	DESMET - Ballestra						SKETCHES MATERIAL LIST					PROJ:	1E35		REV: 0 1	3/04/2010
	PUMA5 13/04/2010 11.20.04											DOC:	1E35-65-	5-020		
	DESMET - Ballestra								Sl	LS - SECT. 77	Size: mm Thk	: mm	Temp: °C		Pres: BAR	Corr: mm
Mark S1 S2 T1 T2 Len mm Qty Um Pip, class							Um Pip. class	Component			Ge	en. Bolt	Weight (Kg) As.bly	Branch		
760	200	0	mm	2.0		mm	00	16.00	m 164	Ding CD ATI DT005/0 DI Walded ACTI	M A 240 Cm TI	204	ĺ		261.00	

Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	s Component	Gen. Bolt	Weight (Kg) As.bly	Branch
760	200	0	mm	3,0	mm	,00	16,00	m	164	Pipe SB-ATI-PT005/0 PL Welded ASTM A 240 Gr. TP304		261,00	
156	200	0	mm		mm	,00	1,00	NR	164	Flange Lap-Joint SB-ATI-PF012/0 * SB-ATI-PF012 FF Smooth From	1943		
	'			'						Plate Fe 360 B - UNI 7070			
527	200	0	mm	3,0	mm	,00	1,00	NR	164	Stub-End SB-ATI-PF009/0 BE * From Plate ASTM A 240 Gr. TP304			
1942	M10	0	mm		mm	30,00	4,00	NR	164	Machine Bolt + 1 Nut SB-ATI-PV008A/0 - UNI 5727 + UNI 5592 4.6		0,16	
										UNI 3740 + 4A UNI 3740		•	'
1943	M10	0	mm		mm	35,00	4,00	NR	164	Machine Bolt + 1 Nut SB-ATI-PV008A/0 - UNI 5727 + UNI 5592 4.6		0,16	
				'						UNI 3740 + 4A UNI 3740			
313	200	0	mm		mm	,00	1,00	NR	164	Gasket SB-ATI-PV009/1 * SB-ATI-PF012 FF Smooth _ A9C			
	*	*	•	*	,	•				M Erection	Total Kg:	261,32	
SX1	SLS - SE	ECT. 77	- PRO		77016	- 0			SL1	SABIZ PLANT 1/1	TOTAL Kg:	261,32	

77Y1	Plant SX1 SLS - SECT. 77 - PRO	Piping Class 164	Welding specification	on SB-ATI-SP006/0 SB-ATI- SP007/0
	Line 77016 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SABIZ PLANT	Sketch Sht 1/1	Isometric code	Page 1
	Zones			_

DESMET - Ballestra	SKETCHES MATERIAL LIST	PROJ:	1E35	REV: 0	13/04/2010
PUMA5 13/04/2010 11.20.04		DOC:	1E35-65-020		
DESMET - Ballestra	SLS - SECT. 77	Size: mm 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	s.bly Branch
760	200	0	mm	3,0	mm	,00	0,50	m	164	Pipe SB-ATI-PT005/0 PL Welded ASTM A 240 Gr. TP304		8,16	
156	200	0	mm		mm	,00	1,00	NR	164	Flange Lap-Joint SB-ATI-PF012/0 * SB-ATI-PF012 FF Smooth From	1943		
										Plate Fe 360 B - UNI 7070		·	
527	200	0	mm	3,0	mm	,00	1,00	NR	164	Stub-End SB-ATI-PF009/0 BE * From Plate ASTM A 240 Gr. TP304			
1942	M10	0	mm		mm	30,00	4,00	NR	164	Machine Bolt + 1 Nut SB-ATI-PV008A/0 - UNI 5727 + UNI 5592 4.6		0,16	
				'				_		UNI 3740 + 4A UNI 3740			
1943	M10	0	mm		mm	35,00	4,00	NR	164	Machine Bolt + 1 Nut SB-ATI-PV008A/0 - UNI 5727 + UNI 5592 4.6		0,16	
										UNI 3740 + 4A UNI 3740	,	'	· ·
313	200	0	mm		mm	,00	1,00	NR	164	Gasket SB-ATI-PV009/1 * SB-ATI-PF012 FF Smooth _ A9C			
			•							M Erection	Total Kg:	8,48	·
SX1	SLS - SE	ECT. 77 -	PRO		77017 -	- 0			SL1	SABIZ PLANT 1/1	ΓΟΤΑL Kg:	8,48	

Plant SX1 SLS - SECT. 77 - PROPiping Class 164Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0Line 77017 - 0FluidSystemDang. fluid typeCoatingDe presOp temArea SABIZ PLANTSketch Sht 1/1Isometric codePage 1

Zones

	Ι	ESME	T - Ba	llestra					S	KETCH	ES MATERIAL LIST		PROJ:	1E35		REV:	0 1	3/04/2010
	PUMA5	5		13/04/20	010 11.20	0.04							DOC:	1E35-65	5-020			
		DE	SMET -	Ballestra	a					S	LS - SECT. 77	Size: mm Thl	k: mm	Temp: °C		Pres: BAR		Corr: mm
										1								
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component			Ge	en. Bolt	Weight (Kg	g) As.bly	Branch
1942	M10	0	mm			mm	30,00	1,00	NR	164	Machine Bolt + 1 Nut SB-ATI-PV008A	/0 - UNI 5727 -	+ UNI 55	92 4.6		0,04	1	
							_		_		UNI 3740 + 4A UNI 3740							
										N	I Erection			T	Total Kg:	0,0	4	

1 / 1

TOTAL Kg:

0,04

SL1 SABIZ PLANT

SLS - SECT. 77 - PRO

77024 - 0

FOR TAKE-OFF MATERIAL SEE DWG. NR. 1E35-60-030	Plant SX1 SLS - SECT. 77 - PRO	Piping Class 164	Welding specificatio	n SB-ATI-SP006/0 SB-ATI- SP007/0
	Line 77024 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SABIZ PLANT	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

DESMET -	- Ballestra	SKETCHES MATERIAL LIST	PROJ:	1E35	REV: 0	13/04/2010
PUMA5	13/04/2010 11.20.04		DOC:	1E35-65-020		
DESM	IET - Ballestra	SLS - SECT. 77	Size: mm 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.	oly Branch
762	300	0	mm	3,0	mm	,00	7,00	m	164	Pipe SB-ATI-PT005/0 PL Welded ASTM A 240 Gr. TP304		169,51	
158	300	0	mm		mm	,00	1,00	NR	164	Flange Lap-Joint SB-ATI-PF012/0 * SB-ATI-PF012 FF Smooth From	1943		
			•							Plate Fe 360 B - UNI 7070			
529	300	0	mm	3,0	mm	,00	1,00	NR	164	Stub-End SB-ATI-PF009/0 BE * From Plate ASTM A 240 Gr. TP304			
1942	M10	0	mm		mm	30,00	4,00	NR	164	Machine Bolt + 1 Nut SB-ATI-PV008A/0 - UNI 5727 + UNI 5592 4.6		0,16	
	'	'						_		UNI 3740 + 4A UNI 3740			
1943	M10	0	mm		mm	35,00	4,00	NR	164	Machine Bolt + 1 Nut SB-ATI-PV008A/0 - UNI 5727 + UNI 5592 4.6		0,16	
										UNI 3740 + 4A UNI 3740			'
315	300	0	mm		mm	,00	1,00	NR	164	Gasket SB-ATI-PV009/1 * SB-ATI-PF012 FF Smooth _ A9C			
		ľ							l	M Erection	Total Kg:	169,83	·
SX1	SLS - SE	CT. 77 -	PRO		77025 -	- 0			SL1	SABIZ PLANT 1/1	TOTAL Kg:	169,83	

77Y15 77Y18	Plant SX1 SLS - SECT. 77 - PRO	Piping Class 164	Welding specification	SB-ATI-SP006/0 SB-ATI- SP007/0
	Line 77025 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SABIZ PLANT	Sketch Sht 1/1	Isometric code	Page 1
ı	Zones			

DESMET -	Ballestra	SKETCHES MATERIAL LIST	PROJ:	1E35	REV:	0	13/04/2010
PUMA5	13/04/2010 11.20.04		DOC:	1E35-65-020			
DESM	ET - Ballestra	SLS - SECT. 77	Size: mm Thk: mm	Temp: °C I	res: BAR		Corr: mm

Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component		Gen. Bolt	Weight (Kg) As.bly	Branch
759	150	0	mm	3,0	mm	,00	13,00	m	164	Pipe SB-ATI-PT005/0 PL	Welded ASTM A 240 Gr. TP304		162,21	
									1	M Erection		Total Kg:	162,21	
SX1	SLS - SE	CT. 77 - P	RO		770	26 - 0			SL1	SABIZ PLANT	1/1	TOTAL Kg:	162,21	

77Y16 77Y19	Plant SX1 SLS - SECT. 77 - PRO	Piping Class 164		SB-ATI-SP006/0 SB-ATI- SP007/0
	Line 77026 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SABIZ PLANT	Sketch Sht 1/1	Isometric code	Page 1
,	Zones			

	DI	ESMET	' - Bal	lestra					S	KETC.	HES MATERIAL LI	ST		PROJ:	1E35		REV:	0 13	3/04/2010
	PUMA5		1	13/04/20	10 11.20.	04								DOC:	1E35-65-020				
		DES	MET - 1	Ballestra							SLS - SECT. 77		Size: mm Thl	₹: mm	Temp: °C		Pres: BAR		Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Be	olt	Weight (K	g) As.bly	Branch

Mark	S1	S2	T		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg) As.bly	Branch
1942	M10	0	mm	mm	30,00	1,00	NR	164	Machine Bolt + 1 Nut SB-ATI-PV008A/0 - UNI 5727 + UNI 5592 4.6		0,04	
									UNI 3740 + 4A UNI 3740			
								N	M Erection	Total Kg:	0,04	
SX1	SLS - SF	CT. 77 -	PRO	77027 -	0			SL1 S	SARIZ PLANT 1/1	TOTAL Kg:	0.04	

FOR TAKE-OFF MATERIAL SEE DWG. NR. 1E35-60-030	Plant SX1 SLS - SECT. 77 - PRO	Piping Class 164	Welding specificatio	n SB-ATI-SP006/0 SB-ATI- SP007/0
	Line 77027 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SABIZ PLANT	Sketch Sht 1/1	Isometric code	Page 1
'	Zones			

DESMET -	Ballestra	SKETCHES MATERIAL LIST	PROJ:	1E35	REV:	0	13/04/2010
PUMA5	13/04/2010 11.20.04		DOC:	1E35-65-020			
DESM	ET - Ballestra	SLS - SECT. 77	Size: mm Thk: mm	Temp: °C I	res: BAR		Corr: mm

Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg) As.b	ly Branch
760	200	0	mm	3,0	mm	,00	10,00	m	164	Pipe SB-ATI-PT005/0 PL Welded ASTM A 240 Gr. TP304		163,13	
156	200	0	mm		mm	,00	1,00	NR	164	Flange Lap-Joint SB-ATI-PF012/0 * SB-ATI-PF012 FF Smooth From	1943		
	'									Plate Fe 360 B - UNI 7070			
527	200	0	mm	3,0	mm	,00	1,00	NR	164	Stub-End SB-ATI-PF009/0 BE * From Plate ASTM A 240 Gr. TP304			
1942	M10	0	mm		mm	30,00	4,00	NR	164	Machine Bolt + 1 Nut SB-ATI-PV008A/0 - UNI 5727 + UNI 5592 4.6		0,16	
	'					-		_		UNI 3740 + 4A UNI 3740			
1943	M10	0	mm		mm	35,00	4,00	NR	164	Machine Bolt + 1 Nut SB-ATI-PV008A/0 - UNI 5727 + UNI 5592 4.6		0,16	
		,	,							UNI 3740 + 4A UNI 3740		'	'
313	200	0	mm		mm	,00	1,00	NR	164	Gasket SB-ATI-PV009/1 * SB-ATI-PF012 FF Smooth _ A9C			
			•]	M Erection	Total Kg:	163,45	
SX1	SLS - SE	ECT. 77	- PRO		77029	- 0			SL1	SABIZ PLANT 1/1	TOTAL Kg:	163,45	

Plant SX1 SLS - SECT. 77 - PROPiping Class 164Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0Line 77029 - 0FluidSystemDang. fluid typeCoatingDe presOp temArea SABIZ PLANTSketch Sht 1/1Isometric codePage 1

	I	DESME	ET - Ba	llestra					5	KETC	HES MATERIAL LIST		PROJ:	1E35		REV: 0	13/04/2010
	PUMA:	5		13/04/20	010 11.20	.05							DOC:	1E35-65-020)		
		Dl	ESMET	- Ballestra	a						SLS - SECT. 77	Size: mm Thk	: mm	Temp: °C]	Pres: BAR	Corr: mm
							1										
Mark	S1	S2		T1	T2		Len mn	n Qty	/ Un	Pip. class	Component			Gen. B	Solt	Weight (Kg) As.b	y Branch
1942	M10	0	mm			mm	30,00	1,0	0 NR	164	Machine Bolt + 1 Nut SB-ATI-PV008A	/0 - UNI 5727 +	UNI 559	92 4.6		0,04	
	•	•	•	•	•	•				•	UNI 3740 + 4A UNI 3740				•	·	

				M Erection		Total Kg:	0,04
SX1	SLS - SECT. 77 - PRO	77030 - 0	SL1	SABIZ PLANT	1/1	TOTAL Kg:	0,04

FOR TAKE-OFF MATERIAL SEE DWG. NR. 1E35-60-Piping Class 164 Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0 Plant SX1 SLS - SECT. 77 - PRO 030 Line 77030 - 0 Fluid System Op tem Dang. fluid type Coating De pres Area SABIZ PLANT Sketch Sht 1/1 Isometric code Page 1 Zones

	D	ESMET	- Bal	lestra					S	KETCH	ES MATERIAL LIST		PROJ:	1E35]	REV: 0	13/04/2010
	PUMA5]	13/04/20	10 11.20.	05							DOC:	1E35-65-020			
		DES	MET -	Ballestra						S	LS - SECT. 77	Size: mm Th	k: mm	Temp: °C	Pres	s: BAR	Corr: mm
Mark	S1	S2		Т1	T2		Len mm	Qty	Um	Pip. class	Component			Gen. Bo	lt Wei	ight (Kg) As.b	v Branch

Mark	S1	S2	T1	T	2	Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg) A	s.bly	Branch
1942	M10	0	mm		mm	30,00	1,00	NR	164	Machine Bolt + 1 Nut SB-ATI-PV008A/0 - UNI 5727 + UNI 5592 4.	5	0,04		
										UNI 3740 + 4A UNI 3740				
										M Erection	Total Kg:	0,04		
SX1	SLS - SE	CT. 77 - I	PRO		77031 -	0			SL1	SABIZ PLANT 1 / 1	TOTAL Kg:	0,04		

FOR TAKE-OFF MATERIAL SEE DWG. NR. 1E35-60-030	Plant SX1 SLS - SECT. 77 - PRO	Piping Class 164	Welding specification	n SB-ATI-SP006/0 SB-ATI- SP007/0
	Line 77031 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area SABIZ PLANT	Sketch Sht 1/1	Isometric code	Page 1
'	Zones			

DESMET -	Ballestra	SKETCHES MATERIAL LIST	J	PROJ:	1E35	REV: 0	13/04/2010
PUMA5	13/04/2010 11.20.05		Ī	DOC:	1E35-65-020		
DESM	ET - Ballestra	SLS - SECT. 77	Size: mm Thk:	mm	Temp: °C	Pres: BAR	Corr: mm
	_						

					_					1		1			
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
762	300	0	mm	3,0		mm	,00	4,00	m	164	Pipe SB-ATI-PT005/0 PL Welded ASTM A 240 Gr. TP304		96,86		
158	300	0	mm			mm	,00	1,00	NR	164	Flange Lap-Joint SB-ATI-PF012/0 * SB-ATI-PF012 FF Smooth From	1943			
Plate Fe 360 B - UNI 7070															
529	300	0	mm	3,0		mm	,00	1,00	NR	164	Stub-End SB-ATI-PF009/0 BE * From Plate ASTM A 240 Gr. TP304				
1942	M10	0	mm			mm	30,00	4,00	NR	164	Machine Bolt + 1 Nut SB-ATI-PV008A/0 - UNI 5727 + UNI 5592 4.6		0,16		
							•		_		UNI 3740 + 4A UNI 3740				
1943	M10	0	mm			mm	35,00	4,00	NR	164	Machine Bolt + 1 Nut SB-ATI-PV008A/0 - UNI 5727 + UNI 5592 4.6		0,16		
							_				UNI 3740 + 4A UNI 3740				
315	300	0	mm			mm	,00	1,00	NR	164	Gasket SB-ATI-PV009/1 * SB-ATI-PF012 FF Smooth _ A9C				
	M Erection							Total Kg:	97,18						
SX1	SLS - SE	CT. 77 -	PRO			77032 -	0			SL1	SABIZ PLANT 1/1	TOTAL Kg:	97,18		

77Y17 77Y20	Plant SX1 SLS - SECT. 77 - PRO	Piping Class 164	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0		
	Line 77032 - 0	Fluid	System		
	Dang. fluid type	Coating	De pres	Op tem	
	Area SABIZ PLANT	Sketch Sht 1/1	Isometric code	Page 1	
ı	Zones				