Large diameter welded steel tubes

Product range:
- SAWL pipes ∅ 508 - 1422 mm (20-56"), wall thickness up to 50 mm (1.97");
- ERW pipes ∅ 508 - 530 mm (20-21").

Standard length of all pipes is from 11.6 to 12.2 m (38 – 40 ft).

Pipes are certified by American Petroleum Institute according to API Spec 5L and ISO.

Basic Equipment
Pipes can be made with either one or two longitudinal welds.

UOE Line
Produces pipes with diameter of 508 - 1067 mm (20-42") and wall thickness from 8 to 32 mm (0.28-1.26"), strength grade X80.

JCO Line
Produces pipes with diameter of 508 - 1422 mm (20-56") and wall thickness from 8 to 48 mm (0.28-1.89"), strength grade up to X100, and working pressure up to 24.7 MPa (250 atm.).

Product range and scope of application

Standard	Outside dia., inches (mm)	Wall thickness, mm	Steel grade	Scope of application
API Spec 5L/ ISO 3183	20" (508) - 56" (1422)	8.0 - 48.0	Strenght class Gr.B - X100 Steel L245 - L555	For construction of gas and oil pipelines, water transportation systems both in oil and gas industry
DNV-OS-F101	20" (508) - 56" (1422)	8.0 - 48.0	Steel L245 - L555	Subsea pipe systems used in the oil and gas sector
DIN 10217	20" (508) - 56" (1422)	8.0 - 40.0	Steel P235 - P265	Multi-purpose pipes
DIN 10219	20" (508) - 56" (1422)	8.0 - 40.0	Steel S235 - S460	Multi-purpose pipes

Production of large diameter SAWL pipes

- Longitudinal electric-welded large diameter pipes are manufactured by submerged arc welding (SAW).
- At present large diameter pipes can be manufactured by two independent lines having different pipe forming processes: UOE and JCO.

API Spec 5L, ISO 3183

Diameter																																	
inch		0.316	0.344	0.375	0.406	0.438	0.469	0.500	0.562	0.625	0.688	0.750	0.812	0.875	0.938	1.000	1.062	1.125	1.188	1.250	1.312	1.375	1.438	1.500	1.562	1.653	1.732	1.771	1.811	1.890	1.968
mm		8.0	8.7	9.5	10.3	11.1	11.9	12.7	14.3	15.9	17.5	19.1	20.6	22.2	23.8	25.4	27.0	28.6	30.2	31.8	33.3	34.9	36.5	38.1	39.7	42.0	44.0	45.0	46.8	48.0	50.0
20	508.0	•	•	•	•	•	•	•	•	•	●	●	●	●																	
22	559.0	•	•	•	•	•	•	•	•	•	●	●	●	●	●																
24	610.0	•	•	•	•	•	•	•	•	•	•	•	•	•	•	●	●	●	●	●	●										
26	660.0	•	•	•	•	•	•	•	•	•	•	•	•	•	•	●	●	●	●	●	●										
28	711.0	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	●	●	●	●									
30	762.0	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	●	●	●	●	●	●						
32	813.0	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	●	●	●	●	●	●						
34	864.0		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	●	●	●	●	●	●						
36	914.0			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	●	●	●	●	●	●	●					
38	960.0			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	●	●	●	●	●	●	●					
40	1016.0			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	●	●	●	●	●	●					
42	1067.0					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	●	●	●	●	●	●					
44	1118.0					●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
46	1168.0					●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
48	1219.0						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
52	1321.0						●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
56	1422.0							●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	

- UOE and JCO process: pipes are manufactured from B, X42, X46, X52, X56, X60, X65, X70, X80 (API Spec 5L) and L245, L290, L360, L415, L450, L485, L 555 (ISO 3183) grades.
- JCO process: pipes are manufactured from B, X42, X46, X52, X56, X60, X65, X70, X80 (API Spec 5L) and L245, L290, L360, L415, L450, L485, L 555 (ISO 3183) grades.

Technical characteristics of pipe coating

Standard	Pipe diameters, mm	Application, intended use	Allowable temperature for coating long-term service, °C	Allowable pipe storage temperature, °C	Coating structure	Coating thickness
DIN 30670	57 - 1420	Pipeline steel surface corrosion protection. For onshore and offshore pipelines.	Normal performance «N», up to plus 50 °C Special performance «S», up to plus 70 °C	From minus 60 °C up to plus 60 °C	External twolayer/ three-layer polyethylene	1.8-3.0 mm
NFA 49710	219 - 1420	Corrosion protection of onshore pipelines. For fluids transportation.	From minus 20 °C up to plus 70 °C	From minus 60 °C up to plus 60 °C	External threelayer polyethylene	1.2-3.5 mm
CAN/CSA Z 245/21-02	219 - 1420	Corrosion protection of onshore and off-shore pipelines. For oil and gas transportation.	From minus 20 °C up to plus 80 °C	From minus 60 °C up to plus 60 °C	External twolayer/ three-layer polyethylene	2.0-3.5 mm
Shell DEP 31.40.30.31-Gen	508 - 1420	Corrosion protection of onshore and off-shore pipelines. For oil and gas transportation.	Allowable tempera-ture for coating long-term service - determined by selection of coating system.	From minus 60 °C up to plus 60 °C	External threelayer polyethylene or polypropylene	2.5-3.7 mm
DNV RP-106	508-1420	For offshore pipelines	According to Customer's requirements	According to Customer's requirements	External threelayer polyethylene or polypropylene	According to Customer's requirements
DIN 30678	219 - 1420	Pipeline steel surface corrosion protection. For onshore and offshore pipelines.	From minus 20 °C up to plus 100 °C	From minus 20 °C up to plus 60 °C	External threelayer polypropylene	1.8-2.5 mm
NFA 4911	219 - 1420	Corrosion protection of onshore and off-shore pipelines. For oil and gas transportation.	From minus 20 °C up to plus 110 °C	From minus 20 °C up to plus 60 °C	External threelayer polypropylene	1.2-2.5 mm
Projects and tenders	219-530	For onshore pipelines	From minus 60 °C up to plus 60 °C	From minus 60 °C up to plus 80 °C	External onelayer/ two-layer flow coating	Up to 1400 microns
API 5L2 (RP5L2)	508 - 1420	Internal flow coating of pipes for noncor-rosive gases transportation.	From minus 20 °C up to plus 110 °C	From minus 20 °C up to plus 60 °C	Internal flow coating	At least 50 microns
ISO 15741	508 - 1420	Internal flow coating of onshore and offshore pipes for transportation of non-corrosive gases.	From minus 20 °C up to plus 110 °C	From minus 20 °C up to plus 60 °C	Internal flow, up to plus 110 °C	60-100 microns