


WELD	WPS	FABRICATION MATERIALS					
1		PT	COMPONENT DESCRIPTION	DN	MATERIAL	QTY	REMARKS
2		NO				(mm)	
3							
4							
5			PIPE				
6							
7		1	PIPE, SS-EN 10217-7, TC1, 76.1x2.0	65	EN 1.4404	759	
8		2	PIPE, SS-EN 10217-7, TC1, 76.1x2.0	65	EN 1.4404	1299	
9		3	PIPE, SS-EN 10217-7, TC1, 76.1x2.0	65	EN 1.4404	62	
10		4	PIPE, SS-EN 10217-7, TC1, 76.1x2.0	65	EN 1.4404	81	
11		5	PIPE, SS-EN 10217-7, TC1, 76.1x2.0	65	EN 1.4404	6508	
12		6	PIPE, SS-EN 10217-7, TC1, 76.1x2.0	65	EN 1.4404	312	
13		7	PIPE, SS-EN 10217-7, TC1, 76.1x2.0	65	EN 1.4404	50	
14		8	PIPE, SS-EN 10217-7, TC1, 21.3x2.0	15	EN 1.4404	17	
15		9	PIPE, SS-EN 10217-7, TC1, 21.3x2.0	15	EN 1.4404	2214	
16			FITTINGS				
17							
18		10	TEE EQUAL, SS-EN 10253-4, TYPE A, 76.1x2.0 / 76.1x2.0	65 x 65	EN 1.4404	1	
19		11	REDUCER CONC, SS-EN 10253-4, TABLE A.5, 76.1x2.0 / 42.4x2.0	65 x 32	EN 1.4404	1	
		12	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 76.1x2.0	65	EN 1.4404	1	
		13	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 76.1x2.0	65	EN 1.4404	1	
		14	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 76.1x2.0	65	EN 1.4404	1	
		15	REDUCER ECC, SS-EN 10253-4, TABLE A.5, 42.4x2.0 / 21.3x2.0	32 x 15	EN 1.4404	1	
		16	ELBOW 45, TYPE 3D, SS-EN 10253-4, TYPE A, 42.4x2.0	32	EN 1.4404	1	
		17	ELBOW 90, TYPE 3D, SS-EN 10253-4, TYPE A, 21.3x2.0	15	EN 1.4404	1	
			FLANGES				
		18	LOOSE FLANGE, SS-EN 1092-1, TYP 02, PN16	65		1	
		19	WELDING RING WITH COLLAR, SS-EN 1092-1 TYPE 35, PN16	65		1	
		20	FLANGE WN, SS-EN 1092-1, TYPE 11, PN16	65		1	
		21	FLANGE WN, SS-EN 1092-1, TYPE 11, PN16	65		1	
			VALVES / IN-LINE ITEMS				
		22	BALL VALVE, WORCESTER A44, SHORT, BW	15		1	

PT NO	COMPONENT DESCRIPTION	DN	MATERIAL	QTY (mm)	REMARKS
GASKETS					
23	GASKET, EN 1514-1, TYPE XXX, T=1,5mm	65	EXPANDED GRAPHITE	1	
24	GASKET, EN 1514-1, TYPE XXX, T=1,5mm	65	EXPANDED GRAPHITE	1	
BOLTS					
28	HEXAGONAL NUT, M6M, ISO 4032	16	EN 1515-4, A4	4	
29	WASHER, BRB, ISO 7089	16	A4, HV≥250	8	
30	65 mm HEXAGONAL BOLT, M6S, ISO 4017	16	EN 1515-4, A4-70	4	
SUPPORTS					
31	ESS Atta	65		1	
32	ESS Atta	65		1	
33	PENETRATION ATTA	65		1	
34	ESS Atta	15		1	

WPS See Weldlist TBN	Design Temperature 50degC	Tightening Torque For Flange Joints TBN	P&ID Drawing Number ESS-0060416	General Layout Drawing Number TBN	Calculation Report ESS-0058702	Inspection Plan TBN	Area Code G02
Quality Level For Weldign Acc To TBN	Design Pressure 10bar (g)	Bend Radius N/A	Bending Procedure N/A	Coupling Installation Procedure TBN	Pressure Test Program TBN	Alternate System Tag	Date (First Issue) 170522
Weld Joint Efficiency Factor (Longitudinal) 1,0	Test Pressure 14.3bar (g)	Insulation Specification N/A	<div><div>Title/Name EUROPEAN SPALLATION SOURCE ERIC WATER COOLING SYSTEM CWM DIW SUPPLY FOR FEB ESS.ACC.E02.E03.WP0003 Document Number ESS-XXXXX12</div></div>				Scale -
Elevation (z) Acc To BCS	Quality Class MQC4-C	Insulation Thickness N/A					Format A2
	Media CWM	Allowance For Corrosion 0					Sheet 1 of 1
	Pipe Specification MQC4-W-PN16	Surface Treatment N/A					Revision A1

Rev	Description	Date	Drawn	Designed	Reviewed	Verified	Quality	Approved
A1	ISSUED FOR CDR	170522	FRPE	FRPE	AKCO	ANLU		