

You can Count on us

STEEL PIPES AND TUBES

- SEAMLESS AND WELDED
- CARBON, ALLOY, STAINLESS









JINDAL SAW LIMITED

- A complete solution provider in the pipe industry with a reach across the world. We have production facilities strategically located in India, the U.S. and the U.A.E., whereas the E.U. is supplied through an associated entity.
- Our customer profile includes some of the biggest global oil and gas producing companies, entities associated with water/sewerage supplies, engineering and procurement companies connected to oil and gas, transportation, power generation and certain industrial applications.
- · Well-diversified and de-risked model allowing us to distinctly offer complete pipe solutions.
- · Global footprint both in manufacturing and sales, thereby positioning our solutions directly where the customers want it.
- Strong core of enterprise knowledge, banking on human capital, uninterrupted flow of business know-how across operations, seamlessly connecting the organisation from end-to-end and propelling the enterprise forward.
- Robust corporate governance standards across the organisation and its dealings with external stakeholders. Jindal SAW's internal and external auditors are four large audit firms.
- · Strong financials of the company support in managing operations and exploring big opportunities in every stream.
- The company enjoys an AA Credit Rating from CARE as on October 2019.

Because a rhythm creates music

Just as our units consistently manufacture masterpieces

STRATEGIC BUSINESS UNITS

Large Diameter Submerged Arc Welded Line pipes (LSAW Pipes):

- Submerged Arc Welded (SAW) pipes, typically of large diameter, find application in transportation of oil, gas, water and slurry. We are one of the largest SAW pipe manufacturing businesses in the world.
- Our facilities can produce pipes of up to 156" in outer diameter. Besides India, the company exports products to Americas, Middle East and Africa.

Ductile Iron Pipes (DI Pipes):

Ductile Iron pipes find usage in carriage of water (both potable and waste). Given our overall capacities of 0.8 MTPA including our Abu Dhabi facility, our operation is counted as amongst the top three largest DI producers in the world. This is a high-potential business where we supply pipes ranging up to 2,200 mm in diameter with external and internal coatings.

Carbon and Alloy Steel (Seamless) and Stainless Steel (Seamless and Welded) pipes and tubes:

 Carbon and Alloy Steel (Seamless) and Stainless Steel (Seamless and Welded) pipes and tubes are versatile and find a wide variety of applications across different industries. Our portfolio covers line pipes, process pipes, OCTG and pipes and tubes for general mechanical engineering. The company has emerged as a trusted supplier to major OEMs domestically and abroad.
 Some of our clients include ONGC, Oil India, GE, Thermax, Godrej, SKF, Petrofac, L&T, Proclad for ADNOC, IDMC Ltd., Tata and Biocon.

Mining and Pellet:

The company operates a mine-head, integrated beneficiation and pellet production facility of 1.5 million MTPA at Bhilwara, Rajasthan. We have obtained a 50-year mining lease for a low grade iron ore mine spread out over 1989 acres. Ours is the first beneficiation plant in the country at a mine head. Through beneficiation, we are upgrading the low-grade magnetite iron ore to high grade with over 65% Fe grade. The majority of these pellets are sold on merchant basis to the market, both domestically and via export.



Because steady builds empires

Standing tall to connect the world through our products

- CARBON AND ALLOY STEEL (SEAMLESS)
- STAINLESS STEEL (SEAMLESS AND WELDED)



OUR ANNUAL CAPACITIES

Carbon & Alloy Steel Seamless pipes & tubes	-	4,25,000 MT
Anti Corrosion 3LPE / 3 LPP / FBE / IFBE Coating	-	1 Million SQM
Stainless Seamless pipes & tubes	-	36,000 MT
Stainless Welded pipes & tubes	-	24,000 MT

MARKET SEGMENTS AND USER INDUSTRY

Oil and Gas Exploration Drilling	-	Casings & Tubing Drill Pipes
Power	-	Boilers & Heat Exchangers Tubes
Defence	-	Pipes & Tubes
Petroleum and Petrochemicals products	_	Pipes & Tubes
Nuclear, Thermal, Hydro Power Plant	-	Pipes & Tubes
Automobile Bearing Industry	-	Pipes & Tubes Bearing Steel Tubes
General Engineering	-	Pipes & Tubes
Refineries	-	Pipes & Process Piping & Tubing
Fertilisers	-	Pipes & Tubes
Dairy & Sugar	-	Pipes & Tubes
Mechanical Tubing & Structural Application	_	Pipes & Tubes
Chemical	-	Pipes & Tubes
Fluid Conveyance Applications	_	Pipes & Tubes
Paper & Pulp	-	Pipes & Tubes
Pharmaceutical	-	Pipes & Tubes
Cryogenic services	-	Pipes & Tubes



PRODUCT PROFILE

PRODUCT	OUTSIDE DIAMETER (D)	WALL THICKNESS (t)	OUTSIDE DIAMETER (D)	WALL THICKNESS (t)
	(inch)	(inch)	(mm)	(mm)
Hot Finished Carbon / Alloy Steel Seamless tubes and pipes	1.00 to 16.00	0.13 to 1.00	33.40 to 406.40	3.38 to 25.40
Seamless Casing and Tubing conforming to API 5CT	2-3/8 to 13-3/8	0.19 to 0.51	60.30 to 339.70	4.83 to 13.06
Seamless Drill Pipes conforming to API 5DP	2-3/8 to 6-5/8	0.25 to 0.50	60.30 to 168.30	6.45 to 12.70
Cold Finished Carbon/ Alloy Steel Seamless tubes and pipes	0.75 to 6.50	0.08 to 0.75	19.05 to 165.10	2.00 to 19.05
Couplings for OCTG Products	2-3/8 to 13-3/8		60.30 to 339.70	

Anti-Corrosion

3LPE / 3 LPP / FBE / IFBE Coating

2" to 14" as per ISO 21809 / DIN 30670 / 30678 and customer requirements

SPECIFICATION:

ASTM (A53, A106), SA (53,106,179,192,210,213), DIN (1629, 2391, 17175), IS (3601, 3074), BS (3059) API 5L (B, X42, X52, X56, X60, X65, X70 PSL 1 & PSL 2 with Annexure J & H) API 5CT (J55, K55, N80, L80, L80 (13 Cr), C90, C95, T95, P110, P110 HC, Q125) API 5DP (E75, X95, G105, S135) PSL 1, PSL 2 & PSL3

MAJOR STEEL GRADES:

SAE 1019, 1035, 1040, 1045, 1518, 1541, 4130, 4140, T11, T12, T22, T91, 8620, EN 19, ST 52, 16MnCr5, 20MnCr5, 20MnV6, 100Cr6, 52100

Hot Extrusion Stainless				
Steel Seamless pipes	Up to 6.00	Up to Sch XXS	Up to 168.30	Up to Sch XXS

SPECIFICATION:

ASTM A312, EN 10216-5

MAJOR STEEL GRADE:

Austenitic Stainless Steel, Duplex Stainless Steel, Super Delux Stainless Steel, Martensitic Stainless Steel, Super Austenitic Stainless Steel, Ferritic Stainless Steel, Nickel Alloys

PRODUCT	SPECIFICATIONS	DIAMETER	THICKNESS	LENGTH
Welded Stainless Steel Tubes (Heat Exchanger, Condenser and LP/HP Heater U tubes)	ASTM A/SA 249, A269, A/SA688	0 ="1 + 1 = "	0.10% - 1.00%	Up to 62.30 ft (19 meters) Straight
Eryth fleder o tabesy	EN 10217-7 as per ISO Tolerance	0.5" to 4.5" (12.70 – 114.30 mm)	0.19"to 1.96" (0.5 – 5 mm)	Up to 98 Ft (30 meters) U-Tubes
Welded Stainless Steel / Duplex / Super Duplex Pipes	ASTM A312 / ASME SA 312	0.5" to 36" NB	Up to SCH80S	Straight length up to 39.5 ft (12 meters)
	ASTM A 358, A 928, A 778, A 789	8" to 72" NB	0.19" to 1.38" (3 – 35 mm)	Generally produced in 12 meters double random length. Can be cut into smaller lengths as per customer's requirement
Stainless Steel / Duplex/ Super Duplex Seamless Pipes	ASTM/ASME – A/SA 312 / EN 10217-7 as per ISO Tolerance	0.5" to 12" NB	Up to SCH80S	Up to 39.50 ft (12 meters) DRL
Stainless Steel Seamless Tubes	ASTM A/ASMESA213, A/SA789, A269		0.027" to 0.315"	Up to 62.30 ft (19 meters) Straight
	EN10216-5 As per ISO Tolerances	0.23" to 4.5" (6.0to 114.30 mm)	(0.7 – 8 mm)	Up to 98 ft (30 meters) U-Tubes
U Tubes Minimum Radius 1.5 D, Maximum Radius 1250 mm				
Hot Induction Bends – Seamless & Welded	High Frequency Induction Healing	4" to 56" NB		Bend Radius 18" to 420"

Because uniformity builds trust

Just like our facilities that churn out top-quality paragons

OUR MANUFACTURING FACILITIES



Plant and Manufacturing facilities (Infrastructure)

1. Hot Finishing

- · Rotary Hearth Furnace
- · Conical Type Piercing Mill
- · Premium Quality Finishing Mill
- · Stretch Reducing Mill

2.16" Mill to produce 8" - 16" OD

- · Rotary Elongator Mill
- · Reeling Mill
- Sizing Mill

3. API Finishing Line

- Upsetter
- Quench and Temper Furnace
- · PMC Threading Machine
- · Coupling Applicator
- · In-house Coupling Manufacturing

4. Coating Plant

 Fusion Bonded Epoxy (FBE) and 3-layer Poly Ethylene (LPE) and 3 Layer Poly Propylene Coating Line

5. Cold Finishing/Cold Drawn

- Push Pointers
- · Cold Draw Benches

6. Finishing Facilities

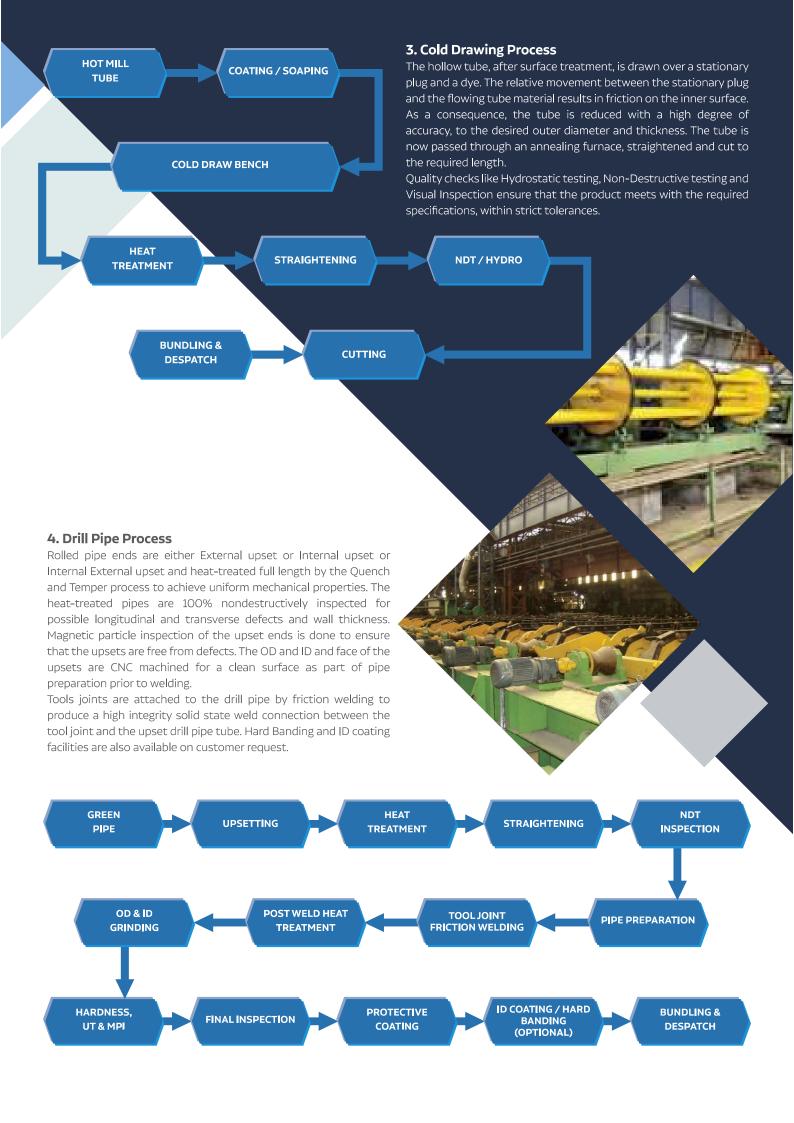
- MFL and Linsinger Cutting Machines
- Heat Treatment Furnaces: Normalising, Annealing, Stress Relieving, Spherodising, Quench and Temper
- Beveling Machines
- Straightener
- · Lacquer Coating Machines
- · Automated Bundling Machine

7. Inspection and Testing Facilities

- EMI and UT System:
 MAC and Tuboscope, USA
 o Eddy Current Testing
 o Leakage Flux Testing
 o Ultrasonic Testing
- · Magnetic Particle Inspection
- SSC / HIC Tests as per API 5L / 5CT / NACE requirements
- Hydrostatic Testing as per API, ASTM, DIN, IS or equivalent standards
- · Chemical, Mechanical and Metallurgical Testing

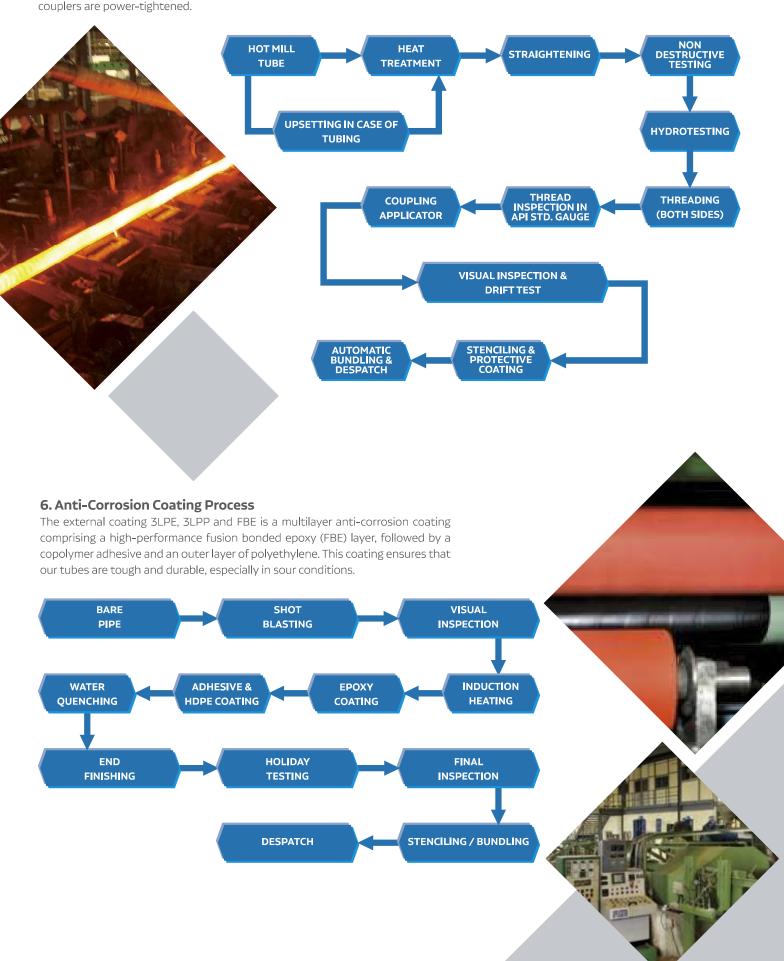


PRODUCT PROCESSES 1. Hot Finishing Process: 1" - 7" OD The round billet is heated in a rotary hearth furnace and pierced by means of an internal piercing plug and a two-roll conical type piercer. The shell is then rolled in a PQF Mill for wall thickness reduction and shell elongation. It is reheated in an induction furnace and rolled in a stretch-reducing mill to decrease the outside diameter to the desired specifications. Finally, Pipe Finishing is carried out via several processes - air-cooling on a cooling bed, straightening, cutting and bevelling. Finished seamless pipes undergo Hydrostatic testing, Non-Destructive Testing, as well as inspection for dimensional irregularities. ROTARY HEARTH ROUNDS CONE TYPE PIERCER **FURNACE** STRETCH REDUCING INDUCTION HEATER **PQF MILL** MILL **COOLING BED STRAIGHTENING & CUTTING** NON DESTRUCTIVE HOT FINISHED TUBES HYDRO TESTING TESTING 2. Hot Finishing Process: 8" - 16" OD ROUND ROTARY HEARTH CONICAL TYPE **REM BILLET FURNACE PIERCER** MILL REELING COOLING **SIZING MILL 6 INDUCTION HEATER** BED **STAND 3 ROLL** MILL STARIGHTENING & HOT FINISHED NON DESTRUCTIVE **HYDRO** CUTTING **TUBES** TESTING **TESTING**



5. OCTG Manufacturing Process

Rolled pipes are heat treated in a Q&T furnace to achieve properties that conform to API grades. In the case of tubing, the ends are upsetted. The pipes are straightened and subjected to EMI and UT and Hydrostatic testing. Subsequently, threads are cut and couplers are power-tightened.



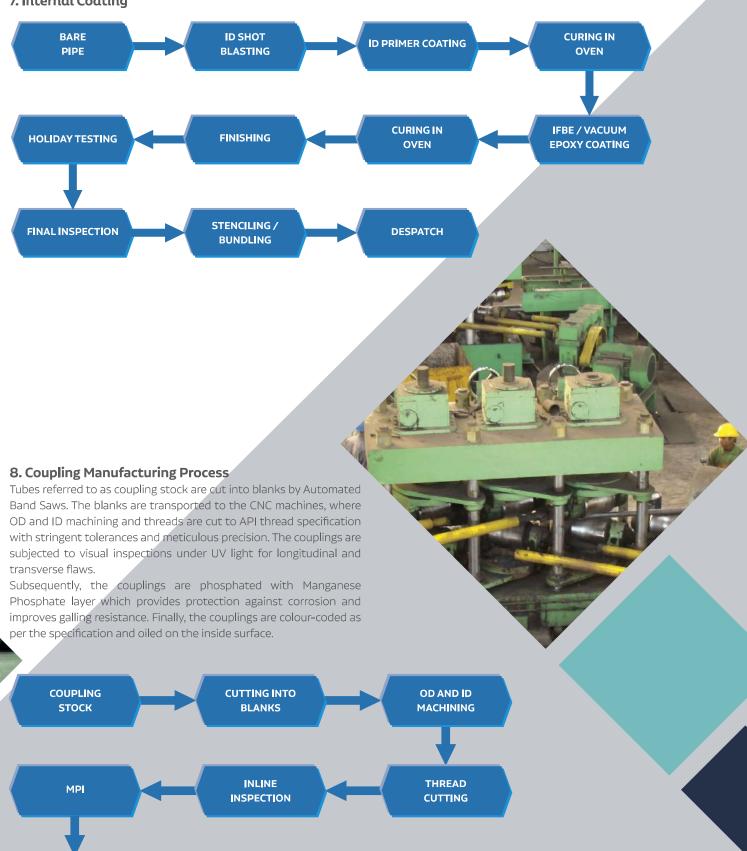
7. Internal Coating

AUTOMATIC

STAMPING

PHOSPHATING

FINISHED COUPLING



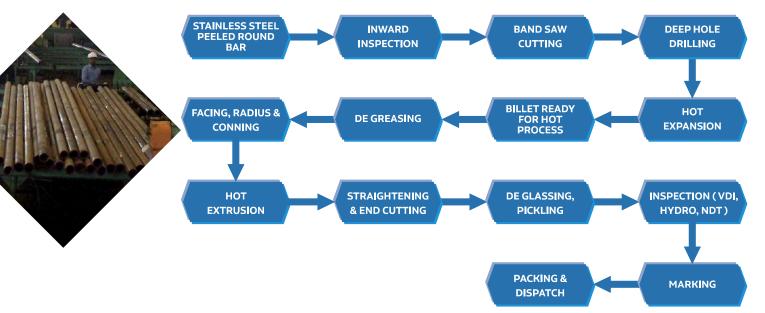
PAINTING

OILING



2. Hot Extrusion Process

A billet is placed in a closed container and squeezed through a die to reduce the cross-section area and increase the length of the billet.





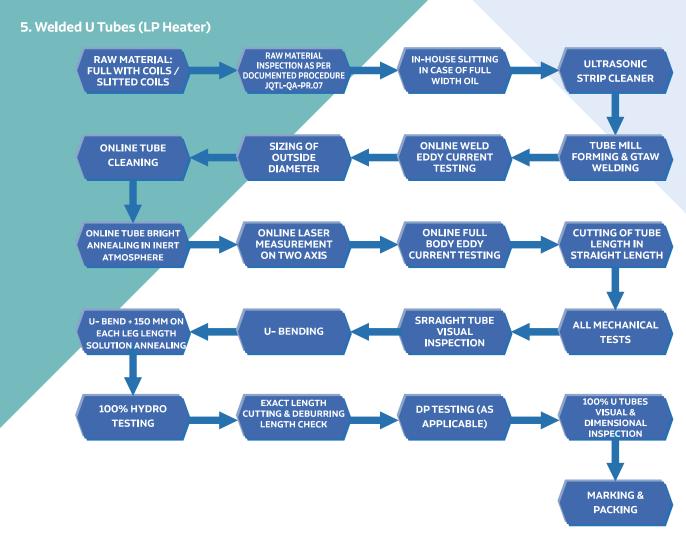


PRODUCT PROCESSES

1. Welded Tubes



3. Seamless Pipe RAW MATERIAL нот **ROUND COLD PILGER** INSPECTION (MOTHER **EXTRUSION BILLET** ROLLING PIPE / TUBE) DIMENSIONAL CHECK FOR BRIGHT / SOLUTION ANNEALING **DEGREASING &** STRAIGHTENING OUTSIDE DIAMETER & **DRYING** WALL THICKNESS ETC **EDDY CURRENT COATING &** TESTING / UT IF REQUIRED **DRAWING HYDROSTATIC TEST POINTING PICKLING & FINAL INSPECTION** MARKING **FINAL CUTTING PASSIVATION PACKING & DISPATCH** 4. Seamless Tubes **Mother Hollow Round Billet** through **Mother Hollow** Hot Extrusion **Cold Pilger Rolling** Solution / Bright Annealing Inspection → Degreasing → Drying → Straightening Re-Cold Pilger Rolling for sizing **Picking & Passivation** Non-destructive tests **Eddy Current Test** Mechanical Testing US-Testing **Cutting to** Dimensional Inspection Packing Shipping length checks Hydrautic Pressre Testing Finished Straight Tubes Cutting to Shipping Packing Inspection length 0 **U-bending** U-Bend **Hydrautic Test** Finished U-bend **Tubes U-Bend Aneeling**



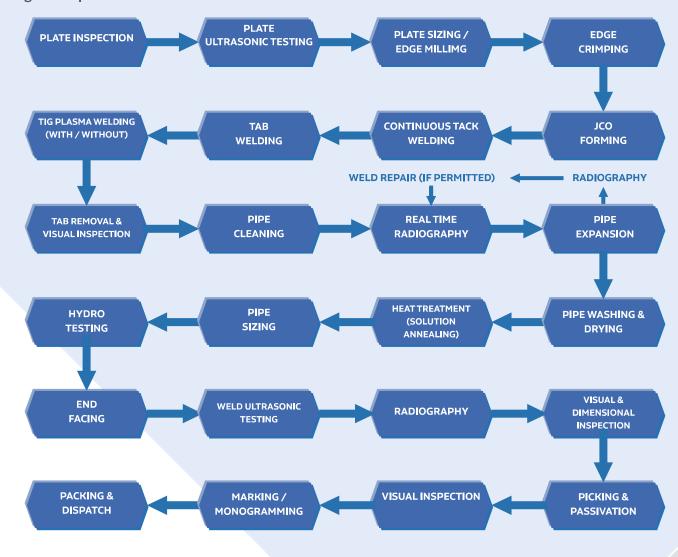


· Real Time Radiography

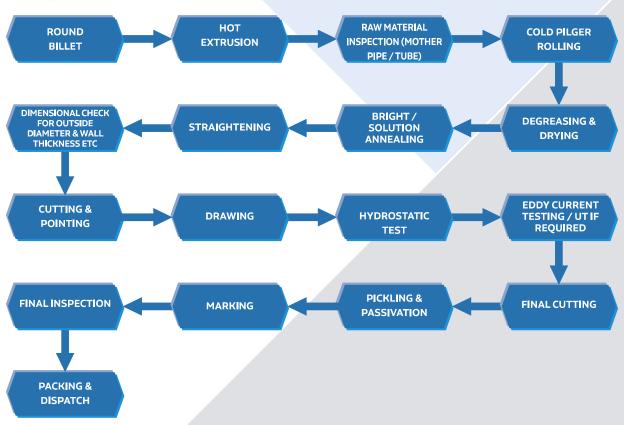
· Weld Ultrasonic Testing Machine

PROCESS FLOW

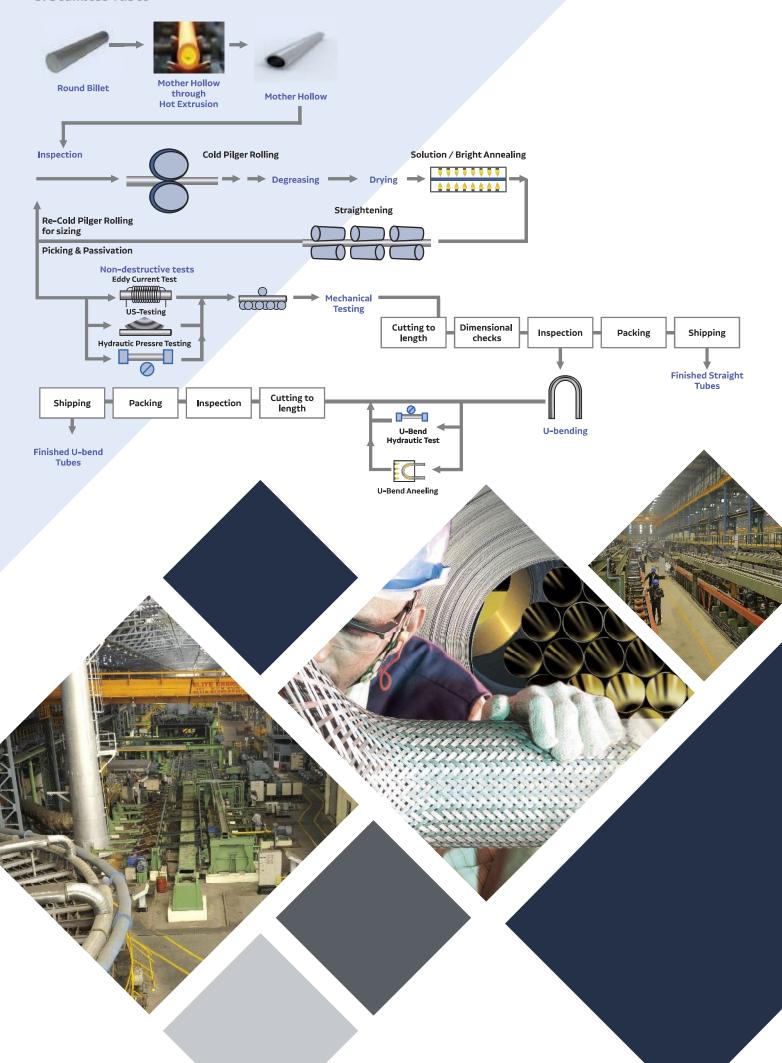
1. Large Dia Pipes



2. Seamless Pipe



3. Seamless Tubes



Quality Standards, Certifications and Accreditations

Committment to Customers, Flexibility in Manufacturing and Total Quality Management are principles that have enabled Jindal SAW Ltd. to deliver value to our customers. Stringent system-based quality control is implemented at each stage of production. Our service standards focus on customer requirements and we strive for the highest user satisfaction.

Carbon and Alloys Steel

- ISO 9001-2015, ISO 14001-2015, OHSAS 18001-2007 Certification
- API 5L, 5CT and 5DP Certification
- PED Certification by DNV
- Well known Tube / Pipe Manufacturer under Indian Boiler Regulation
- Committed to deliver quality assurance at par with stringent International standards, both in terms of product quality as well as customer service

Stainless Steel

Certificate Name	Location
ISO 9001 : 2015	Kosi Kalan
ISO 14001 : 2015	Kosi Kalan
ISO 45001 : 2018	Kosi Kalan
PED 2014/68/EU	Kosi Kalan
EIL Enlistment	Kosi Kalan
Flour	Kosi Kalan
Llyod's Register	Kosi Kalan
IBR Certificate	Kosi Kalan
JSRS Certificate	Kosi Kalan
NORSOK Certification	Kosi Kalan
ISO 9001 : 2015 & ISO 14001 : 2015	Samaghogha
ISO 45001 : 2018	Samaghogha
PED 2014/68/EU	Samaghogha
Flour	Samaghogha
NABL Certificate	Samaghogha
NORSOK Certification	Samaghogha



Key Management

The Management at Jindal SAW Ltd. continues to focus and dominate its leadership position in the entire range of the pipes and tubes market made out of iron and steel. We believe in a culture build up with open and fair communication, sense of belongingness for both employee and organisation, integration of individual and organization's goals and high level of integrity. CSR development activities continue to be a focus so that benefits percolate down to every strata of society that we inhabit.

Marketing Organisation

We are a customer-focused organisation and our endeavour is to meet every expectation of our customer by working on the philosophy of creating value-added products, providing end-to-end solutions, continuous innovation and delivering timely quality products.

Customer Relationship Management

Our dedicated team of Customer Relationship Managers backed by Product/Industry specialists and supported by robust supply chain and commercial teams is relentlessly working towards creating the value. In addition, a cell for CRM handles Customer complaints (if any) on priority.

All our valued customers can contact us at: seamless.domestic@jindalsaw.com and seamless.export@jindalsaw.com

Customer Profile

Stainless Steel (Seamless & Welded) Pipes & Tubes

Strategic Partnership

Jindal SAW Ltd. is having strategic partnership with Hunting Energy Services to manufacture Premium casing and Tubing with Hunting Seal Lock XD Cal-IV tested Premium connections to Cater to Indian and overseas Market.

Premium casing and Tubing in sizes 2.7/8" to 13.3/8" for carbon steel and 13 Cr grades for Oil and Gas sector are manufactured in Nashik unit in technical collaboration with Hunting Energy Services.

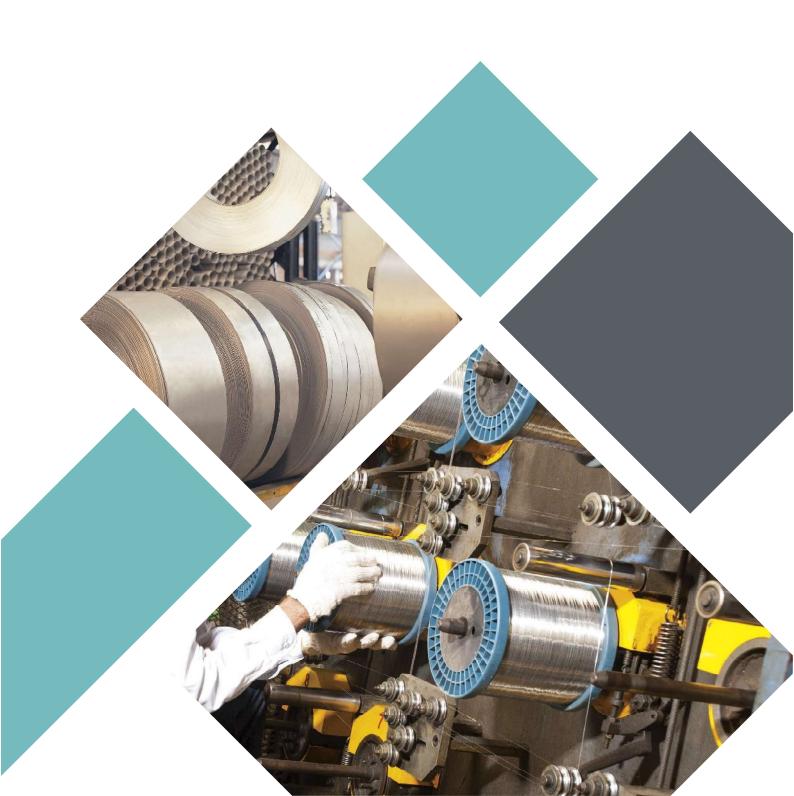
USP

- One of the Largest Pipe Manufacturing Companies: A Strong International Presence
- · Established Track Record and Necessary Accreditations
- State-of-the-art Manufacturing facilities and Testing equipment Technologically at par with the Best Seamless Mills Internationally
- Billets sourced from Group Companies: Advantage of assured delivery as well as high quality due to Vacuum Degassing facilities available at Billet Manufacturing Mill
- Skilled and Experienced Manpower
- Long Term Relationships forged with Leading World Class Customers

CHEMICAL & PHARMA	EPC	FOOD, DAIRY, AUTO, SUGAR	POWER & PROCESSING BOILER & HE, FOOD PROCESSING, PHARMA	OIL & GAS	TRADERS/GENERAL ENGINEERING - MUMBAI
ASIAN PAINTS LTD.	ADANI HAZIRA PORT PVT. LTD.	BALAJI AMINES LTD.	GODREJ & BOYCE MFG CO LTD.	HPCL-MITTAL ENERGY LIMITED	DUGAR TUBES LIMITED
HIMATSINGKA TERRY	BGR ENERGY SYSTEMS LIMITED	BORGWARNER EMISSIONS SYSTEMS INDIA	INOX INDIA PVT LTD.	INDIAN OIL CORPORATION LIMITED	FÉMSZERELVÉNY KFT.
NACL INDUSTRIES LTD.	DYROCON AIRTECH PVT. LTD.	DESMET BALLESTRA INDIA PVT. LTD.	THERMAX LIMITED	KRISHAK BHARATI COOPERATIVE LTD.	MAHAVIR TUBE CORPORATION
UNICHEM LABORATORIES LTD.	HAL OFFSHORE LIMITED	DYNETIC PRODUCTS PVT. LTD.	SHRIJEE PROCESS ENGINEERING		MULTINOX INC
	L&T HYDROCARBON ENGINEERING	DHAMPUR SUGAR MILLS LIMITED	SSP PRIVATE LTD.		S.P.I. (MATERIALS) LIMITED
	LARSEN & TOUBRO LIMITED	FIVES CAIL - KCP LIMITED	RAVI INDUSTRIES		SALECHA METAL INDUSTRIES LLP
	MEGHA ENGINEERING & INFRASTRUCTURES LTD.	SHREE RENUKA SUGARS LTD .	MOJJ ENGINEERING SYSTEMS LTD.		STEELIMPEX S.A
	SUEZ INDIA PRIVATE LIMITED	GUJARAT AMBUJA EXPORT LTD.	NAGARJUNA AGRICHEM LIMITED		STEMCOR STEEL
	VA TECH WABAG LIMITED	ISGEC HEAVY ENGINEERING LIMITED			UNNATI METALS & ALLOYS
		PRAJ INDUSTRIES LTD.			DEHGAMWALA & SONS
		SSP PRIVATE LTD.			GAUTAM TUBE CORPORATION
					SHIB DASS & SONS PVT. LTD.
					VINAYAK PIPES AND TUBES PVT. LTD.

Carbon & Alloy Steel (Seamless) Pipes & Tubes

UPSTREAM- OCTG	DOWNSTREAM REFINERY/ PETROCHEMICAL/ LINE PIPE	AUTOMOBILE, AUTO ANCILLARIES, BEARING, HYDRAULIC CYLINDER, CNG CYLINDER	POWER & PROCESSING BOILER & HE, FOOD PROCESSING, PHARMA	TRADERS/ GENERAL ENGINEERING
ONGC	IOCL	SKF INDIA LIMITED	ISGEC	TUBES INDIA
OIL INDIA	HPCL - MITTAL	SCHAEFFLER INDIA LTD	CHEEMA BOILERS	MANHAR TRADING
CAIRN INDIA	EIL	NATIONAL ENGINEERING INDUSTRIES LIMITED	L&T-MHPS	DUGAR TUBES PVT LTD.
	CHENNAI PETROLEUM	TATA MOTORS LTD.	GE - POWER	MOKSHI INDUSTRY
	L&T-HYDRO CARBON	BAJAJ LIMITED	BHEL	SHIB DASS
	MRPL	SUNDRAM FASTENERS LTD.	THERMAX	RASITRADERS
	RELIANCE INDUSTRIES LTD.	WHEELS INDIA	GODREJ	MADRAS STEEL
	GAIL	WIPRO	TEMA INDIA LTD.	
	TECHNIP	MAHINDRA & MAHINDRA LTD.	L&THEAVY ENGINEERING	
		INTERPUMP HYDRAULICS		







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Jindal Centre

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Email: seamless.domestic@jindalsaw.com

seamless.export@jindalsaw.com

Website: www.jindalsaw.com

Manufacturing Facilities:

Nashik

A-59-60, Malegaon, MIDC, Sinnar,

District Nashik, Maharashtra - 422113, India

Phone: +91-2551-227200

Nagothane

Pipe Nagar, Sukeli, Via - Nagothane Taluka - Roha, District Raigad, Maharashtra - 402126, India

Phone: +91-2194-238535

Kosi Kalan

A-1, UPSIDC Industrial Area, Nandgaon Road, Kosi Kalan, District Mathura, Uttar Pradesh - 281403, India

Phone: +91-5662-232001/4/5

Samaghoha

Paragpar - Mandvi Road, N.H - 8, Village Samaghogha, Taluka Mundra District, Kutch,

Phone: +91-2838-263300

Gujarat - 370415, India