



**GULF
INTERNATIONAL
PIPE INDUSTRY**

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GIPI INTRODUCTION

Gulf International Pipe Industry (GIPI) was established as a Company in Sultanate of Oman in January 2007. GIPI is the first manufacturer of High Pressure Steel Line Pipes and Casing Pipes in Oman and the first mill in MENA region and subcontinent of India to manufacture high pressure 24" Electric Resistance Welded (ERW) Steel Pipes.

The facility is located in the Sohar Industrial Area, the industrial hub of Oman, on an area of 240,000 sq. meters. GIPI's annual production capacity exceeds 250,000 metric tons per year. The facility is designed with a state-of-the-art fifth generation technology exceeding the stringent International Standards and specific requirements of the Oil & Gas Companies.

In GIPI, maintaining high discipline on Health, Safety, Security and Environment and assuring quality and excellence are not just corporate slogans to garner business and profits; they are a essential part of our very being.

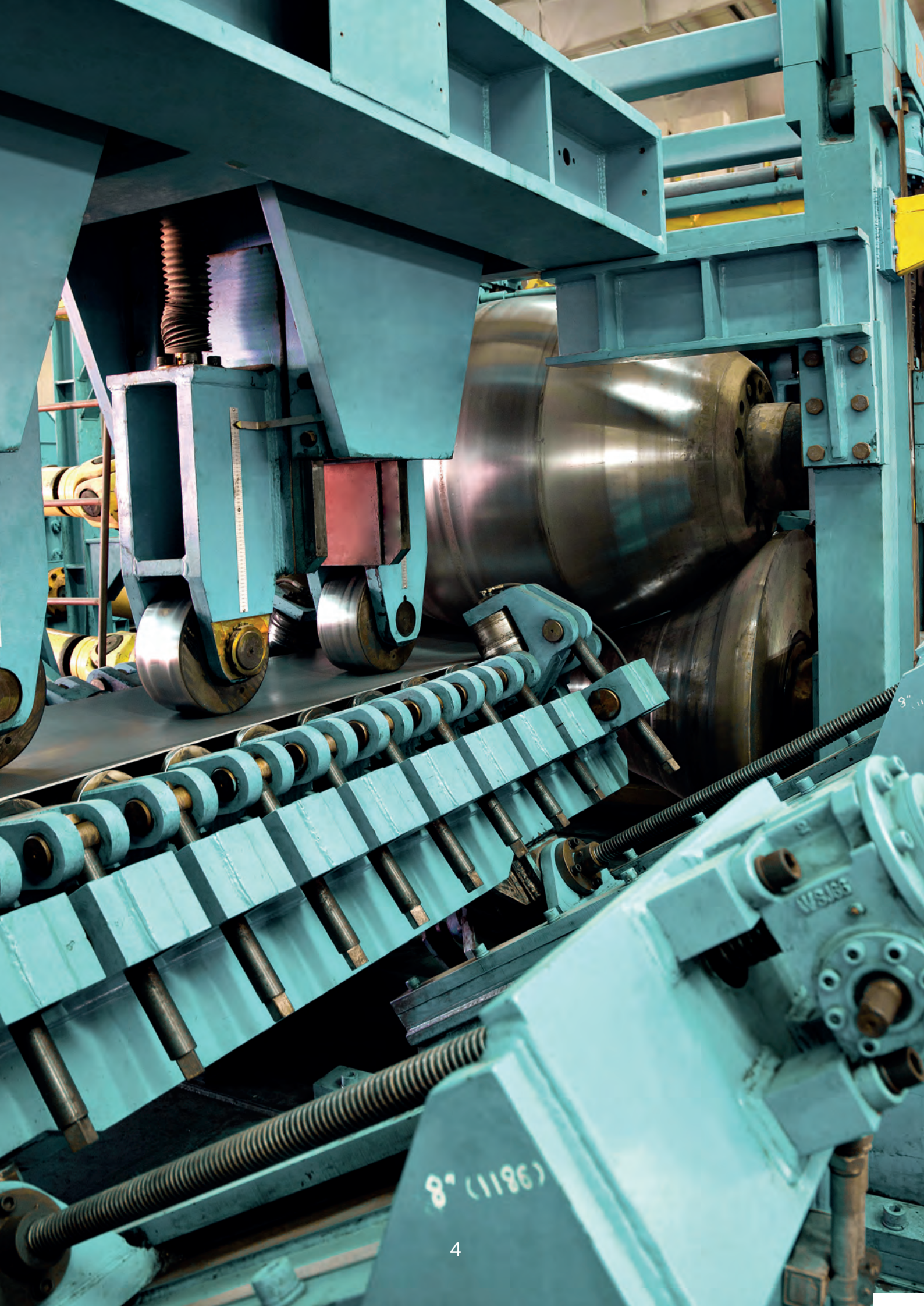
OUR PRODUCTS

GIPI's product lines include oil country tubular goods (OCTG), line pipe, structural pipe made of carbon and alloy steel in accordance with the proprietary and international standards including API, ASTM, EN, ISO. Our manufacturing facility is ISO 9001 and API Spec Q1 certified.

- 6" to 24" high grade API standard carbon steel ERW pipes are capable of withstanding high pressure usage for Oil & Gas transmission & OCTG needs and other types of high pressure usage with thickness levels up to 25mm or 1". The plant is designed to manufacture and handle hydro test and all finishing tests for lengths of up to 18 meters, thus substantially reducing up to 30% of field welding and associated costs, resulting in faster completion of project schedule by 40%;
- 6 5/8" to 20" Casing Pipes of J55 & K55 Plain end
- Threading (Buttress thread & Round thread) of 5 1/2" to 13 3/8" with couplings and protectors supplied;
- "Internal & External Coating of all pipes from 6" to 48", inclusive of 3LPP coating on DSS Pipe"
- Professional in-house Laboratory services with ISO 17025 accreditation capable of all related tests meeting Internationally recognized standards including corrosion test HIC/SSCC test, Coating related tests, etc;
- Fully automated Coil Slitting services









LINE PIPES

GIPI Line pipes are manufactured with stringent quality assurance standards. Our advanced manufacturing processes and quality systems ensure sustained and consistent quality in our products. GIPI manufactures line pipes that are mostly for the surface transmission of oil, gas and other liquids.

Product Range Chart
GIPI - MILL SIZE RANGE - LINE PIPES

OD		Wall Thickness																				
		0.157	0.173	0.188	0.203	0.219	0.250	0.280	0.312	0.344	0.375	0.406	0.438	0.470	0.500	0.562	0.625	0.689	0.750	0.866	0.944	1.000
Inch	mm	4.0	4.4	4.8	5.2	5.6	6.4	7.1	7.9	8.7	9.5	10.3	11.1	11.9	12.7	14.2	15.9	17.5	19.1	22.0	24.0	25.0
6 5/8	168.3																					
8 5/8	219.9																					
10 3/4	273.1																					
12 3/4	323.9																					
14	355.6																					
16	406.4																					
18	457.3																					
20	508																					
22	559																					
24	610																					

- CAPABILITIES**
- Size Range - 6" ~ 24"
 - Wall Thickness - 4.0 mm ~ 25.0 mm
 - Grade – API 5LB ~ X-80 PSL1 & PSL2 (Sour & Non-sour)

HF-ERW Pipe Manufacturing Process Flow Chart

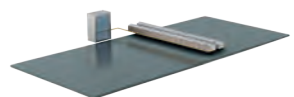
1 Uncoiling



2 Leveling



3 Coil UT



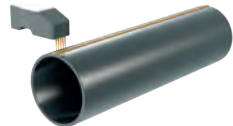
4 Edge Milling



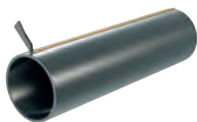
5 Forming



6 H. F. Electric Resistance / Induction Welding



7 External and internal flash removal



8 Ultrasonic Inspection of Weld Seam



9 Post Annealing



10 Air Cooling Water Cooling



11 Sizing



12 Cutting



13 End Facing



14 Hydrostatic Testing



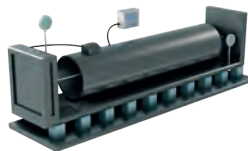
15 Ultrasonic Inspection of Weld Seam and Full Body



16 Ultrasonic Inspection of Ends



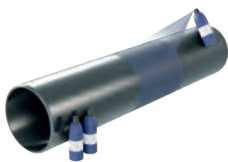
17 Weighing & Measuring



18 Visual & Dimensional Check



19 Mill Coating / Marking



20 Shipping



Standard Sizes API 5L (LINE PIPE)

Outside Diameter		Wall Thickness		Plain End Weight per Unit Length		Hydrostatic Test Pressure							
						Grade A				Grade B			
						Std.		Alt.		Std.		Alt.	
inch	mm	inch	mm	lb/ft	kg/m	psi	kPa x100	psi	kPa x100	psi	kPa x100	psi	kPa x100
6-5/8	168.3	0.156	4.0	10.78	16.21	862	60	1077	75	1003	70	1254	87
		0.188	4.8	12.92	19.35	1039	72	1298	90	1209	84	1511	105
		0.203	5.2	13.92	20.91	1121	78	1402	97	1305	91	1632	114
		0.219	5.6	14.98	22.47	1210	84	1512	105	1408	98	1760	122
		0.25	6.4	17.02	25.55	1381	96	1726	120	1608	112	2009	140
		0.277	7.0	18.78	27.84	1530	105	1913	131	1781	124	2226	153
		0.312	7.9	21.04	31.25	1724	118	2155	148	2006	139	2508	173
		0.322	8.2	21.68	32.37	1779	123	2224	153	2071	144	2588	179
		0.344	8.7	23.08	34.24	1900	130	2376	163	2212	154	2765	190
		0.375	9.5	25.03	37.20	2072	142	2590	178	2411	167	3014	207
8-5/8	219.1	0.156	4.0	14.12	21.22	650	45	810	57	760	53	950	66
		0.188	4.8	16.96	25.37	780	54	980	68	920	63	1140	79
		0.203	5.2	18.28	27.43	850	59	1060	74	990	69	1240	86
		0.219	5.6	19.68	29.48	910	63	1140	79	1070	74	1330	92
		0.250	6.4	22.38	33.57	1040	73	1300	91	1220	84	1520	106
		0.277	7.0	24.72	36.61	1160	79	1450	99	1350	92	1690	115
		0.312	7.9	27.73	41.14	1300	90	1630	112	1520	104	1900	130
		0.322	8.2	28.58	42.65	1340	93	1680	116	1570	108	1960	135
		0.344	8.7	30.45	45.14	1440	99	1790	123	1680	115	2090	144
		0.375	9.5	33.07	49.10	1570	108	1960	135	1830	125	2280	157
		0.438	11.1	38.33	56.94	1830	126	2290	157	2130	147	2670	183
		0.500	12.7	43.43	64.64	2090	144	2610	180	2430	168	2800	193
		0.562	14.3	48.44	72.22	2350	162	2800	193	2740	189	2800	193
		0.625	15.9	53.45	79.67	2610	180	2800	193	2800	193	2800	193
10-3/4	273.1	0.156	4.0	17.67	26.54	520	36	650	45	610	42	760	53
		0.188	4.8	21.23	31.76	630	44	790	55	730	51	920	64
		0.203	5.2	22.89	34.35	680	47	850	59	790	55	990	69
		0.219	5.6	24.65	36.94	730	51	920	64	860	59	1070	74
		0.250	6.4	28.06	42.09	840	58	1050	73	980	68	1220	85
		0.279	7.1	31.23	46.57	930	65	1170	81	1090	75	1360	94
		0.307	7.8	34.27	51.03	1030	71	1290	89	1200	83	1500	103
		0.344	8.7	38.27	56.72	1150	79	1440	99	1340	92	1680	115
		0.365	9.3	40.52	60.50	1220	85	1530	106	1430	98	1780	123
		0.438	11.1	48.28	71.72	1470	101	1830	126	1710	118	2140	147
		0.500	12.7	54.79	81.55	1670	116	2090	144	1950	134	2440	168
		0.562	14.3	61.21	91.26	1880	130	2350	163	2200	151	2740	189
		0.625	15.9	67.65	100.85	2090	145	2620	181	2440	168	2800	193
12-3/4	323.9	0.172	4.4	23.13	34.67	490	34	610	42	570	39	710	49
		0.188	4.8	25.25	37.77	530	37	660	46	620	43	770	54
		0.203	5.2	27.23	40.87	570	40	720	50	670	46	840	58
		0.219	5.6	29.34	43.96	620	43	770	54	720	50	900	63
		0.250	6.4	33.41	50.11	710	49	880	61	820	57	1030	71
		0.281	7.1	37.46	55.47	790	54	990	68	930	63	1160	79
		0.312	7.9	41.48	61.56	880	61	1100	76	1030	71	1280	88
		0.330	8.4	43.81	65.35	930	64	1160	81	1090	75	1360	94
		0.344	8.7	45.62	67.62	970	67	1210	83	1130	78	1420	97
		0.375	9.5	49.61	73.65	1060	73	1320	91	1240	85	1540	106
		0.406	10.3	53.57	79.65	1150	79	1430	99	1340	92	1670	115
		0.438	11.1	57.65	85.62	1240	85	1550	106	1440	99	1800	124
		0.500	12.7	65.48	97.46	1410	97	1760	122	1650	113	2060	142
		0.562	14.3	73.22	109.18	1590	110	1980	137	1850	128	2310	160
		0.625	15.9	81.01	120.76	1760	122	2210	152	2060	142	2570	177
		0.688	17.5	88.71	132.23	1940	134	2430	168	2270	156	2800	193

Standard Sizes API 5L (LINE PIPE) (continued)

Outside Diameter		Wall Thickness		Plain End Weight per Unit Length		Hydrostatic Test Pressure							
						Grade A				Grade B			
						Std.		Alt.		Std.		Alt.	
inch	mm	inch	mm	lb/ft	kg/m	psi	kPa x100	psi	kPa x100	psi	kPa x100	psi	kPa x100
14	355.6	0.188	4.8	27.76	41.52	480	34	600	42	560	39	710	49
		0.203	5.2	29.94	44.93	520	36	650	45	610	42	760	53
		0.210	5.3	30.96	45.78	540	37	680	46	630	43	790	54
		0.219	5.6	32.26	48.33	560	39	700	49	660	46	820	57
		0.250	6.4	36.75	55.11	640	45	800	56	750	52	940	65
		0.281	7.1	41.21	61.02	720	50	900	62	840	58	1050	72
		0.312	7.9	45.65	67.74	800	55	1000	69	940	64	1170	80
		0.344	8.7	50.22	74.42	880	61	1110	76	1030	71	1290	88
		0.375	9.5	54.62	81.08	960	66	1210	83	1130	77	1410	97
		0.406	10.3	59.00	87.71	1040	72	1310	90	1220	84	1520	105
		0.438	11.1	63.50	94.30	1130	78	1410	97	1310	90	1640	113
		0.469	11.9	67.84	100.86	1210	83	1510	104	1410	97	1760	121
		0.500	12.7	72.16	107.39	1290	89	1610	111	1500	103	1880	129
		0.562	14.3	80.73	120.36	1450	100	1810	125	1690	116	2110	145
		0.625	15.9	89.36	133.19	1610	111	2010	139	1880	129	2340	162
		0.688	17.5	97.91	145.91	1770	122	2210	153	2060	142	2580	178
16	406.4	0.188	4.8	31.78	47.54	420	29	530	37	490	34	620	43
		0.203	5.2	34.28	51.45	460	32	570	40	530	37	670	46
		0.219	5.6	36.95	55.35	490	34	620	43	570	40	720	50
		0.250	6.4	42.09	63.13	560	39	700	49	660	46	820	57
		0.281	7.1	47.22	69.91	630	43	790	54	740	51	920	63
		0.312	7.9	52.32	77.63	700	48	880	60	820	56	1020	70
		0.344	8.7	57.57	85.32	770	53	970	66	900	62	1130	77
		0.375	9.5	62.64	92.98	840	58	1050	73	980	68	1230	85
		0.406	10.3	67.68	100.61	910	63	1140	79	1070	73	1330	92
		0.438	11.1	72.86	108.20	990	68	1230	85	1150	79	1440	99
		0.469	11.9	77.87	115.77	1060	73	1320	91	1230	85	1540	106
		0.500	12.7	82.85	123.30	1130	78	1410	97	1310	90	1640	113
		0.562	14.3	92.75	138.27	1260	87	1580	109	1480	102	1840	127
		0.625	15.9	102.72	153.11	1410	97	1760	121	1640	113	2050	141
		0.688	17.5	112.62	167.83	1550	107	1940	134	1810	125	2260	156
18	457.0	0.188	4.8	35.80	53.53	380	26	470	33	440	30	550	38
		0.219	5.6	41.63	62.34	440	30	550	38	510	35	640	44
		0.250	6.4	47.44	71.12	500	35	630	43	580	41	730	51
		0.281	7.1	53.23	78.77	560	39	700	48	660	45	820	56
		0.312	7.9	58.99	87.49	620	43	780	54	730	50	910	62
		0.344	8.7	64.93	96.18	690	47	860	59	800	55	1000	69
		0.375	9.5	70.65	104.84	750	52	940	65	880	60	1090	75
		0.406	10.3	76.36	113.46	810	56	1020	70	950	65	1180	81
		0.438	11.1	82.23	122.05	880	60	1100	75	1020	70	1280	88
		0.469	11.9	87.89	130.62	940	65	1170	81	1090	75	1370	94
		0.500	12.7	93.54	139.15	1000	69	1250	86	1170	80	1460	100
		0.562	14.3	104.76	156.11	1120	78	1410	97	1310	90	1640	113
		0.625	15.9	116.09	172.95	1250	86	1560	108	1460	101	1820	126
		0.688	17.5	127.32	189.67	1380	95	1720	119	1610	111	2010	138
20	508.0	0.219	5.6	46.31	69.38	390	27	490	34	460	32	570	40
		0.250	6.4	52.78	79.16	450	31	560	39	530	36	660	46
		0.281	7.1	59.23	87.70	510	35	630	43	590	40	740	51
		0.312	7.9	65.66	97.43	560	39	700	48	660	45	820	56
		0.344	8.7	72.28	107.12	620	43	770	53	720	50	900	62
		0.375	9.5	78.67	116.78	680	46	840	58	790	54	980	68
		0.406	10.3	85.04	126.41	730	50	910	63	850	59	1070	73
		0.438	11.1	91.59	136.01	790	54	990	68	920	63	1150	79
		0.469	11.9	97.92	145.58	840	58	1060	73	980	68	1230	85
		0.500	12.7	104.23	155.12	900	62	1130	78	1050	72	1310	90
		0.562	14.3	116.78	174.10	1010	70	1260	87	1180	81	1480	102
		0.625	15.9	129.45	192.95	1130	78	1410	97	1310	91	1640	113
		0.688	17.5	142.03	211.68	1240	86	1550	107	1440	100	1810	125
		0.750	19.1	154.34	230.27	1350	93	1690	117	1580	109	1970	136

Standard Sizes API 5L (LINE PIPE) (continued)

Outside Diameter		Wall Thickness		Plain End Weight per Unit Length		Hydrostatic Test Pressure							
						Grade A				Grade B			
						Std.		Alt.		Std.		Alt.	
inch	mm	inch	mm	lb/ft	kg/m	psi	kPa x100	psi	kPa x100	psi	kPa x100	psi	kPa x100
22	558.8	0.219	5.6	50.99	76.39	360	25	450	31	420	29	520	36
		0.250	6.4	58.13	87.18	410	28	510	36	480	33	600	41
		0.281	7.1	65.24	96.59	460	32	570	39	540	37	670	46
		0.312	7.9	72.34	107.32	510	35	640	44	600	41	740	51
		0.344	8.7	79.64	118.02	560	39	700	48	660	45	820	56
		0.375	9.5	86.69	128.68	610	42	770	53	720	49	890	61
		0.406	10.3	93.72	139.32	660	46	830	57	780	53	970	67
		0.438	11.1	100.96	149.92	720	49	900	62	840	57	1050	72
		0.469	11.9	107.95	160.49	770	53	960	66	900	62	1120	77
		0.500	12.7	114.92	171.03	820	56	1020	71	950	66	1190	82
		0.562	14.3	128.79	192.01	920	64	1150	79	1070	74	1340	93
		0.625	15.9	142.81	212.87	1020	71	1280	88	1190	82	1490	103
		0.688	17.5	156.74	233.60	1130	78	1410	97 1	310	91	1640	113
		0.750	19.1	170.37	254.20	1230	85	1530	106	1430	99	1790	124
		0.812	20.6	183.92	273.40	1330	92	1660	114	1550	107	1940	133
		0.875	22.2	197.60	293.76	1430	99	1790	123	1670	115	2090	144
		0.250	6.4	63.47	95.20	380	26	470	33	440	30	550	38
		0.281	7.1	71.25	105.49	420	29	530	36	490	34	610	42
		0.312	7.9	79.01	117.22	470	32	590	40	550	37	680	47
24	609.6	0.344	8.7	86.99	128.92	520	35	650	44	600	41 7	50	52
		0.375	9.5	94.71	140.59	560	39	700	48	660	45	820	56
		0.406	10.3	102.40	152.22	610	42	760	52	710	49	890	61
		0.438	11.1	110.32	163.83	660	45	820	57	770	53	960	66
		0.469	11.9	117.98	175.40	700	48	880	61	820	56	1030	71
		0.500	12.7	125.61	186.94	750	52	940	65	880	60	1090	75
		0.562	14.3	140.81	209.93	840	58	1050	73	980	68	1230	85
		0.625	15.9	156.17	232.79	940	65	1170	81	1090	75	1370	94
		0.688	17.5	171.45	255.52	1030	71	1290	89	1200	83	1510	104
		0.750	19.1	186.41	278.13	1130	78	1410	97	1310	91	1640	113
		0.812	20.6	201.28	299.21	1220	84	1520	105	1420	98	1780	122
		0.875	22.2	216.31	321.57	1310	90	1640	113	1530	105	1910	132
		0.938	23.8 2	31.25	343.81	1410	97	1760	121	1640	113	2050	141
		1.000	25.4	245.87	365.92	1500	104	1880	129	1750	121	2190	151

Chemical & Mechanical Properties API 5L (LINE PIPE)

Spec	Grade	Service	Chemical Composition (%)										
			C max	Mn max	P max	Smax	Si max	V max	Nb max	Ti max	CEIIW	CEPCM	Others
API 5L (PSL1)	A	Line Pipe	0.22	0.90	0.030	0.030	-	-	-	-			-
	B		0.26	1.20	0.030	0.030	-	c,d	c,d	d			-
	X42		0.26	1.30	0.030	0.030	-	d	d	d			-
	X46		0.26	1.40	0.030	0.030	-	d	d	d			-
	X52		0.26	1.40	0.030	0.030	-	d	d	d			-
	X56		0.26	1.40	0.030	0.030	-	d	d	d			-
	X60		0.26e	1.40e	0.030	0.030	-	f	f	f			-
	X65		0.26e	1.45e	0.030	0.030	-	f	f	f			-
	X70		0.26e	1.65e	0.030	0.030	-	f	f	f			-
API 5L (PSL2)	B	Line Pipe	0.22	1.20	0.025	0.015	0.45	0.05	0.05	0.04	0.43	0.25	e
	X42		0.22	1.30	0.025	0.015	0.45	0.05	0.05	0.04	0.43	0.25	e
	X46		0.22	1.30	0.025	0.015	0.45	0.05	0.05	0.04	0.43	0.25	e
	X52		0.22	1.40	0.025	0.015	0.45	d	d	d	0.43	0.25	e
	X56		0.22	1.40	0.025	0.015	0.45	d	d	d	0.43	0.25	e
	X60		0.12f	1.60f	0.025	0.015	0.45f	g	g	g	0.43	0.25	h
	X65		0.12f	1.60f	0.025	0.015	0.45f	g	g	g	0.43	0.25	h,
	X70		0.12f	1.70f	0.025	0.015	0.45f	g	g	g	0.43	0.25	h
	X80		0.12f	1.85f	0.025	0.015	0.45f	g	g	g	0.43f	0.25	i
API 5L (PSL2)	B	Line Pipe (Sour)	0.10	1.25	0.020	0.002e	0.40	0.04	0.04	0.04	-	0.19	c,d
	X42		0.10	1.25	0.020	0.002e	0.40	0.04	0.04	0.04	-	0.19	c,d
	X46		0.10	1.35	0.020	0.002e	0.45	0.05	0.05	0.04	-	0.20	c,d
	X52		0.10	1.45	0.020	0.002e	0.45	0.05	0.06	0.040	-	0.20	c,d
	X56		0.10	1.45	0.020	0.002e	0.45	0.06	0.08	0.040	-	0.21	c,d,g
	X60		0.10	1.45	0.020	0.002e	0.45	0.08	0.08	0.060	-	0.21	c,d,g,i
	X65		0.10	1.60	0.020	0.002e	0.45	0.10	0.08	0.060	-	0.22	c,d,g,l,j
	X70		0.10	1.60	0.020	0.002e	0.45	0.10	0.08	0.060	-	0.22	c,d,g,l,j

Hydrostatic Test Pressure															
X42		X46		X52		X56		X60		X65		X70		X80	
Std.		Std.		Std.		Std.		Std.		Std.		Std.		Std.	
psi	kPa x100	psi	kPa x100	psi	kPa x100	psi	kPa x100	psi	kPa x100	psi	kPa x100	psi	kPa x100	psi	kPa x100
1487	103	1639	114	1844	128	1999	139	2126	148	2306	160	2483	172	2843	197
1792	124	1975	137	2222	154	2409	167	2562	178	2780	193	2992	208	3000	208
1935	134	2133	148	2399	167	2601	181	2767	192	3000	208	3000	208	3000	208
2088	145	2301	160	2588	180	2807	195	2985	207	3000	208	3000	208	3000	208
2383	165	2626	183	2955	205	3000	208	3000	208	3000	208	3000	208	3000	208
2640	181	2910	200	3000	208	3000	208	3000	208	3000	208	3000	208	3000	208
2974	204	3000	208	3000	208	3000	208	3000	208	3000	208	3000	208	3000	208
3000	208	3000	208	3000	208	3000	208	3000	208	3000	208	3000	208	3000	208
3000	208	3000	208	3000	208	3000	208	3000	208	3000	208	3000	208	3000	208
3000	208	3000	208	3000	208	3000	208	3000	208	3000	208	3000	208	3000	208
1140	79	1250	87	1410	98	1520	106	1630	113	1760	123	1900	132	2170	151
1370	95	1500	104	1700	118	1830	127	1960	136	2130	147	2290	159	2620	181
1480	103	1620	113	1840	128	1980	137	2120	147	2290	159	2470	172	2820	197
1600	111	1750	122	1980	138	2130	148	2290	159	2480	172	2670	185	3000	207
1830	127	2000	139	2260	157	2430	169	2610	181	2830	196	3000	207	3000	207
2020	139	2220	152	2510	172	2700	185	2890	198	3000	207	3000	207	3000	207
2280	157	2500	171	2820	194	3000	207	3000	207	3000	207	3000	207	3000	207
2350	163	2580	178	2910	202	3000	207	3000	207	3000	207	3000	207	3000	207
2510	173	2750	189	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
2740	189	3000	206	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
1040	72	1130	79	1280	89	1380	96	1480	103	1600	112	1730	120	1970	137
1250	87	1370	95	1550	107	1660	115	1780	124	1930	134	2080	144	2380	165
1350	94	1480	103	1670	116	1800	125	1930	134	2090	145	2250	156	2570	179
1450	101	1590	111	1800	125	1940	135	2080	144	2250	156	2420	168	2770	192
1660	116	1820	126	2060	143	2210	154	2370	165	2570	178	2770	192	3000	207
1850	128	2030	140	2290	159	2470	171	2650	183	2870	198	3000	207	3000	207
2040	141	2230	154	2520	174	2720	187	2910	201	3000	207	3000	207	3000	207
2280	157	2500	172	2830	194	3000	207	3000	207	3000	207	3000	207	3000	207
2420	168	2660	184	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
2910	200	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
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3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
960	67	1050	73	1190	83	1280	89	1380	96	1490	103	1610	112	3000	127
1050	73	1150	80	1300	90	1400	97	1500	104	1630	113	1750	122	2010	139
1140	79	1250	87	1410	98	1520	105	1620	113	1760	122	1890	132	2170	151
1230	85	1340	93	1520	106	1640	113	1750	122	1900	132	2040	142	2340	162
1400	97	1530	106	1730	121	1870	130	2000	139	2170	150	2330	162	2670	185
1570	108	1720	118	1950	134	2100	144	2250	154	2440	167	2620	180	3000	206
1750	120	1910	131	2160	149	2330	160	2500	172	2700	186	2910	200	3000	207
1850	128	2020	140	2290	158	2460	170	2640	183	2860	198	3000	207	3000	207
1930	132	2110	145	2390	164	2570	176	2750	189	2980	205	3000	207	3000	207
2100	145	2300	158	2600	179	2800	192	3000	206	3000	207	3000	207	3000	207
2270	157	2490	171	2810	194	3000	207	3000	207	3000	207	3000	207	3000	207
2450	169	2690	185	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
2800	193	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
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3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207

Hydrostatic Test Pressure															
X42 Std.		X46 Std.		X52 Std.		X56 Std.		X60 Std.		X65 Std.		X70 Std.		X80 Std.	
psi	kPa x100	psi	kPa x100	psi	kPa x100	psi	kPa x100	psi	kPa x100	psi	kPa x100	psi	kPa x100	psi	kPa x100
960	67	1050	73	1190	82	1280	89	1370	95	1480	103	1600	111	1830	127
1040	72	1130	79	1280	89	1380	96	1480	103	1600	111	1730	120	1970	137
1070	73	1170	80	1330	91	1430	98	1530	105	1660	114	1790	122	2040	140
1120	78	1220	85	1380	96	1490	103	1600	111	1730	120	1860	129	2130	148
1280	89	1400	97	1580	110	1700	118	1820	127	1970	137	2130	148	2430	169
1430	98	1570	108	1770	122	1910	131	2050	141	2220	152	2390	164	2730	187
1590	110	1740	120	1970	136	2120	146	2270	156	2460	169	2650	182	3000	207
1750	121	1920	132	2170	149	2340	161	2510	172	2720	186	2920	201	3000	207
1910	132	2090	144	2370	163	2550	175	2730	188	2960	203	3000	207	3000	207
2070	143	2270	156	2560	177	2760	190	2960	204	3000	207	3000	207	3000	207
2230	154	2450	168	2770	191	2980	205	3000	207	3000	207	3000	207	3000	207
2390	165	2620	180	2960	204	3000	207	3000	207	3000	207	3000	207	3000	207
2550	176	2790	192	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
2870	198	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
840	58	920	64	1040	72	1120	78	1200	83	1300	90	1400	97	1600	111
910	63	990	69	1120	78	1210	84	1290	90	1400	97	1510	105	1730	120
980	68	1070	74	1210	84	1300	90	1400	97	1510	105	1630	113	1860	129
1120	78	1220	85	1380	96	1490	103	1590	111	1730	120	1860	129	2130	148
1250	86	1370	94	1550	107	1670	115	1790	123	1940	133	2090	143	2390	164
1390	96	1520	105	1720	119	1860	128	1990	137	2150	148	2320	160	2650	182
1540	106	1680	115	1900	131	2050	140	2190	151	2380	163	2560	176	2920	201
1670	115	1830	126	2070	143	2230	153	2390	165	2590	178	2790	192	3000	207
1810	125	1980	137	2240	155	2420	166	2590	178	2800	193	3000	207	3000	207
1950	135	2140	147	2420	167	2610	179	2790	192	3000	207	3000	207	3000	207
2090	144	2290	158	2590	179	2790	192	2990	206	3000	207	3000	207	3000	207
230	154	2440	168	2760	191	2980	205	3000	207	3000	207	3000	207	3000	207
2510	173	2750	190	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
2790	193	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
750	52	820	57	920	64	990	69	1070	74	1150	80	1240	86	1420	99
870	60	950	66	1080	75	1160	80	1240	86	1340	93	1450	101	1650	115
990	69	1090	75	1230	85	1320	92	1420	99	1530	107	1650	115	1890	131
1110	77	1220	84	1380	95	1490	102	1590	109	1730	118	1860	128	2120	146
1240	85	1360	93	1530	106	1650	113	1770	122	1920	132	2060	142	2360	162
1360	94	1490	103	1690	116	1820	125	1950	134	2110	145	2270	156	2600	179
1490	102	1630	112	1840	127	1980	136	2130	146	2300	158	2480	171	2830	195
1610	111	1760	121	1990	138	2150	148	2300	159	2490	172	2680	185	3000	207
1740	120	1900	131	2150	148	2320	159	2480	171	2690	185	2900	199	3000	207
1860	128	2040	140	2300	159	2480	171	2660	183	2880	198	3000	207	3000	207
1980	137	2170	150	2460	170	2640	182	2830	196	3000	207	3000	207	3000	207
2230	154	2440	169	2760	191	2970	205	3000	207	3000	207	3000	207	3000	207
2480	172	2720	187	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
2730	189	2990	206	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
830	58	910	63	1020	71	1100	77	1180	82	1280	89	1380	96	1580	110
950	66	1040	72	1170	81	1260	88	1350	94	1460	102	1580	110	1800	125
1060	73	1160	80	1320	90	1420	97	1520	104	1640	113	1770	122	2020	139
1180	81	1290	89	1460	100	1570	108	1680	116	1830	125	1970	135	2250	155
1300	89	1420	98	1610	111	1730	119	1860	128	2010	138	2170	149	2480	170
1420	98	1550	107	1760	121	1890	130	2030	139	2190	151	2360	163	2700	186
1530	106	1680	116	1900	131	2050	141	2190	151	2380	164	2560	176	2920	201
1660	114	1810	125	2050	141	2210	152	2370	163	2560	176	2760	190	3000	207
1770	122	1940	134	2190	151	2360	163	2530	175	2740	189	2950	204	3000	207
1890	131	2070	143	2340	162	2520	174	2700	186	2930	202	3000	207	3000	207
2120	147	2330	161	2630	182	2830	196	3000	207	3000	207	3000	207	3000	207
2360	163	2590	179	2930	202	3000	207	3000	207	3000	207	3000	207	3000	207
2600	180	2850	197	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
2840	196	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207

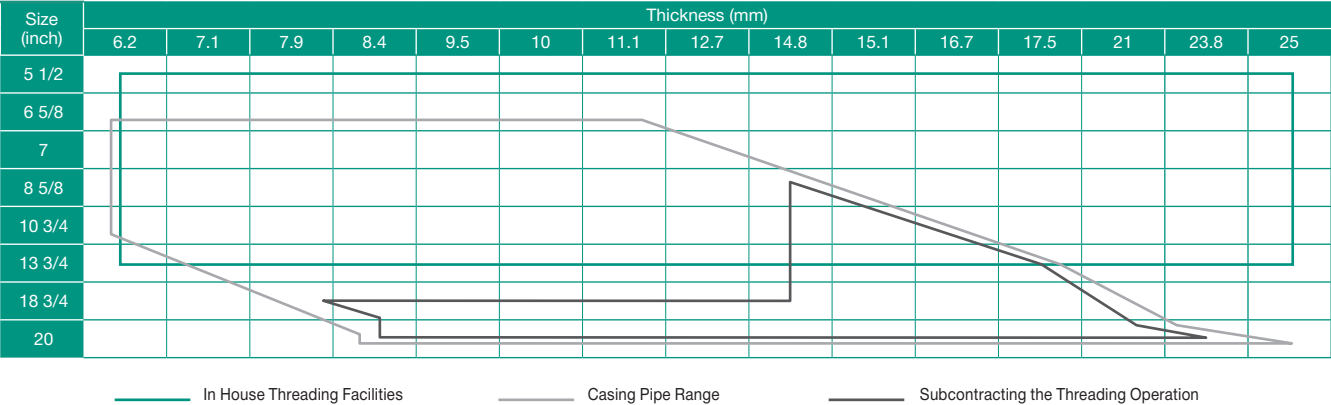
Hydrostatic Test Pressure															
X42		X46		X52		X56		X60		X65		X70		X80	
Std.		Std.		Std.		Std.		Std.		Std.		Std.		Std.	
psi	kPa x100	psi	kPa x100	psi	kPa x100	psi	kPa x100	psi	kPa x100	psi	kPa x100	psi	kPa x100	psi	kPa x100
750	52	820	57	930	65	1000	70	1080	75	1160	81	1250	87	1430	100
860	60	40	65	1060	74	1150	80	1230	85	1330	92	1430	100	1640	114
970	66	1060	72	1200	82	1290	88	1380	95	1490	102	1610	110	1840	126
1070	74	1170	81	1330	91	1430	98	1530	105	1660	114	1790	123	2040	140
1180	81	1290	89	1460	101	1580	108	1690	116	1830	126	1970	135	2250	155
1290	89	1410	97	1600	110	1720	118	1840	127	1990	137	2150	148	2450	169
1400	96	1530	105	1730	119	1860	128	1990	137	2160	149	2330	160	2660	183
1510	104	1650	113	1860	128	2010	138	2150	148	2330	160	2510	173	2870	197
1610	111	1770	122	2000	138	2150	148	2300	159	2490	172	2690	185	3000	207
1720	119	1880	130	2130	147	2290	158	2450	169	2660	183	2860	198	3000	207
1930	134	2120	146	2390	165	2570	178	2760	191	2990	206	3000	207	3000	207
2150	149	2350	162	2660	184	2860	198	3000	207	3000	207	3000	207	3000	207
2360	163	2590	179	2930	202	3000	207	3000	207	3000	207	3000	207	3000	207
2580	178	2820	195	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
2790	192	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
790	55	860	60	980	68	1050	73	1130	78	1220	85	1310	91	1500	104
890	61	970	66	1100	75	1180	81	1260	87	1370	94	1480	101	1690	116
980	68	1080	74	1220	84	1310	90	1400	97	1520	105	1640	113	1870	129
1080	74	1190	81	1340	92	1440	99	1550	106	1680	115	1810	124	2060	142
1180	81	1290	89	1460	101	1580	108	1690	116	1830	126	1970	135	2250	155
1280	88	1400	96	1580	109	1710	117	1830	126	1980	136	2130	147	2440	168
1380	95	1510	104	1710	118	1840	127	1970	136	2140	147	2300	158	2630	181
1480	102	1620	111	1830	126	1970	136	2110	145	2290	157	2460	170	2810	194
1580	109	1730	119	1950	135	2100	145	2250	155	2440	168	2630	181	3000	207
1770	122	1940	134	2190	152	2360	163	2530	175	2740	189	2950	204	3000	207
1970	136	2160	149	2440	169	2630	181	2810	194	3000	207	3000	207	3000	207
2170	150	2370	164	2680	186	2890	199	3000	207	3000	207	3000	207	3000	207
2360	164	2590	179	2930	202	3000	207	3000	207	3000	207	3000	207	3000	207
2560	176	2800	193	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
2760	190	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
2950	204	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207
3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207	3000	207

Chemical Composition (%)	Mechanical Properties				Flattening Test
Remarks	Yield Strength Pipe Body (MPa)	Tensile Strength Pipe Body (MPa)	Tensile Strength weld (MPa)	Elongation (min%) for gauge length 2"	
c = unless agreed, Nb+V≤0.06% d = Nb+V+Ti≤0.15% e = unless agreed f = unless agreed, Nb+V+Ti≤0.15%	210 min	335 min	415min	e=1940xA0.2/U0.9 e=min elongation in 50.8mm gauge A=Cross section area of test specimen (mm)	Step1: For grades ≥X60 with thickness ≥12.7 mm, there shall be no opening of the weld before the distance between plate is less than 66% of original outside diameter. For all other combination, not before 50% of the original outside diameter. Step2: For pipe with D/t>10, there shall be no crack or break other than in weld before the distance between the plates is 33% of original outside diameter. Note1: The weld extends on each side of weld line by 13 mm
	245 min	415 min	415 min		
	290 min	415 min	415 min		
	320 min	435 min	435 min		
	360 min	460 min	460 min		
	390 min	490 min	490 min		
	415 min	520 min	520 min		
	450 min	535 min	535 min		
	485 min	570 min	570 min		
d = Nb+V+Ti≤0.15% e = unless agreed, Cu≤0.50%; Ni, Cr≤0.30% & Mo≤0.15% f = unless agreed g = unless agreed, Nb+V+Ti≤0.15% h = unless agreed, Cu,Ni,Cr&Mo≤0.50% i = unless agreed, Cu,Cr & Mo≤0.50%; Ni	245-450c	415-760	415 min		
	290-495	415-760	415 min		
	320-525	435-760	435 min		
	360-530	460-760	460 min		
	390-545	490-760	490 min		
	415-565	520-760	520 min		
	450-600	535-760	535 min		
	485-635	625-825	570 min		
e=If agreed S can be ≤0.006% in such case Ca/S shall be agreed c =Al(total) ≤0.060%; N≤0.012%; Al/N≥2:1; Cu≤0.35% (if agreed Cu≤0.10%); Ni≤0.30%; Cr≤0.30%; Mo≤0.15%; B≤0.0005% d=Ca shall be ≤0.006%; Unless agreed Ca/S≥1.5 if S>0.0015% g = Nb+V+Ti≤0.15% i = if agreed Mo ≤0.35% j = if agreed Cr ≤0.45%	555-705	625 min	625 min		
	245-450K	415-760	415 min		
	290-495	415-760	415 min		
	320-525	435-760	435 min		
	360-530	460-760	460 min		
	390-545	490-760	490 min		
	415-565	520-760	520 min		
	450-600	535-760	535 min		

CASING PIPE

GIPI plant is designed to manufacture a wide range of HF-ERW casing products conform to API 5CT standard. Laboratory tests confirm full compliance with specifications and other mechanical property requirements before the pipe is threaded, coupled, drift tested and hydrostatically tested. Threading is performed using numerically controlled (NC) threaders with high-speed carbide tools.

Product Range Chart



- Threading Size Range – 5 1/2 " ~ 13 3/8"
- Casing Pipe – 6 5/8" ~ 18 5/8"
- Wall Thickness – 6.70 mm ~ 17.50 mm
- Grade – API 5CT H40, J55 / K55 (BTC, STC / LTC)

PIPE THREADING PROCESS FLOW CHART

1 Transportation of Bare Pipe from Stockpile to Threading Plant



2 Insert internal bungs



3 CNC 1 - Threading on pipe end 1



4 Thread Inspection Racks



5 Phosphate / Anti-galling (Optional)



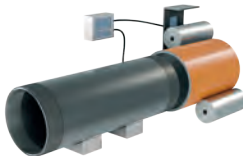
6 Application of Thread Compounds



7 Coupling Hand Tight Make up



8 Coupling Power Tight Make up



9 End Drift Test



10 CNC 2 - Threading on pipe end 2



11 Final Inspection



12 Stencil Marking & Color Band



13 Thread protection & Transportation to Stockpile



Standard Sizes API 5CT (CASING PIPE)

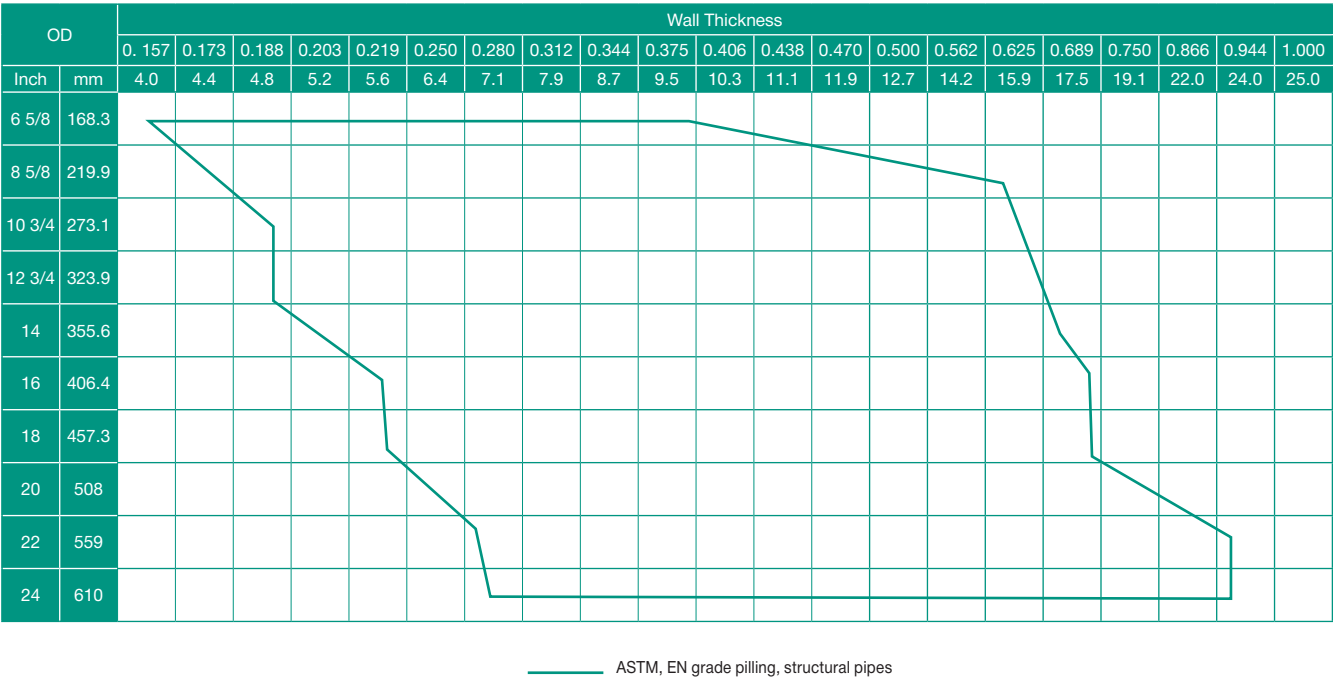
Designation		Outside Diameter		Wall Thickness		Nominal Weight				Hydrostatic Test Pressure								Type of Thread		
						Plain Ends		Threads & Coupling		Grade H40				GGrades J55 & K55				Short	Long	Buttress
										Std.		Alt.		Std.		Alt.				
Size	Weight	inch	mm	inch	mm	lb/ft	kg/m	lb/ft	kg/m	psi	kPa x100	psi	kPa x100	psi	kPa x100	psi	kPa x100			
6 5/8	20.00	6.625	168.3	0.288	7.32	19.52	29.06	20.00	29.76	2089	144	2785	192	2868	198	3824	264	X	X	X
	24.00	6.625	168.3	0.352	8.94	23.60	35.13	24.00	35.72	2551	176	3401	235	3503	242	4671	322	X	X	X
7	28.00	6.625	168.3	0.417	10.59	27.67	41.19	28.00	41.67	3022	208	4029	278	4150	286	5533	382	X	X	X
	17.00	7.000	177.8	0.231	5.87	15.80	23.51	17.00	25.60	1585	109	2233	154	2300	159	3067	212	X	X	X
	20.00	7.000	177.8	0.272	6.91	18.48	27.50	20.00	29.91	1866	129	2629	181	2708	187	3610	249	X	X	X
	23.00	7.000	177.8	0.317	8.05	21.37	31.81	23.00	34.67	2174	150	3063	211	3154	218	4206	290	X	X	X
	26.00	7.000	177.8	0.362	9.19	24.22	36.06	26.00	39.14	2482	171	3496	241	3601	248	4801	331	X	X	X
	29.00	7.000	177.8	0.408	10.36	27.11	40.35	29.00	43.60	2798	193	3942	272	4059	280	5413	373	X	X	X
	32.00	7.000	177.8	0.453	11.51	29.90	44.50	32.00	47.92	3109	214	4379	302	4510	311	6013	415	X	X	X
	8-5/8	24.00	8.625	219.1	0.264	6.7	23.60	35.11	24.00	35.72	-	-	-	-	2700	186	-	-	X	
	28.00	8.625	219.1	0.304	7.7	27.04	40.24	28.00	41.67	2300	159	-	-	-	-	-	-	X		
	32.00	8.625	219.1	0.352	8.9	31.13	46.33	32.00	47.62	2600	179	-	-	-	-	-	-	X		
	32.00	8.625	219.1	0.352	8.9	31.13	46.33	32.00	47.62	-	-	-	-	3000	207	3600	248	X	X	X
	36.00	8.625	219.1	0.400	10.2	35.17	52.34	36.00	53.57	-	-	-	-	3000	207	4100	283	X	X	X
9-5/8	32.30	9.625	244.5	0.312	7.9	31.06	46.22	32.30	48.07	2100	145	-	-	-	-	-	-	X		
	36.00	9.625	244.5	0.352	8.9	34.89	51.93	36.00	53.57	2300	159	-	-	-	-	-	-	X		
	36.00	9.625	244.5	0.352	8.9	34.89	51.93	36.00	53.57	-	-	-	-	3000	207	3200	221	X	X	X
	40.00	9.625	244.5	0.395	10.0	38.97	58.00	40.00	59.53	-	-	-	-	3000	207	3600	248	X	X	X
10-3/4	32.75	10.750	273.1	0.279	7.1	31.23	46.47	32.75	48.74	1200	83	1700	117	-	-	-	-	X		
	40.50	10.750	273.1	0.350	8.9	38.91	57.91	40.50	60.27	1600	110	2100	145	-	-	-	-	X		
	40.50	10.750	273.1	0.350	8.9	38.91	57.91	40.50	60.27	-	-	-	-	2100	145	2900	200	X		X
	45.50	10.750	273.1	0.400	10.2	44.26	65.86	45.50	67.71	-	-	-	-	2500	172	3300	228	X		X
	51.00	10.750	273.1	0.450	11.4	49.55	73.74	51.00	75.90	-	-	-	-	2800	193	3700	255	X		X
13-3/8	48.00	13.375	339.7	0.330	8.4	46.02	68.48	48.00	71.43	1200	83	1600	110	-	-	-	-	X		
	54.50	13.375	339.7	0.380	9.7	52.79	78.56	54.50	81.10	-	-	-	-	1900	131	2500	172	X		X
	61.00	13.375	339.7	0.430	10.9	59.50	88.55	61.00	90.78	-	-	-	-	2100	145	2800	193	X		X
	68.00	13.375	339.7	0.480	12.2	66.17	98.47	68.00	101.19	-	-	-	-	2400	165	3200	221	X		X
16	65.00	16.000	406.4	0.375	9.5	62.64	93.21	65.00	96.73	1100	76	-	-	-	-	-	-	X		
	75.00	16.000	406.4	0.438	11.1	72.86	108.43	75.00	111.61	-	-	-	-	1800	124	-	-	X		X
	84.00	16.000	406.4	0.495	12.6	82.05	122.10	84.00	125.01	-	-	-	-	2000	138	-	-	X		X
18-5/8	87.50	18.625	473.1	0.435	11.0	84.59	125.88	87.50	130.21	1100	76	-	-	-	-	-	-	X		
	87.50	18.625	473.1	0.435	11.0	84.59	125.88	87.50	130.21	-	-	-	-	1500	103	-	-	X		X
20	94.00	20.000	508.0	0.438	11.1	91.59	136.31	94.00	139.89	1100	76	-	-	-	-	-	-	X	X	
	94.00	20.000	508.0	0.438	11.1	91.59	136.31	94.00	139.89	-	-	-	-	1400	97	-	-	X	X	X
	106.50	20.000	508.0	0.500	12.7	104.23	155.11	106.50	158.49	-	-	-	-	1600	110	-	-	X	X	X

COMMERCIAL GRADE PIPES

GIPI manufactures API 5L, ASTM A252, ASTM A500, ASTM A53 pipes in accordance with the International standards.

GIPI uses the High Frequency Electric Resistance welding process to manufacture pipes ranging in nominal diameter 168.3mm (6 5/8") to 610mm (24") and in wall thickness from 4.0 mm (0.118") to 25.4 mm (1.00").

Product Range Chart



Standard Sizes ASTM A53 (Steel Black Pipe)

Nominal Pipe Size	Outside Diameter		Wall Thickness		Schedule No. (Weight Class)	Nominal Weight		Hydrostatic Test Pressure			
								Grade A		Grade B	
inch	inch	mm	inch	mm		lb/ft	kg/m	psi	kPa	psi	kPa
6	6-5/8"	168.3	0.156	4.0	-	10.78	16.21	862	5989	1003	6966
			0.188	4.8	-	12.92	19.35	1039	7187	1209	8395
			0.203	5.2	20	13.92	20.91	1121	7786	1305	9065
			0.219	5.6	-	14.98	22.47	1210	8385	1408	9779
			0.250	6.4	-	17.02	25.55	1381	9583	1608	11164
			0.280	7.1	STD/40/40S	18.78	27.84	1547	10631	1800	12503
			0.312	7.9	-	21.04	31.25	1724	11829	2006	13932
			0.322	8.2	-	21.68	32.37	1779	12278	2071	14379
			0.344	8.7	-	23.08	34.24	1900	13027	2212	15361
			0.375	9.5	-	25.03	37.20	2072	14225	2411	16745
			0.432	11.0	80.0	28.94	43.03	2387	16426	2778	19291
8	8.625	219.1	0.188	4.78	---	16.94	25.26	780	5380	920	6340
			0.203	5.16	---	18.26	27.22	850	5860	1000	6890
			0.219	5.56	---	19.66	29.28	910	6270	1070	7380
			0.250	6.35	20	22.36	33.31	1040	7170	1220	8410
			0.277	7.04	30	24.70	36.31	1160	8000	1350	9310
			0.312	7.92	---	27.70	41.24	1300	8960	1520	10480
			0.322	8.18	40 (STD)	28.55	42.55	1340	9240	1570	10820
			0.344	8.74	---	30.42	45.34	1440	9930	1680	11580
			0.375	9.52	---	33.04	49.20	1570	10820	1830	12620
			0.406	10.31	60	35.64	53.08	1700	11720	2000	13790
			0.438	11.13	---	38.30	57.08	1830	12620	2130	14690
			0.500	12.70	80 (XS)	43.39	64.64	2090	14410	2430	16750
			0.594	15.09	100	50.95	75.92	2500	17240	2800	19310
10	10.750	273.0	0.188	4.78	---	21.21	31.62	630	4340	730	5030
			0.203	5.16	---	22.87	34.08	680	4690	800	5520
			0.219	5.56	---	24.63	36.67	730	5030	860	5930
			0.250	6.35	20	28.04	41.75	840	5790	980	6760
			0.279	7.09	---	31.20	46.49	930	6410	1090	7520
			0.307	7.80	30	34.24	51.01	1030	7100	1200	8270
			0.344	8.74	---	38.23	56.96	1150	7930	1340	9240
			0.365	9.27	40 (STD)	40.48	60.29	1220	8410	1430	9860
			0.438	11.13	---	48.19	71.87	1470	10140	1710	11790
			0.500	12.70	60 (XS)	54.74	81.52	1670	11510	1950	13440
			0.594	15.09	80	64.43	95.97	1990	13720	2320	16000
12	12.750	323.8	0.203	5.16	---	27.20	40.55	570	3930	670	4620
			0.219	5.56	---	29.31	43.63	620	4270	720	4960
			0.250	6.35	20	33.38	49.71	710	4900	820	5650
			0.281	7.14	---	37.42	55.75	790	5450	930	6410
			0.312	7.92	---	41.45	61.69	880	6070	1030	7100
			0.330	8.38	30	43.77	65.18	930	6410	1090	7520
			0.344	8.74	---	45.58	67.90	970	6690	1130	7790
			0.375	9.52	(STD)	49.56	73.78	1060	7310	1240	8550
			0.406	10.31	40	53.52	79.70	1150	7930	1340	9240
			0.438	11.13	---	57.59	85.82	1240	8550	1440	9930
			0.500	12.70	(XS)	65.42	97.43	1410	9720	1650	11380
			0.562	14.27	60	73.15	108.92	1590	10960	1850	12760
			0.688	17.48	80	88.63	132.04	1940	13380	2270	15650
14	14.000	355.6	0.210	5.33	---	30.93	46.04	540	3720	630	4340
			0.219	5.56	---	32.23	47.99	560	3860	660	4550
			0.250	6.35	10	36.71	54.69	640	4410	750	5170
			0.281	7.14	---	41.17	61.35	720	4960	840	5790

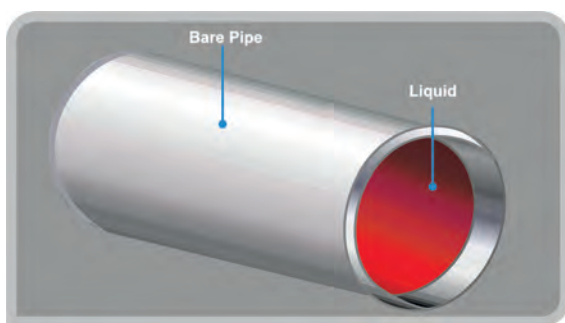
Standard Sizes ASTM A53 (Steel Black Pipe) (continued)

Nominal Pipe Size	Outside Diameter		Wall Thickness		Schedule No. (Weight Class)	Nominal Weight		Hydrostatic Test Pressure			
								Grade A		Grade B	
inch	inch	mm	inch	mm		lb/ft	kg/m	psi	kPa	psi	kPa
14	14.000	355.6	0.312	7.92	20	45.61	67.90	800	5520	940	6480
			0.344	8.74	---	50.17	74.76	880	6070	1030	7100
			0.375	9.52	30 (STD)	54.57	81.25	960	6620	1120	7720
			0.438	11.13	40	63.44	94.55	1130	7790	1310	9030
			0.469	11.91	---	67.78	100.94	1210	8340	1410	9720
			0.500	12.70	(XS)	72.09	107.39	1290	8890	1500	10340
			0.594	15.09	60	85.05	126.71	1530	10550	1790	12340
16	16.000	406.4	0.219	5.56	---	36.91	54.96	490	3380	570	3930
			0.250	6.35	10	42.05	62.64	560	3860	660	4550
			0.281	7.14	---	47.17	70.30	630	4340	740	5100
			0.312	7.92	20	52.27	77.83	700	4830	820	5650
			0.344	8.74	---	57.52	85.71	770	5310	900	6210
			0.375	9.52	30 (STD)	62.58	93.17	840	5790	980	6760
			0.438	11.13	---	72.80	108.49	990	6830	1150	7930
			0.469	11.91	---	77.79	115.86	1060	7310	1230	8480
			0.500	12.70	40 (XS)	82.77	123.30	1120	7720	1310	9030
			0.656	16.66	60	107.50	160.12	1480	10200	1720	11860
18	18.000	457.2	0.250	6.35	10	47.39	70.60	500	3450	580	4000
			0.281	7.14	---	53.18	79.24	560	3860	660	4550
			0.312	7.92	20	58.94	87.75	620	4270	730	5030
			0.344	8.74	---	64.87	96.66	690	4760	800	5520
			0.375	9.52	(STD)	70.59	105.10	750	5170	880	6070
			0.406	10.31	---	76.29	113.62	810	5580	950	6550
			0.438	11.13	30	82.15	122.43	880	6070	1020	7030
			0.469	11.91	---	87.81	130.78	940	6480	1090	7520
			0.500	12.70	(XS)	93.45	139.20	1000	6890	1170	8070
			0.562	14.27	40	104.67	155.87	1120	7720	1310	9030
			0.750	19.05	60	138.17	205.83	1500	10340	1750	12070
20	20.000	508.0	0.250	6.35	10	52.73	78.55	450	3100	520	3590
			0.281	7.14	---	59.18	88.19	510	3520	590	4070
			0.312	7.92	---	65.60	97.67	560	3860	660	4550
			0.344	8.74	---	72.21	107.60	620	4270	720	4960
			0.375	9.52	20 (STD)	78.60	117.02	680	4690	790	5450
			0.406	10.31	---	84.96	126.53	730	5030	850	5860
			0.438	11.13	---	91.51	136.37	790	5450	920	6340
			0.469	11.91	---	97.83	145.70	850	5860	950	6550
			0.500	12.70	30 (XS)	104.13	155.12	900	6210	1050	7240
			0.594	15.09	40	123.11	183.42	1170	8070	1250	8620
			0.812	20.62	60	166.40	247.83	1460	10070	1710	11790
24	24.000	609.6	0.250	6.35	10	63.41	94.46	380	2620	440	3030
			0.281	7.14	---	71.18	106.08	420	2900	490	3380
			0.312	7.92	(Class)	78.93	117.51	470	3240	550	3790
			0.344	8.74	---	86.91	129.50	520	3590	600	4140
			0.375	9.52	20 (STD)	94.62	140.88	560	3860	660	4550
			0.406	0.31	---	102.31	152.37	610	4210	710	4900
			0.438	11.13	---	110.22	164.26	660	4550	770	5310
			0.469	11.91	---	117.86	175.54	700	4830	820	5650
			0.500	12.70	(XS)	125.49	186.94	750	5170	880	6070
			0.562	14.27	30	140.68	209.50	840	5790	980	6760
			0.688	17.48	40	171.29	255.24	1030	7100	1200	8270
			0.938	23.83	---	231.03	344.23	1410	9720	1640	11310
			0.969	24.61	60	238.35	355.02	1450	10000	1700	11720

COATING PROCESS

Internal / External Coating

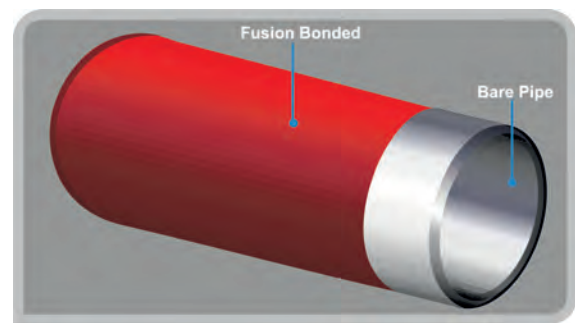
With Gulf International Pipe Industry's commitment to deliver highest quality products, corrosion protection is a critical element contributing to the lifespan of steel pipelines. When Carbon steel pipelines are invariably exposed to diverse corrosive environment, a corrosion protection is required which could be as simple as external paint or sophisticated internal and external coatings supplemented by a cathodic protection system.



Internal:Liquid Epoxy / FBE powder Coating

INTERNAL:LIQUID EPOXY / FBE POWDER COATING

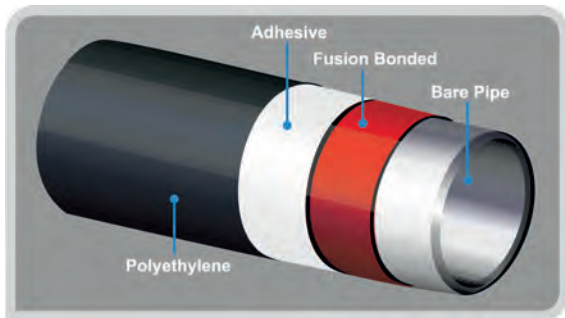
This application uses a two-part liquid epoxy paint / or FBE powder system which is applied in a single coat as anticorrosion for steel pipes. Paint or Powder epoxy is applied to the pipes inner surface by spray guns in a bogey, forming a uniform single layer epoxy which cures after application.



External:FBE powder Coating

EXTERNAL: FBE POWDER COATING

This application uses Fusion Bonded Epoxy (FBE) powder as anticorrosion protection for steel pipes. FBE is a uniform single layer film coating offering good flexibility and excellence resistance to cathodic disbandment. Then the FBE powder is applied to the pipe surface by electrostatic guns, forming a uniform single layer film which cures shortly after application.

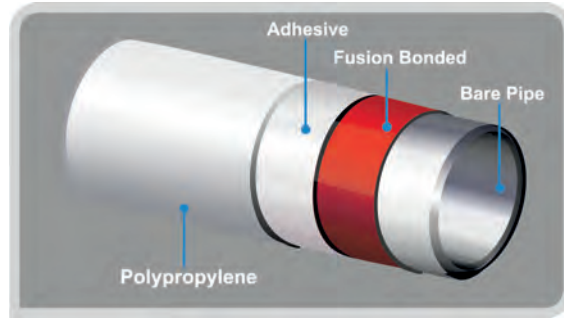


3 Layer Polyethylene System (3LPE)

3 LAYER POLYETHYLENE SYSTEM (3LPE)

3LPE is a coating system consisting of an inner layer of Fusion Bonded Epoxy, copolymer adhesive layer and outer layer of Polyethylene. Inner layer provide corrosion protection and flexibility while outer layer of Polyethylene provide impact and abrasion protection.

The total thickness and combination of various layers used will be in accordance with user specification.



3 Layer Polypropylene System (3LPP)

3 LAYER POLYPROPYLENE SYSTEM (3LPP)

3LPP is similar with 3LPE coating system, the difference is instead of using Polyethylene as an outer layer, and 3LPP uses Polypropylene tape. 3LPP is provided for improved impact and abrasion resistance compared to 3LPE and is suitable with operation temperatures of more than 120°C.

3LPP consists of an inner layer of Fusion Bonded Epoxy, copolymer adhesive layer and outer layer of Polypropylene. Inner layer provide corrosion protection and flexibility while outer layer of Polypropylene provide impact and abrasion protection.

The total thickness and combination of various layers used will be in accordance to user specification.

PIPE EXTERNAL COATING PROCESD FLOW CHART

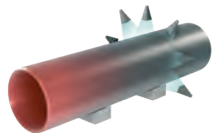
1 Transportation of Bare Pipe from Stockpile to Coating Plant



2 Inspection of Bare Pipes



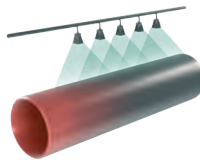
3 External Cleaning & Preheat



4 Plug Installation



5 Blast Cleaning Operation



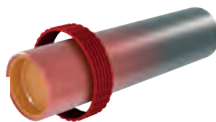
6 Inspection Racks & Internal Blow Out Station



7 Coupling Insertion



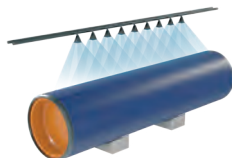
8 Induction Heating



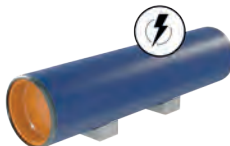
9 Three-layer PE or PP coating



10 Water Quench



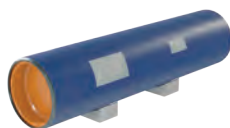
11 Holiday Detection and Coating Inspection



12 Cutback Cleaning



13 Stenci Application



14 Transportation to Stockpile



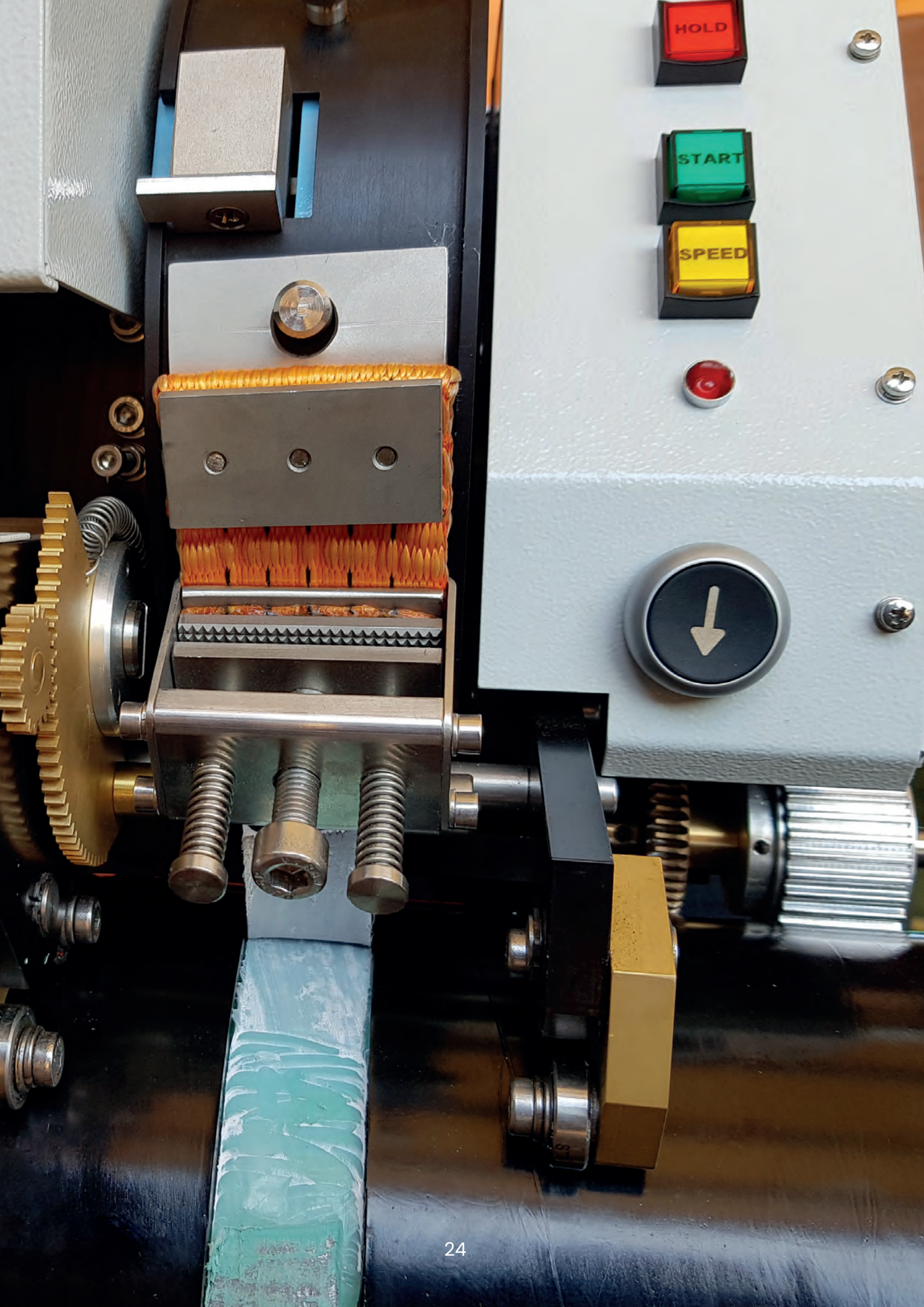
QUALITY ASSURANCE

GIPI's Integrated Laboratory is fully equipped with the latest apparatus and technology, including a Optical Spectrometer, High capacity Universal Testing Machine and fully automated DWTT, Charpy Impact Tester, microscope, hardness tester, etc. Offering a full range of test and inspection in accordance with API, ISO, ASTM, Shell other international standards, the Laboratory can perform independent metallurgical, and mechanical and chemical testing in accordance with ISO/IEC 17025.

The nucleus of the Laboratory is the group of fully trained and experienced technicians and inspectors well versed in the stringent requirements of API Specifications.

NDT Inspection is carried out via the latest in Ultrasonic Testing technology. An Offline UT is used for 100% weld seam inspection, a 10-probe Full Body UT offering full body lamination verification, and an Online UT for after-weld monitoring to provide added confidence in the integrity of our weld process. Several Portable UT's are also available for spot inspections when and where required. These NDT equipments are operated by qualified technicians.

GIPI can perform hydrostatic pressurization tests of up to 7,000 psi on offshore and high pressure rating pipes. Hydrogen Induced Cracking (HIC) and Sulfide Stress Cracking (SSC) tests carried out to determine corrosion fatigue on pipes intended for Critical Sour Services are likewise performed in-house, "as **GIPI is first in Sultanate of Oman to have a facility on conducting HIC and SSC (FPBT) complying to NACE specification managed by automatic software controlled system.**"





NEAREST EQUIVALENTS OF API 5L PIPE MATERIALS

API 5L	ISO 3183	ASTM A53	ASTM A252	ASTM A500	BS/EN 10217	DIN
Grade A	L210	Grade A	Grade 1	Grade A	P195	St 33.0
Grade B	L245	Grade B	Grade 2	Grade B	P235	St 37.0
			Grade 3	Grade C	P265	
				Grade D		
X42	L290				P355	St 44.0
X46	L320					
X52	L360					St 52.0
X56	L390					
X60	L415					
X65	L450					
X70	L485					
X80	L555					

CERTIFICATIONS



CONTINUOUSLY WIDENING OUR CUSTOMER BASE

Locally - Regionally and Internationally dealing with the most
reputable industry shakers and movers



شركة تنمية نفط عُمان ش.م.م
Petroleum Development Oman L.L.C.



JOINT OPERATIONS

SAUDI ARABIAN CHEVRON INC - KUWAIT GULF OIL COMPANY (K.S.C.)



دليل للنفط ش.م.م.
DALEEL PETROLEUM L.L.C

Petrofac



ETROJET



Projects

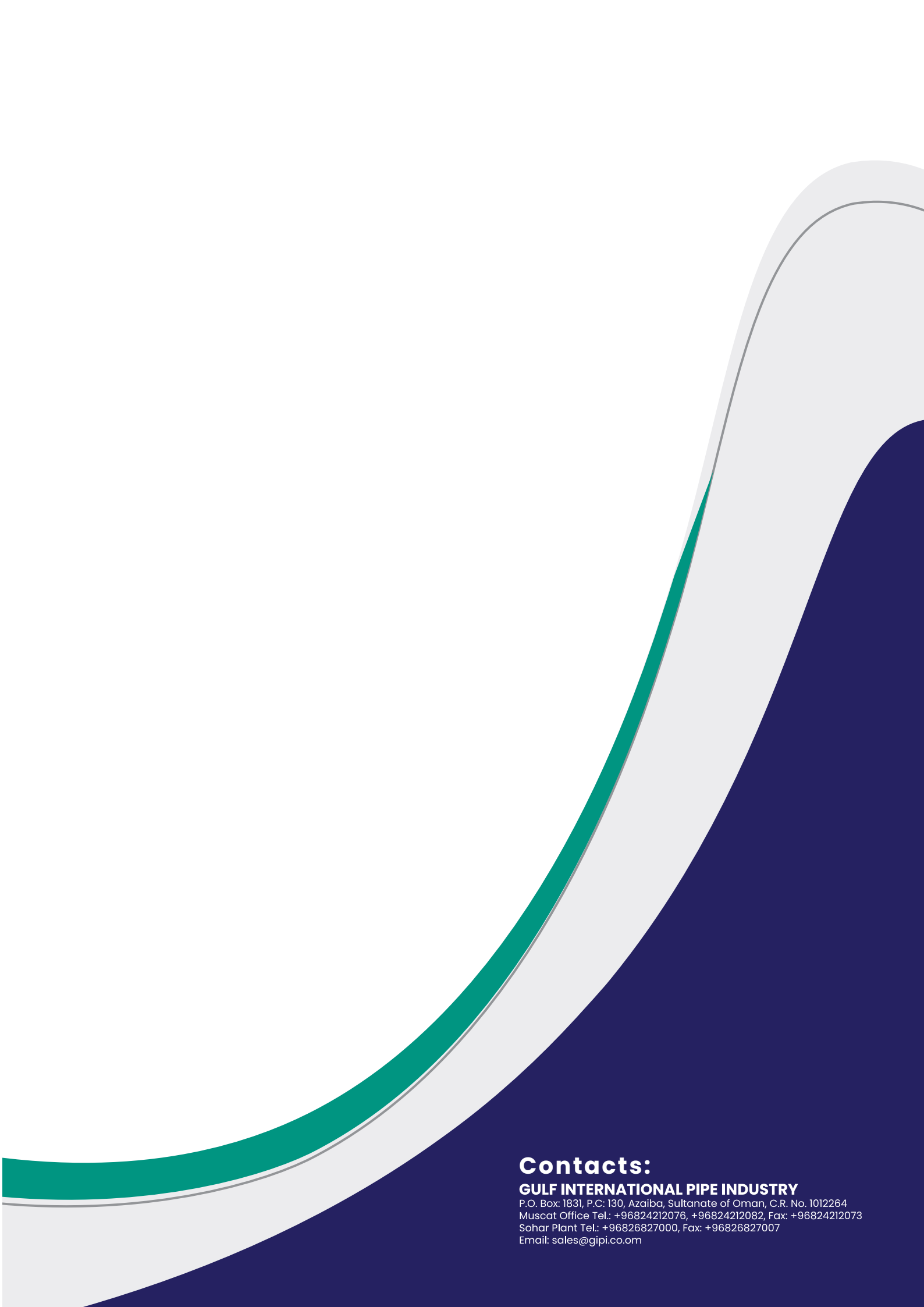


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