

INSPECTION TEST CERTIFICATE

FOOLAD ASA INDUSTRIES CO.

FACTORY: AT A DISTANCE OF 18(km) FROM ZANJAN TO TEHRAN

TEL.: (+98-24) 32462111 & 2 / FAX: (+98-24) 32462113

Certificate No.: 1403-304

Client:HAMIAN SANAAT ENERGY POOYA

Order No:PR-200

Date:1403/11/08

EN 10204 3.1

Standard: ASME B16.9

Product: Pipe Fittings

Specification: ASTM A420 WPL6

Please advise on percentage of Columbium (Cb)

ITEM	DESCRIPTION	QTY (PCS)	HEAT NO.	CHIMICAL COMPOSITION %										MECHANICAL PROPERTY			HARDNES	IMPACT TEST (J)			
				C	Si	Mn	P	S	Cr	Ni	Cu	Mo	V	Y.S.	T.S.	EL.	HB	°C	1	2	3
														Mpa	Mpa	%					
12	CAP SMLS.B.W C/S 6"S/80	2	41015	0.160	0.240	0.970	0.013	0.007	0.020	0.005	0.007	0.003	0.002	334	506	31	149	-46	61	67	75
13	RED.CONC.SMLS.B.W C/S 6"*5"S/80	2	43297	0.110	0.200	0.520	0.016	0.007	0.053	0.015	0.140	0.010	0.005	314	505	33	155	-46	56	60	64
14	RED.CONC.SMLS.B.W C/S 2"*1/2"S/80	6	42176	0.032	0.230	0.660	0.011	0.004	0.005	0.014	0.015	0.003	0.002	330	561	32.1	152	-46	70	73	76
15	RED.CONC.SMLS.B.W C/S 4"*2"S/80	8	43287	0.078	0.220	0.540	0.019	0.012	0.087	0.067	0.110	0.013	0.003	323	556	33	155	-46	69	74	76
16	RED.CONC.SMLS.B.W C/S 4"*3"S/80	2	42166	0.058	0.330	1.210	0.013	0.007	0.098	0.024	0.063	0.024	0.022	318	546	31.2	150	-46	55	58	60
17	RED.CONC.SMLS.B.W C/S 4"*2"S/160	4	14767	0.069	0.240	0.990	0.008	0.002	0.047	0.032	0.068	0.045	0.032	290	519	31	145	-46	64	74	76
19	RED.CONC.SMLS.B.W C/S 1/2"*1"S/80	8	43304	0.120	0.200	0.550	0.011	0.007	0.012	0.005	0.023	0.003	0.002	323	551	32	155	-46	56	66	70
20	RED.CONC.SMLS.B.W C/S 2"*1"S/80	2	43302	0.100	0.230	0.600	0.015	0.007	0.018	0.005	0.021	0.003	0.003	305	522	32	150	-46	58	62	54
21	TEE.EQU.SMLS.B.W C/S 6"S/80	2	43298	0.052	0.220	1.000	0.013	0.004	0.079	0.015	0.110	0.006	0.038	305	554	33	152	-46	55	59	52
22	TEE.UNEQU.SMLS.B.W C/S 4"*2"S/80	3	43296	0.081	0.240	0.540	0.016	0.010	0.071	0.020	0.031	0.005	0.003	300	544	31	148	-46	61	64	68
23	TEE.EQU.SMLS.B.W C/S 4"S/80	3	14930	0.110	0.240	1.030	0.018	0.005	0.047	0.019	0.070	0.010	0.010	303	522	30	155	-46	48	55	69
24	TEE.UNEQU.SMLS.B.W C/S 4"*2"S/80	3	43296	0.081	0.240	0.540	0.016	0.010	0.071	0.020	0.031	0.005	0.003	300	544	31	148	-46	61	64	68
25	TEE.UNEQU.SMLS.B.W C/S 2"*1"S/80	4	43300	0.100	0.200	0.580	0.020	0.015	0.017	0.005	0.016	0.003	0.003	311	536	32	148	-46	67	64	62
26	TEE.EQU.SMLS.B.W C/S 11/2"S/80	2	43303	0.090	0.230	0.530	0.017	0.026	0.022	0.005	0.018	0.003	0.003	305	519	32	153	-46	58	62	68
27	TEE.UNEQU.SMLS.B.W C/S 11/2"*1"S/80	2	43040	0.053	0.240	1.080	0.007	0.004	0.068	0.007	0.028	0.003	0.002	329	508	33	148	-46	61	65	77
28	TEE.UNEQU.SMLS.B.W C/S 11/2"*3/4"S/80	2	43040	0.053	0.240	1.080	0.007	0.004	0.068	0.007	0.028	0.003	0.002	329	508	33	148	-46	61	65	77
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Inspection & Test Results

Surface & Marking	Dimensions	Nondestructive Test				Heat Treatment
ACCEPTABLE	ACCEPTABLE	RT	UT	MT	PT	ACCEPTABLE

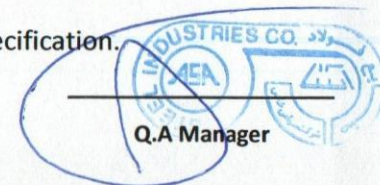
NOTE:ALL ITEMS ARE NORMALIZED (675°C*0.5 HR AIR COOLING)

We hereby certify that the products described herein have been manufactured in accordance above mentioned standard and client P.O. and specification.

This certificate is valid with original signature, stamp and hologram of FOOLAD ASA.



Stamp and Signature:



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