gen. Bolt	Weight (Kg) A	s.bly	Branch
1433	1/2	0	In	2,77		mm	,00	8,7	0 m	205	Pipe ASME B36.10 PL Seamless API 5	5L GR. B				11,01		
3107	1/2	0	In			mm	,00	3,0	0 NI	R 205	Valve Gate ST.46270/3 SW-F 800# For	orged ASTM A 1	05 G 61			5,10		
4949	1/2	0	In			mm	,00	1,0	0 NI	R 205	Steam Trap ST.46702/0 THRD-F NPT	FPN 25 Forged	AISI 304	T 71		4,08		
465	1/2	0	In			mm	,00	1,0	0 NI	R 205	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷250 AA	ARH) For	ged	5191	0,40		
4687	1/2	0	In			mm	,00	4,0	0 NI	R 205	Tee Straight TA 50.6/1 SW-F 3000# Fo	orged ASTM A	105			1,12		
1289	1/2	0	In			mm	,00	2,0	0 NI	R 203	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 105				0,76		
5191	1/2	0	In			mm	65,00	4,0	0 NI	R 205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		C/2.2 TAI	В. 9		0,44		
659	1/2	0	In			mm	,00	1,0	0 NI	R 205	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _ B5	C					
			,								M Erection			,	Total Kg:	22,91		

SX1 SX1

SULPHUREX GH/F

SX1

25153 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specificatio	n SP.1406/2-SP.1407/2
Line 25153 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

22,91

	•	I	Ballestr	a					SKETO	CHES MATERIAL LIST		PROJ:	: 1E35		REV: 0	13/04/2010
	PUMA	15		13/04/20	010 11.47	7.43						DOC:	1E35-	-65-029		
			Ball	estra						SULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Otv	Um Pip. cla	ss Component				Gen. Bolt	Weight (Kg) As.bl	v Branch
1438	2	0	In	3,91	12	mm	.00	0,50		Pipe ASME B36.10 PL Seamless Al	PL5L GR. B			Gen. Bon	2,72	y Dranen
1509	2	0	In	3,91		mm	,00	3,00		Pipe ASME B36.19 PL Seamless AS		P 304			16.64	
2858	2	0	In	- 7-		mm	,00	1,00	NR 215	Valve Ball Full Port ST.46586/3 LU Cast ASTM A 351 CF8 S 123			ARH)	5384	6,63	
3194	2	0	In			mm	,00	1,00	NR 215	Strainer Y-Type ST.46350/5 FLG 15 ASTM A 351 GR. CF8M F 72	60 LB RF (12:	5÷250 AARH	() Cast	5133	14,28	
451	2	0	In			mm	,00	6,00	NR 215	Flange Lap-Joint ASME B16.5 150 ASTM A 105 Galvanized	LB Flat Face	Smooth Forge	ed	5135	13,20	
470	2	0	In			mm	,00	1,00	NR 203	Flange Slip-On ASME B16.5 150 L ASTM A 105	B RF (125÷25	60 AARH) Fo	rged	5199	2,20	
332	2	0	In	3,91		mm	,00	1,00	NR 215	90° Elbow Long Radius ASME B16 GR. WP304	.9 BE Wrougl	nt S ASTM A	403		0,68	
1212	2	0	In	3,91		mm	,00	6,00	NR 215	Stub-End MSS SP-43 FLG x BE Wi WP304 Type A	ought S AST	M A 403 GR.			2,87	
5199	5/8	0	In			mm	85,00	4,00	NR 203	Stud Bolt + 2 Nuts TA 50.48B/28 A ASTM A 193 B7/ASTM A 194 GR.		UNC/2.2 TA	В. 9		0,84	
5133	5/8	0	In			mm	85,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 A ASTM A 193 B7/A194 2H Galvaniz		UNC/2.2 TA	В. 9		0,84	
5135	5/8	0	In			mm	95,00	16,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 A ASTM A 193 B7/A194 2H Galvaniz		UNC/2.2 TA	В. 9		3,68	
564	2	0	In			mm	,00	1,00	NR 203	Gasket TA 50.5/31 150 LB RF (125	÷250 AARH)	_ B5C				
715	2	0	In			mm	,00	7,00	NR 215	Gasket TA 50.5/31 150 LB RF (125	÷250 AARH)	_ B5F				
5384	5/8	0	In			mm	40,00	16,00	NR 215	Screws for valves ASME B 18.2.1 /	JNC ASTM A	193 B7 Galv	vanized		2,40	
		'	'			•				M Erection				Total Kg:	66,99	
SX1	SULPHI	UREX C	H/F			33001 -	- 0		SX1	SX1	1 / 1		1	TOTAL Kg:	66,99	

LCV_33.2	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
	Line 33001 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

	DIMA		llestr	•••	010 11 4	7.42			S	KETCE	IES MATERIAL LIST			J: 1E3		REV: 0	13/	04/2010
	PUMA5			13/04/2	010 11.4	7.43							DOC	: 1E3	35-65-029			
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk: mm	Tem	ıp: ℃	Pres: BAR	Co	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As	s.bly	Branch
1504	1/2	0	In	2,77		mm	,00	0,50	m	215	Pipe ASME B36.19 PL Seamless AST	M A 312 T	P 304			0,65		
1526	2+1/2	0	In	2,11		mm	,00	1,00	m	215	Pipe ASME B36.19 PL E.R.W. ASTM	1 A 312 TP	304			3,76		
1528	4	0	In	2,11		mm	,00	1,00	m	215	Pipe ASME B36.19 PL E.R.W. ASTM	1 A 312 TP	304			5,96		
6032	4	0	In			mm	,00	1,00	NR	215	Valve Ball Full Port ST.46586/3 LUG Cast ASTM A 351 CF8 S 123	150 LB RF	(125÷250 A	AARH)	5385	21,43		
2862	1/2	0	In			mm	,00	1,00	NR	215	Valve Ball Full Port ST.46545/1 THR A 182 GR. F316 S 99	D-F NPT 8	00# Forged	ASTM		0,71		
452	2+1/2	0	In			mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 L ASTM A 105 Galvanized	B Flat Face	Smooth For	ged	5136	3,60		
454	4	0	In			mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 L ASTM A 105 Galvanized	B Flat Face	Smooth For	ged	5138	5,60		
338	2+1/2	0	In	2,11		mm	,00	1,00	NR	215	90° Elbow Long Radius ASME B16.9 GR. WP304	BE Wrough	ht W ASTM	A 403		0,54		
340	4	0	In	2,11		mm	,00	2,00	NR	215	90° Elbow Long Radius ASME B16.9 GR. WP304	BE Wrough	ht W ASTM	A 403		2,80		
5801	4	1+1/2	In	2,11	3,68	mm	,00	1,00	NR	215	Reducer Concentric ASME B16.9 BE	Wrought W	ASTM A 4	03 GR.		0,58		
1219	2+1/2	0	In	2,11		mm	,00	1,00	NR	215	Stub-End MSS SP-43 FLG x BE Wro WP304 Type A	ught W AST	M A 403 G	R.		0,32		
1221	4	0	In	2,11		mm	,00	1,00	NR	215	Stub-End MSS SP-43 FLG x BE Wro WP304 Type A	ught W AST	M A 403 G	R.		0,62		
5136	5/8	0	In			mm	100,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 AS ASTM A 193 B7/A194 2H Galvanize		UNC/2.2 T	AB. 9		0,92		
5138	5/8	0	In			mm	110,00	8,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 AS ASTM A 193 B7/A194 2H Galvanize	ME B18.2.1	UNC/2.2 T	AB. 9		2,00		
716	2+1/2	0	In			mm	,00	1,00	NR	215	Gasket TA 50.5/31 150 LB RF (125:	-	_ B5F					
718	4	0	In			mm	,00			215	Gasket TA 50.5/31 150 LB RF (125=							
5385	5/8	0	In			mm	45,00	32,00			Screws for valves ASME B 18.2.1 /U			lvanize	ed	5,12		<u> </u>

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	on SP.1406/2-SP.1408/3
Line 33002 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

Balle	estra	SKETCHES MATERIAL LIST		PROJ:	1E35	REV: 0	13/04/2010
PUMA5	13/04/2010 11.47.44			DOC:	1E35-65-029		
	Ballestra	SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	Corr: mm
			-				

Mark	S1	S2	T1	T2	Len mm	Qty Um Pip. cl	ass Component		Gen. Bolt	Weight (Kg) As.h	ly Branch
							M Erection		Total Kg:	54,61	
SX1	SULPHU	REX GH/F		330	002 - 0	SX1	SX1	1 / 1	TOTAL Kg:	54,61	

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
Line 33002 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 2
Zones			

		Ba	ıllestr	a					SKETCH	ES MATERIAL LIST		PROJ:	1E35		REV: 0	13/04/2010
	PUMA:	5		13/04/2	010 11.4	17.44	1					DOC:	1E35	-65-029	•	
			Ball	estra					SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp	: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Otv	Um Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	y Branch
1509	2	0	In	3,91	12	mm	,00	2.00		Pipe ASME B36.19 PL Seamless AST	M A 312 TP	304		Gen. Doit	11,10	bi ancii
1527	3	0	In	2,11		mm	,00	13,00	m 215	Pipe ASME B36.19 PL E.R.W. ASTM					59,90	
6030	3	0	In	,		mm	,00		NR 215	Valve Ball Full Port ST.46586/3 LUG Cast ASTM A 351 CF8 S 123			ARH)	5385	14,28	
451	2	0	In			mm	,00	2,00	NR 215	Flange Lap-Joint ASME B16.5 150 LE ASTM A 105 Galvanized	3 Flat Face S	mooth Forge	ed	5135	4,40	
452	2+1/2	0	In			mm	,00	1,00	NR 215	Flange Lap-Joint ASME B16.5 150 LE ASTM A 105 Galvanized	3 Flat Face S	mooth Forge	ed	5136	3,60	
453	3	0	In			mm	,00	2,00	NR 215	Flange Lap-Joint ASME B16.5 150 LE ASTM A 105 Galvanized	Flat Face S	mooth Forge	ed	5137	8,20	
332	2	0	In	3,91		mm	,00	2,00	NR 215	90° Elbow Long Radius ASME B16.9 GR. WP304	BE Wrough	t S ASTM A	403		1,36	
339	3	0	In	2,11		mm	,00	6,00	NR 215	90° Elbow Long Radius ASME B16.9 GR. WP304	BE Wrough	t W ASTM A	A 403		4,78	
1792	3	2+1/2	In	2,11	2,11	mm	,00	1,00	NR 215	Reducer Concentric ASME B16.9 BE WP304	Wrought W	ASTM A 40	3 GR.		0,39	
1212	2	0	In	3,91		mm	,00	2,00	NR 215	Stub-End MSS SP-43 FLG x BE Wrou WP304 Type A	ight S ASTM	1 A 403 GR.			0,96	
1219	2+1/2	0	In	2,11		mm	,00	1,00	NR 215	Stub-End MSS SP-43 FLG x BE Wrou WP304 Type A	ight W AST	M A 403 GR			0,32	
1220	3	0	In	2,11		mm	,00	2,00	NR 215	Stub-End MSS SP-43 FLG x BE Wrou WP304 Type A	ight W AST	M A 403 GR			0,80	
5135	5/8	0	In			mm	95,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized		UNC/2.2 TA	В. 9		0,92	
5136	5/8	0	In			mm	100,00	2,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	ME B18.2.1	UNC/2.2 TA	В. 9		0,46	
5137	5/8	0	In			mm	105,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	ME B18.2.1	UNC/2.2 TA	В. 9		0,96	
PSV_33	11						Plant SX1	SUILPHUI	REX GH/F	Piping Class 215			We	lding specifica	tion SP.1406/2-SP.1408/3	3
101_00	.11						Line 33003		011/1	Fluid				tem	51.1100/2 51.1100/2	-
							Dang. fluid	type		Coating			De p	ores	Op tem	

Sketch Sht 1/1

Isometric code

Area SX1

Zones

Page 1

		В	allestr	a					S	KETCH	ES MATERIAL LIST		PRO	J: 1E3	5	REV: 0	13	3/04/2010
	PUMA5	i		13/04/2	2010 11.47	7.44							DOC	1E3	5-65-029		•	
			Ball	lestra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Tem	p: °C	Pres: BAR		Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
5140	5/8	0	In			mm	125,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2	TAB. 9		1,08		
5141	5/8	0	In			mm	130,00	2,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2	TAB. 9		0,56		
715	2	0	In			mm	,00	2,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_B5F					
716	2+1/2	0	In			mm	,00	1,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_B5F					
717	3	0	In			mm	,00	2,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_B5F					
5385	5/8	0	In			mm	45,00	16,00	NR	215	Screws for valves ASME B 18.2.1 /UNG	C ASTM A	193 B7 G	alvanize	d	2,56		
		1	ı		1	1				N	I Erection				Total Kg:	116,63		

TOTAL Kg:

116,63

SX1 SX1

SX1

SULPHUREX GH/F

PSV_33.11	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
	Line 33003 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 2
	Zones			

		В	allesti	a					S	KETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0	13	/04/2010
	PUMA5	5		13/04/20	010 11.4	7.44		DOC:						1E35-	-65-029			
			Bal	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1508	1+1/2	0	In	3,68		mm	,00	1,50	m	215	Pipe ASME B36.19 PL Seamless ASTM	I A 312 TP	304			6,20		
450	1+1/2	0	In			mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB	Flat Face S1	nooth Forge	d	5129	1,40		
331	1+1/2	0	In	3,68		mm	,00	2,00	NR	215	90° Elbow Long Radius ASME B16.9 B GR. WP304	E Wrought	S ASTM A	403		0,75		
1211	1+1/2	0	In	3,68		mm	,00	1,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ht S ASTM	A 403 GR.			0,29		
5129	1/2	0	In			mm	85,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASMI ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 U	JNC/2.2 TA	B. 9		0,48		
714	1+1/2	0	In			mm	,00	1,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _	B5F					
	'									N	M Erection			'	Total Kg:	9,11		

TOTAL Kg:

9,11

SX1 SX1

SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	n SP.1406/2-SP.1408/3
Line 33005 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

PUMAS 13/04/2010 11.47.44 PUMAS 13/04/2010 11.47.44 PUMAS 13/04/2010 11.47.44 PUMAS 13/04/2010 11.47.44 PUMAS SULPHUREX GHF Size: to This: ma Temps: C Press BA Pumas Pu		35	: 1E3	PROJ				L LIST	ES MATERIAI	CH	SKET						1	llestra	Bal			
Mark S2 T1 T2 Len mm Qty Um Pip. class Component Gen. Bolt Weight	029	35-65-02	1E3	DOC:										1	7.44	010 11.4	13/04/2	1		IA5	PUN	
1508	Pr	ıp: ℃	Tem	hk: mm	n Th	Size: In			LPHUREX GH/F	SUL							stra	Ballest				
1508	, Rolf W	Con							Component	loce	Im Pin el)tv l	-	I on mm		Т2	Т1		22		C1	Mork
1509 2 0 1	i. Doit	Gen.		604	TP 30	A 312 T	ASTM	PL Seamless	_		_				mm	12				_		
2858 2									1			_			mm		- ,)			
	4	5384	ARH)					ST.46586/3	Valve Ball Full Port S			_			mm)	(
450			STM	# Forged A	800#	F NPT 8	THRD-F	ST.46545/1	Valve Ball Full Port S		NR 215	,00	1	,00	mm			In)	(2	6034
451 2 0 In	9	5129	ed	ooth Forg	e Smo	Flat Face	50 LB F	ME B16.5 1	Flange Lap-Joint ASN		NR 215	3,00	3	,00	mm			In)	/2	1+1	450
331	5	5135	ed	ooth Forg	e Smo	Flat Face	50 LB F	ME B16.5 1	Flange Lap-Joint ASN		NR 215	2,00	2	,00	mm			In)	(2	451
332 2 0 In 3,91 mm 0,00 2,00 NR 215 90° Elbow Long Radius ASME B16.9 BE Wrought S ASTM A 403 GR. WP304 1775 2 1+1/2 In 3,91 3,68 mm 0,00 1,00 NR 215 Reducer Concentric ASME B16.9 BE Wrought S ASTM A 403 GR. WP304 1211 1+1/2 0 In 3,68 mm 0,00 3,00 NR 215 Stub-End MSS SP-43 FLG x BE Wrought S ASTM A 403 GR. WP304 Type A 1212 2 0 In 3,91 mm 0,00 2,00 NR 215 Stub-End MSS SP-43 FLG x BE Wrought S ASTM A 403 GR. WP304 Type A 1212 2 0 In mm 85,00 12,00 NR 215 Stub-End MSS SP-43 FLG x BE Wrought S ASTM A 403 GR. WP304 Type A 1210 1/2 0 In mm 85,00 12,00 NR 215 Stub-End MSS SP-43 FLG x BE Wrought S ASTM A 403 GR. WP304 Type A 1210 1/2 0 In mm 85,00 12,00 NR 215 Stub-End MSS SP-43 FLG x BE Wrought S ASTM A 403 GR. WP304 Type A 1210 1/2 0 In mm 115,00 6,00 NR 215 Stub-End MSS SP-43 FLG x BE Wrought S ASTM A 403 GR. WP304 Type A 1210 1/2 0 In mm 115,00 6,00 NR 215 Stub-End MSS SP-43 FLG x BE Wrought S ASTM A 193 B7/A194 2H Galvanized 1210 1/2 0 In mm 115,00 6,00 NR 215 Stub-End MSS SP-43 FLG x BE Wrought S ASTM A 193 B7/A194 2H Galvanized 1210 1/2 0 In mm 95,00 4,00 NR 215 Stub-End MSS SP-43 FLG x BE Wrought S ASTM A 193 B7/A194 2H Galvanized 1210 1/2 0 In mm 95,00 4,00 NR 215 Stub-End MSS SP-43 FLG x BE Wrought S ASTM A 193 B7/A194 2H Galvanized 1210 1/2 0 In mm 0,00 5,00 NR 215 Gasket TA 50.5/31 150 LB RF (125-250 AARH) B5F 1210 1/2 0 In mm 0,00 2,00 NR 215 Gasket TA 50.5/31 150 LB RF (125-250 AARH) B5F 1210 1/2 0 In mm 0,00 2,00 NR 215 Gasket TA 50.5/31 150 LB RF (125-250 AARH) B5F 1210 1/2 0 In mm 0,00 2,00 NR 215 Gasket TA 50.5/31 150 LB RF (125-250 AARH) B5F 1210 1/2 0 In mm 0,00 2,00 NR 215 Gasket TA 50.5/31 150 LB RF (125-250 AARH) B5F			403	S ASTM A	ght S	E Wroug	B16.9 BI		90° Elbow Long Radi		NR 215	3,00	3	,00	mm		3,68	In)	/2	1+1	331
1775 2			403	S ASTM A	ght S	E Wroug	B16.9 BI	lius ASME B	90° Elbow Long Radi		NR 215	2,00	2	,00	mm		3,91	In)	(2	332
1211			3 GR.	STM A 40	S AS	rought S	9 BE W1	ASME B16.9			NR 215	,00	İ	,00	mm	3,68	3,91	In	1+1/2		2	1775
1212 2 0 In 3,91 mm ,00 2,00 NR 215 Stub-End MSS SP-43 FLG x BE Wrought S ASTM A 403 GR. WP304 Type A			,	A 403 GR	ТМ А	nt S AST	Wrough	3 FLG x BE	Stub-End MSS SP-43		NR 215	3,00	3	,00	mm		3,68	In)	./2	1+1	1211
5129 1/2 0 In mm 85,00 12,00 NR 215 Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H Galvanized				A 403 GR	ТМ А	nt S AST	Wrough	3 FLG x BE	Stub-End MSS SP-43		NR 215	2,00	2	,00	mm		3,91	In)	(2	1212
Stade Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 Stade Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H Galvanized			AB. 9	NC/2.2 TA	.1 UN	E B18.2.1			Stud Bolt + 2 Nuts TA		NR 215	2,00	12	85,00	mm			In)	(1/2	5129
ASTM A 193 B7/A194 2H Galvanized 714			AB. 9	NC/2.2 TA	.1 UN	E B18.2.1	8 ASME	A 50.48B/28	Stud Bolt + 2 Nuts TA		NR 215	5,00	(115,00	mm			In)	(1/2	5132
714			AB. 9	NC/2.2 TA	.1 UN	E B18.2.1					NR 215	1,00	4	95,00	mm			In)	(5/8	5135
PSV_33.12 Plant SX1 SULPHUREX GH/F Piping Class 215 Welding specification SP.140				B5F	I) _ B) AARH)	125÷250	50 LB RF (1	Gasket TA 50.5/31 15		NR 215	5,00	4	,00	mm			In)	/2	1+1	714
1 8 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3				B5F	H)_B) AARH)	125÷250	50 LB RF (1	Gasket TA 50.5/31 15		NR 215	2,00	2	,00	mm			In)	(2	715
Line 33006 - 0 Fluid System	specification S	Velding s	W				15	ping Class 21	Pip		EX GH/F	PHUR	1 SULI	Plant SX							3.12	PSV_3
· ·		ystem	Sy																			
Dang. fluid type Coating De pres Area SX1 Sketch Sht 1/1 Isometric code		•											• •	_								

Zones

Balle	estra	SKETCHES MATERIAL LIST		PROJ:	1E35	REV:	0	13/04/2010
PUMA5	13/04/2010 11.47.44			DOC:	1E35-65-029			
	Ballestra	SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR		Corr: mm

Mark	S1	S2		T2	Len mm	Qty	Um Pip.	class Componen	t	Gen. Bolt	Weight (Kg) As.bly	Branch
5384	5/8	0	In	mm	40,00	16,00	NR 215	Screws for	valves ASME B 18.2.1 /UNC ASTM A 193 B7 Galvanize	d	2,40	
							·	M Erection		Total Kg:	47,52	
SX1	SULPHU	JREX GH	/F	3300	5 - 0		SX	1 SX1	1 / 1	TOTAL Kg:	47,52	

PSV_33.12	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
	Line 33006 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 2
	Zones			

		В	allestr	a					SKETO	CHES MATERIAL LIST		PROJ	: 1E35		REV: 0	13/04/2010
	PUMA	15		13/04/2	010 11.4	17.44						DOC:	1E35-0	65-029	•	
			Ball	lestra					;	SULPHUREX GH/F	Size:	In Thk: mm	Temp:	°C	Pres: BAR	Corr: mm
	1	I		I			T									
Mark	S1	S2	· ·	T1	T2		Len mm		Um Pip. cla		1 am 1 1 21			Gen. Bolt	Weight (Kg) As.bl	ly Branch
1504	1/2	0	In	2,77		mm	,00		m 215	Pipe ASME B36.19 PL Seamless					0,26	
1506	1	0	In	3,38		mm	,00		m 215	Pipe ASME B36.19 PL Seamless					65,10	
2855	1	0	In			mm	,00	1,00	NR 215	Valve Ball Full Port ST.46586/3 Cast ASTM A 351 CF8 S 123	LUG 150 LB	RF (125÷250 A	ARH)	5381	2,86	
446	1/2	0	In			mm	,00	1,00	NR 215	Flange Lap-Joint ASME B16.5 1 ASTM A 105 Galvanized	50 LB Flat Fa	ce Smooth Forge	ed :	5127	0,40	
448	1	0	In			mm	,00	3,00	NR 215	Flange Lap-Joint ASME B16.5 1 ASTM A 105 Galvanized	50 LB Flat Fa	ce Smooth Forge	ed :	5128	2,40	
329	1	0	In	3,38		mm	,00	9,00	NR 215	90° Elbow Long Radius ASME I GR. WP304	316.9 BE Wro	ught S ASTM A	403		1,24	
1763	1	1/2	In	3,38	2,77	mm	,00	1,00	NR 215	Reducer Concentric ASME B16. WP304	9 BE Wrough	t S ASTM A 403	GR.		0,14	
1207	1/2	0	In	2,77		mm	,00	1,00	NR 215	Stub-End MSS SP-43 FLG x BE WP304 Type A	Wrought S A	STM A 403 GR.			0,08	
1209	1	0	In	3,38		mm	,00	3,00	NR 215	Stub-End MSS SP-43 FLG x BE WP304 Type A	Wrought S A	STM A 403 GR.			0,49	
5127	1/2	0	In			mm	75,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/24 ASTM A 193 B7/A194 2H Galva		2.1 UNC/2.2 TA	В. 9		0,48	
5128	1/2	0	In			mm	80,00	8,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/20 ASTM A 193 B7/A194 2H Galva		2.1 UNC/2.2 TA	В. 9		0,96	
710	1/2	0	In			mm	,00	1,00	NR 215	Gasket TA 50.5/31 150 LB RF (1	125÷250 AAR	H) _ B5F				
712	1	0	In			mm	,00	3,00	NR 215	Gasket TA 50.5/31 150 LB RF (1	125÷250 AAR	H) _ B5F				
5381	1/2	0	In			mm	30,00	16,00	NR 215	Screws for valves ASME B 18.2.	1 /UNC ASTI	M A 193 B7 Gal	vanized		1,28	
	1								'	M Erection			'	Total Kg:	75,69	
SX1	SULPH	UREX G	H/F			33008	- 0		SX1	SX1	1 / 1		T	OTAL Kg:	75,69	
							Plant SX1		REX GH/F	Piping Class 2	15			o .	ion SP.1406/2-SP.1408	1/3
							Line 33008			Fluid			Syste			
							Dang. fluid Area SX1	type		Coating			De pr	es	Op tem	

Zones

		В	allestı	·a					S	KETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0	13	/04/2010
	PUMA	15		13/04/20	010 11.4	7.45							DOC:	1E35-	65-029			
			Bal	lestra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1509	2	0	In	3,91		mm	,00	1,50	m	215	Pipe ASME B36.19 PL Seamless ASTM	I A 312 TP	304			8,32	<u> </u>	
451	2	0	In			mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face St	nooth Forge	d	5135	2,20		
332	2	0	In	3,91		mm	,00	1,00	NR	215	90° Elbow Long Radius ASME B16.9 B GR. WP304	E Wrought	S ASTM A	403		0,68		
1212	2	0	In	3,91		mm	,00	1,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ht S ASTM	A 403 GR.			0,48		
5135	5/8	0	In			mm	95,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 U	JNC/2.2 TA	В. 9		0,92		
715	2	0	In			mm	,00	1,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _	B5F					
		,					•			N	1 Erection				Total Kg:	12,6		

1 / 1

TOTAL Kg:

12,6

SX1 SX1

SULPHUREX GH/F

33009 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specificatio	n SP.1406/2-SP.1408/3
Line 33009 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestra	a				S	SKETC	HES MATERIAL LIST		PROJ	: 1E35	5	REV: 0	13/	04/2010
	PUMA	A 5		13/04/2	010 11.47.45							DOC:	1E35	5-65-029	•	•	
			Balle	estra					S	ULPHUREX GH/F	Size: In	Thk: mm	Temp	:℃	Pres: BAR	Co	orr: mm
Mark	S1	S2		T1	T2	Len mm	Qty	Un	Pip. clas	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1435	1	0	In	3,38	mm	,00	13,50	m	212	Pipe ASME B36.10 PL Seamless API 5	SL GR. B				33,78		
2840	1	0	In		mm	,00	1,00	NR	212	Valve Ball Full Port ST.46590/3 LUG 1 Forged ASTM A 105 S 127	150 LB RF ((125÷250 A	ARH)	5373	2,80		
467	1	0	In		mm	,00	5,00	NR	212	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷250) AARH) Fo	rged	5192	4,00		
324	1	0	In	3,38	mm	,00	6,00	NR	212	90° Elbow Long Radius ASME B16.9 I GR. WPB	BE Wrough	t S ASTM A	234		0,81		
5192	1/2	0	In		mm	70,00	14,00	NR	212	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	В. 9		1,54		
693	1	0	In		mm	,00	5,00	NR	212	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH)	B5B					
5373	1/2	0	In		mm	30,00	16,00	NR	212	Screws for valves ASME B 18.2.1 /UN	C ASTM A	193 B7			1,28		
	,	'	'	'					'	M Erection				Total Kg:	44,21		
SX1	SULPH	UREX G	H/F		33010	- 0			SX1	SX1 1	/ 1			TOTAL Kg:	44,21		

Plant SX1 SULPHUREX GH/F	Piping Class 212	Welding specificatio	n SP.1406/2-SP.1407/3
Line 33010 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETC	HES MATERIAL LIST		PRO	J: 1E35	5	REV: 0	13	/04/2010
	PUMA	.5		13/04/20	010 11.47	7.45							DOC	: 1E35	5-65-029			
			Balle	estra						S	JLPHUREX GH/F	Size: In	Thk: mm	Temp): ℃	Pres: BAR	C	Corr: mm
								ı		7								
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	16,00	m	212	Pipe ASME B36.10 PL Seamless API 5	L GR. B				20,25		
231	1/2	0	In			mm	,00	2,00	NR	212	90° Elbow TA 50.7/2 THRD-F NPT 30	000# Forge	d ASTM A	105		0,80		
2174	1	1/2	In	3,38	2,77	mm	,00	1,00	NR	212	Reducer Eccentric ASME B16.9 BE W	rought S A	STM A 234	GR.		0,14		
											WPB							
		M Erection						Total Kg:	21,19									
SX1	SULPHUREX GH/F 33011 - 0				- 0	SX1 SX1 1/1					TOTAL Kg:	21,19						

Plant SX1 SULPHUREX GH/F	Piping Class 212	Welding specification	n SP.1406/2-SP.1407/3
Line 33011 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	A 5		13/04/20	010 11.4	7.45							DOC:	1E35	-65-029	•		
			Ball	estra						SI	ULPHUREX GH/F	Size: In T	hk: mm	Temp:	°C	Pres: BAR	С	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1506	1	0	In	3,38		mm	,00	2,00		215	Pipe ASME B36.19 PL Seamless ASTM	M A 312 TP 3	04			5,11	<u>-</u>	
2855	1	0	In			mm	,00	2,00	NR	215	Valve Ball Full Port ST.46586/3 LUG 1 Cast ASTM A 351 CF8 S 123	150 LB RF (1	25÷250 AA	ARH)	5381	5,71		
448	1	0	In			mm	,00	6,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face Sm	ooth Forge	ed	5128	4,80		
161	1	0	In	3,38		mm	,00	1,00	NR	215	45° Elbow Long Radius ASME B16.9 F GR. WP304	BE Wrought S	S ASTM A	403		0,07		
329	1	0	In	3,38		mm	,00	2,00	NR	215	90° Elbow Long Radius ASME B16.9 F GR. WP304	BE Wrought S	S ASTM A	403		0,28		
1209	1	0	In	3,38		mm	,00	6,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ght S ASTM	A 403 GR.			0,97		
5128	1/2	0	In			mm	80,00	14,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	IE B18.2.1 U	NC/2.2 TA	В. 9		1,68		
712	1	0	In			mm	,00	6,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _ 1	B5F					
5381	1/2	0	In			mm	30,00	32,00	NR	215	Screws for valves ASME B 18.2.1 /UNG	C ASTM A 1	93 B7 Galv	vanized		2,56		
	'										M Erection				Total Kg:	21,18		
SX1	SULPH	UREX G	H/F			33012	- 0			SX1	SX1 1.	/ 1		7	TOTAL Kg:	21,18		

LCV_33.1	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
	Line 33012 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		Ba	llestr	a					SKETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0	13/04/2010
	PUMA5	;		13/04/2	010 11.4	17.45	1					DOC:	1E35	-65-029		
			Ball	lestra					SUI	LPHUREX GH/F S	ize: In T	hk: mm	Temp	:℃	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm		Um Pip. class	Component				Gen. Bolt	Weight (Kg) As.bl	y Branch
1504	1/2	0	In	2,77		mm	,00		m 215	Pipe ASME B36.19 PL Seamless ASTM A					0,65	
1509	2	0	In	3,91		mm	,00		m 215	Pipe ASME B36.19 PL Seamless ASTM A	312 TP 3	04			24,97	
2858	2	0	In			mm	,00	1,00	NR 215	Valve Ball Full Port ST.46586/3 LUG 150 I Cast ASTM A 351 CF8 S 123	LB RF (12	25÷250 AA	ARH)	5384	6,63	
2862	1/2	0	In			mm	,00	1,00	NR 215	Valve Ball Full Port ST.46545/1 THRD-F 1 A 182 GR. F316 S 99	NPT 800#	Forged A	STM		0,71	
450	1+1/2	0	In			mm	,00	1,00	NR 215	Flange Lap-Joint ASME B16.5 150 LB Flat ASTM A 105 Galvanized	Face Sm	ooth Forge	d	5129	1,40	
451	2	0	In			mm	,00	1,00	NR 215	Flange Lap-Joint ASME B16.5 150 LB Flat ASTM A 105 Galvanized	Face Sm	ooth Forge	d	5135	2,20	
164	2	0	In	3,91		mm	,00	2,00	NR 215	45° Elbow Long Radius ASME B16.9 BE V GR. WP304	Wrought S	S ASTM A	403		0,64	
331	1+1/2	0	In	3,68		mm	,00	1,00	NR 215	90° Elbow Long Radius ASME B16.9 BE V GR. WP304	Wrought S	S ASTM A	403		0,38	
332	2	0	In	3,91		mm	,00	4,00	NR 215	90° Elbow Long Radius ASME B16.9 BE V GR. WP304	Wrought S	S ASTM A	403		2,71	
1775	2	1+1/2	In	3,91	3,68	mm	,00	1,00	NR 215	Reducer Concentric ASME B16.9 BE Wrot WP304	ught S AS	TM A 403	GR.		0,44	
1211	1+1/2	0	In	3,68		mm	,00	1,00	NR 215	Stub-End MSS SP-43 FLG x BE Wrought S WP304 Type A	S ASTM A	A 403 GR.			0,29	
1212	2	0	In	3,91		mm	,00	1,00	NR 215	Stub-End MSS SP-43 FLG x BE Wrought S WP304 Type A	S ASTM A	A 403 GR.			0,48	
5129	1/2	0	In			mm	85,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B ASTM A 193 B7/A194 2H Galvanized	18.2.1 UI	NC/2.2 TA	B. 9		0,48	
5135	5/8	0	In			mm	95,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B ASTM A 193 B7/A194 2H Galvanized	18.2.1 UI	NC/2.2 TA	B. 9		0,92	
714	1+1/2	0	In			mm	,00	1,00	NR 215	Gasket TA 50.5/31 150 LB RF (125÷250 A	ARH) E	35F				
715	2	0	In			mm	,00		NR 215	Gasket TA 50.5/31 150 LB RF (125÷250 A						
							Plant SX1 S		REX GH/F	Piping Class 215				- ·	tion SP.1406/2-SP.1408/	3
							Dang. fluid			Fluid Coating			Sys De r	tem	Op tem	
							Dang. mulu	, pe		Coaung			Del	11 63	Op tem	

Sketch Sht 1/1

Area SX1

Zones

Page 1

Isometric code

Balle	estra	SKETCHES MATERIAL LIST	PR	OJ: 1E	E35	REV: 0	13/04/2010
PUMA5	13/04/2010 11.47.45		DC	C : 1E	E35-65-029		
	Ballestra	SULPHUREX GH/F	Size: In Thk: mm	Te	emp: °C Pr	es: BAR	Corr: mm

Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component		Gen. Bolt	Weight (Kg)	As.bly	Branch
5384	5/8	0	In		mm	40,00	16,00	NR	215	Screws for valves ASMI	E B 18.2.1 /UNC ASTM A 193 B7 Ga	lvanized	2,40		
	·		•]	M Erection		Total K	g: 45,29		
SX1	SULPHU	JREX GH	/F		330	3 - 0			SX1	SX1	1 / 1	TOTAL K	g: 45,29		

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specificatio	n SP.1406/2-SP.1408/3
Line 33013 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 2
Zones			

			allestr						SKETCH	IES MATERIAL LIST		PROJ:			REV: 0	13/04/2010
	PUMA5			13/04/20	010 11.4	7.45						DOC:	1E35	5-65-029		
			Balle	estra					SUI	LPHUREX GH/F	Size: In	Γhk: mm	Temp	: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um Pip. class	Component				Gen. Bolt	Weight (Kg) As.bl	y Branch
1506	1	0	In	3,38		mm	,00	0,50	m 215	Pipe ASME B36.19 PL Seamless AS	TM A 312 TP 3	304			1,28	
1508	1+1/2	0	In	3,68		mm	,00	14,50	m 215	Pipe ASME B36.19 PL Seamless AS	TM A 312 TP	304			59,91	
2864	1	0	In			mm	,00	1,00	NR 215	Valve Ball Full Port ST.46545/1 THI A 182 GR. F316 S 99	RD-F NPT 800	# Forged A	STM		1,43	
2866	1+1/2	0	In			mm	,00	1,00	NR 215	Valve Ball Full Port ST.46545/1 THI A 182 GR. F316 S 99	RD-F NPT 800	# Forged A	STM		3,27	
446	1/2	0	In			mm	,00	2,00	NR 215	Flange Lap-Joint ASME B16.5 150 I ASTM A 105 Galvanized	B Flat Face Sn	nooth Forge	ed	5127	0,80	
450	1+1/2	0	In			mm	,00	3,00	NR 215	Flange Lap-Joint ASME B16.5 150 I ASTM A 105 Galvanized	B Flat Face Sn	nooth Forge	ed	5129	4,20	
331	1+1/2	0	In	3,68		mm	,00	7,00	NR 215	90° Elbow Long Radius ASME B16. GR. WP304	9 BE Wrought	S ASTM A	403		2,63	
1768	1+1/2	1/2	In	3,68	2,77	mm	,00	2,00	NR 215	Reducer Concentric ASME B16.9 BI WP304	E Wrought S A	STM A 403	GR.		0,53	
1207	1/2	0	In	2,77		mm	,00	2,00	NR 215	Stub-End MSS SP-43 FLG x BE Wro WP304 Type A	ought S ASTM	A 403 GR.			0,17	
1211	1+1/2	0	In	3,68		mm	,00	3,00	NR 215	Stub-End MSS SP-43 FLG x BE Wro WP304 Type A	ought S ASTM	A 403 GR.			0,86	
5127	1/2	0	In			mm	75,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 AS ASTM A 193 B7/A194 2H Galvaniz		INC/2.2 TA	В. 9		0,48	
5129	1/2	0	In			mm	85,00	6,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 AS ASTM A 193 B7/A194 2H Galvaniz		NC/2.2 TA	В. 9		0,72	
5130	1/2	0	In			mm	105,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 AS ASTM A 193 B7/A194 2H Galvaniz		NC/2.2 TA	В. 9		0,56	
5132	1/2	0	In			mm	115,00	6,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 AS ASTM A 193 B7/A194 2H Galvaniz	SME B18.2.1 U	NC/2.2 TA	В. 9		0,90	
710	1/2	0	In			mm	,00	2,00	NR 215	Gasket TA 50.5/31 150 LB RF (125=		B5F				
714	1+1/2	0	In			mm	,00		NR 215	Gasket TA 50.5/31 150 LB RF (125-						

PSV_33.13 FE_33.1 QUICK ADPTOR 1" - TYPE 8 AISI 304 = N. 1 pz Plant SX1 SULPHUREX GH/F Line 33014 - 0 Dang, fluid type Area SX1 Zones Piping Class 215
Fluid
Coating
Sketch Sht 1/1

Welding specification SP.1406/2-SP.1408/3
System
De pres Op tem

Isometric code

Op tem
Page 1

		Bal	lestra						S	KETCH	ES MATERIAL LIST		PROJ:	1E35		REV: 0	13/04/2010
	PUMA5	5]	13/04/20	10 11.47	.46							DOC:	1E35-65	-029		
	Ballestra									SUL	PHUREX GH/F	Size: In	Thk: mm	Temp: °C		Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component			Ge	en. Bolt	Weight (Kg) As.bl	ly Branch

Mark	S1 S2	T1	T2	Len mm	Qty Um Pip. cl	ass Component		Gen. Bolt	Weight (Kg) As.bly	Branch
						M Erection		Total Kg:	77,72	
SX1	SULPHUREX GH/F		330	014 - 0	SX1	SX1	1 / 1 T (OTAL Kg:	77,72	

PSV_33.13	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
FE_33.1	Line 33014 - 0	Fluid	System	
QUICK ADPTOR 1" - TYPE 8 AISI 304 = N. 1 pz	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 2
	Zones			

		В	allestr	a					S	KETCI	HES MATERIAL LIST		PRO) J :	1E35	REV: 0	13.	/04/2010
	PUMA	15		13/04/20	010 11.47	.46							DOC	C: 1	IE35-65-029	•	i l	
			Ball	estra						SU	JLPHUREX GH/F	Size: In	Thk: mm		Гетр: °С	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1504	1/2	0	In	2,77		mm	,00	6,00	m	215	Pipe ASME B36.19 PL Seamless ASTM	A 312 TI	P 304			7,75		
2853	1/2	0	In			mm	,00	1,00	NR	215	Valve Ball Full Port ST.46586/3 LUG 13	50 LB RF	(125÷250	AAR	(H) 5381	1,63		
2862	1/2	0	In			mm	,00	1,00	NR	215	Valve Ball Full Port ST.46545/1 THRD- A 182 GR. F316 S 99	F NPT 80	00# Forged	l AS	ГМ	0,71		
446	1/2	0	In			mm	,00	2,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB I ASTM A 105 Galvanized	Flat Face S	Smooth Fo	rged	5127	0,80		
4684	1/2	0	In			mm	,00	1,00	NR	215	Tee Straight TA 50.6/1 SW-F 3000# For	ged ASTN	Л А 182 G	R. F.	304	0,29		
1207	1/2	0	In	2,77		mm	,00	2,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ht S ASTN	A 403 G	R.		0,17		
5127	1/2	0	In			mm	75,00	8,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASMI ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2	TAB	. 9	0,96		
5130	1/2	0	In			mm	105,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASMI ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2	TAB	. 9	0,56		
710	1/2	0	In			mm	,00	4,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷250	O AARH)	_ B5F					
5381	1/2	0	In			mm	30,00	16,00	NR	215	Screws for valves ASME B 18.2.1 /UNC	ASTM A	193 B7 G	alva	nized	1,28		
					1]	M Erection				Total Kg	g: 14,15	1	
SX1	SULPH	UREX G	H/F			33016	- 0			SX1	SX1 1 /	1			TOTAL Kg	g: 14,15		

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	on SP.1406/2-SP.1408/3
Line 33016 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a						SKETCH	IES MATERIAL LIST		PROJ	: 1E35	5	REV: 0 13	3/04/2010
	PUMA	15		13/04/20	010 11.4	7.46							DOC:	1E35	5-65-029		
			Ball	estra						SU	LPHUREX GH/F	Size: In T	hk: mm	Temp	: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1504	1/2	0	In	2,77		mm	,00	16,00	m	215	Pipe ASME B36.19 PL Seamless ASTM	M A 312 TP 30	04			20,66	
2862	1/2	0	In			mm	,00	1,00	NF	215	Valve Ball Full Port ST.46545/1 THRD A 182 GR. F316 S 99)-F NPT 800#	Forged A	STM		0,71	
446	1/2	0	In			mm	,00	3,00	NF	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face Sm	ooth Forge	ed	5127	1,20	
4684	1/2	0	In			mm	,00	2,00	NF	215	Tee Straight TA 50.6/1 SW-F 3000# Fo	rged ASTM A	A 182 GR.	F304		0,57	
1207	1/2	0	In	2,77		mm	,00	3,00	NF	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ght S ASTM A	A 403 GR.			0,25	
5127	1/2	0	In			mm	75,00	6,00	NF	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	IE B18.2.1 UI	NC/2.2 TA	AB. 9		0,72	
5130	1/2	0	In			mm	105,00	6,00	NF	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	IE B18.2.1 UI	NC/2.2 TA	AB. 9		0,84	
710	1/2	0	In			mm	,00	3,00	NF	215	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _ E	B5F				
	1	-	-							N	M Erection				Total Kg:	24,96	1

1 / 1

TOTAL Kg:

24,96

SX1 SX1

SULPHUREX GH/F

33017 - 0

PSV_33.14	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
	Line 33017 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		I	Ballesti	a					S	KETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0	13	/04/2010
	PUMA5	5		13/04/20	010 11.4	7.46							DOC:	1E35-	65-029		•	
			Bal	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	(orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1508	1+1/2	0	In	3,68		mm	,00,	1,00	m	215	Pipe ASME B36.19 PL Seamless ASTM	I A 312 TP	304			4,13		
450	1+1/2	0	In			mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face St	nooth Forge	d	5129	1,40		
331	1+1/2	0	In	3,68		mm	,00	1,00	NR	215	90° Elbow Long Radius ASME B16.9 B GR. WP304	E Wrought	S ASTM A	403		0,38		
1211	1+1/2	0	In	3,68		mm	,00	1,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ht S ASTM	A 403 GR.			0,29		
5129	1/2	0	In			mm	85,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 U	JNC/2.2 TA	В. 9		0,48		
714	1+1/2	0	In			mm	,00,	1,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _	B5F					
							•			N	1 Erection			,	Total Kg:	6,67		

1 / 1

TOTAL Kg:

6,67

SX1 SX1

SULPHUREX GH/F

33019 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
Line 33019 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	Ballestı	a					S	KETC	HES MATERIAL LIST		PF	ROJ:	1E35		REV: 0	13.	/04/2010
	PUMA	A 5		13/04/2	010 11.4	7.46							DO	OC:	1E35-65	5-029			
			Bal	lestra						S	ULPHUREX GH/F	Size: In	Thk: mr	n	Temp: °€	2	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	s Component				G	en. Bolt	Weight (Kg)	As.bly	Branch
1540	3	0	In	2,11		mm	,00	11,00	m	216	Pipe ASME B36.19 PL E.R.W. ASTM	A 312 TP 3	316				50,69		
6031	3	0	In			mm	,00	2,00	NR	216	Valve Ball Full Port ST.46588/2 LUG Cast ASTM A 351 CF8 S 125	150 LB RF	(125÷25	50 AA	ARH) 53	385	28,57		
184	3	0	In	2,11		mm	,00	1,00	NR	216	45° Elbow Long Radius ASME B16.9 GR. WP316	BE Wrough	ht W AS	TM A	403		0,41		
352	3	0	In	2,11		mm	,00	3,00	NR	216	90° Elbow Long Radius ASME B16.9 GR. WP316	BE Wrough	ht W AS	TM A	403		2,39		
5137	5/8	0	In			mm	105,00	8,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized		UNC/2.	2 TAE	B. 9		1,92		
717	3	0	In			mm	,00	4,00	NR	216	Gasket TA 50.5/31 150 LB RF (125÷2.	50 AARH)	_ B5F						
5385	5/8	0	In			mm	45,00	32,00	NR	216	Screws for valves ASME B 18.2.1 /UN	C ASTM A	A 193 B7	' Galva	anized		5,12		
	•	*	•		•	*				*	M Erection				,	Total Kg:	89,1		
SX1	SULPH	UREX G	H/F			33020	- 0			SX1	SX1 1	/ 1			ТО	TAL Kg:	89,1		

Plant SX1 SULPHUREX GH/F Line 33020 - 0 Dang, fluid type Area SX1 Piping Class 216
Fluid
Coating
Sketch Sht 1/1

Welding specification SP.1406/2-SP.1408/3

System

De pres Op tem Isometric code

		В	allestr	a					S	KETCI	HES MATERIAL LIST		PR	OJ : 1	E35	REV: 0	13	/04/2010
	PUMA	.5		13/04/20	010 11.47	.46							DO	C : 1	E35-65-029			
			Ball	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	Т	Г етр: °С	Pres: BAR	C	Corr: mm
										-								
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	1,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				1,27		
1454	4	0	In	3,18		mm	,00	12,00	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				104,57		
				,							M Erection				Total Kg:	105,83		
SX1	SULPHU	UREX G	H/F			33020J	- 0			SX1	SX1 1.	/ 1			TOTAL Kg:	105,83		

REDUCER CONCENTRIC FOR JACKET - API 5L Gr. B - Size 4"x108 = N. 2 pz. DISK PLATE Ø 125x91 sp. 5 = N. 2 pz. SPACERS 8x5x50 = N. 12 pz.

Plant SX1 SULPHUREX GH/F Line 33020J - 0 Dang. fluid type Area SX1 Zones Piping Class 203
Fluid
Coating
Sketch Sht 1/1

Welding specification SP.1406/2-SP.1407/3
System
De pres Op tem

Isometric code

Op tem
Page 1

		В	allesti	a					S	KETCH	IES MATERIAL LIST		PROJ	: 1E35	5	REV: 0	13/04/2010
	PUMA	15		13/04/20	010 11.4	7.46							DOC:	1E35	5-65-029	•	
			Bal	lestra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp); °C	Pres: BAR	Corr: mm
Mark	S1	S2		Т1	Т2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) A	s.bly Branch
1522	1	0	In	3,38		mm	,00	1,00	m	216	Pipe ASME B36.19 PL Seamless ASTM	1 A 312 TP	316			2,55	
1540	3	0	In	2,11		mm	,00	7,00	m	216	Pipe ASME B36.19 PL E.R.W. ASTM	A 312 TP 3	16			32,25	
184	3	0	In	2,11		mm	,00	1,00	NR	216	45° Elbow Long Radius ASME B16.9 E GR. WP316	BE Wrough	t W ASTM	A 403		0,41	
352	3	0	In	2,11		mm	,00	3,00	NR	216	90° Elbow Long Radius ASME B16.9 E GR. WP316	BE Wrough	t W ASTM	A 403		2,39	
5128	1/2	0	In			mm	80,00	8,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 TA	AB. 9		0,96	
5137	5/8	0	In			mm	105,00	12,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 TA	AB. 9		2,88	
712	1	0	In			mm	,00	2,00	NR	216	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _	_B5F				
717	3	0	In			mm	,00	3,00	NR	216	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)_	B5F				
	-	-		-						N	1 Erection				Total Kg:	41,45	

SX1

SX1

REDUCER CONCENTRIC ASME B16.9 BE WROUGHT W ASTM A 403 Gr. WP 316 - SIZE 3"x1" = 2 pz. FLANGIA S.O. ASME B 16.5 FOR JACKET 150#RF - ASTM A403 GR.WP316 Tp. A - DN 3" = N. 5 pz FLANGIA S.O. ASME B 16.5 FOR JACKET 150#RF - ASTM A403 GR.WP316 Tp. A - DN 1" = N. 4 pz

SULPHUREX GH/F

SX1

Plant SX1 SULPHUREX GH/F Line 33021 - 0 Dang, fluid type Area SX1 Zones

33021 - 0

Piping Class 216
Fluid
Coating
Sketch Sht 1/1

1 / 1

Welding specification SP.1406/2-SP.1408/3
System
De pres Op tem

Isometric code

TOTAL Kg:

41,45

		В	allestr	·a					S	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	.5		13/04/20)10 11.4	7.46							DOC:	1E35-	-65-029			
			Ball	lestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	S Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	2,50	m	203	Pipe ASME B36.10 PL Seamless API 5	5L GR. B				3,16		
1454	4	0	In	3,18		mm	,00	8,00	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				69,71		
465	1/2	0	In			mm	,00	4,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	RF (125÷250) AARH) For	ged	5191	1,60		
1649	4	2	In	3,18	3,91	mm	,00	2,00	NR	203	Reducer Concentric ASME B16.9 BE B	E.R.W. AST	M A 234 GR	. WPB		1,72		
4398	1/2	1/4	In			mm	,00	2,00	NR	203	Coupling Reducing TA 50.7/2 THRD-F	F NPT 3000	# Forged AS	TM A		0,06		
5191	1/2	0	In			mm	65,00	8,00	NR	203	105 Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	B. 9		0,88		
659	1/2	0	In			mm	,00	2,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _	_B5C					
							<u>'</u>	•	•		M Erection				Total Kg:	77,13		
SX1	SULPH	UREX GI	H/F			33021	J - O			SX1	SX1 1	/ 1		Т	TOTAL Kg:	77,13		

REDUCER CONCENTRIC FOR JACKET - API 5L Gr. B - Size 4"x108 = N.5 pz. REDUCER CONCENTRIC FOR JACKET - API 5L Gr. B - Size 2"x49 = N.2 pz. SPACERS 8x5x50 = N.15 pz.

Plant SX1 SULPHUREX GH/F Line 33021J - 0 Dang. fluid type Area SX1 Zones Piping Class 203
Fluid
Coating
Sketch Sht 1/1

Welding specification SP.1406/2-SP.1407/3
System
De pres Op tem
Isometric code Page 1

Balle	estra	SKETCHES MATERIAL LIST		PROJ:	1E35	REV:	0 13/04/2010
PUMA5	13/04/2010 11.47.47			DOC:	1E35-65-029		
	Ballestra	SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	Corr: mm

Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	S Component	Gen. Bolt	Weight (Kg) As.bly	Branch
1520	1/2	0	In	2,77	mm	,00	0,50	m	216	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 316		0,65	
1522	1	0	In	3,38	mm	,00	1,00	m	216	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 316		2,55	
1525	2	0	In	3,91	mm	,00	1,50	m	216	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 316		8,32	
2862	1/2	0	In		mm	,00	1,00	NR	216	Valve Ball Full Port ST.46545/1 THRD-F NPT 800# Forged ASTM A 182 GR. F316 S 99		0,71	
2872	2	0	In		mm	,00	1,00	NR	216	Valve Ball Full Port ST.46588/2 LUG 150 LB RF (125÷250 AARH) Cast ASTM A 351 CF8 S 125	5384	6,63	
334	1	0	In	3,38	mm	,00	1,00	NR	216	90° Elbow Long Radius ASME B16.9 BE Wrought S ASTM A 403 GR. WP316		0,14	
337	2	0	In	3,91	mm	,00	1,00	NR	216	90° Elbow Long Radius ASME B16.9 BE Wrought S ASTM A 403 GR. WP316		0,68	
1787	2	1	In	3,91	3,38 mm	,00	1,00	NR	216	Reducer Concentric ASME B16.9 BE Wrought S ASTM A 403 GR. WP316		0,44	
5128	1/2	0	In		mm	80,00	4,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H Galvanized		0,48	
5135	5/8	0	In		mm	95,00	4,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H Galvanized		0,92	
712	1	0	In		mm	,00	1,00	NR	216	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F			
715	2	0	In		mm	,00	2,00	NR	216	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F			
5384	5/8	0	In		mm	40,00	16,00	NR	216	Screws for valves ASME B 18.2.1 /UNC ASTM A 193 B7 Galvanized		2,40	
		'		•				•		M Erection	Total Kg:	23,92	
SX1	SULPH	UREX G	H/F		33022	- 0			SX1	SX1 1/1	TOTAL Kg:	23,92	

FLANGIA S.O. ASME B 16.5 FOR JACKET 150#RF -ASTM A403 GR.WP316 Tp. A - DN 2" = N. 1 pz FLANGIA S.O. ASME B 16.5 FOR JACKET 150#RF -ASTM A403 GR.WP316 Tp. A - DN 1" = N. 1 pz Plant SX1 SULPHUREX GH/F Line 33022 - 0 Dang. fluid type Area SX1 Zones Piping Class 216 Fluid Coating Sketch Sht 1/1 Welding specification SP.1406/2-SP.1408/3
System
De pres Op tem
Isometric code Page 1

		В	allestr	a					S	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13	/04/2010
	PUMA	.5		13/04/20	010 11.47	7.47							DOC:	1E35-65-0)29			
			Ball	lestra						SI	ULPHUREX GH/F	Size: In Tl	nk: mm	Temp: °C		Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Otv	Um	Pip. class	s Component			Gen	. Bolt	Weight (Kg)	As.blv	Branch
1433	1/2	0	In	2,77		mm	,00		-	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,63		
1438	2	0	In	3,91		mm	,00	1,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				5,44		
1453	3	0	In	3,18		mm	,00	2,00	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				13,44		
1646	3	2	In	3,18	3,91	mm	,00	1,00	NR	203	Reducer Concentric ASME B16.9 BE E	E.R.W. ASTM	A 234 GR	. WPB		0,57		
											M Erection			Tot	tal Kg:	20,09		
SX1	SULPHI	UREX G	H/F			33022	J - 0			SX1	SX1 1.	/ 1		TOTA	AL Kg:	20,09		

REDUCER CONCENTRIC FOR JACKET - API 5L Gr. B - SIZE 3"x78 = N. 1 REDUCER CONCENTRIC FOR JACKET - API 5L Gr. B - SIZE 2"x49 = N. 1 SPACERS 10x5x50 = 6 pz.

Plant SX1 SULPHUREX GH/F Line 33022J - 0 Dang. fluid type Area SX1 Zones Piping Class 203
Fluid
Coating
Sketch Sht 1/1

Welding specification SP.1406/2-SP.1407/3
System
De pres Op tem
Isometric code Page 1

Balle	estra	SKETCHES MATERIAL LIST	PROJ	: 1E35	REV: 0	13/04/2010
PUMA5	13/04/2010 11.47.47		DOC:	1E35-65-029		
	Ballestra	SULPHUREX GH/F	Size: In Thk: mm	Temp: °C	Pres: BAR	Corr: mm

Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg) As.bly	Branch
1504	1/2	0	In	2,77	mm	,00	0,50	m	215	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 304		0,65	
1508	1+1/2	0	In	3,68	mm	,00	7,50	m	215	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 304		30,99	
1522	1	0	In	3,38	mm	,00	1,50	m	216	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 316		3,83	
1525	2	0	In	3,91	mm	,00	5,50	m	216	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 316		30,51	
2862	1/2	0	In		mm	,00	1,00	NR	215	Valve Ball Full Port ST.46545/1 THRD-F NPT 800# Forged ASTM A 182 GR. F316 S 99		0,71	
2872	2	0	In		mm	,00	2,00	NR	216	Valve Ball Full Port ST.46588/2 LUG 150 LB RF (125÷250 AARH) Cast ASTM A 351 CF8 S 125	5384	13,26	
5004	2	0	In		mm	,00	1,00	NR	215	"Y" Valve Check ST.46360/5 FLG 150 LB RF (125÷250 AARH) Forged ASTM A 182 GR. F304 R 92	5133	11,22	
448	1	0	In		mm	,00	1,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5128	0,80	
450	1+1/2	0	In		mm	,00	3,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5129	4,20	
451	2	0	In		mm	,00	2,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5135	4,40	
451	2	0	In		mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5135	2,20	
163	1+1/2	0	In	3,68	mm	,00	1,00	NR	215	45° Elbow Long Radius ASME B16.9 BE Wrought S ASTM A 403 GR. WP304		0,19	
331	1+1/2	0	In	3,68	mm	,00	4,00	NR	215	90° Elbow Long Radius ASME B16.9 BE Wrought S ASTM A 403 GR. WP304		1,50	
334	1	0	In	3,38	mm	,00	2,00	NR	216	90° Elbow Long Radius ASME B16.9 BE Wrought S ASTM A 403 GR. WP316		0,28	
337	2	0	In	3,91	mm	,00	2,00	NR	216	90° Elbow Long Radius ASME B16.9 BE Wrought S ASTM A 403 GR. WP316		1,36	
1775	2	1+1/2	In	3,91	3,68 mm	,00	1,00	NR	215	Reducer Concentric ASME B16.9 BE Wrought S ASTM A 403 GR. WP304		0,44	

FLANGE S.O. ASME B16.5 FOR JACKET 150#RF ASTM A403 GR. WP316 Tp A - DN 2" N. 1 pz.

- DN 1" N. 2 pz.

PSV_33.15 PCV_33.2 PI_33.11 FO_33.11 Plant SX1 SULPHUREX GH/F Line 33023 - 0 Dang. fluid type Area SX1

Zones

Piping Class 216
Fluid
Coating
Sketch Sht 1/1

Welding specification SP.1406/2-SP.1408/3 System

De pres Op tem
Isometric code

Balle	estra	SKETCHES MATERIAL LIST	PRO	J: 1E35	REV: 0	13/04/2010
PUMA5	13/04/2010 11.47.47		DO	C: 1E35-65-029		
	Ballestra	SULPHUREX GH/F	Size: In Thk: mm	Temp: °C	Pres: BAR	Corr: mm

Mark	S1	S2		T1	T2		Len mm	Qty	Um Pip. class	Component	Gen. Bolt	Weight (Kg) As.bly	Branch
1787	2	1	In	3,91	3,38	mm	,00	1,00	NR 216	Reducer Concentric ASME B16.9 BE Wrought S ASTM A 403 GR.		0,44	
									-	WP316			
1211	1+1/2	0	In	3,68		mm	,00	3,00	NR 215	Stub-End MSS SP-43 FLG x BE Wrought S ASTM A 403 GR.		0,86	
		'	,							WP304 Type A		1	
1212	2	0	In	3,91		mm	,00	1,00	NR 215	Stub-End MSS SP-43 FLG x BE Wrought S ASTM A 403 GR.		0,48	
										WP304 Type A			
1215	1	0	In	3,38		mm	,00	1,00	NR 216	Stub-End MSS SP-43 FLG x BE Wrought S ASTM A 403 GR.		0,16	
		•	·				_			WP316 Type A		·	
1218	2	0	In	3,91		mm	,00	2,00	NR 216	Stub-End MSS SP-43 FLG x BE Wrought S ASTM A 403 GR.		0,96	
										WP316 Type A			
5128	1/2	0	In			mm	80,00	12,00	NR 216	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9		1,44	
										ASTM A 193 B7/A194 2H Galvanized			
5129	1/2	0	In			mm	85,00	6,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9		0,72	
										ASTM A 193 B7/A194 2H Galvanized			
5132	1/2	0	In			mm	115,00	6,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9		0,90	
										ASTM A 193 B7/A194 2H Galvanized			
5133	5/8	0	In			mm	85,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9		0,84	
										ASTM A 193 B7/A194 2H Galvanized			
5135	5/8	0	In			mm	95,00	2,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9		0,46	
										ASTM A 193 B7/A194 2H Galvanized			
5135	5/8	0	In			mm	95,00	8,00	NR 216	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9		1,84	
										ASTM A 193 B7/A194 2H Galvanized			
712	1	0	In			mm	,00	3,00	NR 216	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F			
714	1+1/2	0	In			mm	,00	3,00	NR 215	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F			
715	2	0	In			mm	,00	4,00	NR 216	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F			
715	2	0	In			mm	,00	2,00	NR 215	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F			
5384	5/8	0	In			mm	40,00	32,00	NR 216	Screws for valves ASME B 18.2.1 /UNC ASTM A 193 B7 Galvanized	1	4,80	
										·			

FLANGE S.O. ASME B16.5 FOR JACKET 150#RF ASTM A403 GR. WP316 Tp A - DN 2" N. 1 pz.

- DN 1" N. 2 pz.

PSV_33.15 PCV_33.2 PI_33.11 FO_33.11 Plant SX1 SULPHUREX GH/F Line 33023 - 0 Dang, fluid type Area SX1 Zones Piping Class 216
Fluid
Coating
Sketch Sht 1/1

Welding specification SP.1406/2-SP.1408/3 System

De pres Op tem
Isometric code

Balle	estra	SKETCHES MATERIAL LIST	PROJ	1E35	REV: 0	13/04/2010
PUMA5	13/04/2010 11.47.47		DOC:	1E35-65-029		
	Ballestra	SULPHUREX GH/F	Size: In Thk: mm	Temp: °C	Pres: BAR	Corr: mm

Mark	S1 S2	T1	1 T2	Len mm	Qty Um Pip. class	Component		Gen. Bolt	Weight (Kg) As.bly	Branch
						M Erection		Total Kg:	120,43	
SX1	SULPHUREX GH	/F		33023 - 0	SX1	SX1	1 / 1 T	OTAL Kg:	120,43	

FLANGE S.O. ASME B16.5 FOR JACKET 150#RF ASTM A403 GR. WP316 Tp A - DN 2" N. 1 pz.

- DN 1" N. 2 pz.

PSV_33.15 PCV_33.2 PI_33.11 FO_33.11 Plant SX1 SULPHUREX GH/F Line 33023 - 0 Dang. fluid type Area SX1 Zones Piping Class 216
Fluid
Coating
Sketch Sht 1/1

Welding specification SP.1406/2-SP.1408/3
System
De pres Op tem

Isometric code Page 3

		В	allestr	a					5	SKET(CHES MATERIAL LIST		Pl	ROJ:	1E35		REV: 0	13	3/04/2010
	PUMA	.5		13/04/2	2010 11.4	7.47							D	OC:	1E35-6	65-029		•	
			Ball	estra							SULPHUREX GH/F	Size: In	Thk: m	m	Temp: °	°C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	n Pip. cla	ass Component				(Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	2,0) m	203	Pipe ASME B36.10 PL Seamless	API 5L GR. B					2,53		
1438	2	0	In	3,91		mm	,00	0,5) m	203	Pipe ASME B36.10 PL Seamless	API 5L GR. B					2,72		
1453	3	0	In	3,18		mm	,00	6,0) m	203	Pipe ASME B36.10 PL E.R.W. A	PI 5L GR. B					40,33		
465	1/2	0	In			mm	,00	6,0) NF	R 203	Flange Slip-On ASME B16.5 150 ASTM A 105) LB RF (125÷25	0 AARI	H) For	ged 5	5191	2,40		
1646	3	2	In	3,18	3,91	mm	,00	1,0) NF	R 203	Reducer Concentric ASME B16.	BE E.R.W. AS	TM A 2	34 GR	a. WPB		0,57		
5191	1/2	0	In			mm	65,00	12,0) NF	R 203	Stud Bolt + 2 Nuts TA 50.48B/28 ASTM A 193 B7/ASTM A 194 C		UNC/2	2 TA	B. 9		1,32		
659	1/2	0	In			mm	,00	3,0) NF	R 203	Gasket TA 50.5/31 150 LB RF (1	25÷250 AARH)	_ B5C						
	'			'						' 	M Erection				<u>'</u>	Total Kg:	49,87		
SX1	SULPHUREX GH/F 33023J -				- 0			SX1	SX1	1 / 1			TO	OTAL Kg:	49,87				

REDUCER CONCENTRIC FOR JACKET - API 5L Gr. B - SIZE 2"x49 = N. 2 REDUCER CONCENTRIC FOR JACKET - API 5L Gr. B - SIZE 3"x78 = N. 1 SPACERS 10x5x50 = 6 pz.

Plant SX1 SULPHUREX GH/F Line 33023J - 0 Dang. fluid type Area SX1 Zones Piping Class 203
Fluid
Coating
Sketch Sht 1/1

Welding specification SP.1406/2-SP.1407/3
System
De pres Op tem
Isometric code Page 1

\vdash	Ballestra								SKE	TCH	ES MATERIAL LIST		PROJ	: 1E35)	REV: 0	13/04/2010
	PUMA	.5		13/04/2	2010 11.4	17.47	1						DOC:	1E35	5-65-029		
			Ball	lestra						SUL	PHUREX GH/F	Size: In	Thk: mm	Temp	: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Otv	Um Pip	elace	Component				Gen. Bolt	Weight (Kg) As.bl	v Branch
1504	1/2	0	In	2,77	12	mm	,00	1.00			Pipe ASME B36.19 PL Seamless ASTM	A 312 TP	304		Gen. Don	1,29	y Bi anch
1505	3/4	0	In	2,87		mm	,00	3,50			Pipe ASME B36.19 PL Seamless ASTM					6,02	
2854	3/4	0	In	2,07		mm	,00		NR 215		Valve Ball Full Port ST.46586/3 LUG 1. Cast ASTM A 351 CF8 S 123			ARH)	5381	1,94	
2863	3/4	0	In			mm	,00	1,00	NR 215	i	Valve Ball Full Port ST.46545/1 THRD- A 182 GR. F316 S 99	F NPT 800)# Forged A	ASTM		0,92	
446	1/2	0	In			mm	,00	1,00	NR 215	i	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face Si	nooth Forg	ed	5127	0,40	
447	3/4	0	In			mm	,00	1,00	NR 215	1	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face Sı	nooth Forg	ed	5127	0,70	
328	3/4	0	In	2,87		mm	,00	4,00	NR 215		90° Elbow Long Radius ASME B16.9 B GR. WP304	E Wrought	S ASTM A	403		0,35	
1762	3/4	1/2	In	2,87	2,77	mm	,00	1,00	NR 215	í	Reducer Concentric ASME B16.9 BE W WP304	rought S A	STM A 40	3 GR.		0,06	
1207	1/2	0	In	2,77		mm	,00	1,00	NR 215		Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ht S ASTM	A 403 GR			0,08	
1208	3/4	0	In	2,87		mm	,00	1,00	NR 215	i	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ht S ASTM	A 403 GR			0,10	
5127	1/2	0	In			mm	75,00	8,00	NR 215		Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 U	JNC/2.2 TA	AB. 9		0,96	
710	1/2	0	In			mm	,00	1,00	NR 215	;	Gasket TA 50.5/31 150 LB RF (125÷25	O AARH) _	B5F				
711	3/4	0	In			mm	,00	2,00	NR 215	i	Gasket TA 50.5/31 150 LB RF (125÷25	O AARH) _	B5F				
5381	1/2	0	In			mm	30,00	16,00	NR 215	i	Screws for valves ASME B 18.2.1 /UNC	ASTM A	193 B7 Gal	vanized		1,28	
						·				M	Erection				Total Kg:	14,11	
SX1	SULPHU	JREX G	H/F			33025	- 0		SZ	X1 SX	X1 1 /	1		,	TOTAL Kg:	14,11	
							Plant SX1	SULPHU	REX GH/F	;	Piping Class 215			We	elding specificat	ion SP.1406/2-SP.1408/	3
							Line 33025				Fluid				stem		
1							Dang. fluid Area SX1	type			Coating Sketch Sht 1/1		_	De p ometric o	pres	Op tem	Page 1

Zones

		В	allestr	a					5	SKETCH	IES MATERIAL LIST		PRO	J: 1E3:	5	REV: 0	13.	/04/2010
	PUMA	15		13/04/20	010 11.4	7.48							DOC	: 1E3:	5-65-029			
			Balle	estra						SU	LPHUREX GH/F	Size: In	Thk: mm	Tem	p: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1504	1/2	0	In	2,77		mm	,00	10,00	m	215	Pipe ASME B36.19 PL Seamless ASTM	M A 312 TF	304			12,92		
2853	1/2	0	In			mm	,00	1,00	NR	215	Valve Ball Full Port ST.46586/3 LUG 1 Cast ASTM A 351 CF8 S 123	150 LB RF	(125÷250 z	AARH)	5381	1,63		
2862	1/2	0	In			mm	,00	1,00	NR	215	Valve Ball Full Port ST.46545/1 THRD A 182 GR. F316 S 99	O-F NPT 80	00# Forged	ASTM		0,71		
4999	1/2	0	In			mm	,00	1,00	NR	215	"Y" Valve Check ST.46360/5 FLG 150 Forged ASTM A 182 GR. F304 R 92	LB RF (12	5÷250 AA	RH)	5125	3,06		
446	1/2	0	In			mm	,00	4,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth For	ged	5127	1,60		
4684	1/2	0	In			mm	,00	2,00	NR	215	Tee Straight TA 50.6/1 SW-F 3000# Fo	orged ASTN	1 A 182 GI	R. F304		0,57		
1207	1/2	0	In	2,77		mm	,00	4,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ght S ASTN	1 A 403 GI	₹.		0,34		
5125	1/2	0	In			mm	65,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized		UNC/2.2 T	AB. 9		0,44		
5127	1/2	0	In			mm	75,00	8,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized		UNC/2.2 T	AB. 9		0,96		

Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9

Screws for valves ASME B 18.2.1 /UNC ASTM A 193 B7 Galvanized

1 / 1

Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F

ASTM A 193 B7/A194 2H Galvanized

105,00

,00

30,00

mm

mm

mm

33026 - 0

8,00 NR 215

6,00 NR 215

SX1

16,00 NR 215

5130

710

5381

SX1

1/2

1/2

1/2

0

SULPHUREX GH/F

In

PSV_33.16	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
	Line 33026 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

M Erection

SX1

1,12

1,28

24,63

24,63

Total Kg:

TOTAL Kg:

		Е	Ballestr	a				S	KETCI	HES MATERIAL LIST		PROJ:	: 1E35		REV: 0	13	/04/2010
	PUMA	\ 5		13/04/2	2010 11.47.48							DOC:	1E35	-65-029	•	•	
			Ball	lestra					SU	LPHUREX GH/F	Size: In	Thk: mm	Temp	: °C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1506	1	0	In	3,38	mm	,00	0,50	m	215	Pipe ASME B36.19 PL Seamless ASTM	1 A 312 TP	304			1,28		
448	1	0	In		mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	mooth Forge	ed	5128	0,80		
329	1	0	In	3,38	mm	,00	2,00	NR	215	90° Elbow Long Radius ASME B16.9 I GR. WP304	BE Wrough	t S ASTM A	403		0,28		
1209	1	0	In	3,38	mm	,00	1,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ght S ASTM	I A 403 GR.			0,16		
5128	1/2	0	In		mm	80,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 TA	В. 9		0,48		
712	1	0	In		mm	,00	1,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_B5F					
		1				, <u>L</u>			, I	M Erection				Total Kg:	2,99		
SX1	SULPHUREX GH/F 33028 - 0				- 0			SX1	SX1 1.	/ 1		7	TOTAL Kg:	2,99			

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	n SP.1406/2-SP.1408/3
Line 33028 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

			Ballestr				_		SKETCH	IES MATERIAL LIST		PROJ			REV: 0 1	3/04/2010
	PUMA5	,		13/04/20)10 11.4	17.48						DOC:	1E35	5-65-029		
			Ball	estra					SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp): °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1505	3/4	0	In	2,87		mm	,00	1,50	m 215	Pipe ASME B36.19 PL Seamless ASTM	Л А 312 TI	P 304			2,58	
1508	1+1/2	0	In	3,68		mm	,00	2,00	m 215	Pipe ASME B36.19 PL Seamless ASTM	Л А 312 TI	P 304			8,26	
1527	3	0	In	2,11		mm	,00	1,50	m 215	Pipe ASME B36.19 PL E.R.W. ASTM	A 312 TP 3	304			6,91	
2854	3/4	0	In			mm	,00	1,00	NR 215	Valve Ball Full Port ST.46586/3 LUG 1 Cast ASTM A 351 CF8 S 123	50 LB RF	(125÷250 A	ARH)	5381	1,94	
2863	3/4	0	In			mm	,00	1,00	NR 215	Valve Ball Full Port ST.46545/1 THRD A 182 GR. F316 S 99	-F NPT 80	00# Forged A	STM		0,92	
2866	1+1/2	0	In			mm	,00	1,00	NR 215	Valve Ball Full Port ST.46545/1 THRD A 182 GR. F316 S 99	-F NPT 80	00# Forged A	STM		3,27	
447	3/4	0	In			mm	,00	3,00	NR 215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth Forg	ed	5127	2,10	
451	2	0	In			mm	,00	1,00	NR 215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth Forgo	ed	5135	2,20	
328	3/4	0	In	2,87		mm	,00	3,00	NR 215	90° Elbow Long Radius ASME B16.9 I GR. WP304	BE Wrough	nt S ASTM A	403		0,26	
331	1+1/2	0	In	3,68		mm	,00	2,00	NR 215	90° Elbow Long Radius ASME B16.9 I GR. WP304	BE Wrough	nt S ASTM A	403		0,75	
1791	3	2	In	2,11	3,91	mm	,00	1,00	NR 215	Reducer Concentric ASME B16.9 BE V	Vrought W	ASTM A 40	3 GR.		0,39	
4512	3	0	In	2,11		mm	.00	1,00	NR 215	Cap ASME B16.9 BE Wrought W AST	M A 403 C	GR. WP304			0,28	
5127	1/2	0	In	,		mm	75,00		NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized			AB. 9		0,72	
5130	1/2	0	In			mm	105,00	2,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 TA	AB. 9		0,28	
5135	5/8	0	In			mm	95,00	2,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 TA	AB. 9		0,46	
5140	5/8	0	In			mm	125,00	2,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 TA	AB. 9		0,54	
				Plant SX1 S		REX GH/F	Piping Class 215 Fluid				elding specifica	tion SP.1406/2-SP.1408/3	3			

Coating

Sketch Sht 1/1

De pres

Isometric code

Dang. fluid type

Area SX1

Zones

Page 1

Op tem

		В	allestra					SKETC	HES MATEI	RIAL LIST			PROJ:	1E35		REV:	0	13/04/2010
	PUMA	5	13	3/04/2010	11.47.4	8							DOC:	1E35-6	5-029			
			Ballestr	·a				S	ULPHUREX GH/F		Size: In	Thk	: mm	Temp: °C	2	Pres: BAR		Corr: mm
Mark	S1	S2	1	Г1 Т2	2	Len n	ım Qty	Um Pip. clas	s Component					G	Gen. Bolt	Weight (K	g) As.bl	ly Branch
711	3/4	0	In		1	nm	00 3,00	NR 215	Gasket TA 50.5	/31 150 LB RF (125÷2:	50 AARH)	_ B5	F					
715	2	0	In		I	nm	00 1,00	NR 215	Gasket TA 50.5	/31 150 LB RF (125÷2:	50 AARH)	_ B5	F					
5381	1/2	0	In		I	nm 30	00 16,00	NR 215	Screws for valv	es ASME B 18.2.1 /UN	C ASTM A	193	B7 Galv	anized		1,2	8	
		•	,		·		•	-	M Erection						Total Kg:	33,1	.4	
SX1	SULPHU	JREX GI	H/F		3	3029 - 0		SX1	SX1	1	/ 1			TO	TAL Kg:	33,1	4	

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	n SP.1406/2-SP.1408/3
Line 33029 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 2
Zones			

Balle	estra	SKETCHES MATERIAL LIST		PROJ:	1E35	REV:	13/0	/04/2010
PUMA5	13/04/2010 11.47.48			DOC:	1E35-65-029			
	Ballestra	SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	Co	orr: mm

Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg) As.bly	Branch
1504	1/2	0	In	2,77		mm	,00	0,20	m	215	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 304		0,26	
1506	1	0	In	3,38		mm	,00	0,20	m	215	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 304		0,51	
1508	1+1/2	0	In	3,68		mm	,00	4,00	m	215	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 304		16,53	
1527	3	0	In	2,11		mm	,00	1,00	m	215	Pipe ASME B36.19 PL E.R.W. ASTM A 312 TP 304		4,61	
1528	4	0	In	2,11		mm	,00	0,30	m	215	Pipe ASME B36.19 PL E.R.W. ASTM A 312 TP 304		1,79	
2866	1+1/2	0	In			mm	,00	1,00	NR	215	Valve Ball Full Port ST.46545/1 THRD-F NPT 800# Forged ASTM A 182 GR. F316 S 99		3,27	
4996	1+1/2	0	In			mm	,00	2,00	NR	215	"Y" Valve Globe ST.46347/2 FLG 150 LB RF (125÷250 AARH) Forged ASTM A 182 GR. F304 D 75	5127	20,41	
450	1+1/2	0	In			mm	,00	6,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5129	8,40	
451	2	0	In			mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5135	2,20	
453	3	0	In			mm	,00	2,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5137	8,20	
163	1+1/2	0	In	3,68		mm	,00	2,00	NR	215	45° Elbow Long Radius ASME B16.9 BE Wrought S ASTM A 403 GR. WP304		0,38	
331	1+1/2	0	In	3,68		mm	,00	4,00	NR	215	90° Elbow Long Radius ASME B16.9 BE Wrought S ASTM A 403 GR. WP304		1,50	
5789	3	1+1/2	In	2,11	3,68	mm	,00	1,00	NR	215	Reducer Concentric ASME B16.9 BE Wrought W ASTM A 403 GR. WP304		0,39	
2218	4	2	In	2,11	3,91	mm	,00	1,00	NR	215	Reducer Eccentric ASME B16.9 BE Wrought W ASTM A 403 GR. WP304		0,58	
2220	4	3	In	2,11	2,11	mm	,00	1,00	NR	215	Reducer Eccentric ASME B16.9 BE Wrought W ASTM A 403 GR. WP304		0,58	
1049	1/2	0	In			mm	,00	1,00	NR	215	Coupling TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 182 GR. F304		0,12	

TI_33.4	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
PCV_33.1	Line 33030 - 0	Fluid	System	
PI_33.6	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	Ballestr	a					SKETC	CHES MATERIAL LIST		PROJ	: 1E35	5	REV: 0	13/04/2010
	PUMA:	5		13/04/2	010 11.4	47.48						DOC:	1E35	5-65-029		
			Ball	estra					S	SULPHUREX GH/F	Size: In	Thk: mm	Temp	: ℃	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Otv	Um Pip. clas	ss Component				Gen. Bolt	Weight (Kg) As.bl	v Branch
1051	1	0	In	11	12	mm	,00		NR 215	Coupling TA 50.7/2 THRD-F NPT 3 F304	000# Forged	ASTM A 18	32 GR.	Gen. Bott	0,31	y Branch
1211	1+1/2	0	In	3,68		mm	,00	6,00	NR 215	Stub-End MSS SP-43 FLG x BE Wro WP304 Type A	ught S ASTI	M A 403 GR	•		1,71	
1212	2	0	In	3,91		mm	,00	1,00	NR 215	Stub-End MSS SP-43 FLG x BE Wro WP304 Type A	ught S ASTI	M A 403 GR	-		0,48	
1220	3	0	In	2,11		mm	,00	2,00	NR 215	Stub-End MSS SP-43 FLG x BE Wro WP304 Type A	ught W AST	M A 403 GR	₹.		0,80	
5127	1/2	0	In			mm	75,00	8,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 AS ASTM A 193 B7/A194 2H Galvanize		UNC/2.2 TA	AB. 9		0,96	
5129	1/2	0	In			mm	85,00	12,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 AS ASTM A 193 B7/A194 2H Galvanize		UNC/2.2 TA	AB. 9		1,44	
5132	1/2	0	In			mm	115,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 AS ASTM A 193 B7/A194 2H Galvanize	ME B18.2.1	UNC/2.2 TA	AB. 9		0,60	
5135	5/8	0	In			mm	95,00	2,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 AS ASTM A 193 B7/A194 2H Galvanize	ME B18.2.1	UNC/2.2 TA	AB. 9		0,46	
5137	5/8	0	In			mm	105,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 AS ASTM A 193 B7/A194 2H Galvanize	ME B18.2.1	UNC/2.2 TA	AB. 9		0,96	
5140	5/8	0	In			mm	125,00	2,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 AS ASTM A 193 B7/A194 2H Galvanize	ME B18.2.1	UNC/2.2 TA	AB. 9		0,54	
5142	5/8	0	In			mm	135,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 AS ASTM A 193 B7/A194 2H Galvanize	ME B18.2.1	UNC/2.2 TA	AB. 9		1,12	
714	1+1/2	0	In			mm	,00	6,00	NR 215	Gasket TA 50.5/31 150 LB RF (125÷	250 AARH)	_ B5F				
715	2	0	In			mm	,00	1,00	NR 215	Gasket TA 50.5/31 150 LB RF (125÷	250 AARH)	_ B5F				
717	3	0	In			mm	,00	2,00	NR 215	Gasket TA 50.5/31 150 LB RF (125÷	250 AARH)	_ B5F				
										M Erection				Total Kg:	79,09	
SX1	SULPHU	REX G	H/F			33030	- 0		SX1	SX1	1 / 1		ı	TOTAL Kg:	79,09	
TI_33.4 PCV_33	3.1						Plant SX1 Line 33030		REX GH/F	Piping Class 215 Fluid				elding specification	on SP.1406/2-SP.1408	/3
PI_33.6							Dang. fluid	type		Coating			De j	pres	Op tem	
							Area SX1			Sketch Sht 1/1		Ise	ometric (code		Page 2

Zones

Balle		SKETCHES MATERIAL LIST		PROJ:	1E35	REV: 0	13/04/2010
PUMA5	13/04/2010 11.47.48			DOC:	1E35-65-029		
	Ballestra	SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	Corr: mm

Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg) As.bly	Branch
1504	1/2	0	In	2,77	mm	,00	0,20	m	215	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 304		0,26	
1506	1	0	In	3,38	mm	,00	1,00	m	215	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 304		2,55	
1527	3	0	In	2,11	mm	,00	0,30	m	215	Pipe ASME B36.19 PL E.R.W. ASTM A 312 TP 304		1,38	
1535	16	0	In	4,19	mm	,00	4,50	m	215	Pipe ASME B36.19 PL E.R.W. ASTM A 312 TP 304		190,82	
453	3	0	In		mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5137	4,10	
461	16	0	In		mm	,00	4,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5169	208,00	
5074	3	0	In		mm	,00	1,00	NR	215	Flange Blind + Disk ASME B16.5 - TA 50.63/3 (DISK) 150 LB RF	5137	5,33	
	ı	1		l				<u> </u>	1	(125÷250 AARH) Forged FLG: ASTM A 105 Galvanized - DISK: A240 TYPE 304			
329	1	0	In	3,38	mm	,00	1,00	NR	215	90° Elbow Long Radius ASME B16.9 BE Wrought S ASTM A 403 GR. WP304		0,14	
347	16	0	In	4,19	mm	,00	3,00	NR	215	90° Elbow Long Radius ASME B16.9 BE Wrought W ASTM A 403 GR. WP304		120,18	
1049	1/2	0	In		mm	,00	1,00	NR	215	Coupling TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 182 GR. F304		0,12	
1051	1	0	In		mm	,00	1,00	NR	215	Coupling TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 182 GR. F304		0,31	
1220	3	0	In	2,11	mm	,00	1,00	NR	215	Stub-End MSS SP-43 FLG x BE Wrought W ASTM A 403 GR. WP304 Type A		0,40	
1228	16	0	In	4,19	mm	,00	4,00	NR	215	Stub-End MSS SP-43 FLG x BE Wrought W ASTM A 403 GR. WP304 Type A		32,15	
5137	5/8	0	In		mm	105,00	8,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H Galvanized		1,92	
5142	5/8	0	In		mm	135,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H Galvanized		1,12	

T1_33.9
LT_33.1
PI_33.9
STUD BOLT + 2 NUTS TA 50.48b/28 ASME 18.2.1
UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H
GALVANIZED $-5/8$ "x160 = N. 4 pz.

Plant SX1 SULPHUREX GH/F
Line 33031 - 0
Dang. fluid type
Area SX1
Zones

	Balle	estra		SKETCHES MATERIAL LIST		PROJ:	1E35	REV: 0	13/04/2010
	PUMA5	13/04/2010 11.47.49				DOC:	1E35-65-029		
]	Ballestra		SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	Corr: mm
Mark	S1 S2	T1 T2	Len mi	m Oty Um Pip. class Component			Gen. Bolt	Weight (Kg)	As.blv Branch

Mark	S1	S2		T1	T2		Len mm	Qty	Um Pip. cla	ss Component		Gen. Bolt	Weight (Kg)	As.bly	Branch
5169	1	0	In			mm	160,00	48,00	NR 215	Stud Bolt + 2	Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9		89,76		
							_			ASTM A 19	B7/A194 2H Galvanized				
5171	1	0	In			mm	180,00	16,00	NR 215	Stud Bolt + 2	Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9		32,00		
			-				_		_	ASTM A 19	B7/A194 2H Galvanized			I	
717	3	0	In			mm	,00	3,00	NR 215	Gasket TA 5	0.5/31 150 LB RF (125÷250 AARH) _ B5F				
725	16	0	In			mm	,00	4,00	NR 215	Gasket TA 5	0.5/31 150 LB RF (125÷250 AARH) _ B5F				
		·				'				M Erection		Total Kg:	690,54		
SX1	SULPH	UREX G	H/F			33031 -	- 0		SX1	SX1	1/1	TOTAL Kg:	690,54		

TI_33.9 LT_33.1 PI_33.9 STUD BOLT + 2 NUTS TA 50.48b/28 ASME 18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H GALVANIZED -5/8"x160 = N. 4 pz.

Plant SX1 SULPHUREX GH/F Line 33031 - 0 Dang. fluid type Area SX1 Zones

Piping Class 215 Fluid Coating Sketch Sht 1/1

Welding specification SP.1406/2-SP.1408/3 System De pres Op tem Isometric code

		Ba	llestra	a					S	KETCH	IES MATERIAL LIST	PROJ:	: 1E35		REV: 0	13/04/2010
	PUMA5			13/04/20	10 11.4	7.49						DOC:	1E35-65	5-029	•	•
			Balle	estra						SUI	LPHUREX GH/F	Size: In Thk: mm	Temp: °C		Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	Component		G	en. Bolt	Weight (Kg) As.	bly Branch
1507	1+1/4	0	In	3,56		mm	,00	0,50	m	215	Pipe ASME B36.19 PL Seamless ASTM	1 A 312 TP 304			1,73	
1509	2	0	In	3,91		mm	,00	5,00	m	215	Pipe ASME B36.19 PL Seamless ASTM	I A 312 TP 304			27,74	
2858	2	0	In			mm	,00	1,00	NR	215	Valve Ball Full Port ST.46586/3 LUG 1. Cast ASTM A 351 CF8 S 123	50 LB RF (125÷250 AA	ARH) 53	384	6,63	
451	2	0	In			mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face Smooth Forge	ed 51	135	2,20	
164	2	0	In	3,91		mm	,00	2,00	NR	215	45° Elbow Long Radius ASME B16.9 B GR. WP304	BE Wrought S ASTM A	403		0,64	
1774	2	1+1/4	In	3,91	3,56	mm	,00	1,00	NR	215	Reducer Concentric ASME B16.9 BE W WP304	Vrought S ASTM A 403	GR.		0,44	
1212	2	0	In	3,91		mm	,00	1,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ht S ASTM A 403 GR.			0,48	
5135	5/8	0	In			mm	95,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 UNC/2.2 TA	B. 9		0,92	
715	2	0	In			mm	,00	2,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _ B5F				
5384	5/8	0	In			mm	40,00	16,00	NR	215	Screws for valves ASME B 18.2.1 /UNC	C ASTM A 193 B7 Galv	vanized		2,40	
	1				1		· •		1	N	I Erection		1	Fotal Kg:	43,18	1

1 / 1

TOTAL Kg:

43,18

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	on SP.1406/2-SP.1408/3
Line 33032 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

SX1 SX1

SX1

SULPHUREX GH/F

33032 - 0

]	Ballestr	a					S	KETC	HES MATERIAL LIST		PROJ:	1E35	í	REV: 0	13	/04/2010
PUMA5 13/04/2010 11.47.49						47.49	1						DOC:	DOC: 1E35-65-029				•
	Ballestra						SULPHUREX GH/F					Thk: mm	Temp	:°C	Pres: BAR	C	Corr: mm	
Mark	S1	S2		Т1	T2		Len mm	Otro	T I and	Pip. clas	ss Component				Gen. Bolt	Weight (Kg)	a blv	Branch
1504	1/2	0	In	2,77	12	mm	.00	1.00		215	Pipe ASME B36.19 PL Seamless ASTN	/ A 312 TP	304		Gen. Don	1.29	is.biy	Diancii
1506	1	0	In	3,38		mm	.00	4,00		215	Pipe ASME B36.19 PL Seamless ASTM					10,21		+
1507	1+1/4	0	In	3,56		mm	,00	0,50			Pipe ASME B36.19 PL Seamless ASTM					1,73		
2862	1/2	0	In			mm	,00	1,00			Valve Ball Full Port ST.46545/1 THRD A 182 GR. F316 S 99			STM		0,71		
5001	1	0	In			mm	,00	1,00	NR	215	"Y" Valve Check ST.46360/5 FLG 150 Forged ASTM A 182 GR. F304 R 92	LB RF (12:	5÷250 AARI	H)	5126	4,59		
448	1	0	In			mm	,00	2,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	mooth Forge	ed	5128	1,60		
329	1	0	In	3,38		mm	,00	3,00	NR	215	90° Elbow Long Radius ASME B16.9 I GR. WP304	BE Wrough	t S ASTM A	403		0,41		
1767	1+1/4	1	In	3,56	3,38	mm	,00	1,00	NR	215	Reducer Concentric ASME B16.9 BE V	Vrought S A	ASTM A 403	GR.		0,18		
1049	1/2	0	In			mm	,00	1,00	NR	215	Coupling TA 50.7/2 THRD-F NPT 300 F304	00# Forged	ASTM A 18	2 GR.		0,12		
1209	1	0	In	3,38		mm	,00	2,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ght S ASTM	1 A 403 GR.			0,32		
5126	1/2	0	In			mm	70,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 TA	В. 9		0,44		
5128	1/2	0	In			mm	80,00	8,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 TA	В. 9		0,96		
5131	1/2	0	In			mm	110,00	4,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 TA	В. 9		0,60		
712	1	0	In			mm	,00	4,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _	B5F					T
		- 1			ı						M Erection		-		Total Kg:	23,18		
SX1	SULPHU	IREX (GH/F			33033	- 0			SX1	SX1 1	/ 1			TOTAL Kg:	23,18		
LY_33							Plant SX1 S	SULPHUI	REX	GH/F	Piping Class 215			We	elding specificat	ion SP.1406/2-SP.	1408/3	
PI_33.2							Line 33033				Fluid				stem			
							Dang. fluid	type			Coating			De 1		Op te		
							Area SX1				Sketch Sht 1/1		Iso	metric (code		P	age 1

Zones

Ballestra PUMA5 13/04/2010 11.47.49							SKETCHES MATERIAL LIST PROJ: 1E35						REV: 0		13/	04/2010		
								DOC: 1E35							E35-65-029			
	Ballestra							SULPHUREX GH/F Size: In Thk: mm Temp: 5							°C	Pres: BAR	Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1504	1/2	0	In	2,77		mm	,00	0,50	m	215	Pipe ASME B36.19 PL Seamless ASTM	1 A 312 TP 3	04			0,65		
1527	3	0	In	2,11		mm	,00	5,50	m	215	Pipe ASME B36.19 PL E.R.W. ASTM	A 312 TP 304	1			25,34		
6030	3	0	In			mm	,00	1,00	NR	215	Valve Ball Full Port ST.46586/3 LUG 1	50 LB RF (12	25÷250 AA	RH)	5385	14,28		
											Cast ASTM A 351 CF8 S 123							
453	3	0	In			mm	,00	3,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB	Flat Face Sm	ooth Forge	d	5137	12,30		
	1-	-	1-	1					1	T	ASTM A 105 Galvanized							
339	3	0	In	2,11		mm	,00	2,00	NR	215	90° Elbow Long Radius ASME B16.9 E GR. WP304	BE Wrought V	W ASTM A	403		1,59		
1049	1/2	0	In			mm	.00	2.00	NR	215	Coupling TA 50.7/2 THRD-F NPT 300	0# Forged A	STM A 182	GR		0,24		
1047	1/2	U					,00	2,00	1111	213	F304	on ronged m	3111171102	J GIV.		0,24		
1220	3	0	In	2,11		mm	,00	3,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug	ht W ASTM	A 403 GR.			1,20		
				-	-	-					WP304 Type A					I		
5137	5/8	0	In			mm	105,00	8,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	E B18.2.1 UI	NC/2.2 TAI	B. 9		1,92		
	·	·							•		ASTM A 193 B7/A194 2H Galvanized							
717	3	0	In			mm	,00	3,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	60 AARH) _ I	B5F					
5385	5/8	0	In			mm	45,00	16,00	NR	215	Screws for valves ASME B 18.2.1 /UNC	C ASTM A 19	93 B7 Galv	anized		2,56		
	*	•	•		•					•	M Erection				Total Kg:	60,09		
SX1	SULPH	UREX G	H/F			33034	· - 0			SX1	SX1 1 /	/ 1		1	TOTAL Kg:	60,09		

PI_33.10	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification SP.1406/2-SP.1408/3				
PT_33.10	Line 33034 - 0	Fluid	System				
	Dang. fluid type	Coating	De pres	Op tem			
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1			
	Zones						

Ballestra								SKETCHES MATERIAL LIST PROJ: 1E35						1E35	REV:	0 1	3/04/2010	
PUMA5 13/04/2010 11.47.49						7.49							D	OC:	1E35-65-029			
Ballestra								SULPHUREX GH/F Size: In Thk: mm Temp:						Temp: °C Pres: BAR		Corr: mm		
										1								
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg	g) As.bly	Branch
1506	1	0	In	3,38		mm	,00	8,00	m	215	Pipe ASME B36.19 PL Seamless ASTI	M A 312 TF	P 304			20,43	3	
329	1	0	In	3,38		mm	,00	1,00	NR	215	90° Elbow Long Radius ASME B16.9 BE Wrought S ASTM A 403			03	0,14	1		
											GR. WP304						,	
M Erection									Total Kg	g: 20,5	6							
SX1	SX1 SULPHUREX GH/F 33035 -				- 0			SX1	X1 1	/ 1			TOTAL K	g: 20,50	5			

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification SP.1406/2-SP.1408/3					
Line 33035 - 0	Fluid	System					
Dang. fluid type	Coating	De pres	Op tem				
Area SX1	Sketch Sht 1/1	Isometric code	Page 1				
Zones							

		В	allestr	a				SKETCHES MATERIAL LIST PROJ: 1E3:						5	REV: 0	13/	/04/2010	
	PUMA	15		13/04/2	010 11.47	7.49							DOC	: 1E3	5-65-029	•	•	
			Ball	estra						SUI	PHUREX GH/F	Size: In	Thk: mm	Tem): ℃	Pres: BAR	C	orr: mm
										_								
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1527	3	0	In	2,11		mm	,00	4,00	m	215	Pipe ASME B36.19 PL E.R.W. ASTM	A 312 TP 3	304			18,43		
339	3	0	In	2,11		mm	,00	1,00	NR	215	90° Elbow Long Radius ASME B16.9 E	BE Wrough	nt W ASTM	A 403		0,80		
	,					'				'	GR. WP304							
										N	1 Erection				Total Kg:	19,23		

TOTAL Kg:

19,23

SX1 SX1

SX1

SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	n SP.1406/2-SP.1408/3
Line 33036 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		Ba	llestra			SKETCHES MATERIAL LIST	PR	OJ:	1E35	REV: 0	13/04/2010
	PUMA	15	13/04/	2010 11.47	.49		DC	OC:	1E35-65-029		
	Ballestra					SULPHUREX GH/F	Size: In Thk: mm	1	Temp: °C	Pres: BAR	Corr: mm
Mark	S1	S2	T1	T2	Len m	n Oty Um Pip. class Component			Gen. Bolt	Weight (Kg) As.l	oly Branch

Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg) As.bly	Branch
1525	2	0	In	3,91	mm	,00	0,50	m	216	Pipe ASME B36.19 PL Seamless ASTM A 312 TP 316		2,77	
1540	3	0	In	2,11	mm	,00	0,80	m	216	Pipe ASME B36.19 PL E.R.W. ASTM A 312 TP 316		3,69	
1544	8	0	In	2,77	mm	,00	3,00	m	216	Pipe ASME B36.19 PL E.R.W. ASTM A 312 TP 316		45,23	
2872	2	0	In		mm	,00	1,00	NR	216	Valve Ball Full Port ST.46588/2 LUG 150 LB RF (125÷250 AARH) Cast ASTM A 351 CF8 S 125	5384	6,63	
4904	8	0	In		mm	,00	1,00	NR	216	Sight Glass ST.46353/1 FLG 150 LB RF (125÷250 AARH) Cast ASTM A 351 GR. CF8M FG 64	5146	112,24	
451	2	0	In		mm	,00	2,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5135	4,40	
453	3	0	In		mm	,00	2,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5137	8,20	
457	8	0	In		mm	,00	3,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5150	37,80	
188	8	0	In	2,77	mm	,00	1,00	NR	216	45° Elbow Long Radius ASME B16.9 BE Wrought W ASTM A 403 GR. WP316		3,84	
1839	4	3	In	2,11	2,11 mm	,00	1,00	NR	216	Reducer Concentric ASME B16.9 BE Wrought W ASTM A 403 GR. WP316		0,58	
1848	8	4	In	2,77	2,11 mm	,00	1,00	NR	216	Reducer Concentric ASME B16.9 BE Wrought W ASTM A 403 GR. WP316		2,26	
1218	2	0	In	3,91	mm	,00	2,00	NR	216	Stub-End MSS SP-43 FLG x BE Wrought S ASTM A 403 GR. WP316 Type A		0,96	
1233	3	0	In	2,11	mm	,00	2,00	NR	216	Stub-End MSS SP-43 FLG x BE Wrought W ASTM A 403 GR. WP316 Type A		0,80	
1237	8	0	In	2,77	mm	,00	3,00	NR	216	Stub-End MSS SP-43 FLG x BE Wrought W ASTM A 403 GR. WP316 Type A		6,02	
5135	5/8	0	In		mm	95,00	4,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H Galvanized		0,92	

33Y2	Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specification	n SP.1406/2-SP.1408/3
LT_33.1	Line 33037 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		I	Ballestr	a					SKETO	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13	3/04/2010
	PUMA	15		13/04/2	2010 11.4	17.50	1					DOC:	1E35-	65-029	•	L.	
			Ball	estra					\$	ULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um Pip. cla	ss Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
5137	5/8	0	In			mm	105,00	8,00	NR 216	Stud Bolt + 2 Nuts TA 50.48B/28 AS ASTM A 193 B7/A194 2H Galvanize		UNC/2.2 TA	В. 9		1,92		
5146	3/4	0	In			mm	110,00	8,00	NR 216	Stud Bolt + 2 Nuts TA 50.48B/28 AS ASTM A 193 B7/A194 2H Galvanize		UNC/2.2 TA	B. 9		7,04		
5150	3/4	0	In			mm	130,00	24,00	NR 216	Stud Bolt + 2 Nuts TA 50.48B/28 AS ASTM A 193 B7/A194 2H Galvanize		UNC/2.2 TA	В. 9		23,04		
715	2	0	In			mm	,00	2,00	NR 216	Gasket TA 50.5/31 150 LB RF (125÷	250 AARH)	_ B5F					
717	3	0	In			mm	,00	2,00	NR 216	Gasket TA 50.5/31 150 LB RF (125÷	250 AARH)	_ B5F					
721	8	0	In			mm	,00	4,00	NR 216	Gasket TA 50.5/31 150 LB RF (125÷	250 AARH)	_ B5F					
5384	5/8	0	In			mm	40,00	16,00	NR 216	Screws for valves ASME B 18.2.1 /U	NC ASTM A	193 B7 Galv	anized		2,40		
	1	-		1		-	-		<u> </u>	M Erection				Total Kg:	270,75		

TOTAL Kg:

270,75

SX1 SX1

SX1

SULPHUREX GH/F

33Y2	Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specification	SP.1406/2-SP.1408/3
LT_33.1	Line 33037 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 2
	Zones			

		I	Ballestr	a					S	KETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0	13/0	4/2010
	PUMA	.5		13/04/2	2010 11.4	7.50	_						DOC:	1E35	5-65-029			
			Ball	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR	Cor	r: mm
Mark	S1	S2		T1	Т2		Len mm	Otv	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As	s.blv]	Brancl
1520	1/2	0	In	2,77		mm	,00	0,50	m	216	Pipe ASME B36.19 PL Seamless ASTN	M A 312 TP	316			0,65	•	
1522	1	0	In	3,38		mm	,00	0,50	m	216	Pipe ASME B36.19 PL Seamless ASTN	M A 312 TP	316			1,28		
1525	2	0	In	3,91		mm	,00	0,20	m	216	Pipe ASME B36.19 PL Seamless ASTN	M A 312 TP	316			1,11		
1541	4	0	In	2,11		mm	,00	2,50	m	216	Pipe ASME B36.19 PL E.R.W. ASTM	A 312 TP 3	16			14,89		
2862	1/2	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port ST.46545/1 THRD A 182 GR. F316 S 99	D-F NPT 80	0# Forged A	STM		0,71		
2872	2	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port ST.46588/2 LUG Cast ASTM A 351 CF8 S 125	150 LB RF ((125÷250 AA	ARH)	5384	6,63		
6033	4	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port ST.46588/2 LUG Cast ASTM A 351 CF8 S 125	150 LB RF ((125÷250 AA	ARH)	5385	21,43		
451	2	0	In			mm	,00	2,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	mooth Forge	d	5135	4,40		
453	3	0	In			mm	,00	1,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	mooth Forge	d	5137	4,10		
454	4	0	In			mm	,00	1,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	mooth Forge	d	5138	5,60		
337	2	0	In	3,91		mm	,00	1,00	NR	216	90° Elbow Long Radius ASME B16.9 I GR. WP316	BE Wrough	t S ASTM A	403		0,68		
353	4	0	In	2,11		mm	,00	2,00	NR	216	90° Elbow Long Radius ASME B16.9 I	BE Wrough	t W ASTM A	403		2,80		
2264	4	3	In	2,11	2,11	mm	,00	1,00	NR	216	Reducer Eccentric ASME B16.9 BE W WP316	rought W A	STM A 403	GR.		0,58		
1071	1/2	0	In			mm	,00	2,00	NR	216	Coupling TA 50.7/2 THRD-F NPT 300	00# Forged	ASTM A 182	2 GR.		0,24		
1073	1	0	In			mm	,00	2,00	NR	216	Coupling TA 50.7/2 THRD-F NPT 300 F316	00# Forged	ASTM A 182	2 GR.		0,61		
1218	2	0	In	3,91		mm	,00	2,00	NR	216	Stub-End MSS SP-43 FLG x BE Wrou, WP316 Type A	ght S ASTM	1 A 403 GR.			0,96		
TE_33.1 TI 33.2							Plant SX1		REX	GH/F	Piping Class 216 Fluid				- ·	tion SP.1406/2-SP.14	108/3	
PSH_33.	.1						Dang. fluid				Fluid Coating			De i	stem	Op ten		

Sketch Sht 1/1

Isometric code

Area SX1

Zones

PI_33.4

Page 1

		В	Ballesti	ra					SK	ЕТСН	ES MATERIAL LIST		PROJ	1E3	35	REV: 0	13/04/2010
	PUMA	15		13/04/2	010 11.4	7.50							DOC	1E3	35-65-029	•	
			Bal	lestra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Tem	ıp: ℃	Pres: BAR	Corr: mm
Mark	S1	S2		Т1	T2		Len mm	Qty	Um Pi	p. class	Component				Gen. Bolt	Weight (Kg) As.b	ly Branch
1233	3	0	In	2,11		mm	,00	1,00	NR 21	.6	Stub-End MSS SP-43 FLG x BE Wroug WP316 Type A	ht W AST	M A 403 GI	₹.		0,40	
1234	4	0	In	2,11		mm	,00	1,00	NR 21	.6	Stub-End MSS SP-43 FLG x BE Wroug WP316 Type A	ht W AST	M A 403 GI	₹.		0,62	
5135	5/8	0	In			mm	95,00	4,00	NR 21	.6	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 T	AB. 9		0,92	
5137	5/8	0	In			mm	105,00	2,00	NR 21	.6	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 T	AB. 9		0,48	
5138	5/8	0	In			mm	110,00	8,00	NR 21	.6	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 T	AB. 9		2,00	
715	2	0	In			mm	,00	2,00	NR 21	.6	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_B5F				
717	3	0	In			mm	,00	1,00	NR 21	.6	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5F				
718	4	0	In			mm	,00	2,00	NR 21	.6	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5F				
5384	5/8	0	In			mm	40,00	16,00	NR 21	.6	Screws for valves ASME B 18.2.1 /UNO	C ASTM A	193 B7 Ga	vanize	ed	2,40	
5385	5/8	0	In			mm	45,00	32,00	NR 21	.6	Screws for valves ASME B 18.2.1 /UNO	C ASTM A	193 B7 Ga	vanize	ed	5,12	

M Erection

SX1 SX1

SX1

SULPHUREX GH/F

33038 - 0

TE_33.1	Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specification	SP.1406/2-SP.1408/3
TI_33.2	Line 33038 - 0	Fluid	System	
PSH_33.1	Dang. fluid type	Coating	De pres	Op tem
PI_33.4	Area SX1	Sketch Sht 1/1	Isometric code	Page 2
	Zones			

78,61

78,61

Total Kg:

TOTAL Kg:

1 / 1

		В	allestr	a					S	KETCH	IES MATERIAL LIST		P	ROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	.5		13/04/20	010 11.47	7.50	1						D	OC:	1E35	-65-029	•		
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk: n	nm	Temp	: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component					Gen. Bolt	Weight (Kg)	s.bly	Branch
1520	1/2	0	In	2,77		mm	,00	0,20	_	216	Pipe ASME B36.19 PL Seamless ASTM	A 312 TI	P 316				0,26	<u> </u>	
1522	1	0	In	3,38		mm	,00	1,00	m	216	Pipe ASME B36.19 PL Seamless ASTM	A 312 TI	P 316				2,55		
2862	1/2	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port ST.46545/1 THRD-A 182 GR. F316 S 99	F NPT 80	00# For	ged AS	STM		0,71		
2869	1	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port ST.46588/2 LUG 1: Cast ASTM A 351 CF8 S 125	50 LB RF	(125÷2	50 AA	RH)	5381	2,86		
6024	1	0	In			mm	,00	1,00	NR	216	"Y" Valve Globe ST.46347/2 FLG 150 I Forged ASTM A 182 GR. F304 D 75	B RF (12	5÷250	AARH	(I)	5126	5,10		
448	1	0	In			mm	,00	4,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB I ASTM A 105 Galvanized	Flat Face S	Smooth	Forge	d	5128	3,20		
1215	1	0	In	3,38		mm	,00	4,00	NR	216	Stub-End MSS SP-43 FLG x BE Wroug WP316 Type A	ht S ASTI	M A 403	GR.			0,65		
5126	1/2	0	In			mm	70,00	4,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASMI ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2	.2 TAI	B. 9		0,44		
5128	1/2	0	In			mm	80,00	8,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASMI ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2	.2 TAI	B. 9		0,96		
712	1	0	In			mm	,00	4,00	NR	216	Gasket TA 50.5/31 150 LB RF (125÷250) AARH)	_ B5F						
5381	1/2	0	In			mm	30,00	16,00	NR	216	Screws for valves ASME B 18.2.1 /UNC	ASTM A	193 B	7 Galv	anized		1,28		
	-				-	1				N	// Erection					Total Kg:	18,01		

AE_33.1	Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specification	SP.1406/2-SP.1408/3
	Line 33039 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

TOTAL Kg:

18,01

SX1 SX1

SULPHUREX GH/F

SX1

		В	Balles	tra					S	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	15		13/04/20	010 11.4	7.50							DOC:	1E35-6	55-029		•	
			Ba	allestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp: °	С	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	ı Qty	Um	Pip. class	S Component			(Gen. Bolt	Weight (Kg)	As.bly	Branch
1520	1/2	0	In	2,77		mm	,00		-	216	Pipe ASME B36.19 PL Seamless ASTM	1 A 312 TP	316			1,94	<u> </u>	
446	1/2	0	In			mm	,00	2,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face St	mooth Forge	d 5	5127	0,80		
1213	1/2	0	In	2,77		mm	,00	2,00	NR	216	Stub-End MSS SP-43 FLG x BE Wroug WP316 Type A	ght S ASTM	A 403 GR.			0,17		
5127	1/2	0	In			mm	75,00	8,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 U	JNC/2.2 TA	B. 9		0,96		
710	1/2	0	In			mm	,00	2,00	NR	216	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)_	B5F					
	'			'	'	'	1			1	M Erection				Total Kg:	3,87		-
SX1	SULPH	UREX G	H/F			33041	- 0			SX1	SX1 1.	/ 1		TO	OTAL Kg:	3.87		

Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specification	SP.1406/2-SP.1408/3
Line 33041 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCH	IES MATERIAL LIST		PROJ:	1E35	REV: 0	13/0	04/2010
	PUMA	.5		13/04/2	010 11.4	47.50	1						DOC:	1E35-65-029	•		
			Ball	estra						SU	LPHUREX GH/F	Size: In Thk	: mm	Temp: °C	Pres: BAR	Co	orr: mm
Mark	S1	S2		T1	Т2		Len mm	Otv	Um	Pip. class	Component			Gen. Bolt	Weight (Kg)	s.bly	Branch
1520	1/2	0	In	2,77		mm	,00	11,00	_	216	Pipe ASME B36.19 PL Seamless ASTM	M A 312 TP 316	j		14,21		
2862	1/2	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port ST.46545/1 THRD A 182 GR. F316 S 99			TM	0,71		
2867	1/2	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port ST.46588/2 LUG 1 Cast ASTM A 351 CF8 S 125	150 LB RF (125	÷250 AA	RH) 5381	1,63		
5006	1/2	0	In			mm	,00	1,00	NR	216	"Y" Valve Check ST.46360/5 FLG 150 Forged ASTM A 182 GR. F316 R 92	LB RF (125÷2:	50 AARH	5125	3,06		
446	1/2	0	In			mm	,00	8,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face Smoo	th Forged	5127	3,20		
4695	1/2	0	In			mm	,00	2,00	NR	216	Tee Straight TA 50.6/1 SW-F 3000# Fo	orged ASTM A	182 GR. F	316	0,57		
1213	1/2	0	In	2,77		mm	,00	8,00	NR	216	Stub-End MSS SP-43 FLG x BE Wroug WP316 Type A	ght S ASTM A	403 GR.		0,68		
5125	1/2	0	In			mm	65,00	4,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	IE B18.2.1 UNO	C/2.2 TAE	3.9	0,44		
5127	1/2	0	In			mm	75,00	24,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	IE B18.2.1 UNG	C/2.2 TAE	3. 9	2,88		
710	1/2	0	In			mm	,00	8,00	NR	216	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _ B5	F				
5381	1/2	0	In			mm	30,00	16,00	NR	216	Screws for valves ASME B 18.2.1 /UN	C ASTM A 193	B7 Galva	nnized	1,28		
				'						N	// Erection			Total Kg	: 28,66		

PSV_33.4	Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specification	SP.1406/2-SP.1408/3
	Line 33042 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

TOTAL Kg:

28,66

SX1

SX1

SULPHUREX GH/F

SX1

		В	allestr	a						S	KETCH	IES MATERIAL LIST		PRO)J: 1E3	5	REV: 0	13/	/04/2010
	PUMA	A 5		13/04/20	010 11.4	7.50								DO	C: 1E3	5-65-029	•	•	
			Ball	lestra							SU	LPHUREX GH/F	Size: In	Thk: mm	Tem	ıp: ℃	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm		Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1541	4	0	In	2,11		mm	,00		6,50	m	216	Pipe ASME B36.19 PL E.R.W. ASTM	A 312 TP 3	316			38,72		
6033	4	0	In			mm	,00		1,00	NR	216	Valve Ball Full Port ST.46588/2 LUG 1 Cast ASTM A 351 CF8 S 125	50 LB RF	(125÷250	AARH)	5385	21,43		
454	4	0	In			mm	,00		2,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth Fo	rged	5138	11,20		
353	4	0	In	2,11		mm	,00		2,00	NR	216	90° Elbow Long Radius ASME B16.9 F GR. WP316	BE Wrough	t W ASTI	M A 403		2,80		
1234	4	0	In	2,11		mm	,00		2,00	NR	216	Stub-End MSS SP-43 FLG x BE Wroug WP316 Type A	ght W AST	M A 403	GR.		1,25		
5138	5/8	0	In			mm	110,00		8,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2	TAB. 9		2,00		
718	4	0	In			mm	,00		2,00	NR	216	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5F					
5385	5/8	0	In			mm	45,00	3	2,00	NR	216	Screws for valves ASME B 18.2.1 /UNG	C ASTM A	. 193 B7 C	alvanize	d	5,12		
	'	'	1	'	1	1	1				N	/I Erection				Total Kg:	82,51		,

TOTAL Kg:

82,51

SX1

SX1

SX1

SULPHUREX GH/F

CHAIN mt. 4	Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specificati	on SP.1406/2-SP.1408/3
	Line 33043 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		Е	Ballestr	a					S	SKETC	CHES MATERIAL LIST	•		PROJ:	1E35		REV: 0	13	3/04/2010
	PUMA	15		13/04/2	010 11.4	47. 51]	DOC:	1E35	-65-029			
			Ball	estra						S	SULPHUREX GH/F	Size: In	Thk:	mm	Temp	: °C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Un	n Pip. clas	SS Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1520	1/2	0	In	2,77		mm	,00	0,20	-	216	Pipe ASME B36.19 PL Seamless AST	M A 312 T	P 316				0,26		
1522	1	0	In	3,38		mm	,00	0,20	m	216	Pipe ASME B36.19 PL Seamless AST	M A 312 T	P 316				0,51		
1541	4	0	In	2,11		mm	,00	9,50	m	216	Pipe ASME B36.19 PL E.R.W. ASTM	A 312 TP	316				56,59		
6033	4	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port ST.46588/2 LUG Cast ASTM A 351 CF8 S 125	150 LB RF	(125÷	250 AA	RH)	5385	21,43		
454	4	0	In			mm	,00	5,00	NR	216	Flange Lap-Joint ASME B16.5 150 LE ASTM A 105 Galvanized	Flat Face	Smoot	h Forgeo	i	5138	28,00		
456	6	0	In			mm	,00	1,00	NR	216	Flange Lap-Joint ASME B16.5 150 LE ASTM A 105 Galvanized	Flat Face	Smoot	h Forgeo	i	5147	7,50		
353	4	0	In	2,11		mm	,00	5,00	NR	216	90° Elbow Long Radius ASME B16.9 GR. WP316	BE Wrougl	nt W A	ASTM A	403		7,00		
1846	6	4	In	2,77	2,11	mm	,00	1,00	NR	216	Reducer Concentric ASME B16.9 BE WP316	Wrought W	AST	M A 403	GR.		1,55		
1234	4	0	In	2,11		mm	,00	5,00	NR	216	Stub-End MSS SP-43 FLG x BE Wrou WP316 Type A	ght W AST	M A	403 GR.			3,12		
1236	6	0	In	2,77		mm	,00	1,00	NR	216	Stub-End MSS SP-43 FLG x BE Wrou WP316 Type A	ght W AST	M A	403 GR.			1,33		
5138	5/8	0	In			mm	110,00	32,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized		UNC	/2.2 TAI	3. 9		8,00		
5147	3/4	0	In			mm	115,00	8,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	IE B18.2.1	UNC	/2.2 TAI	3. 9		7,20		
718	4	0	In			mm	,00	5,00	NR	216	Gasket TA 50.5/31 150 LB RF (125÷2		B5F	7					\top
720	6	0	In			mm	,00	1,00	NR	216	Gasket TA 50.5/31 150 LB RF (125÷2								+
5385	5/8	0	In			mm	45,00	32,00	NR	R 216	Screws for valves ASME B 18.2.1 /UN	C ASTM A	193	B7 Galva	anized		5,12		1
							- I				M Erection					Total Kg:	147,6		
SX1	SULPH	UREX G	H/F			33044	- 0			SX1	SX1 1	/ 1			7	TOTAL Kg:	147,6		
AE_33.2							Plant SX1		REX	GH/F	Piping Class 216					- ·	ion SP.1406/2-SP	.1408/3	
TE_33.2 PI_33.5							Line 33044 Dang. fluid				Fluid Coating				Sys De r		0 4		
1_55.5							Area SX1	гуре			Sketch Sht 1/1				pe p netric c		Op t		age 1

Zones

		Ba	llestr	ra					SKETCH	IES MATERIAL LIST		PROJ:	1E35	i	REV: 0	13/04/2010
	PUMA5	;		13/04/2	010 11.4	47.51	1					DOC:	1E35	5-65-029		
			Ball	lestra					SUI	LPHUREX GH/F	Size: In	T hk: mm	Temp	:℃	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Otr	Um Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	v Branch
1539	2+1/2	0	In	2,11	12	mm	.00	0,20		Pipe ASME B36.19 PL E.R.W. ASTM	Δ 312 TP 31	6		Gen. Don	0,75	y Branch
1543	6	0	In	2,77		mm	,00	2.00		Pipe ASME B36.19 PL E.R.W. ASTM					23,07	
2922	6	0	In	2,77		mm	,00	,	NR 216	Valve Butterfly ST.46440/5 WAFER 15			5H)	5154	15,31	
L9LL	U	U				11111	,00	1,00	NK 210	Cast ASTM A 351 GR. CF8M B 81	U LD KI (12	.5-250 AAI	XII)	3134	13,31	
452	2+1/2	0	In			mm	,00	1,00	NR 216	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face Sn	nooth Forge	d	5136	3,60	
456	6	0	In			mm	,00	1,00	NR 216	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face Sn	nooth Forge	d	5147	7,50	
355	6	0	In	2,77		mm	,00	1,00	NR 216	90° Elbow Long Radius ASME B16.9 E GR. WP316	BE Wrought	W ASTM A	403		4,04	
2269	6	2+1/2	In	2,77	2,11	mm	,00	1,00	NR 216	Reducer Eccentric ASME B16.9 BE Wi	ought W AS	TM A 403	GR.		1,55	
1232	2+1/2	0	In	2,11		mm	,00	1,00	NR 216	Stub-End MSS SP-43 FLG x BE Wroug WP316 Type A	ht W ASTM	A 403 GR.			0,32	
1236	6	0	In	2,77		mm	,00	1,00	NR 216	Stub-End MSS SP-43 FLG x BE Wroug WP316 Type A	ht W ASTM	A 403 GR.			1,33	
5136	5/8	0	In			mm	100,00	4,00	NR 216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 U	NC/2.2 TA	B. 9		0,92	
5145	3/4	0	In			mm	100,00	-8,00	NR 216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 U	NC/2.2 TA	B. 9		-6,72	
5147	3/4	0	In			mm	115,00	8,00	NR 216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 U	NC/2.2 TA	B. 9		7,20	
5154	3/4	0	In			mm	155,00	8,00	NR 216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 U	NC/2.2 TA	B. 9		8,48	
716	2+1/2	0	In			mm	,00	1,00	NR 216	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	B5F				
720	6	0	In			mm	,00		NR 216	Gasket TA 50.5/31 150 LB RF (125÷25						
			-		-				N	I Erection				Total Kg:	67,36	
															,	
				Plant SX1	SULPHU	REX GH/F	Piping Class 216			We	elding specifica	tion SP.1406/2-SP.1408/	3			
							Line 3304			Fluid				stem		
							Dang. fluid	l type		Coating				pres	Op tem	
							Area SX1			Sketch Sht 1/1		Ison	metric o	code		Page 1

Zones

		Ba	llestra				SKETCHES MA	ATERIAL LIST		PROJ:	1E35	REV: 0	13/04/2010
	PUMA5 13/04/2010 11.47.51									DOC:	1E35-65-029		
	Ballestra					-	SULPHUREX	GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	Corr: mm
Mark	Iark S1 S2 T1 T2 1				T2	Len	ım Qty Um Pip. class Compor	nent			Gen. Bolt	Weight (Kg)	As.bly Branch
SX1	SX1 SULPHUREX GH/F 33045 -			33045 - 0	SX1 SX1	1 /	1		TOTAL Kg:	67,36			

Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specification	on SP.1406/2-SP.1408/3
Line 33045 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 2
Zones			

		Ba	llestr	a					S	KETCH	IES MATERIAL LIST		P	ROJ:	1E35	i	REV: 0	13	3/04/2010
	PUMA5	;		13/04/20	010 11.4	7.51							D	oc:	1E35	5-65-029			
			Ball	lestra						SU	LPHUREX GH/F	Size: In	Thk: n	ım	Temp	: °C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1520	1/2	0	In	2,77		mm	,00	0,50	m	216	Pipe ASME B36.19 PL Seamless ASTM	I A 312 TI	P 316				0,65		
1524	1+1/2	0	In	3,68		mm	,00	0,50	m	216	Pipe ASME B36.19 PL Seamless ASTM	I A 312 TI	P 316				2,07		
1543	6	0	In	2,77		mm	,00	8,00	m	216	Pipe ASME B36.19 PL E.R.W. ASTM	A 312 TP	316				92,30		
2862	1/2	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port ST.46545/1 THRD- A 182 GR. F316 S 99	F NPT 80	00# For	ged AS	STM		0,71		
2866	1+1/2	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port ST.46545/1 THRD- A 182 GR. F316 S 99	F NPT 80	00# For	ged AS	STM		3,27		
2922	6	0	In			mm	,00	1,00	NR	216	Valve Butterfly ST.46440/5 WAFER 15 Cast ASTM A 351 GR. CF8M B 81	0 LB RF ((125÷25	0 AAR	RH)	5154	15,31		
452	2+1/2	0	In			mm	,00	1,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB	Flat Face S	Smooth	Forged	l	5136	3,60		
456	6	0	In			mm	,00	2,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth	Forged	i	5147	15,00		
355	6	0	In	2,77		mm	,00	4,00	NR	216	90° Elbow Long Radius ASME B16.9 B GR. WP316	E Wrough	ht W AS	STM A	403		16,17		
2269	6	2+1/2	In	2,77	2,11	mm	,00	1,00	NR	216	Reducer Eccentric ASME B16.9 BE Wr WP316	ought W	ASTM A	A 403 C	GR.		1,55		
1071	1/2	0	In			mm	,00	1,00	NR	216	Coupling TA 50.7/2 THRD-F NPT 300 F316	0# Forged	I ASTM	A 182	GR.		0,12		
1232	2+1/2	0	In	2,11		mm	,00	1,00	NR	216	Stub-End MSS SP-43 FLG x BE Wroug WP316 Type A	ht W AST	CM A 40	3 GR.			0,32		
1236	6	0	In	2,77		mm	,00	2,00	NR	216	Stub-End MSS SP-43 FLG x BE Wroug WP316 Type A	ht W AST	M A 40	3 GR.			2,66		
5136	5/8	0	In			mm	100,00	4,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASMI ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2	.2 TAE	3. 9		0,92		
5145	3/4	0	In			mm	100,00	-8,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASMI ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2	.2 TAE	3.9		-6,72		<u> </u>

PISH_33.7	Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specification	SP.1406/2-SP.1408/3
	Line 33046 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	a					S	KETCH	IES MATERIAL LIST		PRO	J: 1E35	5	REV: 0	13	3/04/2010
	PUMA5			13/04/2	010 11.4	7.51							DOC	: 1E35	5-65-029			
			Ball	estra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp): °C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
5147	3/4	0	In			mm	115,00	8,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2	AB. 9		7,20		
5154	3/4	0	In			mm	155,00	8,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 T	AB. 9		8,48		
716	2+1/2	0	In			mm	,00	1,00	NR	216	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	B5F					
720	6	0	In			mm	,00	2,00	NR	216	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	B5F					
	•	•	•		•	•	•			N	1 Erection				Total Kg:	163,6		

TOTAL Kg:

163,6

SX1 SX1

SULPHUREX GH/F

PISH_33.7	Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specification	SP.1406/2-SP.1408/3
	Line 33046 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 2
	Zones			

		В	Ballestr	·a					,	SKETCH	IES MATERIAL LIST		PRO	J: 1E35	5	REV: 0 1	3/04/2010
	PUMA	A 5		13/04/20	010 11.47	7.51							DOC	: 1E35	5-65-029		
			Bal	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp): °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1541	4	0	In	2,11		mm	,00	6,5) m	216	Pipe ASME B36.19 PL E.R.W. ASTM	A 312 TP 3	16			38,72	
6033	4	0	In			mm	,00	1,0) NF	216	Valve Ball Full Port ST.46588/2 LUG 1 Cast ASTM A 351 CF8 S 125	50 LB RF ((125÷250 A	ARH)	5385	21,43	
454	4	0	In			mm	,00,	3,0) NF	216	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	mooth Forg	ged	5138	16,80	
353	4	0	In	2,11		mm	,00	5,0) NF	216	90° Elbow Long Radius ASME B16.9 F GR. WP316	BE Wrough	t W ASTM	A 403		7,00	
1234	4	0	In	2,11		mm	,00	3,0) NF	216	Stub-End MSS SP-43 FLG x BE Wroug WP316 Type A	tht W AST!	M A 403 G	R.		1,87	
5138	5/8	0	In			mm	110,00	16,0) NF	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 T	AB. 9		4,00	
718	4	0	In			mm	,00	3,0) NF	216	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _	_B5F				
5385	5/8	0	In			mm	45,00	32,0) NF	216	Screws for valves ASME B 18.2.1 /UNG	C ASTM A	193 B7 Ga	lvanized		5,12	
		1				1				N	M Erection				Total Kg:	94,93	1

TOTAL Kg:

94,93

SX1

SX1

SULPHUREX GH/F

33047 - 0

SX1

Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specification	n SP.1406/2-SP.1408/3
Line 33047 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		E	Ballesti	ra					S	SKETCH	IES MATERIAL LIST		PROJ	: 1E35		REV: 0	13/04/2010
	PUMA	A 5		13/04/20	010 11.47	7.51							DOC:	1E35	-65-029		
			Bal	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp	:℃	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Otv	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bl	v Branch
1543	6	0	In	2,77		mm	,00	3,00	_	216	Pipe ASME B36.19 PL E.R.W. ASTM	A 312 TP 3	16			34,61	
456	6	0	In			mm	,00	1,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized				5147	7,50	
355	6	0	In	2,77		mm	,00	1,00	NR	216	90° Elbow Long Radius ASME B16.9 E GR. WP316	E Wrough	t W ASTM	A 403		4,04	
1236	6	0	In	2,77		mm	,00	1,00	NR	216	Stub-End MSS SP-43 FLG x BE Wroug WP316 Type A	ht W ASTI	M A 403 GR			1,33	
5147	3/4	0	In			mm	115,00	8,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 TA	В. 9		7,20	
720	6	0	In			mm	,00	1,00	NR	216	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_B5F				
	-	-		1	1	1	<u> </u>			N	1 Erection				Total Kg:	54.68	'

SX1 SX1

SX1

SULPHUREX GH/F

33048 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specification	n SP.1406/2-SP.1408/3
Line 33048 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

54,68

TOTAL Kg:

Balle	stra	SKETCHES MATERIAL LIST		PROJ:	1E35	REV:	13/04/2010
PUMA5	13/04/2010 11.47.52			DOC:	1E35-65-029		
	Ballestra	SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR	Corr: mm

Mark	S1	S2		T1	T2		Len mm	Otv	Um	Pip. class	Component	Gen. Bolt	Weight (Kg) As.bly	Branch
1541	4	0	In	2,11		mm	,00	3,00	_	216	Pipe ASME B36.19 PL E.R.W. ASTM A 312 TP 316	Gen. Bon	17,87	- Drunen
6033	4	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port ST.46588/2 LUG 150 LB RF (125÷250 AARH) Cast ASTM A 351 CF8 S 125	5385	21,43	
454	4	0	In			mm	,00	2,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5138	11,20	
456	6	0	In			mm	,00	1,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	5147	7,50	
353	4	0	In	2,11		mm	,00	2,00	NR	216	90° Elbow Long Radius ASME B16.9 BE Wrought W ASTM A 403 GR. WP316		2,80	
1846	6	4	In	2,77	2,11	mm	,00	1,00	NR	216	Reducer Concentric ASME B16.9 BE Wrought W ASTM A 403 GR. WP316		1,55	
1234	4	0	In	2,11		mm	,00	2,00	NR	216	Stub-End MSS SP-43 FLG x BE Wrought W ASTM A 403 GR. WP316 Type A		1,25	
1236	6	0	In	2,77		mm	,00	1,00	NR	216	Stub-End MSS SP-43 FLG x BE Wrought W ASTM A 403 GR. WP316 Type A		1,33	
5138	5/8	0	In			mm	110,00	8,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H Galvanized		2,00	
5147	3/4	0	In			mm	115,00	8,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H Galvanized		7,20	
718	4	0	In			mm	,00	2,00	NR	216	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F			
720	6	0	In			mm	,00	1,00	NR	216	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F			
5385	5/8	0	In			mm	45,00	32,00	NR	216	Screws for valves ASME B 18.2.1 /UNC ASTM A 193 B7 Galvanized		5,12	
		*	•		•	•				•	M Erection	Total Kg:	79,25	
SX1	SULPH	UREX G	H/F			33049	- 0			SX1	SX1 1/1	TOTAL Kg:	79,25	

Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specification	n SP.1406/2-SP.1408/3
Line 33049 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		Ba	llesti	ra					5	SKETCH	IES MATERIAL LIST		P	ROJ:	E35		REV: 0	13	3/04/2010
	PUMA5			13/04/2	010 11.4	47.52	1						D	OC:	E35	-65-029	•		
			Bal	lestra						SU	LPHUREX GH/F	Size: In	Thk:	ım '	Гетр:	: °C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Otv	Un	n Pip. class	Component					Gen. Bolt	Weight (Kg)	As.blv	Branch
1539	2+1/2	0	In	2,11		mm	,00	0,20	_	216	Pipe ASME B36.19 PL E.R.W. ASTM	A 312 TP 3	316				0,75		
1543	6	0	In	2,77		mm	,00	2,00	m	216	Pipe ASME B36.19 PL E.R.W. ASTM						23,07		+
2922	6	0	In			mm	,00	1,00	NF	R 216	Valve Butterfly ST.46440/5 WAFER 15 Cast ASTM A 351 GR. CF8M B 81	0 LB RF (125÷25	0 AARI	H)	5154	15,31		
452	2+1/2	0	In			mm	,00	1,00	NF	R 216	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	mooth	Forged		5136	3,60		
456	6	0	In			mm	,00	1,00	NF	R 216	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	mooth	Forged		5147	7,50		
355	6	0	In	2,77		mm	,00	1,00	NF	R 216	90° Elbow Long Radius ASME B16.9 E GR. WP316	E Wrough	t W As	STM A	103		4,04		
2269	6	2+1/2	In	2,77	2,11	mm	,00	1,00	NF	R 216	Reducer Eccentric ASME B16.9 BE WI WP316	ought W A	STM .	A 403 G	R.		1,55		
1232	2+1/2	0	In	2,11		mm	,00	1,00	NF	R 216	Stub-End MSS SP-43 FLG x BE Wroug WP316 Type A	ht W AST	M A 40	3 GR.			0,32		
1236	6	0	In	2,77		mm	,00	1,00	NF	R 216	Stub-End MSS SP-43 FLG x BE Wroug WP316 Type A	ht W AST	M A 40	3 GR.			1,33		
5136	5/8	0	In			mm	100,00	4,00	NF	R 216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2	.2 TAB	. 9		0,92		
5145	3/4	0	In			mm	100,00	-8,00	NF	R 216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2	.2 TAB	. 9		-6,72		
5147	3/4	0	In			mm	115,00	8,00	NF	R 216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2	.2 TAB	. 9		7,20		
5154	3/4	0	In			mm	155,00	8,00	NF	R 216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2	.2 TAB	. 9		8,48		
716	2+1/2	0	In			mm	,00	1,00	NF	R 216	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_B5F						
720	6	0	In			mm	,00	2,00	NF	R 216	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_B5F						
	-				"		•			N	1 Erection					Total Kg:	67,36	•	
							Plant SX1 S	SULPHU	IREX	CGH/F	Piping Class 216				We	lding snecificat	ion SP.1406/2-SI	P 1408/3	
							Line 33050				Fluid				Syst	- ·	JI .1 -100/ 2-01	.1-100/3	
							Dang. fluid	type			Coating				De p		Op	tem	
							Area SX1				Sketch Sht 1/1			Isom	etric c	ode		P	age 1

Zones

		Ba	allestr	ra					SKE	тсн	IES MATE	RIAL LIST			PROJ:	1E35		REV: 0	13	3/04/2010
	PUMA	.5		13/04/2	010 11.47	7.52									DOC:	1E35-65-	-029			
	Ballestra									SUL	LPHUREX GH/F		Size:	In	Thk: mm	Temp: °C		Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2	I	Len mm	Qty	Um Pip.	. class	Component					Ge	n. Bolt	Weight (Kg)	As.bly	Branch
SX1	SX1 SULPHUREX GH/F 33050 - 0)		SΣ	X1 S	X1		1 / 1			ТОТ	TAL Kg:	67,36				

Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specification	n SP.1406/2-SP.1408/3
Line 33050 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 2
Zones			

	DIDEA		llestr		10.11.4		_		SKETCH	IES MATERIAL LIST		PROJ:			REV: 0	13/04/2010
	PUMA5	·		13/04/20)10 11.4	7.52						DOC:	1E35	5-65-029		
			Ball	estra					SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp	: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	y Branch
1520	1/2	0	In	2,77		mm	,00	0,50	m 216	Pipe ASME B36.19 PL Seamless AST	M A 312 TI	2316			0,65	
1524	1+1/2	0	In	3,68		mm	,00	0,50	m 216	Pipe ASME B36.19 PL Seamless AST	M A 312 TI	2316			2,07	
1543	6	0	In	2,77		mm	,00	5,50	m 216	Pipe ASME B36.19 PL E.R.W. ASTM	I A 312 TP	316			63,45	
2862	1/2	0	In			mm	,00	1,00	NR 216	Valve Ball Full Port ST.46545/1 THR A 182 GR. F316 S 99	D-F NPT 80	00# Forged A	STM		0,71	
2866	1+1/2	0	In			mm	,00	1,00	NR 216	Valve Ball Full Port ST.46545/1 THR A 182 GR. F316 S 99	D-F NPT 80	00# Forged A	STM		3,27	
2922	6	0	In			mm	,00	1,00	NR 216	Valve Butterfly ST.46440/5 WAFER Cast ASTM A 351 GR. CF8M B 81	150 LB RF (125÷250 AA	RH)	5154	15,31	
452	2+1/2	0	In			mm	,00	1,00	NR 216	Flange Lap-Joint ASME B16.5 150 LI ASTM A 105 Galvanized	3 Flat Face S	Smooth Forge	ed	5136	3,60	
456	6	0	In			mm	,00	2,00	NR 216	Flange Lap-Joint ASME B16.5 150 LI ASTM A 105 Galvanized	3 Flat Face S	Smooth Forge	ed	5147	15,00	
2269	6	2+1/2	In	2,77	2,11	mm	,00	1,00	NR 216	Reducer Eccentric ASME B16.9 BE V WP316	Vrought W	ASTM A 403	GR.		1,55	
1232	2+1/2	0	In	2,11		mm	,00	1,00	NR 216	Stub-End MSS SP-43 FLG x BE Wrot WP316 Type A	ight W AST	M A 403 GR			0,32	
1236	6	0	In	2,77		mm	,00	2,00	NR 216	Stub-End MSS SP-43 FLG x BE Wrot WP316 Type A	ight W AST	M A 403 GR			2,66	
5136	5/8	0	In			mm	100,00	4,00	NR 216	Stud Bolt + 2 Nuts TA 50.48B/28 ASI ASTM A 193 B7/A194 2H Galvanized		UNC/2.2 TA	В. 9		0,92	
5145	3/4	0	In			mm	100,00	-8,00	NR 216	Stud Bolt + 2 Nuts TA 50.48B/28 ASI ASTM A 193 B7/A194 2H Galvanized		UNC/2.2 TA	В. 9		-6,72	
5147	3/4	0	In			mm	115,00	8,00	NR 216	Stud Bolt + 2 Nuts TA 50.48B/28 ASI ASTM A 193 B7/A194 2H Galvanized	ME B18.2.1	UNC/2.2 TA	В. 9		7,20	
5154	3/4	0	In			mm	155,00	8,00	NR 216	Stud Bolt + 2 Nuts TA 50.48B/28 ASI ASTM A 193 B7/A194 2H Galvanized	ME B18.2.1	UNC/2.2 TA	В. 9		8,48	
716	2+1/2	0	In			mm	,00	1,00	NR 216	Gasket TA 50.5/31 150 LB RF (125÷2		_ B5F				
PISH_33	3.8						Plant SX1 S		REX GH/F	Piping Class 216 Fluid				elding specifica	tion SP.1406/2-SP.1408/3	3

Coating

Sketch Sht 1/1

De pres

Isometric code

Dang. fluid type

Area SX1

Zones

Page 1

Op tem

PUMA5 13/04/2010 11.47.52 DOC: 1E35-65-029 Ballestra SULPHUREX GH/F Size: In Thk: mm Temp: °C Pres: BAR Corr; mm	Ballestra	SKETCHES MATERIAL LIST	PROJ	: 1E35	REV: 0	13/04/2010
Ballestra SULPHUREX GH/F Size: In Thk: mm Temp: °C Pres: BAR Corr: mm	PUMA5 13/04/2010 11.47.52		DOC:	1E35-65-029		
·	Ballestra	SULPHUREX GH/F	Size: In Thk: mm	Temp: °C	Pres: BAR	Corr: mm

Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	s Component			Gen. Bolt	Weight (Kg)	As.bly	Branch
720	6	0	In			mm	,00	2,00	NR	216	Gasket TA 50.5/2	31 150 LB RF (125÷250 AARH) _ B5F					
	•				•	·					M Erection			Total Kg:	118,47		
SX1	1 SULPHUREX GH/F 33051 - 0			- 0			SX1	SX1	1 / 1	Т	OTAL Kg:	118,47					

PISH_33.8	Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specification	SP.1406/2-SP.1408/3
	Line 33051 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 2
	Zones			

		В	Ballestr	a					S	KETCH	ES MATERIAL LIST		PROJ	I: 1E35	í	REV: 0	13/04/2010
	PUMA	A 5		13/04/20	010 11.47	7.52							DOC	1E35	5-65-029		
			Ball	lestra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bl	y Branch
1541	4	0	In	2,11		mm	,00	6,50	m	216	Pipe ASME B36.19 PL E.R.W. ASTM	A 312 TP 3	316			38,72	
6033	4	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port ST.46588/2 LUG 1 Cast ASTM A 351 CF8 S 125	50 LB RF	(125÷250 A	ARH)	5385	21,43	
454	4	0	In			mm	,00	3,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth Forg	ed	5138	16,80	
353	4	0	In	2,11		mm	,00	5,00	NR	216	90° Elbow Long Radius ASME B16.9 E GR. WP316	BE Wrough	nt W ASTM	A 403		7,00	
1234	4	0	In	2,11		mm	,00	3,00	NR	216	Stub-End MSS SP-43 FLG x BE Wroug WP316 Type A	ht W AST	M A 403 GI	₹.		1,87	
5138	5/8	0	In			mm	110,00	16,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	E B18.2.1	UNC/2.2 T.	AB. 9		4,00	
											ASTM A 193 B7/A194 2H Galvanized						
718	4	0	In			mm	,00	3,00	NR	216	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5F				
5385	5/8	0	In			mm	45,00	32,00	NR	216	Screws for valves ASME B 18.2.1 /UNC	C ASTM A	193 B7 Ga	lvanized		5,12	
								<u> </u>	-	N	I Erection				Total Kg:	94,93	

TOTAL Kg:

94,93

SX1 SX1

SX1

SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specification	on SP.1406/2-SP.1408/3
Line 33052 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0	13	/04/2010
	PUMA	15		13/04/2	010 11.4	7.52	1						DOC:	1E35-6	65-029			
			Ball	lestra						SUI	LPHUREX GH/F	Size: In T	nk: mm	Temp: °	°C	Pres: BAR	C	Corr: mm
Mark	S1		T1	T2		Len mm	Qty	Um	Pip. class	Component			(Gen. Bolt	Weight (Kg)	As.bly	Branch	
1543	6	0	In	2,77		mm	,00	3,00		216	Pipe ASME B36.19 PL E.R.W. ASTM A	312 TP 316				34,61		
456	6 0 In mm						,00	1,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB I ASTM A 105 Galvanized	Flat Face Smo	ooth Forge	d 5	5147	7,50		
355	6	0	In	2,77		mm	,00									4,04		
1236	6 0 In 2,77 mm					,00	1,00	NR	216	Stub-End MSS SP-43 FLG x BE Wrougl WP316 Type A	nt W ASTM	A 403 GR.			1,33			
5147	7 3/4 0 In mm					115,00	8,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASMI ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 UN	IC/2.2 TAI	B. 9		7,20			
720	6	0	In			mm	,00	1,00	NR	216	Gasket TA 50.5/31 150 LB RF (125÷250	AARH) _ E	5F					T
		•								N	1 Erection				Total Kg:	54,68		-

TOTAL Kg:

54,68

SX1 SX1

SX1

SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specification	on SP.1406/2-SP.1408/3
Line 33053 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allest	ra					S	KETC	HES MATERIAL LIST		PRO	J: 1	E35	REV: 0	13/	/04/2010
	PUMA	15		13/04/2	010 11.4	7.53							DOC	: 1	E35-65-029			
			Bal	lestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Т	ſ emp: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	S Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	3,00	m	205	Pipe ASME B36.10 PL Seamless API 5	SL GR. B				3,80		
2874	1/2	0	In			mm	,00	1,00	NR	205	Valve Ball Full Port ST.46739/1 LUG 1 Forged CARBON STEEL S 152	150 LB RF	(125÷250 A	AAR	Н) 5373	1,60		
2984	1/2	0	In			mm	,00	1,00	NR	205	Valve Check ST.46275/1 SW-F 800# F	Forged AST	M A 105 R	83		1,90		
465	1/2 0 In mm				mm	,00	2,00	NR	205	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷25	0 AARH) I	Forge	ed 5191	0,80			
231	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow TA 50.7/2 THRD-F NPT 30	000# Forge	d ASTM A	105		1,20		
1254	1/2	0	In			mm	,00	1,00	NR	203	Union TA 50.7/2 THRD-F NPT 3000#	Forged AS	STM A 105			0,30		
5191	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 T	TAB.	9	0,44		
659	1/2	0	In			mm	,00	2,00	NR	205	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH)	_ B5C					
5373	1/2	0	In			mm	30,00	8,00	NR	205	Screws for valves ASME B 18.2.1 /UN	C ASTM A	193 B7			0,64		
	•	•	*	*	•	•	-			•	M Erection				Total Kg:	10,68		
SX1	SULPHUREX GH/F 330					33054	- 0			SX1	SX1 1	/ 1			TOTAL Kg:	10,68		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	on SP.1406/2-SP.1407/2
Line 33054 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					SI	KETCH	IES MATERIAL LIST		PROJ:	1E35	REV:) 13	/04/2010
	PUMA	A 5		13/04/2	010 11.47	7.53							DOC:	1E35-65-029			
			Balle	estra						SU	LPHUREX GH/F	Size: In Thl	k: mm	Temp: °C	Pres: BAR	С	Corr: mm
Mark	S1	S2		T1	T2]	Len mm	Qty	Um	Pip. class	Component			Gen. Bol	t Weight (Kg) As.bly	Branch
1456	5	0	In	3,96		mm	,00	0,20	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B			2,68		
1458	8	0	In	3,96		mm	,00	12,50	m	203	Pipe ASME B36.10 PL E.R.W. API 5L			262,61			
302	8	0	In	3,96		mm	,00	3,00	NR	203	90° Elbow Long Radius ASME B16.9 E WPB	E E.R.W. AST	ГМ А 234	GR.	29,70		
2092	8	5	In	3,96	3,96	mm	,00	1,00	NR :	203	Reducer Eccentric ASME B16.9 BE E.I	R.W. ASTM A	234 GR.	WPB	3,17	T	
4465	1 1						,00	1,00	NR :	203	Cap ASME B16.9 BE Seamless ASTM	A 234 GR. WI	PB		2,65		
								'		N	M Erection			Total K	g: 300,82		
SX1	X1 SULPHUREX GH/F 33101									SX1 S	SX1 1 /	1		TOTAL K	g: 300,82]	

		В	Ballestr	a					S	KETC	HES MATERIAL LIST		PRO	J: 1E	35	REV: 0	13	/04/2010
	PUMA	15		13/04/2	010 11.4	7.53							DOC	2: 1E	35-65-029	•	•	
			Ball	estra						S	ULPHUREX GH/F	Size: In	Thk: mm	Ter	mp: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	ss Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1435	1	0	In	3,38		mm	,00	10,00	_	_	Pipe ASME B36.10 PL Seamless AP	5L GR. B				25,02		
2986	1	0	In			mm	,00	1,00	NR	205	Valve Check ST.46275/1 SW-F 800#	Forged AST	TM A 105 F	83		4,80		
3125	1	0	In			mm	,00	1,00	NR	205	Valve Globe ST.46274/3 SW-F 800#	Forged AST	M A 105 D	72		5,40		
324	1 0 In 3,38 mm					,00	5,00	NR	205	90° Elbow Long Radius ASME B16. GR. WPB	BE Wroug	ht S ASTM	A 234		0,68			
											M Erection				Total Kg:	35,9		
SX1	SULPHUREX GH/F 33102 - 0									SX1	SX1	1 / 1			TOTAL Kg:	35,9		

Plant SX1 SULPHUREX GH/F	Piping Class 205	Welding specification	n SP.1406/2-SP.1407/2
Line 33102 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		F	allest	a					S	KETCH	HES MATERIAL LIST		PROJ	: 1E35	5	REV: 0	13	/04/2010
	PUMA	A 5		13/04/2	010 11.4	7.53							DOC:	1E35	5-65-029	•	•	
			Bal	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp); °C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1454	4	0	In	3,18		mm	,00	12,00	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				104,57		
5024	4	0	In			mm	,00	2,00	NR	203	Valve Butterfly With Gasket ST.46373/ (125÷250 AARH) Cast DUCTILE IRO		150 LB RF		5210	9,00		
3181	4	0	In			mm	,00	1,00	NR	203	Strainer Y-Type ST.46349/3 FLG 150 I ASTM A 216 GR. WCB F 71	LB RF (125	5÷250 AARF	I) Cast	5201	34,00		
473	4	0	In			mm	,00	8,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	RF (125÷25	0 AARH) Fo	orged	5201	44,80		
298	4	0	In	3,18		mm	,00	8,00	NR	203	90° Elbow Long Radius ASME B16.9 I WPB	BE E.R.W.	ASTM A 23	4 GR.		16,54		
5201	5/8	0	In			mm	95,00	32,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	AB. 9		7,36		
5210	5/8	0	In			mm	145,00	16,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	AB. 9		4,80		
667	4	0	In			mm	,00	5,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH)	_ B5C					
	1			1	-		1			N	M Erection				Total Kg:	221,06		

TOTAL Kg:

221,06

SX1 SX1

SX1

SULPHUREX GH/F

TV_33.9	Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	SP.1406/2-SP.1407/3
	Line 33103 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

	Ballestra								S	KETCE	IES MATERIAL LIST	PROJ:	1E35		REV: 0	13.	/04/2010	
	PUMA	15		13/04/2	010 11.4	7.53							DOC:	1E35-	65-029		•	
			Ball	lestra						SU	LPHUREX GH/F	Size: In Th	k: mm	Temp:	°C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2]	Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1435	1	0	In	3,38		mm	,00	0,50	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				1,25		
1454	4	0	In	3,18		mm	,00	0,20	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				1,74		
1457	6	0	In	3,96		mm	,00	12,00	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				192,58		
1662	6	4	In	3,96	3,18	mm	,00	1,00	NR	203	Reducer Concentric ASME B16.9 BE E	E.R.W. ASTM	A 234 GR	. WPB		2,18		
1058	1	0	In			mm	,00	2,00	NR	203	Coupling TA 50.7/2 THRD-F NPT 300	00# Forged AS	TM A 105	5		0,60		
1124	1/2	0	In			mm	,00	1,00	NR	203	Coupling Half TA 50.7/2 THRD-F NP	Γ 3000# Forge	d ASTM A	A 105		0,06		
4464	6	0	In	3,96		mm	,00	1,00	NR	203	Cap ASME B16.9 BE Seamless ASTM	A 234 GR. W	PB			2,02		
	'									N	M Erection				Total Kg:	200,43		
SX1	SULPH	UREX G	H/F			33104 - 0)			SX1 S	SX1 1.	/ 1		Т	OTAL Kg:	200,43		

TET_33.9	Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification S	SP.1406/2-SP.1407/3
TI_33.8	Line 33104 - 0	Fluid	System	
PI_33.13	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allest	ra				SKETCHES MATERIAL LIST PROJ: 1E3.						: 1E35		REV: 0	13/04/2010
	PUMA	\ 5		13/04/20	010 11.47	7.53							DOC:	1E35	-65-029	'	•
			Bal	lestra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Un	Pip. class	Component				Gen. Bolt	Weight (Kg) As.	bly Branch
1453	3	0	In	3,18		mm	,00	1,00	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				6,72	
5023	3	0	In			mm	,00	1,00	NR	203	Valve Butterfly With Gasket ST.46373/ (125÷250 AARH) Cast DUCTILE IRO		150 LB RF		5209	3,50	
472	3	0	In			mm	,00	3,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷25	0 AARH) Fo	rged	5201	12,30	
297	3	0	In	3,18		mm	,00	2,00	NR	203	90° Elbow Long Radius ASME B16.9 I WPB	BE E.R.W.	ASTM A 23	4 GR.		2,35	
5201	5/8	0	In			mm	95,00	8,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	B. 9		1,84	
5209	5/8	0	In			mm	140,00	4,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	B. 9		1,16	
666	3	0	In			mm	,00	2,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5C				
				•			<u>'</u>	•	-1	N	M Erection				Total Kg:	27,88	

TOTAL Kg:

27,88

SX1 SX1

SX1

SULPHUREX GH/F

33Y1C	Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	on SP.1406/2-SP.1407/3
	Line 33105 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	a					S	KETC	HES MATERIAL LIST		PROJ:	1E35	,	REV: 0	13/04/2010
	PUMA	.5		13/04/2	010 11.47	7.53							DOC:	1E35	-65-029		
			Balle	estra						SU	ULPHUREX GH/F	Size: In	Thk: mm	Temp	:℃	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg) As.bl	Branch
1453	3	0	In	3,18		mm	,00	1,00	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				6,72	
5023	3	0	In			mm	,00	1,00	NR	203	Valve Butterfly With Gasket ST.46373/. (125÷250 AARH) Cast DUCTILE IRON		50 LB RF		5209	3,50	
472	3	0	In			mm	,00,	3,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250	AARH) Fo	rged	5201	12,30	
297	3	0	In	3,18		mm	,00	2,00	NR	203	90° Elbow Long Radius ASME B16.9 E WPB	BE E.R.W. A	ASTM A 23	4 GR.		2,35	
5201	5/8	0	In			mm	95,00	8,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1 U	JNC/2.2 TA	В. 9		1,84	
5209	5/8	0	In			mm	140,00	4,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1 U	JNC/2.2 TA	В. 9		1,16	
666	3	0	In			mm	,00	2,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _	B5C				
						M Erection							Total Kg:	27,88			
SX1	X1 SULPHUREX GH/F 33106 - 0				0 SX1 SX1 1/1							7	TOTAL Kg:	27,88			

33Y1B	Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	on SP.1406/2-SP.1407/3
	Line 33106 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		Е	allestr	a					S	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	04/2010
	PUMA	15		13/04/20	010 11.4	7.54							DOC:	1E35	-65-029		•	
			Ball	estra						S	SULPHUREX GH/F	Size: In	Thk: mm	Temp:	: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	ss Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1453	3	0	In	3,18		mm	,00	1,00	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				6,72		
5023	3	0	In			mm	,00	1,00	NR	203	Valve Butterfly With Gasket ST.46373/5 (125÷250 AARH) Cast DUCTILE IRON		150 LB RF		5209	3,50		
472	3	0	In			mm	,00	3,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250) AARH) Foi	rged	5201	12,30		
297	3	0	In	3,18		mm	,00	2,00	NR	203	90° Elbow Long Radius ASME B16.9 B WPB	BE E.R.W.	ASTM A 234	4 GR.		2,35		
5201	5/8	0	In			mm	95,00	8,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2 TA	В. 9		1,84		
5209	5/8	0	In			mm	140,00	4,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASMI ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2 TA	В. 9		1,16		
666	3	0	In			mm	,00	2,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25)	0 AARH)	_B5C					
										•	M Erection				Total Kg:	27,88		
SX1	SULPHUREX GH/F 33107 - 0						-0 SX1 SX1 1/1						7	TOTAL Kg:	27,88			

33Y1A	Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	SP.1406/2-SP.1407/3
	Line 33107 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestra	a					5	KET	CH	ES MATERIAL LIST		PROJ	1E35	i	REV: 0	13/	04/2010
	PUMA	15		13/04/20	10 11.47	7.54								DOC:	1E35	5-65-029		•	
			Balle	estra							SUL	PHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR	Co	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	Pip. cla	lass	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1453	3	0	In	3,18		mm	,00	1,00) m	203		Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				6,72		
3006	3	0	In			mm	,00,	1,00	NR	203		Valve Check ST.46357/5 WAFER 150 I ASTM A 36 CADMIUM PLATED R 87	,	5÷250 AAR	H) Cast	5204	1,60		
472	3	0	In			mm	,00	3,00) NR	203		Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250	0 AARH) F	orged	5201	12,30		
297	3	0	In	3,18		mm	,00	2,00) NR	203		90° Elbow Long Radius ASME B16.9 B WPB	BE E.R.W.	ASTM A 23	84 GR.		2,35		
5201	5/8	0	In			mm	95,00	8,00) NR	203		Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	AB. 9		1,84		
5204	5/8	0	In			mm	110,00	4,00) NR	203		Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	AB. 9		1,00		
666	3	0	In			mm	,00	4,00) NR	203		Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_B5C					
	*	•	•	•	*	•	•			*	M	1 Erection				Total Kg:	25,82		
SX1	SULPHUREX GH/F 33108 - 0				- 0 SX1 SX1 1 / 1						,	TOTAL Kg:	25,82						

33Y1D	Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification SP.1406/2	2-SP.1407/3
	Line 33108 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			
		Sketch Sht 1/1	Isometric code	rage 1

		Е	allestr	a					S	KETC	HES MATERIAL LIST		PROJ	: 1E35	i	REV: 0	13/	/04/2010
	PUMA	\ 5		13/04/20	010 11.4	7.54							DOC:	1E35	5-65-029		•	
			Ball	estra				SULPHUREX GH/F Size: In Thk: mm Ter						Temp	: °C	Pres: BAR		orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1453	3	0	In	3,18		mm	,00	1,00	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				6,72		
3006	3	0	In			mm	,00	1,00	NR	203	Valve Check ST.46357/5 WAFER 150 ASTM A 36 CADMIUM PLATED R 8		5÷250 AARI	H) Cast	5204	1,60		
472	3	0	In			mm	,00	3,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	RF (125÷25)	0 AARH) Fo	rged	5201	12,30		
297	3	0	In	3,18		mm	,00	2,00	NR	203	90° Elbow Long Radius ASME B16.9 E WPB	BE E.R.W.	ASTM A 23	4 GR.		2,35		
5201	5/8	0	In			mm	95,00	8,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	В. 9		1,84		
5204	5/8	0	In			mm	110,00	4,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	В. 9		1,00		
666	3	0	In			mm	,00	4,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	O AARH)	_ B5C					
							•		•		M Erection				Total Kg:	25,82		
SX1	SULPH	UREX G	H/F			33109	- 0			SX1	SX1 1,	/ 1		,	TOTAL Kg:	25,82		

33Y1E	Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification SP.1406	5/2-SP.1407/3
	Line 33109 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestra	a					S	KETO	CHE	ES MATERIAL LIST		PROJ	: 1E35		REV: 0	13/	04/2010
	PUMA	15		13/04/20	10 11.47	7.54								DOC:	1E35	-65-029	•		
			Balle	estra				SULPHUREX GH/F Size: In Thk: mm T						Temp	:℃	Pres: BAR		orr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Un	Pip. cla	lass	Component				Gen. Bolt	Weight (Kg)	s.bly	Branch
1453	3	0	In	3,18		mm	,00	1,00	m	203]	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				6,72		
3006	3	0	In			mm	,00,	1,00) NR	203		Valve Check ST.46357/5 WAFER 150 I ASTM A 36 CADMIUM PLATED R 87	,	5÷250 AAR1	H) Cast	5204	1,60		
472	3	0	In			mm	,00	3,00) NR	203		Flange Slip-On ASME B16.5 150 LB RI ASTM A 105	F (125÷250) AARH) Fo	orged	5201	12,30		
297	3	0	In	3,18		mm	,00	2,00) NR	203		90° Elbow Long Radius ASME B16.9 B WPB	E E.R.W.	ASTM A 23	4 GR.		2,35		
5201	5/8	0	In			mm	95,00	8,00) NR	203		Stud Bolt + 2 Nuts TA 50.48B/28 ASMI ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2 TA	AB. 9		1,84		
5204	5/8	0	In			mm	110,00	4,00) NR	203		Stud Bolt + 2 Nuts TA 50.48B/28 ASMI ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2 TA	AB. 9		1,00		
666	3	0	In			mm	,00	4,00) NR	203	(Gasket TA 50.5/31 150 LB RF (125÷250	0 AARH) _	B5C					
	*		•	•	*	•	•	•		*	Ml	Erection				Total Kg:	25,82		
SX1	SULPH	UREX G	H/F			33110	- 0			SX1	SX	X1 1 /	1		7	TOTAL Kg:	25,82		

33Y1F	Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	SP.1406/2-SP.1407/3
	Line 33110 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	a					S	KETCH	IES MATERIAL LIST		PROJ	: 1E35		REV: 0 11	3/04/2010
	PUMA	A 5		13/04/2	010 11.47	7.54							DOC:	1E35	-65-029		
			Ball	lestra				SULPHUREX GH/F Size: In Thk: mm Temp:							:°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1454	4	0	In	3,18		mm	,00	13,00	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				113,28	
3006	3	0	In			mm	,00	1,00	NR	203	Valve Check ST.46357/5 WAFER 1501 ASTM A 36 CADMIUM PLATED R 8		5÷250 AAR	H) Cast	5204	1,60	
473	4	0	In			mm	,00	2,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷25	0 AARH) Fo	orged	5201	11,20	
298	4	0	In	3,18		mm	,00	5,00	NR	203	90° Elbow Long Radius ASME B16.9 E WPB	BE E.R.W.	ASTM A 23	4 GR.		10,33	
5201	5/8	0	In			mm	95,00	4,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	AB. 9		0,92	
5204	5/8	0	In			mm	110,00	4,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	AB. 9		1,00	
666	3	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_B5C				
667	4	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_B5C				
	1	1	1	-	1	1				N	1 Erection				Total Kg:	138,34	

TOTAL Kg:

138,34

SX1 SX1

33111 - 0

SULPHUREX GH/F

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 33111 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		E	Ballest	ra					S	KETC	HES MATERIAL LIST		PROJ	: 1E35		REV: 0	13	/04/2010
	PUMA	15		13/04/20	010 11.4	7.55							DOC:	1E35-0	65-029		•	
	Ballestra SULPHUREX GH/F Size: In Thk: mm Temp:						°C	Pres: BAR	(Corr: mm								
Mark	S1	S2		T1	Т2		Len mn	ı Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	9,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				11,39		
3116	1/2	0	In			mm	,00	1,00	NR	203	Valve Globe ST.46004/3 THRD-F NPT 51	Γ 200 LB For	ged BRON	IZE D		0,70		
1254	1/2	0	In			mm	,00	1,00	NR	203	Union TA 50.7/2 THRD-F NPT 3000#	Forged AST	M A 105			0,30		
	*	•	•	•	•	•				•	M Erection				Total Kg:	12,39		
SX1	SULPH	UREX G	H/F			33112	- 0			SX1	SX1 1	/ 1		T	OTAL Kg:	12,39		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 33112 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allest	a					S	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13.	/04/2010
	PUMA	.5		13/04/2	010 11.4	7.55							DOC:	1E35-	-65-029			
			Bal	lestra						SU	ULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	9,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				11,39		
6021	1/2	0	In			mm	,00	1,00	NR	203	Valve Check ST.46396/3 THRD-F NP 96	Γ 150 LB Fo	orged BRON	VZE R		0,37		
1254	1/2	0	In			mm	,00	1,00	NR	203	Union TA 50.7/2 THRD-F NPT 3000#	Forged AS	TM A 105			0,30		
				,					•		M Erection				Total Kg:	12,06		
SX1	SULPHI	UREX G	H/F			33113	- 0			SX1	SX1 1.	/ 1		T	OTAL Kg:	12,06		

Plant SX1 SULPHUREX GH/F Piping Class 203 Welding specification SP.1406/2-SP.1407/3

Line 33113 - 0 Fluid System

Dang, fluid type Coating De pres Op tem

Area SX1 Sketch Sht 1/1 Isometric code Page 1

Zones

		В	allest	ra					S	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	.5		13/04/20	010 11.4	7.55							DOC:	1E35-0	65-029		•	
			Ba	llestra						SI	ULPHUREX GH/F	Size: In	T hk: mm	Temp:	°C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	s Component			(Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	11,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				13,92		
3116	1/2	0	In			mm	,00	1,00	NR	203	Valve Globe ST.46004/3 THRD-F NPT	200 LB For	ged BRONZ	ZE D		0,70		
											51							
465	1/2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB R	F (125÷250	AARH) For	ged :	5191	0,40		
						'					ASTM A 105							
5191	1/2	0	In			mm	65,00	4,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	E B18.2.1 U	NC/2.2 TAI	B. 9		0,44		
											ASTM A 193 B7/ASTM A 194 GR.2H					l.		
659	1/2	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)_	B5C					
											M Erection				Total Kg:	15,46		
SX1	SULPHU	UREX G	H/F			33114	- 0			SX1	SX1 1 /	1		T	OTAL Kg:	15,46		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 33114 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allesti	a					S	KETCI	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/04/2010
	PUMA	.5		13/04/2	010 11.4	7.55	1						DOC:	1E35	-65-029	•	•
			Bal	lestra						SU	JLPHUREX GH/F	Size: In	Thk: mm	Temp	:℃	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As	bly Branch
1433	1/2	0	In	2,77		mm	,00	11,00	m	203	Pipe ASME B36.10 PL Seamless API 51	L GR. B				13,92	
6021	1/2	0	In			mm	,00	1,00	NR	203	Valve Check ST.46396/3 THRD-F NPT 96	7 150 LB Fo	orged BRON	IZE R		0,37	
465	1/2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250	AARH) For	rged	5191	0,40	
5191	1/2	0	In			mm	65,00	4,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1 U	JNC/2.2 TA	B. 9		0,44	
659	1/2	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _	B5C				
								-	•	I	M Erection				Total Kg:	15,13	
SX1	SULPHUREX GH/F 33115 -						- 0			SX1	SX1 1 /	1		7	ΓΟΤΑL Kg:	15,13	

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 33115 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					5	KETCH	HES MATERIAL LIST		P	ROJ:	1E35	5	REV: 0	13	8/04/2010
	PUMA5	;		13/04/20	010 11.4	7.55							D	OC:	1E35	5-65-029			
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk: n	ım	Temp	p: °C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	Pip. class	Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1435	1	0	In	3,38		mm	,00	1,50	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B					3,75		
1437	1+1/2	0	In	3,68		mm	,00	7,50	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B					30,37		
2830	1	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 20	00 LB F	orged			0,60		
467	1	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷25	0 AAR	H) Fo	rged	5192	0,80		
324	1	0	In	3,38		mm	,00	1,00	NR	203	90° Elbow Long Radius ASME B16.9 F GR. WPB	BE Wrough	nt S AS	ГМ А	234		0,14		
326	1+1/2	0	In	3,68		mm	,00	4,00	NR	203	90° Elbow Long Radius ASME B16.9 F GR. WPB	BE Wrough	nt S AS	ГМ А	234		1,47		
1756	1+1/2	1	In	3,68	3,38	mm	,00	2,00	NR	203	Reducer Concentric ASME B16.9 BE V WPB	Vrought S	ASTM	A 234	GR.		0,52		
5192	1/2	0	In			mm	70,00	4,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2	.2 TA	B. 9		0,44		
661	1	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5C						
	'			'	'					·	M Erection					Total Kg:	38,08		

1 / 1

TOTAL Kg:

38,08

SX1 SX1

SX1

SULPHUREX GH/F

33116 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	on SP.1406/2-SP.1407/3
Line 33116 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					,	SKETCH	IES MATERIAL LIST		PR	OJ:	1E35		REV: 0	13	/04/2010
	PUMA5	5		13/04/20	10 11.4	7.55							DC	C:	1E35	-65-029	•		
			Ball	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm		Temp:	°C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	n Pip. class	Component					Gen. Bolt	Weight (Kg) A	s.bly	Branch
1435	1	0	In	3,38		mm	,00	1,50	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B					3,75		
1437	1+1/2	0	In	3,68		mm	,00	2,50	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B					10,12		
3120	1+1/2	0	In			mm	,00	1,00	NI	R 203	Valve Globe ST.46004/3 THRD-F NPT 51	Γ 200 LB Fo	rged BF	RONZ	ZE D		3,45		
467	1	0	In			mm	,00	1,00	NI	R 203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	AF (125÷250	AARH) For	ged	5192	0,80		
324	1	0	In	3,38		mm	,00	2,00	NI	R 203	90° Elbow Long Radius ASME B16.9 E GR. WPB	BE Wrought	S ASTI	M A 2	234		0,27		
326	1+1/2	0	In	3,68		mm	,00	1,00	NI	R 203	90° Elbow Long Radius ASME B16.9 E GR. WPB	BE Wrought	S ASTI	M A 2	234		0,37		
1756	1+1/2	1	In	3,68	3,38	mm	,00	2,00	NI	R 203	Reducer Concentric ASME B16.9 BE W WPB	Vrought S A	STM A	234	GR.		0,52		
5192	1/2	0	In			mm	70,00	4,00	NI	R 203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		JNC/2.2	TAE	3. 9		0,44		
661	1	0	In			mm	,00	1,00	NI	R 203	Gasket TA 50.5/31 150 LB RF (125÷25	60 AARH) _	B5C						

M Erection

1 / 1

SX1 SX1

SX1

SULPHUREX GH/F

33117 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	on SP.1406/2-SP.1407/3
Line 33117 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

Total Kg:

TOTAL Kg:

19,72

19,72

		F	Ballestr	a				S	SKETCI	HES MATERIAL LIST		PROJ	: 1E35	í	REV: 0	13/	/04/2010
	PUMA	\ 5		13/04/2	010 11.47.56							DOC:	1E35	5-65-029			
			Ball	estra					SU	JLPHUREX GH/F	Size: In	Thk: mm	Temp	: °C	Pres: BAR	Co	orr: mm
Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1435	1	0	In	3,38	mm	,00	1,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				2,50		
2830	1	0	In		mm	,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 20	0 LB Forged	Į		0,60		
467	1	0	In		mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250) AARH) Fo	rged	5192	0,80		
324	1	0	In	3,38	mm	,00	1,00	NR	203	90° Elbow Long Radius ASME B16.9 I GR. WPB	BE Wrough	t S ASTM A	234		0,14		
5192	1/2	0	In		mm	70,00	4,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2 TA	В. 9		0,44		
661	1	0	In		mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_B5C					
					1	, <u>L</u>			.]	M Erection				Total Kg:	4,48		
SX1	SULPHUREX GH/F 33118 - (- 0			SX1	SX1 1.	/ 1		,	TOTAL Kg:	4,48		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 33118 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		I	Ballesti	a						SKETC	HES MATERIAL LIST		PROJ	1E35	5	REV: 0	13/	/04/2010
	PUMA	15		13/04/20	010 11.4	7.56							DOC:	1E35	5-65-029			
			Bal	lestra						SI	ULPHUREX GH/F	Size: In	Thk: mm	Temp); °C	Pres: BAR	С	corr: mm
Mark	S1	S2		T1	T2		Len mn	n Qty	Un	n Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1435	1	0	In	3,38		mm	,00	1,50	m	203	Pipe ASME B36.10 PL Seamless API 5	SL GR. B				3,75		
3118	1	0	In			mm	,00	1,00	NF	R 203	Valve Globe ST.46004/3 THRD-F NPT	T 200 LB F	orged BRO	NZE D		1,70		
		· ·			'						51							
467	1	0	In			mm	,00	1,00	NF	203	Flange Slip-On ASME B16.5 150 LB R	RF (125÷25	0 AARH) Fo	orged	5192	0,80		
											ASTM A 105							
324	1	0	In	3,38		mm	,00	2,00	NF	203	90° Elbow Long Radius ASME B16.9 l	BE Wrough	t S ASTM A	A 234		0,27		
								_			GR. WPB							
5192	1/2	0	In			mm	70,00	4,00	NF	R 203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	ME B18.2.1	UNC/2.2 TA	AB. 9		0,44		
					'				_		ASTM A 193 B7/ASTM A 194 GR.2H	[
661	1	0	In			mm	,00	1,00	NF	R 203	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH)	_B5C					
	,	'					•			•	M Erection				Total Kg:	6,96		
SX1	SULPHUREX GH/F 33119 -					- 0			SX1	SX1 1	/ 1			TOTAL Kg:	6,96			

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 33119 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allesti	ra					S	KETC	HES MATERIAL LIST		PROJ	1E35		REV: 0	13	3/04/2010
	PUMA	15		13/04/20	010 11.4	7.56							DOC	1E35	-65-029			
			Bal	lestra						SI	ULPHUREX GH/F	Size: In	Γhk: mm	Temp:	: °C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	Т2		Len mn	n Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	8,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				10,13		
2828	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 200	LB Forge	d		0,30		
1289	1/2	0	In			mm	,00	1,00	NR	203	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 105	i			0,38		
							'				M Erection				Total Kg:	10,81		
SX1	SULPHUREX GH/F 33120 - 0					- 0			SX1	SX1 1.	/ 1		7	TOTAL Kg:	10,81			

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 33120 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В									HES MATERIAL LIST		PRO	I: 1E35		REV: 0	13	3/04/2010
	PUMA	15		13/04/20	010 11.4	7.56							DOC	: 1E35-	-65-029			
			Bal	lestra						SI	ULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	Т2		Len mm	ı Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	8,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				10,13		
3116	1/2	0	In			mm	,00	1,00	NR	203	Valve Globe ST.46004/3 THRD-F NPT	Γ 200 LB Fo	orged BRO	NZE D		0,70		
1289	1/2	0	In			mm	,00	1,00	NR	203	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 10:	5			0,38		
	,	'					,	•		•	M Erection				Total Kg:	11,21		
SX1	SULPH	SULPHUREX GH/F 33121 - 0								SX1	SX1 1	/ 1		7	TOTAL Kg:	11,21		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	SP.1406/2-SP.1407/3
Line 33121 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allesti	ra				SKETCHES MATERIAL LIST PROJ:					J: 1E35	5	REV: 0	13/	/04/2010	
	PUMA	15		13/04/20	010 11.47	7.56							DOC	: 1E35	5-65-029	•		
			Bal	lestra						SU	JLPHUREX GH/F	Size: In	Thk: mm	Temp): ℃	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	Т2		Len mn	n Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) A	s.bly	Branch
1433	1/2	0	In	2,77		mm	,00	9,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				11,39	<u> </u>	
2828	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 20	0 LB Forg	ed		0,30		
1289	1/2	0	In			mm	,00	1,00	NR	203	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 10	5			0,38		
	,	"			'			•		1	M Erection				Total Kg:	12,07		
SX1	X1 SULPHUREX GH/F 33122 - 0					- 0			SX1	SX1 1	/ 1			TOTAL Kg:	12.07			

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 33122 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allest	ra			SKETCHES MATERIAL LIST PROJ: 1E3					1E35		REV: 0	13	/04/2010			
	PUMA	.5		13/04/2	010 11.4	7.56							I	OC:	1E35-	65-029		•	
			Bal	llestra						S	ULPHUREX GH/F	Size: In	Thk:	nm	Temp:	°C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. clas	s Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	16,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B					20,25	<u> </u>	
3116	1/2	0	In			mm	,00	1,00	NR	203	Valve Globe ST.46004/3 THRD-F NP 51	T 200 LB F	Forged	BRON	IZE D		0,70		
1289	1/2	0	In			mm	,00	1,00	NR	203	Union TA 50.6/1 SW-F 3000# Forged	ASTM A 10	05				0,38		
		,				"					M Erection				•	Total Kg:	21,33		
SX1	SULPHI	JREX G	H/F	33123 - 0			33123 - 0 SX1 SX1 1/1						T	OTAL Kg:	21,33				

Plant SX1 SULPHUREX GH/F Piping Class 203 Welding specification SP.1406/2-SP.1407/3

Line 33123 - 0 Fluid System

Dang. fluid type Coating De pres Op tem

Area SX1 Sketch Sht 1/1 Isometric code Page 1

Zones

		В	Ballesti	a					S	KETC	HES MATERIAL LIST		PROJ:	1E35	REV: 0	13/	/04/2010
	PUMA	.5		13/04/2	010 11.47	7.56	1						DOC:	1E35-65-029	•	•	
			Bal	lestra						SI	ULPHUREX GH/F	Size: In	Γhk: mm	Temp: °C	Pres: BAR	Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	s Component			Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	8,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B			10,13		
2828	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 200	LB Forged		0,30		
3174	1/2	0	In			mm	,00	1,00	NR	203	Strainer Y-Type ST.46326/4 THRD-F	NPT 200 LB	Forged BRO	ONZE	0,50		
1254	1/2	0	In			mm	,00	1,00	NR	203	Union TA 50.7/2 THRD-F NPT 3000#	Forged AST	M A 105		0,30		
			'		,						M Erection			Total Kg:	11,23		
SX1	SULPH	UREX G	iH/F			33124	- 0			SX1	SX1 1	/ 1		TOTAL Kg:	11,23		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 33124 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

Balle	estra	SKETCHES MATERIAL LIST	PR	OJ: 1E35	REV:	0 13/04/2010
PUMA5	13/04/2010 11.47.56		DC	OC: 1E35-65-02	29	
	Ballestra	SULPHUREX GH/F	Size: In Thk: mn	Temp: °C	Pres: BAR	Corr: mm

Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	s Component	0	Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	2,50	m	203	Pipe ASME B36.10 PL Seamless API 5L GR. B			3,16		
				,							M Erection		Total Kg:	3,16		
SX1	SULPHU	JREX GE	I/F			33125 -	- 0			SX1	SX1 1 / 1	TC	OTAL Kg:	3,16		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 33125 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETC	CHES MATERIAL LIST		PROJ	: 1E35		REV: 0	13	/04/2010
	PUMA	15		13/04/20	010 11.47	7.57							DOC:	1E35-	65-029			
			Ball	lestra						S	SULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	ss Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	2,50	m	203	Pipe ASME B36.10 PL Seamless API 5	SL GR. B				3,16		
2828	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRE BRASS NICKEL PLATED S 87	O-F NPT 20	00 LB Forged	i		0,30		
3174	1/2	0	In			mm	,00	1,00	NR	203	Strainer Y-Type ST.46326/4 THRD-F F 70	NPT 200 L	B Forged BR	RONZE		0,50		
1254	1/2	0	In			mm	,00	1,00	NR	203	Union TA 50.7/2 THRD-F NPT 3000#	Forged AS	TM A 105			0,30		
						<u></u>				M Erection				Total Kg:	4,26			
SX1	SX1 SULPHUREX GH/F 33126 - 0					- 0			SX1	SX1 1	/ 1		Т	OTAL Kg:	4.26			

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 33126 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

Ballestra	SKETCHES MATERIAL LIST	PROJ	: 1E35	REV: 0	13/04/2010
PUMA5 13/04/2010 11.47.57		DOC:	1E35-65-029		
Ballestra	SULPHUREX GH/F	Size: In Thk: mm	Temp: °C	Pres: BAR	Corr: mm

Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	Component	Gen. Bol	t Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	8,00	m	203	Pipe ASME B36.10 PL Seamless API 5L GR. B		10,13		
	·			·							M Erection	Total K	g: 10,13		
SX1	SULPHU	JREX GF	I/F			33127 -	0			SX1	SX1 1 / 1	TOTAL K	g: 10,13		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 33127 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	Ballestr	a				SKETCHES MATERIAL LIST PROJ. 1E							1E35		REV: 0	13	3/04/2010
	PUMA	15		13/04/20	010 11.4	7.57							D	OC:	1E35	-65-029			
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk: n	m	Temp	:°C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	n Pip. class	Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,50	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B					0,63		
1438	2	0	In	3,91		mm	,00	13,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B					70,68		
2828	1/2 0 In mm					,00	1,00	NF	203	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87			0,30						
2833	2	0	In			mm	,00	1,00	NF	203	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87)-F NPT 20	00 LB F	orged			2,20		
3179	2	0	In			mm	,00	1,00	NF	203	Strainer Y-Type ST.46326/4 THRD-F	NPT 200 I	LB Forg	d BR	ONZE		5,00		
470	2	0	In			mm	,00	1,00	NF	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	RF (125÷25	50 AAR	H) For	ged	5199	2,20		
327	2	0	In	3,91		mm	,00	6,00	NF	203	90° Elbow Long Radius ASME B16.9 I GR. WPB	BE Wrough	ht S AS	ГМ А	234		3,99		
5199	5/8	0	In			mm	85,00	4,00	NF	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2	.2 TA	B. 9		0,84		
664	2	0	In			mm	,00	1,00	NF	R 203	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5C						
	-		-							I	M Erection					Total Kg:	85,84		

1 / 1

SX1 SX1

SX1

SULPHUREX GH/F

33128 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	on SP.1406/2-SP.1407/3
Line 33128 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

85,84

TOTAL Kg:

		В	allestra	ì					S	KETC	CHES MATERIAL LIST		PROJ:	1E35		REV: 0	13/04/2010
	PUMA	\ 5		13/04/20	010 11.47	7.57							DOC:	1E35-	-65-029	•	•
			Balle	stra						5	SULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	iss Component				Gen. Bolt	Weight (Kg) As	s.bly Branch
1438	2	0	In	3,91		mm	,00	13,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				70,68	
2833	2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 20	00 LB Forged	l		2,20	
470	2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	AF (125÷25	0 AARH) For	rged	5199	2,20	
159	2	0	In	3,91		mm	,00	2,00	NR	203	45° Elbow Long Radius ASME B16.9 F GR. WPB	BE Wrough	t S ASTM A	234		0,63	
327	2	0	In	3,91		mm	,00	7,00	NR	203	90° Elbow Long Radius ASME B16.9 F GR. WPB	BE Wrough	t S ASTM A	234		4,65	
5199	5/8	0	In			mm	85,00	4,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	В. 9		0,84	
664	2	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	O AARH)	_B5C				
							M Erection								81,2	<u> </u>	
SX1	11 SULPHUREX GH/F 33129 - 0					9 - 0 SX1 SX1 1 / 1							1	TOTAL Kg:	81,2		

PSV_33.9	Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification SP.1-	406/2-SP.1407/3
	Line 33129 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

	Ballestra							SKETCHES MATERIAL LIST PROJ: 11							;	REV: 0	13	/04/2010
	PUMA	\ 5		13/04/2	010 11.4	7.57							DOC:	1E35	5-65-029		•	
			Bal	lestra						S	SULPHUREX GH/F	Size: In	Thk: mm	Temp	: ℃	Pres: BAR	C	Corr: mm
Mark							Len mm	Qty	Um	Pip. clas	ss Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1438	2	0	In	3,91		mm	,00									21,75		
2833	2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRD- BRASS NICKEL PLATED S 87	-F NPT 200) LB Forge	i		2,20		
327	2	2 0 In 3,91 mm				,00	3,00	NR	203	90° Elbow Long Radius ASME B16.9 E GR. WPB	BE Wrought	S ASTM A	234		1,99			
											M Erection				Total Kg:	25,94		
SX1	X1 SULPHUREX GH/F 33130						- 0 SX1 SX1 1/1							TOTAL Kg:	25,94			

	Ballestra							SKETCHES MATERIAL LIST PROJ:								REV: 0	13	3/04/2010	
	PUMA	A 5		13/04/20	010 11.47	7.57							DOC:	1E35-	-65-029		-	,	
			Bal	lestra						S	GULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	C	Corr: mm	
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. clas	ss Component				Gen. Bolt	Weight (Kg)	As.bly	Branch	
1438	2	0	In	3,91		mm	,00	4,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				21,75			
2833	2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	o-F NPT 20	0 LB Forged			2,20			
327	2	0	In	3,91		mm	,00	2,00	NR	203	90° Elbow Long Radius ASME B16.9 I GR. WPB	BE Wrought	t S ASTM A	234		1,33			
										M Erection				Total Kg:	25,28				
SX1	X1 SULPHUREX GH/F 33131 - 0				- 0			SX1	SX1 1	/ 1		Т	OTAL Kg:	25,28					

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 33131 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

]	Ballesti	a					SKETC	HES MATERIAL LIST		PROJ:	1E35	;	REV: 0	13/04/2010
	PUMA	.5		13/04/2	010 11.4	7.57	<u> </u>					DOC:	1E35	5-65-029		
			Bal	lestra					SU	JLPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Otv	Um Pip. class	Component				Gen. Bolt	Weight (Kg) As.bl	y Branch
1433	1/2	0	In	2,77		mm	,00		m 203	Pipe ASME B36.10 PL Seamless AP	PI 5L GR. B				0,63	
1504	1/2	0	In	2,77		mm	,00	14,00	m 215	Pipe ASME B36.19 PL Seamless AS	TM A 312 TF	304			18,08	
2853	1/2	0	In			mm	,00	1,00	NR 215	Valve Ball Full Port ST.46586/3 LUC Cast ASTM A 351 CF8 S 123	G 150 LB RF	(125÷250 AA	RH)	5381	1,63	
3191	1/2	0	In			mm	,00	1,00	NR 215	Strainer Y-Type ST.46350/5 FLG 15 ASTM A 351 GR. CF8M F 72	60 LB RF (125	÷250 AARH)	Cast	5125	1,53	
446	1/2	0	In			mm	,00	7,00	NR 215	Flange Lap-Joint ASME B16.5 150 I ASTM A 105 Galvanized	LB Flat Face S	Smooth Forged	i	5127	2,80	
465	1/2	0	In			mm	,00	1,00	NR 203	Flange Slip-On ASME B16.5 150 LF ASTM A 105	B RF (125÷25	0 AARH) For	ged	5191	0,40	
1207	1/2	0	In	2,77		mm	,00	7,00	NR 215	Stub-End MSS SP-43 FLG x BE Wro WP304 Type A	ought S ASTN	1 A 403 GR.			0,59	
1247	1/2	0	In			mm	,00	1,00	NR 215	Union TA 50.7/2 THRD-F NPT 300 F304	00# Forged AS	TM A 182 GI	₹.		0,31	
5191	1/2	0	In			mm	65,00	4,00	NR 203	Stud Bolt + 2 Nuts TA 50.48B/28 AS ASTM A 193 B7/ASTM A 194 GR.2		UNC/2.2 TAI	3. 9		0,44	
5125	1/2	0	In			mm	65,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 AS ASTM A 193 B7/A194 2H Galvaniz		UNC/2.2 TAI	3. 9		0,44	
5127	1/2	0	In			mm	75,00	20,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 AS ASTM A 193 B7/A194 2H Galvaniz		UNC/2.2 TAI	3. 9		2,40	
5130	1/2	0	In			mm	105,00	4,00	NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 AS ASTM A 193 B7/A194 2H Galvaniz		UNC/2.2 TAI	3. 9		0,56	
659	1/2	0	In			mm	,00	1,00	NR 203	Gasket TA 50.5/31 150 LB RF (125-	÷250 AARH)	_ B5C				
710	1/2	0	In			mm	,00	9,00	NR 215	Gasket TA 50.5/31 150 LB RF (125-	÷250 AARH)	_ B5F				
5381	1/2	0	In			mm	30,00	16,00	NR 215	Screws for valves ASME B 18.2.1 /L	JNC ASTM A	193 B7 Galva	anized		1,28	
	1			1	1					M Erection				Total Kg:	31,1	
SX1	SULPH	UREX (GH/F			33132	- 0		SX1	SX1	1/1		ı	TOTAL Kg:	31,1	
KV_33.	.1						Plant SX1 Line 33132		REX GH/F	Piping Class 215 Fluid				elding specificat	tion SP.1406/2-SP.1408	/3
							Dang. fluid			r nud Coating				ores	Op tem	
							Area SX1 Zones	·, pc		Sketch Sht 1/1		Ison	netric (Ор ил	Page 1

		В	allestr	a				Sl	KETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0	13/0	4/2010
	PUMA	15		13/04/2	010 11.47.57							DOC:	1E35-65-0	29			
			Ball	estra					SU	LPHUREX GH/F	Size: In T	hk: mm	Temp: °C		Pres: BAR	Cor	r: mm
Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component			Gen.	Bolt	Weight (Kg) A	s.bly	Branch
1504	1/2	0	In	2,77	mm	,00	8,00	m	215	Pipe ASME B36.19 PL Seamless ASTM	I A 312 TP 3	04			10,33		
1247	1/2	0	In		mm	,00	1,00	NR	215	Union TA 50.7/2 THRD-F NPT 3000# F304	Forged ASTI	И А 182 GI	₹.		0,31		
4390	1/2	1/4	In		mm	,00	1,00	NR	215	Coupling Reducing TA 50.7/2 THRD-F 182 GR. F304	NPT 3000#	Forged AS	ТМ А		0,03		
									N	M Erection			Tot	al Kg:	10,67		
SX1	SULPH	UREX G	H/F		33133	- 0			SX1 S	SX1 1 /	1		ТОТА	L Kg:	10,67		

Plant SX1 SULPHUREX GH/F Piping Class 215 Welding specification SP.1406/2-SP.1408/3

Line 33133 - 0 Fluid System

Dang. fluid type Coating De pres Op tem

Area SX1 SULPHUREX GH/F Piping Class 215 Welding specification SP.1406/2-SP.1408/3

System

Dang. fluid type Sketch Sht 1/1 Isometric code Page 1

Zones

		В	allestr	ra					S	KETCH	IES MATERIAL LIST		PROJ	: 1E35		REV: 0	13	3/04/2010
	PUMA	15		13/04/2	010 11.4	47.58							DOC:	1E35	5-65-029		•	
			Ball	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp	:℃	Pres: BAR	(Corr: mm
Mark	S1	S2		Т1	Т2		Len mm	Otv	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	Ac bly	Branch
1504	1/2	0	In	2,77	12	mm	,00		+	215	Pipe ASME B36.19 PL Seamless ASTM	I A 312 TI	P 304		Gen. Bon	20,66	As.DIY	Diancii
6020	1/2	0	In			mm	,00	1,00	NR	216	"Y" Valve Globe ST.46347/2 FLG 150 LB RF (125÷250 AARF				5125	3,27		
											Forged ASTM A 182 GR. F304 D 75							
446	1/2	0	In			mm	,00	2,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth Forg	ed	5127	0,80		
1 < 1 =	1 /0	0	τ				0.0	1.00) ID	215	E G 11 E 50 E 0 E NDE 6	1000 // E	1 4 0773 4 4	100		0.00		Т

SX1	SULPHI	UREX (GH/F	33134 -	0	SX1	SX1 1 / 1	TOTAL Kg:	26,53	
							M Erection	Total Kg:	26,53	
710	1/2	0	In	mm	,00	1,00 NR 215	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F			
710	1/2	0	In	mm	,00	1,00 NR 216	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F			
				1 1			ASTM A 193 B7/A194 2H Galvanized			
5127	1/2	0	In	mm	75,00	4,00 NR 215	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB.	9	0,48	
J14J	1/2	U		111111	03,00	7,00 NK 210	ASTM A 193 B7/A194 2H Galvanized	´	0,44	
5125	1/2	0	In	mm	65,00	4,00 NR 216	Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB.	0	0,44	
1247	1/2	0	In	mm	,00	1,00 NR 215	Union TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 182 GR. F304		0,31	
	1	1.					WP304 Type A			
1207	1/2	0	In 2,77	mm	,00	2,00 NR 215	Stub-End MSS SP-43 FLG x BE Wrought S ASTM A 403 GR.		0,17	
							F304		- 1	
1049	1/2	0	In	mm	,00,	1,00 NR 215	Coupling TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 182 C	GR.	0,12	
+043	1/2	U	111	ıııııı	,00	1,00 NK 213	GR. F304		0,29	
4645	1/2	0	In	mm	,00	1,00 NR 215	ASTM A 105 Galvanized Tee Straight TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 18	2	0,29	
146	1/2	0	In	mm	,00	2,00 NR 215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged	5127	0,80	

PI_33.12	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
	Line 33134 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	a					SKETO	HES MATERIAL LIST		PROJ:	1E35	5	REV: 0 1	3/04/2010
	PUMA	.5		13/04/20	010 11.47	7.58						DOC:	1E35	5-65-029		
			Ball	lestra		-			5	ULPHUREX GH/F	Size: In	Thk: mm	Temp	o: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um Pip. clas	s Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	0,50	m 203	Pipe ASME B36.10 PL Seamless API 5	5L GR. B				0,63	
1457	6	0	In	3,96		mm	,00	8,50	m 203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				136,41	
2828	1/2	0	In			mm	,00	1,00	NR 203	Valve Ball Full Port ST.46330/3 THRE BRASS NICKEL PLATED S 87	O-F NPT 200) LB Forged			0,30	
5026	6	0	In			mm	,00	1,00	NR 203	Valve Butterfly With Gasket ST.46373 (125÷250 AARH) Cast DUCTILE IRO		50 LB RF		5223	7,00	
475	6	0	In			mm	,00	3,00	NR 203	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷250	AARH) For	ged	5214	22,50	
133	6	0	In	3,96		mm	,00	1,00	NR 203	45° Elbow Long Radius ASME B16.9	BE E.R.W. A	ASTM A 234	GR.		2,85	
301	6	0	In	3,96		mm	,00	5,00	NR 203	90° Elbow Long Radius ASME B16.9	BE E.R.W. A	ASTM A 234	GR.		28,31	
5214	3/4	0	In			mm	100,00	8,00	NR 203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		JNC/2.2 TA	B. 9		6,72	
5223	3/4	0	In			mm	155,00	8,00	NR 203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		JNC/2.2 TA	B. 9		8,48	
669	6	0	In			mm	,00	1,00	NR 203	Gasket TA 50.5/31 150 LB RF (125÷2:	50 AARH) _	B5C				
	'								'	M Erection				Total Kg:	213,21	

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	on SP.1406/2-SP.1407/3
Line 33135 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

SX1 SX1

1 / 1

TOTAL Kg:

213,21

SULPHUREX GH/F

SX1

33135 - 0

		В	allestr	a					S	KETC	HES MATERIAL LIST		PROJ:	1E35	REV: 0	13/	/04/2010
	PUMA	15		13/04/20	010 11.47	7.58							DOC:	1E35-65-029			
			Ball	lestra						S	ULPHUREX GH/F	Size: In Thl	k: mm	Temp: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	s Component			Gen. Bo	olt Weight (Kg)	As.bly	Branch
1457	6	0	In	3,96		mm	,00	6,50	m	203	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B			104,31		
5026	6	0	In			mm	,00	1,00	NR	203	Valve Butterfly With Gasket ST.46373 (125÷250 AARH) Cast DUCTILE IRO		LB RF	5223	7,00		
475	6	0	In			mm	,00	3,00	NR	203	Flange Slip-On ASME B16.5 150 LB I ASTM A 105	RF (125÷250 A	ARH) Forg	ged 5214	22,50		
133	6	0	In	3,96		mm	,00	1,00	NR	203	45° Elbow Long Radius ASME B16.9 WPB	BE E.R.W. AST	ГМ А 234	GR.	2,85		
301	6	0	In	3,96		mm	,00	4,00	NR	203	90° Elbow Long Radius ASME B16.9 WPB	BE E.R.W. AST	ГМ А 234	GR.	22,65		
5214	3/4	0	In			mm	100,00	8,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		C/2.2 TAB	. 9	6,72		
5223	3/4	0	In			mm	155,00	8,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		C/2.2 TAB	. 9	8,48		
669	6	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷2.	50 AARH) _ B5	5C				
								•			M Erection			Total 1	Kg: 174,52		
SX1	SULPH	UREX G	H/F			33136	- 0			SX1	SX1 1	. / 1		TOTAL	Kg: 174,52		

PSV_33.10	Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	SP.1406/2-SP.1407/3
	Line 33136 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allest	ra					,	SKET	CHE	ES MATERIAL LIST		PROJ	: 1E3	5	REV: 0	13/04/2010
	PUMA	\ 5		13/04/20	010 11.4	7.58								DOC:	1E3	5-65-029		
			Ba	llestra							SULP	PHUREX GH/F	Size: In	Thk: mm	Tem	p: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	n Pip. cla	lass (Component				Gen. Bolt	Weight (Kg) As.b	ly Branch
1457	6	0	In	3,96		mm	,00	3,50) m	203	I	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				56,17	
5026	6	0	In			mm	,00	,00 1,00 NR 203 Valve Butterfly With Gasket ST.46373/5 WAFER 150 LB RF (125÷250 AARH) Cast DUCTILE IRON B 74								5223	7,00	
475	6	0	In			mm	,00,	2,00) NI	R 203		Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250) AARH) Fo	orged	5214	15,00	
301	6	0	In	3,96		mm	,00	2,00) NI	R 203		90° Elbow Long Radius ASME B16.9 B WPB	BE E.R.W.	ASTM A 23	4 GR.		11,33	
5223	3/4	0	In			mm	155,00	8,00) NI	R 203		Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2 TA	AB. 9		8,48	
											ΜI	Erection				Total Kg:	97,97	
SX1	SULPH	UREX G	H/F			33137	- 0			SX1	SX	ζ1 1 /	1			TOTAL Kg:	97,97	

		В	Ballestr	a					SKETO	CHES MATERIAL LIST		PROJ:	1E35	REV: 0	13/04/2010
	PUMA	A 5		13/04/20	010 11.47	7.58						DOC:	1E35-65-029		
			Ball	estra					,	SULPHUREX GH/F	Size: In Thk	: mm	Temp: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um Pip. cla	ss Component			Gen. Bolt	Weight (Kg) As.bly	y Branch
1457	6	0	In	3,96		mm	,00	5,50	m 203	Pipe ASME B36.10 PL E.R.W. API 51	L GR. B			88,27	
5026	6	0	In			mm	,00	1,00	NR 203	Valve Butterfly With Gasket ST.46373 (125÷250 AARH) Cast DUCTILE IRO	5223	7,00			
475	6	0	In			mm	,00	2,00	NR 203	Flange Slip-On ASME B16.5 150 LB ASTM A 105	RF (125÷250 AA	ARH) Forgo	ed 5214	15,00	
133	6	0	In	3,96		mm	,00	1,00	NR 203	45° Elbow Long Radius ASME B16.9 WPB	BE E.R.W. AST	M A 234 (GR.	2,85	
301	6	0	In	3,96		mm	,00	3,00	NR 203	90° Elbow Long Radius ASME B16.9 WPB	BE E.R.W. AST	M A 234 (GR.	16,99	
5223	3/4	0	In			mm	155,00	8,00	NR 203	Stud Bolt + 2 Nuts TA 50.48B/28 ASI ASTM A 193 B7/ASTM A 194 GR.2I		C/2.2 TAB	. 9	8,48	
										M Erection			Total Kg:	138,59	
SX1	SULPH	UREX G	H/F			33138	- 0		SX1	SX1	1 / 1		TOTAL Kg:	138,59	

	Ballestra												J: 1E35	5	REV: 0	13	/04/2010	
	PUMA	15		13/04/20	010 11.47	7.58							DO	: 1E35	5-65-029			
Ballestra SULI									SU	JLPHUREX GH/F	Size: In	Thk: mm	Temp); °C	Pres: BAR	C	Corr: mm	
Mark	S1	S2		T1	T2		Len mn	n Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1434	3/4	0	In	2,87		mm	,00	16,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				26,98		
2829	3/4	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 20	0 LB Forg	ed		0,40		
1255	3/4	0	In			mm	,00	1,00	NR	203	Union TA 50.7/2 THRD-F NPT 3000#	Forged AS	TM A 10:			0,43		
	,	"			'	"		•		1	M Erection				Total Kg:	27,81		
SX1	K1 SULPHUREX GH/F 33139 - 0				- 0			SX1	SX1 1.	/ 1			TOTAL Kg:	27.81				

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 33139 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

	Ballestra										PROJ:	1E35		REV: 0	13/	/04/2010		
	PUMA	A5		13/04/20	010 11.4	7.58							DOC:	1E35-65	5-029			
			Ba	allestra						S	ULPHUREX GH/F	Size: In T	hk: mm	Temp: °C		Pres: BAR	С	orr: mm
Mark	S1	S2		Т1	T2		Len mm	Qty	Um	Pip. class	s Component			Ge	en. Bolt	Weight (Kg)	As.bly	Branch
1435	1	0	In	3,38		mm	,00	16,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				40,04		
2830	1	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 200	LB Forged			0,60		
156	1	0	In	3,38		mm	,00	1,00	NR	203	45° Elbow Long Radius ASME B16.9 E GR. WPB	BE Wrought S	S ASTM A	234		0,07		
324	1	0	In	3,38		mm	,00	9,00	NR	203	90° Elbow Long Radius ASME B16.9 E GR. WPB	BE Wrought S	S ASTM A	234		1,22		
1256	1	0	In			mm	,00	1,00	NR	203	Union TA 50.7/2 THRD-F NPT 3000#	Forged AST	M A 105			0,65		
	'	'			'	'	'	•		1	M Erection			1	Total Kg:	42,57		
SX1	SULPH	UREX G	H/F			33140	- 0			SX1	SX1 1,	['] 1		TO	TAL Kg:	42,57		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 33140 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

	Ballestra						SKETCHES MATERIAL LIST PROJ:					1E35	REV: 0	13	3/04/2010			
	PUMA	A 5		13/04/20	010 11.47	.59							D	OC:	1E35-65-029			
			Bal	lestra						S	ULPHUREX GH/F	Size: In	Thk:	nm	Temp: °C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1435	1	0	In	3,38		mm	,00		1	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				37,53		
2830	1	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRE BRASS NICKEL PLATED S 87	D-F NPT 20	00 LB I	Forged		0,60		
324	1	0	In	3,38		mm	,00	9,00	NR	203	90° Elbow Long Radius ASME B16.9 GR. WPB	BE Wrough	nt S AS	TM A	234	1,22		
1256	1	0	In			mm	,00	1,00	NR	203	Union TA 50.7/2 THRD-F NPT 3000#	Forged AS	STM A	105		0,65		
	<u>'</u>	'	'	'	'					1	M Erection				Total Kg	: 40,		
SX1	SULPH	UREX G	H/F			33141	- 0			SX1	SX1 1	/ 1			TOTAL Kg	: 40,		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 33141 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

	Ballestra								SKETO	CHES MATERIAL LIS	Γ	PROJ:	1E35	F	EV: 0	13/0	04/2010
	PUMA	15		13/04/20	10 11.47	.59						DOC:	1E35-65-029)	•		
			Balle	estra						SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres	: BAR	Cor	rr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um Pip. cla	ass Component			Gen. Be	olt Wei	ght (Kg) As	s.bly l	Branch
1435	1	0	In	3,38		mm	,00	14,00	m 203	Pipe ASME B36.10 PL Seam	less API 5L GR. B				35,03		
2830	1 0 In mm				,00	1,00	NR 203	Valve Ball Full Port ST.46330 BRASS NICKEL PLATED S		0 LB Forged			0,60				
156	1	0	In	3,38		mm	,00	1,00	NR 203	45° Elbow Long Radius ASM GR. WPB	E B16.9 BE Wrought	S ASTM A	234		0,07		
324	1	0	In	3,38		mm	,00	8,00	NR 203	90° Elbow Long Radius ASM GR. WPB	E B16.9 BE Wrought	S ASTM A	234		1,08		
										M Erection			Total	Kg:	36,78		
SX1	SULPHUREX GH/F 33142 - 0					33142	- 0		SX1	SX1	1 / 1		TOTAL	Kg:	36,78		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 33142 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

	Ballestra						SKETCHES MATERIAL LIST PROJ:					1E35		REV:) 13	/04/2010		
	PUMA	\ 5		13/04/20	11.47	7.59							DOC:	1E35-	65-029			
			Ba	illestra						S	SULPHUREX GH/F	Size: In	Γhk: mm	Temp:	°C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	SS Component				Gen. Bolt	Weight (Kg	As.bly	Branch
1435	1	0	In	3,38		mm	,00	14,00	m	203	Pipe ASME B36.10 PL Seamless API 5L	GR. B				35,03		
2830	1	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRD- BRASS NICKEL PLATED S 87	F NPT 200	LB Forged	l		0,60		
156	1	0	In	3,38		mm	,00	1,00	NR	203	45° Elbow Long Radius ASME B16.9 B GR. WPB	E Wrought	S ASTM A	234		0,07		
324	1	0	In	3,38		mm	,00	8,00	NR	203	90° Elbow Long Radius ASME B16.9 B GR. WPB	E Wrought	S ASTM A	234		1,08		
											M Erection				Total Kg:	36,78		
SX1	1 SULPHUREX GH/F 33143 - 0				- 0			SX1	SX1 1/	1		T	OTAL Kg:	36,78				

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	SP.1406/2-SP.1407/3
Line 33143 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	ra					S	KETC	HES MATERIAL LIST		PROJ	: 1E35	5	REV: 0	13/04/2010
	PUMA	.5		13/04/20	010 11.4	7.59	1						DOC:	1E35	5-65-029		
			Ball	lestra						SU	ULPHUREX GH/F	Size: In	Thk: mm	Temp): °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg) As.bl	y Branch
1433	1/2	0	In	2,77		mm	,00	8,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				10,13	
2828	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 20	0 LB Forgeo	l		0,30	
465	1/2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250	AARH) Fo	rged	5191	0,40	
5191	1/2	0	In			mm	65,00	4,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	В. 9		0,44	
659	1/2	0	In			mm	,00	1,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)_	B5C				
					'			-		'	M Erection				Total Kg:	11,27	
SX1	SULPH	UREX G	H/F			33144	- 0			SX1	SX1 1,	/ 1		,	TOTAL Kg:	11,27	

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 33144 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a				SKETCHES MATERIAL LIST PROJ: 1E35								REV: 0	13.	/04/2010
	PUMA5 13/04/2010 11.47.59												DOC:	1E35	-65-029			
Ballestra								SULPHUREX GH/F Size: In Thk: mm						m Temp: °C		Pres: BAR		orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	6,00	_	203	Pipe ASME B36.10 PL Seamless API 5I	GR. B				7,59		
3116	1/2	0	In			mm	,00	1,00	NR	203	Valve Globe ST.46004/3 THRD-F NPT 51	200 LB Fe	orged BRON	ZE D		0,70		
4879	1/2	0	In			mm	,00	1,00	NR	203	Sight Glass ST.46352/2 FLG 150 LB RF cast ASTM A 105 or ASTM A 216 WCI		AARH) For	ged or	5191	3,00		
465	1/2	0	In			mm	,00	3,00	NR	203	Flange Slip-On ASME B16.5 150 LB RI ASTM A 105	F (125÷250) AARH) Foi	ged	5191	1,20		
5191	1/2	0	In			mm	65,00	12,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASMI ASTM A 193 B7/ASTM A 194 GR.2H	E B18.2.1	UNC/2.2 TA	B. 9		1,32		
659	1/2	0	In			mm	,00	3,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷250	O AARH)	B5C					
										N	/I Erection				Total Kg:	13,81		

1 / 1

TOTAL Kg:

13,81

SX1 SX1

SX1

SULPHUREX GH/F

33145 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 33145 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

	Ballestra								S	KETC	HES MATERIAL LIST		PR)J: 1E3:	5	REV: 0	13	3/04/2010
	PUMA5 13/04/2010 11.47.59												DO	C: 1E3:	5-65-029			
Ballestra								SULPHUREX GH/F Size: In Thk: mm Ten					Tem	emp: °C Pres: BAR		Corr: mm		
Mark	S1	S2		T1	Т2		Len mn	n Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	6,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				7,59		
2828	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	O-F NPT 200) LB For	ged		0,30		
1289	1/2	0	In			mm	,00	1,00	NR	203	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 10:	5			0,38		
							•				M Erection				Total Kg:	8,27		
SX1 SULPHUREX GH/F 33146 -				- 0	SX1 SX1 1/1						TOTAL Kg:	8,27						

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 33146 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

	Ballestra							SKETCHES MATERIAL LIST PROJ: 1E35							REV: 0	13	/04/2010	
	PUMA5 13/04/2010 11.47.59												DOC:	1E35-6	65-029			
Ballestra								SULPHUREX GH/F Size: In Thk: mm Temp:					Temp: °	°C Pres: BAR		(Corr: mm	
Mark	S1	S2		T1	Т2		Len mm	ı Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	3,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				3,80		
3116	1/2	0	In			mm	,00	1,00	NR	203	Valve Globe ST.46004/3 THRD-F NP.	Γ 200 LB For	ged BRON	IZE D		0,70		
1289	1/2	0	In			mm	,00	1,00	NR	203	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 105				0,38		
	•	•	•	•	•	•				•	M Erection				Total Kg:	4,88		
SX1	SX1 SULPHUREX GH/F 33147 -				- 0	SX1 SX1 1/1 T					OTAL Kg:	4,88						

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 33147 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

	Ballestra							SKETCHES MATERIAL LIST PROJ: 1E35							REV: 0	13	/04/2010	
	PUMA5 13/04/2010 11.47.59												DOC:	1E35-	65-029		•	
Ballestra								SULPHUREX GH/F Size: In Thk: mm Temp:					; °C Pres ; BAR		(Corr: mm		
Mark	S1	S2		T1	Т2		Len mn	ı Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	8,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				10,13		
3116	1/2	0	In			mm	,00	1,00	NR	203	Valve Globe ST.46004/3 THRD-F NP 51	Γ 200 LB For	ged BRON	NZE D		0,70		
1289	1/2	0	In			mm	,00	1,00	NR	203	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 105				0,38		
	*	•	•	•	•	•	•			•	M Erection			•	Total Kg:	11,21	•	
SX1	SULPH	UREX G	H/F			33148	- 0			SX1	SX1 1	/ 1		Т	OTAL Kg:	11,21		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	SP.1406/2-SP.1407/3
Line 33148 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allest	ra					S	KETCI	HES MATERIAL LIST		PROJ	: 1E35		REV: 0	13/0	04/2010
	PUMA	15		13/04/20	010 11.47	7.59							DOC:	1E35-	65-029			
			Bal	llestra						su	JLPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	Cor	rr: mm
Mark	S1	S2		T1	T2		Len mn	n Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As	s.bly	Branch
1433	1/2	0	In	2,77		mm	,00	9,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				11,39		
2828	7					,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 20	0 LB Forge	i		0,30			
1289	1/2	0	In			mm	,00	1,00	NR	203	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 10)5			0,38		
								•	•]	M Erection				Total Kg:	12,07	'	
SX1	SULPHUREX GH/F 33149						- 0			SX1	SX1 1	/ 1		Т	OTAL Kg:	12,07		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line 33149 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allest	ra					SI	KETC	HES MATERIAL LIST		PRO	I: 1E35		REV: 0	13	/04/2010
	PUMA	.5		13/04/20	010 11.4	8.00							DOC	: 1E35	-65-029		-	
			Bal	lestra						SU	ULPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Otv	Um l	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.blv	Branch
1433	1/2	0	In	2,77		mm	,00				Pipe ASME B36.10 PL Seamless API 5	L GR. B				10,13		
3116	1/2	0	In			mm	,00	1,00	NR 2	203	Valve Globe ST.46004/3 THRD-F NP7	Γ 200 LB F	orged BRO	NZE D		0,70		
1289	1/2	0	In			mm	,00	1,00	NR 2	203	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 10)5			0,38		
								,		M Erection				Total Kg:	11,21			
SX1	SULPHUREX GH/F 33150					- 0			SX1	SX1 1.	/ 1			TOTAL Kg:	11,21			

Plant SX1 SULPHUREX GH/F Piping Class 203 Welding specification SP.1406/2-SP.1407/3

Line 33150 - 0 Fluid System

Dang. fluid type Coating De pres Op tem

Area SX1 Sketch Sht 1/1 Isometric code Page 1

Zones

		В	Ballest	ra					S	KETC	HES MATERIAL LIST		PROJ	1E35		REV: 0	13	3/04/2010
	PUMA	15		13/04/20	010 11.48	8.00							DOC:	1E35-	65-029			
			Bal	llestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	Т2		Len mn	n Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	8,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				10,13		
2828	1/2 0 In 2,77 mm 1/2 0 In mm						,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 200	LB Forgeo	l		0,30		
1289	1/2	0	In			mm	,00	1,00	NR	203	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 105				0,38		
								•			M Erection			•	Total Kg:	10,81		
SX1	SULPHUREX GH/F 3					33151	- 0			SX1	SX1 1	/ 1		Т	OTAL Kg:	10,81		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 33151 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allest	ra					\mathbf{S}	KETC	HES MATERIAL LIST		PROJ:	1E35	REV: 0	13	3/04/2010
	PUMA	.5		13/04/20	010 11.4	8.00							DOC:	1E35-65-029			
			Bal	lestra						S	CULPHUREX GH/F	Size: In	hk: mm	Temp: °C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	ss Component			Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	9,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B			11,39		
2828	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 200	LB Forged		0,30		
1289	1/2	0	In			mm	,00	1,00	NR	203	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 105			0,38		
											M Erection			Total Kg	12,07		
SX1	SULPHUREX GH/F 33152					- 0			SX1	SX1 1	/ 1		TOTAL Kg	12,07]		

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	SP.1406/2-SP.1407/3
Line 33152 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETC	HES MATERIAL LIST		PF	ROJ:	1E35	REV:	0 1	3/04/2010
	PUMA	5		13/04/2	010 11.48	3.00							DO	OC:	1E35-65-029	•		
			Ball	estra		_				S	ULPHUREX GH/F	Size: In	Thk: mr	n	Temp: °C	Pres: BAR		Corr: mm
Mark							Len mm	Qty	Um	Pip. clas	s Component				Gen. Bolt	Weight (K	g) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	10,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				12,6	6	
3116	1/2	0	In			mm	,00,	1,00	NR	203	Valve Globe ST.46004/3 THRD-F NPT	Γ 200 LB F	Forged B	RONZ	ZE D	0,7	0	
4687	1/2	0	In			mm	,00	1,00	NR	203	Tee Straight TA 50.6/1 SW-F 3000# Fo	rged ASTN	M A 105			0,2	8	
1289	1/2	0	In			mm	,00	2,00	NR	203	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 10	05			0,7	6	
											M Erection				Total Kg:	14,4		
SX1	SULPHUREX GH/F 33153 -						0			SX1	SX1 1	/ 1			TOTAL Kg:	14,4		

		В	allest	ra					5	SKETC	HES MATERIAL LIST		PROJ	: 1E35		REV: 0	13	/04/2010
	PUMA	15		13/04/20	010 11.4	18.00							DOC:	1E35-	-65-029		•	
			Bal	llestra						S	SULPHUREX GH/F	Size: In	Γhk: mm	Temp:	°C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	ı Pip. clas	ss Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	6,00	m	203	Pipe ASME B36.10 PL Seamless API 5	L GR. B				7,59		
2828	1/2	0	In			mm	,00	1,00	NF	203	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	0-F NPT 200	LB Forged	1		0,30		
465	1/2	0	In			mm	,00	2,00	NF	203	Flange Slip-On ASME B16.5 150 LB F ASTM A 105	RF (125÷250	AARH) Fo	rged	5191	0,80		
1289	1/2	0	In			mm	,00	1,00	NF	203	Union TA 50.6/1 SW-F 3000# Forged A	ASTM A 105				0,38		
5191	1/2	0	In			mm	65,00	4,00	NF	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		NC/2.2 TA	AB. 9		0,44		
659	1/2	0	In			mm	,00	1,00	NF	203	Gasket TA 50.5/31 150 LB RF (125÷25	50 AARH) _	B5C					
	'	'	-	'	'		1			1	M Erection				Total Kg:	9,51		
SX1	SULPHUREX GH/F 33154 -					- 0			SX1	SX1 1	/ 1		T	OTAL Kg:	9,51			

33Y5	Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification SP.140	6/2-SP.1407/3
	Line 33154 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		I	Ballest	ra						S	KETC	CHES MATERIAL LIST		PROJ:	: 1E35		REV: 0	13/04/2010
	PUMA	15		13/04/2	010 11.48	8.00								DOC:	1E35-	65-029		-
			Bal	llestra							S	SULPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mn	1 (Qty	Um	Pip. clas	ss Component				Gen. Bolt	Weight (Kg) As	.bly Branch
1433	1/2	0	In	2,77		mm	,00) 6	,00	m	203	Pipe ASME B36.10 PL Seamless API	5L GR. B				7,59	
3116	1/2	0	In			mm	,00) 1	,00	NR	203	Valve Globe ST.46004/3 THRD-F NI 51	PT 200 LB F	orged BRON	ZE D		0,70	
465	1/2	0	In			mm	,00) 2	2,00	NR	203	Flange Slip-On ASME B16.5 150 LB ASTM A 105	RF (125÷250) AARH) For	rged	5191	0,80	
1289	1/2	0	In			mm	,00) 1	,00	NR	203	Union TA 50.6/1 SW-F 3000# Forged	ASTM A 10)5			0,38	
5191	1/2	0	In			mm	65,00) 4	,00	NR	203	Stud Bolt + 2 Nuts TA 50.48B/28 ASI ASTM A 193 B7/ASTM A 194 GR.21		UNC/2.2 TA	В. 9		0,44	
659	1/2	0	In			mm	,00) 1	,00	NR	203	Gasket TA 50.5/31 150 LB RF (125÷2	250 AARH) _	_B5C				
			-				1	-			I	M Erection	·			Total Kg:	9,91	
SX1	SULPH	UREX C	GH/F			33155	- 0				SX1	SX1	1 / 1		Т	OTAL Kg:	9,91	

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 33155 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETC	HES MATERIAL LIST		PROJ	1E35		REV: 0	13	/04/2010
	PUMA	.5		13/04/20	10 11.48	3.00							DOC:	1E35	-65-029			
			Ball	lestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp:	:°C	Pres: BAR	C	Corr: mm
Mark	S1	S2		Т1	Т2		Len mm	Otv	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As blv	Branch
1493	1/2	0	In	2,77		mm	,00		-	202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized			12,66	110001			
2828	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 20	0 LB Forged			0,30		
252	1/2 0 In mm							5,00	NR	202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	000# Forged	ASTM A 1	05		2,00		
											M Erection				Total Kg:	14,96		
SX1	SULPHI	UREX GI	H/F			33156	- 0			SX1	SX1 1,	/ 1		7	ΓΟΤΑL Kg:	14,96		

33Y3	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification		
	Line 33156 - 0	Fluid	System		
	Dang. fluid type	Coating	De pres	Op tem	
	Area SX1	Sketch Sht 1/1	Isometric code		Page 1
	Zones				

		В	allestra	a				SKETO	CHES MATERIAL LIST		PROJ:	1E35	REV: 0	13/04/2010
	PUMA	.5		13/04/20	010 11.48.01						DOC:	1E35-65-029		•
			Balle	estra					SULPHUREX GH/F	Size: In	Γ hk: mm	Temp: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2	Len mm	Qty	Um Pip. cla	iss Component			Gen. Bolt	Weight (Kg)	As.bly Branch
1493	1/2	0	In	2,77	mm	,00	12,00	m 202	Pipe ASME B36.10 THRD-M NPT Sea Galvanized	amless API 5	L GR. B		15,19	
2828	1/2	0	In		mm	,00	1,00	NR 202	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 200	LB Forged		0,30	
252	1/2 0 In mm						4,00	NR 202	90° Elbow TA 50.7/2 THRD-F NPT 30 Galvanized	00# Forged	ASTM A 10)5	1,60	
									M Erection			Total Kg:	17,09	
SX1	SULPH	UREX G	H/F		33157	- 0		SX1	SX1 1,	/ 1		TOTAL Kg:	17,09	

33Y4	Plant SX1 SULPHUREX GH/F	Piping Class 202	Welding specification	
	Line 33157 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestra	ì					S	KETCH	ES MATERIAL LIST		PROJ	: 1E35		REV: 0	13	/04/2010
	PUMA	.5		13/04/20	010 11.48	8.01							DOC:	1E35	-65-029			
			Balle	stra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR	C	orr: mm
																	I	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	12,00	m	203	Pipe ASME B36.10 PL Seamless API 5	GR. B				15,19		
2828	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRD	F NPT 20	00 LB Forgeo	Į.		0,30		
			'								BRASS NICKEL PLATED S 87							
										N	1 Erection				Total Kg:	15,49		

SX1 SX1

SX1

SULPHUREX GH/F

33158 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	n SP.1406/2-SP.1407/3
Line 33158 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

TOTAL Kg:

15,49

		В	allestra	a					S	KETCH	ES MATERIAL LIST		PROJ	1E35		REV: 0	13/	04/2010
	PUMA	5		13/04/2	010 11.4	8.01							DOC:	1E35	-65-029			
			Balle	estra						SUI	PHUREX GH/F	Size: In	Thk: mm	Temp:	: °C	Pres: BAR	С	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	14,00	m	203	Pipe ASME B36.10 PL Seamless API 5I	GR. B				17,72		
2828	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port ST.46330/3 THRD-	F NPT 20	00 LB Forged			0,30		
											BRASS NICKEL PLATED S 87							
	M Erection													Total Kg:	18,02			

TOTAL Kg:

18,02

SX1

SX1

SX1

SULPHUREX GH/F

33159 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	on SP.1406/2-SP.1407/3
Line 33159 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

Balle	estra	SKETCHES MATERIAL LIST	PROJ:	1E35	REV: 0	13/04/2010
PUMA5	13/04/2010 11.48.01		DOC:	1E35-65-029		
	Ballestra	SULPHUREX GH/F	Size: In Thk: mm	Temp: °C	Pres: BAR	Corr: mm

Mark	S1	S2		T1	T2		Len mm	Qty	Um Pip. class	Component	Gen. Bolt	Weight (Kg) As.bly	Branch
1433	1/2	0	In	2,77		mm	,00	12,00	m 205	Pipe ASME B36.10 PL Seamless API 5L GR. B		15,19	
1434	3/4	0	In	2,87		mm	,00	20,00	m 205	Pipe ASME B36.10 PL Seamless API 5L GR. B		33,73	
3107	1/2	0	In			mm	,00	7,00	NR 205	Valve Gate ST.46270/3 SW-F 800# Forged ASTM A 105 G 61		11,90	
3108	3/4	0	In			mm	,00	2,00	NR 205	Valve Gate ST.46270/3 SW-F 800# Forged ASTM A 105 G 61		4,20	
4942	1/2	0	In			mm	,00	2,00	NR 205	Steam Trap ST.46212/3 SW-F 300 LB Forged ASTM A 105 T 66		1,60	
231	1/2	0	In			mm	,00	4,00	NR 205	90° Elbow TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 105		1,60	
232	3/4	0	In			mm	,00	8,00	NR 205	90° Elbow TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 105		5,04	
324	1	0	In	3,38		mm	,00	4,00	NR 205	90° Elbow Long Radius ASME B16.9 BE Wrought S ASTM A 234 GR. WPB		0,54	
2797	3/4	1/2	In			mm	,00	4,00	NR 205	Tee Reducing TA 50.6/1 SW-F 3000# Forged ASTM A 105		1,48	
4687	1/2	0	In			mm	,00	1,00	NR 205	Tee Straight TA 50.6/1 SW-F 3000# Forged ASTM A 105		0,28	
4546	1/2	0	In			mm	,00	1,00	NR 205	Cap TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 105		0,12	
4547	3/4	0	In			mm	,00	2,00	NR 205	Cap TA 50.7/2 THRD-F NPT 3000# Forged ASTM A 105		0,38	
					1		I			M Erection	Total Kg:	76,06	
SX1	SULPHU	UREX GI	H/F			TRAC	VB - 0		SX1	SX1 1/1	TOTAL Kg:	76,06	

TUBO IN RAME DIA.E. 12mm Thk 1 mt=15 RACCORDI SERTO SO 1221-12-1/2" Nr= 6 RACCORDI SERTO SO 1021-120 Nr= 5 Plant SX1 SULPHUREX GH/F Line TRAC VB - 0 Dang. fluid type Area SX1 Zones Piping Class 205
Fluid
Coating
Sketch Sht 1/1

Welding specification SP.1406/2-SP.1407/2 System De pres Op tem

Isometric code

Op tem Page 1

		В	allestr	a				:	SKET	CH	ES MATERIAL LIST		PRO	J: 11	E35	REV: 0	13	3/04/2010
	PUMA	15		13/04/2	010 11.48.01								DOC	: 1I	E35-65-029	•	•	
			Ball	lestra						SUL	PHUREX GH/F	Size: In	Thk: mm	To	emp: °C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2	Len mm	Qty	Un	n Pip. cl	ass	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1433	1/2	0	In	2,77	mm	,00	130,00) m	203		Pipe ASME B36.10 PL Seamless API 5	L GR. B				164,55		
1434	3/4	0	In	2,87	mm	,00	10,00) m	203		Pipe ASME B36.10 PL Seamless API 5	L GR. B				16,87		
2828	1/2	0	In		mm	,00	13,00) NI	R 203		Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 20	00 LB Forge	ed		3,90		
2829	3/4	0	In		mm	,00	1,00) NI	R 203		Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 20	00 LB Forge	ed		0,40		
3116	1/2	0	In		mm	,00	13,00) NI	R 203		Valve Globe ST.46004/3 THRD-F NPT	Г 200 LB F	orged BRO	NZE	D	9,10		
3117	3/4	0	In		mm	,00	1,00) NI	R 203		Valve Globe ST.46004/3 THRD-F NPT	Г 200 LB F	orged BRO	NZE	D	0,80		
4687	1/2	0	In		mm	,00	12,00) NI	R 203		Tee Straight TA 50.6/1 SW-F 3000# Fo.	rged ASTN	I A 105			3,36		
4398	1/2	1/4	In		mm	,00	34,00) NI	R 203		Coupling Reducing TA 50.7/2 THRD-F	F NPT 300	0# Forged A	ASTM	П А	1,02		
4449	3/4	1/2	In		mm	,00	6,00) NI	R 205		Coupling Reducing TA 50.6/1 SW-F 30	000# Forge	d ASTM A	105		0,18		$\overline{}$

M Erection

SX1

SX1

TUBO IN RAME DIA.E. 10mm Thk 1 mt=435 TUBO IN RAME DIA.E. 16mm Thk 1 mt=130 RACCORDI INTERM. ERMETO ID10 A Nr= 146 RACCORDI INTERM. ERMETO ID16 A Nr= 44 RACCORDI ERMETO ED10-1/4" A Nr=34 RACCORDI ERMETO EDS/16 A Nr=10

SULPHUREX GH/F

SX1

Plant SX1 SULPHUREX GH/F Line TRAC WH - 0 Dang, fluid type Area SX1 Zones

TRAC WH - 0

Piping Class 203
Fluid
Coating
Sketch Sht 1/1

1 / 1

Welding specification SP.1406/2-SP.1407/3
System
De pres Op tem
Isometric code Page 1

Total Kg:

TOTAL Kg:

200,17

200,17

		В	allest	ra					5	SKETC	CHES MATERIAL LIST		PROJ	1E35	i	REV: 0	13.	/04/2010
	PUMA	15		13/04/20	010 11.48	3.01							DOC:	1E35	5-65-029			
			Bal	llestra							GULPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Un	ı Pip. clas	ss Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
5608	16	0	In	4,78		mm	,00	0,20	_	209	Pipe ASME B36.10 PL E.R.W. API 5L	GR. B				9,47		
594	16	0	In			mm	,00	1,00	NR	209	Flange Slip-On AWWA C207-TAB.1 C AARH) Forged ASTM A 105	CL.B 86 psi	FF (125÷25	50	5211	19,00		
5211	3/4	0	In			mm	85,00	16,00	NR	209	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	AB. 9		12,48		
801	16	0	In			mm	,00	1,00	NR	209	Gasket TA 50.5/31 86 psi FF (125÷250	AARH)_	B15D FLAT					
		'			'						M Erection				Total Kg:	40,95		
SX1	SULPH	UREX G	H/F			VEST.	11V1 - 0			SX1	SX1 1	/ 1		-	TOTAL Kg:	40,95		

Plant SX1 SULPHUREX GH/F	Piping Class 209	Welding specificatio	n SP.1406/2-SP.1407/2
Line VEST.11V1 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	Ballest	ra					S	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	04/2010
	PUMA	A 5		13/04/20	010 11.48	8.01							DOC:	1E35-6	55-029	•		
			Bal	llestra						SI	ULPHUREX GH/F	Size: In	Thk: mm	Temp: °	С	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	s Component			(Gen. Bolt	Weight (Kg)	As.bly	Branch
1435	1	0	In	3,38		mm	,00	0,20	m	206	Pipe ASME B36.10 PL Seamless API 5	L GR. B				0,50	<u> </u>	
2830	1	0	In			mm	,00	1,00	NR	206	Valve Ball Full Port ST.46330/3 THRD BRASS NICKEL PLATED S 87	-F NPT 200	0 LB Forged			0,60		
467	1	0	In			mm	,00	1,00	NR	206	Flange Slip-On ASME B16.5 150 LB R ASTM A 105	F (125÷250	AARH) For	rged 5	5192	0,80		
5192	1/2	0	In			mm	70,00	4,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 TA	B. 9		0,44		
661	1	0	In			mm	,00	1,00	NR	206	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)_	B5C					
							<u>'</u>	•			M Erection				Total Kg:	2,34		
SX1	SULPHUREX GH/F VEST.									SX1	SX1 1,	/ 1		TO	OTAL Kg:	2,34		

Plant SX1 SULPHUREX GH/F	Piping Class 206	Welding specification	on SP.1406/2-SP.1407/3
Line VEST.11V2 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

	Ballestra								S	KETC	CHES MATERIAL LIST		PR	OJ:	1E35	REV: 0	13/	04/2010
	PUMA	.5		13/04/2	010 11.4	8.01							DO	OC:	1E35-65-029			
			Ball	estra						S	SULPHUREX GH/F	Size: In	Thk: mm	1	Temp: °C	Pres: BAR	Co	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. clas	ss Component				Gen. Bolt	Weight (Kg) A	s.bly	Branch
1504	1/2	0	In	2,77		mm	,00	37,00	m	215	Pipe ASME B36.19 PL Seamless ASTM	1 A 312 TI	2 304			47,79		
1505	3/4	0	In	2,87		mm	,00	1,60	m	215	Pipe ASME B36.19 PL Seamless ASTM	1 A 312 TI	2 304			2,75		
3155	1/4	0	In			mm	,00	10,00	NR	215	Valve Plug ST.46019/1 THRD-F NPT GR. F316 M 53	PN 16 Forg	ged ASTN	M A 1	82	2,04		
1762	3/4	1/2	In	2,87	2,77	mm	,00	10,00	NR	215	Reducer Concentric ASME B16.9 BE V WP304	Vrought S	ASTM A	403 (GR.	0,59		
3	1/2	0	In			mm	,00	10,00	NR	215	Cross Straight TA 50.7/2 THRD-F NP GR. F304	Г 3000# Fc	orged AS	ГМ А	182	2,86		
1156	1/2	0	In			mm	,00	10,00	NR	215	Coupling Half TA 50.6/1 SW-F 3000#1	Forged AS'	TM A 18	2 GR.	F304	1,53		
1180	1/2	0	In			mm	,00	10,00	NR	215	Plug Hex. TA 50.7/2 THRD-M NPT 30 F304	000# Forge	d ASTM	A 18	2 GR.	1,33		
4390	1/2	1/4	In			mm	,00	10,00	NR	215	Coupling Reducing TA 50.7/2 THRD-F 182 GR. F304	NPT 300	0# Forge	d AS7	гм А	0,31		
											M Erection				Total Kg:	59,19		
SX1	SULPHUREX GH/F VEST					VEST	.12C1 - 0			SX1	SX1 1	/ 1			TOTAL Kg:	59,19		

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specificatio	n SP.1406/2-SP.1408/3
Line VEST.12C1 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

	Ballestra								S	KETC	HES MATERIAL LIST		PRO	J: 1E35	5	REV: 0	13/	/04/2010
	PUMA	.5		13/04/20	010 11.48	.02							DOC	: 1E35	5-65-029			
			Ball	lestra						S	ULPHUREX GH/F	Size: In	Thk: mm	Temp): °C	Pres: BAR	C	orr: mm
Mark							Len mn	n Qty	Um	Pip. class	s Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
1438	2	0	In	3,91		mm	,00		_	206	Pipe ASME B36.10 PL Seamless API 5	L GR. B				1,09		
3113	2	0	In			mm	,00,	1,00	NR	211	Valve Gate ST.46329/1 THRD-F GAS GUNMETAL	UNI 339 PI	N 10 Cast E	RONZE		3,45		
5249	1	0	In			mm	135,00	12,00	NR	206	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/ASTM A 194 GR.2H		UNC/2.2 T	AB. 9		20,64		
673	14	0	In			mm	,00	1,00	NR	206	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5C					
										•	M Erection				Total Kg:	25,18		
SX1	1 SULPHUREX GH/F VEST.121						12H1 - 0			SX1	SX1 1	/ 1			TOTAL Kg:	25,18		

Plant SX1 SULPHUREX GH/F	Piping Class 206	Welding specificatio	n SP.1406/2-SP.1407/3
Line VEST.12H1 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

	Ballestra								,	SKET	ГСН	HES MATERIAL LIST		PROJ	1E35		REV	: 0	13/0	04/2010
	PUMA	.5		13/04/2	010 11.48	3.02								DOC:	1E35	-65-029				
	Ballestra										SU	LPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BA	2	Co	orr: mm
Mark	S1	S2		T1	T2		Len mn	ı Qt	y Un	n Pip. o	class	Component				Gen. Bolt	Weight	(Kg) As	.bly	Branch
3155	1/4	0	In			mm	,00	1,0	0 NF	R 215		Valve Plug ST.46019/1 THRD-F NPT GR. F316 M 53	PN 16 Forg	ged ASTM A	182		(),20		
	M Erection									Total Kg:		0,2								
SX1	1 SULPHUREX GH/F VEST.16F4A - 0							SX	1 S	SX1 1	/ 1		1	TOTAL Kg:	().2				

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
Line VEST.16F4A - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

	Ballestra									SKI	ETC	HES MATERIAL LIST		PROJ:	1E35		REV	7: 0	13/	04/2010
	PUMA	.5		13/04/2	010 11.48	3.02								DOC:	1E35	-65-029				
	Ballestra										SU	ULPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BA	R	Co	orr: mm
Mark	S1	S2		T1	T2		Len mn	1 Q	ty Uı	m Pij	p. class	Component				Gen. Bolt	Weight	(Kg) As	s.bly	Branch
3155	1/4	0	In			mm	,00	1,	00 N	R 21:	5	Valve Plug ST.46019/1 THRD-F NPT GR. F316 M 53	PN 16 Forg	ged ASTM A	182		-	0,20		
	M Erection										Total Kg:		0,2							
SX1	1 SULPHUREX GH/F VEST.16F4B - 0							S	SX1	SX1 1	/ 1		-	TOTAL Kg:		0.2				

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
Line VEST.16F4B - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	Ballestr	a					S	KETCH	IES MATERIAL LIST		PROJ	: 1E35	5	REV: 0	3/04/2010
	PUMA	.5		13/04/20	010 11.4	8.02	1						DOC:	1E35	5-65-029		
			Ball	estra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As.bly	Branch
1502	1/4	0	In	2,24		mm	,00	1,60	m	215	Pipe ASME B36.19 PL Seamless ASTM	1 A 312 TP	304			1,03	
1504	1/2	0	In	2,77		mm	,00	2,50	m	215	Pipe ASME B36.19 PL Seamless ASTM	1 A 312 TP	304			3,23	
2853	1/2	0	In			mm	,00	3,00	NR	215	Valve Ball Full Port ST.46586/3 LUG 1 Cast ASTM A 351 CF8 S 123	50 LB RF	(125÷250 A.	ARH)	5381	4,90	
2860	1/4	0	In			mm	,00	3,00	NR	215	Valve Ball Full Port ST.46545/1 THRD A 182 GR. F316 S 99	-F NPT 80	00# Forged A	STM		1,84	
446	1/2	0	In			mm	,00	6,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth Forgo	ed	5127	2,40	
1207	1/2	0	In	2,77		mm	,00	6,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ght S ASTM	1 A 403 GR.			0,51	
4539	1/2	0	In			mm	,00	3,00	NR	215	Cap TA 50.7/2 THRD-F NPT 3000# Fo	orged AST	M A 182 GR	. F304		0,37	
5127	1/2	0	In			mm	75,00	12,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 TA	В. 9		1,44	
710	1/2	0	In			mm	,00	6,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	B5F				
5381	1/2	0	In			mm	30,00	48,00	NR	215	Screws for valves ASME B 18.2.1 /UNG	C ASTM A	. 193 B7 Gal	vanized		3,84	
							-			N	/I Erection				Total Kg:	19,55	

TOTAL Kg:

19,55

SX1 SX1

SULPHUREX GH/F

VEST.16R1 - 0

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specificatio	n SP.1406/2-SP.1408/3
Line VEST.16R1 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allest	ra					5	KETCH	IES MATERIAL LIST		PRO.	J: 1E35	í	REV: 0	13/04/2010
	PUMA	\ 5		13/04/20	010 11.4	8.02							DOC	: 1E35	5-65-029	•	•
			Bal	lestra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp	:°C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Un	Pip. class	Component				Gen. Bolt	Weight (Kg) As	bly Branch
1534	14	0	In	3,96		mm	,00	0,20	m	215	Pipe ASME B36.19 PL E.R.W. ASTM	A 312 TP 3	304			7,01	
460	14	0	In			mm	,00	2,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB ASTM A 105 Galvanized	Flat Face S	Smooth Forg	ged	5168	84,00	
346	14	0	In	3,96		mm	,00	1,00	NR	215	90° Elbow Long Radius ASME B16.9 I GR. WP304	BE Wrough	nt W ASTM	A 403		28,85	
1117	1/2	0	In			mm	,00	1,00	NR	215	Coupling Half TA 50.7/2 THRD-F NP GR. F304	Г 3000# Fo	orged ASTN	I A 182		0,06	
1227	14	0	In	3,96		mm	,00	2,00	NR	215	Stub-End MSS SP-43 FLG x BE Wroug WP304 Type A	ght W AST	M A 403 G	R.		13,01	
5168	1	0	In			mm	155,00	18,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 T	AB. 9		33,12	
724	14	0	In			mm	,00	2,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5F				
	'		,	<u>'</u>	1	'	"			N	1 Erection				Total Kg:	166,05	

TOTAL Kg:

166,05

SX1 SX1

SX1

SULPHUREX GH/F

VEST.16S1 - 0

PI_16.5	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
	Line VEST.16S1 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestra	a						SKET	HES MATERIAL LIST			PRO	J: 1E3:	5	REV: 0	13/	/04/2010
	PUMA	15		13/04/20	010 11.48	3.02]	DOC	: 1E3:	5-65-029		•	
			Balle	estra							ULPHUREX GH/F	Size: In	Thk:	mm	Temp	p: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Uı	n Pip. cl	s Component					Gen. Bolt	Weight (Kg)	As.bly	Branch
1506	1	0	In	3,38		mm	,00	0,50	n	n 215	Pipe ASME B36.19 PL Seamless AST	M A 312 T	P 304				1,28		
2864	1	0	In			mm	,00	1,00	N	R 215	Valve Ball Full Port ST.46545/1 THR A 182 GR. F316 S 99	D-F NPT 8	00# Fo	orged .	ASTM		1,43		
448	1	0	In			mm	,00	1,00) N	R 215	Flange Lap-Joint ASME B16.5 150 L ASTM A 105 Galvanized	B Flat Face	Smoot	h Forg	ged	5128	0,80		
1209	1	0	In	3,38		mm	,00	1,00	N	R 215	Stub-End MSS SP-43 FLG x BE Wro WP304 Type A	ught S ASTI	M A 4	03 GR	l.		0,16		
5127	1/2	0	In			mm	75,00	12,00) N	R 215	Stud Bolt + 2 Nuts TA 50.48B/28 AS: ASTM A 193 B7/A194 2H Galvanize		UNC	/2.2 T	AB. 9		1,44		
5128	1/2	0	In			mm	80,00	4,00	N	R 215	Stud Bolt + 2 Nuts TA 50.48B/28 AS: ASTM A 193 B7/A194 2H Galvanize		UNC	/2.2 T	AB. 9		0,48		
711	3/4	0	In			mm	,00	3,00	N	R 215	Gasket TA 50.5/31 150 LB RF (125÷2	250 AARH)	_ B5F	7					
712	1	0	In			mm	,00	1,00	N	R 215	Gasket TA 50.5/31 150 LB RF (125÷2	250 AARH)	_ B5F	7					
	,		'			•				·	M Erection					Total Kg:	5,59		

SX1 SX1

SX1

SULPHUREX GH/F

VEST.16V5 - 0

LG_16.1	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
	Line VEST.16V5 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

5,59

TOTAL Kg:

		В	allest	tra					S	KETCI	IES MATERIAL LIST		PROJ	: 1E35	5	REV: 0	13/	04/2010
	PUMA	5		13/04/2	010 11.4	8.02							DOC:	1E35	5-65-029			
			Ba	illestra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp): °C	Pres: BAR	Co	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) A	s.bly	Branch
5137	5/8	0	In			mm	105,00	8,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 TA	В. 9		1,92		
717	3	0	In			mm	,00,	2,00	NR	216	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5F					
										1	M Erection				Total Kg:	1,92		

TOTAL Kg:

1,92

SX1 SX1

SX1

SULPHUREX GH/F

VEST.33A1 - 0

TI_33.6	Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specification	SP.1406/2-SP.1408/3
LSL_33.6	Line VEST.33A1 - 0	Fluid	System	
LSH_33.6	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	a					S	KETCH	IES MATERIAL LIST		PROJ	1E35		REV: 0	13/	04/2010
	PUMA	15		13/04/2	2010 11.4	18.02							DOC:	1E35	-65-029	•	•	
			Ball	lestra						SU	LPHUREX GH/F	Size: In	Thk: mm	Temp:	°C	Pres: BAR	Co	orr: mm
									1	7					1		I	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
5137	5/8	0	In			mm	105,00	8,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	E B18.2.1	UNC/2.2 TA	B. 9		1,92		
											ASTM A 193 B7/A194 2H Galvanized							
717	3	0	In			mm	,00	2,00	NR	216	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_ B5F					
	•	*								N	1 Erection				Total Kg:	1,92		

TOTAL Kg:

1,92

SX1 SX1

SX1

SULPHUREX GH/F

VEST.33A2 - 0

TI_33.7	Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specification	sP.1406/2-SP.1408/3
LSL_33.7	Line VEST.33A2 - 0	Fluid	System	
LSH_33.7	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

Balle	estra	SKETCHES MATERIAL LIST		PROJ:	1E35	REV:	0	13/04/2010
PUMA5	13/04/2010 11.48.03			DOC:	1E35-65-029			
	Ballestra	SULPHUREX GH/F	Size: In	Thk: mm	Temp: °C	Pres: BAR		Corr: mm

Mark	S1	S2		T1	T2		Len mm	Qty	Um Pip. cla	ss Component		Gen. Bolt	Weight (Kg) As.bly	Branch
4546	1/2	0	In			mm	,00	1,00	NR 203	Cap TA 50.7/2	THRD-F NPT 3000# Forged ASTM A 105		0,12	
	·								·	M Erection		Total Kg:	0,12	
SX1	SULPHU	JREX GH	I/F			VEST.	33D1 - 0		SX1	SX1	1 / 1	TOTAL Kg:	0,12	

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specificatio	n SP.1406/2-SP.1407/3
Line VEST.33D1 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					SI	KETCH	IES MATERIAL LIST		PROJ	: 1E35		REV: 0	13	3/04/2010
	PUMA	.5		13/04/2	2010 11.48	8.03							DOC:	1E35-	-65-029			
	Ballestra									SU	LPHUREX GH/F	Size: In	Thk: mm	Temp:	: °C	Pres: BAR	(Corr: mm
											_							
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component		Gen. Bolt	Weight (Kg)	As.bly	Branch		
5142	5/8	0	In			mm	135,00	8,00	NR 2	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM	E B18.2.1	UNC/2.2 TA	AB. 9		2,24		
											ASTM A 193 B7/A194 2H Galvanized							
717	3	0	In			mm	,00	2,00	NR 2	216	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	B5F					
	M Erection												Total Kg:	2,24				
SX1	1 SULPHUREX GH/F VEST.33					.33E1 - 0			SX1 S	X1 1	/ 1		1	ΓΟΤΑL Kg:	2,24			

TI_33.10	Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specification	SP.1406/2-SP.1408/3
LSL_33.2	Line VEST.33E1 - 0	Fluid	System	
LSH_33.2	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

	Ballestra							,	SKET	CHI	ES MATERIAL LIST		PROJ:	1E35		REV	: 0	13/04	4/2010	
	PUMA	.5		13/04/2	010 11.48	3.03								DOC:	1E35	-65-029	-			
	Ballestra SULPHUREX GH/F Size: In Thk: mm Tem								Temp	:°C	Pres: BAI	R	Corı	r: mm						
Mark	S1	S2		T1	T2		Len mn	ı Qt	y Un	n Pip. cl	ass	Component				Gen. Bolt	Weight	(Kg) As	bly B	Branch
3155	1/4	0	In			mm	,00	1,0	0 NF	215		Valve Plug ST.46019/1 THRD-F NPT PN 16 Forged ASTM A 182 GR. F316 M 53					(),20		
	M Erection												Total Kg:),2					
SX1	X1 SULPHUREX GH/F VEST.33F1					33F1 - 0			SX1	SX	X1 1	/ 1		7	TOTAL Kg:	(),2			

Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
Line VEST.33F1 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

	Ballestra							5	SKET(CHES MA	TERIAL L	IST		PROJ	: 1E35		REV	: 0	13/04	4/2010	
	PUMA	.5		13/04/2	010 11.48	3.03									DOC:	1E35	-65-029				
	Ballestra SULPHUREX GH/F Size: In Thk: mm								Temp:	°C	Pres: BAR		Corr	r: mm							
Mark	S1	S2		T1	T2		Len mm	n Qty	Un	ı Pip. cla	ss Compone	nt					Gen. Bolt	Weight (Kg) As.	bly B	Branch
3155	1/4	0	In			mm	,00	1,0) NR	203		Valve Plug ST.46019/1 THRD-F NPT PN 16 Forged ASTM A 182						0	,20		
	GR. F316 M 53 M Erection													Total Kg:	(,2					
SX1	K1 SULPHUREX GH/F VEST.33F2					33F2 - 0			SX1	SX1		1/	1		7	TOTAL Kg:	0	.2			

Plant SX1 SULPHUREX GH/F	Piping Class 203	Welding specification	SP.1406/2-SP.1407/3
Line VEST.33F2 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area SX1	Sketch Sht 1/1	Isometric code	Page 1
Zones			

		В	allestr	a					S	KETCH	IES MATERIAL LIST		PROJ	1E35	j	REV: 0	13/04/2010
	PUMA	.5		13/04/2	2010 11.48	8.03							DOC	1E35	5-65-029	-	
	Ballestra									SUI	LPHUREX GH/F	Size: In	Γhk: mm	Temp	: °C	Pres: BAR	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg) As.	bly Branch
2853	1/2	0	In			mm	,00		_	215	Valve Ball Full Port ST.46586/3 LUG 1 Cast ASTM A 351 CF8 S 123	ARH)	5381	1,63			
5127	1/2	0	In			mm	75,00	2,00	NR	215	Cast ASTM A 351 CF8 S 123 Stud Bolt + 2 Nuts TA 50.48B/28 ASME B18.2.1 UNC/2.2 TAB. 9 ASTM A 193 B7/A194 2H Galvanized			AB. 9		0,24	
710	1/2	0	In			mm	,00	2,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷250 AARH) _ B5F						
5381	1/2	0	In			mm	30,00	16,00	NR	215	Screws for valves ASME B 18.2.1 /UNG	lvanized		1,28			
	M Erection											Total Kg:	3,15				

TOTAL Kg:

3,15

SX1 SX1

SX1

SULPHUREX GH/F

VEST.33V1 - 0

TI_33.1	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification S	SP.1406/2-SP.1408/3
	Line VEST.33V1 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

		В	allestr	ra					S	KETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0	13	/04/2010
	PUMA	15		13/04/2	2010 11.4	8.03							DOC:	1E35-	65-029		•	
	Ballestra									SUI	LPHUREX GH/F	Size: In Th	k: mm	Temp:	°C	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
2867	1/2	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port ST.46588/2 LUG 150 LB RF (125÷250 AARH) Cast ASTM A 351 CF8 S 125				5381	1,63		
5127	1/2	0	In			mm	75,00	2,00	NR	216	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 UN	C/2.2 TA	B. 9		0,24		
710	1/2	0	In			mm	,00	2,00	NR	216	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _ B	5F					
5381	1/2	0	In			mm	30,00	16,00	NR	216	Screws for valves ASME B 18.2.1 /UNG	C ASTM A 19	3 B7 Galv	anized		1,28		
				•		*			-	N	1 Erection				Total Kg:	3,15		

SX1 SX1

SX1

SULPHUREX GH/F

VEST.33V3 - 0

TI_33.3	Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specification S	SP.1406/2-SP.1408/3
LSL_33.3	Line VEST.33V3 - 0	Fluid	System	
LSH_33.3	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

3,15

TOTAL Kg:

		В	allestra	ì					S	KETCH	IES MATERIAL LIST		PROJ	: 1E35		REV: 0	13.	/04/2010
	PUMA	5		13/04/20	010 11.48	3.03							DOC:	1E35	-65-029			
			Balle	stra						SUI	LPHUREX GH/F	Size: In	Thk: mm	Temp	:℃	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
2853	1/2	0	In			mm	,00	1,00	NR	215	Valve Ball Full Port ST.46586/3 LUG 1 Cast ASTM A 351 CF8 S 123	ARH)	5381	1,63				
5130	1/2	0	In			mm	105,00	8,00	NR	215	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1	UNC/2.2 TA	В. 9		1,12		
710	1/2	0	In			mm	,00	1,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_B5F					
711	3/4	0	In			mm	,00	2,00	NR	215	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH)	_B5F					
5381	1/2	0	In			mm	30,00	16,00	NR	215	Screws for valves ASME B 18.2.1 /UNC	C ASTM A	193 B7 Gal	vanized		1,28		
										N	1 Erection				Total Kg:	4,03		

SX1 SX1

SX1

SULPHUREX GH/F

VEST.33V4 - 0

LG_33.4	Plant SX1 SULPHUREX GH/F	Piping Class 215	Welding specification	SP.1406/2-SP.1408/3
LSL_33.4	Line VEST.33V4 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

4,03

TOTAL Kg:

Ballestra								SKETCHES MATERIAL LIST PROJ: 1E35								REV	: 0	13/04/2010	
PUMA5 13/04/2010 11.48.03						DOC: 1E35						5-65-029							
Ballestra								SULPHUREX GH/F Size: In Thk: mm Te						Temp	p: °C Pres		Pres: BAR Corr:		
Mark	S1	S2		T1	Т2		Len mm	Q	ty U	Jm Pi	ip. class	Component				Gen. Bolt	Weight (Kg) As.bl	y Branch
5086	1/2	0	In			mm	,00	1.	,00 N	NR 21	16	Flange Blind + Disk ASME B16.5 - TA (125÷250 AARH) Forged FLG: ASTM . A240 TYPE 316				5127	(,44	
5127	1/2	0	In			mm	75,00	4.	,00	NR 21	16	Stud Bolt + 2 Nuts TA 50.48B/28 ASM ASTM A 193 B7/A194 2H Galvanized	E B18.2.1 UN	C/2.2 TA	B. 9		(,48	
710	1/2	0	In			mm	,00	1.	,00 N	NR 21	16	Gasket TA 50.5/31 150 LB RF (125÷25	0 AARH) _ B	5F					
	M Erection								Total Kg:	(,92								

TOTAL Kg:

0,92

SX1 SX1

SULPHUREX GH/F

SX1

VEST.33V5 - 0

TI_33.5	Plant SX1 SULPHUREX GH/F	Piping Class 216	Welding specification	Welding specification SP.1406/2-SP.1408/3		
LSL_33.5	Line VEST.33V5 - 0	Fluid	System			
	Dang. fluid type	Coating	De pres	Op tem		
	Area SX1	Sketch Sht 1/1	Isometric code	Page 1		
	Zones					