



API LINE PIPE

Used in natural gas and petroleum distribution systems, IIL's API Line Pipe are longitudinal electric welded steel pipe available in PSL1 and PSL2 specification made in accordance with ANSI/API Specification 5L under license: API-0391 and API-1104.

IIL API line pipes are marked and embossed (inside or outside) according to customer requirements. The nominal diameter of IIL line pipes ranges from 3/4" to 12 3/4" with the length ranging from 6 meters to 12.20 meters.

Tube Mill Section:

IIL's state-of-the-art U.S. and Japanese tube mills are used for the manufacturing of API line pipe and are equipped with:

- Solid state/high frequency welder (from Thermatool, UK) for high integrity forge welding
- Seam annealing: The weld seam and entire heat affected zone is heat treated and processed to ensure no un-tempered Martensite remains on the heat affected zone
- Inner Bead Trimming (Diameter 4" and 6"): Carried out to meet API Specification 5L

Product Testing Features:

- NDT unit (Eddy Current Flaw Detector): Eddy Current testing is used to detect surface and internal flaws or imperfections like seam, slivers, open weld and incomplete welds
- Hydrostatic Tests: Each length IIL API Line Pipe is manufactured to withstand leakage at hydrostatic test pressure specified in the standard. In order to ensure that every length of pipe is tested, the hydro testers at IIL are equipped with a test pressure gauge and timer. We ensure that no pipe is dispatched until hydro testing has been performed. Size and grade wise hydrostatic test pressures are given in table overleaf

Product Range- As per API-5L

Size (Inches)	Diameter (mm)	Thickness (mm)	Grade L175 or A25	Grade L210 or A	Grade L245 or B	Grade L290 or X42	Grade L320 or X46	Grade L360 or X52	Grade L390 or X56	Grade L415 or X60	Grade L450 or X65	Grade L485 or X70
3/4"	26.7	2.87	*	*	*							
1"	33.4	3.38	*	*	*							
2 3/8"	60.3	3.91	*	*	*	*	*					
4 1/2"	114.3	4.78	*	*	*	*	*					
6 5/8"	168.3	4.78	*	*	*	*	*	*	*	*	*	*
8 5/8"	219.1	4.78-7.04		*	*	*	*	*	*	*	*	*
10 3/4"	273.1	5.56		*	*	*	*	*	*	*	*	*
12 3/4"	323.8	5.56-9.5		*	*	*	*	*	*	*	*	*

API Specification PSL-1

Grade	Yield Strength		Tensile Strength		Elongation
	Minimum		Minimum		
	psi	MPa	psi	MPa	
L175 or A25	25 400	175	45 000	310	a
L210 or A	30 500	210	48 600	335	a
L245 or B	35 500	245	60 200	415	a
L290 or X42	42 100	290	60 200	415	a
L320 or X46	46 400	320	63 100	435	a
L360 or X52	52 200	360	66 700	460	a
L390 or X56	56 600	390	71 100	490	a
L415 or X60	60 200	415	75 400	520	a
L450 or X65	65 300	450	77 600	535	a
L485 or X70	70 300	485	82 700	570	a

Note: "a" is as per Note c of table 6, API 5L, 45th edition

API Specification PSL-2

Grade	Yield Strength				Tensile Strength				Elongation
	Minimum		Maximum		Minimum		Maximum		
	psi	MPa	psi	MPa	psi	MPa	psi	MPa	
L245 or B	35 500	245	65 300	450	60 200	415	95 000	655	b
L290 or X42	42 100	290	71 800	495	60 200	415	95 000	655	b
L320 or X46	46 400	320	76 100	525	63 100	435	95 000	655	b
L360 or X52	52 200	360	76 900	530	66 700	460	110 200	760	b
L390 or X56	56 600	390	79 000	545	71 100	490	110 200	760	b
L415 or X60	60 200	415	81 900	565	75 400	520	110 200	760	b

Note: "b" is as per Note f of table 7, API 5L, 45th edition

Hydro Static Pressure

Size (inches)	Diameter (mm)	Wall Thickness (mm)	Minimum Test Pressure (psi) w.r.t. each grade										
			A25	A	B	X42	X46	X52	X56	X60	X65	X70	
3/4"	27.0	3.00	700	700	700								
1"	33.0	3.00	700	700	700								
2 3/8"	60.0	4.00	1976	2373	2762	3270	3579						
4 1/2"	114.0	5.00	1275	1531	1781	2113	2329						
6 5/8"	168.3	4.78		1040	1210	1435	1581	1779	1929	2052	2226	2396	
8 5/8"	219.1	4.78-7.04		798-1176	929-1369	1102-1623	1215-1789	1367-2013	1482-2182	1576-2321	1710-2518	1840-2711	
10 3/4"	273.1	5.56		745	867	1028	1134	1275	1383	1471			
12 3/4"	323.9	5.56-9.50		628-1073	731-1249	867-1482	956-1633	1075-1837	1166-1992	1240-2119	1345-2298	1448-2474	



ISO 9001, ISO 14001, ISO 45001, API 5L, PSQA, UL & CE Mark Certified Company