

Sarcheshmeh Copper Complex							
Flash Smelting Expansion Project							
Sarcheshmeh Flash Smelting Package							
Rev.C	Document No. C047P-S602-001						
Document Title: POS FOR FITTING (PART1)							
8.1 ELBOW 90° LR							
NO	SIZE (in)	SCH	MATERIAL	QTY	CONNECTION	REMARK	
1	14	60	ASTM A234 Gr.WP11-S	10	BE	ASME B16.9	
2	12	10	ASTM A234 Gr.WPB-S	5	BE	ASME B16.9	
3	12	STD	ASTM A234 Gr.WPB-S	4	BE	ASME B16.9	
6	8	10	ASTM A234 Gr.WPB-S	40	BE	ASME B16.9	
7	8	STD	ASTM A234 Gr.WPB-S	3	BE	ASME B16.9	
8	6	STD	ASTM A234 Gr.WPB-S	36	BE	ASME B16.9	
9	6	XS	ASTM A234 Gr.WPB-S	15	BE	ASME B16.9	
10	4	STD	ASTM A234 Gr.WPB-S	72	BE	ASME B16.9	
12	4	XS	ASTM A234 Gr.WPB-S	13	BE	ASME B16.9	
14	3	STD	ASTM A234 Gr.WP11-S	32	BE	ASME B16.9	
17	2	10S	ASTM A403-Gr.WP304L-W	31	BE	ASME B16.9	
18	2	STD	ASTM A234 Gr.WP11-S	4	BE	ASME B16.9	
20	1 1/2	CL3000	ASTM A182-Gr.F304L	157	SW	ASME B16.11	
21	1 1/2	CL6000	ASTM A182 Gr.F11	13	SW	ASME B16.11	
24	1	CL3000	ASTM A182-Gr.F304L	10	SW	ASME B16.11	
25	3/4	CL3000	ASTM A182-Gr.F304L	13	SW	ASME B16.11	
26	3/4	CL6000	ASTM A182 Gr.F11	11	SW	ASME B16.11	
27	3/4	CL3000	ASTM A105	101	SW	ASME B16.11	
28	3/4	CL3000	ASTM A403-Gr.WP304L-WX	45	SW	ASME B16.11	
29	1/2	CL3000	ASTM A182-Gr.F304L	126	SW	ASME B16.11	
30	1/2	CL6000	ASTM A182 Gr.F11	24	SW	ASME B16.11	
31	1/2	CL3000	ASTM A105	36	SW	ASME B16.11	
				801	801		
8.2 ELBOW 45° LR							
NO	SIZE (in)	SCH	MATERIAL	QTY	CONNECTION	REMARK	
1	14	60	ASTM A234 Gr.WP11-S	1	BE	ASME B16.9	
2	10	XS	ASTM A234 Gr.WP11-S	2	BE	ASME B16.9	
3	1 1/2	CL3000	ASTM A182-Gr.F304L	2	SW	ASME B16.11	
4	3/4	CL6000	ASTM A182 Gr.F11	1	SW	ASME B16.11	
				6			
8.3 SOCKOLET							
NO	SIZE 1 (in)	SIZE 2 (in)	RATING	MATERIAL	QTY	CONNECTION	REMARK
1	14	3/4	CL6000	ASTM A182 Gr.F11	2	SW	MSS-SP-95
2	10	1 1/2	CL6000	ASTM A182 Gr.F11	4	SW	MSS-SP-95
3	10	3/4	CL6000	ASTM A182 Gr.F11	12	SW	MSS-SP-95
4	8	3/4	CL6000	ASTM A182 Gr.F11	7	SW	MSS-SP-95
5	6	1	CL3000	ASTM A105	5	SW	MSS-SP-95
6	4	3/4	CL6000	ASTM A182 Gr.F11	2	SW	MSS-SP-95
7	3	1 1/2	CL3000	ASTM A105	12	SW	MSS-SP-95
8	3	3/4	CL6000	ASTM A182 Gr.F11	8	SW	MSS-SP-95
9	2	1 1/2	CL3000	ASTM A182-Gr.F304L	6	SW	MSS-SP-95
10	2	1 1/2	CL3000	ASTM A105	17	SW	MSS-SP-95
11	2	3/4	CL3000	ASTM A182-Gr.F304L	7	SW	MSS-SP-95
12	2	1/2	CL3000	ASTM A182-Gr.F304L	3	SW	MSS-SP-95

13	1 1/2	3/4	CL3000	ASTM A182-Gr.F304L	8	SW	MSS-SP-95
14	1 1/2	3/4	CL3000	ASTM A105	14	SW	MSS-SP-95
15	1 1/2	1/2	CL3000	ASTM A182-Gr.F304L	16	SW	MSS-SP-95
16					123		
8.4 WELDOLET							
NO	SIZE 1 (in)	SIZE 2 (in)	RATING	MATERIAL	QTY	CONNECTION	REMARK
1	14	3	CL6000	ASTM A182 Gr.F11	2	BW	MSS-SP-95
2	10	2	CL6000	ASTM A182 Gr.F11	2	BW	MSS-SP-95
					4		
8.5 EQUAL TEE							
NO	SIZE (in)	SCH	MATERIAL	QTY	CONNECTION	REMARK	
1	14	60	ASTM A234 Gr.WP11-S	4	BE	ASME B16.9	
2	8	STD	ASTM A234 Gr.WPB-S	5	BE	ASME B16.9	
3	6	XS	ASTM A234 Gr.WPB-S	2	BE	ASME B16.9	
4	4	20	ASTM A234 Gr.WPB-S	2	BE	ASME B16.9	
5	3	STD	ASTM A234 Gr.WP11-S	2	BE	ASME B16.9	
6	3	20	ASTM A234 Gr.WPB-S	11	BE	ASME B16.9	
7	2	10S	ASTM A403-Gr.WP304L-W	2	BE	ASME B16.9	
8	3/4	CL6000	ASTM A182 Gr.F11	4	SW	ASME B16.11	
9	1 1/2	CL3000	ASTM A182-Gr.F304L	32	SW	ASME B16.11	
10	3/4	CL6000	ASTM A182 Gr.F11	11	SW	ASME B16.11	
11	3/4	CL6000	A182-Gr.F304L	2	SW	ASME B16.11	
12	1/2	CL6000	ASTM A182 Gr.F11	2	SW	ASME B16.11	
				79			
8.6 REDUCED TEE							
NO	SIZE 1 (in)	SIZE 2 (in)	SCH (1) x (2)	MATERIAL	QTY	CONNECTION	REMARK
1	6	4	XS x XS	ASTM A234 Gr.WPB-S	2	BE	ASME B16.9
2	4	2	XS x XS	ASTM A234 Gr.WPB-S	2	BE	ASME B16.9
3	1 1/2	1	CL3000	ASTM A182-Gr.F304L	2	SW	ASME B16.11
4	1 1/2	3/4	CL6000	ASTM A182 Gr.F11	14	SW	ASME B16.11
5	1 1/2	3/4	CL3000	ASTM A182-Gr.F304L	2	SW	ASME B16.11
6	1 1/2	1/2	CL3000	ASTM A182-Gr.F304L	62	SW	ASME B16.11
7	3/4	1/2	CL6000	ASTM A182 Gr.F11	2	SW	ASME B16.11
					86		
8.7 REDUCER (CONCENTRIC)							
NO	SIZE 1 (in)	SIZE 2 (in)	SCH (1) x (2)	MATERIAL	QTY	CONNECTION	REMARK
1	16	10	XS x S60	ASTM A234 Gr.WP11-S	6	BE	ASME B16.9
2	12	8	S20 x S20	ASTM A234 Gr.WPB-S	2	BE	ASME B16.9
3	8	6	S20 x STD	ASTM A234 Gr.WPB-S	2	BE	ASME B16.9
4	8	4	S20 x STD	ASTM A234 Gr.WPB-S	2	BE	ASME B16.9
5	6	4	STD x STD	ASTM A234 Gr.WPB-S	4	BE	ASME B16.9
6	6	4	XS x XS	ASTM A234 Gr.WPB-S	2	BE	ASME B16.9
7	5	4	XS x XS	ASTM A234 Gr.WPB-S	4	BE	ASME B16.9
8	4	3	STD x STD	ASTM A234 Gr.WPB-S	1	BE	ASME B16.9
9	4	3	STD x STD	ASTM A234 Gr.WP11-S	4	BE	ASME B16.9
10	4	3	XS x XS	ASTM A234 Gr.WPB-S	4	BE	ASME B16.9
11	4	1 1/2	STD x XS	ASTM A234 Gr.WPB-S	6	BE/PE	MSS-SP-95
12	2	1 1/2	STD x XS	ASTM A234 Gr.WPB-S	11	BE/PE	MSS-SP-95
13	2	1 1/2	XS x XS	ASTM A234 Gr.WPB-S	2	BE/PE	MSS-SP-95
14	2	1	10S x 40S	ASTM A403-Gr.WP304L-S	2	PE	MSS-SP-95

15	2	1	XS x XS	ASTM A234 Gr.WPB-S	2	BE/PE	MSS-SP-95
16	1 1/2	1	XS x XS	ASTM A234 Gr.WP11-S	4	PE	MSS-SP-95
17	1 1/2	1/2	40S x 40S	ASTM A403-Gr.WP304L-S	4	PE	MSS-SP-95
18	1	3/4	XS x XS	ASTM A234 Gr.WPB-S	4	PE	MSS-SP-95
19	1	3/4	40S x 40S	ASTM A403-Gr.WP304L-WX	2	PE	MSS-SP-95
					68		
8.8 REDUCER (ECCENTRIC)							
NO	SIZE 1 (in)	SIZE 2 (in)	SCH (1) x (2)	MATERIAL	QTY	CONNECTION	REMARK
1	12	8	STD x STD	ASTM A234 Gr.WPB-S	1	BE	ASME B16.9
2	10	8	XS x S60	ASTM A234 Gr.WP11-S	1	BE	ASME B16.9
3	2	1 1/2	STD x XS	ASTM A234 Gr.WP11-S	2	BE/PE	MSS-SP-95
4	2	1	XS x XS	ASTM A234 Gr.WPB-S	1	BE/PE	MSS-SP-95
5	1 1/2	1	XS x XS	ASTM A234 Gr.WPB-S	2	PE	MSS-SP-95
					7		
8.9 CAP							
NO	SIZE (in)	SCH	MATERIAL	QTY	CONNECTION	REMARK	
1	14	60	ASTM A234 Gr.WP11-S	2	BE	ASME B16.9	
2	8	60	ASTM A234 Gr.WP11-S	7	BE	ASME B16.9	
3	8	10	ASTM A234 Gr.WPB-S	7	BE	ASME B16.9	
4	6	XS	ASTM A234 Gr.WPB-S	2	BE	ASME B16.9	
5	3	STD	ASTM A234 Gr.WP11-S	2	BE	ASME B16.9	
6	2	10S	ASTM A403-Gr.WP304L-S	5	BE	ASME B16.9	
7	2	STD	ASTM A234 Gr.WPB-S	10	BE	ASME B16.9	
8	1 1/2	CL6000	ASTM A182 Gr.F11	2	SW	ASME B16.11	
9	1 1/2	CL3000	ASTM A182-Gr.F304L	32	SW	ASME B16.11	
				69			
8.11 FULL COUPLING							
NO	SIZE (in)	SCH	MATERIAL	QTY	CONNECTION	REMARK	
1	1 1/2	CL3000	ASTM A105	13	SW	ASME B16.11	
2	1 1/2	CL3000	ASTM A182 GR. F304L	2	SW	ASME B16.11	
3	1/2	CL3000	ASTM A105	3	SW	ASME B16.11	
4	1/2	CL3000	ASTM A182 GR. F304L	8	SW	ASME B16.11	
5	1/2	CL6000	ASTM A182 GR. F11 CL.2	1	SW	ASME B16.11	
				24			