

		Aviation Fuel Station of Asalouyeh Persian Gulf Airport			
		MTO FOR PIPING COMPONENT			
		Doc. No.: PSEEZ-PFC-D-MTO-PI-1414			
		REV:02		Approved For Construction	
row	TYPE	DESCRIPTION	MATERIAL	SIZE	QTY
1	Pipe	PIPE SMLS BE ASME B36.10M, STD	API 5L Gr. B PSL2	4"	64.3
2	Pipe	PIPE SMLS PE ASME B36.10M, STD	API 5L Gr. B PSL2	2"	88.9
3	Pipe	PIPE SMLS PE ASME B36.10M, XS	API 5L Gr. B PSL2	1/2"	4
4	Pipe	PIPE SMLS PE ASME B36.10M, XS	API 5L Gr. B PSL2	3/4"	27.1
5	Pipe	PIPE SMLS PE ASME B36.10M, XS	API 5L Gr. B PSL2	1 1/2"	0.7
6	Pipe	PIPE SMLS PE ASME B36.19M, 40S	ASTM A312 Gr. TP316	1/2"	3
7	Pipe	PIPE SMLS PE ASME B36.19M, 40S	ASTM A312 Gr. TP316	3/4"	2.7
8	Pipe	PIPE WELDED EFW 100% RT BE ASME B36.19M, 10S	ASTM A312 Gr. TP316	2 1/2"	7.9
9	Pipe	PIPE WELDED EFW 100% RT BE ASME B36.19M, 10S	ASTM A312 Gr. TP316	3"	0.2
10	Pipe	PIPE WELDED EFW 100% RT BE ASME B36.19M, 10S	ASTM A312 Gr. TP316	4"	43.1
11	Pipe	PIPE WELDED EFW 100% RT BE ASME B36.19M, 10S	ASTM A312 Gr. TP316	6"	139
12	Pipe	PIPE WELDED EFW 100% RT BE ASME B36.19M, 10S	ASTM A312 Gr. TP316	8"	57.4
13	Fitting	ELBOW 45 DEG LR WROUGHT SMLS BW ASME B16.9, 40S	ASTM A403 Gr. WP316-S	3/4"	7
14	Fitting	ELBOW 45 DEG LR WROUGHT SMLS BW ASME B16.9, STD	ASTM A234 Gr. WPB	2"	2
15	Fitting	ELBOW 45 DEG LR WROUGHT WELDED 100% RT BW ASME B16.9, 10S	ASTM A403 Gr. WP316-W	4"	4
16	Fitting	ELBOW 45 DEG LR WROUGHT SMLS BW ASME B16.9, STD	ASTM A234 Gr. WPB	4"	6
17	Fitting	ELBOW 90 DEG LR WROUGHT SMLS BW ASME B16.9, 40S	ASTM A403 Gr. WP316-S	3/4"	7
18	Fitting	ELBOW 90 DEG LR WROUGHT SMLS BW ASME B16.9, STD	ASTM A234 Gr. WPB	2"	35
19	Fitting	ELBOW 90 DEG LR WROUGHT SMLS BW ASME B16.9, STD	ASTM A234 Gr. WPB	4"	2
20	Fitting	ELBOW 90 DEG LR WROUGHT SMLS BW ASME B16.9, XS	ASTM A234 Gr. WPB	1/2"	14
21	Fitting	ELBOW 90 DEG LR WROUGHT SMLS BW ASME B16.9, XS	ASTM A234 Gr. WPB	3/4"	23
22	Fitting	ELBOW 90 DEG LR WROUGHT WELDED 100% RT BW ASME B16.9, 10S	ASTM A403 Gr. WP316-W	3"	2
23	Fitting	ELBOW 90 DEG LR WROUGHT WELDED 100% RT BW ASME B16.9, 10S	ASTM A403 Gr. WP316-W	4"	21
24	Fitting	ELBOW 90 DEG LR WROUGHT WELDED 100% RT BW ASME B16.9, 10S	ASTM A403 Gr. WP316-W	6"	40
25	Fitting	ELBOW 90 DEG LR WROUGHT WELDED 100% RT BW ASME B16.9, 10S	ASTM A403 Gr. WP316-W	8"	5
26	Fitting	REDUCER CON WROUGHT SMLS BW ASME B16.9, STD x XS	ASTM A234 Gr. WPB	2"x1 1/2"	2

27	Fitting	REDUCER CON WROUGHT WELDED 100% RT BW ASME B16.9, 10S x 10S	ASTM A403 Gr. WP316-W	6"x4"	5
28	Fitting	REDUCER ECC WROUGHT SMLS BW ASME B16.9, STD x XS	ASTM A234 Gr. WPB	2"x1 1/2"	2
29	Fitting	REDUCER ECC WROUGHT WELDED 100% RT BW ASME B16.9, 10S x 10S	ASTM A403 Gr. WP316-W	6"x4"	2
30	Fitting	REDUCER ECC WROUGHT WELDED 100% RT BW ASME B16.9, 10S x 10S	ASTM A403 Gr. WP316-W	8"x6"	2
31	Fitting	REDUCER CON WROUGHT SMLS BW ASME B16.9, S20 x STD	ASTM A234 Gr. WPB	8"x4"	8
32	Fitting	REDUCER CON WROUGHT WELDED 100% RT BW ASME B16.9, 10S x 10S	ASTM A403 Gr. WP316-W	6"x2 1/2"	2
33	Fitting	REDUCER CON WROUGHT WELDED 100% RT BW ASME B16.9, 10S x 10S	ASTM A403 Gr. WP316-W	4"x2 1/2"	10
34	Fitting	TEE EQ. WROUGHT SMLS BW ASME B16.9, STD	ASTM A234 Gr. WPB	4"	8
35	Fitting	TEE EQ. WROUGHT SMLS BW ASME B16.9, XS	ASTM A234 Gr. WPB	3/4"	6
36	Fitting	TEE EQ. WROUGHT WELDED 100% RT BW ASME B16.9, 10S	ASTM A403 Gr. WP316-W	4"	3
37	Fitting	TEE EQ. WROUGHT WELDED 100% RT BW ASME B16.9, 10S	ASTM A403 Gr. WP316-W	6"	6
38	Fitting	TEE EQ. WROUGHT WELDED 100% RT BW ASME B16.9, 10S	ASTM A403 Gr. WP316-W	8"	1
39	Fitting	TEE RED. WROUGHT SMLS BW ASME B16.9, XS x XS	ASTM A234 Gr. WPB	3/4"x1/2"	3
40	Fitting	TEE RED. WROUGHT WELDED 100% RT BW ASME B16.9, 10S x 10S	ASTM A403 Gr. WP316-W	6"x3"	2
41	Fitting	TEE RED. WROUGHT WELDED 100% RT BW ASME B16.9, 10S x 10S	ASTM A403 Gr. WP316-W	6"x4"	8
42	Fitting	TEE RED. WROUGHT WELDED 100% RT BW ASME B16.9, 10S x 10S	ASTM A403 Gr. WP316-W	8"x4"	4
43	Fitting	CROSS WROUGHT WELDED 100% RT BW ASME B16.9, 10S	ASTM A403 Gr. WP316-W	4"	2
44	Fitting	WELDOLET FORGED BW MSS SP-97, 40S	ASTM A182 Gr. F316	2 1/2"x1/2"	4
45	Fitting	WELDOLET FORGED BW MSS SP-97, 40S	ASTM A182 Gr. F316	4"x1/2"	2
46	Fitting	THREDOLET FORGED BW MSS SP-97, 40S	ASTM A182 Gr. F316	4"x1/2"	1
47	Fitting	WELDOLET FORGED BW MSS SP-97, 40S	ASTM A182 Gr. F316	6"x1/2"	16
48	Fitting	WELDOLET FORGED BW MSS SP-97, 40S	ASTM A182 Gr. F316	6"x3/4"	6
49	Fitting	WELDOLET FORGED BW MSS SP-97, 40S	ASTM A182 Gr. F316	6"x2"	1
50	Fitting	WELDOLET FORGED BW MSS SP-97, 40S	ASTM A182 Gr. F316	8"x1/2"	2
51	Flange	FLANGE BLIND RF CL.150 ASME B16.5	ASTM A182 Gr. F316	6"	3
52	Flange	FLANGE BLIND RF CL.150 ASME B16.5	ASTM A105	3/4"	3
53	Flange	FLANGE BLIND RF CL.150 ASME B16.5	ASTM A182 Gr. F316	8"	1
54	Flange	FLANGE WN RF CL.150 ASME B16.5, 10S	ASTM A182 Gr. F316	3"	2
55	Flange	FLANGE WN RF CL.150 ASME B16.5, 10S	ASTM A182 Gr. F316	4"	36
56	Flange	FLANGE WN RF CL.150 ASME B16.5, 10S	ASTM A182 Gr. F316	6"	43
57	Flange	FLANGE WN RF CL.150 ASME B16.5, 10S	ASTM A182 Gr. F316	8"	7
58	Flange	FLANGE WN RF CL.150 ASME B16.5, 10S	ASTM A182 Gr. F316	2 1/2"	12
59	Flange	FLANGE WN RF CL.150 ASME B16.5, 40S	ASTM A182 Gr. F316	1/2"	46
60	Flange	FLANGE WN RF CL.150 ASME B16.5, 40S	ASTM A182 Gr. F316	3/4"	11
61	Flange	FLANGE WN RF CL.150 ASME B16.5, STD	ASTM A105	2"	33
62	Flange	FLANGE WN RF CL.150 ASME B16.5, STD	ASTM A105	4"	1
63	Flange	FLANGE WN RF CL.150 ASME B16.5, XS	ASTM A105	1/2"	13
64	Flange	FLANGE WN RF CL.150 ASME B16.5, XS	ASTM A105	3/4"	19
65	Flange	FLANGE WN RF CL.150 ASME B16.5, XS	ASTM A105	1 1/2"	4
66	Gasket	GASKET SPIRAL WOUND 4.5 mm THK. RF CL.150 ASME B16.20 ASME B16.5	316 METALLIC+FLEXIBLE GRAPHITE CR: CS - IR: SS316	1/2"	59

67	Gasket	GASKET SPIRAL WOUND 4.5 mm THK. RF CL.150 ASME B16.20 ASME B16.5	316 METALLIC+FLEXIBLE GRAPHITE CR: CS - IR: SS316	3/4"	33
68	Gasket	GASKET SPIRAL WOUND 4.5 mm THK. RF CL.150 ASME B16.20 ASME B16.5	316 METALLIC+FLEXIBLE GRAPHITE CR: CS - IR: SS316	1 1/2"	4
69	Gasket	GASKET SPIRAL WOUND 4.5 mm THK. RF CL.150 ASME B16.20 ASME B16.5	316 METALLIC+FLEXIBLE GRAPHITE CR: CS - IR: SS316	2"	39
70	Gasket	GASKET SPIRAL WOUND 4.5 mm THK. RF CL.150 ASME B16.20 ASME B16.5	316 METALLIC+FLEXIBLE GRAPHITE CR: CS - IR: SS316	2 1/2"	8
71	Gasket	GASKET SPIRAL WOUND 4.5 mm THK. RF CL.150 ASME B16.20 ASME B16.5	316 METALLIC+FLEXIBLE GRAPHITE CR: CS - IR: SS316	3"	2
72	Gasket	GASKET SPIRAL WOUND 4.5 mm THK. RF CL.150 ASME B16.20 ASME B16.5	316 METALLIC+FLEXIBLE GRAPHITE CR: CS - IR: SS316	4"	42
73	Gasket	GASKET SPIRAL WOUND 4.5 mm THK. RF CL.150 ASME B16.20 ASME B16.5	316 METALLIC+FLEXIBLE GRAPHITE CR: CS - IR: SS316	6"	48
74	Gasket	GASKET SPIRAL WOUND 4.5 mm THK. RF CL.150 ASME B16.20 ASME B16.5	316 METALLIC+FLEXIBLE GRAPHITE CR: CS - IR: SS316	8"	8
75	Valve	BALL VALVE FLANGED-RF CL.150 SIDE ENTRY FB FLOATING BALL HO API 608 ASME B16.5	BODY: ASTM A182 Gr. F316 TRIM: STEM & BALL: 316, SEAT: RPTFE SEAL: AED VITON	1/2"	22
76	Valve	BALL VALVE FLANGED-RF CL.150 SIDE ENTRY FB FLOATING BALL HO API 608 ASME B16.5	BODY: ASTM A182 Gr. F316 TRIM: STEM & BALL: 316, SEAT: RPTFE SEAL: AED VITON	3/4"	8
77	Valve	BALL VALVE FLANGED-RF CL.150 SIDE ENTRY FB FLOATING BALL HO API 608 ASME B16.5	BODY: ASTM A216 Gr. WCB TRIM: BALL & SEAT: 316+TUNGSTEN CARBIDE COATING, STEM: 316 SEAL: GRAPHITE	1/2"	5
78	Valve	BALL VALVE FLANGED-RF CL.150 SIDE ENTRY FB FLOATING BALL HO API 608 ASME B16.5	BODY: ASTM A216 Gr. WCB TRIM: BALL & SEAT: 316+TUNGSTEN CARBIDE COATING, STEM: 316 SEAL: GRAPHITE	3/4"	6
79	Valve	BALL VALVE FLANGED-RF CL.150 SIDE ENTRY FB FLOATING BALL HO API 608 ASME B16.5	BODY: ASTM A216 Gr. WCB TRIM: BALL & SEAT: 316+TUNGSTEN CARBIDE COATING, STEM: 316 SEAL: GRAPHITE	2"	11

80	Valve	BALL VALVE FLANGED-RF CL.150 SIDE ENTRY FB TRUNION MOUNTED GO API 608 ASME B16.5	BODY: ASTM A351 Gr. CF8 TRIM: STEM & BALL: 316, SEAT: RPTFE SEAL: AED VITON	6"	13
81	Valve	BALL VALVE FLANGED-RF CL.150 SIDE ENTRY FB TRUNION MOUNTED GO API 608 ASME B16.5	BODY: ASTM A351 Gr. CF8 TRIM: STEM & BALL: 316, SEAT: RPTFE SEAL: AED VITON	8"	2
82	Valve	BALL VALVE FLANGED-RF CL.150 SIDE ENTRY RB FLOATING BALL HO API 608 ASME B16.5	BODY: ASTM A351 Gr. CF8 TRIM: STEM & BALL: 316, SEAT: RPTFE SEAL: AED VITON	4"	11
83	Valve	BALL VALVE FLANGED-RF CL.150 SIDE ENTRY FB TRUNION MOUNTED GO API 608 ASME B16.5	BODY: ASTM A351 Gr. CF8 TRIM: STEM & BALL: 316, SEAT: RPTFE SEAL: AED VITON	2 1/2"	4
84	Valve	CHECK VALVE FLANGED-RF CL.150 BC PISTON LIFT TYPE WITH SPRING SELF OPERATED API 602 ASME B16.5	BODY: ASTM A105N TRIM: 8 (F6+HF)	2"	4
85	Valve	CHECK VALVE LUG TYPE RF CL.150 DUAL PLATE SELF OPERATED API 594 ASME B16.5	BODY: ASTM A351 Gr. CF8M TRIM: 10 (316)	6"	4
86	Valve	CHECK VALVE LUG TYPE RF CL.150 DUAL PLATE SELF OPERATED API 594 ASME B16.5	BODY: ASTM A351 Gr. CF8M TRIM: 10 (316)	4"	2
87	Filter	STRAINER BASKET TYPE FLANGED-RF 150# ASME B16.5	BODY: ASTM A351 Gr CF8M, SCREEN-SS304	6"	2
88	Filter	STRAINER BASKET TYPE FLANGED-RF 150# ASME B16.5	BODY: ASTM A351 Gr CF8M, SCREEN-SS304	8"	2
89	Filter	STRAINER T-TYPE BW 150# ASME B16.25, STD	BODY: ASTM A234 Gr.WPB, SCREEN-SS304	2"	2
90	Coupling	Quick connection	316 stainless steel	1/2"	1
91	Coupling	Aviation Coupler Tank unit, flanged 150# with Dust cap	material in aluminium and stainless steel.	2 1/2"	4
92	Coupling	Aviation Adapter Hose unit with female thread - Standard Handle ,with Dust plug	material in aluminium and stainless steel.	2 1/2"	2
93	HOSE	Aviation FLEXIBLE HOSE with male thread ends (L=6m)	NBR seamless tube, reinforcement textile braids, cover chloroprene	2 1/2"	2
94	HOSE	Unloading Composite Hose Pipe(L=6m)		2 1/2"	6