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JINDAL
STEEL & POWER

L&K | SAATCHI & SAATCHI (2022)

JINDAL
STEEL & POWER

WORLD-CLASS
PRODUCTS

WE'RE
ALWAYS PUSHING
BEYOND
IMAGINED
LIMITATIONS

DIVERSIFIED **RANGE**

LONG PRODUCTS I FLAT PRODUCTS I INNOVATIVE PRODUCTS

1) SEMI-FINISHED PRODUCTS

2) PARALLEL FLANGE BEAMS, COLUMNS, ANGLES & CHANNELS

3) RAILS

4) PLATES & COILS

5) WIRE ROD

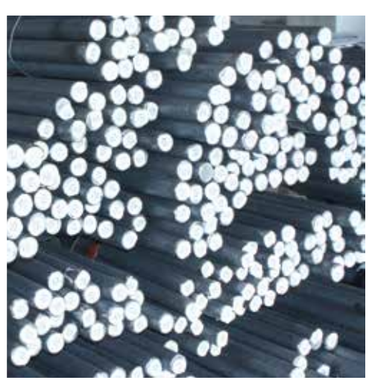
6) ROUNDS

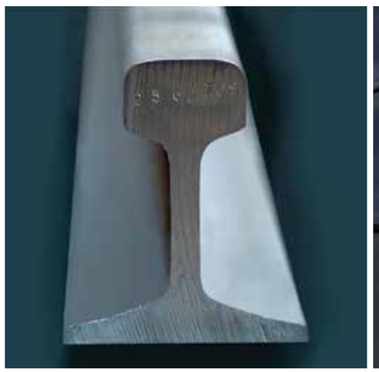
7) TMT

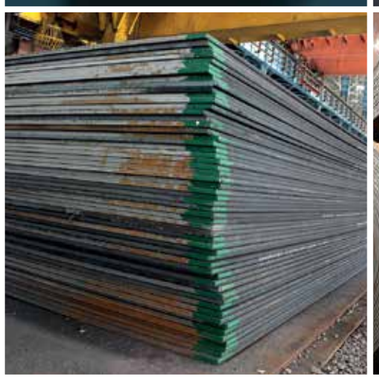
8) WELDMESH AND CUT & BEND

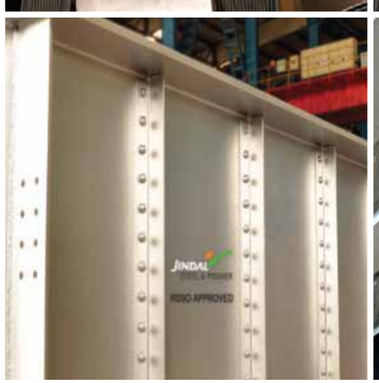
9) FABRICATED SECTIONS

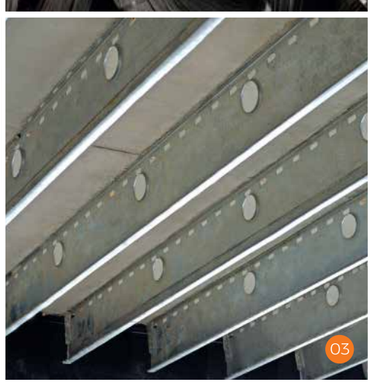
10) SPEED FLOOR











LEADERSHIP **STRENGTH**

JSP is an industrial powerhouse with a dominant presence in steel, power, mining and infrastructure sectors. Part of the US $ 22 billion OP Jindal Group, the Company is continuously scaling its capacity utilizations and efficiencies to capture opportunities for Building “A Nation of Our Dreams”.

Led by Mr Naveen Jindal, the youngest son of the legendary Shri O.P. Jindal, the company produces economical and efficient steel and power through backward and forward integration.

JSP’s business operations span across the states of Chhattisgarh, Odisha and Jharkhand in India, where it operates some of India’s most advanced steel manufacturing and power generation capacities of global scale. JSP has created cutting-edge capacities to produce 9.0 MTPA steelmaking capacities through a judicious mix of Direct Reduced Iron (DRI), Blast Furnace across two locations in India. JSP’s captive iron ore mines at

PROVIDING A FIRM FOUNDATION FOR FUTURE SUCCESS.

Tensa, Odisha have a production capacity of 3.11 MTPA. The company has a well-spread out installed finished steel capacity of 7.52 MTPA prudently spread over Bar Mills, Plate Mills, Rail and Universal Beam Mill (RUBM), Medium & Light Structural Mill (MLSM), and Wire Rod Mill.

Alongside contributing to India's growth story the company is driving an ambitious global expansion plan with its sights set on emerging as a leading transnational business group. The company continues to capitalize on opportunities in high growth markets, expanding its core areas and diversifying into new businesses. JSP's global operations include a 2.4 MTPA integrated steel complex at Sohar, Oman and 6.6 MTPA coal-mining operations spread across South Africa, Mozambique and Australia.

From the widest flat products to a whole range of long products, JSP has a unique product portfolio that caters to markets across the steel value chain. JSP has pioneered production of Hot Rolled Parallel Flange Beams and Columns in the country. The company also introduced 121-metre long rails in the country and is the first to manufacture Head Hardened Rails for high-speed trains and metros in India. The company's plate mill at Angul is capable of producing 5-meter-wide plates – the widest in the world. JSP manufactures high strength Jindal Panther TMT Rebars equipped to withstand shock loading and cyclic loading condition making them an ideal choice for buildings in high seismic zones. In addition, JSP also manufactures customized steel products like Weld Mesh and Cut & Bend Rebars aimed to speed up the construction process.

The company endeavours to strengthen India's industrial base by aiding infrastructural development, through sustainable development approaches and inclusive growth. It deploys its resources to improve infrastructure, education, health, water, sanitation, environment and so on in the areas it operates in.

PRODUCTS

SEMI-FINISHED PRODUCTS

JSP uses virgin Iron Ore from its captive mines which along with its world class steelmaking and refining technology ensure a highly controlled steel chemistry for its various steel products with very low levels of sulphur (0.003%-0.035%) phosphorous (0.010% - 0.035%) and very negligible levels of inclusion and tramp elements.

Semi-finished products like Slabs, Billets, Blooms, Beam Blank and Rounds can be delivered in a very wide range of carbon steel and alloy steel grades with ultra low gas, controlled chemical composition, high internal soundness and dimensional uniformity.

Besides captive use, semi finished products from Jindal Steel and Power are being widely used by the forging industry, rolling units and seamless pipe manufacturers in India as well as International markets to Europe, South-East Asia, West Asia and the Middle East.

PRODUCT SPECIFICATIONS

Square Billets and Blooms

130mm | 150mm | 165mm | 200mm
250mm

Rectangular Blooms

285mmx390mm

Beam Blanks

480X420X120mm | 355x280x90mm

Rounds

162mm | 180mm | 200mm | 220mm | 255mm
280mm | 305mm | 320mm | 350mm diameter

SLABS

Width

1250mm to 3010mm

Thickness

180mm | 215mm | 250mm | 280mm | 300mm

Length

3 meter to 9 meter

Max. Weight

25 MT per slab

PARALLEL FLANGE BEAMS, COLUMNS, ANGLES & CHANNELS

We have pioneered the production of Hot Rolled Parallel Flange Beams and Columns in India

Considered a revolutionary product, Parallel Flange Beams from JSP are the most sought after by the structural engineers, architects and construction companies globally. The beams have standard nominal depths with different flange and web thicknesses, thereby offering cost competitive options in terms of unit weights, and sectional properties. Manufactured as per Indian and International standards, these are superior in terms of strength, efficiency, higher axial and load bearing capacity, workability and economy vis-à-vis the conventional tapered flange beams.

JSP's Parallel Flange Beams and Columns enable complex fabrications in high volumes due to inherent functional advantages of these sections. When used under bending load, steel savings between 10-25% are achieved, as beams of lower sectional weight can be used.

The Rail and Universal Beam Mill (RUBM) is equipped with a walking beam type reheating furnace, high efficiency water descaling system, Breakdown Mill, a modern Universal Tandem Mill incorporating a Universal Rougher, Universal Edger and Universal Finishing Mill, one of the longest 123 meter long cooling bed, high capacity 9 roll vertical and 9 roll horizontal straightening machine, cutting, stacking, bundling, and marking machines.

APPLICATIONS

Refineries | Shopping Malls | Steel Plants | Transmission Line Tower/Telecom Line Towers | Industrial Sheds | Airports | Power Plants | Industrial Sheds | Fabrication | Bus/Truck bodies Flyovers | Stadiums | Infrastructure constructions | Electrical Towers (SEB/Railways) | Commercial & Industrial houses etc. Metro Rail Projects | Cement Plants

With an endeavor to provide a complete product basket, JSP produces an enhanced range of medium and light structural sections through its state-of-the-art Medium and Light Structural Mill (MLSM). This continuous mill is the first of its kind in India, equipped with advanced rolling mill technology and equipments from DANIELI, ITALY, it has facility of rolling Parallel Flange Beams (150-300mm), Columns (150-200) channels (100-300mm) and Angles (75-200mm).

STEEL GRADES

IS	-	E250, E275, E300, E350, E410, E450
EN	-	S275, S355, S450
ASTM	-	IS equivalent grades
JIS	-	IS equivalent grades
DIN	-	IS equivalent grades
CU	-	IS equivalent grades

PRODUCT RANGE

JSP today rolls more than 49 different sections and over 160 different variants (units-weights) of Structural Steel including Beams, Columns, Sheet Pile, Crane Rails, Channels and Angles conforming to Indian and International series BS/UB/UC/NPB/WPB/IPE/HE.

PARALLEL RANGE BEAMS

UB 203 mm x 133 mm to 610mm x 229mm
NPB/IPE 180mm x 90mm to 600mm x 220mm
WPB/HE 600mm x300mm to 900mm x 300mm

COLUMNS

UC 152 mm x 152 mm to UC 356mm x 406mm

CHANNELS

ISMC 100 – 400mm

ANGLES

Equal Angles (ISA) 75-250mm

SHEET PILE

Larsen Type Sheet Pile of Width 406x170 mm

CRANE RAIL

CR 80, 100, 120, 150

LENGTH

We can supply in specific lengths upto 18m

CERTIFICATES

- ISO 9001 & 14001
- BIS Certification
- Certification for CE marking, mandatory for supply of sections to the construction industry in Europe and other export destinations.
- Certification by the Lloyd's Register UK.
- JSP sections are also certified by ABS for supply to ship building industry.

ADVANTAGES OF STRUCTURAL SECTIONS FROM JSP

- Economy – Steel savings with parallel flange sections under bending as well as axial load conditions are appreciable when compared with tapered flange sections
- Excellent Durability - Due to clean steel quality, it is free from any harmful impurities and inclusions on account of in-house virgin raw material and state-of-art steel refining facilities.
- Superior Weldability – Due to its chemical composition of pure steel and lower carbon equivalent. Product Range – Widest range available lending more flexibility to designers and more cost-effective options to project owners.
- Customised Length – Can be supplied in customised length which has helps in considerable amount of steel wastage reduction at consumer's end.
- Multiple Grades – Wide range of high value grades available providing good opportunity for consumers to opt for rolled sections and avoid built up sections.

MARQUEE PROJECTS CONSTRUCTED WITH JSP STRUCTURAL STEEL

- Statue of Unity (HSS E350 Grade)
- Bogibeel Road cum Rail Bridge (HSS E410CU Copper Grade)
- Dwarka International Convention Center, New Delhi (HSS E350 Grade)
- KIA Motors Plant (HSS E350 Grade)
- MRF Rubber Factory, Chennai (HSS E350 Grade) Vijayvada Airport
- Hybrid Wind Towers from Suzlon (HSS E350 Grade)
- Worli Sea Link, Mumbai
- Dhirubhai Ambani Convention Center, BMC, Mumbai (HSS E450 & E350 Grade)
- Refineries (All HSS E350 Grade)
- High Rise Buildings:
  - Mist Avenue Noida
  - Aplathum – Greater Noida

ADVANTAGES OF HIGH STRENGTH STEEL (HSS):

As a thumb rule every 1 % increase in YS saves 0.5 % of steel as enumerated below:

	HSS GRADE	Inc in YS	Potential savings in usage	Savings in steel cost considering additional prices for high strength steel
Conventional Use is YS 250 MPa	YS 350 MPa	40% over 250 MPa	20%	13.5%
	YS 450 MPa	80% over 250 MPa	40%	26.5%

JSP can supply all steel in High Strength Steel and is customized length.
We can also collaborate to develop YS 550 MPa.

RAILS

JSP manufactures one of the world's longest 121 meter long track rails in the Indian sub-continent. These 'A' class rails ranging from 13m to 121m length will make introduction of high speed rails in India, a reality. The availability of 121 meter long rails ensures a drastic reduction of weld population in Indian rail tracks, resulting in better riding comfort, enhanced safety and substantial savings in costs.

JSP rails are rolled in sections IRS 52, UIC 54 & UIC 60 conforming to Indian Railways specifications IRS T-12 as well as various other international railway specifications. Rails can be supplied in customized finished lengths upto 121 meter and Flash Butt welded rail panels up to a length of 484 meter.

JSP manufactures Head Hardened Rails conforming to IRS T-12 and EN-13674 grades. We have exported our Head Hardened Rails as per EN-13674.

JSP is also a preferred supplier for Crane Rails which finds widespread usage in EOT Cranes as well as for Gantry Crane Operations.

PRODUCT DIMENSIONS

Track Rails

UIC 54 | UIC 60 | 60 E1 | 60 E2 | IRS 52

Crane Rails

CR80 | CR100 | CR120 Sections

STEEL GRADES

Track Rails

IRS T-12-2009	:	Gr 880 & Gr 1080 HH (Class A, Class B, IU)
UIC 860 (O)	:	Gr 900A, 900B, Other as per prior agreement
EN 13674-1	:	R 200, R-220, R-260, R-350 HT

Crane rails

IS3443	:	55 Cl1 | 50 Cl2

CERTIFICATION

- BSI-London for Quality (BS:EN 9002:2000)
- RDSO (Indian Railways)

CERTIFICATION

- RDSO approved mill BVQI, SGS, TUV NORD, LR
- RITES inspected rails

APPLICATIONS

Rail Tracks: High Speed Trains, Sidings of Power Plants, Refineries, Cement Plants, Fertilizers Plants, Steel Plants etc.

Crane Rails: Ports & Harbors, Factories, Mines, Shipyards etc.

PLATES & COILS

PLATE-CUM-COIL MILL AT ANGUL

The Plate mill from Siemens VAI, at Angul (Odisha) produces plates in wide range upto a width of 5 metre. The state of the art plate mill is equipped with latest equipment's and technology like TMCR, MULPIC Cooling, On line and Off-line normalizing, Quenching and Self Tempering, Shearing Units and On-line ultrasonic flaw detection system, Hot and Cold leveler, Vaccum Degassing etc. Angul is having India's largest blast furnace with volume of 4554m^3. Angul Steel plates has capability to produce plates used for stringent applications in various segments like Boiler Quality, Line Pipe, Hydro, Defense etc.

PRODUCT RANGE

Dimension (in mm)	As Rolled	Furnace Normalised	Quenched & Tempered
Thickness	8-150	8-150	8-100
Width	1500-4800	1500-4800	1500-4800
Length	6000-19000	6000-19000	6000-19000

PLATES HEAT TREATMENT DIMENSIONAL CAPABILITY

Equipment	Thickness Range (mm)	Width Range (mm)	Length Range (mm)	Capacity (Tons/Annum)
Normalizing	5-100**	1500-4800	6000-19000	125,000
Quenching	5-100	1500-4800	6000-19000	62,500
Tempering	5-100	1500-4800	6000-19000	137500

***Thickness: >100-150mm shall be discussed on case to case basis.*

TECHNOLOGY DETAILS

Equipment	Make
5 Meter Wide Plate Mill	Primetals Technologies Limited
Reheating Furnace	Fives Stein France -280 MT/Hr.
Roll Shop	TENOVA Pomini Italy
Online Ultrasonic Testing Machine	GE Inspection Technologies Germany
Robotic Universal Testing Machine	Zwick Roell, Germany
Impact Testing Machine & Hardness Testers	Zwick Roell, Germany
Ultrasonic Testing machine	GE Technology
Normalizing Furnace, Quenching & Tempering M/c	LOI Therm process, GERMANY
Plate Leveller	SPCO Japan

PLATES & COILS

PLATE-CUM-COIL MILL AT RAIGARH

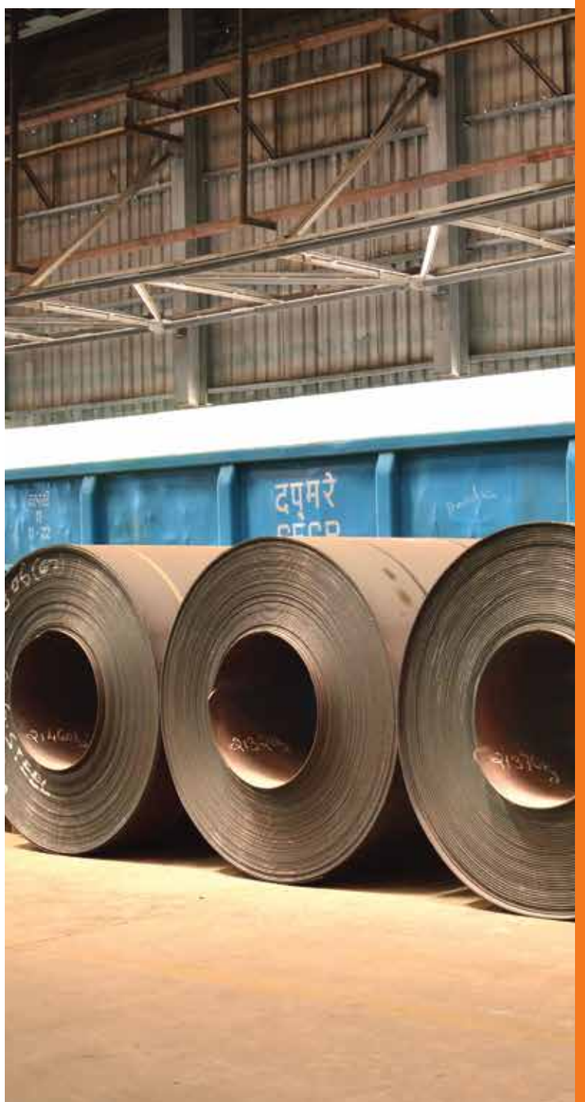
JSP Plate-cum-Coil Mill at Raigarh (Chhattisgarh) produces plates up to 3500mm wide and coils upto 3000mm wide in various steel grades as per Indian and International Standards.Raigarh Plate-cum-Coil mill produces plates and coils complying to IS 2062 specifications upto E450 grades besides a wide range of international standards and steel grades as per BS, EN, ASTM, JIS, LRS, ABS, DNV GL, NK, API etc.

COIL WEIGHT CHART

Maximum coil weight (MT)

Thickness (mm)	Width (mm)				
	1500	2000	2500	2800	3000
5	21				
6	21	21			
7	21	21			
8	21	27	25		
10	21	27	30	31	31
12	21	27	30	31	31
14	21	27	30	31	31
16	21	27	30	31	31
18	21	27	30	31	31
20	21	27	30	31	31
22	21	27	30	31	31
25	21	27	30	31	31

** Coil weight may vary for some grades*



PRODUCT RANGE

DISCRETE PLATE

Dimension	Range (in mm)
Thickness	5 – 100
Width	1500 – 3500
Length	6000 – 13500

CUT TO LENGTH

Dimension	Range (in mm)
Thickness	5 – 25
Width	1500 – 2500
Length	6000 – 12500

HOT ROLLED COILS

Dimension	Range (in mm)
Thickness	5 – 25
Width	1500 – 3000
Coil ID/OD	700/2000

PLATES HEAT TREATMENT DIMENSIONAL CAPABILITY

Dimension	Range (in mm)
Thickness	12 - 100
Width	1500 - 3500
Length	6000 - 12500

Parameter	Range
Capacity	200 Tons per Batch
Operating temperature range	900-950°C
Maximum Furnace temperature	1000°C

GRADES

ASTM	A36, A572, A573, A633, A656, A709, A242 Type I, A588 Gr A, A283/285 Gr A/B/C/D
ASTM A515	Grades 60, 65, 70
ASTM A516	Grades 55, 60, 65, 70
ASTM A 537	Class 1, Class 2
ASTM A387	Gr. 11 Cl.1/Cl.2, Gr. 12 Cl.1/Cl.2, Gr 22 Cl.1/Cl.2
ASTM A 204	A, B, C
ASTM A 131	AH32, DH32, EH32, AH36, DH36, EH36
ASTM A 517	Grade F
EN 10025	S235, S275, S355, S420, S460
EN 10025	S690QL, S890QL, S960QL
EN 10028	P235GH, P295GH, P355GH, P355, P420, P460 (M/ML1/ML2)
IS 10748	Grade 1, Grade2, Grade3, Grade 4, Grade 5
IS 5986	Grade 165, Grade 205, Grade 235, Grade 255, Grade 325, Grade 355, Grade 420, Grade 490, Grade 560
IS 2062	E250, E275, E300, E350, E410, E450, E550
IS 2062	E250 Cu , E275 Cu, E300 Cu, E350 Cu, E410 Cu, E450 Cu
IS2041	R220, R260, R275, R355, H235, H265, H295, H355
IS 2002	Grade 1, Grade 2, Grade 3
LRS/ABS/DNV	A, B, D, AH32, DH32, EH32, AH36, DH36, EH36 and equivalent
API 5L	Gr B, X-42, X-46, X-52, X-56, X-60, X-65, X-70, X-80 (Sweet and Sour service)
API	2H Gr. 50/60, 2W Gr. 50/60, 2Y Gr. 50/60,
Defence	Various Grades
ROCKHARD	400, 450, 500
CAT	1E1247, 1E0170, 1E1863,1E1839, 1E0577

CERTIFICATIONS AND APPROVALS

- ISO Certification
- NABL Certification for Labs
- “Well Known Steel Maker” certification from Central Boiler Board
- API Monogram Certification for Offshore Application
- CE Certification for European country supplies
- PED approval
- BIS approval for Structural and Boiler Grades
- EIL and MECON approval for GAIL & Other Line pipe projects
- ABS/LR/RINA/BV/GL/NKK/IRS Shipbuilding grades approval
- Goa Shipyard and Mazagaon Shipyard Approval
- Vehicle Factory Approval
- Gun Carriage Approval
- NTPC approval for various grades
- BHEL approval for various grades

WIRE RODS

JSP has production facility of Wire rods at its 0.6 MTPA capacity Wire rod mill at Patratu Jharkhand. This mill was supplied by Morgan Construction Company, USA (now known as SIEMENS), the world leader in long product rolling technology Wire rod and Round production of JSP Patratu uses the superior and clean steel billets produced at JSP, Raigarh & Angul through the BF/DRI-EAF/BOF-LRF-VD-CCM route.

JSP is capable of producing a wide range of alloy steel grades with ultra low sulphur and phosphorus levels as per customer's requirements. Billets are cast in state of the art-Continuous casters which are equipped with Electromagnetic Stirring (EMS) and Auto Mould Level Control (AMLC) facilities which minimize centre line segregation and ensure uniform properties in Wire rods as well as Rolled Rounds. State of the art mills, equipped with latest technologies including Morgan Enhanced Temperature Control System and large reduction ratios capability enables JSP to offer special steel products with very close dimensional tolerance, uniform mechanical properties, homogeneity, superiors grain structure and more uniform scale.

PRODUCT SPECIFICATIONS

Rolled Rounds

Size Range

20mm-63mm

Grade

Forging Quality, Alloy Steel, Spring Steel, Low Carbon, Medium Carbon

PRODUCT SPECIFICATIONS

Wire Rod

Size Range

5.2mm, 5.5-25mm

Coil Weight

2.0 to 2.5 MT (nominal)

Coil outside Diameter

1250mm

Coil Inside Diameter

850mm

APPLICATIONS

Fasteners | bolts | rivets | screws | general purpose wires | electrode wires | Industrial wires | agriculture wires | CAQ, bush wires | chain rivet wires | detonator wire | umbrella ribs | upholstery wires | cycle spokes | bead wires | staple pin wire | ACSR | tyre and hose reinforcement wires | prestressed concrete wire | springs and rope wires | needle wires | safety pin wires | card clothing wires | vineyard wires | earth wires | ball bearing | automobile parts like screw | fasteners | bush | spline | socket | connecting rod | shaft | gear | rivets | engine shaft | connecting rod | spindles | gears etc.

GRADES

Low Carbon Grades	SAE 1006/1008/1010/1012/1015/1018/1020,CAQ
Medium Carbon Grades	SAE 1030/1035/1038/1040/1541/EN8D/EN8D(Cr)
High Carbon	HC36/40,HC41/45, HC51/55, HC56/60, HC61/65, HC66/70, TB68, PSC116, SWR52A, SWR62A, SWRH72A, SWR82A
Cold Heading quality	SAE1010/1015/1018/1020, SAE10B21, SAE15B25, SAE15B41, SAE10B35/AISI4135, 19MnB4
Electrode quality Grades	EQ(IS 2879), JSPL Weld(MIG), EM12K, ER90SG, EH14
Free cutting Grades	SAE 12L14, EN1A
Ball Bearing Grades	EN31, SAE52100
Alloy Grades	26MnCr5, 30MnCr5, SCM41SH, SCM420H, SAE8620, SAE4140, SCM435, 55SiCr7, 56SiCr7, 60SiCr7
Spring Steels	SAE9254

ROUND BARS

In accordance with the company's philosophy to expand its product range to offer a complete product basket to the customer, JSP now also offers Round Bars in 20 mm to 63 mm diameters from its steel plant at Patratu, Jharkhand.

The Round Bar mill at Patratu is equipped with latest technology from Morgan Construction Company, USA (now known as Siemens). This mill is operational with advanced rolling equipment such as reducing and sizing mill (RSM), high speed shear, pinch rolls and laying heads along with controlled temperature rolling and controlled cooling to meet the processing requirements of various grades of carbon and alloy steel.

The round bars come with the promise of high quality and dimensional precision. The company continues to improve and innovate to produce the best of quality and develop systems that can deliver its products at the end user's door-step in excellent condition. The quality assurance system equipped with modern equipment and highly skilled work force constantly strives to get the best of products by controlling entire process at every vital point.

GRADES

Round Bar Diameter (mm):	20, 20.64, 21, 22, 23, 23.5, 24, 25, 27.5, 28, 30, 30.5, 32, 34, 36, 40, 45, 56, 56.5, 63
Carbon Steel	
Plain Carbon Steel:	15C8, 35C8, 45C8, 55C8, C30, C35, C38, C40, C45CR, C48, C50, C55, C65, CK35, CK45, En2a, En3, En32B, En42, En43, En43AM, En5, En8, En8DCR, En9, JDMA1045, S20C, S25C, S35C, S38C, S40C, S43C, S45C, S48C, S50C, S53C, S58C, SAE1006, SAE1008, SAE1010, SAE1015, SAE1016, SAE1018, SAE1019, SAE1020, SAE1025, SAE1030, SAE1035, SAE1037, SAE1038, SAE1040, SAE1041, SAE1045, SAE1047, SAE1050, SAE1052, SAE1055.
Carbon Manganese Steel :	En15A, En15B ,SAE1524, SAE1541, 45M5, St52-3
Case Hardening Steel	
Chrome Steel:	15Cr3, 17Cr3
Chrome Manganese Steel:	16MnCr5, 16MnCrS5, 20MnCr5
SCM Category Steel / Chrome- Moly Steel:	SCM415H, SCM418H, SCM420H
Nickel Chrome / Nickel Chrome Moly Steel:	SAE8620H, SAE8622, SAE8625, SAE8822, En351,En352,
En353	
Through Hardening Steel	
Chrome Steel:	40Cr4, 40Cr4B, 40Cr4C, 41Cr4,41Cr4, En18, En18C, En18D
Chrome Moly Steel:	SAE4140
Ball Bearing Steel:	En31, SAE52100
Free/ Semi Free Cutting Steel: Spring Steel:	En15AM, En18DM, En1A, En8DM, En8M En45, En45A, 55SI7, 60SI7, 37MnSI5, SUP11A, SUP9G, 50CrV4, En47, 38XC, 52Cr4Mo2V, 59CrV4, SAE4161H, SUP12,51CrV4

JINDAL PANTHER TMT REBARS

JSP operates a 1.0 MPTA capacity TMT Rebar mill at Patratu, Jharkhand and 1.4 MTPA at Angul. Patratu Bar Mill supplied by the world leaders in rebars production technology M/s. Morgan Construction Company (new Siemens) of USA. This mill produces high strength rebars confirming to IS 1786:2008 Fe500D, Fe550D & Fe600 grade in normal, EQR & CRS quality and Fe500S for seismic zones. TMT production at JSP uses the superior and clean steel billets produced at JSP, Raigarh and Angul through the BF/DRI–EAF/BOF–LRF-CCM route with highly controlled steel chemistry with very low levels of sulphur and phosphorus (less than0.035%), and very low levels of inclusion and tramp elements.

JSP Rebar Mill uses superior HYQST (High Yield Quenching & Self Tempering) TMT technology for production of TMT rebars, HYQST technology produces rebars with high strength, high ductility and bendability and high weldability surpassing the requirement of Fe 500D, FE 550D & Fe 600 rebars. Jindal Panther TMT Rebars are thus able to withstand shock loading and cyclic loading condition making them the choice of the designer for building in high seismic areas.

APPLICATIONS

Jindal Panther TMT rebars have been specifically designed for high strength application. They are ideal for a wide range of usages where high yield strength is required without compromising on the elongation properties, such as:

Flyovers | Dams | Bridges | High Rises | Airports | Metro Projects | Power Plants | Industrial Structures Individual Houses | Other Critical Structures

TMT CHEMICAL & MECHANICAL PROPERTIES

Rebar Grade	BIS FE 500D	Jindal Panther 500D (Typical Values)	BIS Fe500S	JSPL Fe500S	BIS FE500D CRS (As per clause 4.2.Note 3)	Jindal Panther FE 500D CRS (Typical Values)	BIS FE 550D (Typical Values	Jindal Panther 550D	BIS 600	Jindal Panther 600 (Typical Values)
%Carbon (max)	0.25	0.20-0.25	0.25	0.25	0.15	0.11-0.15	0.25	0.22-0.25	0.3	0.25-0.28
% Silicon (max)		0.15-0.25				0.15-0.25		0.15-0.25		0.15-0.25
%Manganese (max)		0.90-1.00				0.80-1.00		0.95-1.05		0.75-0.80
%Sulphur (max)	0.04	0.03	0.04	0.04		0.03	0.04	0.03	0.04	0.03
%Phosphorous (max)	0.04	0.03	0.04	0.04	0.12	0.10	0.04	0.03	0.04	0.03
% Sulphur + Phosphorous (max)	0.075	0.055	0.075	0.075		0.125	0.075	0.055	0.075	0.055
%Carbon Equivalent, CE (max)	0.42	0.35-0.40	0.42	0.42		0.42	0.42	0.31-0.41	0.42	0.41
% Copper						0.35-0.40				
Yield Stress(N/mm2)Min	500	525	500-625	500-625	500	525	550	575	600	610
% Elongation (minimum)	16	18	18	18	16	18	14.5	16	10	12
Tensiole Strength (N/mm2)Min	565	600	625	625	565	600	600	645	645	675
UTS/YS Ratio	1.13	1.15	1.25	1.25	1.13	1.15	1.08	1.12	1.1	1.2

Rebar Grade	BIS Fe 500S	Jindal Panther 500S (Typical Values)
%Carbon (max)	0.25	0.25
% Silicon (max)		
%Manganese (max)		0.040
%Sulphur (max)	0.040	0.040
%Phosphorous (max)	0.040	0.040
% Sulphur + Phosphorous (max)	0.075	0.074
%Carbon Equivalent, CE (max)	0.53	
% Copper		
Yield Stress(N/mm2)Min	500.0	500.0
% Elongation (minimum)	18.0	18.0
Tensile Strength (N/mm2)Min	625	625
UTS/YS Ratio	1.25	1.25

ADVANTAGES OF JINDAL PANTHER TMT REBARS

Excellent Bendability

Due to a controlled manufacturing process Jindal Panther TMT Rebars have excellent bendability. The rebars can be bent around mandrels specified in IS 1786.

Superior Weldability

Jindal Panther TMT Rebars having a low carbon equivalent ensures superior Weldability for all types of welding without preheating.

Higher Bond Strength

Jindal Panther TMT Rebars have uniform and precise ribs which lead to uniform bond strength.

CUT & BEND

Recognizing the need for customized solutions, we have developed the concept of ready to use TMT bars through Cut and Bend bars. The ISPL Cut and Bed rebars enables high customization. Thus giving the customer a ready to use product at site. This fast and efficient service caters to every kind of reinforcement requirement, saves time and reduces material wastage.

Sizes (in mm)

6, 8, 10, 12, 16, 20, 25, 28, 32, 36, 40, 45, 50

* 45 & 50mm are available with prior agreement,
* 6-12mm are available in coil and straight form.

Grades

Fe500/ Fe500D/ F500S/ Fe550D/ Fe600 in normal and corrosion resistant steel grade. Fe 500S for areas prone to seismic activity

Standards

Jindal Panther TMT rebars comply with IS 1786-2008.

WELDMESH

Weld mesh, another pioneering idea from JPS, is a new and efficient product aimed to expedite construction. It is a processed steel product that consists of rebars welded together to from a grid pattern.

Use of Weld mesh reduces construction time considerably as it eliminates activities like cutting, marking and spacing of bars and binding or wires to the bars.

Benefits of Weld mesh are

- Ready to use
- Saves time and labor
- Greater accuracy
- Reduced requirement of storage area
- No scrap generation

JSP Weld mesh is available with following specifications

Diameter of bar used

6mm-12mm

Aperture

50mm-200mm

Width

From 1200mm upto 3200mm

Length

From 2000mm upto 6000mm

FABRICATED STRUCTURES

Time, Precision, Quality & Cost – Jindal Steel & Power structural steel division is abiding by these principles for the past 10 year.

An integrated steel producer with the capability of factory fabrication; JSP exercise stringent quality control right from the raw material stage to actual fabrication.

In addition, JSP also insure the availability of raw material for timely execution or orders.

Marking an identity in Pre Fabricated Structures; JSP proves to be a key market differentiator with:

- One of the largest installed capacity in the country
- State – of – the – art manufacturing facilities
- Easy availability of steel
- Proximity to the market
- Good quality & on-time supplies
- Lowest cost producer & total solution provider

JSP can fabricate structures, as per client's specification drawings, in a wide variety of size.

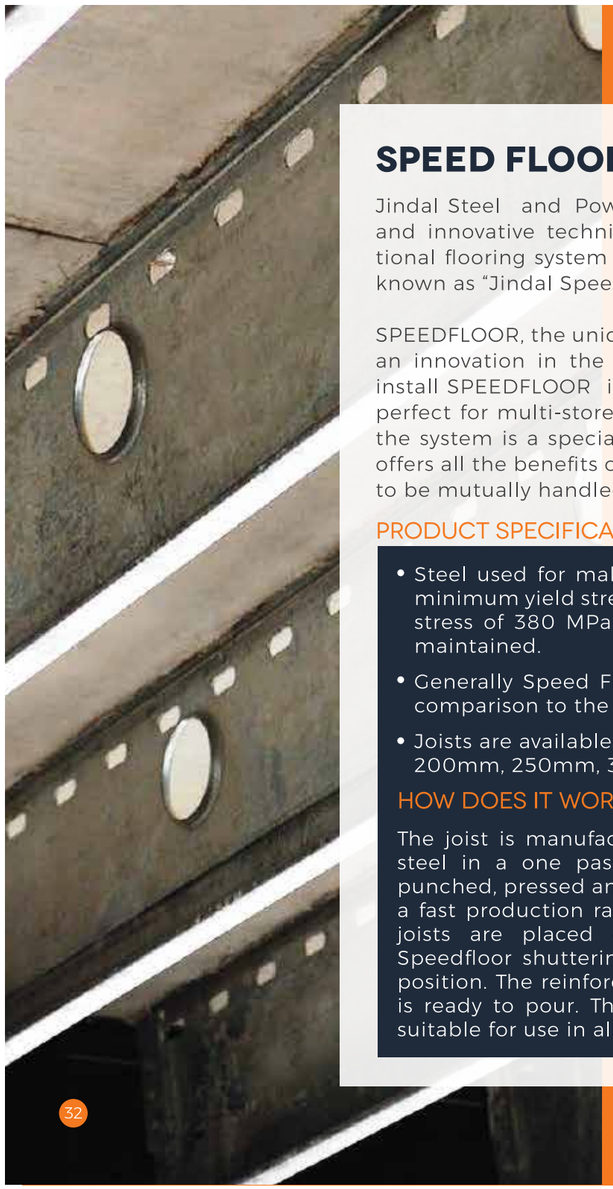
JSP has the capability to fabricate

- H-Beams/ I-Beams
- Star Sections
- Box Sections
- Medium and Heavy fabrication along-with bracings, angles & Trusses.

Facilities at Fabricated Structural Division at Angul & Raigarh

Plant	Covered Area (Sq. Mtr)	Uncovered Area (Sq. Mtr)	Capacity
Punjipatra	60000	182811	8000 MT/Month
Angul	32000	129874	5000 MT/Month
Raigarh	11000	11401	2000 MT/Month

With state-of-the-art facility at three locations namely Raigarh, Angul & Punjipatra (25km away from Raigarh), the company today holds close to 1.8 Lac/Yr capacity which is one of the largest installed capacities in the country so far. JSP aspire to further strengthen their capacity by increasing it to 3 Lac/Yr in the near future.



SPEED FLOOR

Jindal Steel and Power have come up with revolutionary and innovative techniques to eliminate the outdated conventional flooring system with suspended concrete flooring system known as “Jindal Speed floor”.

SPEEDFLOOR, the unique suspended concrete flooring system, is an innovation in the building industry. So quick and easy to install SPEEDFLOOR is a light weight cost effective system that perfect for multi-storey buildings and car parks. At the heart of the system is a specially roll formed, galvanized steel joist that offers all the benefits of open-webbed truss system, easy enough to be mutually handled into place, reducing cranage costs.

PRODUCT SPECIFICATION

- Steel used for making JOIST is of Grade 350 which has a minimum yield strength of 350 MPa and a minimum tensile stress of 380 MPa as well a minimum coating of Z275 is maintained.
- Generally Speed Floor uses a 75mm or 90mm topping in comparison to the other conventional RCC flooring system.
- Joists are available in five different depths as follows: 200mm, 250mm, 300mm, 350mm, 400mm

HOW DOES IT WORK?

The joist is manufactured from pre-galvanized high tensile steel in a one pass roll former, where it is roll formed, punched, pressed and slotted to a high degree of accuracy at a fast production rate. The individually marked, lightweight joists are placed on the support medium where the Speedfloor shuttering system locks the joist into the exact position. The reinforcement is placed and the concrete floor is ready to pour. The Speedfloor composite floor system is suitable for use in all types of construction.

ADVANTAGES

- Speedy Erection
- Cost Effective
- Less Labor intensive
- No need of Propping and require less crane handling
- Safe for use in Seismic sensitive zone
- Easily accommodates services through pre punched holes

APPLICATIONS

- Steel frame structures
- RCC frame buildings
- Poured in situ or precast concrete frames
- Light gauge steel frame
- Conventional structural brick walls constructions etc.

KEY LOCATIONS & SALES NETWORK

CORPORATE OFFICE

Jindal Centre
12, Bhikaiji Cama Place,
New Delhi - 110 066, INDIA.
Tel: +91 11 26188340-50, 4146000
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REGISTERED OFFICE

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Ludhiana
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SCS-132, 1st Floor, Phase 1
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Ranchi
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Ashok Nagar, Ranchi - 834 002,
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WESTERN REGION

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