]	DESME	T - Ba	llestra					S	KETCH	IES MATERIAL LIST		PRO	J: 1E	E35	REV: 0	13.	/04/2010
	PUMA	5		13/04/20	10 11.22	2.10							DOC	C: 1E	E35-65-020			
		DI	ESMET -	Ballestra	ı					\$	SLS - SECT. 77	Size: mm	Thk: mm	Te	emp: °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
696	300	0	mm	4,78		mm	,00	0,50	m	109	Pipe ASME B36.10 PL E.R.W. API 5L	Gr.B				18,80		
728	900	0	mm	6,0		mm	,00	4,00	m	109	Pipe SB-ATI-PT003/0 PL Welded Fe 4	10-1 KW - U	JNI 5869			537,39		
153	300	0	mm			mm	,00	1,00	NR	109	Flange Blind EN 1092-1 Type 05 PN 6 ASTM A 105	EN1092-1 I	B1-Ra For	ged	1933			
239	900	0	mm			mm	,00	3,00	NR	109	Flange Slip-On SB-ATI-PF001/0 * SB- From Plate Fe 510-C UNI 7070	ATI-PF001	(125÷250)	AARH) 1917			
262	300	0	mm			mm	,00	1,00	NR	109	Flange Slip-On EN 1092-1 Type 01 PN ASTM A 105	6 EN1092-	1 B1-Ra F	orged	1933			
1917	M12	0	mm			mm	55,00	72,00	NR	109	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 A Tab.9 ASTM A 193 B7 / A 194 Gr.2H	ASME B18.	2.1 UNC/	2.2		5,76		
1933	M20	0	mm			mm	100,00	12,00	NR	109	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ATab.9 ASTM A 193 B7 / A 194 Gr.2H	ASME B18.	2.1 UNC/	2.2		4,92		
274	900	0	mm			mm	,00	3,00	NR	109	Gasket SB-ATI-PV009/1 * SB-ATI-PF0 FLAT-RING	001(125÷25	0AARH)	_ A9D)			
361	300	0	mm			mm	,00	1,00	NR	109	Gasket SB-ATI-PV009/1 PN 6 EN1092	-1 B1-Ra_	B2D FLA	Т				
		1	1	-	1	1				N	/I Erection				Total Kg:	566,87		

SL1

SX2

SLS - SECT. 77 -DUCT

77004 - 0

N. 1 manhole DN500 Std.46144 HV_77.2	Plant SX2 SLS - SECT. 77 -DUCT	Piping Class 109	Welding specificatio	n SB-ATI-SP006/0 SB-ATI- SP007/0
77Y11	Line 77004 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area	Sketch Sht 1/1	Isometric code	Page 1
	Zones			

566,87

TOTAL Kg:

]	DESM	ET - Ba	llestra					S	KETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0	13/	/04/2010
	PUMA	5		13/04/20	010 11.22	2.10	1						DOC:	1E35-	-65-020	•		
		D	ESMET	- Ballestra	a					S	SLS - SECT. 77	Size: mm Thl	k: mm	Temp:	°C	Pres: BAR	С	orr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	s.bly	Branch
701	25	0	mm	3,38		mm	,00	1,00	m	109	Pipe ASME B36.10 PL sch.40 Seamless	API 5L Gr.B				2,50		
728	900	0	mm	6,0		mm	,00	9,50	m	109	Pipe SB-ATI-PT003/0 PL Welded Fe 41	0-1 KW - UNI	5869			1.276,30		
239	900	0	mm			mm	,00	2,00	NR	109	Flange Slip-On SB-ATI-PF001/0 * SB-ATI-P	ATI-PF001(125	5÷250AA	RH)	1917			
1540	900	0	mm	6,0		mm	,00	1,00	NR	109	90° Miter SB-ATI-PC003/0 BE Welded R=1.5 D	Fe 410-1 KW	- UNI 586	59		303,60		
480	25	0	mm			mm	,00	4,00	NR	109	Coupling SB-ATI-PR008/0 THRD-F N 105	PT 3000# Forg	ged ASTM	I A		1,20		
1917	M12	0	mm			mm	55,00	48,00	NR	109	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 A Tab.9 ASTM A 193 B7 / A 194 Gr.2H	ASME B18.2.1	UNC/2.2			3,84		
274	900	0	mm			mm	,00	2,00	NR	109	Gasket SB-ATI-PV009/1 * SB-ATI-PF0 FLAT-RING	01(125÷250A	ARH) _ A	.9D				
										N	1 Erection				Total Kg:	1587,45		

TOTAL Kg:

1587,45

SL1

SX2

SLS - SECT. 77 -DUCT

77005 - 0

N. 1 manhole DN500 Std.46144 TI_77.4	Plant SX2 SLS - SECT. 77 -DUCT	Piping Class 109	Welding specificatio	n SB-ATI-SP006/0 SB-ATI- SP007/0
TET_77.3	Line 77005 - 0	Fluid	System	
TET_77.2	Dang. fluid type	Coating	De pres	Op tem
TET_77.1	Area	Sketch Sht 1/1	Isometric code	Page 1
HV_77.1	Zones			J
77Y10				
77Y8				

]	DESM	ET - Ba	llestra					S	KETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0	13.	/04/2010
	PUMA	.5		13/04/20	010 11.22	2.10	1						DOC:	1E35-	65-020	•	l a l	
		D	ESMET	- Ballestra	ì					S	SLS - SECT. 77	Size: mm 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
701	25	0	mm	3,38		mm	,00	0,20	m	109	Pipe ASME B36.10 PL sch.40 Seamless	API 5L Gr.B				0,50		
728	900	0	mm	6,0		mm	,00	3,50	m	109	Pipe SB-ATI-PT003/0 PL Welded Fe 41	0-1 KW - UNI	5869			470,22		
1476	900	0	mm			mm	,00	1,00	NR	109	Valve Butterfly SB-ATI-VB005/0 FLG PF001(125÷250AARH) Cast ASTM A 2		3 61		1917			
1502	8	0	mm			mm	,00	1,00	NR	109	Valve Plug SB-ATI-VM001/0 THRD-F 182 Gr. F316 M 53	NPT PN 16 F	orged AS	ТМ А		0,20		
239	900	0	mm			mm	,00	4,00	NR	109	Flange Slip-On SB-ATI-PF001/0 * SB-A From Plate Fe 510-C UNI 7070	ATI-PF001(12:	5÷250AAl	RH)	1917			
480	25	0	mm			mm	,00	1,00	NR	109	Coupling SB-ATI-PR008/0 THRD-F N	PT 3000# Forg	ged ASTM	I A		0,30		
1917	M12	0	mm			mm	55,00	96,00	NR	109	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 A Tab.9 ASTM A 193 B7 / A 194 Gr.2H	SME B18.2.1	UNC/2.2			7,68		
274	900	0	mm			mm	,00	4,00	NR	109	Gasket SB-ATI-PV009/1 * SB-ATI-PF0 FLAT-RING	01(125÷250A	ARH) _ A	.9D				
										N	/I Erection				Total Kg:	478,9		
SX2	SLS - SE	ECT. 77	-DUCT			77006	- 0			SL1	1 /	1		Т	OTAL Kg:	478,9		

N. 1 manhole DN500 Std.46144 TET_77.10 77Y22 WIRE NET MESH 2,54 x ø 1mm - C.s. GALVANIZED = mq 1,00

Piping Class 109 Welding specification SB-ATI-SP006/0 SB-ATI-Plant SX2 SLS - SECT. 77 - DUCT SP007/0 Line 77006 - 0 Fluid System Dang. fluid type Coating De pres Op tem Area 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 11.22.10		DOC:	1E35-65-020		
DESMET - 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
728	900	0	mm	6,0	mm	,00	2,50	m	109	Pipe SB-ATI-PT003/0 PL Welded Fe 410-1 KW - UNI 5869		335,87	
1502	8	0	mm		mm	,00	1,00	NR	109	Valve Plug SB-ATI-VM001/0 THRD-F NPT PN 16 Forged ASTM A		0,20	
		1							1	182 Gr F316 M 53			

			M Erection		Total Kg:	336,07
SX2	SLS - SECT. 77 -DUCT	77007 - 0	SL1	1/1	TOTAL Kg:	336,07

77Y7 77Y9	Plant SX2 SLS - SECT. 77 -DUCT	Piping Class 109	Welding specification	SB-ATI-SP006/0 SB-ATI- SP007/0
	Line 77007 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area	Sketch Sht 1/1	Isometric code	Page 1
"	Zones			

]	DESMI	ET - Ba	llestra					S	KETCH	IES MATERIAL LIST	PROJ:	1E35		REV: 0	13.	/04/2010
	PUMA	5		13/04/20	010 11.22.	11	1				Ī	DOC:	1E35	-65-020	•		
		D	ESMET -	Ballestra	ì					S	SLS - SECT. 77 Size: mm Thk:	mm	Temp	: °C	Pres: BAR	C	orr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	_	Pip. class	Component			Gen. Bolt	Weight (Kg)	As.bly	Branch
713	25	0	mm	3,38		mm	,00	0,20		164	Pipe ASME B36.19 PL sch.40S Seamless ASTM A 312	TP304			0,51		
762	300	0	mm	3,0		mm	,00	0,50		164	Pipe SB-ATI-PT005/0 PL Welded ASTM A 240 Gr. TP3	304			12,11		
777	1100	0	mm	4,0		mm	,00	13,50	m	164	Pipe SB-ATI-PT005/0 PL Welded ASTM A 240 Gr. TP3	304			1.512,29		
1502	8	0	mm			mm	,00	1,00	NR	164	Valve Plug SB-ATI-VM001/0 THRD-F NPT PN 16 For 182 Gr. F316 M 53	rged AS	ГМ А		0,20		
158	300	0	mm			mm	,00	1,00	NR	164	Flange Lap-Joint SB-ATI-PF012/0 * SB-ATI-PF012 FF Plate Fe 360 B - UNI 7070	Smooth	From	1943			
173	1100	0	mm			mm	,00	1,00	NR	164	Flange Lap-Joint SB-ATI-PF012/0 * SB-ATI-PF012 FF Plate Fe 360 B - UNI 7070	Smooth	From				
1872	300	0	mm			mm	,00	1,00	NR	164	Flange Blind + Disk SB-ATI-PF006/0 * SB-ATI- PF006(125÷250AARH) From Plate Fe 360 B - UNI 7070 DISK A240 TP304	0 - Galv.	. +				
1524	1100	0	mm	4,0		mm	,00	2,00	NR	164	90° Miter SB-ATI-PC003/0 BE Welded ASTM A 240 G R=1.5 D	r. TP304	1		592,62		
473	25	0	mm			mm	,00	1,00	NR	164	Coupling SB-ATI-PR008/0 THRD-F NPT 3000# Forget	d ASTM	A		0,31		
529	300	0	mm	3,0		mm	,00	1,00	NR	164	Stub-End SB-ATI-PF009/0 BE * From Plate ASTM A 2-	40 Gr. T	P304				
544	1100	0	mm	4,0		mm	,00	1,00	NR	164	Stub-End SB-ATI-PF009/0 BE * From Plate ASTM A 2-	40 Gr. T	P304				
1943	M10	0	mm			mm	35,00	4,00	NR	164	Machine Bolt + 1 Nut SB-ATI-PV008A/0 - UNI 5727 + UNI 3740 + 4A UNI 3740	UNI 559	92 4.6		0,16		
1955	M16	0	mm			mm	40,00	16,00	NR	164	Machine Bolt + 1 Nut SB-ATI-PV008A/0 - UNI 5727 + UNI 3740 + 4A UNI 3740	UNI 559	92 4.6		2,56		
315	300	0	mm			mm	,00	1,00	NR	164	Gasket SB-ATI-PV009/1 * SB-ATI-PF012 FF Smooth _	A9C					
330	1100	0	mm			mm	,00	1,00	NR	164	Gasket SB-ATI-PV009/1 * SB-ATI-PF012 FF Smooth _	A9C					
						1	-			N	1 Erection			Total Kg:	2120,76		
SX2	SLS - SF	ECT. 77	-DUCT			77011 -	- 0			SL1	1/1		7	ГОТАL Kg:	2120,76		
77Y6 TI 77.B							Plant SX2	SLS - SE	CT. 7	7 -DUCT	Piping Class 164		We	lding specificat	tion SB-ATI-SP00 SP007/0	5/0 SB-A	TI-
							Line 7701	1 - 0			Fluid		Sys	tem			
							Dang. fluid	l type			Coating		De p	ores	Op to	em	
							1 .				COLUMN CO						

Area

Zones

Sketch Sht 1/1

Isometric code

Page 1

DESMET -	- Ballestra	SKETCHES MATERIAL LIST	PROJ:	1E35	REV: 0	13/04/2010
PUMA5	13/04/2010 11.22.11		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.bly	Branch
711	15	0	mm	2,77		mm	,00	6,00		164	Pipe ASME B36.19 PL sch.40S Seamless ASTM A 312 TP304		7,75	
777	1100	0	mm	4,0		mm	,00	18,50	m	164	Pipe SB-ATI-PT005/0 PL Welded ASTM A 240 Gr. TP304		2.072,39	
1502	8	0	mm			mm	,00	2,00	NR	164	Valve Plug SB-ATI-VM001/0 THRD-F NPT PN 16 Forged ASTM A		0,41	
											182 Gr. F316 M 53			
173	1100	0	mm			mm	,00	1,00	NR	164	Flange Lap-Joint SB-ATI-PF012/0 * SB-ATI-PF012 FF Smooth From			
				1		1			1		Plate Fe 360 B - UNI 7070			
984	1300	1100	mm	4,0	4,0	mm	,00	1,00	NR	164	Reducer Concentric SB-ATI-PR005/0 BE Welded ASTM A 240 Gr.			
							_		_		TP304			
1524	1100	0	mm	4,0		mm	,00	3,00	NR	164	90° Miter SB-ATI-PC003/0 BE Welded ASTM A 240 Gr. TP304		888,93	
						1				1	R=1.5 D	1		
544	1100	0	mm	4,0		mm	,00	1,00	NR	164	Stub-End SB-ATI-PF009/0 BE * From Plate ASTM A 240 Gr. TP304			
1731	15	8	mm			mm	.00	1,00	NR	164	Coupling Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged		0.03	
							· · ·		l.		ASTM A 182 Gr. F304		· · ·	
1955	M16	0	mm			mm	40,00	16,00	NR	164	Machine Bolt + 1 Nut SB-ATI-PV008A/0 - UNI 5727 + UNI 5592 4.6		2,56	
									L		UNI 3740 + 4A UNI 3740		, , , , , , , , , , , , , , , , , , ,	
330	1100	0	mm			mm	,00	1,00	NR	164	Gasket SB-ATI-PV009/1 * SB-ATI-PF012 FF Smooth _ A9C			
	1	1		1	1	1	· •			M	Erection	Total Kg:	2972,07	
SX2	SLS - SEG	CT. 77 -E	DUCT	<u> </u>	<u> </u>	77012	- 0	<u> </u>		SL1	1/1	TOTAL Kg:	2972,07	

Plant SX2 SLS - SECT. 77 -DUCT	Piping Class 164	Welding specification SB-ATI- SP007/0	
Line 77012 - 0	Fluid	System	
Dang. fluid type	Coating	De pres	Op tem
Area	Sketch Sht 1/1	Isometric code	Page 1
Zones			

	I	DESM	ET - Ba	llestra	1				SK	KETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0	13	/04/2010
	PUMA:	5		13/04/2	2010 11.22.11								DOC:	1E35-6	65-020	•		
		D	ESMET -	- Ballest	ra					S	SLS - SECT. 77	Size: mm Thk	: mm	Temp: °	PC C	Pres: BAR	(Corr: mm
Mark	S1	S2		T1	T2	Len mi	n Q	ty [Um I	Pip. class	Component			(Gen. Bolt	Weight (Kg)	As.bly	Branch
743	500	0	mm	3,0	mm	,0	0 4,	50	m 1	124	Pipe SB-ATI-PT002/0 PL Welded Fe 36	0 B - UNI 7070)			168,12		
213	500	0	mm		mm	,0,	0 2,	00	NR 1	124	Flange Slip-On SB-ATI-PF001/0 * SB-ATI-PF001(125÷250AARH) From Plate Fe 360 B - UNI 7070				1942			
1555	500	0	mm	3,0	mm	,0	0 2,	00	NR 1	124	90° Miter SB-ATI-PC003/0 BE Welded	Fe 360 B - UN	7070 R=	=1.5 D		90,00		
1942	M10	0	mm		mm	30,0	0 24,	00 1	NR 1	124	Machine Bolt + 1 Nut SB-ATI-PV008A/ UNI 3740 + 4A UNI 3740	0 - UNI 5727 +	UNI 559	92 4.6		0,96		
296	500	0	mm		mm	,0	0 2,	00	NR 1	124	Gasket SB-ATI-PV009/1 * SB-ATI-PF0 FLAT-RING	01(125÷250AA	ARH) _ A	.9C				
										N	1 Erection				Total Kg:	259,08		
SX2	SLS - SE	CT. 77	-DUCT		770	13 - 0				SL1	1/	1		TO	OTAL Kg:	259,08		

WIRE NET- MESH 2,54x \emptyset 1mm - C.s. GALVANIZED = mq. 0,6 HV_77.7

Plant SX2 SLS - SECT. 77 -DUCT

Line 77013 - 0

Dang. fluid type

Area

Zones

Piping Class 124

Fluid
Coating

Sketch Sht 1/1

Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0

De pres Isometric code

System

Op tem Page 1

	I	DESMI	ET - Ba	allestra					S	KETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0	13	/04/2010
	PUMA:	5		13/04/20	010 11.22	.11							DOC:	1E35-0	65-020		•	
		D	ESMET	- Ballestra	a					S	SLS - SECT. 77	Size: mm 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
754	1100	0	mm	4,0		mm	,00	8,50	m	124	Pipe SB-ATI-PT002/0 PL Welded Fe 36	0 B - UNI 7070)	ĺ		933,18		
1502	8	0	mm			mm	,00	1,00	NR	124	Valve Plug SB-ATI-VM001/0 THRD-F 182 Gr. F316 M 53	NPT PN 16 Fo	rged AS	TM A		0,20		
1566	1100	0	mm	4,0		mm	,00	2,00	NR	124	90° Miter SB-ATI-PC003/0 BE Welded	Fe 360 B - UN	7070 R	=1.5 D		580,80		
476	8	0	mm			mm	,00	1,00	NR	124	Coupling SB-ATI-PR008/0 THRD-F N	PT 3000# Forgo	ed ASTM	1 A		0,06		
									•		105							
										N	1 Erection				Total Kg:	1514,25		

SL1

SX2

SLS - SECT. 77 -DUCT

77014 - 0

77Y5 Piping Class 124 Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0 Plant SX2 SLS - SECT. 77 - DUCT N. 1 manhole DN500 Std.46144 Line 77014 - 0 Fluid System Op tem Dang. fluid type Coating De pres Area Sketch Sht 1/1 Isometric code Page 1 Zones

TOTAL Kg:

1514,25

DESMET -	- Ballestra	SKETCHES MATERIAL LIST	PROJ:	1E35	REV: 0	13/04/2010
PUMA5	13/04/2010 11.22.11		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.bly	Branch
754	1100	0	mm	4,0	mm	,00	0,60	m	124	Pipe SB-ATI-PT002/0 PL Welded Fe 360 B - UNI 7070		65,87	
	·						1 Erection	Total Kg:	65,87				
SX2	SLS - SE	CT. 77 -D	UCT		77015	- 0	SL1 1/1				TOTAL Kg:	65,87	

77Y4 77Y21	Plant SX2 SLS - SECT. 77 -DUCT	Piping Class 124	Welding specification	n SB-ATI-SP006/0 SB-ATI- SP007/0
	Line 77015 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area	Sketch Sht 1/1	Isometric code	Page 1
'	Zones			

	Ι	DESME	Γ - Bal	llestra					S	KET	CH	ES MATERIAL LIST		PROJ:	1E35		REV: 0	3/04/2010
	PUMA5	5		13/04/20	10 11.22.	11								DOC:	1E35-	65-020		
	DESMET - Ballestra									Sl	LS - SECT. 77	Size: mm Thl	k: 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.bly	Branch
768	600	0	mm	3.0		mm	00	0 0.50 m 164 Pine SR-ATI-PT005/0 PI Welder					M A 240 Gr T	D304			22.80	

Mark	S1	S2		T1	T2	Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg) As	.bly Branch
768	600	0	mm	3,0	mm	,00	0,50	m	164	Pipe SB-ATI-PT005/0 PL Welded ASTM A 240 Gr. TP304		22,89	
164	600	0	mm		mm	,00	1,00	NR	164	Flange Lap-Joint SB-ATI-PF012/0 * SB-ATI-PF012 FF Smooth From	1951		
										Plate Fe 360 B - UNI 7070			·
535	600	0	mm	3,0	mm	,00	1,00	NR	164	Stub-End SB-ATI-PF009/0 BE * From Plate ASTM A 240 Gr. TP304			
1950	M12	0	mm		mm	35,00	8,00	NR	164	Machine Bolt + 1 Nut SB-ATI-PV008A/0 - UNI 5727 + UNI 5592 4.6		0,56	
	'					-		_		UNI 3740 + 4A UNI 3740			
1951	M12	0	mm		mm	40,00	8,00	NR	164	Machine Bolt + 1 Nut SB-ATI-PV008A/0 - UNI 5727 + UNI 5592 4.6		0,64	
	'									UNI 3740 + 4A UNI 3740			
321	600	0	mm		mm	,00	1,00	NR	164	Gasket SB-ATI-PV009/1 * SB-ATI-PF012 FF Smooth _ A9C			
	•	·							N	M Erection	Total Kg:	24,09	
SX2	SLS - SE	SLS - SECT. 77 -DUCT 77018 - 0 SL1							SL1	1/1	ΓΟΤΑL Kg:	24,09	

77Y12	Plant SX2 SLS - SECT. 77 -DUCT	Piping Class 164	Welding specificati	on SB-ATI-SP006/0 SB-ATI- SP007/0
	Line 77018 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area	Sketch Sht 1/1	Isometric code	Page 1
1	Zones			

		DESMI	ET - Ba	allestra					S	KETCH	IES MATERIAL LIST		PROJ:	1E35		REV: 0	13.	/04/2010
	PUMA	.5		13/04/2	010 11.22	.11							DOC:	1E35-65	5-020		•	
		D	ESMET	- Ballestr	a					S	SLS - SECT. 77	Size: mm Thk	: mm	Temp: °C	2	Pres: BAR	C	Corr: mm
Mark	S1	S2		T1	Т2		Len mm	Qty	Um	Pip. class	Component			G	en. Bolt	Weight (Kg)	As.bly	Branch
742	450	0	mm	3,0		mm	,00	5,00	m	124	Pipe SB-ATI-PT002/0 PL Welded Fe 36	0 B - UNI 7070)			168,01		
1502	8	0	mm			mm	,00	1,00	NR	124	Valve Plug SB-ATI-VM001/0 THRD-F 182 Gr. F316 M 53	NPT PN 16 Fo	rged AS	ГМ А		0,20		
1554	450	0	mm	3,0		mm	,00	2,00	NR	124	90° Miter SB-ATI-PC003/0 BE Welded	Fe 360 B - UN	7070 R	=1.5 D		71,40		
476	8	0	mm			mm	,00	1,00	NR	124	Coupling SB-ATI-PR008/0 THRD-F N	PT 3000# Forgo	ed ASTM	I A		0,06		
										N	A Erection			ŗ	Total Kg:	239,67		

TOTAL Kg:

239,67

SL1

SX2

SLS - SECT. 77 -DUCT

77022 - 0

N. 1 HAND-HOLE DN350 Std.40259 Piping Class 124 Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0 Plant SX2 SLS - SECT. 77 - DUCT 77Y28 Line 77022 - 0 Fluid System Dang. fluid type Op tem Coating De pres Area 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 11.22.12			DOC:	1E35-65-020		
DESM	ET - Ballestra	SLS - SECT. 77	Size: mm Thk	t: 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
767	550	0	mm	3,0	mm	,00	18,50	m	164	Pipe SB-ATI-PT005/0 PL Welded ASTM A 240 Gr. TP304		776,17		
163	550	0	mm		mm	,00	2,00	NR	164	Flange Lap-Joint SB-ATI-PF012/0 * SB-ATI-PF012 FF Smooth From	1951			
										Plate Fe 360 B - UNI 7070				
534	550	0	mm	3,0	mm	,00	2,00	NR	164	Stub-End SB-ATI-PF009/0 BE * From Plate ASTM A 240 Gr. TP304				
1950	M12	0	mm		mm	35,00	16,00	NR	164	Machine Bolt + 1 Nut SB-ATI-PV008A/0 - UNI 5727 + UNI 5592 4.6		1,12		
										UNI 3740 + 4A UNI 3740				
1951	M12	0	mm		mm	40,00	16,00	NR	164	Machine Bolt + 1 Nut SB-ATI-PV008A/0 - UNI 5727 + UNI 5592 4.6		1,28		
						-				UNI 3740 + 4A UNI 3740				
320	550	0	mm		mm	,00	2,00	NR	164	Gasket SB-ATI-PV009/1 * SB-ATI-PF012 FF Smooth _ A9C				
									N	1 Erection	Total Kg:	778,57		
SX2	SLS - SE	CT. 77 -	DUCT		77023 -	. 0			SL1	1/1	ΓΟΤΑL Kg:	778,57		

 Plant SX2 SLS - SECT. 77 - DUCT
 Piping Class 164
 Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0

 Line 77023 - 0
 Fluid
 System

 Dang. fluid type
 Coating
 De pres
 Op tem

 Area
 Sketch Sht 1/1
 Isometric code
 Page 1

 Zones

DESMET - Ballestra							SKETCHES MATERIAL LIST PROJ:						: 1E35		REV: 0 1	3/04/2010
	PUMA5 13/04/2010 11.22.12							DOC: 1E35					1E35-	-65-020		
DESMET - Ballestra										S	LS - 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.bly	Branch
728	900	0	mm	6,0		mm	,00	5,00	m	109	Pipe SB-ATI-PT003/0 PL Welded Fe 4	10-1 KW - UNI 5869			671,74	
239	900	0	mm			mm	,00	2,00	NR	109	Flange Slip-On SB-ATI-PF001/0 * SB-From Plate Fe 510-C UNI 7070	ATI-PF001(125÷250A	ARH)	1917		
1358	900	0	mm			mm	,00	1,00	NR	109	Blind & Spacer SB-ATI-PA001/0 WAF From Plate Fe 410-1 KW - UNI 5869	ER * FF (125÷250 AAI	RH)	1919		
1540	900	0	mm	6,0		mm	,00	2,00	NR	109	90° Miter SB-ATI-PC003/0 BE Welded R=1.5 D	Fe 410-1 KW - UNI 58	369		607,20	
1917	M12	0	mm			mm	55,00	24,00	NR	109	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 A Tab.9 ASTM A 193 B7 / A 194 Gr.2H	ASME B18.2.1 UNC/2.2	2		1,92	
1919	M12	0	mm			mm	70,00	24,00	NR	109	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 A Tab.9 ASTM A 193 B7 / A 194 Gr.2H	ASME B18.2.1 UNC/2.2	2		2,40	
274	900	0	mm			mm	,00	3,00	NR	109	Gasket SB-ATI-PV009/1 * SB-ATI-PF0 FLAT-RING	001(125÷250AARH)	A9D			
										N	1 Erection			Total Kg:	1283,26	
SX2	X2 SLS - SECT. 77 -DUCT 77028 - 0				- 0	SL1			1.	/ 1	1	TOTAL Kg:	1283,26			

Plant SX2 SLS - SECT. 77 -DUCT	Piping Class 109	Welding specification SB-ATI-SP006/0 SB-ATI- SP007/0		
Line 77028 - 0	Fluid	System		
Dang. fluid type	Coating	De pres	Op tem	
Area	Sketch Sht 1/1	Isometric code	Page 1	
Zones				