

TOLERANCE ON OUTSIDE DIAMETER, WALL THICKNESS, WEIGHT AND LENGTH OF PIPE

SPEC.	OUT SIDE DIAMETER		WALL THICKNESS	WEIGHT	LENGTH							
	PIPE BODY	PIPE END			NOMINAL	Avg. Min.	MINIMUM	MAXIMUM				
API 5L IS/ISO: 3183	< 2 3/8" (60.3 mm) OD: + 0.40mm, - 0.80mm ≥ 2 3/8" (60.3 mm) OD to ≤ 24" (610 mm) ± 0.0075 D (but max. of ± 3.20 mm)	≤ 6 5/8" (168.3 mm): + 1.60 mm, - 0.40mm > 6 5/8" (168.3 mm) to ≤ 24" (610 mm) ± 0.005 D (but max. of ± 1.6 mm)	≤ 5.0 mm WT: ± 0.5 mm > 5.0 mm WT to < 15.0 mm WT: ± 0.1t ≥ 15.0 mm WT: ± 1.5 mm	Single length of pipe + 10%, - 3.5% Carloads > 20 Ton: - 1.75%	20 40	6.0 12.0	17.5 35.0	5.33 10.67	9 14	2.74 4.27	22.5 45.0	6.86 13.72
API - SCT	4 - 1/2" and larger = +1.0% - .5% of OD	5" and larger = + 1.0% .0016"	-12.50%	Single length of pipe +6.5%, -3.5% Car loads: for min 40,000 lb or more - 1.75%	Range-1 ft/mtr. 16/4.88 min.	Range-2 ft/mtr. 25/7.62 min.	Range-3 ft/mtr. 34/10.36 min.					
ASTM- A-53	Pipe 2" NPS and over = ±1.0%	-	At any point -12.5% (Max) Tm = Tn X 0.875 Tn = Nominal wt Tm = Minimum wt	± 10%	20 40	6.0 12.0	- 35	16 10.67	4.88 22	22 -	6.71 -	6.71 -
IS: 3589	Upto 508 mm OD = ± 0.75%	-	± 10%	-	-	6.0 12.0	- -	- -	4.00 7.00	-	7.0 14.0	-
IS: 4270	± 1.0%	-	upto 406.4 mm OD = + 15% - 12.5% over 406.4 mm OD = +15% -10%	+ 10% - 8%	-	6.0 -	- -	- -	4.0 -	-	7.0 -	-
IS: 1161	Upto 48.3mm O.D.= +0.4mm, -0.80mm Over 48.3mm = ± 1.0%	NA	-10% , +not limited	Carload 10 MT Light ±5%, M&H ±7.5% Single Tube Light -8%, +10%, Med & Heavy ±10%	-	6.0 -	- -	- -	4.0 -	-	7.0 -	-

Quality

We never compromise

Quality is the hallmark of D. P. Jindal Group. Strict adherence to the policy of "No Compromise with Quality" is demonstrated by its stringent control over procurement of raw material, process control, streamlined distribution network and fast delivery of finished products.

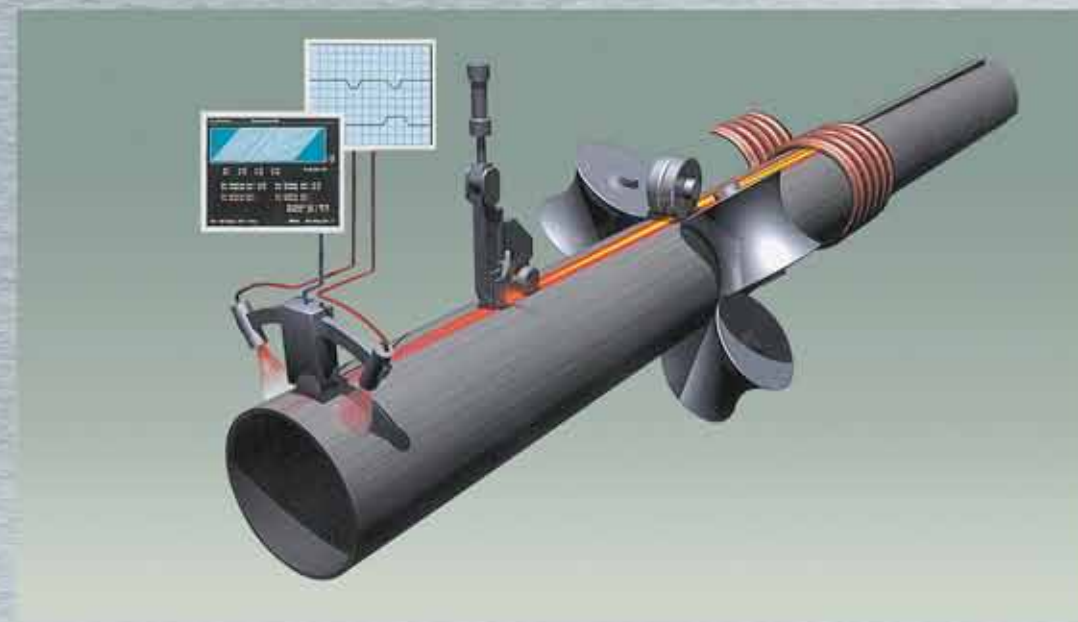


We are holding Quality Management System Certification of ISO 9001: 2008. Similarly, we hold Integrated Management System Certification for Environmental Management System ISO 14001: 2004 and Occupational Health and Safety Management System OHSAS 18001: 2007.

Apart from Certifications from Bureau of Indian Standards, we are also certified to use API Monogram for Casing and Line Pipes from American Petroleum Institute.

Our in-house R&D activities and adherence to the stringent Quality Standards using sophisticated inspection facilities which include Hydrostatic Testing, NDT facilities v.i.z Electro Magnetic Inspection, Ultrasonic, MPI & Eddy Current Testing and Laboratory Inspection/ Testing facilities like Spectrometer, Metallurgical Microscope, UTM, Impact Testing and Hardness Testers etc. have helped MSL to benchmark itself, amongst the best Pipe Manufacturers in the world.

Our manufacturing / inspection facilities and product quality have approval from all leading International Inspection agencies such as Lloyds, DNV, BVQI, EIL, TUV, PDIL, SGS, etc. Our products are in use by quality conscious sector of Indian Industry and our regular clientele includes customers like IOCL, ONGC, OIL, HPCL, BPCL, GAIL, BHEL, NTPC, SAIL, L&T, Adani, ESSAR, JSW, JSPL and Coal India.



Large Diameter ERW PIPES & TUBES



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D.P. JINDAL GROUP



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MAHARASHTRA SEAMLESS LIMITED
(ERW Division)
An ISO 9001:2008 Company

MSL/PN/ERW/NOV 2012

JINDAL
D.P. JINDAL GROUP

Company Profile

Maharashtra Seamless Limited, the flagship company of the D.P. Jindal Group, is the largest manufacturer of Seamless Pipes & Tubes in India. The company is also manufacturing the largest diameter ERW pipes in the country, ranging from 1/2" to 20" with wall thickness ranging from 2mm to 12.7mm (Black and Galvanized). The state-of-the-art plant of Mannesman, Germany, is India's first, par excellence "Largest Outer Diameter" ERW pipe manufacturing plant having maximum welding speed of 33 meters per minute with an installed capacity of 1,50,000 MT per annum.

JINDAL STAR ERW Steel Pipes are serving the Oil and Gas Sector, including Cross Country Pipelines. These pipes are also utilized in petrochemical industries, refineries, water and sewage applications.

Group company Jindal Pipes Limited is one of the most established, best and largest manufacturer of ERW, Black and Galvanized, Steel Pipes & Tubes. Maharashtra Seamless Limited and Jindal Pipes Limited, together, make JINDAL STAR, the largest selling ERW Pipes & Tubes brand in India with diverse manufacturing locations catering to requirements across the country. All manufacturing locations are ISO, API and BIS certified and manufacture products conforming to various Indian and International Standards.

Product Applications

A wide range of application is found in almost every sector of activities viz:



Product Specification and Application

API 5L (IS/ISO:3183)	Steel Pipe for Oil & Gas line
API 5CT	Steel casing pipe for Oil Wells
ASTM A53	Steel pipe for Water, Gas, Steam & Air lines
IS:1161	Steel Tubes for Structural Purposes
IS:3589	Steel pipes for Water, Gas & Sewage
IS:4270	Steel pipes for Water Well casing

System Specification

API Q1	Specification for Quality Programs for the Petroleum, Petro Chemical and Natural Gas Industry
ISO 9001	Quality Management Systems Requirements

ERW LINE PIPES CONFORMING TO API 5L, IS/ISO:3183

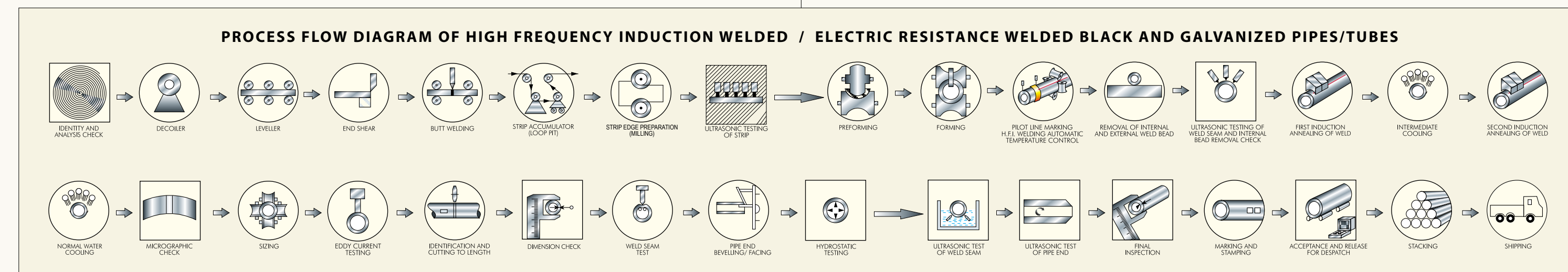
Dimensions, Weights and Test Pressures for Sizes 6 5/8" through 20" (SI Units)

Table with 14 columns: Size, Specified Outside Diameter, Specified Wall Thickness, Plain-end Weight per Unit Length, Calculated Inside Diameter, and Minimum Test Pressure (kPa x 100) for grades A25, A, B, X-42, X-46, X-52, X-56, X-60, X-65, X-70.

Table with 14 columns: Size, Specified Outside Diameter, Specified Wall Thickness, Plain-end Weight per Unit Length, Calculated Inside Diameter, and Minimum Test Pressure (kPa x 100) for grades A25, A, B, X-42, X-46, X-52, X-56, X-60, X-65, X-70.

ERW CASING CONFORMING TO API 5CT

Table with 14 columns: Outside Diameter (In, mm), Normal Weight (lb/ft, Kg/m), Normal Weight Plain-end (lb/ft, Kg/m), Wall Thickness (Inch, mm), Type of Finish (H-40, J-55, K-55), Coupling OD (mm), and Thread Types (STC LTC, BTC).



STEAM, WATER, GAS AND AIR LINE ERW PIPES CONFORMING TO ASTM A-53

Table with 11 columns: Nominal Pipe Size (mm/inch), OD (mm), and SCHEDULE WALL THICKNESS (mm) / WEIGHT (kg/m) for Schedules 10, 20, 30, STD, 40, XS, 60, and 80.

ERW PIPES FOR WATER & SEWAGE CONFORMING TO IS:3589 & WATER WELL CASING CONFORMING TO IS:4270

Table with 15 columns: NB (mm), OD (mm), and WALL THICKNESS (mm) for conventional mass per unit length (Kg/m) for various pipe sizes.

NOTE: (I) IS:4270 covers Pipe size 100mm to 500mm NB & IS:3589 covers Pipe size 168.30mm O.D. to 508.00mm O.D. (II) IS:4270 covers wall thickness upto 12 mm. (III) Other thickness may be supplied as per agreement. (IV) Max. Hydro Test Pressure IS:3589-5 MPa, IS:4270 -7 MPa.

CHEMICAL COMPOSITION AND MECHANICAL PROPERTIES

Large table with 24 columns: Specification, Grade, CHEMICAL COMPOSITION (Max.), MECHANICAL PROPERTIES (YIELD STRENGTH, TENSILE STRENGTH, % Elongation), and Impact Energy J (Fr/lb) min.

NOTE: Refer current edition of Relevant specification for Dimensions and Properties data * Specifications are subject to change without any prior notice

A = Specimen cross-sectional area U = Specified Min. Tensile Strength