

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5			23/07/2012 15.00.08												DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
982	1	0	In	3,38		mm	,00	16,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		40,04											
986	2+1/2	0	In	5,16		mm	,00	12,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		103,59											
68	1	0	In			mm	,00	2,00	NR	202	45° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,70											
181	1	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		4,40											
2568	2+1/2	0	In			mm	,00	1,00	NR	202	Tee Straight SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized													
767	1	0	In			mm	,00	1,00	NR	202	Plug Hex. SB-ATI-PR008/0 THRD-M NPT 3000# Forged ASTM A 105 Galvanized		0,35											
2349	2+1/2	1/2	In			mm	,00	1,00	NR	202	Coupling Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,13											
2351	2+1/2	1	In			mm	,00	1,00	NR	202	Coupling Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,13											
2354	2+1/2	2	In			mm	,00	2,00	NR	202	Coupling Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,26											
M Erection													Total Kg:		150,59									
SZ1	SABIZ PLANT ANSI				01101 - 0				A		Area A		1 / 1		TOTAL Kg:		150,59							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 202	Welding specification
	Line 01101 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.08											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
984	1+1/2	0	In	3,68		mm	,00	20,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		80,98											
183	1+1/2	0	In			mm	,00	1,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		2,40											
1743	1+1/2	1/2	In			mm	,00	7,00	NR	202	Tee Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized													
2498	1+1/2	0	In			mm	,00	1,00	NR	202	Cap SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,75											
M Erection												Total Kg:		84,13										
SZ1	SABIZ PLANT ANSI				01103 - 0				A		Area A		1 / 1		TOTAL Kg:		84,13							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	01103 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
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DESMET - Ballestra								SKETCHES MATERIAL LIST										PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.08														DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h										Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch												
980	1/2	0	In	2,77		mm	,00	21,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		26,58														
179	1/2	0	In			mm	,00	1,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,40														
2562	1/2	0	In			mm	,00	6,00	NR	202	Tee Straight SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,68														
2494	1/2	0	In			mm	,00	1,00	NR	202	Cap SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,12														
M Erection												Total Kg:		28,78													
SZ1	SABIZ PLANT ANSI				01104 - 0				A		Area A		1 / 1		TOTAL Kg:		28,78										

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	01104 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.08										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component					Gen. Bolt	Weight (Kg)		As.bly	Branch			
982	1	0	In	3,38		mm	,00	13,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized						32,53						
1738	1	1/2	In			mm	,00	16,00	NR	202	Tee Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized												
2496	1	0	In			mm	,00	1,00	NR	202	Cap SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized						0,25						
M Erection																Total Kg:		32,78					
SZ1	SABIZ PLANT ANSI				01105 - 0				A		Area A		1 / 1		TOTAL Kg:		32,78						

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 202	Welding specification
	Line 01105 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.08										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component					Gen. Bolt	Weight (Kg)		As.bly	Branch			
982	1	0	In	3,38		mm	,00	19,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized						47,54						
1738	1	1/2	In			mm	,00	15,00	NR	202	Tee Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized												
2496	1	0	In			mm	,00	1,00	NR	202	Cap SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized						0,25						
M Erection																Total Kg:		47,79					
SZ1	SABIZ PLANT ANSI					01106 - 0					A	Area A			1 / 1			TOTAL Kg:		47,79			

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	01106 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
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DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
984	1+1/2	0	In	3,68		mm	,00	46,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		186,26		
183	1+1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		9,60		
1743	1+1/2	1/2	In			mm	,00	1,00	NR	202	Tee Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized				
1745	1+1/2	1	In			mm	,00	1,00	NR	202	Tee Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized				
2566	1+1/2	0	In			mm	,00	1,00	NR	202	Tee Straight SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized				
2498	1+1/2	0	In			mm	,00	2,00	NR	202	Cap SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,50		
M Erection												Total Kg:		197,36	
SZ1	SABIZ PLANT ANSI			01107 - 0			A			Area A	1 / 1	TOTAL Kg:		197,36	

	Plant	SZ1	SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	01107 - 0		Fluid		System	
	Dang. fluid type			Coating		De pres	Op tem
	Area	Area A		Sketch Sht	1 / 1	Isometric code	Page 1
	Zones						

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PUMA5				23/07/2012 15.00.08											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
982	1	0	In	3,38		mm	,00	24,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		60,05											
181	1	0	In			mm	,00	2,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		2,20											
2564	1	0	In			mm	,00	2,00	NR	202	Tee Straight SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,14											
2496	1	0	In			mm	,00	1,00	NR	202	Cap SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,25											
M Erection													Total Kg:		63,64									
SZ1	SABIZ PLANT ANSI				01108 - 0				A	Area A		1 / 1		TOTAL Kg:		63,64								

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	01108 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST										PROJ:		2F11		REV:		0		23/07/2012	
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DESMET - Ballestra								SABIZ 8000 kg/h										Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch												
980	1/2	0	In	2,77		mm	,00	15,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		18,99														
179	1/2	0	In			mm	,00	1,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,40														
2562	1/2	0	In			mm	,00	2,00	NR	202	Tee Straight SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,56														
2494	1/2	0	In			mm	,00	1,00	NR	202	Cap SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,12														
M Erection												Total Kg:		20,07													
SZ1	SABIZ PLANT ANSI				01110 - 0				A		Area A		1 / 1		TOTAL Kg:		20,07										

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	01110 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					



DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.08										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
982	1	0	In	3,38		mm	,00	12,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		30,03										
181	1	0	In			mm	,00	3,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		3,30										
1738	1	1/2	In			mm	,00	2,00	NR	202	Tee Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized												
2496	1	0	In			mm	,00	1,00	NR	202	Cap SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,25										
M Erection												Total Kg:		33,58									
SZ1	SABIZ PLANT ANSI				01111 - 0				A		Area A		1 / 1		TOTAL Kg:		33,58						

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	01111 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.08											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
985	2	0	In	3,91		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		32,62											
1748	2	1	In			mm	,00	1,00	NR	202	Tee Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized													
2567	2	0	In			mm	,00	1,00	NR	202	Tee Straight SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized													
544	1	1/2	In			mm	,00	1,00	NR	202	Reducing Insert M/F SB-ATI-PR008/0 THRD-M NPT x THRD-F 3000# Forged ASTM A 105 Galvanized		0,19											
2499	2	0	In			mm	,00	1,00	NR	202	Cap SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
M Erection												Total Kg:		34,41										
SZ1	SABIZ PLANT ANSI				01113 - 0				A		Area A		1 / 1		TOTAL Kg:		34,41							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	01113 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
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DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.08										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component					Gen. Bolt	Weight (Kg)		As.bly	Branch			
982	1	0	In	3,38		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized						15,01						
2564	1	0	In			mm	,00	1,00	NR	202	Tee Straight SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized						0,57						
2496	1	0	In			mm	,00	1,00	NR	202	Cap SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized						0,25						
M Erection																Total Kg:		15,83					
SZ1	SABIZ PLANT ANSI				01114 - 0				A		Area A		1 / 1		TOTAL Kg:		15,83						

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 202	Welding specification	
	Line 01114 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area Area A	Sketch Sht 1 / 1	Isometric code	Page 1
	Zones			

DESMET - Ballestra								SKETCHES MATERIAL LIST										PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.09														DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h										Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch												
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59														
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30														
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60														
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30														
M Erection												Total Kg:		9,79													
SZ1	SABIZ PLANT ANSI				01115 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79										

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	01115 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
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DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection													Total Kg:		9,79									
SZ1	SABIZ PLANT ANSI				01117 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	01117 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.09											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection													Total Kg:		9,79									
SZ1	SABIZ PLANT ANSI				01118 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	01118 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.09											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection												Total Kg:		9,79										
SZ1	SABIZ PLANT ANSI				01119 - 0				A	Area A		1 / 1		TOTAL Kg:		9,79								

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	01119 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.09											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
982	1	0	In	3,38		mm	,00	8,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		20,02											
181	1	0	In			mm	,00	2,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		2,20											
1738	1	1/2	In			mm	,00	2,00	NR	202	Tee Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized													
2564	1	0	In			mm	,00	1,00	NR	202	Tee Straight SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,57											
2496	1	0	In			mm	,00	1,00	NR	202	Cap SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,25											
M Erection												Total Kg:		23,04										
SZ1	SABIZ PLANT ANSI				01122 - 0				A		Area A		1 / 1		TOTAL Kg:		23,04							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 202	Welding specification
	Line 01122 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1



DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.09											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
900	3	0	In	3,18		mm	,00	12,00	m	205	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		80,66											
2421	3	0	In	3,18		mm	,00	1,00	NR	205	Cap ASME B16.9 BE sch.40 Seamless ASTM A 234 Gr. WPB		0,41											
M Erection													Total Kg:		81,08									
SZ1	SABIZ PLANT ANSI				03101 - 0				A		Area A		1 / 1		TOTAL Kg:		81,08							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	03101 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.09											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
935	1+1/2	0	In	3,68		mm	,00	12,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		48,59											
2418	1+1/2	0	In	3,68		mm	,00	1,00	NR	205	Cap ASME B16.9 BE sch.40 Seamless ASTM A 234 Gr. WPB		0,18											
M Erection													Total Kg:		48,77									
SZ1	SABIZ PLANT ANSI				03102 - 0				A		Area A		1 / 1		TOTAL Kg:		48,77							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	03102 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.09											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
936	2	0	In	3,91		mm	,00	21,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		114,18											
2419	2	0	In	3,91		mm	,00	1,00	NR	205	Cap ASME B16.9 BE sch.40 Seamless ASTM A 234 Gr. WPB		0,31											
M Erection													Total Kg:		114,49									
SZ1	SABIZ PLANT ANSI				03103 - 0				A		Area A		1 / 1		TOTAL Kg:		114,49							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	03103 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST								PROJ:		2F11		REV:		0		23/07/2012		
PUMA5				23/07/2012 15.00.09												DOC:		2F11.65.102								
DESMET - Ballestra								SABIZ 8000 kg/h								Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm		
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component										Gen. Bolt	Weight (Kg)		As.bly	Branch	
933	1	0	In	3,38		mm	,00	21,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B											52,55				
2416	1	0	In	3,38		mm	,00	1,00	NR	205	Cap ASME B16.9 BE sch.40 Seamless ASTM A 234 Gr. WPB											0,10				
M Erection																	Total Kg:		52,65							
SZ1	SABIZ PLANT ANSI				03104 - 0				A		Area A				1 / 1				TOTAL Kg:		52,65					

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	03104 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ: 2F11		REV: 0	23/07/2012	
PUMA5			23/07/2012 15.00.09												DOC: 2F11.65.102				
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch				
933	1	0	In	3,38		mm	,00	20,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		50,04						
229	1	0	In	3,38		mm	,00	1,00	NR	205	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,14						
2416	1	0	In	3,38		mm	,00	1,00	NR	205	Cap ASME B16.9 BE sch.40 Seamless ASTM A 234 Gr. WPB		0,10						
M Erection													Total Kg:	50,28					
SZ1	SABIZ PLANT ANSI					03105 - 0					A	Area A	1 / 1	TOTAL Kg:	50,28				

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 03105 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ: 2F11		REV: 0	23/07/2012	
PUMA5			23/07/2012 15.00.09												DOC: 2F11.65.102				
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch				
933	1	0	In	3,38		mm	,00	20,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		50,04						
229	1	0	In	3,38		mm	,00	1,00	NR	205	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,14						
2416	1	0	In	3,38		mm	,00	1,00	NR	205	Cap ASME B16.9 BE sch.40 Seamless ASTM A 234 Gr. WPB		0,10						
M Erection													Total Kg:	50,28					
SZ1	SABIZ PLANT ANSI					03106 - 0					A	Area A	1 / 1		TOTAL Kg:	50,28			

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 03106 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ: 2F11		REV: 0	23/07/2012		
PUMA5			23/07/2012 15.00.09												DOC: 2F11.65.102					
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch					
935	1+1/2	0	In	3,68		mm	,00	17,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		68,84							
231	1+1/2	0	In	3,68		mm	,00	1,00	NR	205	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,37							
2418	1+1/2	0	In	3,68		mm	,00	1,00	NR	205	Cap ASME B16.9 BE sch.40 Seamless ASTM A 234 Gr. WPB		0,18							
M Erection													Total Kg:		69,39					
SZ1	SABIZ PLANT ANSI				03107 - 0				A	Area A		1 / 1		TOTAL Kg: 69,39						

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 03107 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST								PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.09												DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h								Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch										
931	1/2	0	In	2,77		mm	,00	17,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		21,52												
193	1/2	0	In			mm	,00	1,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,25												
2576	1/2	0	In			mm	,00	4,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105														
2508	1/2	0	In			mm	,00	1,00	NR	205	Cap SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,12												
M Erection													Total Kg:		21,89										
SZ1	SABIZ PLANT ANSI				03108 - 0				A		Area A		1 / 1		TOTAL Kg:		21,89								

	Plant	SZ1	SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	03108 - 0		Fluid		System	
	Dang. fluid type			Coating		De pres	
	Area	Area A		Sketch Sht	1 / 1	Isometric code	
	Zones					Op tem	
							Page 1



DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.09										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
931	1/2	0	In	2,77		mm	,00	6,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		7,59										
2025	1/2	0	In			mm	,00	3,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		5,10										
2678	1/2	0	In			mm	,00	1,00	NR	205	Steam Trap SB-ATI-VT005/0 SW-F 300 LB Forged ASTM A 105 T 66		0,80										
193	1/2	0	In			mm	,00	9,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		2,25										
2576	1/2	0	In			mm	,00	2,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105												
M Erection													Total Kg:		15,74								
SZ1	SABIZ PLANT ANSI				03111 - 0				A	Area A		1 / 1		TOTAL Kg:		15,74							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 03111 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.10											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	7,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		8,86											
2025	1/2	0	In			mm	,00	3,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		5,10											
2678	1/2	0	In			mm	,00	1,00	NR	205	Steam Trap SB-ATI-VT005/0 SW-F 300 LB Forged ASTM A 105 T 66		0,80											
193	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75											
2576	1/2	0	In			mm	,00	2,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105													
M Erection												Total Kg:		15,51										
SZ1	SABIZ PLANT ANSI				03112 - 0				A		Area A		1 / 1		TOTAL Kg:		15,51							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 03112 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST								PROJ: 2F11		REV: 0		23/07/2012					
PUMA5				23/07/2012 15.00.10												DOC: 2F11.65.102									
DESMET - Ballestra								SABIZ 8000 kg/h								Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component								Gen. Bolt	Weight (Kg)		As.bly	Branch		
933	1	0	In	3,38		mm	,00	18,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B									45,04					
229	1	0	In	3,38		mm	,00	3,00	NR	205	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB									0,41					
2416	1	0	In	3,38		mm	,00	1,00	NR	205	Cap ASME B16.9 BE sch.40 Seamless ASTM A 234 Gr. WPB									0,10					
M Erection																Total Kg:		45,55							
SZ1	SABIZ PLANT ANSI						03115 - 0				A		Area A				1 / 1		TOTAL Kg:		45,55				

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 03115 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ: 2F11		REV: 0	23/07/2012	
PUMA5			23/07/2012 15.00.10											DOC: 2F11.65.102				
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch			
933	1	0	In	3,38		mm	,00	14,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		35,03					
229	1	0	In	3,38		mm	,00	1,00	NR	205	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,14					
2416	1	0	In	3,38		mm	,00	1,00	NR	205	Cap ASME B16.9 BE sch.40 Seamless ASTM A 234 Gr. WPB		0,10					
M Erection													Total Kg:	35,27				
SZ1	SABIZ PLANT ANSI					03116 - 0					A	Area A	1 / 1	TOTAL Kg:	35,27			

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 03116 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.10											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	14,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		17,72											
193	1/2	0	In			mm	,00	1,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,25											
2576	1/2	0	In			mm	,00	3,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105													
2508	1/2	0	In			mm	,00	1,00	NR	205	Cap SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,12											
M Erection													Total Kg:		18,09									
SZ1	SABIZ PLANT ANSI				03117 - 0				A	Area A		1 / 1		TOTAL Kg:		18,09								

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 03117 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST								PROJ:		2F11		REV:		0		23/07/2012		
PUMA5				23/07/2012 15.00.10												DOC:		2F11.65.102								
DESMET - Ballestra								SABIZ 8000 kg/h								Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm		
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component										Gen. Bolt	Weight (Kg)		As.bly	Branch	
933	1	0	In	3,38		mm	,00	19,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B											47,54				
229	1	0	In	3,38		mm	,00	1,00	NR	205	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB											0,14				
2550	1	0	In			mm	,00	1,00	NR	205	Tee Straight SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105											0,57				
2416	1	0	In	3,38		mm	,00	1,00	NR	205	Cap ASME B16.9 BE sch.40 Seamless ASTM A 234 Gr. WPB											0,10				
M Erection																Total Kg:		48,35								
SZ1	SABIZ PLANT ANSI				03118 - 0				A		Area A				1 / 1				TOTAL Kg:		48,35					

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 03118 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.10											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	4,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		5,06											
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		1,70											
193	1/2	0	In			mm	,00	4,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,00											
2576	1/2	0	In			mm	,00	1,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105													
M Erection													Total Kg:		7,76									
SZ1	SABIZ PLANT ANSI				03119 - 0				A	Area A		1 / 1		TOTAL Kg:		7,76								

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	03119 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.10											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	6,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		7,59											
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		1,70											
193	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75											
2576	1/2	0	In			mm	,00	1,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105													
M Erection													Total Kg:		10,04									
SZ1	SABIZ PLANT ANSI				03120 - 0				A		Area A		1 / 1		TOTAL Kg:		10,04							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	03120 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	
					Page	1



DESMET - Ballestra								SKETCHES MATERIAL LIST								PROJ: 2F11		REV: 0		23/07/2012					
PUMA5				23/07/2012 15.00.10												DOC: 2F11.65.102									
DESMET - Ballestra								SABIZ 8000 kg/h								Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component										Gen. Bolt	Weight (Kg)		As.bly	Branch
935	1+1/2	0	In	3,68		mm	,00	18,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B											72,89			
231	1+1/2	0	In	3,68		mm	,00	5,00	NR	205	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB											1,84			
2418	1+1/2	0	In	3,68		mm	,00	1,00	NR	205	Cap ASME B16.9 BE sch.40 Seamless ASTM A 234 Gr. WPB											0,18			
M Erection																		Total Kg:		74,91					
SZ1	SABIZ PLANT ANSI					03121 - 0					A	Area A					1 / 1		TOTAL Kg:		74,91				

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	03121 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST								PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.10												DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h								Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component								Gen. Bolt	Weight (Kg)		As.bly	Branch		
936	2	0	In	3,91		mm	,00	40,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B									217,49					
2419	2	0	In	3,91		mm	,00	2,00	NR	203	Cap ASME B16.9 BE sch.40 Seamless ASTM A 234 Gr. WPB									0,63					
M Erection																	Total Kg:		218,11						
SZ1	SABIZ PLANT ANSI				04101 - 0				A		Area A				1 / 1		TOTAL Kg:		218,11						

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	04101 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.10											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
936	2	0	In	3,91		mm	,00	40,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		217,49											
2419	2	0	In	3,91		mm	,00	2,00	NR	203	Cap ASME B16.9 BE sch.40 Seamless ASTM A 234 Gr. WPB		0,63											
M Erection													Total Kg:		218,11									
SZ1	SABIZ PLANT ANSI					04102 - 0					A	Area A	1 / 1		TOTAL Kg:		218,11							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	04102 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.10											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
936	2	0	In	3,91		mm	,00	18,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		97,87											
2419	2	0	In	3,91		mm	,00	1,00	NR	203	Cap ASME B16.9 BE sch.40 Seamless ASTM A 234 Gr. WPB		0,31											
M Erection													Total Kg:		98,18									
SZ1	SABIZ PLANT ANSI				05101 - 0				A		Area A		1 / 1		TOTAL Kg:		98,18							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	05101 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.10											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
936	2	0	In	3,91		mm	,00	22,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		119,62											
2419	2	0	In	3,91		mm	,00	2,00	NR	203	Cap ASME B16.9 BE sch.40 Seamless ASTM A 234 Gr. WPB		0,63											
M Erection													Total Kg:		120,24									
SZ1	SABIZ PLANT ANSI				05102 - 0				A		Area A		1 / 1		TOTAL Kg:		120,24							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	05102 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.10											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
936	2	0	In	3,91		mm	,00	21,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		114,18											
2485	2	0	In			mm	,00	1,00	NR	203	Cap SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		1,60											
M Erection													Total Kg:		115,78									
SZ1	SABIZ PLANT ANSI				05103 - 0				A		Area A		1 / 1		TOTAL Kg:		115,78							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	05103 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST								PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.10												DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h								Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component								Gen. Bolt	Weight (Kg)		As.bly	Branch		
936	2	0	In	3,91		mm	,00	21,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B									114,18					
2485	2	0	In			mm	,00	1,00	NR	203	Cap SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105									1,60					
M Erection																Total Kg:		115,78							
SZ1	SABIZ PLANT ANSI				05104 - 0				A		Area A				1 / 1		TOTAL Kg:		115,78						

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	05104 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ: 2F11		REV: 0	23/07/2012		
PUMA5			23/07/2012 15.00.10											DOC: 2F11.65.102					
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch				
935	1+1/2	0	In	3,68		mm	,00	20,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		80,98						
169	1+1/2	0	In			mm	,00	1,00	NR	203	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		2,40						
2484	1+1/2	0	In			mm	,00	1,00	NR	203	Cap SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,75						
M Erection													Total Kg:		84,13				
SZ1	SABIZ PLANT ANSI					05105 - 0					A	Area A	1 / 1	TOTAL Kg:		84,13			

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 05105 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1



DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ: 2F11		REV: 0		23/07/2012					
PUMA5				23/07/2012 15.00.10										DOC: 2F11.65.102									
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
935	1+1/2	0	In	3,68		mm	,00	20,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		80,98										
169	1+1/2	0	In			mm	,00	1,00	NR	203	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		2,40										
2484	1+1/2	0	In			mm	,00	1,00	NR	203	Cap SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,75										
M Erection													Total Kg:		84,13								
SZ1	SABIZ PLANT ANSI					05106 - 0					A	Area A	1 / 1		TOTAL Kg:		84,13						

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 05106 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ: 2F11		REV: 0	23/07/2012	
PUMA5			23/07/2012 15.00.11											DOC: 2F11.65.102				
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch			
935	1+1/2	0	In	3,68		mm	,00	20,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		80,98					
169	1+1/2	0	In			mm	,00	1,00	NR	203	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		2,40					
2484	1+1/2	0	In			mm	,00	1,00	NR	203	Cap SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,75					
M Erection													Total Kg:		84,13			
SZ1	SABIZ PLANT ANSI				05107 - 0				A	Area A		1 / 1		TOTAL Kg:		84,13		

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 05107 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ: 2F11		REV: 0		23/07/2012					
PUMA5			23/07/2012 15.00.11												DOC: 2F11.65.102									
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
935	1+1/2	0	In	3,68		mm	,00	20,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		80,98											
169	1+1/2	0	In			mm	,00	1,00	NR	203	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		2,40											
2484	1+1/2	0	In			mm	,00	1,00	NR	203	Cap SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,75											
M Erection													Total Kg:		84,13									
SZ1	SABIZ PLANT ANSI					05108 - 0					A	Area A	1 / 1		TOTAL Kg:		84,13							

	Plant	SZ1	SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	05108 - 0		Fluid		System	
	Dang. fluid type			Coating		De pres	
	Area	Area A		Sketch Sht	1 / 1	Isometric code	
	Zones					Op tem	
							Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.11											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component							Gen. Bolt	Weight (Kg)		As.bly	Branch		
936	2	0	In	3,91		mm	,00	12,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B								65,25					
2419	2	0	In	3,91		mm	,00	1,00	NR	203	Cap ASME B16.9 BE sch.40 Seamless ASTM A 234 Gr. WPB								0,31					
M Erection																	Total Kg:		65,56					
SZ1	SABIZ PLANT ANSI				07101 - 0				A		Area A				1 / 1		TOTAL Kg:		65,56					

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	07101 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST					PROJ: 2F11		REV: 0		23/07/2012			
PUMA5			23/07/2012 15.00.11										DOC: 2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h					Size: In    Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch					
936	2	0	In	3,91		mm	,00	22,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		119,62							
2419	2	0	In	3,91		mm	,00	1,00	NR	203	Cap ASME B16.9 BE sch.40 Seamless ASTM A 234 Gr. WPB		0,31							
M Erection													Total Kg:		119,93					
SZ1	SABIZ PLANT ANSI				07102 - 0				A		Area A		1 / 1		TOTAL Kg:		119,93			

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 07102 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ: 2F11		REV: 0		23/07/2012					
PUMA5				23/07/2012 15.00.11											DOC: 2F11.65.102									
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
936	2	0	In	3,91		mm	,00	19,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		103,31											
232	2	0	In	3,91		mm	,00	1,00	NR	203	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,66											
2419	2	0	In	3,91		mm	,00	1,00	NR	203	Cap ASME B16.9 BE sch.40 Seamless ASTM A 234 Gr. WPB		0,31											
M Erection													Total Kg:		104,28									
SZ1	SABIZ PLANT ANSI					07103 - 0					A	Area A	1 / 1		TOTAL Kg:		104,28							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	07103 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ: 2F11		REV: 0	23/07/2012	
PUMA5			23/07/2012 15.00.11											DOC: 2F11.65.102				
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch			
931	1/2	0	In	2,77		mm	,00	19,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		24,05					
165	1/2	0	In			mm	,00	1,00	NR	203	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,40					
2480	1/2	0	In			mm	,00	1,00	NR	203	Cap SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,12					
M Erection													Total Kg:		24,57			
SZ1	SABIZ PLANT ANSI					07104 - 0					A	Area A	1 / 1		TOTAL Kg: 24,57			

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 07104 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ: 2F11		REV: 0		23/07/2012					
PUMA5			23/07/2012 15.00.11											DOC: 2F11.65.102									
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
933	1	0	In	3,38		mm	,00	26,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		65,06										
229	1	0	In	3,38		mm	,00	4,00	NR	203	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,54										
2482	1	0	In			mm	,00	1,00	NR	203	Cap SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,25										
M Erection													Total Kg:		65,85								
SZ1	SABIZ PLANT ANSI					07106 - 0					A	Area A	1 / 1		TOTAL Kg:		65,85						

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 07106 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1



DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:	2F11		REV:	0	23/07/2012				
PUMA5				23/07/2012 15.00.11										DOC:	2F11.65.102								
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
936	2	0	In	3,91		mm	,00	9,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		48,93										
1806	2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		2,20										
2087	2	0	In			mm	,00	1,00	NR	203	Strainer Y-Type SB-ATI-VF018/0 THRD-F NPT 200 LB Forged BRONZE F 70		5,00										
330	2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2838	2,20										
232	2	0	In	3,91		mm	,00	6,00	NR	203	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		3,99										
826	2	0	In			mm	,00	1,00	NR	203	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		2,01										
2838	5/8	0	In			mm	85,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,84										
376	2	0	In			mm	,00	1,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C												
M Erection												Total Kg:		65,17									
SZ1	SABIZ PLANT ANSI				62023 - 0				A	Area A		1 / 1		TOTAL Kg:		65,17							

LCV\_62.1

Plant SZ1 SABIZ PLANT ANSI  
  
Line 62023 - 0  
Dang. fluid type  
Area Area A  
Zones

Piping Class 203  
  
Fluid  
Coating  
Sketch Sht 1 / 1

Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0  
  
System  
De pres  
Isometric code  
  
Op tem  
  
Page 1

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.11		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
900	3	0	In	3,18		mm	,00	3,00	m	203	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		20,17		
332	3	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	4,10		
199	3	0	In	3,18		mm	,00	1,00	NR	203	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		1,18		
2840	5/8	0	In			mm	95,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,92		
378	3	0	In			mm	,00	1,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C				
M Erection												Total Kg:	26,36		

SZ1	SABIZ PLANT ANSI	62024 - 0	A	Area A	1 / 1	TOTAL Kg:	26,36
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	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 62024 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.11		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
936	2	0	In	3,91		mm	,00	1,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		5,44		
1806	2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		2,20		
330	2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2838	2,20		
2838	5/8	0	In			mm	85,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,84		
376	2	0	In			mm	,00	1,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C				
M Erection												Total Kg:	10,68		

SZ1	SABIZ PLANT ANSI		62025 - 0		A	Area A	1 / 1		TOTAL Kg:	10,68
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	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	62025 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ: 2F11		REV: 0		23/07/2012						
PUMA5			23/07/2012 15.00.11											DOC: 2F11.65.102										
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm		
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component						Gen. Bolt	Weight (Kg)		As.bly	Branch			
901	4	0	In	3,18		mm	,00	27,00	m	203	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B							235,28						
87	4	0	In	3,18		mm	,00	2,00	NR	203	45° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB							2,04						
200	4	0	In	3,18		mm	,00	2,00	NR	203	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB							4,13						
M Erection																Total Kg:		241,44						
SZ1	SABIZ PLANT ANSI					62026 - 0					A	Area A					1 / 1		TOTAL Kg:		241,44			

FUNNEL ST. 46250 TYPE B > 4" Pz. N. 1	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	62026 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5			23/07/2012 15.00.11												DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
900	3	0	In	3,18		mm	,00	6,00	m	203	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		40,33											
2742	3	0	In			mm	,00	1,00	NR	203	Valve Butterfly With Gasket SB-ATI-VB016/0 WAFER 150 LB RF (125÷250 AARH) Cast DUCTILE IRON B 74	2848	5,20											
332	3	0	In			mm	,00	2,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	8,20											
199	3	0	In	3,18		mm	,00	2,00	NR	203	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		2,35											
2840	5/8	0	In			mm	95,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,92											
2848	5/8	0	In			mm	145,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		1,20											
378	3	0	In			mm	,00	1,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C													
2985	5/8	0	In			mm	45,00	4,00	NR	216	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7 Galvanized		0,64											
M Erection												Total Kg:		58,85										
SZ1	SABIZ PLANT ANSI					62027 - 0					A	Area A	1 / 1		TOTAL Kg:		58,85							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 62027 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST										PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.12														DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h								Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm			
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch												
936	2	0	In	3,91		mm	,00	25,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		135,93														
1806	2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		2,20														
2742	3	0	In			mm	,00	1,00	NR	203	Valve Butterfly With Gasket SB-ATI-VB016/0 WAFER 150 LB RF (125÷250 AARH) Cast DUCTILE IRON B 74	2848	5,20														
330	2	0	In			mm	,00	3,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2838	6,60														
332	3	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	4,10														
119	2	0	In	3,91		mm	,00	2,00	NR	203	45° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,63														
199	3	0	In	3,18		mm	,00	1,00	NR	203	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		1,18														
232	2	0	In	3,91		mm	,00	8,00	NR	203	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		5,32														
1011	3	2	In	3,18	3,91	mm	,00	1,00	NR	203	Reducer Concentric ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		0,57														
826	2	0	In			mm	,00	1,00	NR	203	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		2,01														
2838	5/8	0	In			mm	85,00	12,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		2,52														
2848	5/8	0	In			mm	145,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		1,20														
376	2	0	In			mm	,00	3,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C																
M Erection												Total Kg:		167,45													
SZ1	SABIZ PLANT ANSI				62029 - 0				A	Area A		1 / 1		TOTAL Kg:		167,45											

FQ\_62.1

Plant SZ1 SABIZ PLANT ANSI  
  
Line 62029 - 0  
Dang. fluid type  
Area Area A  
Zones

Piping Class 203  
  
Fluid  
Coating  
Sketch Sht 1 / 1

Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0  
  
System  
De pres  
Isometric code  
  
Op tem  
  
Page 1

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.12		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
901	4	0	In	3,18		mm	,00	1,50	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		13,07		
333	4	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	5,60		
200	4	0	In	3,18		mm	,00	1,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		2,07		
2840	5/8	0	In			mm	95,00	8,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		1,84		
407	4	0	In			mm	,00	1,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B				
M Erection												Total Kg:	22,58		

SZ1	SABIZ PLANT ANSI	62030 - 0	A	Area A	1 / 1	TOTAL Kg:	22,58
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	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 62030 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.12											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
904	6	0	In	3,96		mm	,00	4,00	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		64,19											
931	1/2	0	In	2,77		mm	,00	0,50	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,63											
1898	1/2	0	In			mm	,00	1,00	NR	212	Valve Check SB-ATI-VR018/0 SW-F 800# Forged ASTM A 105 R 83		1,90											
335	6	0	In			mm	,00	2,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2850	15,00											
203	6	0	In	3,96		mm	,00	1,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		5,66											
2850	3/4	0	In			mm	100,00	8,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		6,72											
409	6	0	In			mm	,00	3,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B													
2978	3/4	0	In			mm	50,00	16,00	NR	212	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7		10,24											
M Erection													Total Kg:		104,35									
SZ1	SABIZ PLANT ANSI				62031 - 0				A	Area A			1 / 1		TOTAL Kg:		104,35							

HV\_62.2 DN 6"

Plant SZ1 SABIZ PLANT ANSI

Piping Class 212

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

Line 62031 - 0

Fluid

System

Dang. fluid type

Coating

De pres

Area Area A

Sketch Sht 1 / 1

Isometric code

Op tem

Zones

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DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.12										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component						Gen. Bolt	Weight (Kg)		As.bly	Branch		
904	6	0	In	3,96		mm	,00	2,00	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B							32,10					
935	1+1/2	0	In	3,68		mm	,00	0,50	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B							2,02					
1829	1+1/2	0	In			mm	,00	1,00	NR	212	Valve Ball Full Port SB-ATI-VS019/0 THRD-F NPT 800# Forged ASTM A 105 S 98							3,20					
2757	6	0	In			mm	,00	1,00	NR	212	Valve Butterfly With Gasket SB-ATI-VB030/0 WAFER 150 LB RF (125÷250 AARH) Cast DUCTILE IRON B 85						2858	10,30					
335	6	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105						2850	7,50					
203	6	0	In	3,96		mm	,00	2,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB							11,33					
231	1+1/2	0	In	3,68		mm	,00	1,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB							0,37					
1026	6	3	In	3,96	3,18	mm	,00	1,00	NR	212	Reducer Concentric ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB							2,18					
2858	3/4	0	In			mm	160,00	8,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H							8,64					
M Erection												Total Kg:		77,63									
SZ1	SABIZ PLANT ANSI				62032 - 0				A		Area A		1 / 1		TOTAL Kg:		77,63						

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0		
	Line 62032 - 0	Fluid	System		
	Dang. fluid type	Coating	De pres		Op tem
	Area Area A	Sketch Sht 1 / 1	Isometric code		Page 1
	Zones				

DESMET - Ballestra								SKETCHES MATERIAL LIST					PROJ: 2F11		REV: 0		23/07/2012	
PUMA5			23/07/2012 15.00.12										DOC: 2F11.65.102					
DESMET - Ballestra								SABIZ 8000 kg/h					Size: In    Thk: mm    Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch			
900	3	0	In	3,18		mm	,00	34,00	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		228,55					
332	3	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	4,10					
199	3	0	In	3,18		mm	,00	6,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		7,06					
1011	3	2	In	3,18	3,91	mm	,00	1,00	NR	212	Reducer Concentric ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		0,57					
2840	5/8	0	In			mm	95,00	4,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,92					
406	3	0	In			mm	,00	1,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B							
M Erection												Total Kg:		241,2				
SZ1	SABIZ PLANT ANSI					62033 - 0					A	Area A	1 / 1		TOTAL Kg:		241,2	

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 62033 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.12		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
900	3	0	In	3,18		mm	,00	2,00	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		13,44		
285	3	0	In			mm	,00	1,00	NR	212	Flange Blind ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	5,00		
199	3	0	In	3,18		mm	,00	2,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		2,35		
2840	5/8	0	In			mm	95,00	4,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,92		
406	3	0	In			mm	,00	1,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B				
M Erection												Total Kg:	21,72		

SZ1	SABIZ PLANT ANSI		62034 - 0		A	Area A	1 / 1		TOTAL Kg:	21,72
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	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	212	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	62034 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMAS	23/07/2012 15.00.12		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
901	4	0	In	3,18		mm	,00	4,00	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		34,86		
931	1/2	0	In	2,77		mm	,00	0,50	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,63		
1898	1/2	0	In			mm	,00	1,00	NR	212	Valve Check SB-ATI-VR018/0 SW-F 800# Forged ASTM A 105 R 83		1,90		
2695	4	0	In			mm	,00	1,00	NR	212	Valve Ball Type Bottom SB-ATI-VS051/0 LUG 150 LB RF (125÷250 AARH) Cast ASTM A 216 Gr. WCB S 128		33,00		
333	4	0	In			mm	,00	2,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	11,20		
200	4	0	In	3,18		mm	,00	2,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		4,13		
2840	5/8	0	In			mm	95,00	8,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		1,84		
407	4	0	In			mm	,00	3,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B				
2975	5/8	0	In			mm	45,00	8,00	NR	212	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7		1,28		
M Erection												Total Kg:	88,84		
SZ1	SABIZ PLANT ANSI			62035 - 0			A			Area A		1 / 1		TOTAL Kg:	88,84

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 62035 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.12		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
901	4	0	In	3,18		mm	,00	40,00	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		348,56		
333	4	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	5,60		
200	4	0	In	3,18		mm	,00	8,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		16,54		
2840	5/8	0	In			mm	95,00	8,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		1,84		
407	4	0	In			mm	,00	1,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B				
M Erection												Total Kg:	372,53		

SZ1	SABIZ PLANT ANSI			62036 - 0			A	Area A		1 / 1		TOTAL Kg:	372,53
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	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 62036 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.13										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
931	1/2	0	In	2,77		mm	,00	0,20	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,25										
936	2	0	In	3,91		mm	,00	2,00	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		10,87										
1898	1/2	0	In			mm	,00	1,00	NR	212	Valve Check SB-ATI-VR018/0 SW-F 800# Forged ASTM A 105 R 83		1,90										
2692	2	0	In			mm	,00	1,00	NR	212	Valve Ball Type Bottom SB-ATI-VS051/0 LUG 150 LB RF (125÷250 AARH) Cast ASTM A 216 Gr. WCB S 128		10,50										
330	2	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2838	2,20										
232	2	0	In	3,91		mm	,00	2,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		1,33										
404	2	0	In			mm	,00	2,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B												
M Erection													Total Kg:		27,06								
SZ1	SABIZ PLANT ANSI				62037 - 0				A		Area A		1 / 1		TOTAL Kg:		27,06						

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	212	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	62037 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	
					Page	1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5			23/07/2012 15.00.13												DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
900	3	0	In	3,18		mm	,00	34,00	m	203	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		228,55											
2742	3	0	In			mm	,00	1,00	NR	203	Valve Butterfly With Gasket SB-ATI-VB016/0 WAFER 150 LB RF (125÷250 AARH) Cast DUCTILE IRON B 74	2848	5,20											
332	3	0	In			mm	,00	2,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	8,20											
86	3	0	In	3,18		mm	,00	1,00	NR	203	45° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		0,60											
199	3	0	In	3,18		mm	,00	6,00	NR	203	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		7,06											
2848	5/8	0	In			mm	145,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		1,20											
M Erection												Total Kg:		250,81										
SZ1	SABIZ PLANT ANSI					62038 - 0					A	Area A	1 / 1			TOTAL Kg:		250,81						

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 62038 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code

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DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:	2F11	REV:	0	23/07/2012
PUMA5			23/07/2012 15.00.13											DOC:	2F11.65.102			
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch			
955	4	0	In	2,11		mm	,00	25,00	m	215	Pipe ASME B36.19 PL sch.5S E.R.W. ASTM A 312 TP304		148,91					
2991	4	0	In			mm	,00	1,00	NR	215	Valve Butterfly SB-ATI-VB024/0 WAFER 150 LB RF (125÷250 AARH) Cast ASTM A 351 CF8 B 80	2995	5,92					
314	4	0	In			mm	,00	4,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	2924	22,40					
132	4	0	In	2,11		mm	,00	1,00	NR	215	45° Elbow Long Radius ASME B16.9 BE sch.5S Wrought W ASTM A 403 Gr. WP304		0,69					
245	4	0	In	2,11		mm	,00	3,00	NR	215	90° Elbow Long Radius ASME B16.9 BE sch.5S Wrought W ASTM A 403 Gr. WP304		4,20					
788	4	0	In	2,11		mm	,00	4,00	NR	215	Stub-End MSS SP-43 BE sch.5S Wrought W ASTM A 403 Gr. WP304 Type A		2,50					
2924	5/8	0	In			mm	110,00	16,00	NR	215	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		4,00					
2995	5/8	0	In			mm	170,00	8,00	NR	215	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		2,64					
426	4	0	In			mm	,00	4,00	NR	215	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F							
2985	5/8	0	In			mm	45,00	8,00	NR	215	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7 Galvanized		1,28					
M Erection												Total Kg:	192,53					
SZ1	SABIZ PLANT ANSI				62040 - 0				A	Area A		1 / 1		TOTAL Kg:	192,53			

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	215	Welding specification	SB-ATI-SP006/0 SB-ATI-SP008/0
	Line	62040 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	



DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.13											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
936	2	0	In	3,91		mm	,00	34,00	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		184,86											
1839	2	0	In			mm	,00	1,00	NR	212	Valve Ball Full Port SB-ATI-VS050/0 LUG 150 LB RF (125÷250 AARH) Forged ASTM A 105 S 127	2974	6,50											
330	2	0	In			mm	,00	4,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2838	8,80											
232	2	0	In	3,91		mm	,00	5,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		3,32											
2838	5/8	0	In			mm	85,00	8,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		1,68											
404	2	0	In			mm	,00	4,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B													
2974	5/8	0	In			mm	40,00	12,00	NR	212	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7		1,80											
M Erection												Total Kg:		206,97										
SZ1	SABIZ PLANT ANSI				62041 - 0				A		Area A		1 / 1		TOTAL Kg:		206,97							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	212	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	62041 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:	2F11		REV:	0	23/07/2012				
PUMA5			23/07/2012 15.00.13												DOC:	2F11.65.102								
DESMET - Ballestra								SABIZ 8000 kg/h							Size:	In	Thk:	mm	Temp:	°C	Pres:	Bar(g)	Corr:	mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
952	2	0	In	3,91		mm	,00	34,00	m	216	Pipe ASME B36.19 PL sch.40S Seamless ASTM A 312 TP316		188,63											
1858	2	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port SB-ATI-VS047/0 LUG 150 LB RF (125÷250 AARH) Cast ASTM A 351 Gr. CF8M S 125	2984	6,63											
311	2	0	In			mm	,00	4,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	2921	8,80											
242	2	0	In	3,91		mm	,00	5,00	NR	216	90° Elbow Long Radius ASME B16.9 BE sch.40S Wrought S ASTM A 403 Gr. WP316		3,39											
785	2	0	In	3,91		mm	,00	4,00	NR	216	Stub-End MSS SP-43 BE sch.40S Wrought S ASTM A 403 Gr. WP316 Type A		1,92											
2921	5/8	0	In			mm	95,00	4,00	NR	216	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		0,92											
423	2	0	In			mm	,00	4,00	NR	216	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F													
2984	5/8	0	In			mm	40,00	12,00	NR	216	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7 Galvanized		1,80											
M Erection													Total Kg:	212,08										
SZ1	SABIZ PLANT ANSI					62042 - 0				A	Area A	1 / 1		TOTAL Kg:	212,08									

KV\_62.11

Plant SZ1 SABIZ PLANT ANSI

Piping Class 216

Welding specification SB-ATI-SP006/0 SB-ATI-SP008/0

Line 62042 - 0

Fluid

System

Dang. fluid type

Coating

De pres

Area Area A

Sketch Sht 1 / 1

Isometric code

Op tem

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Zones

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:	2F11	REV:	0	23/07/2012
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DESMET - Ballestra								SABIZ 8000 kg/h							Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch				
952	2	0	In	3,91		mm	,00	34,00	m	216	Pipe ASME B36.19 PL sch.40S Seamless ASTM A 312 TP316		188,63						
1858	2	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port SB-ATI-VS047/0 LUG 150 LB RF (125÷250 AARH) Cast ASTM A 351 Gr. CF8M S 125	2984	6,63						
311	2	0	In			mm	,00	4,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	2921	8,80						
242	2	0	In	3,91		mm	,00	5,00	NR	216	90° Elbow Long Radius ASME B16.9 BE sch.40S Wrought S ASTM A 403 Gr. WP316		3,39						
785	2	0	In	3,91		mm	,00	4,00	NR	216	Stub-End MSS SP-43 BE sch.40S Wrought S ASTM A 403 Gr. WP316 Type A		1,92						
2921	5/8	0	In			mm	95,00	4,00	NR	216	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		0,92						
423	2	0	In			mm	,00	4,00	NR	216	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F								
2984	5/8	0	In			mm	40,00	12,00	NR	216	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7 Galvanized		1,80						
M Erection												Total Kg:		212,08					
SZ1	SABIZ PLANT ANSI					62043 - 0			A	Area A		1 / 1		TOTAL Kg:		212,08			

KV\_62.12

Plant SZ1 SABIZ PLANT ANSI

Piping Class 216

Welding specification SB-ATI-SP006/0 SB-ATI-SP008/0

Line 62043 - 0

Fluid

System

Dang. fluid type

Coating

De pres

Area Area A

Sketch Sht 1 / 1

Isometric code

Op tem

Zones

Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:	2F11	REV:	0	23/07/2012
PUMA5		23/07/2012 15.00.13													DOC:	2F11.65.102			
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch				
941	1	0	In	3,38		mm	,00	34,00	m	215	Pipe ASME B36.19 PL sch.40S Seamless ASTM A 312 TP304		86,81						
1844	1	0	In			mm	,00	1,00	NR	215	Valve Ball Full Port SB-ATI-VS045/0 LUG 150 LB RF (125÷250 AARH) Cast ASTM A 351 CF8 S 123	2981	2,86						
308	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	2910	3,20						
234	1	0	In	3,38		mm	,00	5,00	NR	215	90° Elbow Long Radius ASME B16.9 BE sch.40S Wrought S ASTM A 403 Gr. WP304		0,69						
776	1	0	In	3,38		mm	,00	4,00	NR	215	Stub-End MSS SP-43 BE sch.40S Wrought S ASTM A 403 Gr. WP304 Type A		0,65						
2910	1/2	0	In			mm	80,00	8,00	NR	215	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		0,96						
420	1	0	In			mm	,00	4,00	NR	215	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F								
2981	1/2	0	In			mm	30,00	12,00	NR	215	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7 Galvanized		0,96						
M Erection												Total Kg:		96,12					
SZ1	SABIZ PLANT ANSI				62044 - 0				A	Area A		1 / 1		TOTAL Kg:		96,12			

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 215	Welding specification SB-ATI-SP006/0 SB-ATI-SP008/0
	Line 62044 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
			Page 1

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMAS	23/07/2012 15.00.13		DOC:	2F11.65.102			

DESMET - Ballestra			SABIZ 8000 kg/h			Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
949	1	0	In	3,38		mm	,00	1,00	m	216	Pipe ASME B36.19 PL sch.40S Seamless ASTM A 312 TP316		2,55		
952	2	0	In	3,91		mm	,00	1,00	m	216	Pipe ASME B36.19 PL sch.40S Seamless ASTM A 312 TP316		5,55		
967	3	0	In	2,11		mm	,00	1,00	m	216	Pipe ASME B36.19 PL sch.5S E.R.W. ASTM A 312 TP316		4,61		
968	4	0	In	2,11		mm	,00	2,00	m	216	Pipe ASME B36.19 PL sch.5S E.R.W. ASTM A 312 TP316		11,91		
969	5	0	In	2,77		mm	,00	0,50	m	216	Pipe ASME B36.19 PL sch.5S E.R.W. ASTM A 312 TP316		4,83		
970	6	0	In	2,77		mm	,00	3,00	m	216	Pipe ASME B36.19 PL sch.5S E.R.W. ASTM A 312 TP316		34,61		
308	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	2910	0,80		
311	2	0	In			mm	,00	3,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	2921	6,60		
313	3	0	In			mm	,00	1,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	2923	4,10		
314	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	2924	11,20		
316	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	2933	7,50		
2807	6	0	In			mm	,00	1,00	NR	216	Flange Blind + Disk ASME B16.5 - SB-ATI-PF007/0 (DISK) 150 LB RF (125÷250 AARH) Forged FLG: ASTM A 105 Galvanized - DISK: A240 TYPE 316	2933	0,89		
260	6	0	In	2,77		mm	,00	1,00	NR	216	90° Elbow Long Radius ASME B16.9 BE sch.5S Wrought W ASTM A 403 Gr. WP316		4,04		
1191	6	5	In	2,77	2,77	mm	,00	1,00	NR	216	Reducer Concentric ASME B16.9 BE sch.5S Wrought W ASTM A 403 Gr. WP316		1,55		
782	1	0	In	3,38		mm	,00	1,00	NR	216	Stub-End MSS SP-43 BE sch.40S Wrought S ASTM A 403 Gr. WP316 Type A		0,16		
785	2	0	In	3,91		mm	,00	3,00	NR	216	Stub-End MSS SP-43 BE sch.40S Wrought S ASTM A 403 Gr. WP316 Type A		1,44		

KV_62.7 KV_62.8 KV_62.9 KV_62.11 KV_62.13	Plant SZ1 SABIZ PLANT ANSI	Piping Class 216	Welding specification SB-ATI-SP006/0 SB-ATI-SP008/0		
	Line 62045 - 0	Fluid	System		
	Dang. fluid type	Coating	De pres		
	Area Area A	Sketch Sht 1 / 1	Isometric code		
	Zones		Op tem		

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
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DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
800	3	0	In	2,11		mm	,00	1,00	NR	216	Stub-End MSS SP-43 BE sch.5S Wrought W ASTM A 403 Gr. WP316 Type A		0,40		
801	4	0	In	2,11		mm	,00	2,00	NR	216	Stub-End MSS SP-43 BE sch.5S Wrought W ASTM A 403 Gr. WP316 Type A		1,25		
803	6	0	In	2,77		mm	,00	1,00	NR	216	Stub-End MSS SP-43 BE sch.5S Wrought W ASTM A 403 Gr. WP316 Type A		1,33		
2910	1/2	0	In			mm	80,00	2,00	NR	216	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		0,24		
2921	5/8	0	In			mm	95,00	6,00	NR	216	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		1,38		
2923	5/8	0	In			mm	105,00	2,00	NR	216	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		0,48		
2924	5/8	0	In			mm	110,00	8,00	NR	216	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		2,00		
2932	5/8	0	In			mm	150,00	8,00	NR	216	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		2,48		
2933	3/4	0	In			mm	115,00	12,00	NR	216	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		10,80		
420	1	0	In			mm	,00	2,00	NR	216	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F				
423	2	0	In			mm	,00	3,00	NR	216	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F				
425	3	0	In			mm	,00	2,00	NR	216	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F				
426	4	0	In			mm	,00	4,00	NR	216	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F				
428	6	0	In			mm	,00	1,00	NR	216	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F				
2981	1/2	0	In			mm	30,00	4,00	NR	216	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7 Galvanized		0,32		
2984	5/8	0	In			mm	40,00	12,00	NR	216	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7 Galvanized		1,80		
2985	5/8	0	In			mm	45,00	24,00	NR	216	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7 Galvanized		3,84		
M Erection												Total Kg:	128,66		

KV_62.7 KV_62.8 KV_62.9 KV_62.11 KV_62.13	Plant SZ1 SABIZ PLANT ANSI	Piping Class 216	Welding specification SB-ATI-SP006/0 SB-ATI-SP008/0		
	Line 62045 - 0	Fluid	System		
	Dang. fluid type	Coating	De pres		
	Area Area A	Sketch Sht 1 / 1	Isometric code		
	Zones		Op tem		

DESMET - Ballestra				SKETCHES MATERIAL LIST								PROJ: 2F11		REV: 0		23/07/2012						
PUMA5		23/07/2012 15.00.14										DOC: 2F11.65.102										
DESMET - Ballestra				SABIZ 8000 kg/h								Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm		
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component							Gen. Bolt	Weight (Kg)	As.bly	Branch	
SZ1	SABIZ PLANT ANSI			62045 - 0						A	Area A							1 / 1	TOTAL Kg:	128,66		

KV_62.7 KV_62.8 KV_62.9 KV_62.11 KV_62.13	Plant	SZ1	SABIZ PLANT ANSI	Piping Class	216	Welding specification	SB-ATI-SP006/0 SB-ATI-SP008/0
	Line	62045 - 0		Fluid		System	
	Dang. fluid type			Coating		De pres	
	Area	Area A		Sketch Sht	1 / 1	Isometric code	
	Zones					Op tem	

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.14											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	2,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		2,53											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	3,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,20											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection												Total Kg:		4,33										
SZ1	SABIZ PLANT ANSI				62101 - 0				A		Area A		1 / 1		TOTAL Kg:		4,33							

PICV_62.1	Plant	SZ1	SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	62101 - 0		Fluid		System	
	Dang. fluid type			Coating		De pres	Op tem
	Area	Area A		Sketch Sht	1 / 1	Isometric code	Page 1
	Zones						



DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.14											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	4,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		5,06											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	3,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,20											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection												Total Kg:		6,86										
SZ1	SABIZ PLANT ANSI				62102 - 0				A		Area A		1 / 1		TOTAL Kg:		6,86							

PICV_62.2	Plant SZ1 SABIZ PLANT ANSI	Piping Class 202	Welding specification	
	Line 62102 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area Area A	Sketch Sht 1 / 1	Isometric code	Page 1
	Zones			

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.14											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	4,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		5,06											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	3,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,20											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection													Total Kg:		6,86									
SZ1	SABIZ PLANT ANSI				62103 - 0				A		Area A		1 / 1		TOTAL Kg:		6,86							

PICV_62.3	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	62103 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.14											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	2,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		2,53											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	3,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,20											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection												Total Kg:		4,33										
SZ1	SABIZ PLANT ANSI				62104 - 0				A		Area A		1 / 1		TOTAL Kg:		4,33							

PICV_62.4	Plant SZ1 SABIZ PLANT ANSI	Piping Class 202	Welding specification
	Line 62104 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMAS	23/07/2012 15.00.14		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
933	1	0	In	3,38		mm	,00	2,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		5,00		
935	1+1/2	0	In	3,68		mm	,00	8,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		32,39		
2029	1+1/2	0	In			mm	,00	2,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		14,00		
2042	1	0	In			mm	,00	1,00	NR	205	Valve Globe SB-ATI-VD012/0 SW-F 800# Forged ASTM A 105 D 72		5,40		
2091	1+1/2	0	In			mm	,00	1,00	NR	205	Strainer Y-Type SB-ATI-VF016/0 SW-F 800# Forged ASTM A 105 F 69		3,20		
325	1/2	0	In			mm	,00	2,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2830	0,80		
327	1	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2831	0,80		
229	1	0	In	3,38		mm	,00	1,00	NR	205	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,14		
231	1+1/2	0	In	3,68		mm	,00	4,00	NR	205	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		1,47		
1084	1+1/2	1/2	In	3,68	2,77	mm	,00	2,00	NR	205	Reducer Concentric ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,52		
1086	1+1/2	1	In	3,68	3,38	mm	,00	1,00	NR	205	Reducer Concentric ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,26		
2830	1/2	0	In			mm	65,00	8,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,88		
2831	1/2	0	In			mm	70,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44		
2816	1/2	0	In			mm	,00	2,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING				
2818	1	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING				
M Erection												Total Kg:	65,3		

TCV_62.1	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 62108 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra				SKETCHES MATERIAL LIST								PROJ: 2F11		REV: 0		23/07/2012							
PUMA5		23/07/2012 15.00.14										DOC: 2F11.65.102											
DESMET - Ballestra				SABIZ 8000 kg/h								Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm			
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component							Gen. Bolt	Weight (Kg)	As.bly	Branch		
SZ1	SABIZ PLANT ANSI				62108 - 0						A	Area A							1 / 1	TOTAL Kg:	65,3		

TCV_62.1	Plant	SZ1 SABIZ PLANT ANSI			Piping Class	205			Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0					
	Line	62108 - 0			Fluid				System						
	Dang. fluid type				Coating				De pres						
	Area	Area A			Sketch Sht	1 / 1			Isometric code						
	Zones									Op tem					
														Page	2

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMAS	23/07/2012 15.00.14		DOC:	2F11.65.102			

DESMET - Ballestra			SABIZ 8000 kg/h			Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
931	1/2	0	In	2,77		mm	,00	4,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		5,06		
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		1,70		
327	1	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2831	0,80		
193	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75		
1079	1	1/2	In	3,38	2,77	mm	,00	1,00	NR	205	Reducer Concentric ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,14		
2831	1/2	0	In			mm	70,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44		
2818	1	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING				
M Erection												Total Kg:		8,89	
SZ1	SABIZ PLANT ANSI				62110 - 0				A	Area A	1 / 1	TOTAL Kg:		8,89	

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	62110 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.14											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	4,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		5,06											
2025	1/2	0	In			mm	,00	2,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		3,40											
2678	1/2	0	In			mm	,00	1,00	NR	205	Steam Trap SB-ATI-VT005/0 SW-F 300 LB Forged ASTM A 105 T 66		0,80											
327	1	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2831	0,80											
80	1/2	0	In			mm	,00	1,00	NR	205	45° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,18											
193	1/2	0	In			mm	,00	4,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,00											
1079	1	1/2	In	3,38	2,77	mm	,00	1,00	NR	205	Reducer Concentric ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,14											
2576	1/2	0	In			mm	,00	1,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105													
2831	1/2	0	In			mm	70,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44											
2818	1	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING													
M Erection												Total Kg:		11,82										
SZ1	SABIZ PLANT ANSI				62111 - 0				A	Area A		1 / 1		TOTAL Kg:		11,82								

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 62111 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra							SKETCHES MATERIAL LIST						PROJ: 2F11		REV: 0		23/07/2012			
PUMA5			23/07/2012 15.00.15										DOC: 2F11.65.102							
DESMET - Ballestra							SABIZ 8000 kg/h					Size: In    Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm		
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component					Gen. Bolt	Weight (Kg)	As.bly	Branch	
931	1/2	0	In	2,77		mm	,00	5,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B						6,33			
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61						1,70			
193	1/2	0	In			mm	,00	4,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105						1,00			
M Erection															Total Kg:		9,03			
SZ1	SABIZ PLANT ANSI				62112 - 0				A	Area A				1 / 1		TOTAL Kg:		9,03		

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 62112 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
			Page 1



DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.15											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	6,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		7,59											
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		1,70											
327	1	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2831	0,80											
193	1/2	0	In			mm	,00	4,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,00											
1079	1	1/2	In	3,38	2,77	mm	,00	1,00	NR	205	Reducer Concentric ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,14											
2831	1/2	0	In			mm	70,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44											
2818	1	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING													
M Erection												Total Kg:		11,67										
SZ1	SABIZ PLANT ANSI				62113 - 0				A	Area A		1 / 1		TOTAL Kg:		11,67								

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 62113 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.15		DOC:	2F11.65.102			

DESMET - Ballestra			SABIZ 8000 kg/h			Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch		
931	1/2	0	In	2,77		mm	,00	6,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		7,59				
2025	1/2	0	In			mm	,00	4,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		6,80				
2678	1/2	0	In			mm	,00	1,00	NR	205	Steam Trap SB-ATI-VT005/0 SW-F 300 LB Forged ASTM A 105 T 66		0,80				
327	1	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2831	0,80				
193	1/2	0	In			mm	,00	5,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,25				
1079	1	1/2	In	3,38	2,77	mm	,00	1,00	NR	205	Reducer Concentric ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,14				
2576	1/2	0	In			mm	,00	2,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105						
2831	1/2	0	In			mm	70,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44				
2818	1	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING						
M Erection												Total Kg:		17,82			
SZ1	SABIZ PLANT ANSI				62114 - 0				A	Area A		1 / 1		TOTAL Kg: 17,82			

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 62114 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.15											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	5,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		6,33											
1801	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
193	1/2	0	In			mm	,00	4,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,00											
849	1/2	0	In			mm	,00	1,00	NR	203	Union SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,38											
M Erection													Total Kg:		8,01									
SZ1	SABIZ PLANT ANSI					62115 - 0					A	Area A	1 / 1		TOTAL Kg:		8,01							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 62115 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST								PROJ:		2F11		REV:		0		23/07/2012		
PUMA5				23/07/2012 15.00.15												DOC:		2F11.65.102								
DESMET - Ballestra								SABIZ 8000 kg/h								Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm		
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component										Gen. Bolt	Weight (Kg)		As.bly	Branch	
931	1/2	0	In	2,77		mm	,00	3,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B											3,80				
193	1/2	0	In			mm	,00	2,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105											0,50				
M Erection																	Total Kg:		4,3							
SZ1	SABIZ PLANT ANSI				62116 - 0				A		Area A				1 / 1				TOTAL Kg:		4,3					

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	62116 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ: 2F11		REV: 0		23/07/2012					
PUMA5				23/07/2012 15.00.15										DOC: 2F11.65.102									
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
931	1/2	0	In	2,77		mm	,00	5,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		6,33										
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		1,70										
193	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75										
M Erection												Total Kg:		8,78									
SZ1	SABIZ PLANT ANSI				62117 - 0				A		Area A		1 / 1		TOTAL Kg:		8,78						

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 62117 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
			Page 1

DESMET - Ballestra							SKETCHES MATERIAL LIST							PROJ: 2F11		REV: 0		23/07/2012					
PUMA5			23/07/2012 15.00.15											DOC: 2F11.65.102									
DESMET - Ballestra							SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component							Gen. Bolt	Weight (Kg)		As.bly	Branch	
931	1/2	0	In	2,77		mm	,00	4,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B								5,06				
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61								1,70				
193	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105								0,75				
M Erection																	Total Kg:		7,51				
SZ1	SABIZ PLANT ANSI				62118 - 0				A		Area A				1 / 1				TOTAL Kg:		7,51		

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	62118 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.15		DOC:	2F11.65.102			

DESMET - Ballestra			SABIZ 8000 kg/h			Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
931	1/2	0	In	2,77		mm	,00	4,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		5,06		
2025	1/2	0	In			mm	,00	2,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		3,40		
325	1/2	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2830	0,40		
193	1/2	0	In			mm	,00	4,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,00		
2576	1/2	0	In			mm	,00	1,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105				
2830	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44		
2816	1/2	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING				

M Erection												Total Kg:	10,3
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SZ1	SABIZ PLANT ANSI		62119 - 0		A	Area A	1 / 1		TOTAL Kg:		10,3
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	Plant SZ1 SABIZ PLANT ANSI		Piping Class 205		Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0	
	Line 62119 - 0		Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area Area A		Sketch Sht 1 / 1		Isometric code	
	Zones				Op tem	

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.15											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	4,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		5,06											
193	1/2	0	In			mm	,00	3,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75											
M Erection													Total Kg:		5,81									
SZ1	SABIZ PLANT ANSI				62120 - 0				A		Area A		1 / 1		TOTAL Kg:		5,81							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	62120 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					



DESMET - Ballestra							SKETCHES MATERIAL LIST						PROJ: 2F11		REV: 0	23/07/2012
PUMA5			23/07/2012 15.00.15										DOC: 2F11.65.102			
DESMET - Ballestra							SABIZ 8000 kg/h					Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch	
931	1/2	0	In	2,77		mm	,00	4,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		5,06			
80	1/2	0	In			mm	,00	1,00	NR	203	45° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,18			
193	1/2	0	In			mm	,00	3,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75			
M Erection													Total Kg:	5,99		
SZ1	SABIZ PLANT ANSI				62121 - 0				A	Area A				1 / 1	TOTAL Kg:	5,99

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	62121 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	
					Page	1

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.15		DOC:	2F11.65.102			

DESMET - Ballestra			SABIZ 8000 kg/h			Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
931	1/2	0	In	2,77		mm	,00	5,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		6,33		
2025	1/2	0	In			mm	,00	2,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		3,40		
325	1/2	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2830	0,40		
80	1/2	0	In			mm	,00	1,00	NR	205	45° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,18		
193	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75		
2576	1/2	0	In			mm	,00	1,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105				
2830	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44		
2816	1/2	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) – G5N INNER OUTER RING				

M Erection												Total Kg:	11,5
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SZ1	SABIZ PLANT ANSI		62122 - 0		A	Area A		1 / 1		TOTAL Kg:		11,5
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	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	62122 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.16											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
933	1	0	In	3,38		mm	,00	3,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		7,51											
327	1	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2831	0,80											
116	1	0	In	3,38		mm	,00	1,00	NR	203	45° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,07											
229	1	0	In	3,38		mm	,00	3,00	NR	203	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,41											
2831	1/2	0	In			mm	70,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44											
373	1	0	In			mm	,00	1,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C													
M Erection												Total Kg:		9,22										
SZ1	SABIZ PLANT ANSI				62123 - 0				A		Area A		1 / 1		TOTAL Kg:		9,22							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 62123 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.16											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
929	1/4	0	In	2,24		mm	,00	0,20	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,13											
931	1/2	0	In	2,77		mm	,00	5,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		6,33											
1801	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
193	1/2	0	In			mm	,00	3,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75											
849	1/2	0	In			mm	,00	1,00	NR	203	Union SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,38											
2384	1/2	1/4	In			mm	,00	1,00	NR	203	Coupling Reducing SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,03											
M Erection												Total Kg:		7,92										
SZ1	SABIZ PLANT ANSI				62124 - 0				A	Area A		1 / 1		TOTAL Kg:		7,92								

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	62124 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	

DESMET - Ballestra								SKETCHES MATERIAL LIST								PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.16												DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h								Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch										
935	1+1/2	0	In	3,68		mm	,00	6,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		24,30												
1805	1+1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		1,50												
329	1+1/2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2832	1,40												
118	1+1/2	0	In	3,68		mm	,00	2,00	NR	203	45° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,37												
231	1+1/2	0	In	3,68		mm	,00	3,00	NR	203	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		1,10												
2832	1/2	0	In			mm	75,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,48												
375	1+1/2	0	In			mm	,00	1,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C														
M Erection												Total Kg:		29,15											
SZ1	SABIZ PLANT ANSI				62125 - 0				A	Area A		1 / 1		TOTAL Kg:		29,15									

63Y30	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 62125 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST										PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.16														DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h										Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch												
935	1+1/2	0	In	3,68		mm	,00	5,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		20,25														
2037	1+1/2	0	In			mm	,00	1,00	NR	203	Valve Globe SB-ATI-VD001/0 THRD-F NPT 200 LB Forged BRONZE D 51		3,45														
329	1+1/2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2832	1,40														
231	1+1/2	0	In	3,68		mm	,00	3,00	NR	203	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		1,10														
2832	1/2	0	In			mm	75,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,48														
375	1+1/2	0	In			mm	,00	1,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C																
M Erection												Total Kg:		26,68													
SZ1	SABIZ PLANT ANSI				62126 - 0				A		Area A		1 / 1		TOTAL Kg:		26,68										

63Y31	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	62126 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.16											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	12,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		15,19											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	5,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		2,00											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection													Total Kg:		17,79									
SZ1	SABIZ PLANT ANSI					62127 - 0					A	Area A	1 / 1		TOTAL Kg:		17,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	62127 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.16											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection												Total Kg:		9,79										
SZ1	SABIZ PLANT ANSI				62128 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	62128 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					



DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.16											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection													Total Kg:		9,79									
SZ1	SABIZ PLANT ANSI				62129 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	62129 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.16											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection												Total Kg:		9,79										
SZ1	SABIZ PLANT ANSI				62131 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	62131 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.16											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection													Total Kg:		9,79									
SZ1	SABIZ PLANT ANSI				62132 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	62132 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.16											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection													Total Kg:		9,79									
SZ1	SABIZ PLANT ANSI				62133 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	62133 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.17										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59										
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30										
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60										
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30										
M Erection												Total Kg:		9,79									
SZ1	SABIZ PLANT ANSI				62134 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79						

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	62134 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.17											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection													Total Kg:		9,79									
SZ1	SABIZ PLANT ANSI				62135 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	62135 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.17											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection													Total Kg:		9,79									
SZ1	SABIZ PLANT ANSI				62136 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	62136 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.17											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection													Total Kg:		9,79									
SZ1	SABIZ PLANT ANSI				62137 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	62137 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					



DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.17											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection												Total Kg:		9,79										
SZ1	SABIZ PLANT ANSI				62138 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	62138 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:	2F11	REV:	0	23/07/2012
PUMA5			23/07/2012 15.00.17												DOC:	2F11.65.102			
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch				
969	5	0	In	2,77		mm	,00	0,20	m	216	Pipe ASME B36.19 PL sch.5S E.R.W. ASTM A 312 TP316		1,93						
970	6	0	In	2,77		mm	,00	5,00	m	216	Pipe ASME B36.19 PL sch.5S E.R.W. ASTM A 312 TP316		57,69						
316	6	0	In			mm	,00	3,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	2933	22,50						
147	6	0	In	2,77		mm	,00	1,00	NR	216	45° Elbow Long Radius ASME B16.9 BE sch.5S Wrought W ASTM A 403 Gr. WP316		2,03						
260	6	0	In	2,77		mm	,00	1,00	NR	216	90° Elbow Long Radius ASME B16.9 BE sch.5S Wrought W ASTM A 403 Gr. WP316		4,04						
1191	6	5	In	2,77	2,77	mm	,00	1,00	NR	216	Reducer Concentric ASME B16.9 BE sch.5S Wrought W ASTM A 403 Gr. WP316		1,55						
803	6	0	In	2,77		mm	,00	3,00	NR	216	Stub-End MSS SP-43 BE sch.5S Wrought W ASTM A 403 Gr. WP316 Type A		3,99						
2933	3/4	0	In			mm	115,00	16,00	NR	216	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		14,40						
2940	3/4	0	In			mm	170,00	8,00	NR	216	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		8,96						
428	6	0	In			mm	,00	3,00	NR	216	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F								
M Erection												Total Kg:	117,09						
SZ1	SABIZ PLANT ANSI					63001 - 0					A	Area A	1 / 1	TOTAL Kg:	117,09				

KV_63.1A	Plant	SZ1 SABIZ PLANT ANSI		Piping Class	216		Welding specification	SB-ATI-SP006/0 SB-ATI-SP008/0	
	Line	63001 - 0		Fluid			System		
	Dang. fluid type			Coating			De pres		
	Area	Area A		Sketch Sht	1 / 1		Isometric code		
	Zones							Op tem	
								Page 1	

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:	2F11	REV:	0	23/07/2012
PUMA5			23/07/2012 15.00.17												DOC:	2F11.65.102			
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch				
969	5	0	In	2,77		mm	,00	0,20	m	216	Pipe ASME B36.19 PL sch.5S E.R.W. ASTM A 312 TP316		1,93						
970	6	0	In	2,77		mm	,00	4,50	m	216	Pipe ASME B36.19 PL sch.5S E.R.W. ASTM A 312 TP316		51,92						
316	6	0	In			mm	,00	2,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	2933	15,00						
147	6	0	In	2,77		mm	,00	1,00	NR	216	45° Elbow Long Radius ASME B16.9 BE sch.5S Wrought W ASTM A 403 Gr. WP316		2,03						
260	6	0	In	2,77		mm	,00	1,00	NR	216	90° Elbow Long Radius ASME B16.9 BE sch.5S Wrought W ASTM A 403 Gr. WP316		4,04						
1191	6	5	In	2,77	2,77	mm	,00	1,00	NR	216	Reducer Concentric ASME B16.9 BE sch.5S Wrought W ASTM A 403 Gr. WP316		1,55						
803	6	0	In	2,77		mm	,00	2,00	NR	216	Stub-End MSS SP-43 BE sch.5S Wrought W ASTM A 403 Gr. WP316 Type A		2,66						
2933	3/4	0	In			mm	115,00	8,00	NR	216	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		7,20						
2940	3/4	0	In			mm	170,00	8,00	NR	216	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		8,96						
428	6	0	In			mm	,00	2,00	NR	216	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F								
M Erection												Total Kg:		95,3					
SZ1	SABIZ PLANT ANSI				63002 - 0				A	Area A		1 / 1		TOTAL Kg:		95,3			

KV\_63.1B

Plant SZ1 SABIZ PLANT ANSI

Piping Class 216

Welding specification SB-ATI-SP006/0 SB-ATI-SP008/0

Line 63002 - 0

Fluid

System

Dang. fluid type

Coating

De pres

Area Area A

Sketch Sht 1 / 1

Isometric code

Op tem

Zones

Page 1

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.18		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
939	1/2	0	In	2,77		mm	,00	0,50	m	215	Pipe ASME B36.19 PL sch.40S Seamless ASTM A 312 TP304		0,65		
957	6	0	In	2,77		mm	,00	6,00	m	215	Pipe ASME B36.19 PL sch.5S E.R.W. ASTM A 312 TP304		69,22		
2727	1/2	0	In			mm	,00	1,00	NR	215	"Y" Valve Check SB-ATI-VR028/0 FLG 150 LB RF (125÷250 AARH) Forged ASTM A 182 Gr. F304 R 92	2909	3,06		
306	1/2	0	In			mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	2909	0,40		
316	6	0	In			mm	,00	2,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	2933	15,00		
134	6	0	In	2,77		mm	,00	2,00	NR	215	45° Elbow Long Radius ASME B16.9 BE sch.5S Wrought W ASTM A 403 Gr. WP304		4,07		
774	1/2	0	In	2,77		mm	,00	1,00	NR	215	Stub-End MSS SP-43 BE sch.40S Wrought S ASTM A 403 Gr. WP304 Type A		0,08		
790	6	0	In	2,77		mm	,00	2,00	NR	215	Stub-End MSS SP-43 BE sch.5S Wrought W ASTM A 403 Gr. WP304 Type A		2,66		
2909	1/2	0	In			mm	75,00	6,00	NR	215	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		0,72		
2933	3/4	0	In			mm	115,00	24,00	NR	215	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		21,60		
418	1/2	0	In			mm	,00	2,00	NR	215	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F				
428	6	0	In			mm	,00	3,00	NR	215	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F				
M Erection												Total Kg:	117,46		
SZ1	SABIZ PLANT ANSI			63003 - 0			A			Area A	1 / 1	TOTAL Kg:	117,46		

KV_63.2A	Plant SZ1 SABIZ PLANT ANSI	Piping Class 215	Welding specification SB-ATI-SP006/0 SB-ATI-SP008/0
	Line 63003 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.18		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
939	1/2	0	In	2,77		mm	,00	0,50	m	215	Pipe ASME B36.19 PL sch.40S Seamless ASTM A 312 TP304		0,65		
957	6	0	In	2,77		mm	,00	6,00	m	215	Pipe ASME B36.19 PL sch.5S E.R.W. ASTM A 312 TP304		69,22		
2727	1/2	0	In			mm	,00	1,00	NR	215	"Y" Valve Check SB-ATI-VR028/0 FLG 150 LB RF (125÷250 AARH) Forged ASTM A 182 Gr. F304 R 92	2909	3,06		
306	1/2	0	In			mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	2909	0,40		
316	6	0	In			mm	,00	2,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	2933	15,00		
134	6	0	In	2,77		mm	,00	2,00	NR	215	45° Elbow Long Radius ASME B16.9 BE sch.5S Wrought W ASTM A 403 Gr. WP304		4,07		
774	1/2	0	In	2,77		mm	,00	1,00	NR	215	Stub-End MSS SP-43 BE sch.40S Wrought S ASTM A 403 Gr. WP304 Type A		0,08		
790	6	0	In	2,77		mm	,00	2,00	NR	215	Stub-End MSS SP-43 BE sch.5S Wrought W ASTM A 403 Gr. WP304 Type A		2,66		
2909	1/2	0	In			mm	75,00	6,00	NR	215	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		0,72		
2933	3/4	0	In			mm	115,00	24,00	NR	215	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		21,60		
418	1/2	0	In			mm	,00	2,00	NR	215	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F				
428	6	0	In			mm	,00	3,00	NR	215	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F				
M Erection												Total Kg:	117,46		
SZ1	SABIZ PLANT ANSI				63004 - 0				A	Area A	1 / 1	TOTAL Kg:	117,46		

KV_63.2B	Plant SZ1 SABIZ PLANT ANSI	Piping Class 215	Welding specification SB-ATI-SP006/0 SB-ATI-SP008/0
	Line 63004 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra								SKETCHES MATERIAL LIST					PROJ: 2F11		REV: 0		23/07/2012							
PUMA5			23/07/2012 15.00.18										DOC: 2F11.65.102											
DESMET - Ballestra								SABIZ 8000 kg/h					Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm			
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
957	6	0	In	2,77		mm	,00	3,00	m	215	Pipe ASME B36.19 PL sch.5S E.R.W. ASTM A 312 TP304		34,61											
247	6	0	In	2,77		mm	,00	2,00	NR	215	90° Elbow Long Radius ASME B16.9 BE sch.5S Wrought W ASTM A 403 Gr. WP304		8,08											
M Erection												Total Kg:		42,7										
SZ1	SABIZ PLANT ANSI					63005 - 0					A	Area A	1 / 1		TOTAL Kg:		42,7							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	215	Welding specification	SB-ATI-SP006/0 SB-ATI-SP008/0
	Line	63005 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.18										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
957	6	0	In	2,77		mm	,00	4,00	m	215	Pipe ASME B36.19 PL sch.5S E.R.W. ASTM A 312 TP304		46,15										
958	8	0	In	2,77		mm	,00	2,00	m	215	Pipe ASME B36.19 PL sch.5S E.R.W. ASTM A 312 TP304		30,16										
317	8	0	In			mm	,00	1,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	2935	12,60										
1144	8	6	In	2,77	2,77	mm	,00	1,00	NR	215	Reducer Concentric ASME B16.9 BE sch.5S Wrought W ASTM A 403 Gr. WP304		2,26										
791	8	0	In	2,77		mm	,00	1,00	NR	215	Stub-End MSS SP-43 BE sch.5S Wrought W ASTM A 403 Gr. WP304 Type A		2,01										
2935	3/4	0	In			mm	130,00	8,00	NR	215	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		7,68										
429	8	0	In			mm	,00	1,00	NR	215	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F												
M Erection												Total Kg:		100,85									
SZ1	SABIZ PLANT ANSI				63006 - 0				A		Area A		1 / 1		TOTAL Kg:		100,85						

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	215	Welding specification	SB-ATI-SP006/0 SB-ATI-SP008/0
	Line	63006 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.18		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
954	3	0	In	2,11		mm	,00	0,50	m	215	Pipe ASME B36.19 PL sch.5S E.R.W. ASTM A 312 TP304		2,30		
955	4	0	In	2,11		mm	,00	0,50	m	215	Pipe ASME B36.19 PL sch.5S E.R.W. ASTM A 312 TP304		2,98		
958	8	0	In	2,77		mm	,00	4,00	m	215	Pipe ASME B36.19 PL sch.5S E.R.W. ASTM A 312 TP304		60,31		
1871	8	0	In			mm	,00	1,00	NR	215	Valve Butterfly SB-ATI-VB024/0 WAFER 150 LB RF (125÷250 AARH) Cast ASTM A 351 CF8 B 80	2941	19,69		
313	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	2923	4,10		
314	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	2924	5,60		
317	8	0	In			mm	,00	3,00	NR	215	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	2935	37,80		
332	3	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	4,10		
333	4	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	5,60		
1142	8	4	In	2,77	2,11	mm	,00	1,00	NR	215	Reducer Concentric ASME B16.9 BE sch.5S Wrought W ASTM A 403 Gr. WP304		2,26		
787	3	0	In	2,11		mm	,00	1,00	NR	215	Stub-End MSS SP-43 BE sch.5S Wrought W ASTM A 403 Gr. WP304 Type A		0,40		
788	4	0	In	2,11		mm	,00	1,00	NR	215	Stub-End MSS SP-43 BE sch.5S Wrought W ASTM A 403 Gr. WP304 Type A		0,62		
791	8	0	In	2,77		mm	,00	3,00	NR	215	Stub-End MSS SP-43 BE sch.5S Wrought W ASTM A 403 Gr. WP304 Type A		6,02		
2840	5/8	0	In			mm	95,00	6,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		1,38		
2923	5/8	0	In			mm	105,00	4,00	NR	215	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		0,96		

63Y1	Plant SZ1 SABIZ PLANT ANSI	Piping Class 215	Welding specification SB-ATI-SP006/0 SB-ATI-SP008/0
	Line 63007 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem



DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.18		DOC:	2F11.65.102			

DESMET - Ballestra			SABIZ 8000 kg/h			Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
2924	5/8	0	In			mm	110,00	8,00	NR	215	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		2,00		
2935	3/4	0	In			mm	130,00	8,00	NR	215	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		7,68		
2941	3/4	0	In			mm	205,00	8,00	NR	215	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		10,08		
378	3	0	In			mm	,00	1,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C				
379	4	0	In			mm	,00	1,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C				
425	3	0	In			mm	,00	1,00	NR	215	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F				
426	4	0	In			mm	,00	1,00	NR	215	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F				
429	8	0	In			mm	,00	3,00	NR	215	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F				
M Erection												Total Kg:	173,89		
SZ1	SABIZ PLANT ANSI				63007 - 0				A	Area A	1 / 1	TOTAL Kg:	173,89		

63Y1	Plant SZ1 SABIZ PLANT ANSI	Piping Class 215	Welding specification SB-ATI-SP006/0 SB-ATI-SP008/0
	Line 63007 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra							SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5			23/07/2012 15.00.19											DOC:		2F11.65.102							
DESMET - Ballestra							SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
936	2	0	In	3,91		mm	,00	7,00	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		38,06										
1839	2	0	In			mm	,00	1,00	NR	212	Valve Ball Full Port SB-ATI-VS050/0 LUG 150 LB RF (125÷250 AARH) Forged ASTM A 105 S 127	2974	6,50										
330	2	0	In			mm	,00	2,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2838	4,40										
232	2	0	In	3,91		mm	,00	4,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		2,66										
404	2	0	In			mm	,00	2,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B												
2974	5/8	0	In			mm	40,00	8,00	NR	212	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7		1,20										
M Erection												Total Kg:		52,82									
SZ1	SABIZ PLANT ANSI				63009 - 0				A	Area A		1 / 1		TOTAL Kg:		52,82							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63009 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:	2F11	REV:	0	23/07/2012
PUMA5				23/07/2012 15.00.19										DOC:	2F11.65.102			
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch			
931	1/2	0	In	2,77		mm	,00	0,50	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,63					
936	2	0	In	3,91		mm	,00	4,00	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		21,75					
330	2	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2838	2,20					
193	1/2	0	In			mm	,00	2,00	NR	212	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,50					
232	2	0	In	3,91		mm	,00	6,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		3,99					
2838	5/8	0	In			mm	85,00	4,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,84					
404	2	0	In			mm	,00	1,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B							
M Erection													Total Kg:		29,91			
SZ1	SABIZ PLANT ANSI				63010 - 0				A	Area A		1 / 1		TOTAL Kg:		29,91		

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	212	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63010 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	
					Page	1

DESMET - Ballestra								SKETCHES MATERIAL LIST					PROJ: 2F11		REV: 0		23/07/2012					
PUMA5			23/07/2012 15.00.19										DOC: 2F11.65.102									
DESMET - Ballestra								SABIZ 8000 kg/h					Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch							
936	2	0	In	3,91		mm	,00	18,00	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		97,87									
232	2	0	In	3,91		mm	,00	2,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		1,33									
M Erection												Total Kg:		99,2								
SZ1	SABIZ PLANT ANSI					63011 - 0					A	Area A	1 / 1		TOTAL Kg:		99,2					

FUNNEL ST.46250/1 TYPE B >2" Pz. N.1	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	212	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63011 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5			23/07/2012 15.00.19												DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
900	3	0	In	3,18		mm	,00	16,00	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		107,55											
2754	3	0	In			mm	,00	1,00	NR	212	Valve Butterfly With Gasket SB-ATI-VB030/0 WAFER 150 LB RF (125÷250 AARH) Cast DUCTILE IRON B 85	2848	5,20											
332	3	0	In			mm	,00	3,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	12,30											
86	3	0	In	3,18		mm	,00	1,00	NR	212	45° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		0,60											
199	3	0	In	3,18		mm	,00	2,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		2,35											
2840	5/8	0	In			mm	95,00	4,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,92											
2848	5/8	0	In			mm	145,00	4,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		1,20											
406	3	0	In			mm	,00	1,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B													
M Erection												Total Kg:		130,13										
SZ1	SABIZ PLANT ANSI				63015 - 0				A	Area A		1 / 1		TOTAL Kg:		130,13								

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	212	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63015 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
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DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
904	6	0	In	3,96		mm	,00	14,00	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		224,68		
335	6	0	In			mm	,00	2,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2850	15,00		
203	6	0	In	3,96		mm	,00	6,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		33,98		
2850	3/4	0	In			mm	100,00	16,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		13,44		
409	6	0	In			mm	,00	2,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B				
M Erection												Total Kg:	287,09		
SZ1	SABIZ PLANT ANSI			63016 - 0			A			Area A		1 / 1		TOTAL Kg:	287,09

	Plant SZ1	SABIZ PLANT ANSI	Piping Class	212	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63016 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.19											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
904	6	0	In	3,96		mm	,00	3,00	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		48,15											
931	1/2	0	In	2,77		mm	,00	0,50	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,63											
1898	1/2	0	In			mm	,00	2,00	NR	212	Valve Check SB-ATI-VR018/0 SW-F 800# Forged ASTM A 105 R 83		3,80											
2757	6	0	In			mm	,00	1,00	NR	212	Valve Butterfly With Gasket SB-ATI-VB030/0 WAFER 150 LB RF (125÷250 AARH) Cast DUCTILE IRON B 85	2858	10,30											
335	6	0	In			mm	,00	4,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2850	30,00											
203	6	0	In	3,96		mm	,00	3,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		16,99											
2850	3/4	0	In			mm	100,00	24,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		20,16											
2858	3/4	0	In			mm	160,00	8,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		8,64											
409	6	0	In			mm	,00	3,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B													
M Erection												Total Kg:		138,67										
SZ1	SABIZ PLANT ANSI				63020 - 0				A		Area A		1 / 1		TOTAL Kg:		138,67							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63020 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
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DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.19											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component						Gen. Bolt	Weight (Kg)		As.bly	Branch			
904	6	0	In	3,96		mm	,00	3,00	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B							48,15						
931	1/2	0	In	2,77		mm	,00	0,50	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B							0,63						
933	1	0	In	3,38		mm	,00	0,50	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B							1,25						
1827	1	0	In			mm	,00	1,00	NR	212	Valve Ball Full Port SB-ATI-VS019/0 THRD-F NPT 800# Forged ASTM A 105 S 98							1,40						
1898	1/2	0	In			mm	,00	1,00	NR	212	Valve Check SB-ATI-VR018/0 SW-F 800# Forged ASTM A 105 R 83							1,90						
335	6	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105						2850	7,50						
203	6	0	In	3,96		mm	,00	2,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB							11,33						
229	1	0	In	3,38		mm	,00	1,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB							0,14						
2850	3/4	0	In			mm	100,00	8,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H							6,72						
409	6	0	In			mm	,00	1,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B													
M Erection													Total Kg:		79,01									
SZ1	SABIZ PLANT ANSI				63021 - 0				A		Area A		1 / 1		TOTAL Kg:		79,01							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63021 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem



DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.19											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
904	6	0	In	3,96		mm	,00	2,00	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		32,10											
933	1	0	In	3,38		mm	,00	0,50	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		1,25											
1827	1	0	In			mm	,00	1,00	NR	212	Valve Ball Full Port SB-ATI-VS019/0 THRD-F NPT 800# Forged ASTM A 105 S 98		1,40											
335	6	0	In			mm	,00	2,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2850	15,00											
203	6	0	In	3,96		mm	,00	1,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		5,66											
2850	3/4	0	In			mm	100,00	8,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		6,72											
2858	3/4	0	In			mm	160,00	8,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		8,64											
409	6	0	In			mm	,00	2,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B													
M Erection												Total Kg:		70,77										
SZ1	SABIZ PLANT ANSI				63022 - 0				A		Area A		1 / 1		TOTAL Kg:		70,77							

HV\_63.2A  
PISH\_63.2A

Plant SZ1 SABIZ PLANT ANSI  
  
Line 63022 - 0  
Dang. fluid type  
Area Area A  
Zones

Piping Class 212  
  
Fluid  
Coating  
Sketch Sht 1 / 1

Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0  
  
System  
De pres  
Isometric code

Op tem

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:	2F11	REV:	0	23/07/2012
PUMA5				23/07/2012 15.00.20											DOC:	2F11.65.102			
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch				
904	6	0	In	3,96		mm	,00	3,00	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		48,15						
931	1/2	0	In	2,77		mm	,00	0,50	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,63						
1898	1/2	0	In			mm	,00	2,00	NR	212	Valve Check SB-ATI-VR018/0 SW-F 800# Forged ASTM A 105 R 83		3,80						
2757	6	0	In			mm	,00	1,00	NR	212	Valve Butterfly With Gasket SB-ATI-VB030/0 WAFER 150 LB RF (125÷250 AARH) Cast DUCTILE IRON B 85	2858	10,30						
335	6	0	In			mm	,00	4,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2850	30,00						
203	6	0	In	3,96		mm	,00	3,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		16,99						
2850	3/4	0	In			mm	100,00	24,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		20,16						
2858	3/4	0	In			mm	160,00	8,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		8,64						
409	6	0	In			mm	,00	3,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B								
M Erection												Total Kg:	138,67						
SZ1	SABIZ PLANT ANSI				63023 - 0				A	Area A			1 / 1	TOTAL Kg:	138,67				

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63023 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.20											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
904	6	0	In	3,96		mm	,00	3,00	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		48,15											
931	1/2	0	In	2,77		mm	,00	0,50	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,63											
933	1	0	In	3,38		mm	,00	0,50	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		1,25											
1827	1	0	In			mm	,00	1,00	NR	212	Valve Ball Full Port SB-ATI-VS019/0 THRD-F NPT 800# Forged ASTM A 105 S 98		1,40											
1898	1/2	0	In			mm	,00	1,00	NR	212	Valve Check SB-ATI-VR018/0 SW-F 800# Forged ASTM A 105 R 83		1,90											
335	6	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2850	7,50											
203	6	0	In	3,96		mm	,00	2,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		11,33											
229	1	0	In	3,38		mm	,00	1,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,14											
2850	3/4	0	In			mm	100,00	8,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		6,72											
409	6	0	In			mm	,00	1,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B													
M Erection												Total Kg:		79,01										
SZ1	SABIZ PLANT ANSI				63024 - 0				A	Area A		1 / 1		TOTAL Kg:		79,01								

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63024 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.20										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
904	6	0	In	3,96		mm	,00	27,00	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		433,31										
933	1	0	In	3,38		mm	,00	0,50	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		1,25										
1827	1	0	In			mm	,00	1,00	NR	212	Valve Ball Full Port SB-ATI-VS019/0 THRD-F NPT 800# Forged ASTM A 105 S 98		1,40										
1959	6	0	In			mm	,00	1,00	NR	212	Valve Check SB-ATI-VR055/0 WAFER 150 LB RF (125÷250 AARH) Forged ASTM A 105 R 111	2854	5,00										
335	6	0	In			mm	,00	5,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2850	37,50										
90	6	0	In	3,96		mm	,00	1,00	NR	212	45° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		2,85										
203	6	0	In	3,96		mm	,00	6,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		33,98										
2850	3/4	0	In			mm	100,00	24,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		20,16										
2854	3/4	0	In			mm	120,00	8,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		7,36										
2858	3/4	0	In			mm	160,00	8,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		8,64										
409	6	0	In			mm	,00	5,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B												
M Erection												Total Kg:		551,45									
SZ1	SABIZ PLANT ANSI				63025 - 0				A		Area A		1 / 1		TOTAL Kg:		551,45						

PI\_63.2  
HV\_63.2B  
PISH\_63.2B

Plant SZ1 SABIZ PLANT ANSI  
  
Line 63025 - 0  
Dang. fluid type  
Area Area A  
Zones

Piping Class 212  
  
Fluid  
Coating  
Sketch Sht 1 / 1

Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0  
  
System  
De pres  
Isometric code  
  
Op tem  
  
Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5			23/07/2012 15.00.20												DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
902	5	0	In	3,18		mm	,00	0,20	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		2,17											
904	6	0	In	3,96		mm	,00	18,00	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		288,87											
931	1/2	0	In	2,77		mm	,00	0,20	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,25											
1898	1/2	0	In			mm	,00	1,00	NR	212	Valve Check SB-ATI-VR018/0 SW-F 800# Forged ASTM A 105 R 83		1,90											
2757	6	0	In			mm	,00	1,00	NR	212	Valve Butterfly With Gasket SB-ATI-VB030/0 WAFER 150 LB RF (125÷250 AARH) Cast DUCTILE IRON B 85	2858	10,30											
335	6	0	In			mm	,00	3,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2850	22,50											
90	6	0	In	3,96		mm	,00	1,00	NR	212	45° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		2,85											
203	6	0	In	3,96		mm	,00	6,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		33,98											
1253	6	5	In	3,96	3,18	mm	,00	1,00	NR	212	Reducer Eccentric ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		2,18											
2850	3/4	0	In			mm	100,00	8,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		6,72											
2858	3/4	0	In			mm	160,00	8,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		8,64											
409	6	0	In			mm	,00	1,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B													
M Erection													Total Kg:		380,36									
SZ1	SABIZ PLANT ANSI				63026 - 0				A		Area A		1 / 1		TOTAL Kg:		380,36							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63026 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
Page 1			

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.20											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
902	5	0	In	3,18		mm	,00	0,20	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		2,17											
904	6	0	In	3,96		mm	,00	3,00	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		48,15											
931	1/2	0	In	2,77		mm	,00	0,20	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,25											
1898	1/2	0	In			mm	,00	1,00	NR	212	Valve Check SB-ATI-VR018/0 SW-F 800# Forged ASTM A 105 R 83		1,90											
2757	6	0	In			mm	,00	1,00	NR	212	Valve Butterfly With Gasket SB-ATI-VB030/0 WAFER 150 LB RF (125÷250 AARH) Cast DUCTILE IRON B 85	2858	10,30											
335	6	0	In			mm	,00	2,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2850	15,00											
203	6	0	In	3,96		mm	,00	2,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		11,33											
1253	6	5	In	3,96	3,18	mm	,00	1,00	NR	212	Reducer Eccentric ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		2,18											
2858	3/4	0	In			mm	160,00	8,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		8,64											
M Erection												Total Kg:		99,91										
SZ1	SABIZ PLANT ANSI				63027 - 0				A	Area A		1 / 1		TOTAL Kg:		99,91								

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63027 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.20											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
899	2+1/2	0	In	3,18		mm	,00	0,20	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		1,10											
901	4	0	In	3,18		mm	,00	3,00	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		26,14											
933	1	0	In	3,38		mm	,00	1,00	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		2,50											
1827	1	0	In			mm	,00	1,00	NR	212	Valve Ball Full Port SB-ATI-VS019/0 THRD-F NPT 800# Forged ASTM A 105 S 98		1,40											
333	4	0	In			mm	,00	2,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	11,20											
200	4	0	In	3,18		mm	,00	1,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		2,07											
229	1	0	In	3,38		mm	,00	1,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,14											
1015	4	2+1/2	In	3,18	3,18	mm	,00	1,00	NR	212	Reducer Concentric ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		0,86											
2840	5/8	0	In			mm	95,00	8,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		1,84											
2849	5/8	0	In			mm	150,00	8,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		2,48											
407	4	0	In			mm	,00	1,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B													
M Erection												Total Kg:		49,72										
SZ1	SABIZ PLANT ANSI				63028 - 0				A		Area A		1 / 1		TOTAL Kg:		49,72							

HV\_63.4A

Plant SZ1 SABIZ PLANT ANSI

Piping Class 212

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

Line 63028 - 0

Fluid

System

Dang. fluid type

Coating

De pres

Area Area A

Sketch Sht 1 / 1

Isometric code

Op tem

Zones

Page 1

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.20		DOC:	2F11.65.102			

DESMET - Ballestra			SABIZ 8000 kg/h			Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
899	2+1/2	0	In	3,18		mm	,00	0,20	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		1,10		
901	4	0	In	3,18		mm	,00	20,00	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		174,28		
931	1/2	0	In	2,77		mm	,00	0,20	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,25		
933	1	0	In	3,38		mm	,00	2,00	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		5,00		
1827	1	0	In			mm	,00	2,00	NR	212	Valve Ball Full Port SB-ATI-VS019/0 THRD-F NPT 800# Forged ASTM A 105 S 98		2,80		
1898	1/2	0	In			mm	,00	1,00	NR	212	Valve Check SB-ATI-VR018/0 SW-F 800# Forged ASTM A 105 R 83		1,90		
2755	4	0	In			mm	,00	1,00	NR	212	Valve Butterfly With Gasket SB-ATI-VB030/0 WAFER 150 LB RF (125÷250 AARH) Cast DUCTILE IRON B 85	2849	6,70		
333	4	0	In			mm	,00	6,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	33,60		
200	4	0	In	3,18		mm	,00	6,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		12,40		
229	1	0	In	3,38		mm	,00	3,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,41		
1015	4	2+1/2	In	3,18	3,18	mm	,00	1,00	NR	212	Reducer Concentric ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		0,86		
2840	5/8	0	In			mm	95,00	16,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		3,68		
2849	5/8	0	In			mm	150,00	16,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		4,96		
407	4	0	In			mm	,00	2,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B				
M Erection												Total Kg:	247,94		
SZ1	SABIZ PLANT ANSI			63029 - 0			A			Area A		1 / 1		TOTAL Kg:	247,94

PT_63.4 PI_63.4 HV_63.4B	Plant SZ1 SABIZ PLANT ANSI	Piping Class	212	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0	
	Line 63029 - 0	Fluid		System		
	Dang. fluid type	Coating		De pres	Op tem	
	Area Area A	Sketch Sht	1 / 1	Isometric code	Page 1	
	Zones					



DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.20											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
901	4	0	In	3,18		mm	,00	4,50	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		39,21											
931	1/2	0	In	2,77		mm	,00	0,20	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,25											
933	1	0	In	3,38		mm	,00	0,50	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		1,25											
1827	1	0	In			mm	,00	1,00	NR	212	Valve Ball Full Port SB-ATI-VS019/0 THRD-F NPT 800# Forged ASTM A 105 S 98		1,40											
1898	1/2	0	In			mm	,00	1,00	NR	212	Valve Check SB-ATI-VR018/0 SW-F 800# Forged ASTM A 105 R 83		1,90											
2755	4	0	In			mm	,00	1,00	NR	212	Valve Butterfly With Gasket SB-ATI-VB030/0 WAFER 150 LB RF (125÷250 AARH) Cast DUCTILE IRON B 85	2849	6,70											
333	4	0	In			mm	,00	2,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	11,20											
200	4	0	In	3,18		mm	,00	2,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		4,13											
2849	5/8	0	In			mm	150,00	8,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		2,48											
M Erection												Total Kg:		68,53										
SZ1	SABIZ PLANT ANSI				63033 - 0				A	Area A		1 / 1		TOTAL Kg:		68,53								

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63033 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST					PROJ: 2F11		REV: 0		23/07/2012					
PUMA5			23/07/2012 15.00.21										DOC: 2F11.65.102									
DESMET - Ballestra								SABIZ 8000 kg/h					Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch							
936	2	0	In	3,91		mm	,00	3,00	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		16,31									
232	2	0	In	3,91		mm	,00	2,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		1,33									
M Erection												Total Kg:		17,64								
SZ1	SABIZ PLANT ANSI					63041 - 0					A	Area A	1 / 1		TOTAL Kg:		17,64					

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	212	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63041 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST					PROJ:		2F11		REV:		0	23/07/2012		
PUMA5			23/07/2012 15.00.21										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h					Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch							
931	1/2	0	In	2,77		mm	,00	0,20	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,25									
935	1+1/2	0	In	3,68		mm	,00	0,20	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,81									
936	2	0	In	3,91		mm	,00	3,00	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		16,31									
1898	1/2	0	In			mm	,00	1,00	NR	212	Valve Check SB-ATI-VR018/0 SW-F 800# Forged ASTM A 105 R 83		1,90									
119	2	0	In	3,91		mm	,00	1,00	NR	212	45° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,31									
232	2	0	In	3,91		mm	,00	1,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,66									
1091	2	1+1/2	In	3,91	3,68	mm	,00	1,00	NR	212	Reducer Concentric ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,43									
M Erection												Total Kg:		20,68								
SZ1	SABIZ PLANT ANSI					63042 - 0					A	Area A	1 / 1		TOTAL Kg:		20,68					

PSV_63.1	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63042 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.21										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
931	1/2	0	In	2,77		mm	,00	0,20	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,25										
935	1+1/2	0	In	3,68		mm	,00	0,20	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,81										
936	2	0	In	3,91		mm	,00	3,00	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		16,31										
1898	1/2	0	In			mm	,00	1,00	NR	212	Valve Check SB-ATI-VR018/0 SW-F 800# Forged ASTM A 105 R 83		1,90										
119	2	0	In	3,91		mm	,00	1,00	NR	212	45° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,31										
232	2	0	In	3,91		mm	,00	1,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,66										
1091	2	1+1/2	In	3,91	3,68	mm	,00	1,00	NR	212	Reducer Concentric ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,43										
M Erection												Total Kg:		20,68									
SZ1	SABIZ PLANT ANSI				63043 - 0				A		Area A		1 / 1		TOTAL Kg:		20,68						

PSV_63.2	Plant SZ1 SABIZ PLANT ANSI				Piping Class 212		Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0	
	Line 63043 - 0				Fluid		System	
	Dang. fluid type				Coating		De pres	
	Area Area A				Sketch Sht 1 / 1		Isometric code	
	Zones						Op tem	
								Page 1

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.21		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
931	1/2	0	In	2,77		mm	,00	0,50	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,63		
936	2	0	In	3,91		mm	,00	1,00	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		5,44		
1898	1/2	0	In			mm	,00	1,00	NR	212	Valve Check SB-ATI-VR018/0 SW-F 800# Forged ASTM A 105 R 83		1,90		
2692	2	0	In			mm	,00	1,00	NR	212	Valve Ball Type Bottom SB-ATI-VS051/0 LUG 150 LB RF (125÷250 AARH) Cast ASTM A 216 Gr. WCB S 128		10,50		
330	2	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2838	2,20		
232	2	0	In	3,91		mm	,00	2,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		1,33		
404	2	0	In			mm	,00	2,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B				
M Erection												Total Kg:	22,		
SZ1	SABIZ PLANT ANSI				63045 - 0				A	Area A	1 / 1	TOTAL Kg:	22,		

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63045 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.21		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
931	1/2	0	In	2,77		mm	,00	0,50	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,63		
936	2	0	In	3,91		mm	,00	1,00	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		5,44		
1898	1/2	0	In			mm	,00	1,00	NR	212	Valve Check SB-ATI-VR018/0 SW-F 800# Forged ASTM A 105 R 83		1,90		
2692	2	0	In			mm	,00	1,00	NR	212	Valve Ball Type Bottom SB-ATI-VS051/0 LUG 150 LB RF (125÷250 AARH) Cast ASTM A 216 Gr. WCB S 128		10,50		
330	2	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2838	2,20		
232	2	0	In	3,91		mm	,00	2,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		1,33		
404	2	0	In			mm	,00	2,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B				
M Erection												Total Kg:	22,		
SZ1	SABIZ PLANT ANSI			63046 - 0			A			Area A		1 / 1		TOTAL Kg:	22,

	Plant	SZ1	SABIZ PLANT ANSI	Piping Class	212	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63046 - 0		Fluid		System	
	Dang. fluid type			Coating		De pres	
	Area	Area A		Sketch Sht	1 / 1	Isometric code	
	Zones					Op tem	

DESMET - Ballestra								SKETCHES MATERIAL LIST					PROJ:	2F11	REV:	0	23/07/2012
PUMA5				23/07/2012 15.00.21									DOC:	2F11.65.102			
DESMET - Ballestra								SABIZ 8000 kg/h					Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch		
900	3	0	In	3,18		mm	,00	2,50	m	203	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		16,81				
931	1/2	0	In	2,77		mm	,00	1,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		1,27				
936	2	0	In	3,91		mm	,00	0,20	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		1,09				
1801	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30				
2668	3	0	In			mm	,00	1,00	NR	203	Valve Foot SB-ATI-VR025/0 FLG 150 LB RF (125÷250 AARH) Cast DUCTILE IRON R 89	2840	10,00				
332	3	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	4,10				
199	3	0	In	3,18		mm	,00	1,00	NR	203	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		1,18				
1236	3	2	In	3,18	3,91	mm	,00	1,00	NR	203	Reducer Eccentric ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		0,57				
2840	5/8	0	In			mm	95,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,92				
378	3	0	In			mm	,00	2,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C						
M Erection												Total Kg:	36,23				
SZ1	SABIZ PLANT ANSI				63047 - 0				A	Area A		1 / 1	TOTAL Kg:	36,23			

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63047 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMAS	23/07/2012 15.00.21		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
933	1	0	In	3,38		mm	,00	1,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		2,50		
934	1+1/4	0	In	3,56		mm	,00	0,20	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,68		
936	2	0	In	3,91		mm	,00	36,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		195,74		
1803	1	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,60		
1806	2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		2,20		
1893	2	0	In			mm	,00	1,00	NR	203	Valve Check SB-ATI-VR072/0 THRD-F NPT 200 LB Forged BRONZE R 126		2,05		
330	2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2838	2,20		
119	2	0	In	3,91		mm	,00	3,00	NR	203	45° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,94		
229	1	0	In	3,38		mm	,00	1,00	NR	203	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,14		
232	2	0	In	3,91		mm	,00	6,00	NR	203	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		3,99		
1090	2	1+1/4	In	3,91	3,56	mm	,00	1,00	NR	203	Reducer Concentric ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,43		
709	1/2	0	In			mm	,00	1,00	NR	203	Coupling Half SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,06		
2838	5/8	0	In			mm	85,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,84		
376	2	0	In			mm	,00	1,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C				
M Erection												Total Kg:	212,36		
SZ1	SABIZ PLANT ANSI				63048 - 0				A	Area A	1 / 1	TOTAL Kg:	212,36		

PI_63.6	Plant SZ1 SABIZ PLANT ANSI				Piping Class 203				Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0			
	Line 63048 - 0				Fluid				System			
	Dang. fluid type				Coating				De pres			
	Area Area A				Sketch Sht 1 / 1				Isometric code			
	Zones								Op tem			



DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.21		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
935	1+1/2	0	In	3,68		mm	,00	6,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		24,30		
1805	1+1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		1,50		
118	1+1/2	0	In	3,68		mm	,00	1,00	NR	203	45° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,18		
231	1+1/2	0	In	3,68		mm	,00	3,00	NR	203	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		1,10		
825	1+1/2	0	In			mm	,00	1,00	NR	203	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		1,26		
M Erection												Total Kg:	28,34		

SZ1	SABIZ PLANT ANSI			63050 - 0			A			Area A			1 / 1			TOTAL Kg:	28,34
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	Plant SZ1 SABIZ PLANT ANSI				Piping Class 203		Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0	
	Line 63050 - 0				Fluid		System	
	Dang. fluid type				Coating		De pres	
	Area Area A				Sketch Sht 1 / 1		Isometric code	
	Zones						Op tem	
								Page 1

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.21		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
936	2	0	In	3,91		mm	,00	2,50	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		13,59		
330	2	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2838	2,20		
232	2	0	In	3,91		mm	,00	1,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,66		
2838	5/8	0	In			mm	85,00	4,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,84		
404	2	0	In			mm	,00	1,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B				
M Erection												Total Kg:	17,3		

SZ1	SABIZ PLANT ANSI			63051 - 0			A			Area A			1 / 1			TOTAL Kg:	17,3
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	Plant SZ1 SABIZ PLANT ANSI				Piping Class 212		Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0	
	Line 63051 - 0				Fluid		System	
	Dang. fluid type				Coating		De pres	
	Area Area A				Sketch Sht 1 / 1		Isometric code	
	Zones						Op tem	
								Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST					PROJ: 2F11		REV: 0		23/07/2012			
PUMA5			23/07/2012 15.00.22										DOC: 2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h					Size: In    Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch					
935	1+1/2	0	In	3,68		mm	,00	1,00	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		4,05							
1838	1+1/2	0	In			mm	,00	1,00	NR	212	Valve Ball Full Port SB-ATI-VS050/0 LUG 150 LB RF (125÷250 AARH) Forged ASTM A 105 S 127	2971	7,00							
329	1+1/2	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2832	1,40							
231	1+1/2	0	In	3,68		mm	,00	1,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,37							
403	1+1/2	0	In			mm	,00	2,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B									
2971	1/2	0	In			mm	35,00	8,00	NR	212	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7		0,64							
M Erection												Total Kg:		13,46						
SZ1	SABIZ PLANT ANSI					63052 - 0					A	Area A		1 / 1		TOTAL Kg:		13,46		

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63052 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
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DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.22										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
900	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										
936	2	0	In	3,91		mm	,00	0,20	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		1,09										
1841	3	0	In			mm	,00	1,00	NR	212	Valve Ball Full Port SB-ATI-VS050/0 LUG 150 LB RF (125÷250 AARH) Forged ASTM A 105 S 127	2975	14,00										
332	3	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	4,10										
86	3	0	In	3,18		mm	,00	1,00	NR	212	45° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		0,60										
199	3	0	In	3,18		mm	,00	1,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		1,18										
1236	3	2	In	3,18	3,91	mm	,00	1,00	NR	212	Reducer Eccentric ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		0,57										
406	3	0	In			mm	,00	2,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B												
2975	5/8	0	In			mm	45,00	8,00	NR	212	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7		1,28										
M Erection												Total Kg:		32,9									
SZ1	SABIZ PLANT ANSI				63053 - 0				A	Area A		1 / 1		TOTAL Kg:		32,9							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63053 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.22											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
934	1+1/4	0	In	3,56		mm	,00	0,20	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,68											
936	2	0	In	3,91		mm	,00	21,00	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		114,18											
1903	2	0	In			mm	,00	1,00	NR	212	Valve Check SB-ATI-VR018/0 SW-F 800# Forged ASTM A 105 R 83		15,00											
330	2	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2838	2,20											
119	2	0	In	3,91		mm	,00	2,00	NR	212	45° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,63											
232	2	0	In	3,91		mm	,00	7,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		4,65											
1090	2	1+1/4	In	3,91	3,56	mm	,00	1,00	NR	212	Reducer Concentric ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,43											
2838	5/8	0	In			mm	85,00	4,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,84											
404	2	0	In			mm	,00	1,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B													
M Erection												Total Kg:		138,61										
SZ1	SABIZ PLANT ANSI				63054 - 0				A	Area A		1 / 1		TOTAL Kg:		138,61								

PI_63.5	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63054 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

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DESMET - Ballestra								SKETCHES MATERIAL LIST								PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.22												DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h								Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch										
936	2	0	In	3,91		mm	,00	3,00	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		16,31												
1839	2	0	In			mm	,00	1,00	NR	212	Valve Ball Full Port SB-ATI-VS050/0 LUG 150 LB RF (125÷250 AARH) Forged ASTM A 105 S 127	2974	6,50												
330	2	0	In			mm	,00	2,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2838	4,40												
119	2	0	In	3,91		mm	,00	1,00	NR	212	45° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,31												
232	2	0	In	3,91		mm	,00	3,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		1,99												
404	2	0	In			mm	,00	2,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B														
2974	5/8	0	In			mm	40,00	8,00	NR	212	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7		1,20												
M Erection												Total Kg:		30,72											
SZ1	SABIZ PLANT ANSI				63055 - 0				A		Area A		1 / 1		TOTAL Kg:		30,72								

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63055 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
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DESMET - Ballestra								SKETCHES MATERIAL LIST								PROJ: 2F11		REV: 0		23/07/2012					
PUMA5				23/07/2012 15.00.22												DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h								Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component								Gen. Bolt	Weight (Kg)		As.bly	Branch		
935	1+1/2	0	In	3,68		mm	,00	4,00	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B									16,20					
1829	1+1/2	0	In			mm	,00	1,00	NR	212	Valve Ball Full Port SB-ATI-VS019/0 THRD-F NPT 800# Forged ASTM A 105 S 98									3,20					
231	1+1/2	0	In	3,68		mm	,00	3,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB									1,10					
825	1+1/2	0	In			mm	,00	1,00	NR	212	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105									1,26					
M Erection																Total Kg:		21,76							
SZ1	SABIZ PLANT ANSI				63056 - 0				A		Area A		1 / 1				TOTAL Kg:		21,76						

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63056 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.22											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	5,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		6,33											
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		1,70											
193	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75											
2576	1/2	0	In			mm	,00	1,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105													
M Erection													Total Kg:		8,78									
SZ1	SABIZ PLANT ANSI				63101 - 0				A		Area A		1 / 1		TOTAL Kg:		8,78							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63101 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					



DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.22											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	5,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		6,33											
1801	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
193	1/2	0	In			mm	,00	3,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75											
2576	1/2	0	In			mm	,00	1,00	NR	203	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105													
849	1/2	0	In			mm	,00	1,00	NR	203	Union SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,38											
M Erection													Total Kg:		7,76									
SZ1	SABIZ PLANT ANSI				63102 - 0				A		Area A		1 / 1		TOTAL Kg:		7,76							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63102 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.22											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component							Gen. Bolt	Weight (Kg)		As.bly	Branch		
931	1/2	0	In	2,77		mm	,00	8,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B								10,13					
1801	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87								0,30					
2082	1/2	0	In			mm	,00	1,00	NR	203	Strainer Y-Type SB-ATI-VF018/0 THRD-F NPT 200 LB Forged BRONZE F 70								0,50					
325	1/2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105							2830	0,40					
193	1/2	0	In			mm	,00	4,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105								1,00					
2576	1/2	0	In			mm	,00	1,00	NR	203	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105													
849	1/2	0	In			mm	,00	1,00	NR	203	Union SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105								0,38					
2830	1/2	0	In			mm	65,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H								0,44					
371	1/2	0	In			mm	,00	1,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C													
M Erection												Total Kg:		13,15										
SZ1	SABIZ PLANT ANSI				63103 - 0				A		Area A		1 / 1		TOTAL Kg:		13,15							

KV\_63.4  
PI\_63.1

Plant SZ1 SABIZ PLANT ANSI  
  
Line 63103 - 0  
Dang. fluid type  
Area Area A  
Zones

Piping Class 203  
  
Fluid  
Coating  
Sketch Sht 1 / 1

Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0  
  
System  
De pres  
Isometric code  
  
Op tem  
  
Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST					PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.22									DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h					Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch							
931	1/2	0	In	2,77		mm	,00	2,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		2,53									
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		1,70									
325	1/2	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2830	0,40									
193	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75									
2830	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44									
2816	1/2	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING											
M Erection												Total Kg:		5,82								
SZ1	SABIZ PLANT ANSI				63105 - 0				A		Area A		1 / 1		TOTAL Kg:		5,82					

KY_63.3A	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63105 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.22		DOC:	2F11.65.102			

DESMET - Ballestra			SABIZ 8000 kg/h			Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
931	1/2	0	In	2,77		mm	,00	4,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		5,06		
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		1,70		
325	1/2	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2830	0,40		
193	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75		
2830	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44		
2816	1/2	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING				

M Erection												Total Kg:	8,35
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SZ1	SABIZ PLANT ANSI		63106 - 0		A	Area A		1 / 1		TOTAL Kg:		8,35
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KY_63.3B	Plant SZ1 SABIZ PLANT ANSI		Piping Class 205		Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0	
	Line 63106 - 0		Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area Area A		Sketch Sht 1 / 1		Isometric code	
	Zones				Op tem	

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5			23/07/2012 15.00.22											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component						Gen. Bolt	Weight (Kg)		As.bly	Branch		
933	1	0	In	3,38		mm	,00	16,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B							40,04					
2027	1	0	In			mm	,00	2,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61							6,60					
2090	1	0	In			mm	,00	1,00	NR	205	Strainer Y-Type SB-ATI-VF016/0 SW-F 800# Forged ASTM A 105 F 69							1,40					
327	1	0	In			mm	,00	3,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105						2831	2,40					
229	1	0	In	3,38		mm	,00	11,00	NR	205	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB							1,49					
2831	1/2	0	In			mm	70,00	6,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H							0,66					
2970	1/2	0	In			mm	30,00	8,00	NR	205	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7							0,64					
2818	1	0	In			mm	,00	3,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING												
M Erection												Total Kg:						53,22					
SZ1	SABIZ PLANT ANSI				63107 - 0				A		Area A		1 / 1				TOTAL Kg:		53,22				

TV_63.1A	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63107 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

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DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.23		DOC:	2F11.65.102			

DESMET - Ballestra			SABIZ 8000 kg/h			Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
933	1	0	In	3,38		mm	,00	11,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		27,52		
2027	1	0	In			mm	,00	4,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		13,20		
2680	1	0	In			mm	,00	1,00	NR	205	Steam Trap SB-ATI-VT005/0 SW-F 300 LB Forged ASTM A 105 T 66		3,40		
327	1	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2831	0,80		
229	1	0	In	3,38		mm	,00	6,00	NR	205	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,81		
2831	1/2	0	In			mm	70,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44		
2818	1	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING				
M Erection												Total Kg:	46,18		
SZ1	SABIZ PLANT ANSI		63108 - 0		A		Area A		1 / 1		TOTAL Kg:		46,18		

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63108 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.23											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	4,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		5,06											
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		1,70											
2088	1/2	0	In			mm	,00	1,00	NR	205	Strainer Y-Type SB-ATI-VF016/0 SW-F 800# Forged ASTM A 105 F 69		0,50											
325	1/2	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2830	0,40											
193	1/2	0	In			mm	,00	4,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,00											
2830	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44											
2816	1/2	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING													
M Erection												Total Kg:		9,1										
SZ1	SABIZ PLANT ANSI				63109 - 0				A		Area A		1 / 1		TOTAL Kg:		9,1							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63109 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.23										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
933	1	0	In	3,38		mm	,00	10,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		25,02										
2027	1	0	In			mm	,00	2,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		6,60										
2090	1	0	In			mm	,00	1,00	NR	205	Strainer Y-Type SB-ATI-VF016/0 SW-F 800# Forged ASTM A 105 F 69		1,40										
327	1	0	In			mm	,00	3,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2831	2,40										
229	1	0	In	3,38		mm	,00	7,00	NR	205	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,95										
2831	1/2	0	In			mm	70,00	6,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,66										
2970	1/2	0	In			mm	30,00	8,00	NR	205	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7		0,64										
2818	1	0	In			mm	,00	3,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING												
M Erection												Total Kg:		37,67									
SZ1	SABIZ PLANT ANSI				63110 - 0				A		Area A		1 / 1		TOTAL Kg:		37,67						

TV_63.1B	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63110 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

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DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.23		DOC:	2F11.65.102			

DESMET - Ballestra			SABIZ 8000 kg/h			Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
933	1	0	In	3,38		mm	,00	11,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		27,52		
2027	1	0	In			mm	,00	4,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		13,20		
2680	1	0	In			mm	,00	1,00	NR	205	Steam Trap SB-ATI-VT005/0 SW-F 300 LB Forged ASTM A 105 T 66		3,40		
327	1	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2831	0,80		
229	1	0	In	3,38		mm	,00	7,00	NR	205	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,95		
2831	1/2	0	In			mm	70,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44		
2818	1	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING				
M Erection												Total Kg:	46,31		
SZ1	SABIZ PLANT ANSI			63111 - 0			A			Area A		1 / 1		TOTAL Kg:	46,31

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63111 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMAS	23/07/2012 15.00.23		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
931	1/2	0	In	2,77		mm	,00	4,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		5,06		
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		1,70		
2088	1/2	0	In			mm	,00	1,00	NR	205	Strainer Y-Type SB-ATI-VF016/0 SW-F 800# Forged ASTM A 105 F 69		0,50		
325	1/2	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2830	0,40		
193	1/2	0	In			mm	,00	4,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,00		
2830	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44		
2816	1/2	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING				

M Erection												Total Kg:	9,1
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SZ1	SABIZ PLANT ANSI				63112 - 0				A	Area A	1 / 1	TOTAL Kg:	9,1
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	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63112 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.23		DOC:	2F11.65.102			

DESMET - Ballestra			SABIZ 8000 kg/h			Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
933	1	0	In	3,38		mm	,00	10,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		25,02		
2027	1	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		3,30		
327	1	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2831	0,80		
116	1	0	In	3,38		mm	,00	2,00	NR	205	45° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,14		
229	1	0	In	3,38		mm	,00	5,00	NR	205	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,68		
2831	1/2	0	In			mm	70,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44		
2818	1	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING				
M Erection												Total Kg:	30,37		
SZ1	SABIZ PLANT ANSI			63115 - 0			A			Area A		1 / 1		TOTAL Kg:	30,37

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63115 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.23										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
933	1	0	In	3,38		mm	,00	5,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		12,51										
2027	1	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		3,30										
327	1	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2831	0,80										
229	1	0	In	3,38		mm	,00	4,00	NR	205	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,54										
2831	1/2	0	In			mm	70,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44										
2818	1	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING												
M Erection												Total Kg:		17,59									
SZ1	SABIZ PLANT ANSI				63116 - 0				A	Area A		1 / 1		TOTAL Kg:		17,59							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63116 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.23										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component						Gen. Bolt	Weight (Kg)		As.bly	Branch		
931	1/2	0	In	2,77		mm	,00	4,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B							5,06					
193	1/2	0	In			mm	,00	3,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105							0,75					
M Erection																Total Kg:		5,81					
SZ1	SABIZ PLANT ANSI				63117 - 0				A		Area A		1 / 1		TOTAL Kg:		5,81						

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63117 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.24		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
931	1/2	0	In	2,77		mm	,00	5,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		6,33		
2025	1/2	0	In			mm	,00	2,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		3,40		
325	1/2	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2830	0,40		
193	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75		
2576	1/2	0	In			mm	,00	1,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105				
2830	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44		
2816	1/2	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING				

M Erection												Total Kg:	11,32
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SZ1	SABIZ PLANT ANSI		63118 - 0		A	Area A	1 / 1		TOTAL Kg:		11,32
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	Plant SZ1 SABIZ PLANT ANSI				Piping Class 205				Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0			
	Line 63118 - 0				Fluid				System			
	Dang. fluid type				Coating				De pres			
	Area Area A				Sketch Sht 1 / 1				Isometric code			
	Zones								Op tem			

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.24										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
933	1	0	In	3,38		mm	,00	3,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		7,51										
327	1	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2831	0,80										
116	1	0	In	3,38		mm	,00	1,00	NR	203	45° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,07										
229	1	0	In	3,38		mm	,00	3,00	NR	203	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,41										
2831	1/2	0	In			mm	70,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44										
373	1	0	In			mm	,00	1,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C												
M Erection												Total Kg:		9,22									
SZ1	SABIZ PLANT ANSI				63119 - 0				A		Area A		1 / 1		TOTAL Kg:		9,22						

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63119 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ: 2F11		REV: 0		23/07/2012						
PUMA5				23/07/2012 15.00.24										DOC: 2F11.65.102										
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm		
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	5,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		6,33											
1801	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
193	1/2	0	In			mm	,00	3,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75											
849	1/2	0	In			mm	,00	1,00	NR	203	Union SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,38											
M Erection												Total Kg:		7,76										
SZ1	SABIZ PLANT ANSI				63120 - 0				A		Area A		1 / 1		TOTAL Kg:		7,76							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63120 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1



DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.24										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
931	1/2	0	In	2,77		mm	,00	3,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		3,80										
2033	1/2	0	In			mm	,00	1,00	NR	203	Valve Globe SB-ATI-VD001/0 THRD-F NPT 200 LB Forged BRONZE D 51		0,70										
193	1/2	0	In			mm	,00	4,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,00										
2576	1/2	0	In			mm	,00	1,00	NR	203	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105												
667	1/2	0	In			mm	,00	1,00	NR	203	Coupling SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,12										
849	1/2	0	In			mm	,00	1,00	NR	203	Union SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,38										
M Erection												Total Kg:		6,									
SZ1	SABIZ PLANT ANSI				63121 - 0				A	Area A		1 / 1		TOTAL Kg:		6,							

PI_63.F2A	Plant	SZ1	SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63121 - 0		Fluid		System	
	Dang. fluid type			Coating		De pres	
	Area	Area A		Sketch Sht	1 / 1	Isometric code	
	Zones					Op tem	

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ: 2F11		REV: 0		23/07/2012					
PUMA5				23/07/2012 15.00.24										DOC: 2F11.65.102									
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
931	1/2	0	In	2,77		mm	,00	5,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		6,33										
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		1,70										
193	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75										
M Erection												Total Kg:		8,78									
SZ1	SABIZ PLANT ANSI				63122 - 0				A		Area A		1 / 1		TOTAL Kg:		8,78						

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63122 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.24		DOC:	2F11.65.102			

DESMET - Ballestra			SABIZ 8000 kg/h			Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
931	1/2	0	In	2,77		mm	,00	5,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		6,33		
2025	1/2	0	In			mm	,00	2,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		3,40		
325	1/2	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2830	0,40		
80	1/2	0	In			mm	,00	1,00	NR	205	45° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,18		
193	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75		
2576	1/2	0	In			mm	,00	1,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105				
2830	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44		
2816	1/2	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) – G5N INNER OUTER RING				

M Erection												Total Kg:	11,5
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SZ1	SABIZ PLANT ANSI		63123 - 0		A	Area A		1 / 1		TOTAL Kg:		11,5
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	Plant SZ1 SABIZ PLANT ANSI			Piping Class 205			Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0		
	Line 63123 - 0			Fluid			System		
	Dang. fluid type			Coating			De pres		
	Area Area A			Sketch Sht 1 / 1			Isometric code		
	Zones						Op tem		

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.24											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	4,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		5,06											
193	1/2	0	In			mm	,00	3,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75											
M Erection													Total Kg:		5,81									
SZ1	SABIZ PLANT ANSI				63124 - 0				A		Area A		1 / 1		TOTAL Kg:		5,81							

	Plant	SZ1	SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0	
	Line	63124 - 0		Fluid		System		
	Dang. fluid type			Coating		De pres		
	Area	Area A		Sketch Sht	1 / 1	Isometric code		
	Zones					Op tem		
							Page	1

DESMET - Ballestra							SKETCHES MATERIAL LIST						PROJ: 2F11		REV: 0	23/07/2012		
PUMA5			23/07/2012 15.00.24										DOC: 2F11.65.102					
DESMET - Ballestra							SABIZ 8000 kg/h					Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm		
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
931	1/2	0	In	2,77		mm	,00	5,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B					6,33		
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61					1,70		
193	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105					0,75		
M Erection															Total Kg:	8,78		
SZ1	SABIZ PLANT ANSI				63125 - 0				A	Area A				1 / 1	TOTAL Kg:	8,78		

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63125 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.24											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component							Gen. Bolt	Weight (Kg)		As.bly	Branch		
931	1/2	0	In	2,77		mm	,00	3,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B								3,80					
193	1/2	0	In			mm	,00	3,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105								0,75					
M Erection																	Total Kg:		4,55					
SZ1	SABIZ PLANT ANSI				63126 - 0				A		Area A				1 / 1		TOTAL Kg:		4,55					

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63126 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	
					Page	1

DESMET - Ballestra								SKETCHES MATERIAL LIST					PROJ:	2F11	REV:	0	23/07/2012
PUMA5			23/07/2012 15.00.24										DOC:	2F11.65.102			
DESMET - Ballestra								SABIZ 8000 kg/h					Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch		
931	1/2	0	In	2,77		mm	,00	4,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		5,06				
2025	1/2	0	In			mm	,00	2,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		3,40				
325	1/2	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2830	0,40				
193	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75				
2576	1/2	0	In			mm	,00	1,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105						
2830	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44				
2816	1/2	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING						
M Erection													Total Kg:	10,05			
SZ1	SABIZ PLANT ANSI					63127 - 0					A	Area A	1 / 1	TOTAL Kg:	10,05		

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63127 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.24											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
933	1	0	In	3,38		mm	,00	3,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		7,51											
327	1	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2831	0,80											
116	1	0	In	3,38		mm	,00	1,00	NR	203	45° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,07											
229	1	0	In	3,38		mm	,00	3,00	NR	203	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,41											
2831	1/2	0	In			mm	70,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44											
373	1	0	In			mm	,00	1,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C													
M Erection												Total Kg:		9,22										
SZ1	SABIZ PLANT ANSI				63128 - 0				A		Area A		1 / 1		TOTAL Kg:		9,22							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0		
	Line 63128 - 0	Fluid	System		
	Dang. fluid type	Coating	De pres		
	Area Area A	Sketch Sht 1 / 1	Isometric code		Op tem
	Zones		Page 1		



DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.24											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	5,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		6,33											
1801	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
193	1/2	0	In			mm	,00	3,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75											
849	1/2	0	In			mm	,00	2,00	NR	203	Union SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,76											
M Erection													Total Kg:		8,14									
SZ1	SABIZ PLANT ANSI				63129 - 0				A		Area A		1 / 1		TOTAL Kg:		8,14							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63129 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.25										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
931	1/2	0	In	2,77		mm	,00	3,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		3,80										
2033	1/2	0	In			mm	,00	1,00	NR	203	Valve Globe SB-ATI-VD001/0 THRD-F NPT 200 LB Forged BRONZE D 51		0,70										
193	1/2	0	In			mm	,00	4,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,00										
2576	1/2	0	In			mm	,00	1,00	NR	203	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105												
667	1/2	0	In			mm	,00	1,00	NR	203	Coupling SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,12										
849	1/2	0	In			mm	,00	1,00	NR	203	Union SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,38										
M Erection													Total Kg:		6,								
SZ1	SABIZ PLANT ANSI					63130 - 0					A	Area A	1 / 1		TOTAL Kg:		6,						

PI_63.F2B	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63130 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ: 2F11		REV: 0		23/07/2012						
PUMA5				23/07/2012 15.00.25										DOC: 2F11.65.102										
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm		
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	5,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		6,33											
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		1,70											
193	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75											
M Erection												Total Kg:		8,78										
SZ1	SABIZ PLANT ANSI				63131 - 0				A		Area A		1 / 1		TOTAL Kg:		8,78							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63131 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.25		DOC:	2F11.65.102			

DESMET - Ballestra			SABIZ 8000 kg/h			Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
931	1/2	0	In	2,77		mm	,00	5,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		6,33		
2025	1/2	0	In			mm	,00	2,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		3,40		
325	1/2	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2830	0,40		
80	1/2	0	In			mm	,00	1,00	NR	205	45° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,18		
193	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75		
2576	1/2	0	In			mm	,00	1,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105				
2830	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44		
2816	1/2	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) – G5N INNER OUTER RING				

M Erection												Total Kg:	11,5
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SZ1	SABIZ PLANT ANSI		63132 - 0		A	Area A		1 / 1		TOTAL Kg:		11,5
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	Plant SZ1 SABIZ PLANT ANSI		Piping Class 205		Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0	
	Line 63132 - 0		Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area Area A		Sketch Sht 1 / 1		Isometric code	
	Zones				Op tem	

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.25											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	5,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		6,33											
193	1/2	0	In			mm	,00	3,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75											
M Erection													Total Kg:		7,08									
SZ1	SABIZ PLANT ANSI				63133 - 0				A		Area A		1 / 1		TOTAL Kg:		7,08							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63133 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	
					Page	1

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ: 2F11		REV: 0		23/07/2012						
PUMA5				23/07/2012 15.00.25										DOC: 2F11.65.102										
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm		
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	5,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		6,33											
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		1,70											
193	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75											
M Erection												Total Kg:		8,78										
SZ1	SABIZ PLANT ANSI				63134 - 0				A		Area A		1 / 1		TOTAL Kg:		8,78							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63134 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.25											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component					Gen. Bolt	Weight (Kg)		As.bly	Branch				
935	1+1/2	0	In	3,68		mm	,00	12,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B						48,59							
1805	1+1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87						1,50							
2086	1+1/2	0	In			mm	,00	1,00	NR	203	Strainer Y-Type SB-ATI-VF018/0 THRD-F NPT 200 LB Forged BRONZE F 70						2,20							
327	1	0	In			mm	,00	2,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105					2831	1,60							
329	1+1/2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105					2832	1,40							
231	1+1/2	0	In	3,68		mm	,00	6,00	NR	203	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB						2,21							
1373	1+1/2	1	In	3,68	3,38	mm	,00	2,00	NR	203	Reducer Eccentric ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB						0,52							
2831	1/2	0	In			mm	70,00	8,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H						0,88							
2832	1/2	0	In			mm	75,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H						0,48							
373	1	0	In			mm	,00	2,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C													
375	1+1/2	0	In			mm	,00	1,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C													
M Erection																Total Kg:		59,37						
SZ1	SABIZ PLANT ANSI				63135 - 0				A		Area A		1 / 1		TOTAL Kg:		59,37							

TV_63.3	Plant SZ1 SABIZ PLANT ANSI										Piping Class 203					Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0				
	Line 63135 - 0										Fluid					System				
	Dang. fluid type										Coating					De pres				
	Area Area A										Sketch Sht 1 / 1					Isometric code				
	Zones															Op tem				
Page 1																				

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.25										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
935	1+1/2	0	In	3,68		mm	,00	4,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		16,20										
1892	1+1/2	0	In			mm	,00	1,00	NR	203	Valve Check SB-ATI-VR072/0 THRD-F NPT 200 LB Forged BRONZE R 126		1,50										
329	1+1/2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2832	1,40										
231	1+1/2	0	In	3,68		mm	,00	3,00	NR	203	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		1,10										
2832	1/2	0	In			mm	75,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,48										
375	1+1/2	0	In			mm	,00	1,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C												
M Erection													Total Kg:		20,68								
SZ1	SABIZ PLANT ANSI				63136 - 0				A		Area A		1 / 1		TOTAL Kg:		20,68						

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63136 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1



DESMET - Ballestra								SKETCHES MATERIAL LIST								PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.25												DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h								Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch										
935	1+1/2	0	In	3,68		mm	,00	8,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		32,39												
1805	1+1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		1,50												
2086	1+1/2	0	In			mm	,00	1,00	NR	203	Strainer Y-Type SB-ATI-VF018/0 THRD-F NPT 200 LB Forged BRONZE F 70		2,20												
327	1	0	In			mm	,00	2,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2831	1,60												
329	1+1/2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2832	1,40												
231	1+1/2	0	In	3,68		mm	,00	5,00	NR	203	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		1,84												
1373	1+1/2	1	In	3,68	3,38	mm	,00	2,00	NR	203	Reducer Eccentric ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,52												
2831	1/2	0	In			mm	70,00	8,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,88												
2832	1/2	0	In			mm	75,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,48												
373	1	0	In			mm	,00	2,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C														
375	1+1/2	0	In			mm	,00	1,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C														
M Erection												Total Kg:		42,81											
SZ1	SABIZ PLANT ANSI				63137 - 0				A	Area A		1 / 1		TOTAL Kg:		42,81									

TV_63.2	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0		
	Line 63137 - 0	Fluid	System		
	Dang. fluid type	Coating	De pres		
	Area Area A	Sketch Sht 1 / 1	Isometric code		Op tem
	Zones		Page 1		

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.25											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
935	1+1/2	0	In	3,68		mm	,00	6,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		24,30											
1892	1+1/2	0	In			mm	,00	1,00	NR	203	Valve Check SB-ATI-VR072/0 THRD-F NPT 200 LB Forged BRONZE R 126		1,50											
329	1+1/2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2832	1,40											
118	1+1/2	0	In	3,68		mm	,00	1,00	NR	203	45° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,18											
231	1+1/2	0	In	3,68		mm	,00	2,00	NR	203	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,74											
2832	1/2	0	In			mm	75,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,48											
375	1+1/2	0	In			mm	,00	1,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C													
M Erection													Total Kg:		28,6									
SZ1	SABIZ PLANT ANSI				63138 - 0				A		Area A		1 / 1		TOTAL Kg:		28,6							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63138 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra							SKETCHES MATERIAL LIST						PROJ: 2F11		REV: 0		23/07/2012					
PUMA5			23/07/2012 15.00.25										DOC: 2F11.65.102									
DESMET - Ballestra							SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component						Gen. Bolt	Weight (Kg)		As.bly	Branch	
931	1/2	0	In	2,77		mm	,00	6,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B							7,59				
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61							1,70				
193	1/2	0	In			mm	,00	4,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105							1,00				
M Erection																Total Kg:		10,29				
SZ1	SABIZ PLANT ANSI				63139 - 0				A		Area A				1 / 1		TOTAL Kg:		10,29			

	Plant	SZ1 SABIZ PLANT ANSI		Piping Class	205		Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0		
	Line	63139 - 0		Fluid			System			
	Dang. fluid type			Coating			De pres			
	Area	Area A		Sketch Sht	1 / 1		Isometric code			
	Zones						Op tem			
										Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST					PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.26									DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h					Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch							
929	1/4	0	In	2,24		mm	,00	0,20	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,13									
931	1/2	0	In	2,77		mm	,00	6,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		7,59									
1801	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30									
193	1/2	0	In			mm	,00	4,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,00									
849	1/2	0	In			mm	,00	1,00	NR	203	Union SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,38									
2384	1/2	1/4	In			mm	,00	1,00	NR	203	Coupling Reducing SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,03									
M Erection												Total Kg:		9,43								
SZ1	SABIZ PLANT ANSI				63140 - 0				A	Area A		1 / 1		TOTAL Kg:		9,43						

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63140 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST					PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.26									DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h					Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch							
929	1/4	0	In	2,24		mm	,00	0,20	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,13									
931	1/2	0	In	2,77		mm	,00	4,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		5,06									
193	1/2	0	In			mm	,00	3,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75									
2576	1/2	0	In			mm	,00	2,00	NR	203	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105											
667	1/2	0	In			mm	,00	2,00	NR	203	Coupling SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,24									
849	1/2	0	In			mm	,00	1,00	NR	203	Union SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,38									
2260	1/2	1/4	In			mm	,00	1,00	NR	203	Coupling Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,03									
M Erection												Total Kg:		6,59								
SZ1	SABIZ PLANT ANSI				63141 - 0				A	Area A		1 / 1		TOTAL Kg:		6,59						

PI\_63.7A  
PSHL\_63.8A

Plant SZ1 SABIZ PLANT ANSI  
  
Line 63141 - 0  
Dang. fluid type  
Area Area A  
Zones

Piping Class 203  
  
Fluid  
Coating  
Sketch Sht 1 / 1

Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0  
  
System  
De pres  
Isometric code  
  
Op tem  
  
Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11	REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.26											DOC:		2F11.65.102						
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm	Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
929	1/4	0	In	2,24		mm	,00	0,20	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,13										
931	1/2	0	In	2,77		mm	,00	7,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		8,86										
1801	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30										
193	1/2	0	In			mm	,00	4,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,00										
849	1/2	0	In			mm	,00	1,00	NR	203	Union SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,38										
2384	1/2	1/4	In			mm	,00	1,00	NR	203	Coupling Reducing SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,03										
M Erection												Total Kg:		10,7									
SZ1	SABIZ PLANT ANSI				63142 - 0				A	Area A		1 / 1		TOTAL Kg:		10,7							

	Plant	SZ1	SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63142 - 0			Fluid	System	
	Dang. fluid type				Coating	De pres	Op tem
	Area	Area A			Sketch Sht	1 / 1	Isometric code
	Zones						

DESMET - Ballestra							SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5			23/07/2012 15.00.26										DOC:		2F11.65.102							
DESMET - Ballestra							SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch							
929	1/4	0	In	2,24		mm	,00	0,20	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,13									
931	1/2	0	In	2,77		mm	,00	5,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		6,33									
2033	1/2	0	In			mm	,00	1,00	NR	203	Valve Globe SB-ATI-VD001/0 THRD-F NPT 200 LB Forged BRONZE D 51		0,70									
193	1/2	0	In			mm	,00	4,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,00									
2576	1/2	0	In			mm	,00	2,00	NR	203	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105											
667	1/2	0	In			mm	,00	2,00	NR	203	Coupling SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,24									
821	1/2	0	In			mm	,00	1,00	NR	203	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,30									
M Erection													Total Kg:		8,7							
SZ1	SABIZ PLANT ANSI					63143 - 0					A	Area A		1 / 1		TOTAL Kg:		8,7				

PI-63.7B  
PSHL\_63.8B

Plant SZ1 SABIZ PLANT ANSI  
  
Line 63143 - 0  
Dang. fluid type  
Area Area A  
Zones

Piping Class 203  
  
Fluid  
Coating  
Sketch Sht 1 / 1

Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0  
  
System  
De pres  
Isometric code

Op tem  
  
Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.26											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	5,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		6,33											
2033	1/2	0	In			mm	,00	1,00	NR	203	Valve Globe SB-ATI-VD001/0 THRD-F NPT 200 LB Forged BRONZE D 51		0,70											
193	1/2	0	In			mm	,00	3,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75											
2576	1/2	0	In			mm	,00	1,00	NR	203	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105													
849	1/2	0	In			mm	,00	1,00	NR	203	Union SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,38											
M Erection													Total Kg:		8,16									
SZ1	SABIZ PLANT ANSI				63144 - 0				A		Area A		1 / 1		TOTAL Kg:		8,16							

KY_63.8A	Plant	SZ1	SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63144 - 0		Fluid		System	
	Dang. fluid type			Coating		De pres	
	Area	Area A		Sketch Sht	1 / 1	Isometric code	
	Zones					Op tem	



DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.26											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	3,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		3,80											
2033	1/2	0	In			mm	,00	1,00	NR	203	Valve Globe SB-ATI-VD001/0 THRD-F NPT 200 LB Forged BRONZE D 51		0,70											
193	1/2	0	In			mm	,00	2,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,50											
849	1/2	0	In			mm	,00	1,00	NR	203	Union SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,38											
M Erection													Total Kg:		5,38									
SZ1	SABIZ PLANT ANSI				63145 - 0				A		Area A		1 / 1		TOTAL Kg:		5,38							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63145 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012			
PUMA5				23/07/2012 15.00.26											DOC:		2F11.65.102									
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm			
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component										Gen. Bolt	Weight (Kg)		As.bly	Branch	
931	1/2	0	In	2,77		mm	,00	4,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B											5,06				
193	1/2	0	In			mm	,00	2,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105											0,50				
M Erection																	Total Kg:		5,56							
SZ1	SABIZ PLANT ANSI				63146 - 0				A		Area A				1 / 1				TOTAL Kg:		5,56					

	Plant	SZ1	SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63146 - 0		Fluid		System	
	Dang. fluid type			Coating		De pres	
	Area	Area A		Sketch Sht	1 / 1	Isometric code	
	Zones					Op tem	
						Page	1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.26											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
929	1/4	0	In	2,24		mm	,00	0,20	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,13											
931	1/2	0	In	2,77		mm	,00	2,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		2,53											
193	1/2	0	In			mm	,00	2,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,50											
2260	1/2	1/4	In			mm	,00	1,00	NR	203	Coupling Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,03											
M Erection													Total Kg:		3,19									
SZ1	SABIZ PLANT ANSI				63147 - 0				A		Area A		1 / 1		TOTAL Kg:		3,19							

INSERT REDUCING 1/4"x1/8" THD ANSI B1.20.1 NPT FORGED SB-ATI-PR008/0 3000 LB ASTM A105 Pz. N.1	Plant SZ1 SABIZ PLANT ANSI		Piping Class 203		Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0	
	Line 63147 - 0		Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area Area A		Sketch Sht 1 / 1		Isometric code	
	Zones				Op tem	
						Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.26											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
929	1/4	0	In	2,24		mm	,00	0,20	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,13											
931	1/2	0	In	2,77		mm	,00	2,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		2,53											
193	1/2	0	In			mm	,00	2,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,50											
2260	1/2	1/4	In			mm	,00	1,00	NR	203	Coupling Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,03											
M Erection													Total Kg:		3,19									
SZ1	SABIZ PLANT ANSI				63148 - 0				A		Area A		1 / 1		TOTAL Kg:		3,19							

INSERT REDUCING 1/4"x1/8" THD ANSI B1.20.1 NPT FORGED SB-ATI-PR008/0 3000 LB ASTM A105 Pz. N.1	Plant SZ1 SABIZ PLANT ANSI		Piping Class 203		Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0	
	Line 63148 - 0		Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area Area A		Sketch Sht 1 / 1		Isometric code	
	Zones				Op tem	
						Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.26											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
929	1/4	0	In	2,24		mm	,00	0,20	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,13											
931	1/2	0	In	2,77		mm	,00	2,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		2,53											
193	1/2	0	In			mm	,00	2,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,50											
2260	1/2	1/4	In			mm	,00	1,00	NR	203	Coupling Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,03											
M Erection													Total Kg:		3,19									
SZ1	SABIZ PLANT ANSI				63149 - 0				A		Area A		1 / 1		TOTAL Kg:		3,19							

INSERT REDUCING 1/4"x1/8" THD ANSI B1.20.1 NPT FORGED SB-ATI-PR008/0 3000 LB ASTM A105 Pz. N.1	Plant SZ1 SABIZ PLANT ANSI			Piping Class 203		Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0		
	Line 63149 - 0			Fluid		System		
	Dang. fluid type			Coating		De pres		
	Area Area A			Sketch Sht 1 / 1		Isometric code		
	Zones					Op tem		
								Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.26											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	5,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		6,33											
2033	1/2	0	In			mm	,00	1,00	NR	203	Valve Globe SB-ATI-VD001/0 THRD-F NPT 200 LB Forged BRONZE D 51		0,70											
193	1/2	0	In			mm	,00	3,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75											
2576	1/2	0	In			mm	,00	1,00	NR	203	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105													
849	1/2	0	In			mm	,00	1,00	NR	203	Union SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,38											
M Erection													Total Kg:		8,16									
SZ1	SABIZ PLANT ANSI				63150 - 0				A		Area A		1 / 1		TOTAL Kg:		8,16							

KY_63.8B	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63150 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.26										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
931	1/2	0	In	2,77		mm	,00	3,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		3,80										
2033	1/2	0	In			mm	,00	1,00	NR	203	Valve Globe SB-ATI-VD001/0 THRD-F NPT 200 LB Forged BRONZE D 51		0,70										
193	1/2	0	In			mm	,00	2,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,50										
849	1/2	0	In			mm	,00	1,00	NR	203	Union SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,38										
M Erection													Total Kg:		5,38								
SZ1	SABIZ PLANT ANSI				63151 - 0				A	Area A		1 / 1		TOTAL Kg:		5,38							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63151 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
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DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.27										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component						Gen. Bolt	Weight (Kg)	As.bly	Branch			
931	1/2	0	In	2,77		mm	,00	4,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B							5,06					
193	1/2	0	In			mm	,00	2,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105							0,50					
M Erection																	Total Kg:		5,56				
SZ1	SABIZ PLANT ANSI				63152 - 0				A		Area A		1 / 1		TOTAL Kg:		5,56						

	Plant	SZ1	SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63152 - 0		Fluid		System	
	Dang. fluid type			Coating		De pres	
	Area	Area A		Sketch Sht	1 / 1	Isometric code	
	Zones					Op tem	



DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.27											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
929	1/4	0	In	2,24		mm	,00	0,20	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,13											
931	1/2	0	In	2,77		mm	,00	2,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		2,53											
193	1/2	0	In			mm	,00	2,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,50											
2260	1/2	1/4	In			mm	,00	1,00	NR	203	Coupling Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,03											
M Erection													Total Kg:		3,19									
SZ1	SABIZ PLANT ANSI				63153 - 0				A		Area A		1 / 1		TOTAL Kg:		3,19							

INSERT REDUCING 1/4"x1/8" THD ANSI B1.20.1 NPT FORGED SB-ATI-PR008/0 3000 LB ASTM A105 Pz. N.1	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63153 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.27											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
929	1/4	0	In	2,24		mm	,00	0,20	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,13											
931	1/2	0	In	2,77		mm	,00	2,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		2,53											
193	1/2	0	In			mm	,00	2,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,50											
2260	1/2	1/4	In			mm	,00	1,00	NR	203	Coupling Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,03											
M Erection													Total Kg:		3,19									
SZ1	SABIZ PLANT ANSI				63154 - 0				A		Area A		1 / 1		TOTAL Kg:		3,19							

INSERT REDUCING 1/4"x1/8" THD ANSI B1.20.1 NPT FORGED SB-ATI-PR008/0 3000 LB ASTM A105 Pz. N.1	Plant SZ1 SABIZ PLANT ANSI				Piping Class 203		Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0			
	Line 63154 - 0				Fluid		System			
	Dang. fluid type				Coating		De pres			
	Area Area A				Sketch Sht 1 / 1		Isometric code			
	Zones						Op tem			
						Page 1				

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.27											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
929	1/4	0	In	2,24		mm	,00	0,20	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,13											
931	1/2	0	In	2,77		mm	,00	2,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		2,53											
193	1/2	0	In			mm	,00	2,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,50											
2260	1/2	1/4	In			mm	,00	1,00	NR	203	Coupling Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,03											
M Erection													Total Kg:		3,19									
SZ1	SABIZ PLANT ANSI						63155 - 0				A	Area A	1 / 1		TOTAL Kg:		3,19							

INSERT REDUCING 1/4"x1/8" THD ANSI B1.20.1 NPT FORGED SB-ATI-PR008/0 3000 LB ASTM A105 Pz. N.1	Plant SZ1 SABIZ PLANT ANSI		Piping Class 203		Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0	
	Line 63155 - 0		Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area Area A		Sketch Sht 1 / 1		Isometric code	
	Zones				Op tem	
						Page 1

DESMET - Ballestra							SKETCHES MATERIAL LIST						PROJ: 2F11		REV: 0	23/07/2012		
PUMA5			23/07/2012 15.00.27										DOC: 2F11.65.102					
DESMET - Ballestra							SABIZ 8000 kg/h					Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm		
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component				Gen. Bolt	Weight (Kg)	As.bly	Branch
931	1/2	0	In	2,77		mm	,00	6,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B					7,59		
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61					1,70		
193	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105					0,75		
M Erection															Total Kg:	10,04		
SZ1	SABIZ PLANT ANSI				63156 - 0				A	Area A				1 / 1	TOTAL Kg:	10,04		

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63156 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra							SKETCHES MATERIAL LIST							PROJ: 2F11		REV: 0		23/07/2012				
PUMA5			23/07/2012 15.00.27											DOC: 2F11.65.102								
DESMET - Ballestra							SABIZ 8000 kg/h					Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm		
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component					Gen. Bolt	Weight (Kg)		As.bly	Branch		
931	1/2	0	In	2,77		mm	,00	6,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B						7,59					
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61						1,70					
193	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105						0,75					
M Erection															Total Kg:		10,04					
SZ1	SABIZ PLANT ANSI				63157 - 0				A		Area A				1 / 1		TOTAL Kg:		10,04			

	Plant	SZ1 SABIZ PLANT ANSI		Piping Class	205		Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0		
	Line	63157 - 0		Fluid			System			
	Dang. fluid type			Coating			De pres			
	Area	Area A		Sketch Sht	1 / 1		Isometric code			
	Zones						Op tem			
										Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.27											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	6,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		7,59											
2025	1/2	0	In			mm	,00	2,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		3,40											
193	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75											
2576	1/2	0	In			mm	,00	1,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105													
M Erection													Total Kg:		11,74									
SZ1	SABIZ PLANT ANSI				63158 - 0				A		Area A		1 / 1		TOTAL Kg:		11,74							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63158 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMAS	23/07/2012 15.00.27		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
931	1/2	0	In	2,77		mm	,00	6,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		7,59		
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		1,70		
326	3/4	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2830	0,70		
193	1/2	0	In			mm	,00	3,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75		
618	3/4	1/2	In	2,87	2,77	mm	,00	1,00	NR	205	Reducing Insert M/F SB-ATI-PR007/0 SW-F x PL 3000# Forged ASTM A 105 TYPE 11		0,11		
2830	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44		
2817	3/4	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING				
M Erection												Total Kg:	11,29		
SZ1	SABIZ PLANT ANSI		63159 - 0		A		Area A		1 / 1		TOTAL Kg:		11,29		

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63159 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.27		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
931	1/2	0	In	2,77		mm	,00	8,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		10,13		
2025	1/2	0	In			mm	,00	4,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		6,80		
2678	1/2	0	In			mm	,00	1,00	NR	205	Steam Trap SB-ATI-VT005/0 SW-F 300 LB Forged ASTM A 105 T 66		0,80		
326	3/4	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2830	0,70		
193	1/2	0	In			mm	,00	5,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,25		
2576	1/2	0	In			mm	,00	3,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105				
618	3/4	1/2	In	2,87	2,77	mm	,00	1,00	NR	205	Reducing Insert M/F SB-ATI-PR007/0 SW-F x PL 3000# Forged ASTM A 105 TYPE 11		0,11		
2830	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44		
2817	3/4	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING				
M Erection												Total Kg:	20,23		
SZ1	SABIZ PLANT ANSI					63160 - 0				A	Area A	1 / 1		TOTAL Kg:	20,23

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63160 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem



DESMET - Ballestra								SKETCHES MATERIAL LIST								PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.27												DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h								Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component								Gen. Bolt	Weight (Kg)		As.bly	Branch		
931	1/2	0	In	2,77		mm	,00	7,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B									8,86					
1801	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87									0,30					
193	1/2	0	In			mm	,00	4,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105									1,00					
2260	1/2	1/4	In			mm	,00	1,00	NR	203	Coupling Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105									0,03					
M Erection																Total Kg:		10,19							
SZ1	SABIZ PLANT ANSI						63161 - 0				A	Area A				1 / 1		TOTAL Kg:		10,19					

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63161 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST								PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.27												DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h								Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component						Gen. Bolt	Weight (Kg)		As.bly	Branch				
931	1/2	0	In	2,77		mm	,00	7,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B							8,86							
1801	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87							0,30							
193	1/2	0	In			mm	,00	4,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105							1,00							
2260	1/2	1/4	In			mm	,00	1,00	NR	203	Coupling Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105							0,03							
M Erection																Total Kg:		10,19							
SZ1	SABIZ PLANT ANSI						63162 - 0				A		Area A				1 / 1		TOTAL Kg:		10,19				

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63162 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	
					Page	1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.27											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection												Total Kg:		9,79										
SZ1	SABIZ PLANT ANSI				63163 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	63163 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.27											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	6,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
193	1/2	0	In			mm	,00	3,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,75											
849	1/2	0	In			mm	,00	1,00	NR	203	Union SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,38											
M Erection													Total Kg:		9,02									
SZ1	SABIZ PLANT ANSI					63164 - 0					A	Area A	1 / 1		TOTAL Kg:		9,02							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63164 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.27											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection													Total Kg:		9,79									
SZ1	SABIZ PLANT ANSI				63165 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	63165 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.27											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection												Total Kg:		9,79										
SZ1	SABIZ PLANT ANSI				63166 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	63166 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.28											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection													Total Kg:		9,79									
SZ1	SABIZ PLANT ANSI				63167 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	63167 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.28											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection													Total Kg:		9,79									
SZ1	SABIZ PLANT ANSI				63168 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	63168 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					



DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.28											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection												Total Kg:		9,79										
SZ1	SABIZ PLANT ANSI				63169 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	63169 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST					PROJ:		2F11		REV:		0		23/07/2012			
PUMA5				23/07/2012 15.00.28									DOC:		2F11.65.102									
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component						Gen. Bolt	Weight (Kg)		As.bly	Branch			
931	1/2	0	In	2,77		mm	,00	6,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B							7,59						
193	1/2	0	In			mm	,00	4,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105							1,00						
M Erection																	Total Kg:		8,59					
SZ1	SABIZ PLANT ANSI				63170 - 0				A		Area A		1 / 1				TOTAL Kg:		8,59					

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63170 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra							SKETCHES MATERIAL LIST						PROJ: 2F11		REV: 0	23/07/2012
PUMA5			23/07/2012 15.00.28										DOC: 2F11.65.102			
DESMET - Ballestra							SABIZ 8000 kg/h					Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch	
931	1/2	0	In	2,77		mm	,00	6,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		7,59			
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		1,70			
193	1/2	0	In			mm	,00	4,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,00			
M Erection													Total Kg:	10,29		
SZ1	SABIZ PLANT ANSI				63171 - 0				A	Area A				1 / 1	TOTAL Kg:	10,29

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63171 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
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DESMET - Ballestra								SKETCHES MATERIAL LIST					PROJ: 2F11		REV: 0		23/07/2012					
PUMA5				23/07/2012 15.00.28									DOC: 2F11.65.102									
DESMET - Ballestra								SABIZ 8000 kg/h					Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component					Gen. Bolt	Weight (Kg)		As.bly	Branch		
931	1/2	0	In	2,77		mm	,00	6,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B						7,59					
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61						1,70					
193	1/2	0	In			mm	,00	4,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105						1,00					
M Erection																Total Kg:		10,29				
SZ1	SABIZ PLANT ANSI				63172 - 0				A		Area A				1 / 1		TOTAL Kg:		10,29			

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	63172 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.28											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	8,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		10,13											
2025	1/2	0	In			mm	,00	4,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		6,80											
193	1/2	0	In			mm	,00	8,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		2,00											
2576	1/2	0	In			mm	,00	2,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105													
M Erection													Total Kg:		18,93									
SZ1	SABIZ PLANT ANSI				63173 - 0				A		Area A		1 / 1		TOTAL Kg:		18,93							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63173 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
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DESMET - Ballestra							SKETCHES MATERIAL LIST							PROJ: 2F11		REV: 0		23/07/2012				
PUMA5			23/07/2012 15.00.28											DOC: 2F11.65.102								
DESMET - Ballestra							SABIZ 8000 kg/h					Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm		
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component						Gen. Bolt	Weight (Kg)		As.bly	Branch	
931	1/2	0	In	2,77		mm	,00	6,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B							7,59				
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61							1,70				
193	1/2	0	In			mm	,00	4,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105							1,00				
M Erection																Total Kg:		10,29				
SZ1	SABIZ PLANT ANSI				63174 - 0				A		Area A				1 / 1		TOTAL Kg:		10,29			

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 63174 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
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DESMET - Ballestra							SKETCHES MATERIAL LIST							PROJ: 2F11		REV: 0	23/07/2012		
PUMA5			23/07/2012 15.00.28											DOC: 2F11.65.102					
DESMET - Ballestra							SABIZ 8000 kg/h					Size: In    Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch				
933	1	0	In	3,38		mm	,00	10,00	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		25,02						
327	1	0	In			mm	,00	4,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2831	3,20						
229	1	0	In	3,38		mm	,00	3,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,41						
2831	1/2	0	In			mm	70,00	12,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		1,32						
401	1	0	In			mm	,00	4,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B								
2970	1/2	0	In			mm	30,00	8,00	NR	212	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7		0,64						
M Erection												Total Kg:		30,59					
SZ1	SABIZ PLANT ANSI				64005 - 0				A	Area A		1 / 1		TOTAL Kg:		30,59			

HV_64.10	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	212	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	64005 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	
					Page	1

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.28		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
900	3	0	In	3,18		mm	,00	6,00	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		40,33		
332	3	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	4,10		
199	3	0	In	3,18		mm	,00	1,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		1,18		
2840	5/8	0	In			mm	95,00	4,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,92		
406	3	0	In			mm	,00	1,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B				
M Erection												Total Kg:	46,53		
SZ1	SABIZ PLANT ANSI			64006 - 0			A			Area A		1 / 1		TOTAL Kg:	46,53

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	212	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	64006 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	



DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.28											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
933	1	0	In	3,38		mm	,00	0,20	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,50											
935	1+1/2	0	In	3,68		mm	,00	7,50	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		30,37											
1838	1+1/2	0	In			mm	,00	1,00	NR	212	Valve Ball Full Port SB-ATI-VS050/0 LUG 150 LB RF (125÷250 AARH) Forged ASTM A 105 S 127	2971	7,00											
329	1+1/2	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2832	1,40											
231	1+1/2	0	In	3,68		mm	,00	5,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		1,84											
1086	1+1/2	1	In	3,68	3,38	mm	,00	1,00	NR	212	Reducer Concentric ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,26											
403	1+1/2	0	In			mm	,00	2,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B													
2971	1/2	0	In			mm	35,00	8,00	NR	212	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7		0,64											
M Erection												Total Kg:		42,01										
SZ1	SABIZ PLANT ANSI				64007 - 0				A		Area A		1 / 1		TOTAL Kg:		42,01							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 64007 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.28										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
900	3	0	In	3,18		mm	,00	0,50	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		3,36										
902	5	0	In	3,18		mm	,00	4,00	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		43,32										
199	3	0	In	3,18		mm	,00	1,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		1,18										
201	5	0	In	3,18		mm	,00	1,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		3,15										
1021	5	3	In	3,18	3,18	mm	,00	1,00	NR	212	Reducer Concentric ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		1,40										
M Erection													Total Kg:		52,41								
SZ1	SABIZ PLANT ANSI					64009 - 0					A	Area A		1 / 1		TOTAL Kg:		52,41					

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 64009 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.28		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
900	3	0	In	3,18		mm	,00	30,00	m	212	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		201,66		
931	1/2	0	In	2,77		mm	,00	0,20	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,25		
1898	1/2	0	In			mm	,00	1,00	NR	212	Valve Check SB-ATI-VR018/0 SW-F 800# Forged ASTM A 105 R 83		1,90		
2754	3	0	In			mm	,00	1,00	NR	212	Valve Butterfly With Gasket SB-ATI-VB030/0 WAFER 150 LB RF (125÷250 AARH) Cast DUCTILE IRON B 85	2848	5,20		
332	3	0	In			mm	,00	2,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	8,20		
333	4	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	5,60		
86	3	0	In	3,18		mm	,00	3,00	NR	212	45° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		1,81		
199	3	0	In	3,18		mm	,00	8,00	NR	212	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		9,41		
1016	4	3	In	3,18	3,18	mm	,00	1,00	NR	212	Reducer Concentric ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		0,86		
2840	5/8	0	In			mm	95,00	8,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		1,84		
2848	5/8	0	In			mm	145,00	4,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		1,20		
407	4	0	In			mm	,00	1,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B				
M Erection												Total Kg:	237,94		

SZ1	SABIZ PLANT ANSI	64012 - 0	A	Area A	1 / 1	TOTAL Kg:	237,94
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	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 64012 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ: 2F11		REV: 0		23/07/2012	
PUMA5				23/07/2012 15.00.29										DOC: 2F11.65.102					
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In    Thk: mm    Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch				
931	1/2	0	In	2,77		mm	,00	4,00	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		5,06						
1834	1/2	0	In			mm	,00	1,00	NR	212	Valve Ball Full Port SB-ATI-VS050/0 LUG 150 LB RF (125÷250 AARH) Forged ASTM A 105 S 127	2970	1,60						
325	1/2	0	In			mm	,00	2,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2830	0,80						
193	1/2	0	In			mm	,00	4,00	NR	212	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,00						
399	1/2	0	In			mm	,00	2,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B								
2970	1/2	0	In			mm	30,00	8,00	NR	212	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7		0,64						
M Erection													Total Kg:		9,1				
SZ1	SABIZ PLANT ANSI					64020 - 0					A	Area A	1 / 1		TOTAL Kg:		9,1		

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 64020 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMAS	23/07/2012 15.00.29		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch	
900	3	0	In	3,18		mm	,00	0,50	m	206	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		3,36			
901	4	0	In	3,18		mm	,00	12,00	m	206	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		104,57			
933	1	0	In	3,38		mm	,00	0,20	m	206	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,50			
1933	4	0	In			mm	,00	1,00	NR	206	Valve Check SB-ATI-VR022/0 WAFER 150 LB RF (125÷250 AARH) Cast ASTM A 36 CADMIUM PLATED R 87	2843	2,00			
332	3	0	In			mm	,00	1,00	NR	206	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	4,10			
333	4	0	In			mm	,00	2,00	NR	206	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	11,20			
199	3	0	In	3,18		mm	,00	1,00	NR	206	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		1,18			
200	4	0	In	3,18		mm	,00	6,00	NR	206	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		12,40			
709	1/2	0	In			mm	,00	2,00	NR	206	Coupling Half SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,12			
711	1	0	In			mm	,00	1,00	NR	206	Coupling Half SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,15			
2840	5/8	0	In			mm	95,00	4,00	NR	206	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,92			
2843	5/8	0	In			mm	110,00	8,00	NR	206	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		2,00			
378	3	0	In			mm	,00	1,00	NR	206	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C					
379	4	0	In			mm	,00	2,00	NR	206	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C					
M Erection												Total Kg:	142,5			
SZ1	SABIZ PLANT ANSI				64025 - 0				A	Area A	1 / 1		TOTAL Kg:	142,5		

PSH_64.6 PI_64.6 TI_64.10 PSV_64.6	Plant SZ1 SABIZ PLANT ANSI				Piping Class 206				Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0			
	Line 64025 - 0				Fluid				System			
	Dang. fluid type				Coating				De pres			
	Area Area A				Sketch Sht 1 / 1				Isometric code			
	Zones								Op tem			

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.29										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
901	4	0	In	3,18		mm	,00	7,00	m	206	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		61,00										
2755	4	0	In			mm	,00	1,00	NR	206	Valve Butterfly With Gasket SB-ATI-VB030/0 WAFER 150 LB RF (125÷250 AARH) Cast DUCTILE IRON B 85	2849	6,70										
333	4	0	In			mm	,00	2,00	NR	206	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	11,20										
200	4	0	In	3,18		mm	,00	5,00	NR	206	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		10,33										
2849	5/8	0	In			mm	150,00	8,00	NR	206	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		2,48										
M Erection													Total Kg:		91,71								
SZ1	SABIZ PLANT ANSI				64026 - 0				A		Area A		1 / 1		TOTAL Kg:		91,71						

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	206	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	64026 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMAS	23/07/2012 15.00.29		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch	
900	3	0	In	3,18		mm	,00	0,50	m	206	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		3,36			
901	4	0	In	3,18		mm	,00	12,00	m	206	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		104,57			
933	1	0	In	3,38		mm	,00	0,20	m	206	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		0,50			
1933	4	0	In			mm	,00	1,00	NR	206	Valve Check SB-ATI-VR022/0 WAFER 150 LB RF (125÷250 AARH) Cast ASTM A 36 CADMIUM PLATED R 87	2843	2,00			
332	3	0	In			mm	,00	1,00	NR	206	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	4,10			
333	4	0	In			mm	,00	2,00	NR	206	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	11,20			
199	3	0	In	3,18		mm	,00	1,00	NR	206	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		1,18			
200	4	0	In	3,18		mm	,00	6,00	NR	206	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		12,40			
709	1/2	0	In			mm	,00	2,00	NR	206	Coupling Half SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,12			
711	1	0	In			mm	,00	1,00	NR	206	Coupling Half SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,15			
2840	5/8	0	In			mm	95,00	4,00	NR	206	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,92			
2843	5/8	0	In			mm	110,00	8,00	NR	206	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		2,00			
378	3	0	In			mm	,00	1,00	NR	206	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C					
379	4	0	In			mm	,00	2,00	NR	206	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C					
M Erection												Total Kg:	142,5			
SZ1	SABIZ PLANT ANSI				64028 - 0				A	Area A	1 / 1		TOTAL Kg:	142,5		

PSH_64.7 PI_64.7 TI_64.11 PSV_64.7	Plant SZ1 SABIZ PLANT ANSI				Piping Class 206				Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0			
	Line 64028 - 0				Fluid				System			
	Dang. fluid type				Coating				De pres			
	Area Area A				Sketch Sht 1 / 1				Isometric code			
	Zones								Op tem			

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.29											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
901	4	0	In	3,18		mm	,00	7,00	m	206	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		61,00											
2755	4	0	In			mm	,00	1,00	NR	206	Valve Butterfly With Gasket SB-ATI-VB030/0 WAFER 150 LB RF (125÷250 AARH) Cast DUCTILE IRON B 85	2849	6,70											
333	4	0	In			mm	,00	2,00	NR	206	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	11,20											
200	4	0	In	3,18		mm	,00	5,00	NR	206	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		10,33											
2849	5/8	0	In			mm	150,00	8,00	NR	206	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		2,48											
M Erection													Total Kg:		91,71									
SZ1	SABIZ PLANT ANSI				64029 - 0				A		Area A		1 / 1		TOTAL Kg:		91,71							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	206	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	64029 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					



DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ: 2F11		REV: 0		23/07/2012					
PUMA5			23/07/2012 15.00.29												DOC: 2F11.65.102									
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
936	2	0	In	3,91		mm	,00	1,50	m	212	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		8,16											
2989	2	0	In			mm	,00	1,00	NR	212	Valve Ball Full Port SB-ATI-VS019/0 THRD-F NPT 800# Forged ASTM A 105 S 98		5,20											
330	2	0	In			mm	,00	1,00	NR	212	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2838	2,20											
232	2	0	In	3,91		mm	,00	1,00	NR	212	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,66											
2838	5/8	0	In			mm	85,00	4,00	NR	212	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,84											
404	2	0	In			mm	,00	1,00	NR	212	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5B													
M Erection												Total Kg:		17,06										
SZ1	SABIZ PLANT ANSI					64038 - 0					A	Area A	1 / 1		TOTAL Kg:		17,06							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 212	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 64038 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.29											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	18,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		22,78											
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		1,70											
193	1/2	0	In			mm	,00	7,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,75											
667	1/2	0	In			mm	,00	1,00	NR	205	Coupling SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,12											
M Erection													Total Kg:		26,35									
SZ1	SABIZ PLANT ANSI					64101 - 0					A	Area A	1 / 1		TOTAL Kg:		26,35							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 64101 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ: 2F11		REV: 0		23/07/2012					
PUMA5				23/07/2012 15.00.29											DOC: 2F11.65.102									
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component							Gen. Bolt	Weight (Kg)		As.bly	Branch		
931	1/2	0	In	2,77		mm	,00	16,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B								20,25					
80	1/2	0	In			mm	,00	1,00	NR	203	45° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105								0,18					
193	1/2	0	In			mm	,00	7,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105								1,75					
M Erection																Total Kg:		22,18						
SZ1	SABIZ PLANT ANSI				64103 - 0				A		Area A				1 / 1		TOTAL Kg:		22,18					

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	64103 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.29											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	12,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		15,19											
2025	1/2	0	In			mm	,00	2,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		3,40											
80	1/2	0	In			mm	,00	1,00	NR	205	45° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,18											
193	1/2	0	In			mm	,00	6,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,50											
2576	1/2	0	In			mm	,00	1,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105													
M Erection													Total Kg:		20,27									
SZ1	SABIZ PLANT ANSI				64104 - 0				A		Area A		1 / 1		TOTAL Kg:		20,27							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	205	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	64104 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.29										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
931	1/2	0	In	2,77		mm	,00	1,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		1,27										
325	1/2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2830	0,40										
193	1/2	0	In			mm	,00	1,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,25										
2830	1/2	0	In			mm	65,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44										
371	1/2	0	In			mm	,00	1,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C												
M Erection													Total Kg:		2,36								
SZ1	SABIZ PLANT ANSI					64105 - 0					A	Area A	1 / 1		TOTAL Kg:		2,36						

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	64105 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5			23/07/2012 15.00.29												DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
933	1	0	In	3,38		mm	,00	43,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		107,59											
1803	1	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,60											
327	1	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2831	0,80											
116	1	0	In	3,38		mm	,00	1,00	NR	203	45° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,07											
229	1	0	In	3,38		mm	,00	12,00	NR	203	90° Elbow Long Radius ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		1,62											
1079	1	1/2	In	3,38	2,77	mm	,00	1,00	NR	203	Reducer Concentric ASME B16.9 BE sch.40 Wrought S ASTM A 234 Gr. WPB		0,14											
823	1	0	In			mm	,00	1,00	NR	203	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,65											
2831	1/2	0	In			mm	70,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44											
373	1	0	In			mm	,00	1,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C													
M Erection												Total Kg:		111,91										
SZ1	SABIZ PLANT ANSI				64106 - 0				A	Area A		1 / 1		TOTAL Kg:		111,91								

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 64106 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

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DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMAS	23/07/2012 15.00.30		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
980	1/2	0	In	2,77		mm	,00	7,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		8,86		
982	1	0	In	3,38		mm	,00	0,20	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		0,50		
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30		
66	1/2	0	In			mm	,00	1,00	NR	202	45° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,32		
179	1/2	0	In			mm	,00	5,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		2,00		
544	1	1/2	In			mm	,00	1,00	NR	202	Reducing Insert M/F SB-ATI-PR008/0 THRD-M NPT x THRD-F 3000# Forged ASTM A 105 Galvanized		0,19		
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30		

M Erection												Total Kg:	12,47
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SZ1	SABIZ PLANT ANSI				64107 - 0		A	Area A	1 / 1	TOTAL Kg:	12,47
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	Plant SZ1 SABIZ PLANT ANSI	Piping Class 202	Welding specification
	Line 64107 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.30		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
981	3/4	0	In	2,87		mm	,00	0,50	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		0,84		
982	1	0	In	3,38		mm	,00	8,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		20,02		
1803	1	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,60		
181	1	0	In			mm	,00	6,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		6,60		
545	1	3/4	In			mm	,00	1,00	NR	202	Reducing Insert M/F SB-ATI-PR008/0 THRD-M NPT x THRD-F 3000# Forged ASTM A 105 Galvanized		0,19		
837	1	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,65		
M Erection												Total Kg:		28,9	
SZ1	SABIZ PLANT ANSI					64110 - 0				A	Area A	1 / 1		TOTAL Kg: 28,9	

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 202	Welding specification	
	Line 64110 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area Area A	Sketch Sht 1 / 1	Isometric code	Page 1
	Zones			



DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:	2F11	REV:	0	23/07/2012
PUMA5				23/07/2012 15.00.30											DOC:	2F11.65.102			
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch				
985	2	0	In	3,91		mm	,00	14,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		76,12						
1806	2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		2,20						
71	2	0	In			mm	,00	1,00	NR	202	45° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		3,00						
184	2	0	In			mm	,00	6,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		19,80						
840	2	0	In			mm	,00	2,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		4,02						
M Erection													Total Kg:	105,14					
SZ1	SABIZ PLANT ANSI					64111 - 0					A	Area A	1 / 1	TOTAL Kg:	105,14				

PICV_64.1	Plant SZ1 SABIZ PLANT ANSI	Piping Class 202	Welding specification
	Line 64111 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.30											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
982	1	0	In	3,38		mm	,00	15,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		37,53											
1803	1	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,60											
181	1	0	In			mm	,00	6,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		6,60											
545	1	3/4	In			mm	,00	1,00	NR	202	Reducing Insert M/F SB-ATI-PR008/0 THRD-M NPT x THRD-F 3000# Forged ASTM A 105 Galvanized		0,19											
837	1	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,65											
M Erection												Total Kg:		45,57										
SZ1	SABIZ PLANT ANSI				64112 - 0				A		Area A		1 / 1		TOTAL Kg:		45,57							

PICV_64.2	Plant SZ1 SABIZ PLANT ANSI	Piping Class 202	Welding specification	
	Line 64112 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area Area A	Sketch Sht 1 / 1	Isometric code	Page 1
	Zones			

DESMET - Ballestra							SKETCHES MATERIAL LIST							PROJ: 2F11		REV: 0		23/07/2012				
PUMA5			23/07/2012 15.00.30											DOC: 2F11.65.102								
DESMET - Ballestra							SABIZ 8000 kg/h					Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm		
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component						Gen. Bolt	Weight (Kg)		As.bly	Branch	
931	1/2	0	In	2,77		mm	,00	8,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B							10,13				
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61							1,70				
193	1/2	0	In			mm	,00	6,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105							1,50				
M Erection																Total Kg:		13,33				
SZ1	SABIZ PLANT ANSI				64113 - 0				A		Area A				1 / 1		TOTAL Kg:		13,33			

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line 64113 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Op tem
	Zones		Isometric code
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:	2F11	REV:	0	23/07/2012
PUMA5			23/07/2012 15.00.30											DOC:	2F11.65.102			
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch			
900	3	0	In	3,18		mm	,00	75,00	m	203	Pipe ASME B36.10 PL E.R.W. API 5L Gr.B		504,15					
1912	3	0	In			mm	,00	1,00	NR	203	Valve Check SB-ATI-VR071/0 WAFER 150 LB RF (125÷250 AARH) Cast ASTM A 36 CADMIUM PLATED R 124	2843	1,60					
332	3	0	In			mm	,00	5,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2840	20,50					
86	3	0	In	3,18		mm	,00	1,00	NR	203	45° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		0,60					
199	3	0	In	3,18		mm	,00	12,00	NR	203	90° Elbow Long Radius ASME B16.9 BE E.R.W. ASTM A 234 Gr. WPB		14,12					
709	1/2	0	In			mm	,00	1,00	NR	203	Coupling Half SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,06					
2840	5/8	0	In			mm	95,00	12,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		2,76					
2843	5/8	0	In			mm	110,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		1,00					
378	3	0	In			mm	,00	5,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C							
M Erection												Total Kg:	544,8					
SZ1	SABIZ PLANT ANSI					64115 - 0					A	Area A	1 / 1	TOTAL Kg:	544,8			

KV\_64.9  
PI\_64.8

Plant SZ1 SABIZ PLANT ANSI

Line 64115 - 0

Dang. fluid type

Area Area A

Zones

Piping Class 203

Fluid

Coating

Sketch Sht 1 / 1

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

System

De pres

Isometric code

Op tem

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DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.30											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component						Gen. Bolt	Weight (Kg)	As.bly	Branch				
980	1/2	0	In	2,77		mm	,00	7,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized							8,86						
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87							0,30						
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized							1,60						
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized							0,30						
M Erection																Total Kg:		11,06						
SZ1	SABIZ PLANT ANSI					64118 - 0					A	Area A					1 / 1		TOTAL Kg:		11,06			

KV_64.10	Plant	SZ1	SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	64118 - 0		Fluid		System	
	Dang. fluid type			Coating		De pres	Op tem
	Area	Area A		Sketch Sht	1 / 1	Isometric code	Page 1
	Zones						

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.30											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	7,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		8,86											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection												Total Kg:		11,06										
SZ1	SABIZ PLANT ANSI				64119 - 0				A		Area A		1 / 1		TOTAL Kg:		11,06							

KY_64.2	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	64119 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.30											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
982	1	0	In	3,38		mm	,00	12,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		30,03											
1803	1	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,60											
181	1	0	In			mm	,00	5,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		5,50											
837	1	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,65											
M Erection												Total Kg:		36,78										
SZ1	SABIZ PLANT ANSI				64120 - 0				A		Area A		1 / 1		TOTAL Kg:		36,78							

PCV_64.3	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	64120 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.30											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection												Total Kg:		9,79										
SZ1	SABIZ PLANT ANSI				64121 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

KC_64.4A	Plant SZ1 SABIZ PLANT ANSI	Piping Class 202	Welding specification	
	Line 64121 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area Area A	Sketch Sht 1 / 1	Isometric code	Page 1
	Zones			



DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.30										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59										
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30										
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60										
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30										
M Erection												Total Kg:		9,79									
SZ1	SABIZ PLANT ANSI				64122 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79						

KC_64.4B	Plant SZ1 SABIZ PLANT ANSI	Piping Class 202	Welding specification	
	Line 64122 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area Area A	Sketch Sht 1 / 1	Isometric code	Page 1
	Zones			

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.31											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection													Total Kg:		9,79									
SZ1	SABIZ PLANT ANSI					64124 - 0					A	Area A	1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	64124 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.31											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection												Total Kg:		9,79										
SZ1	SABIZ PLANT ANSI				64125 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	64125 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.31											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	5,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		2,00											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection												Total Kg:		10,19										
SZ1	SABIZ PLANT ANSI				64128 - 0				A		Area A		1 / 1		TOTAL Kg:		10,19							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	64128 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.31											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection													Total Kg:		9,79									
SZ1	SABIZ PLANT ANSI				64129 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	64129 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMAS	23/07/2012 15.00.31		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
947	1/2	0	In	2,77		mm	,00	11,00	m	216	Pipe ASME B36.19 PL sch.40S Seamless ASTM A 312 TP316		14,21		
1809	1/2	0	In			mm	,00	2,00	NR	216	Valve Ball Full Port SB-ATI-VS020/0 THRD-F NPT 800# Forged ASTM A 182 Gr. F316 S 99		1,43		
306	1/2	0	In			mm	,00	4,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	2909	1,60		
308	1	0	In			mm	,00	6,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	2910	4,80		
84	1/2	0	In			mm	,00	1,00	NR	216	45° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 182 Gr. F316		0,18		
197	1/2	0	In			mm	,00	5,00	NR	216	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 182 Gr. F316		1,28		
1109	1	1/2	In	3,38	2,77	mm	,00	2,00	NR	216	Reducer Concentric ASME B16.9 BE sch.40S Wrought S ASTM A 403 Gr. WP316		0,28		
2580	1/2	0	In			mm	,00	2,00	NR	216	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 182 Gr. F316				
675	1/2	0	In			mm	,00	1,00	NR	216	Coupling SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 182 Gr. F316		0,12		
780	1/2	0	In	2,77		mm	,00	4,00	NR	216	Stub-End MSS SP-43 BE sch.40S Wrought S ASTM A 403 Gr. WP316 Type A		0,34		
782	1	0	In	3,38		mm	,00	6,00	NR	216	Stub-End MSS SP-43 BE sch.40S Wrought S ASTM A 403 Gr. WP316 Type A		0,97		
852	1/2	0	In			mm	,00	3,00	NR	216	Union SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 182 Gr. F316		1,16		
2909	1/2	0	In			mm	75,00	8,00	NR	216	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		0,96		
2910	1/2	0	In			mm	80,00	16,00	NR	216	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		1,92		
418	1/2	0	In			mm	,00	2,00	NR	216	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F				
420	1	0	In			mm	,00	4,00	NR	216	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F				

PSV_65.2 PSH_65.2 KY_65.27B	Plant SZ1 SABIZ PLANT ANSI	Piping Class 216	Welding specification SB-ATI-SP006/0 SB-ATI-SP008/0
	Line 65020 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra								SKETCHES MATERIAL LIST								PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.31												DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h								Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component								Gen. Bolt	Weight (Kg)	As.bly	Branch			
M Erection												Total Kg:		29,25											
SZ1	SABIZ PLANT ANSI						65020 - 0				A	Area A				1 / 1		TOTAL Kg:		29,25					

<div> <div>PSV_65.2</div> <div>PSH_65.2</div> <div>KY_65.27B</div> </div>	Plant	SZ1	SABIZ PLANT ANSI	Piping Class	216	Welding specification	SB-ATI-SP006/0 SB-ATI-SP008/0	
	Line	65020 - 0			Fluid	System		
	Dang. fluid type				Coating	De pres	Op tem	
	Area	Area A			Sketch Sht	1 / 1	Isometric code	Page 2
	Zones							

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMAS	23/07/2012 15.00.31		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
947	1/2	0	In	2,77		mm	,00	11,00	m	216	Pipe ASME B36.19 PL sch.40S Seamless ASTM A 312 TP316		14,21		
1809	1/2	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port SB-ATI-VS020/0 THRD-F NPT 800# Forged ASTM A 182 Gr. F316 S 99		0,71		
306	1/2	0	In			mm	,00	4,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	2909	1,60		
307	3/4	0	In			mm	,00	3,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	2909	2,10		
84	1/2	0	In			mm	,00	2,00	NR	216	45° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 182 Gr. F316		0,37		
197	1/2	0	In			mm	,00	5,00	NR	216	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 182 Gr. F316		1,28		
1108	3/4	1/2	In	2,87	2,77	mm	,00	1,00	NR	216	Reducer Concentric ASME B16.9 BE sch.40S Wrought S ASTM A 403 Gr. WP316		0,06		
2580	1/2	0	In			mm	,00	1,00	NR	216	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 182 Gr. F316				
699	1/2	0	In			mm	,00	1,00	NR	216	Coupling SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 182 Gr. F316		0,14		
780	1/2	0	In	2,77		mm	,00	4,00	NR	216	Stub-End MSS SP-43 BE sch.40S Wrought S ASTM A 403 Gr. WP316 Type A		0,34		
781	3/4	0	In	2,87		mm	,00	3,00	NR	216	Stub-End MSS SP-43 BE sch.40S Wrought S ASTM A 403 Gr. WP316 Type A		0,31		
852	1/2	0	In			mm	,00	2,00	NR	216	Union SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 182 Gr. F316		0,78		
2909	1/2	0	In			mm	75,00	24,00	NR	216	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		2,88		
418	1/2	0	In			mm	,00	4,00	NR	216	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F				
419	3/4	0	In			mm	,00	2,00	NR	216	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F				
M Erection												Total Kg:	24,77		

PSV_65.1 PSH_65.1 KY_65.27A	Plant SZ1 SABIZ PLANT ANSI	Piping Class 216	Welding specification SB-ATI-SP006/0 SB-ATI-SP008/0
	Line 65021 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem



DESMET - Ballestra				SKETCHES MATERIAL LIST								PROJ: 2F11		REV: 0		23/07/2012										
PUMA5		23/07/2012 15.00.31										DOC: 2F11.65.102														
DESMET - Ballestra				SABIZ 8000 kg/h								Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm						
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component										Gen. Bolt	Weight (Kg)	As.bly	Branch		
SZ1	SABIZ PLANT ANSI				65021 - 0						A	Area A										1 / 1	TOTAL Kg:	24,77		

<div> <div>PSV_65.1</div> <div>PSH_65.1</div> <div>KY_65.27A</div> </div>	Plant	SZ1	SABIZ PLANT ANSI	Piping Class	216	Welding specification	SB-ATI-SP006/0 SB-ATI-SP008/0
	Line	65021 - 0			Fluid	System	
	Dang. fluid type				Coating	De pres	Op tem
	Area	Area A			Sketch Sht	1 / 1	Isometric code
	Zones						Page 2

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.31											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
947	1/2	0	In	2,77		mm	,00	0,20	m	216	Pipe ASME B36.19 PL sch.40S Seamless ASTM A 312 TP316		0,26											
948	3/4	0	In	2,87		mm	,00	2,00	m	216	Pipe ASME B36.19 PL sch.40S Seamless ASTM A 312 TP316		3,44											
1809	1/2	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port SB-ATI-VS020/0 THRD-F NPT 800# Forged ASTM A 182 Gr. F316 S 99		0,71											
1810	3/4	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port SB-ATI-VS020/0 THRD-F NPT 800# Forged ASTM A 182 Gr. F316 S 99		0,92											
1854	3/4	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port SB-ATI-VS047/0 LUG 150 LB RF (125÷250 AARH) Cast ASTM A 351 Gr. CF8M S 125	2981	1,94											
2100	3/4	0	In			mm	,00	1,00	NR	216	Strainer Y-Type SB-ATI-VF023/0 FLG 150 LB RF (125÷250 AARH) Cast ASTM A 351 Gr. CF8M F 72	2909	2,86											
307	3/4	0	In			mm	,00	4,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	2909	2,80											
125	3/4	0	In	2,87		mm	,00	1,00	NR	216	45° Elbow Long Radius ASME B16.9 BE sch.40S Wrought S ASTM A 403 Gr. WP316		0,03											
238	3/4	0	In	2,87		mm	,00	2,00	NR	216	90° Elbow Long Radius ASME B16.9 BE sch.40S Wrought S ASTM A 403 Gr. WP316		0,18											
781	3/4	0	In	2,87		mm	,00	4,00	NR	216	Stub-End MSS SP-43 BE sch.40S Wrought S ASTM A 403 Gr. WP316 Type A		0,41											
2909	1/2	0	In			mm	75,00	10,00	NR	216	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		1,20											
419	3/4	0	In			mm	,00	5,00	NR	216	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F													
2981	1/2	0	In			mm	30,00	8,00	NR	216	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7 Galvanized		0,64											
M Erection												Total Kg:		15,38										
SZ1	SABIZ PLANT ANSI				65022 - 0				A	Area A		1 / 1		TOTAL Kg:		15,38								

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 216	Welding specification SB-ATI-SP006/0 SB-ATI-SP008/0			
	Line 65022 - 0	Fluid	System			
	Dang. fluid type	Coating	De pres			
	Area Area A	Sketch Sht 1 / 1	Isometric code			
Zones				Op tem		Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:	2F11		REV:	0	23/07/2012	
PUMA5				23/07/2012 15.00.32										DOC:	2F11.65.102					
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm		
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch					
947	1/2	0	In	2,77		mm	,00	0,20	m	216	Pipe ASME B36.19 PL sch.40S Seamless ASTM A 312 TP316		0,26							
949	1	0	In	3,38		mm	,00	3,00	m	216	Pipe ASME B36.19 PL sch.40S Seamless ASTM A 312 TP316		7,66							
1809	1/2	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port SB-ATI-VS020/0 THRD-F NPT 800# Forged ASTM A 182 Gr. F316 S 99		0,71							
1811	1	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port SB-ATI-VS020/0 THRD-F NPT 800# Forged ASTM A 182 Gr. F316 S 99		1,43							
1855	1	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port SB-ATI-VS047/0 LUG 150 LB RF (125÷250 AARH) Cast ASTM A 351 Gr. CF8M S 125	2981	2,86							
2101	1	0	In			mm	,00	1,00	NR	216	Strainer Y-Type SB-ATI-VF023/0 FLG 150 LB RF (125÷250 AARH) Cast ASTM A 351 Gr. CF8M F 72	2910	3,37							
308	1	0	In			mm	,00	4,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	2910	3,20							
126	1	0	In	3,38		mm	,00	1,00	NR	216	45° Elbow Long Radius ASME B16.9 BE sch.40S Wrought S ASTM A 403 Gr. WP316		0,07							
239	1	0	In	3,38		mm	,00	3,00	NR	216	90° Elbow Long Radius ASME B16.9 BE sch.40S Wrought S ASTM A 403 Gr. WP316		0,41							
782	1	0	In	3,38		mm	,00	4,00	NR	216	Stub-End MSS SP-43 BE sch.40S Wrought S ASTM A 403 Gr. WP316 Type A		0,65							
2910	1/2	0	In			mm	80,00	12,00	NR	216	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		1,44							
420	1	0	In			mm	,00	5,00	NR	216	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F									
2981	1/2	0	In			mm	30,00	8,00	NR	216	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7 Galvanized		0,64							
M Erection												Total Kg:		22,7						
SZ1	SABIZ PLANT ANSI				65023 - 0				A	Area A		1 / 1		TOTAL Kg:		22,7				

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 216	Welding specification SB-ATI-SP006/0 SB-ATI-SP008/0
	Line 65023 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:	2F11		REV:	0	23/07/2012	
PUMA5				23/07/2012 15.00.32											DOC:	2F11.65.102					
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm		
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch						
947	1/2	0	In	2,77		mm	,00	0,50	m	216	Pipe ASME B36.19 PL sch.40S Seamless ASTM A 312 TP316		0,65								
949	1	0	In	3,38		mm	,00	4,00	m	216	Pipe ASME B36.19 PL sch.40S Seamless ASTM A 312 TP316		10,21								
1809	1/2	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port SB-ATI-VS020/0 THRD-F NPT 800# Forged ASTM A 182 Gr. F316 S 99		0,71								
1811	1	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port SB-ATI-VS020/0 THRD-F NPT 800# Forged ASTM A 182 Gr. F316 S 99		1,43								
1855	1	0	In			mm	,00	1,00	NR	216	Valve Ball Full Port SB-ATI-VS047/0 LUG 150 LB RF (125÷250 AARH) Cast ASTM A 351 Gr. CF8M S 125	2981	2,86								
2101	1	0	In			mm	,00	1,00	NR	216	Strainer Y-Type SB-ATI-VF023/0 FLG 150 LB RF (125÷250 AARH) Cast ASTM A 351 Gr. CF8M F 72	2910	3,37								
308	1	0	In			mm	,00	4,00	NR	216	Flange Lap-Joint ASME B16.5 150 LB Flat Face Smooth Forged ASTM A 105 Galvanized	2910	3,20								
126	1	0	In	3,38		mm	,00	1,00	NR	216	45° Elbow Long Radius ASME B16.9 BE sch.40S Wrought S ASTM A 403 Gr. WP316		0,07								
239	1	0	In	3,38		mm	,00	3,00	NR	216	90° Elbow Long Radius ASME B16.9 BE sch.40S Wrought S ASTM A 403 Gr. WP316		0,41								
782	1	0	In	3,38		mm	,00	4,00	NR	216	Stub-End MSS SP-43 BE sch.40S Wrought S ASTM A 403 Gr. WP316 Type A		0,65								
2910	1/2	0	In			mm	80,00	12,00	NR	216	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 2H Galvanized		1,44								
420	1	0	In			mm	,00	5,00	NR	216	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5F										
2981	1/2	0	In			mm	30,00	8,00	NR	216	Screws for valves ASME B 18.2.1/UNC ASTM A 193 B7 Galvanized		0,64								
M Erection												Total Kg:		25,64							
SZ1	SABIZ PLANT ANSI				65024 - 0				A	Area A		1 / 1		TOTAL Kg:		25,64					

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 216	Welding specification SB-ATI-SP006/0 SB-ATI-SP008/0
	Line 65024 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
Zones			Op tem
			Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.32										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
980	1/2	0	In	2,77		mm	,00	5,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		6,33										
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30										
179	1/2	0	In			mm	,00	3,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,20										
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30										
M Erection												Total Kg:		8,13									
SZ1	SABIZ PLANT ANSI				65101 - 0				A		Area A		1 / 1		TOTAL Kg:		8,13						

<div>PICV_65.4</div>	Plant	SZ1	SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	65101	- 0	Fluid		System	
	Dang. fluid type			Coating		De pres	Op tem
	Area	Area A		Sketch Sht	1 / 1	Isometric code	Page 1
	Zones						

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.32											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	10,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		12,66											
179	1/2	0	In			mm	,00	6,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		2,40											
2562	1/2	0	In			mm	,00	2,00	NR	202	Tee Straight SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,56											
681	1/2	0	In			mm	,00	2,00	NR	202	Coupling SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,24											
835	1/2	0	In			mm	,00	2,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,60											
M Erection												Total Kg:		16,46										
SZ1	SABIZ PLANT ANSI				65102 - 0				A		Area A		1 / 1		TOTAL Kg:		16,46							

PSL_65.1 PICV_65.1 KY_65.2B	Plant SZ1 SABIZ PLANT ANSI	Piping Class 202	Welding specification	
	Line 65102 - 0	Fluid	System	
	Dang. fluid type	Coating	De pres	Op tem
	Area Area A	Sketch Sht 1 / 1	Isometric code	Page 1
	Zones			

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.32		DOC:	2F11.65.102			

DESMET - Ballestra			SABIZ 8000 kg/h			Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
931	1/2	0	In	2,77		mm	,00	8,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		10,13		
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		1,70		
325	1/2	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2830	0,40		
193	1/2	0	In			mm	,00	6,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,50		
2830	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44		
2816	1/2	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING				

M Erection												Total Kg:	14,17
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SZ1	SABIZ PLANT ANSI		65103 - 0		A	Area A		1 / 1		TOTAL Kg:		14,17
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	Plant SZ1 SABIZ PLANT ANSI			Piping Class 205			Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0		
	Line 65103 - 0			Fluid			System		
	Dang. fluid type			Coating			De pres		
	Area Area A			Sketch Sht 1 / 1			Isometric code		
	Zones						Op tem		

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.32											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
931	1/2	0	In	2,77		mm	,00	9,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		11,39											
2025	1/2	0	In			mm	,00	4,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		6,80											
2678	1/2	0	In			mm	,00	1,00	NR	205	Steam Trap SB-ATI-VT005/0 SW-F 300 LB Forged ASTM A 105 T 66		0,80											
325	1/2	0	In			mm	,00	1,00	NR	205	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2830	0,40											
193	1/2	0	In			mm	,00	4,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,00											
2576	1/2	0	In			mm	,00	3,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105													
2830	1/2	0	In			mm	65,00	4,00	NR	205	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44											
2816	1/2	0	In			mm	,00	1,00	NR	205	Gasket Spiral Wound SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ G5N INNER OUTER RING													
M Erection													Total Kg:		20,83									
SZ1	SABIZ PLANT ANSI				65104 - 0				A		Area A		1 / 1		TOTAL Kg:		20,83							

	Plant	SZ1 SABIZ PLANT ANSI		Piping Class	205		Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0		
	Line	65104 - 0		Fluid			System			
	Dang. fluid type			Coating			De pres			
	Area	Area A		Sketch Sht	1 / 1		Isometric code			
	Zones						Op tem			
										Page 1



DESMET - Ballestra								SKETCHES MATERIAL LIST					PROJ: 2F11		REV: 0		23/07/2012					
PUMA5			23/07/2012 15.00.32										DOC: 2F11.65.102									
DESMET - Ballestra								SABIZ 8000 kg/h					Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch							
931	1/2	0	In	2,77		mm	,00	3,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		3,80									
165	1/2	0	In			mm	,00	4,00	NR	203	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		1,60									
613	1/2	1/4	In	2,77	2,24	mm	,00	1,00	NR	203	Reducing Insert M/F SB-ATI-PR007/0 SW-F x PL 3000# Forged ASTM A 105 TYPE 11		0,06									
M Erection												Total Kg:		5,46								
SZ1	SABIZ PLANT ANSI				65105 - 0				A		Area A		1 / 1		TOTAL Kg:		5,46					

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	65105 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	
					Page	1

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.32		DOC:	2F11.65.102			

DESMET - Ballestra				SABIZ 8000 kg/h				Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch
980	1/2	0	In	2,77		mm	,00	8,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		10,13		
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30		
179	1/2	0	In			mm	,00	6,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		2,40		
2562	1/2	0	In			mm	,00	1,00	NR	202	Tee Straight SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,28		
538	1/2	3/8	In			mm	,00	1,00	NR	202	Reducing Insert M/F SB-ATI-PR008/0 THRD-M NPT x THRD-F 3000# Forged ASTM A 105 Galvanized		0,06		
681	1/2	0	In			mm	,00	2,00	NR	202	Coupling SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,24		
835	1/2	0	In			mm	,00	2,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,60		

M Erection												Total Kg:	14,01
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SZ1	SABIZ PLANT ANSI					65106 - 0		A	Area A	1 / 1	TOTAL Kg:	14,01
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PSL_65.2 PICV_65.2 KY_65.2A	Plant SZ1 SABIZ PLANT ANSI	Piping Class 202	Welding specification
	Line 65106 - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.33											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
982	1	0	In	3,38		mm	,00	5,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		12,51											
1803	1	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,60											
68	1	0	In			mm	,00	1,00	NR	202	45° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,85											
181	1	0	In			mm	,00	3,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		3,30											
837	1	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,65											
M Erection												Total Kg:		17,91										
SZ1	SABIZ PLANT ANSI					65107 - 0					A	Area A	1 / 1		TOTAL Kg:		17,91							

	Plant	SZ1	SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	65107 - 0		Fluid		System	
	Dang. fluid type			Coating		De pres	Op tem
	Area	Area A		Sketch Sht	1 / 1	Isometric code	Page 1
	Zones						

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0	23/07/2012		
PUMA5				23/07/2012 15.00.33										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
931	1/2	0	In	2,77		mm	,00	6,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		7,59										
1801	1/2	0	In			mm	,00	1,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30										
325	1/2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2830	0,40										
193	1/2	0	In			mm	,00	4,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,00										
821	1/2	0	In			mm	,00	1,00	NR	203	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,30										
2830	1/2	0	In			mm	65,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44										
371	1/2	0	In			mm	,00	1,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C												
M Erection												Total Kg:		10,03									
SZ1	SABIZ PLANT ANSI					65108 - 0					A	Area A	1 / 1		TOTAL Kg:		10,03						

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	65108 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	
					Page	1

DESMET - Ballestra								SKETCHES MATERIAL LIST					PROJ: 2F11		REV: 0		23/07/2012			
PUMA5			23/07/2012 15.00.33										DOC: 2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h					Size: In    Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch					
931	1/2	0	In	2,77		mm	,00	6,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		7,59							
2033	1/2	0	In			mm	,00	1,00	NR	203	Valve Globe SB-ATI-VD001/0 THRD-F NPT 200 LB Forged BRONZE D 51		0,70							
325	1/2	0	In			mm	,00	1,00	NR	203	Flange Slip-On ASME B16.5 150 LB RF (125÷250 AARH) Forged ASTM A 105	2830	0,40							
193	1/2	0	In			mm	,00	6,00	NR	203	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,50							
2830	1/2	0	In			mm	65,00	4,00	NR	203	Stud Bolt + 2 Nuts SB-ATI-PV008B/0 ASME B18.2.1 UNC/2.2 Tab.9 ASTM A 193 B7 / A 194 Gr.2H		0,44							
371	1/2	0	In			mm	,00	1,00	NR	203	Gasket SB-ATI-PV009/5 150 LB RF (125÷250 AARH) _ B5C									
M Erection													Total Kg:		10,63					
SZ1	SABIZ PLANT ANSI					65109 - 0					A	Area A	1 / 1		TOTAL Kg:		10,63			

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	203	Welding specification	SB-ATI-SP006/0 SB-ATI-SP007/0
	Line	65109 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	
	Area	Area A	Sketch Sht	1 / 1	Isometric code	
	Zones				Op tem	
					Page	1

DESMET - Ballestra							SKETCHES MATERIAL LIST						PROJ: 2F11		REV: 0	23/07/2012
PUMA5			23/07/2012 15.00.33										DOC: 2F11.65.102			
DESMET - Ballestra							SABIZ 8000 kg/h					Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch	
931	1/2	0	In	2,77		mm	,00	8,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		10,13			
2025	1/2	0	In			mm	,00	1,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		1,70			
193	1/2	0	In			mm	,00	4,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,00			
M Erection													Total Kg:	12,83		
SZ1	SABIZ PLANT ANSI				65110 - 0				A	Area A			1 / 1	TOTAL Kg:	12,83	

RED. COUPL. SB-ATI-PR008/0 THRD-F 3000# FORGED  
ASTM A 105 1/2"x1/8" Q.TY 1

Plant SZ1 SABIZ PLANT ANSI

Line 65110 - 0

Dang. fluid type

Area Area A

Zones

Piping Class 205

Fluid

Coating

Sketch Sht 1 / 1

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

System

De pres

Isometric code

Op tem

Page 1

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.33										DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
931	1/2	0	In	2,77		mm	,00	8,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		10,13										
2025	1/2	0	In			mm	,00	4,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		6,80										
2678	1/2	0	In			mm	,00	1,00	NR	205	Steam Trap SB-ATI-VT005/0 SW-F 300 LB Forged ASTM A 105 T 66		0,80										
193	1/2	0	In			mm	,00	4,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		1,00										
2576	1/2	0	In			mm	,00	2,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105												
M Erection													Total Kg:		18,73								
SZ1	SABIZ PLANT ANSI				65111 - 0				A	Area A		1 / 1		TOTAL Kg:		18,73							

RED. COUPL. SB-ATI-PR008/0 THRD-F 3000# FORGED ASTM A 105 1/2"x1/8" Q.TY 1	Plant SZ1 SABIZ PLANT ANSI				Piping Class 205				Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0				
	Line 65111 - 0				Fluid				System				
	Dang. fluid type				Coating				De pres				
	Area Area A				Sketch Sht 1 / 1				Isometric code				
	Zones								Op tem				
												Page 1	

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.33											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection													Total Kg:		9,79									
SZ1	SABIZ PLANT ANSI				65112 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	65112 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					



DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.33											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection												Total Kg:		9,79										
SZ1	SABIZ PLANT ANSI				65113 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	65113 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.34											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	5,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		2,00											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection													Total Kg:		10,19									
SZ1	SABIZ PLANT ANSI					65114 - 0					A	Area A	1 / 1		TOTAL Kg:		10,19							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	65114 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.34											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection												Total Kg:		9,79										
SZ1	SABIZ PLANT ANSI				65117 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	65117 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST							PROJ:		2F11		REV:		0		23/07/2012	
PUMA5				23/07/2012 15.00.34											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h							Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch									
980	1/2	0	In	2,77		mm	,00	6,00	m	202	Pipe ASME B36.10+Coupling ASME 3000# THRD-M NPT sch.40 Seamless API 5L GR. B Galvanized		7,59											
1801	1/2	0	In			mm	,00	1,00	NR	202	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		0,30											
179	1/2	0	In			mm	,00	4,00	NR	202	90° Elbow SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		1,60											
835	1/2	0	In			mm	,00	1,00	NR	202	Union SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105 Galvanized		0,30											
M Erection												Total Kg:		9,79										
SZ1	SABIZ PLANT ANSI				65118 - 0				A		Area A		1 / 1		TOTAL Kg:		9,79							

	Plant	SZ1 SABIZ PLANT ANSI	Piping Class	202	Welding specification	
	Line	65118 - 0	Fluid		System	
	Dang. fluid type		Coating		De pres	Op tem
	Area	Area A	Sketch Sht	1 / 1	Isometric code	Page 1
	Zones					

DESMET - Ballestra								SKETCHES MATERIAL LIST						PROJ:		2F11		REV:		0	23/07/2012		
PUMA5			23/07/2012 15.00.34											DOC:		2F11.65.102							
DESMET - Ballestra								SABIZ 8000 kg/h						Size: In		Thk: mm		Temp: °C		Pres: Bar(g)		Corr: mm	
Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch								
931	1/2	0	In	2,77		mm	,00	220,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		278,47										
932	3/4	0	In	2,87		mm	,00	135,00	m	203	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		227,68										
1801	1/2	0	In			mm	,00	23,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		6,90										
1802	3/4	0	In			mm	,00	14,00	NR	203	Valve Ball Full Port SB-ATI-VS014/0 THRD-F NPT 200 LB Forged BRASS NICKEL PLATED S 87		5,60										
2033	1/2	0	In			mm	,00	23,00	NR	203	Valve Globe SB-ATI-VD001/0 THRD-F NPT 200 LB Forged BRONZE D 51		16,10										
2034	3/4	0	In			mm	,00	14,00	NR	203	Valve Globe SB-ATI-VD001/0 THRD-F NPT 200 LB Forged BRONZE D 51		11,20										
2576	1/2	0	In			mm	,00	32,00	NR	203	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105												
2260	1/2	1/4	In			mm	,00	74,00	NR	203	Coupling Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		2,22										
2265	3/4	1/2	In			mm	,00	32,00	NR	203	Coupling Reducing SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,96										
M Erection												Total Kg:		549,13									
SZ1	SABIZ PLANT ANSI				TRACC. WH - 0				A	Area A		1 / 1		TOTAL Kg:		549,13							

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 203	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0
	Line TRACC. WH - 0	Fluid	System
	Dang. fluid type	Coating	De pres
	Area Area A	Sketch Sht 1 / 1	Isometric code
	Zones		Op tem
			Page 1

DESMET - Ballestra		SKETCHES MATERIAL LIST	PROJ:	2F11	REV:	0	23/07/2012
PUMA5	23/07/2012 15.00.34		DOC:	2F11.65.102			

DESMET - Ballestra			SABIZ 8000 kg/h			Size: In	Thk: mm	Temp: °C	Pres: Bar(g)	Corr: mm
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Mark	S1	S2		T1	T2		Len mm	Qty	Um	Pip. class	Component	Gen. Bolt	Weight (Kg)	As.bly	Branch	
931	1/2	0	In	2,77		mm	,00	169,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		213,91			
932	3/4	0	In	2,87		mm	,00	40,00	m	205	Pipe ASME B36.10 PL sch.40 Seamless API 5L Gr.B		67,46			
2025	1/2	0	In			mm	,00	22,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		37,40			
2026	3/4	0	In			mm	,00	4,00	NR	205	Valve Gate SB-ATI-VG001/0 SW-F 800# Forged ASTM A 105 G 61		8,40			
2678	1/2	0	In			mm	,00	8,00	NR	205	Steam Trap SB-ATI-VT005/0 SW-F 300 LB Forged ASTM A 105 T 66		6,40			
193	1/2	0	In			mm	,00	8,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		2,00			
194	3/4	0	In			mm	,00	16,00	NR	205	90° Elbow SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		5,12			
1772	3/4	1/2	In			mm	,00	16,00	NR	205	Tee Reducing SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105					
2576	1/2	0	In			mm	,00	2,00	NR	205	Tee Straight SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105					
695	1/2	0	In			mm	,00	6,00	NR	205	Coupling SB-ATI-PR007/0 SW-F 3000# Forged ASTM A 105		0,84			
2480	1/2	0	In			mm	,00	2,00	NR	205	Cap SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,24			
2481	3/4	0	In			mm	,00	4,00	NR	205	Cap SB-ATI-PR008/0 THRD-F NPT 3000# Forged ASTM A 105		0,76			
M Erection												Total Kg:	342,53			
SZ1	SABIZ PLANT ANSI				TRACC.VB - 0				A	Area A		1 / 1	TOTAL Kg:	342,53		

	Plant SZ1 SABIZ PLANT ANSI	Piping Class 205	Welding specification SB-ATI-SP006/0 SB-ATI-SP007/0		
	Line TRACC.VB - 0	Fluid	System		
	Dang. fluid type	Coating	De pres		
	Area Area A	Sketch Sht 1 / 1	Isometric code		
	Zones		Op tem		