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Dec'17

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APPROVALS & CERTIFICATIONS



Make your dreams stronger
with **JSW Neosteel.**



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JSW Group

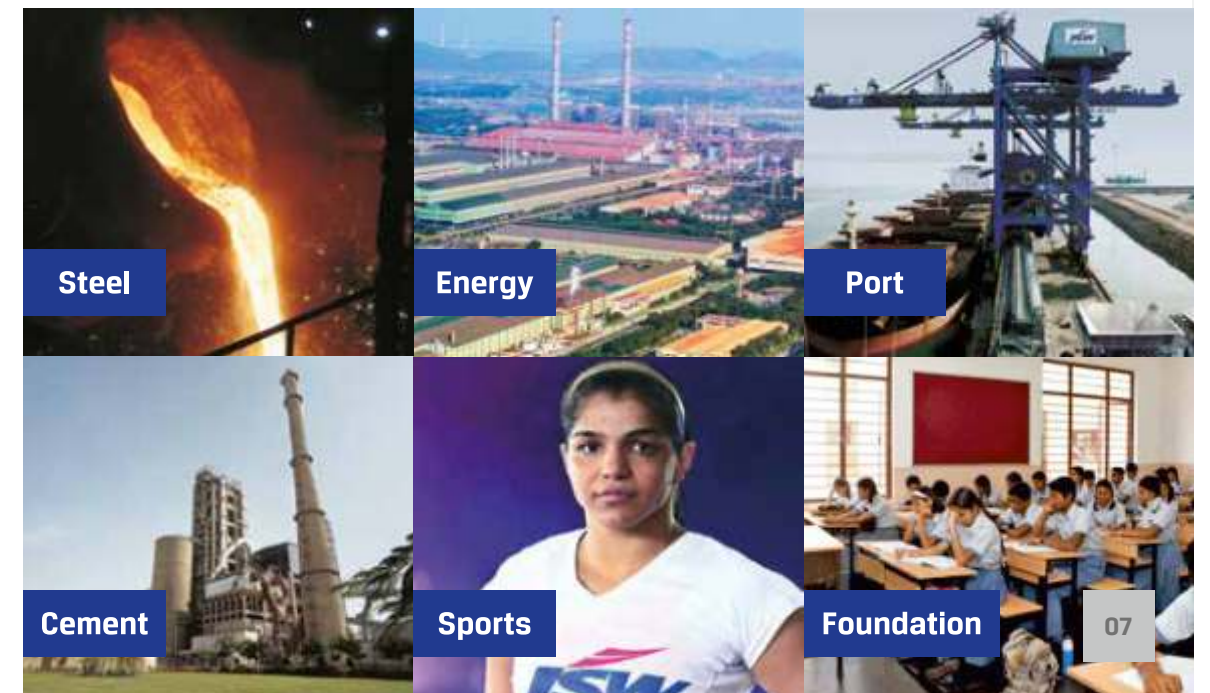
An \$11 billion conglomerate, with presence across India, USA, South America & Africa, the JSW Group is a part of the O.P. Jindal Group with strong footprints across core economic sectors, namely, Steel, Energy, Infrastructure, Cement, also in Ventures and Sports.

The Group is paving the way for India's development as a global superpower. JSW Steel is India's leading steel producer and among the world's most illustrious steel company. The Group is also leading in every sector that it operates in.

JSW Energy is one of the earliest private entrants into the power sector positioned strongly as a full-spectrum integrated power company with a presence across the power sector value chain. It is one of the most efficient Power Company in the country with one of the country's largest open cast mining operation by volume and one of the largest private sector Hydro Operator in India. JSW Cement creates the building blocks of India with its environment friendly products. JSW Infrastructure is contributing to the nation's development by providing world class services to clients through state of- the-art ports, terminals, shipyards and other facilities. JSW Sports runs the Sports Excellence Program (SEP) to identify, nurture and develop Indian athletes to ensure that they bring sporting glory to the nation on the global stage. JSW Sports also runs the Bengaluru Football Club & The Bengaluru Yodhas wrestling team.

The JSW Group is committed to creating more smiles at every step of the journey. JSW Foundation, the Group's CSR and sustainability arm, is in constant pursuit of making life better for communities with its various initiatives in the fields of health, education, livelihood and sports, along with art and culture.

JSW Group is proud to be charting a course to excellence that creates opportunities for every Indian and leads to the creation of a sustainable, dynamic and developed nation.



Steel

Energy

Port

Cement

Sports

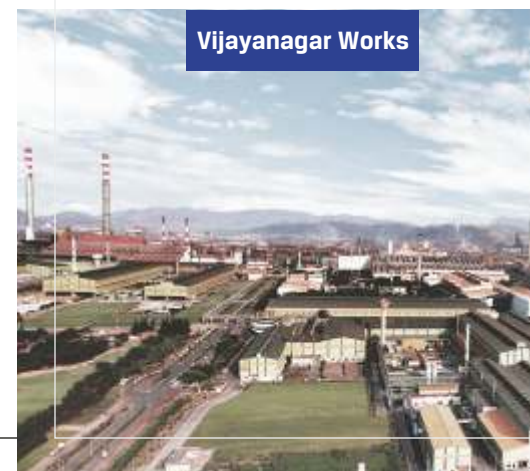
Foundation



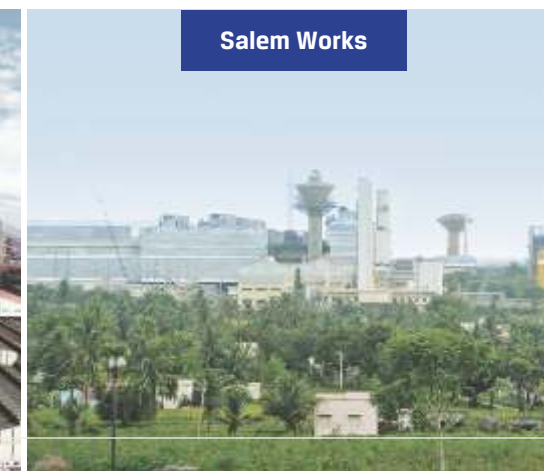
JSW Steel Ltd.

The flagship company of USD 11 billion JSW Group, JSW Steel is one of India's leading integrated steel manufacturers with a capacity of 18 MTPA. It is one of the fastest growing companies in India with a footprint in over 140 countries. With state-of-the-art manufacturing facilities located in Karnataka, Tamil Nadu and Maharashtra, it is recognized for its innovation and quality. JSW offers a wide gamut of steel products that includes Hot Rolled, Cold Rolled, Bare & Pre-painted Galvanized & Galvalume®, TMT Rebars, Wire Rods and Special Steel.

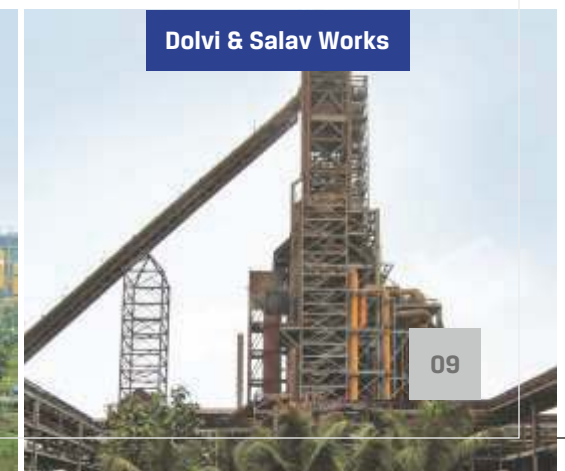
JSW Steel continues to enhance its capabilities to meet the rapidly changing global market needs. To stay on the leading edge of technical advancement, JSW has entered into technological collaboration with JFE Steel Corp, Japan to manufacture high strength and advanced high strength steel for the automobile sector. JSW Steel has also entered into a joint venture with Marubeni-Itochu Steel Inc. Tokyo, to set up a state-of-the-art steel processing centers. To strengthen its global network, the Company has also acquired a Pipe and Plate making steel mill in Baytown, Texas in USA. Going forward, JSW Steel aims to produce 40 million tons of steel annually.



Vijayanagar Works



Salem Works



Dolvi & Salav Works



JSW Steel Coated Products Ltd.

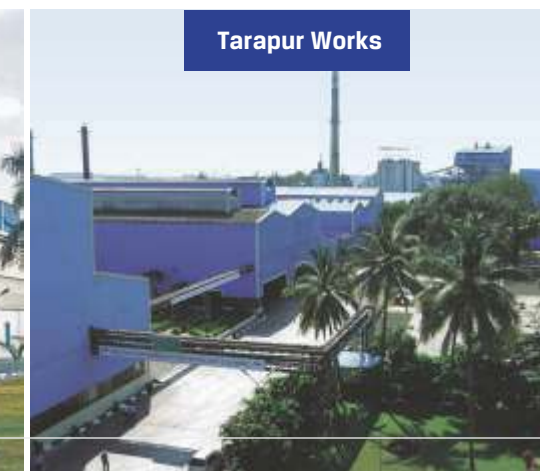
JSW Steel Coated Products Limited is 100% subsidiary company of JSW Steel, having state-of-the-art manufacturing facilities in the state of Maharashtra.

JSW Steel Coated Products Ltd. is India's largest manufacturer and exporter of Coated Steel as well as Colour Coated Steel. The production facilities, Tarapur and Vasind Works, are located in the vicinity of major ports. The company's Kalmeshwar Works is centrally located near Nagpur to serve across regions.

JSW is an ISO 9001: 2008 Certified Organization and the first licensee producer for Galvalume® in India. The Tarapur plant is specialized in manufacturing Ultra-Thin Coated Products. The company is also a manufacturer of appliance grade colour coated products. JSW's Kalmeshwar Works is the first producer of Galvanized and Colour Coated Steel in India. JSW also has established India's first Appliance Grade Line to manufacture Pre Coated and Vinyl Coated Metal.



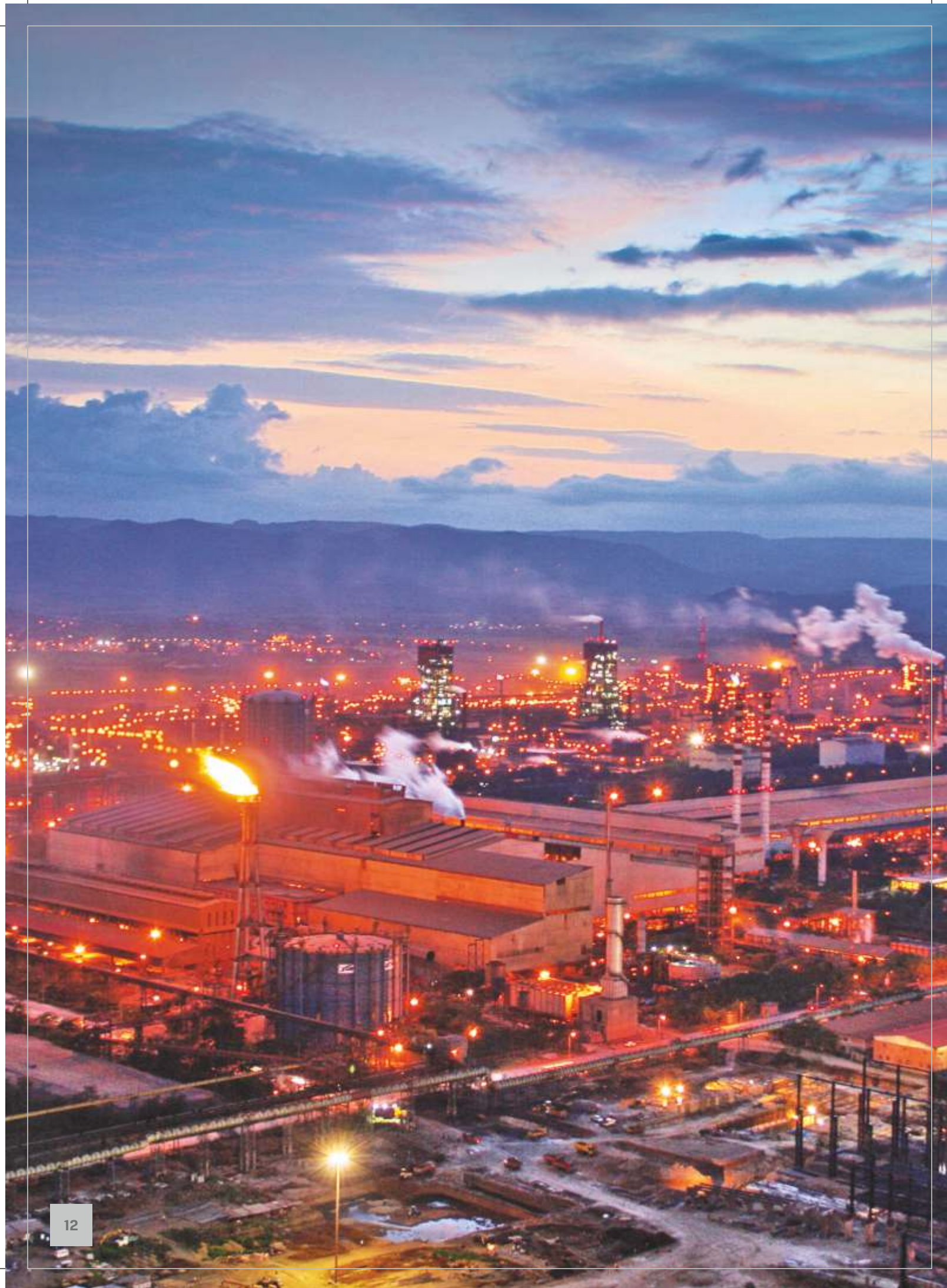
Vasind Works



Tarapur Works



Kalmeshwar Works



Steel Melting Shop

Setting Benchmarks

- First continuous annealing line in India
- Widest Cold Rolling Mill (upto 1870 mm width)
- India's largest Coated Steel producer
- First licensee Galvalume® producer in India
- JSW Steel Salem works is the largest integrated Alloy and Special Steel plant in India
- Widest Hot Strip Mill in India
- India's most modern and largest Vertical Caster-300/260/220 x 2200 mm
- India's only Multi-Radii Bloom caster operational at Salem works
- ZERO EFFLUENT discharge for greener & cleaner environment
- 1.6 million trees planted at Vijayanagar works, transforming the area into a green oasis
- India's largest long steel producer by installed capacity



Blast Furnace - IV

India's largest long Steel
producer by installed capacity

Manufacturing Facilities



Vijayanagar Works

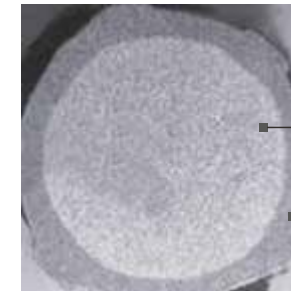
JSW Steel Vijayanagar Works, located at Bellary (Karnataka), is the first integrated steel plant to reach 10 MTPA capacity at a single location in India. It is the first plant in India to use the Corex technology for hot metal production. The state of the art and technical advanced bar rod mills for the production are supplied by Danieli Italy and Morgan USA.

Dolvi Works

Located on the west coast of India, 80 kms from Mumbai. It has a distinction of having the first thin slab caster in India, that runs at a high casting speed of 8 mtrs/minute. The plant caters to several industries including automotive, projects and construction, machinery, LPG cylinder-makers, cold rollers, oil and gas sector and consumer durables.



JSW NEOSTEEL TMT bars are manufactured through primary production process to ensure purity and superior quality. The state of the art and technical advanced bar rod mills for the production are supplied by Danieli Italy and Morgan USA. JSW NEOSTEEL is toughened high strength HYQST (High Yield Quenched and Self Tempered) TMT bar conforming to IS 1786:2008. JSW NEOSTEEL bars are available in Fe500, Fe500D, Fe550D, Fe600 and CRS grades.



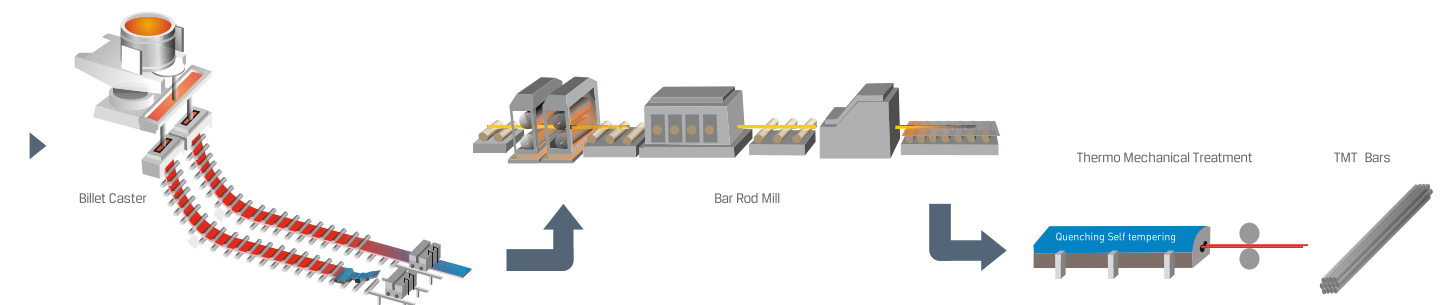
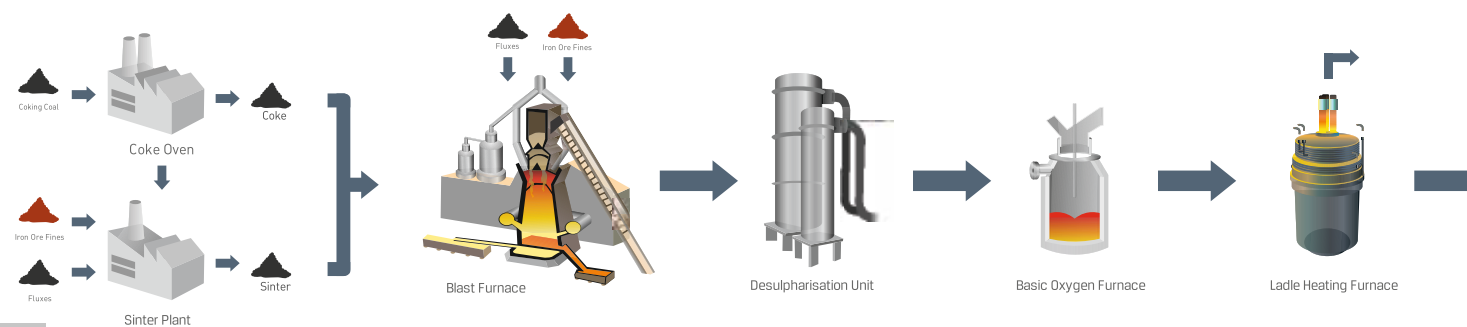
Typical macrostructure of JSW Neosteel

Ferrite and Pearlite Core
Result: Tough Surface and strong fine-grain core

Tempered Martensite Surface Layer

Pathway to perfection

Process route of Blast Furnace - LD Steel making - Ladle Refining - Continous Casting of billets ensures the right and desired quality with minimum tramp elements and sulphur and phosphorus content of 0.005 - 0.035%. Cast billets are hot rolled in state-of-the-art MORGAN and DANIELI rolling mill, which ensures uniform dimensions and properties in each bar. Surface finish of each bar is excellent as the mill employs tungsten carbide rolls against conventional rolls. Each bar is thermomechanically treated. After leaving the last stand of the rolling mill, the bars are quenched (rapid cooling) in water from final rolling temperature of about 1050C. The quenching is partial, only until outer surface layer has been transformed from austenite to martensite. Because of partial quenching, a part of the original heat remains in the core of the steel and on the cooling bed, this migrates towards the surface and results in an automatic self tempering process where the surface layer of martensite is tempered. The resulting tempered - martensite shows improved deformability as compared to quenched martensite. On atmospheric cooling on cooling bed, austenitic core is transformed into ductile ferrite - pearlite. The core of the heat treated bars consists of ferrite and pearlite while strong outer layer consists of martensite.





World-class Rolling Mills

Reheating Furnace

- Walking Beam Furnace with digitally controlled combustion system
- Uniform reheating of Billets gives uniform control on decarburization level in finished products with less scale loss ($\leq 0.5\%$)

Roughing and Intermediate Mill

- Input Billet size of 165 x 165 mm²
- Patented Oval - Round Pass sequence enables higher reduction ratio resulting in better internal soundness & superior quality steel
- Two-way online slitter ensures high productivity for smaller sizes

Vee No Twist Mill

- Two sets of six stand No Twist Mill (NTM) enables controlled temperature rolling to produce superior grain structure



Cooling Bed



Reheating Furnace BRM2

JSW Neosteel

BIS: IS 1786: 2008 Amend. No.3

JSW NEO STEEL BIS Grades: Fe 500D, Fe 500S, Fe 550D & Fe 600

Product Range and Nominal Weight

| Nominal Size (mm) | Tolerance Wt/m | Nominal Wt/m (kg/m) | Nominal Size (mm) | Tolerance Wt/m | Nominal Wt/m (kg/m) |
|-------------------|----------------|---------------------|-------------------|----------------|---------------------|
| 8 | ±7% | 0.395 | 25 | ±3% | 3.850 |
| 10 | ±7% | 0.617 | 28 | ±3% | 4.830 |
| 12 | ±5% | 0.888 | 32 | ±3% | 6.310 |
| 16 | ±5% | 1.580 | 36 | ±3% | 7.990 |
| 20 | ±3% | 2.470 | 40 | ±3% | 9.860 |

Chemical Composition

| Chemical Properties | IS 1786: 2008 Amend.No.3 Fe 500 D | JSW NEO STEEL Fe 500 D * | IS 1786:2008 Amend. No.3 Fe 500 S | JSW NEO STEEL Fe 500 S * | IS 1786:2008 Amend. No.3 Fe 550 D | JSW NEO' STEEL' Fe 550 D * | IS 1786:2008 Amend. No.3 Fe 600 | JSW NEO STEEL Fe 600 * |
|---------------------|-----------------------------------|--------------------------|-----------------------------------|--------------------------|-----------------------------------|----------------------------|---------------------------------|------------------------|
| % C (Max) | 0.25 | 0.25 | 0.32 | 0.32 | 0.25 | 0.25 | 0.30 | 0.30 |
| % S (Max) | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| % P (Max) | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| % S + % P (Max) | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 | 0.075 |
| % N (Max) | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 |
| C.E (Max) | 0.5 | 0.5 | 0.61 | 0.61 | 0.61 | 0.61 | - | - |

* Values meets the requirement of IS 1786:2008, Amnd. No.3, however the actual results will have improved values which will be reflected in MTC.

Mechanical Composition

| Mechanical Properties | IS 1786: 2008 Amend.No.3 Fe 500 D | JSW NEO STEEL Fe 500 D * | IS 1786:2008 Amend. No.3 Fe 500 S | JSW NEO STEEL Fe 500 S * | IS 1786:2008 Amend. No.3 Fe 550 D | JSW NEO' STEEL' Fe 550 D * | IS 1786:2008 Amend. No.3 Fe 600 | JSW NEO STEEL Fe 600 * |
|-----------------------|-----------------------------------|--------------------------|-----------------------------------|--------------------------|-----------------------------------|----------------------------|---------------------------------|------------------------|
| Y.S (Min) Mpa | 500 | 500 | 500 - 650 | 500 - 650 | 550 | 550 | 600 | 600 |
| T.S (Min) Mpa | 565 | 565 | - | - | 600 | 600 | 660 | 660 |
| T.S/Y.S (Min) | 1.10 | 1.10 | 1.25 | 1.25 | 1.08 | 1.08 | 1.06 | 1.06 |
| % El (Min) | 16 | 16 | 16 | 16 | 14.5 | 14.5 | 10 | 10 |
| % Total El (Min) | 5 | 5 | 8 | 8 | 5 | 5 | - | - |

* Values meets the requirement of IS 1786:2008, Amnd. No.3, however the actual results will have improved values which will be reflected in MTC.

Bend Properties

| Grade | | Minimum Mandrel Diameter | |
|------------------------|------------------|--------------------------|------------|
| | | upto and incl. 20 mm | over 20 mm |
| JSW NEO STEEL Fe 500 D | IS 1786 Fe 500 D | 3 d | 4 d |
| JSW NEO STEEL Fe 500 S | IS 1786 Fe 500 S | 3 d | 4 d |
| JSW NEO STEEL Fe 550 D | IS 1786 Fe 550 D | 4 d | 5 d |
| JSW NEO STEEL Fe 600 | IS 1786 Fe 600 | 5 d | 6 d |

Re-Bend Properties

| Grade | | Minimum Mandrel Diameter | |
|------------------------|------------------|--------------------------|------------|
| | | upto and incl. 10 mm | over 10 mm |
| JSW NEO STEEL Fe 500 D | IS 1786 Fe 500 D | 4 d | 6 d |
| JSW NEO STEEL Fe 500 S | IS 1786 Fe 500 S | 4 d | 6 d |
| JSW NEO STEEL Fe 550 D | IS 1786 Fe 550 D | 6 d | 7 d |
| JSW NEO STEEL Fe 600 | IS 1786 Fe 600 | 7 d | 9 d |



ASTM Grades

ASTM A 615/A 615M-06a

JSW NEO STEEL ASTM Grades: Gr 40 & Gr 60

Product Range and Nominal Weight

| Nominal Size (mm) | Tolerance Wt / m | Nominal Wt / m (kg / m) |
|-------------------|------------------|-------------------------|
| 9.5 | -6/+0% | 0.560 |
| 12.7 | -6/+0% | 0.994 |
| 15.9 | -6/+0% | 1.552 |
| 19.1 | -6/+0% | 2.235 |

Chemical Composition

| Chemical Properties | ASTM A 615/A 615M - 06a Gr 40 | JSW NEO STEEL Gr 40 * | ASTM A 615/ A 615M - 06a Gr 60 | JSW NEO STEEL Gr 60 * |
|---------------------|-------------------------------|-----------------------|--------------------------------|-----------------------|
| % P (Max) | 0.06 | 0.06 | 0.06 | 0.06 |

* Values meets the requirement of ASTM a 615/A 615M -06a, however the actual results will have improved values which will be reflected in MTC.

Mechanical Properties

| Grade | Y.S (Min) | T.S (Min) | % El (Min) |
|----------------------|-----------|-----------|------------|
| JSW NEOSTEEL Gr 40 * | 280 | 420 | 12 |
| JSW NEOSTEEL Gr 60 * | 420 | 620 | 9 |

* Values meets the requirement of ASTM a 615/A 615M -06a, however the actual results will have improved values which will be reflected in MTC.

Bend Properties

| Grade | | Min. Mandrel Diameter | | |
|----------------------|--------------------------------|------------------------|--------------------|--------------------|
| | | upto and incl. 15.9 mm | 19.1 mm to 25.4 mm | 28.7 mm to 35.8 mm |
| JSW NEOSTEEL Gr 40 * | ASTM A 615/ A 615M - 06a Gr 40 | 3.5 d | 5 d | 5 d |
| JSW NEOSTEEL Gr 60 * | ASTM A 615/ A 615M - 06a Gr 60 | 3.5 d | 5 d | 7 d |

Advantages JSW Neosteel



Highest level of purity

Manufactured from iron, our TMT bars have the highest grade of purity and lowest sulphur and phosphorous content, making it strong



Consistent quality across the bar

Our HYQST technology ensures a uniform quality across the bar. The proof is a perfect ring that can be seen across any cross sections of the bar



Best bonding with Cement

Well-defined ribs that exceed the standard AR value specifications, ensuring better bonding with cement



Leading Primary Steel Producer

JSW Steel has a production capacity of 18 MTPA



World-Class Steel Maker

Ranked in top 10 world class steelmakers for consecutive nine years



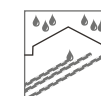
Earthquake Resistant

Excellent combination of strength, bendability, ductility and fatigue resistance is the best match for earthquake prone zones



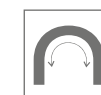
Easy Weldability

Provides excellent weldability due to low carbon content



Anti-Corrosive

Unique & uniform microstructure due to HYQST technology that gives higher corrosion resistance



Easy Bendability

JSW Neosteel can be bent into customized shape in spite of having very high strength due to its inherent microstructure with soft ferrite and pearlite core



Higher Fatigue Resistance

JSW Neosteel is excellent in cyclic loading situations due to uniform & critically designed rib pattern



Green Steel

Plant with zero effluent discharge

JSW Neosteel CRS

JSW NEO STEEL BIS CRS Grades: Fe 500D CRS, Fe 550D CRS & Fe 600 CRS

Product Range and Nominal Weight

| Nominal Size (mm) | Tolerance Wt/m | Nominal Wt/m (kg/m) | Nominal Size (mm) | Tolerance Wt/m | Nominal Wt/m (kg/m) |
|-------------------|----------------|---------------------|-------------------|----------------|---------------------|
| 8 | ±7% | 0.395 | 25 | ±3% | 3.850 |
| 10 | ±7% | 0.617 | 28 | ±3% | 4.830 |
| 12 | ±5% | 0.888 | 32 | ±3% | 6.310 |
| 16 | ±5% | 1.580 | 36 | ±3% | 7.990 |
| 20 | ±3% | 2.470 | 40 | ±3% | 9.860 |

Chemical Composition

| Chemical Properties | IS 1786:2008 Amnd. No.3 Fe 500 D CRS | JSW NEO STEEL Fe 500 D CRS * | IS 1786:2008 Amnd. No.3 Fe 550 D CRS | JSW NEO STEEL Fe 550 D CRS * | IS 1786:2008 Amnd. No.3 Fe 600 CRS | JSW NEO STEEL Fe 600 CRS * |
|-----------------------|--------------------------------------|------------------------------|--------------------------------------|------------------------------|------------------------------------|----------------------------|
| % C (Max) | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 |
| % S (Max) | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| % P (Max) | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| (Cu+Cr+Ni+Mo+P)% min. | 0.40% | 0.40% | 0.40% | 0.40% | 0.40% | 0.40% |
| % N (Max) | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 |
| C.E (Max) | 0.50 | 0.50 | 0.61 | 0.61 | - | - |

Note: (Cu+Cr+Ni+Mo+P)% : these alloying elements either individually or in combination should be > 0.40%
 'P' is added as alloying element, accordingly 'C' shall be 0.15% max.

* Values meets the requirement of IS 1786:2008, Amnd. No.3, however the actual results will have improved values which will be reflected in MTC.

Mechanical Composition

| Chemical Properties | IS 1786:2008 Amnd. No.3 Fe 500 D CRS | JSW NEO STEEL Fe 500 D CRS * | IS 1786:2008 Amnd. No.3 Fe 550 D CRS | JSW NEO STEEL Fe 550 D CRS * | IS 1786:2008 Amnd. No.3 Fe 600 CRS | JSW NEO STEEL Fe 600 CRS * |
|---------------------|--------------------------------------|------------------------------|--------------------------------------|------------------------------|------------------------------------|----------------------------|
| Y.S (Min) Mpa | 500 | 500 | 550 | 550 | 600 | 600 |
| T.S (Min) Mpa | 565 | 565 | 585 | 585 | 660 | 660 |
| T.S/Y.S (Min) | 1.10 | 1.10 | 1.08 | 1.08 | 1.06 | 1.06 |
| % El (Min) | 16 | 16 | 14.5 | 14.5 | 10 | 10 |
| % Total El (Min.) | 5 | 5 | 5 | 5 | - | - |

* Values meets the requirement of IS 1786:2008, Amnd. No.3, however the actual results will have improved values which will be reflected in MTC.



Bend Properties

| Grade | | Minimum Mandrel Diameter | |
|----------------------------|----------------------|--------------------------|------------|
| | | upto and incl. 20 mm | over 20 mm |
| JSW NEO STEEL Fe 500 D CRS | IS 1786 Fe 500 D CRS | 3 d | 4 d |
| JSW NEO STEEL Fe 550 D CRS | IS 1786 Fe 550 D CRS | 4 d | 5 d |
| JSW NEO STEEL Fe 600 CRS | IS 1786 Fe 600 CRS | 5 d | 6 d |

Re-Bend Properties

| Grade | | Minimum Mandrel Diameter | |
|----------------------------|----------------------|--------------------------|------------|
| | | upto and incl. 10 mm | over 10 mm |
| JSW NEO STEEL Fe 500 D CRS | IS 1786 Fe 500 D CRS | 4 d | 6 d |
| JSW NEO STEEL Fe 550 D CRS | IS 1786 Fe 550 D CRS | 6 d | 7 d |
| JSW NEO STEEL Fe 600 CRS | IS 1786 Fe 600 CRS | 7 d | 9 d |



BS Grades

BS 4449: 2005+A3: 2016

JSW NEO STEEL BS Grade: B500B

Product Range and Nominal Weight

| Nominal Size (mm) | Tolerance Wt / m | Tolerance Wt / m | Tolerance Wt / m | Tolerance Wt / m | Tolerance Wt / m |
|-------------------|------------------|------------------|------------------|------------------|------------------|
| 8 | ±6% | 0.395 | 25 | ±4.5% | 3.850 |
| 10 | ±4.5% | 0.617 | 32 | ±4.5% | 6.310 |
| 12 | ±4.5% | 0.888 | 40 | ±4.5% | 9.860 |
| 16 | ±4.5% | 1.580 | | | |
| 20 | ±4.5% | 2.470 | | | |

Chemical Composition

| Chemical Properties | BS 4449:2005+A3: 2016 B500B | JSW NEO STEEL B500B * |
|---------------------|-----------------------------|-----------------------|
| % C (Max) | 0.22 | 0.22 |
| % S (Max) | 0.05 | 0.05 |
| % P (Max) | 0.05 | 0.05 |
| % N (Max) | 0.012 | 0.012 |
| % Cu (Max) | 0.80 | 0.80 |
| C.E (Max) | 0.50 | 0.50 |

* Values meets the requirement of BS 4449:2005+A3:2016, however the actual results will have improved values which will be reflected in MTC.

Mechanical Properties

| Grade | Y.S Mpa | T.S (Min) Mpa | T.S/Y.S (Min) | % Agt (Min) |
|-----------------------------|-----------|---------------|---------------|-------------|
| BS 4449:2005+A3: 2016 B500B | 500 - 650 | 540 | 1.08 | 5 |
| JSW NEO STEEL B500B* | 500 - 650 | 540 | 1.08 | 5 |

* Values meets the requirement of BS 4449:2005+A3:2016, however the actual results will have improved values which will be reflected in MTC.

Re-Bend Properties

| Grade | Grade | Max. Mandrel Diameter | |
|---------------------|--------------------|-----------------------|------------|
| | | upto and incl. 16 mm | over 16 mm |
| JSW NEO STEEL B500B | BS 4449:2005 B500B | 3.5 d | 5 d |



Kakrapar Nuclear-Plant



Metro Projects -
Delhi, Chennai, Hyderabad, Kolkata, Lucknow, Kochi



Yamuna Expressway



V. O. Chidambaram Port,
Tuticorin, Tamil Nadu



Infosys, Bengaluru



Eastern Freeway, Mumbai

The Ultimate Test

JSW Neosteel finds wide applications for general concrete reinforcements in

- Residential Buildings
- Airports and Metro Rail
- Roads, Bridges and Flyovers
- Commercial Complexes
- Dams
- Industrial Structures
- Power Plants



Indira Gandhi International Airport, Terminal 3, Delhi

Our Esteemed Clients



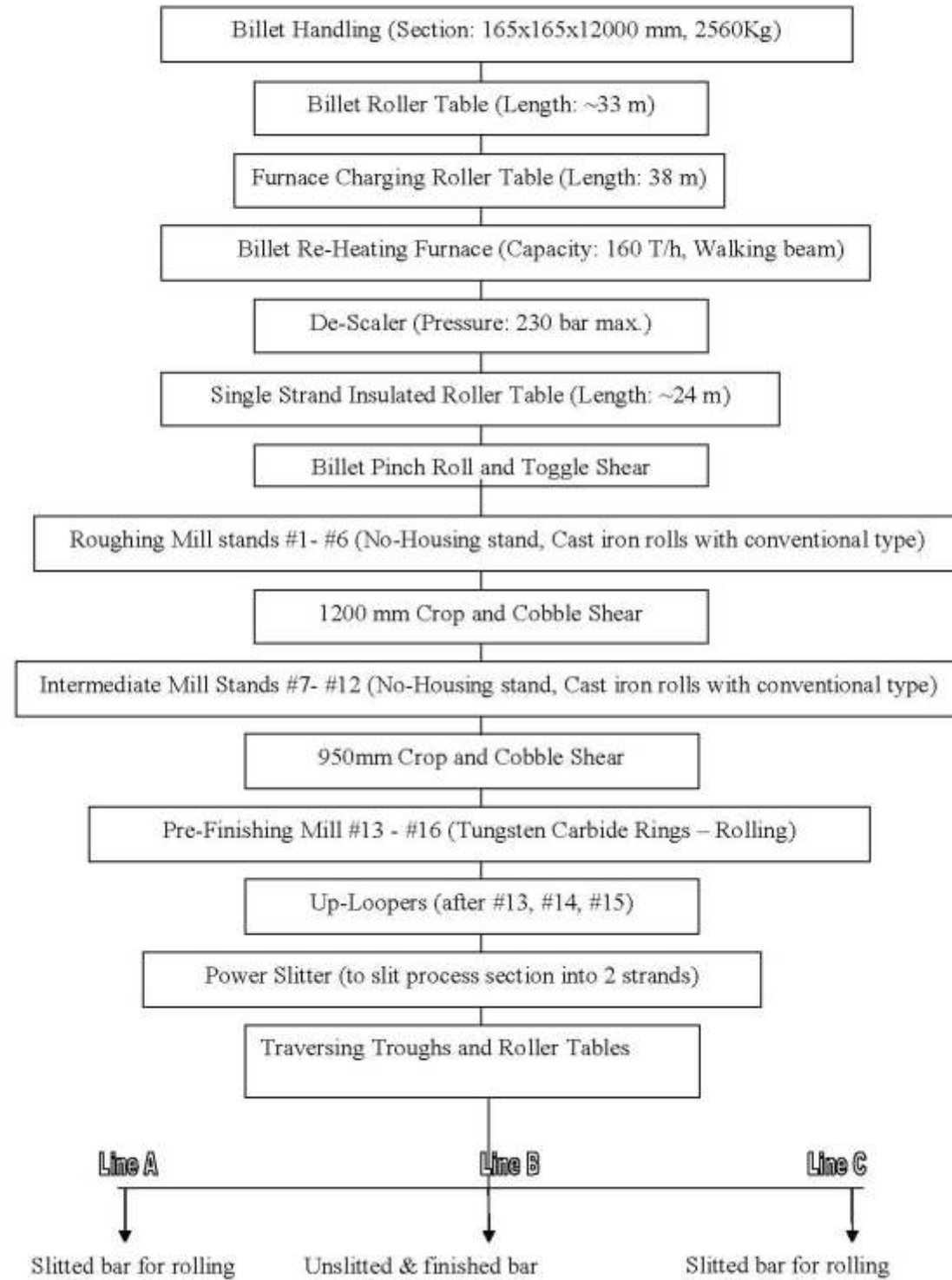
Godrej & Boyce Mfg. Co. Ltd.



BAR MIL PROCESS FLOW (LONG PRODUCTS)



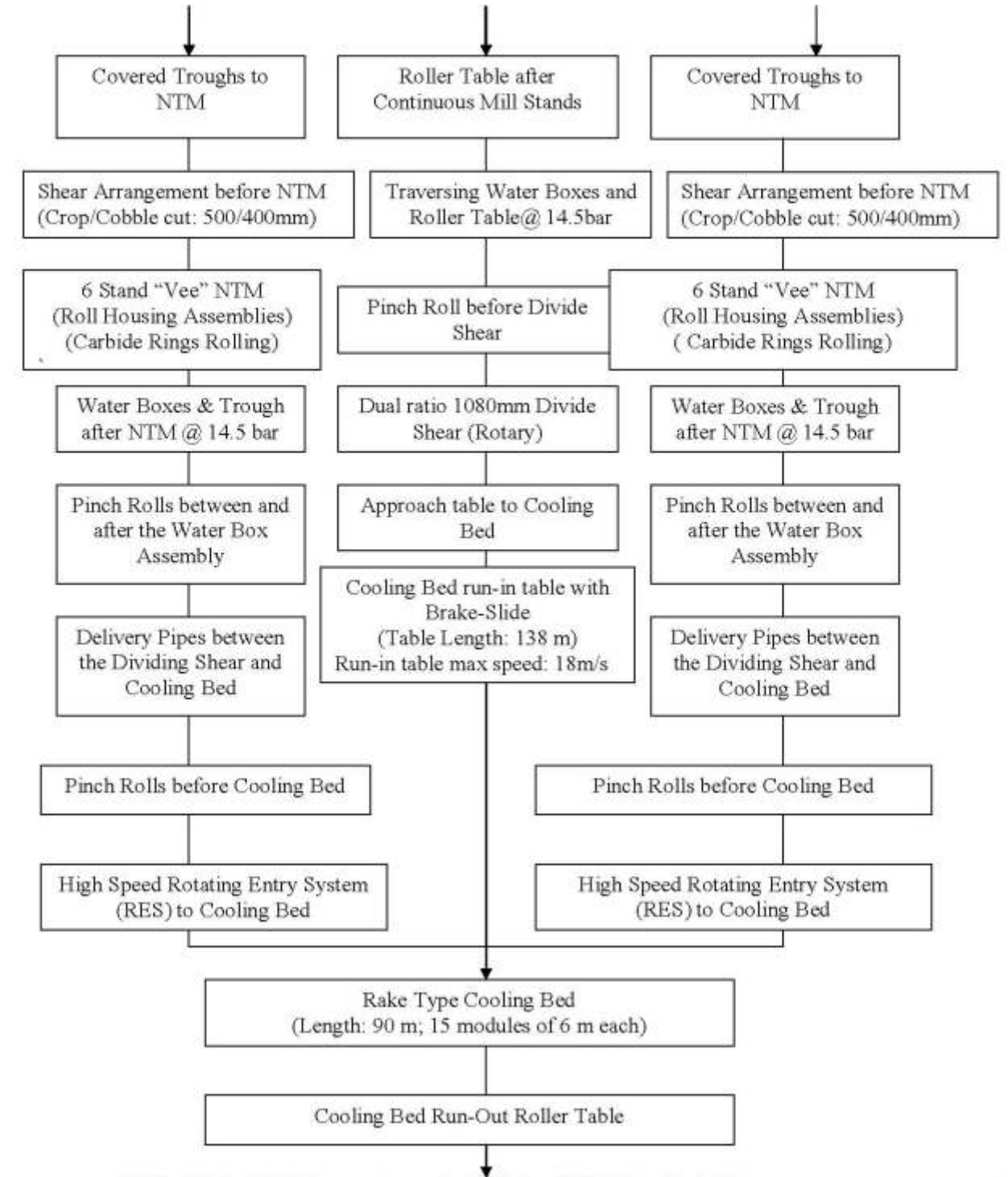
JSW Steel Limited- LP Mills - BAR MILL PROCESS FLOW



BAR MIL PROCESS FLOW (LONG PRODUCTS)

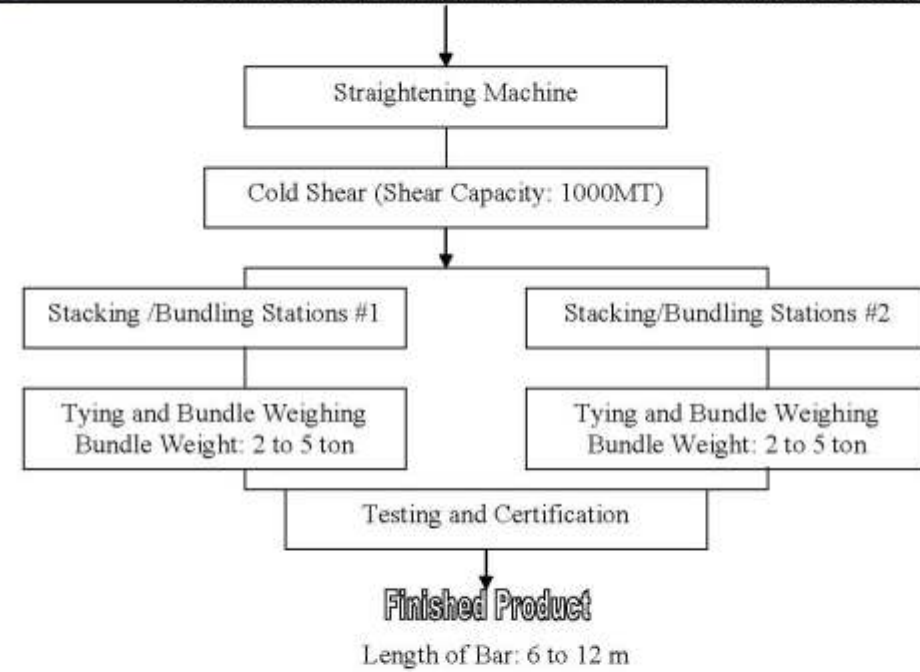


JSW Steel Limited- LP Mills - BAR MILL PROCESS FLOW



BAR MILL PROCESS FLOW (LONG PRODUCTS)

JSW Steel Limited- LP Mills - BAR MILL PROCESS FLOW



Salient Features

Mill Supplier: MORGAN, USA. Max. Speed : 38 m/sec (with RES)
 Capacity : 1 MTPA No. of stands: 22
 Furnace rate: 160 t/h Steel Grades: Structural Steel grades
 Bundle Weight: 2 – 5 tons Yield: 97%
 Rolling hours proposed: 6700 hours Stand #1 entry temperature: 1130° C
 Mill rolling rate: 211.8 t/h @ 100 % efficiency (without gap & yield)
 Additional Features:
 Inline straightening for structural products high speed delivery system onto cooling bed in case of smaller products.

Input: Dimensions: 165x165x12000 mm

Weight : 2559 – 2735 Kg

Output: Product Mix:

Φ 8 – 40mm: TMT Rebar (HYQT) → Structural Steel
 Φ 20 – 63mm: Plain Round
 Φ 40 – 63mm: Round cornered squares (RCS) } En Forging Steel
 50x50x5 – 90x90x9 mm: Equal Angles → Structural Steel

Product Mix:

| Products | Size (mm) | Production(T/y) | Grade |
|-------------|---|-----------------|------------------------|
| TMT Rebar | 8,10,12,16,20,25,28,32,36,40 | 720,000 | Fe 415, Fe500/550, CR1 |
| Plain Round | 20,20.5,21,23.5,24,27.5,32,34,36,40,45,50,56.5,63 | 90,000 | FCS, AS, CS, MS |
| RCS | 40,45,50,56.5,63 | 90,000 | FCS, AS, CS, MS |
| Angles | 50,65,75,90 | 100,000 | |

ISO 9001 CERTIFICATE

Certificate

Standard **ISO 9001:2008**

Certificate Registr. No. **01 100 99572**

TÜV Rheinland Cert GmbH certifies:

Certificate Holder: **JSW Steel Limited**
 Vijayanagar Works, P. O. Vidyanagar,
 Toranagallu, Dist. Bellary – 583 275,
 Karnataka, India.

Scope: **Manufacturing of Flat and Long Products, including Hot Rolled, Cold Rolled, Wire Rods, Bar Rods, Slabs and Billets through Integrated Steel Plant Operations.**

An audit was performed, Report No. 99572. Proof has been furnished that the requirements according to ISO 9001:2008 are fulfilled.
 The due date for all future audits is 31 - 08 (dd.mm).

Validity: The certificate is valid from **2014-02-18 until 2016-08-31**.
 First Certification 1999.



DGA-ZM-58-95-00

2014-02-18

JSW

TÜV Rheinland Cert GmbH
 Am Grauen Stein · 51106 Köln

www.tuv.com

TÜVRheinland®
 Precisely Right.

ISO 14001 CERTIFICATE

Certificate

Standard **ISO 14001:2004 + Cor. 1:2009**

Certificate Registr. No. **01 104 010751**

TÜV Rheinland Cert GmbH certifies:

Certificate Holder: **JSW Steel Limited**
Vijayanagar Works, P. O. Vidyanagar,
Toranagallu, Dist. Bellary – 583 275,
Karnataka, India.

Scope: **Manufacturing of Flat and Long Products,
including Hot Rolled, Cold Rolled, Wire Rods,
Bar Rods, Slabs and Billets through Integrated
Steel Plant Operations**

An audit was performed, Report No. 010751. Proof has been
furnished that the requirements according to ISO 14001:2004 +
Cor. 1:2009 are fulfilled.
The due date for all future audits is 23 - 09 (dd.mm).

Validity: The certificate is valid from **2014-02-18 until 2016-12-23**.
First Certification 2001.



DGA-ZM-58-95-60

2014-02-18

Frankfurt 22

TÜV Rheinland Cert GmbH
Am Grauen Stein · 51105 Köln

www.tuv.com

 **TÜVRheinland®**
Precisely Right.

BS OHSAS 180001 CERTIFICATE

Certificate

Standard **BS OHSAS 18001:2007**

Certificate Registr. No. **01 113 010751**

TÜV Rheinland Cert GmbH certifies:

Certificate Holder: **JSW Steel Limited**
Vijayanagar Works, P. O. Vidyanagar,
Toranagallu, Dist. Bellary – 583 275,
Karnataka, India.

Scope: **Manufacturing of Flat and Long Products,
including Hot Rolled, Cold Rolled, Wire Rods,
Bar Rods, Slabs and Billets through Integrated
Steel Plant Operations.**

An audit was performed, Report No. 010751. Proof has been
furnished that the requirements according to BS OHSAS
18001:2007 are fulfilled.
The due date for all future audits is 29 - 10 (dd.mm).

Validity: The certificate is valid from **2014-02-18 until 2016-12-22**.
First Certification 2004.



DGA-ZM-58-95-64

2014-02-18

Frankfurt 22

TÜV Rheinland Cert GmbH
Am Grauen Stein · 51105 Köln

www.tuv.com

 **TÜVRheinland®**
Precisely Right.

ISO 9001 CERTIFICATE

Certificate

Standard: **ISO 9001:2008**

Certificate Registr. No. **01 100 99572**

Certificate Holder: **JSW Steel Limited**
Vijaynagar Works P. O., Vidhya Nagar,
Toranagallu, Dist. Bellary - 583 275,
Karnataka, India.

Scope: **Manufacture of Flat and Long Products including Hot Rolled, Cold Rolled, Wire Rods, Bar Rods, Angles, Slabs, Billets, Galvanized (GI), Galvannealed (GA), Non-oriented Fully Processed Coils and Sheets through Integrated Plant Operations.**

Proof has been furnished by means of an audit that the requirements of ISO 9001:2008 are met.
The due date for all future audits is 23 - 10 (dd.mm).

Validity: The certificate is valid from **2016-12-23 until 2018-09-14**.
First Certification 1999-08-25.

 **DAKKS**
Deutsche
Akkreditierungsstelle
D-ZM-16031-04-00
2016-10-18



TÜV Rheinland Cert GmbH
Am Grauen Stein - 51105 Köln

The validity of this certificate is subject to timely completion of Surveillance audits as agreed in the Contract.
The Validity of the Certificate can be verified under www.tuv.com with the Identification No. 1104210751

CIN: U72601KA1996PT022093

www.tuv.com

 **TÜVRheinland®**
Precisely Right.

ISO 14001 CERTIFICATE

Certificate

Standard: **ISO 14001:2004**

Certificate Registr. No. **01 104 010751**

Certificate Holder: **JSW Steel Limited**
Vijaynagar Works P. O., Vidhya Nagar,
Toranagallu, Dist. Bellary - 583 275,
Karnataka, India.

Scope: **Manufacture of Flat and Long Products including Hot Rolled, Cold Rolled, Wire Rods, Bar Rods, Angles, Slabs, Billets, Galvanized (GI), Galvannealed (GA), Non-oriented Fully Processed Coils and Sheets through Integrated Plant Operations.**

Proof has been furnished by means of an audit that the requirements of ISO 14001:2004 are met.

The due date for all future audits is 23 - 09 (dd.mm).

Validity: The certificate is valid from **2016-12-23 until 2018-09-14**.
First Certification 2001-06-27.

 **DAKKS**
Deutsche
Akkreditierungsstelle
D-ZM-16031-04-00
2016-10-18



TÜV Rheinland Cert GmbH
Am Grauen Stein - 51105 Köln

The validity of this certificate is subject to timely completion of Surveillance audits as agreed in the Contract.
The Validity of the Certificate can be verified under www.tuv.com with the Identification No. 1104010751

CIN: U72601KA1996PT022093

www.tuv.com

 **TÜVRheinland®**
Precisely Right.

BS OHSAS 18001 CERTIFICATE

Certificate

Standard **BS OHSAS 18001:2007**

Certificate Registr. No. **01 113 010751**

Certificate Holder: **JSW Steel Limited**
 Vijaynagar Works P. O., Vidhya Nagar,
 Toranagallu, Dist. Bellary - 583 275,
 Karnataka, India.

Scope: **Manufacture of Flat and Long Products including Hot Rolled, Cold Rolled, Wire Rods, Bar Rods, Angles, Slabs, Billets, Galvanized (GI), Galvannealed (GA), Non- oriented Fully Processed Coils and Sheets through Integrated Plant Operations.**

Validity: **Proof has been furnished by means of an audit that the requirements of BS OHSAS 18001:2007 are met. The due date for all future audits is 29 - 10 (dd.mm).**
 The certificate is valid from **2016-12-23** until **2019-12-22**.
 First Certification 2004-09-21.



Bankappa D

TÜV Rheinland Cert GmbH
 Am Grauen Stein · 51105 Köln

The validity of this certificate is subject to timely completion of surveillance audits as agreed in the Contract.
 The Validity of the Certificate can be verified under www.tuv.com with the identification No. 110410751

CIN: U7201KA1866PTC020633

www.tuv.com



ISO 9001-2015 CERTIFICATE



CERTIFICATE

Management system as per
ISO 9001 : 2015

In accordance with TÜV NORD CERT procedures, it is hereby certified that

JSW STEEL LIMITED (DOLVI WORKS)
 Geetapuram, Dolvi, Taluka - Pen,
 Dist.: Raigad - 402 107, Maharashtra,
 India
 and other location as per Annexure

applies a management system in line with the above standard for the following scope

Manufacture and Supply of Steel Billet, Hot Rolled Flat & Long Products Including Coils, Slits, Plates, Sheets & Bar / Rods For Industrial, Construction, Structural, Pipes, Tubes, Cold Rolling Applications and Indian Railways Grade : IRS M-41, Pig Iron, Sponge Iron, Sinter, Lime, Dolomite, Coke & Iron Ore Pellets through Integrated Steel Plant Operations

Certificate Registration No. **44 100 135105**
 Audit Report No. **2.5-6099/2013**

Valid until **21.09.2019**
 Valid from **22.09.2016**
 Initial certification **23.10.2013**

S.K. Kulkarni

Certification Body
 at TÜV NORD CERT GmbH

Issue **25.07.2016**
 Place : **Mumbai**

This certification was conducted in accordance with the TÜV NORD CERT auditing and certification procedures and is subject to regular surveillance audits.

TÜV NORD CERT GmbH Langemarckstrasse 20 45141 Essen www.tuev-nord-cert.com

TUV India Pvt. Ltd., 801, Raheja Plaza - 1, L.B.S. Marg. Ghatkopar (W), Mumbai - 400 086, India www.tuv-nord.com/in



ISO 14001- 2015 CERTIFICATE



CERTIFICATE

Management system as per
ISO 14001 : 2015

In accordance with TÜV NORD CERT procedures, it is hereby certified that

JSW STEEL LIMITED (DOLVI WORKS)
Geetapuram, Dolvi, Taluka-Pen,
Dist.: Raigad - 402 107, Maharashtra,
India

applies a management system in line with the above standard for the following scope

Manufacture of Steel Billet, Hot Rolled Flat & Long Products including Coils, Slits, Plates, Sheets & Bar / Rods For Industrial, Construction, Structural, Pipes, Tubes, Cold Rolling Applications and Indian Railways Grade : IRS M-41, Pig Iron, Sponge Iron, Sinter, Lime, Dolomite, Coke & Iron Ore Pellets through Integrated Steel Plant Operations

| | |
|---|--|
| Certificate Registration No. 44 104 135105 Audit Report No. 2.5- 0999/2000 | Valid until 12.09.2019 Valid from 13.09.2016 Initial certification 13.09.2013 |
|---|--|

SKKulka


| | |
|---|--|
| Certification Body at TÜV NORD CERT GmbH | Issue 25.07.2016 Place : Mumbai |
|---|--|

This certification was conducted in accordance with the TÜV NORD CERT auditing and certification procedures and is subject to regular surveillance audits.

TÜV NORD CERT GmbH Langemarckstrasse 20 45141 Essen www.tuev-nord-cert.com
TUV India Pvt. Ltd., 801, Raheja Plaza – 1, L.B.S. Marg, Ghatkopar (W), Mumbai - 400 086, India www.tuv-nord.com/in




BIS LICENCE CERTIFICATE



भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS
बेंगलूरु शाखा कार्यालय
BENGALURU BRANCH OFFICE

Address : Peenya Industrial Area, 1st Stage,
Bengaluru-Tumkur Road,
Bengaluru-560058
Phones : 080-28394955, 28394956
Fax : 080-28398841
E-mail : bnbo@bis.org.in
Web : <http://www.bis.org.in>

ENDORSEMENT FOR CHANGE/S IN THE LICENCE

ATTACHMENT TO LICENCE NO. CM/L- 6965397

| CML NO | NAME OF THE LICENSEE WITH ADDRESS | PRODUCT | IS NO |
|---------|---|--|----------------|
| 6965397 | JSW STEEL LTD TORANAGALLU P.O VIDYANAGAR BELLARY-583275 Karnataka | High strength deformed steel bars and wires for concrete reinforcement | IS 1786 : 2008 |

ENDORSEMENT NO. 1 Dated **7 JUN 2010**

The following additional sizes and grades have been included in Column (2) of the first schedule and column (1) of the Second Schedule of the Licence alongwith the Standard Mark in Column (1) of First Schedule with effect from Third June Two Thousand and Ten.

- Sizes 36 mm and 40 mm, TMT Processed, Grade Fe 415 and Fe 500
- Sizes 8 mm to 40 mm, TMT Processed, Grade Fe 500D

Other terms and conditions of Licence remain the same.

C. R. Rajendra
(C R RAJENDRA)
SCIENTIST- F & HEAD

OHSAS 18001-2007 CERTIFICATE



CERTIFICATE

Management system as per
BS OHSAS 18001 : 2007

In accordance with TÜV NORD CERT procedures, it is hereby certified that:

JSW STEEL LIMITED (DOLVI WORKS)
Geetapuram, Dolvi, Taluka-Pen,
Dist.: Raigad - 402 107, Maharashtra,
India

applies a management system in line with the above standard for the following scope

Manufacture of Steel Billet, Hot Rolled Flat & Long Products including Coils, Slits, Plates, Sheets & Bar / Rods For Industrial, Construction, Structural, Pipes, Tubes, Cold Rolling Applications and Indian Railways Grade : IRS M-41, Pig Iron, Sponge Iron, Sinter, Lime, Dolomite, Coke & Iron Ore Pellets through Integrated Steel Plant Operations

Certificate Registration No. 44 116 135105
Audit Report No. 2.5-6099/2013

Valid until 12.09.2019
Valid from 13.09.2016
Initial certification 23.11.2011

S.K. Kulkarni

Certification Body
at TÜV NORD CERT GmbH


Issue 25.07.2016
Place : Mumbai

This certification was conducted in accordance with the TÜV NORD CERT auditing and certification procedures and is subject to regular surveillance audits.

TÜV NORD CERT GmbH Langemarckstrasse 20 45141 Essen www.tuev-nord-cert.com
TUV India Pvt. Ltd., 801, Raheja Plaza - 1, L.B.S. Marg, Ghatkopar (W), Mumbai - 400 086, India www.tuv-nord.com/in



BIS LICENCE CERTIFICATE



भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS
बेंगलूरु शाखा कार्यालय
BENGALURU BRANCH OFFICE

ADDRESS: P. Chetty Industrial Area, 1st Stage,
Bengaluru-Tumkur Road,
Bengaluru-560058
Phones: 080-28394955, 28394956
Fax: 080-28398841
E-mail: bnbo@bis.org.in
Web: <http://www.bis.org.in>

ENDORSEMENT FOR CHANGES IN THE LICENCE

ATTACHMENT TO LICENCE NO. CM/L- 6965397

| CML NO | NAME OF THE LICENSEE WITH ADDRESS | PRODUCT | IS NO |
|---------|---|--|----------------|
| 6965397 | JSW STEEL LTD TORANAGALLU P.O VIDYANAGAR BELLARY-583275 Karnataka | High strength deformed steel bars and wires for concrete reinforcement | IS 1786 : 2008 |

ENDORSEMENT NO. 3 Dated *2 FEB 2012*

The following additional (sizes/types/grades etc.) has (have) been included in Columns(2) of the first schedule and column (1) of the the Second Schedule of the Licence alongwith the Standard Mark in Column (1) of First Schedule with effect from Twenty Fifth October Two Thousand and Eleven.

Sizes 8mm to 40mm dia in Grades Fe550 and Fe550D

Other terms and conditions of Licence remain the same.

C.R. Rajendra
2 FEB 2012
(C.R. RAJENDRA)
SCIENTIST - F & HEAD
BIS Bangalore Branch Office
P. Chetty Industrial Area, 1st Stage,
Bengaluru - 560058

BIS LICENCE



भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS
 बेंगलूरु शाखा कार्यालय
BENGALURU BRANCH OFFICE

Address: Peenya Industrial Area, 1st Stage,
 Bengaluru-Tumkur Road,
 Bengaluru-560058
 Phones: 080-28394955, 28394956
 Fax: 080-28398841
 E-mail: bnbo@bis.org.in
 Web: http://www.bis.org.in

ENDORSEMENT FOR CHANGE/S IN THE LICENCE

ATTACHMENT TO LICENCE NO. CML/- 6161963

| CML NO | NAME OF THE LICENSEE WITH ADDRESS | PRODUCT | IS NO |
|---------|---|---------------------------------------|----------------|
| 6161963 | JSW STEEL LTD TORANAGALLU P.O VIDYANAGAR BELLARY-583275 Karnataka | Steel for general structural purposes | IS 2062 : 2011 |

ENDORSEMENT NO. 14 Dated 30 JUL 2012

Consequent upon the revision of IS 2062:2006 as IS 2062:2011, the Scheme of Testing and Inspection attached to the Licence has been replaced by the revised scheme, Document STI/2062/10, February 2012 and Column (3) of the First Schedule of the Licence revised as under with effect from First April, Two Thousand and Twelve.

IS 2062:2011
 Steel for general structural purposes

The following additional (sizes/types/grades etc.) has (have) been included in Columns(2) of the first schedule and column (1) of the the Second Schedule of the Licence with immediate effect.

Bars (Size 5.5mm to 22 mm dia) Grade E 250 (Fe 410W) Quality 'C'

Other terms and conditions of Licence remain the same.

(Signature)
 (C R RAJENDRA)

SCIENTIST-F & HEAD

सी.आर. राजेंद्रा / C.R. RAJENDRA
 वैज्ञानिक 'फ' एवं प्रमुख / Scientist F & Head
 भारतीय मानक ब्यूरो / Bureau of Indian Standards
 बेंगलूरु शाखा कार्यालय / Bengaluru Branch Office
 पीन्या औद्योगिक क्षेत्र, बेंगलूरु - 560058
 Bengaluru/Bangalore - 560058

TYPICAL TEST CERTIFICATES



JSW STEEL LTD
 P.O. Vidyanagar Dist: Bellary State: Karnataka, INDIA
 Regd. Office: JSW CENTRE, Bandra Kurla Complex, Bandra (East), Mumbai, 400 051



TEST CERTIFICATE FOR HIGH STRENGTH DEFORMED STEEL BARS AND WIRES FOR CONCRETE REINFORCEMENT

Test Certificate No. IS 1786/2016-17/124498
 TO MS: JSW Steel Ltd Depot - Delhi, M
 S&L,
 New Delhi 110041
 Delhi

Date : 04.04.2016
 S.O. No : 400447037
 Product : TMTBF
 P.O. No. : stock transfer

We certify that the material described below fully conforms to IS:1786-2008. Chemical composition and mechanical properties of the product as tested in accordance with the scheme of Testing and Inspection contained in the ISI certification Marks License No. CML/- 666538Z Are as indicated against each order No. etc.

(PLEASE REFER TO IS: 1786-2008 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

TEST RESULTS

| Nominal Size mm | Cast/ Lot No | No. of bundle / coils | Quantity (MT) | Testing Date | CHEMICAL ANALYSIS | | | | | | | | | | CE | MECHANICAL PROPERTIES | | | | | | Grade |
|-----------------|--------------|-----------------------|---------------|--------------|-------------------|-------|-------|--------|-------|-------|-------|-------|-------|--------|-----|-----------------------|-------|------------|--------------|-----------|-------------|---------|
| | | | | | C % | S % | P % | N % | Mn % | Si % | V % | Nb % | Ti % | YS MPa | | UTS MPa | EI % | Total EL % | UTS/YS RATIO | Bend Test | Rebend Test | |
| 8 | F672609 | 8 | 32.370 | 04.04.2016 | 0.217 | 0.008 | 0.016 | 0.0080 | 0.760 | 0.264 | 0.001 | 0.001 | 0.001 | 0.343 | 636 | 600 | 32.40 | 8.14 | 1.19 | OK | OK | Fe 500D |

| | | |
|---|--|--|
| This is to certify that steel bar & wire produced & supplied by JSW Steel Limited, Vidyanagar works do not present any radio active higher than the natural level | | |
| Invoice No. : 9002320946 Mode of transport: Rail Vehicle No. : Excise Inv : | The materials supplied conforms to the standard rolling and mass tolerances Remarks : | <i>(Signature)</i> Authorized Signatory JSW Steel Ltd. |



JSW STEEL LTD
 P.O. Vidyanagar Dist: Bellary State: Karnataka, INDIA
 Regd. Office: JSW CENTRE, Bandra Kurla Complex, Bandra (East), Mumbai, 400 051



TEST CERTIFICATE FOR HIGH STRENGTH DEFORMED STEEL BARS AND WIRES FOR CONCRETE REINFORCEMENT

Test Certificate No. IS 1786/2016-17/126123
 TO MS: JSW Steel Ltd Depot - Delhi, M
 S&L,
 New Delhi 110041
 Delhi

Date : 13.04.2016
 S.O. No : 400357923
 Product : TMTBF
 P.O. No. : stock transfer

We certify that the material described below fully conforms to IS:1786-2008. Chemical composition and mechanical properties of the product as tested in accordance with the scheme of Testing and Inspection contained in the ISI certification Marks License No. CML/- 666538Z Are as indicated against each order No. etc.

(PLEASE REFER TO IS: 1786-2008 FOR DETAILS OF SPECIFICATION REQUIREMENTS)


TEST RESULTS

| Nominal Size mm | Cast/ Lot No | No. of bundle / coils | Quantity (MT) | Testing Date | CHEMICAL ANALYSIS | | | | | | | | | | CE | MECHANICAL PROPERTIES | | | | | | Grade |
|-----------------|--------------|-----------------------|---------------|--------------|-------------------|-------|-------|--------|-------|-------|-------|-------|-------|--------|-----|-----------------------|-------|------------|--------------|-----------|-------------|---------|
| | | | | | C % | S % | P % | N % | Mn % | Si % | V % | Nb % | Ti % | YS MPa | | UTS MPa | EI % | Total EL % | UTS/YS RATIO | Bend Test | Rebend Test | |
| 10 | 10000359 | 8 | 38.815 | 13.04.2016 | 0.215 | 0.018 | 0.014 | 0.0086 | 0.760 | 0.218 | 0.001 | 0.001 | 0.001 | 0.341 | 636 | 601 | 19.40 | 8.10 | 1.16 | OK | OK | Fe 500D |

| | | |
|---|--|--|
| This is to certify that steel bar & wire produced & supplied by JSW Steel Limited, Vidyanagar works do not present any radio active higher than the natural level | | |
| Invoice No. : 9002342996 Mode of transport: Rail Vehicle No. : Excise Inv : | The materials supplied conforms to the standard rolling and mass tolerances Remarks : | <i>(Signature)</i> Authorized Signatory JSW Steel Ltd. |

TYPICAL TEST CERTIFICATES

JSW STEEL LTD
P.O. Vidyanagar Dist: Bellary State: Karnataka, INDIA
Regd. Office: JSW CENTRE, Bandra Kurla Complex, Bandra (East), Mumbai, 400 051

IS 1786

CML-6965397

TEST CERTIFICATE FOR HIGH STRENGTH DEFORMED STEEL BARS AND WIRES FOR CONCRETE REINFORCEMENT

Test Certificate No. IS 1786/2016-17/125398
TO M/S: JSW Steel Ltd Depot - Delhi, M
56/4,
New Delhi 110041
Delhi

Date : 09.04.2016
S.O. No : 400357923
Product : TMTBF
P.O. No. : stock transfer

We certify that the material described below fully conforms to IS:1786-2008. Chemical composition and mechanical properties of the product as tested in accordance with the scheme of Testing and Inspection contained in the ISI certification Marks License No. CML- 6965397 Are as indicated against each order No. etc.

(PLEASE REFER TO IS: 1786-2008 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

TEST RESULTS

| Nominal Size mm | Cast/ Lot No | No. of bundle / coils | Quantity (MT) | Testing Date | CHEMICAL ANALYSIS | | | | | | | | | | CE | MECHANICAL PROPERTIES | | | | | | | Grade |
|-----------------|--------------|-----------------------|---------------|--------------|-------------------|-------|-------|--------|-------|-------|-------|-------|-------|--------|-----|-----------------------|-------|------------|--------------|-----------|-------------|---------|-------|
| | | | | | C % | S % | P % | N % | Mn % | Si % | V % | Nb % | Ti % | YS MPa | | UTS MPa | EI % | Total EL % | UTS/YS RATIO | Bend Test | Rebend Test | | |
| 12 | 10009480 | 1 | 9.824 | 08.04.2016 | 0.210 | 0.026 | 0.003 | 0.0074 | 0.750 | 0.234 | 0.001 | 0.001 | 0.001 | 0.336 | 550 | 662 | 18.30 | 8.32 | 1.19 | OK | OK | Fa 500D | |
| 12 | 10009492 | 7 | 25.705 | 09.04.2016 | 0.202 | 0.024 | 0.021 | 0.0085 | 0.750 | 0.230 | 0.001 | 0.001 | 0.001 | 0.328 | 555 | 642 | 20.32 | 8.21 | 1.10 | OK | OK | Fa 500D | |

This is to certify that steel bar & wire produced & supplied by JSW Steel Limited, Vijayanagar works do not present any radio active higher than the natural level

Invoice No. : 900233377
Mode of transport: Rail
Vehicle No. :
Excise Inv. :

The materials supplied conforms to the standard rolling and mass tolerances

Remarks :


Authorised Signatory
JSW Steel Ltd.

JSW STEEL LTD
P.O. Vidyanagar Dist: Bellary State: Karnataka, INDIA
Regd. Office: JSW CENTRE, Bandra Kurla Complex, Bandra (East), Mumbai, 400 051

IS 1786

CML-6965397

TEST CERTIFICATE FOR HIGH STRENGTH DEFORMED STEEL BARS AND WIRES FOR CONCRETE REINFORCEMENT

Test Certificate No. IS 1786/2016-17/124376
TO M/S: JSW Steel Ltd Depot - Delhi, M
56/4,
New Delhi 110041
Delhi

Date : 03.04.2016
S.O. No : 400447037
Product : TMTBF
P.O. No. : stock transfer

We certify that the material described below fully conforms to IS:1786-2008. Chemical composition and mechanical properties of the product as tested in accordance with the scheme of Testing and Inspection contained in the ISI certification Marks License No. CML- 6965397 Are as indicated against each order No. etc.

(PLEASE REFER TO IS: 1786-2008 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

TEST RESULTS


| Nominal Size mm | Cast/ Lot No | No. of bundle / coils | Quantity (MT) | Testing Date | CHEMICAL ANALYSIS | | | | | | | | | | CE | MECHANICAL PROPERTIES | | | | | | | Grade |
|-----------------|--------------|-----------------------|---------------|--------------|-------------------|-------|-------|--------|-------|-------|-------|-------|-------|--------|-----|-----------------------|-------|------------|--------------|-----------|-------------|---------|-------|
| | | | | | C % | S % | P % | N % | Mn % | Si % | V % | Nb % | Ti % | YS MPa | | UTS MPa | EI % | Total EL % | UTS/YS RATIO | Bend Test | Rebend Test | | |
| 16 | 10009293 | 8 | 30.988 | 03.04.2016 | 0.203 | 0.015 | 0.014 | 0.0060 | 0.770 | 0.222 | 0.001 | 0.001 | 0.001 | 0.328 | 555 | 648 | 19.23 | 8.39 | 1.17 | OK | OK | Fa 500D | |

This is to certify that steel bar & wire produced & supplied by JSW Steel Limited, Vijayanagar works do not present any radio active higher than the natural level

Invoice No. : 9002320571
Mode of transport: Rail
Vehicle No. :
Excise Inv. :


The materials supplied conforms to the standard rolling and mass tolerances

Remarks :


Authorised Signatory
JSW Steel Ltd.

TYPICAL TEST CERTIFICATES

JSW STEEL LTD
P.O. Vidyanagar Dist: Bellary State: Karnataka, INDIA
Regd. Office: JSW CENTRE, Bandra Kurla Complex, Bandra (East), Mumbai, 400 051

IS 1786

CML-6965397

TEST CERTIFICATE FOR HIGH STRENGTH DEFORMED STEEL BARS AND WIRES FOR CONCRETE REINFORCEMENT

Test Certificate No. IS 1786/2016-17/127829
TO M/S: JSW Steel Ltd Depot - Delhi, M
56/4,
New Delhi 110041
Delhi

Date : 22.04.2016
S.O. No : 400357923
Product : TMTBF
P.O. No. : stock transfer

We certify that the material described below fully conforms to IS:1786-2008. Chemical composition and mechanical properties of the product as tested in accordance with the scheme of Testing and Inspection contained in the ISI certification Marks License No. CML- 6965397 Are as indicated against each order No. etc.

(PLEASE REFER TO IS: 1786-2008 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

TEST RESULTS


| Nominal Size mm | Cast/ Lot No | No. of bundle / coils | Quantity (MT) | Testing Date | CHEMICAL ANALYSIS | | | | | | | | | | CE | MECHANICAL PROPERTIES | | | | | | | Grade |
|-----------------|--------------|-----------------------|---------------|--------------|-------------------|-------|-------|--------|-------|-------|-------|-------|-------|--------|-----|-----------------------|-------|------------|--------------|-----------|-------------|---------|-------|
| | | | | | C % | S % | P % | N % | Mn % | Si % | V % | Nb % | Ti % | YS MPa | | UTS MPa | EI % | Total EL % | UTS/YS RATIO | Bend Test | Rebend Test | | |
| 25 | 0573530 | 8 | 30.320 | 15.04.2016 | 0.200 | 0.017 | 0.015 | 0.0036 | 0.750 | 0.241 | 0.001 | 0.001 | 0.001 | 0.325 | 550 | 652 | 18.30 | 8.52 | 1.19 | OK | OK | Fa 500D | |

This is to certify that steel bar & wire produced & supplied by JSW Steel Limited, Vijayanagar works do not present any radio active higher than the natural level


Invoice No. : 900232167
Mode of transport: Rail
Vehicle No. :
Excise Inv. :

The materials supplied conforms to the standard rolling and mass tolerances

Remarks :


Authorised Signatory
JSW Steel Ltd.

JSW STEEL LTD
P.O. Vidyanagar Dist: Bellary State: Karnataka, INDIA
Regd. Office: JSW CENTRE, Bandra Kurla Complex, Bandra (East), Mumbai, 400 051

IS 1786

CML-6965397

TEST CERTIFICATE FOR HIGH STRENGTH DEFORMED STEEL BARS AND WIRES FOR CONCRETE REINFORCEMENT

Test Certificate No. IS 1786/2016-17/126108
TO M/S: JSW Steel Ltd Depot - Delhi, M
56/4,
New Delhi 110041
Delhi

Date : 13.04.2016
S.O. No : 400357923
Product : TMTBF
P.O. No. : stock transfer

We certify that the material described below fully conforms to IS:1786-2008. Chemical composition and mechanical properties of the product as tested in accordance with the scheme of Testing and Inspection contained in the ISI certification Marks License No. CML- 6965397 Are as indicated against each order No. etc.

(PLEASE REFER TO IS: 1786-2008 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

TEST RESULTS


| Nominal Size mm | Cast/ Lot No | No. of bundle / coils | Quantity (MT) | Testing Date | CHEMICAL ANALYSIS | | | | | | | | | | CE | MECHANICAL PROPERTIES | | | | | | | Grade |
|-----------------|--------------|-----------------------|---------------|--------------|-------------------|-------|-------|--------|-------|-------|-------|-------|-------|--------|-----|-----------------------|-------|------------|--------------|-----------|-------------|---------|-------|
| | | | | | C % | S % | P % | N % | Mn % | Si % | V % | Nb % | Ti % | YS MPa | | UTS MPa | EI % | Total EL % | UTS/YS RATIO | Bend Test | Rebend Test | | |
| 25 | 0573303 | 10 | 32.975 | 12.04.2016 | 0.210 | 0.009 | 0.016 | 0.0052 | 0.800 | 0.270 | 0.001 | 0.001 | 0.001 | 0.343 | 544 | 651 | 15.11 | 7.56 | 1.20 | OK | OK | Fa 500D | |

This is to certify that steel bar & wire produced & supplied by JSW Steel Limited, Vijayanagar works do not present any radio active higher than the natural level

Invoice No. : 9002342620
Mode of transport: Rail
Vehicle No. :
Excise Inv. :

The materials supplied conforms to the standard rolling and mass tolerances

Remarks :


Authorised Signatory
JSW Steel Ltd.

TYPICAL TEST CERTIFICATES



JSW STEEL LTD
P.O. Vidyanagar Dist: Bellary State: Karnataka, INDIA
Regd. Office: JSW CENTRE, Bandra Kurla Complex, Bandra (East), Mumbai, 400 051



TEST CERTIFICATE FOR HIGH STRENGTH DEFORMED STEEL BARS AND WIRES FOR CONCRETE REINFORCEMENT
Test Certificate No. IS 1786/2016-17/125709
TO M/S: JSW Steel Ltd Depot - Delhi, M
56/A,
New Delhi 110041
Delhi

Date : 11.04.2016
S.O. No : 400357923
Product : TMTBF
P.O. No : stock transfer

We certify that the material described below fully conforms to IS:1786-2008. Chemical composition and mechanical properties of the product as tested in accordance with the scheme of Testing and Inspection contained in the ISI certification Marks License No. CM/L- 89539Z. Are as indicated against each order No. etc.

(PLEASE REFER TO IS: 1786-2008 FOR DETAILS OF SPECIFICATION REQUIREMENTS)
TEST RESULTS

| Nominal Size mm | Cast/ Lot No | No. of bundle / coils | Quantity (MT) | Testing Date | CHEMICAL ANALYSIS | | | | | | | | | | CE | MECHANICAL PROPERTIES | | | | | | Grade |
|-----------------|--------------|-----------------------|---------------|--------------|-------------------|-------|-------|--------|-------|-------|-------|-------|-------|--------|-----|-----------------------|-------|------------|--------------|-----------|-------------|---------|
| | | | | | C % | S % | P % | N % | Mn % | Si % | V % | Nb % | Ti % | YS MPa | | UTS MPa | EI % | Total EL % | UTS/YS RATIO | Bend Test | Rebend Test | |
| 32 | 067200 | 2 | 7.506 | 11.04.2016 | 0.220 | 0.016 | 0.018 | 0.0061 | 0.610 | 0.291 | 0.001 | 0.001 | 0.001 | 0.355 | 636 | 634 | 18.24 | 6.05 | 1.18 | OK | OK | Fv 500D |
| 32 | 067203 | 2 | 7.292 | 11.04.2016 | 0.210 | 0.014 | 0.018 | 0.0048 | 0.780 | 0.297 | 0.001 | 0.001 | 0.001 | 0.34 | 630 | 635 | 17.88 | 7.03 | 1.30 | OK | OK | Fv 500D |
| 32 | 067206 | 6 | 18.935 | 11.04.2016 | 0.204 | 0.018 | 0.015 | 0.0048 | 0.800 | 0.215 | 0.001 | 0.001 | 0.002 | 0.337 | 636 | 634 | 18.22 | 6.10 | 1.18 | OK | OK | Fv 500D |

| | | |
|---|--|--|
| This is to certify that steel bar & wire produced & supplied by JSW Steel Limited, Vijayanagar works do not present any radio active higher than the natural level. | | |
| Invoice No. : 902237913 Mode of transport: Rail Vehicle No. : Excise Inv. : | The materials supplied conforms to the standard rolling and mass tolerances Remarks : | Authorised Signatory JSW Steel Ltd. |



JSW STEEL LTD
P.O. Vidyanagar Dist: Bellary State: Karnataka, INDIA
Regd. Office: JSW CENTRE, Bandra Kurla Complex, Bandra (East), Mumbai, 400 051



TEST CERTIFICATE FOR HIGH STRENGTH DEFORMED STEEL BARS AND WIRES FOR CONCRETE REINFORCEMENT
Test Certificate No. IS 1786/2016-17/113160
TO M/S: SHAPOORJI PALLONJI & CO. PVT.
PRIVATE PROJECT, WAVEROCK PROJ
HYDERABAD 500008
TELANGANA

Date : 16.02.2016
S.O. No : 400422175
Product : TMTBF
P.O. No : 4200066529

We certify that the material described below fully conforms to IS:1786-2008. Chemical composition and mechanical properties of the product as tested in accordance with the scheme of Testing and Inspection contained in the ISI certification Marks License No. CM/L- 89539Z. Are as indicated against each order No. etc.

(PLEASE REFER TO IS: 1786-2008 FOR DETAILS OF SPECIFICATION REQUIREMENTS)
TEST RESULTS

| Nominal Size mm | Cast/ Lot No | No. of bundle / coils | Quantity (MT) | Testing Date | CHEMICAL ANALYSIS | | | | | | | | | | CE | MECHANICAL PROPERTIES | | | | | | Grade |
|-----------------|--------------|-----------------------|---------------|--------------|-------------------|-------|-------|--------|-------|-------|-------|-------|-------|--------|-----|-----------------------|-------|------------|--------------|-----------|-------------|---------|
| | | | | | C % | S % | P % | N % | Mn % | Si % | V % | Nb % | Ti % | YS MPa | | UTS MPa | EI % | Total EL % | UTS/YS RATIO | Bend Test | Rebend Test | |
| 32 | 067203 | 3 | 10.785 | 11.02.2016 | 0.206 | 0.012 | 0.015 | 0.0044 | 0.760 | 0.280 | 0.001 | 0.001 | 0.001 | 0.338 | 635 | 630 | 18.03 | 7.50 | 1.18 | OK | OK | Fv 500D |
| 36 | 0617907 | 1 | 3.266 | 14.07.2014 | 0.210 | 0.058 | 0.017 | 0.0047 | 0.770 | 0.198 | 0.001 | 0.001 | 0.001 | 0.358 | 632 | 631 | 18.77 | 7.96 | 1.19 | OK | OK | Fv 500D |
| 36 | 0666095 | 1 | 3.805 | 08.10.2015 | 0.200 | 0.020 | 0.026 | 0.0040 | 0.760 | 0.220 | 0.001 | 0.001 | 0.001 | 0.328 | 639 | 646 | 18.13 | 8.32 | 1.30 | OK | OK | Fv 500D |
| 36 | 0617943 | 1 | 2.466 | 15.07.2014 | 0.210 | 0.057 | 0.018 | 0.0040 | 0.760 | 0.181 | 0.001 | 0.001 | 0.001 | 0.358 | 633 | 638 | 17.55 | 8.62 | 1.30 | OK | OK | Fv 500D |

| | | |
|---|--|--|
| This is to certify that steel bar & wire produced & supplied by JSW Steel Limited, Vijayanagar works do not present any radio active higher than the natural level. | | |
| Invoice No. : 9022187750 Mode of transport: Normal Trailer Vehicle No. : AP16TD0400 Excise Inv. : | The materials supplied conforms to the standard rolling and mass tolerances Remarks : | Authorised Signatory JSW Steel Ltd. |

TYPICAL TEST CERTIFICATES



JSW STEEL LTD
P.O. Vidyanagar Dist: Bellary State: Karnataka, INDIA
Regd. Office: JSW CENTRE, Bandra Kurla Complex, Bandra (East), Mumbai, 400 051



TEST CERTIFICATE FOR HIGH STRENGTH DEFORMED STEEL BARS AND WIRES FOR CONCRETE REINFORCEMENT
Test Certificate No. IS 1786/2016-17/58100
TO M/S: LARSEN & TOUBRO LTD.
CHENNAI 517588
Tamil Nadu

Date : 05.05.2015
S.O. No : 400294769
Product : TMTBF
P.O. No : EA421PO5000472

We certify that the material described below fully conforms to IS:1786-2008. Chemical composition and mechanical properties of the product as tested in accordance with the scheme of Testing and Inspection contained in the ISI certification Marks License No. CM/L- 89539Z. Are as indicated against each order No. etc.

(PLEASE REFER TO IS: 1786-2008 FOR DETAILS OF SPECIFICATION REQUIREMENTS)
TEST RESULTS

| Nominal Size mm | Cast/ Lot No | No. of bundle / coils | Quantity (MT) | Testing Date | CHEMICAL ANALYSIS | | | | | | | | | | CE | MECHANICAL PROPERTIES | | | | | | Grade | |
|-----------------|--------------|-----------------------|---------------|--------------|-------------------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-----------------------|---------|-------|------------|--------------|-----------|-------|-------------|
| | | | | | C % | S % | P % | N % | Mn % | Si % | V % | Nb % | Ti % | S+P % | | YS MPa | UTS MPa | EI % | Total EL % | UTS/YS RATIO | Bend Test | | Rebend Test |
| 35 | F641234 | 11 | 41.778 | 03.03.2015 | 0.225 | 0.015 | 0.018 | 0.0042 | 0.750 | 0.219 | 0.001 | 0.001 | 0.001 | 0.003 | 0.351 | 660 | 660 | 18.30 | 8.30 | 1.16 | OK | OK | Fv 500D |
| 38 | 0641266 | 4 | 15.057 | 03.03.2015 | 0.210 | 0.014 | 0.018 | 0.0035 | 0.760 | 0.201 | 0.002 | 0.001 | 0.001 | 0.000 | 0.34 | 660 | 660 | 18.30 | 8.30 | 1.16 | OK | OK | Fv 500D |

| | | |
|---|--|--|
| This is to certify that steel bar & wire produced & supplied by JSW Steel Limited, Vijayanagar works do not present any radio active higher than the natural level. | | |
| Invoice No. : 9001504667 Mode of transport: Rail Vehicle No. : Excise Inv. : 1510038027 | The materials supplied conforms to the standard rolling and mass tolerances Remarks : | Authorised Signatory JSW Steel Ltd. |

THIRD PARTY INSPECTION REPORTS

THIRD PARTY INSPECTION REPORTS



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

An ISO - 9001:2008 Certified Institute

TEST CERTIFICATE

000356167

Issued to :
JSW STEEL LIMITED
607, 6TH FLOOR
BHICAJI CAMA BHAWAN
BHICAJI CAMA PLACE
NEW DELHI - -
Kind Attn: MR VIKRAM GUPTA , DY MANAGER
Sample Particulars :
One Sample described as TMT Bar- JSW TMT PLUS, Grade FE 500D dia 16 mm was received.

J.O.No. 501-171-3904
Reg.No. 1369443
Date 28-01-2015
GC-01 (REV-04)
Your Ref.No. -
Date 21.01.2015

The sampling was not carried out by SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH.
The sample particulars provided in the Test Certificate are based on the declaration by the Party.

TEST RESULTS

(As Per IS: 1786-2008 with amendment No.2)

| S.No. | Tests | Observation | Requirement Grade Fe-500D | Conformity | Protocol Adopted |
|--|---|--------------|---------------------------------------|------------|---------------------|
| A. Chemical Tests (% by wt.) | | | | | |
| 1. | Carbon | 0.17 | 0.25 Max. | Yes | IS:228 Pt 1-2002 |
| 2. | Sulfur | 0.015 | 0.040 Max | Yes | IS:228 Pt 9-2004 |
| 3. | Phosphorus | 0.022 | 0.040 Max | Yes | IS:228 Pt 3-2002 |
| 4. | Sulfur + Phosphorus | 0.037 | 0.075 Max | Yes | IS: 1786-2008 |
| B. Physical Tests | | | | | |
| 1. | T S/YS ratio ¹ | 1.19 | ≥ 1.10, but TS not less than 565.0 | Yes | IS: 1786-2008 |
| | Tensile Strength , N/mm ² | 658 | | Yes | IS:1608-2005 |
| 2. | Yield Stress , N/mm ² | 552 | 500 Min. | Yes | IS: 1608-2005 |
| 3. | Elongation (%) (Gauge Length 5.65 Sq Root Area) | 25.0 | 16.0 Min. | Yes | IS: 1608-2005 |
| 4. | Bend Test | Satisfactory | To satisfy the test | Yes | IS: 1599-2012 |
| 5. | Rebend test | Satisfactory | To satisfy the test | Yes | IS: 1786-2008 |
| 6. | Mass per metre run (Kg) | 1.564 | Not less than 1.485 | Yes | IS: 1786-2008 |
| 7. Deformations & Surface Characteristics | | | | | |
| a. | Mean ribs area in mm ² /mm length | 3.24 | 2.40 Min. | Yes | IS: 1786-2008 |
| b. | Mean projected area of transverse ribs in mm ² /mm length | 3.24 | 0.80 Min. | Yes | IS: 1786-2008 |

Remarks: The sample conforms to IS: 1786-2008 with amendment No.2 for Grade FE 500 D.
Note: 1 - TS/YS ratio refers to ratio of tensile strength to the yield stress of the test piece.

D.O.R.: 21/01/2015
D.O.C.: 28/01/2015

[Signature]
AUTHORISED SIGNATORY
(EMPLOYEE CODE: 5065)

19, University Road, Delhi - 110007.
E-Mail: sridlhi@vsnl.com Website: <http://www.shriraminstitute.org>

Ph: 91-11-27667267, 27667983, 27667860
Fax: 91-11-27667676, 27667207 P.T.O.



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

An ISO - 9001:2008 Certified Institute

000356168

Issued to :
JSW STEEL LIMITED
607, 6TH FLOOR
BHICAJI CAMA BHAWAN
BHICAJI CAMA PLACE
NEW DELHI - -
Kind Attn: MR VIKRAM GUPTA , DY MANAGER
Sample Particulars :
One Sample described as TMT Bar- JSW TMT PLUS, Grade FE 500D dia 8 mm was received.

J.O.No. 501-171-3905
Reg.No. 1369443
Date 28-01-2015
GC-01 (REV-04)
Your Ref.No. -
Date 21.01.2015



The sampling was not carried out by SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH.
The sample particulars provided in the Test Certificate are based on the declaration by the Party.

TEST RESULTS

(As Per IS: 1786-2008 with amendment No.2)

| S.No. | Tests | Observation | Requirement Grade Fe-500D | Conformity | Protocol Adopted |
|--|---|--------------|---------------------------------------|------------|---------------------|
| A. Chemical Tests (% by wt.) | | | | | |
| 1. | Carbon | 0.16 | 0.25 Max. | Yes | IS:228 Pt 1-2002 |
| 2. | Sulfur | 0.012 | 0.040 Max | Yes | IS:228 Pt 9-2004 |
| 3. | Phosphorus | 0.022 | 0.040 Max | Yes | IS:228 Pt 3-2002 |
| 4. | Sulfur + Phosphorus | 0.034 | 0.075 Max | Yes | IS: 1786-2008 |
| B. Physical Tests | | | | | |
| 1. | T S/YS ratio ¹ | 1.13 | ≥ 1.10, but TS not less than 565.0 | Yes | IS: 1786-2008 |
| | Tensile Strength , N/mm ² | 672 | | Yes | IS:1608-2005 |
| 2. | Yield Stress , N/mm ² | 593 | 500 Min. | Yes | IS: 1608-2005 |
| 3. | Elongation (%) (Gauge Length 5.65 Sq Root Area) | 25.0 | 16.0 Min. | Yes | IS: 1608-2005 |
| 4. | Bend Test | Satisfactory | To satisfy the test | Yes | IS: 1599-2012 |
| 5. | Rebend test | Satisfactory | To satisfy the test | Yes | IS: 1786-2008 |
| 6. | Mass per metre run (Kg) | 0.397 | Not less than 0.363 | Yes | IS: 1786-2008 |
| 7. Deformations & Surface Characteristics | | | | | |
| a. | Mean ribs area in mm ² /mm length | 1.35 | 0.96 Min. | Yes | IS: 1786-2008 |
| b. | Mean projected area of transverse ribs in mm ² /mm length | 1.35 | 0.32 Min. | Yes | IS: 1786-2008 |

Remarks: The sample conforms to IS: 1786-2008 with amendment No.2 for Grade FE 500 D.
Note: 1 - TS/YS ratio refers to ratio of tensile strength to the yield stress of the test piece.

D.O.R.: 21/01/2015
D.O.C.: 28/01/2015

[Signature]
AUTHORISED SIGNATORY
(EMPLOYEE CODE: 5065)

19, University Road, Delhi - 110007.
E-Mail: sridlhi@vsnl.com Website: <http://www.shriraminstitute.org>

Ph: 91-11-27667267, 27667983, 27667860
Fax: 91-11-27667676, 27667207 P.T.O.

THIRD PARTY INSPECTION REPORTS

Tele: 23793509

Directorate General Married
Accommodation Project
E-in-C's Branch,
Integrated HQ of MoD (Army)
Kashmir House, Rajaji Marg,
DHQ PO New Delhi - 110 011

21372/BOO/P&S/ 2.19 /MAP

07 Jan 2013

(All PMs)

APPROVAL OF VENDORS FOR FUTURE PROJECTS OF MAP PHASE II AND PHASE-III

1. M/s JSW Steel Ltd is approved as a vendor for future projects of MAP Phase-II and Phase-III for the following products:

- (a) TMT Steel
- (b) Galvanised Steel Sheets

2. The address and contact details of the above Firm are:

M/s JSW Steel Ltd
Jindal Mansion, 5A,
Dr G Deshmukh Marg
Mumbai-400026

Contact Executive : Shri Rakesh Chauhan
Mobile # 09818650441

E-mail : rakesh.chauhan@jsw.in

3. The above approval does not absolve the executive/supervisory staff from their responsibility for using correct quality product. It is only after they are satisfied about the quality and the performance, the product will be used. Mandatory checks about the quality will be carried out as laid down and the records of the same maintained.

(Signature)
(JS Sochi)
Lt Col
SO 1 (P&S)
for DG MAP

Copy to:

M/s JSW Steel Ltd
Jindal Mansion, 5A,
Dr G Deshmukh Marg
Mumbai-400026

- for information please

Internal:

Team 'A' - for necessary action please

Team 'B' - -do-

Contract Section Team 'A' - -do-

Contract Section Team 'B' - -do-

THIRD PARTY INSPECTION REPORTS



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)

An ISO - 9001:2008 Certified Institute

TEST CERTIFICATE

000371070

Issued To:

Client Code : J0161
JSW STEEL LIMITED
THAPAR HOUSE, 3RD FLOOR,
EASTERN SIDE OF CENTRAL WING,
124, JANPATH LANE
NEW DELHI
NEW DELHI-110001

Date 15/06/2015

Job No. 1506-1-171-1090

Booking No. RG1516/1/2187

Booking Date 06/06/2015

Customer Ref No. -

Customer Ref Date 06/06/2015



Sample Description :

ONE SAMPLE DESCRIBED AS TMT GRADE : FE-500D, 32 MM DIA, MARKED AS : JSW NEO STEEL WAS RECEIVED.

The sample was not carried out by SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH. The sample particulars provided in the Test Certificate are based on the declaration by the party.

TEST RESULTS

(As Per IS: 1786-2008 with amendment No. 2)

| S.No. Tests | Observation | Requirement Grade Fe-500D | Conformity | Protocol Adopted |
|--|--------------|---------------------------|------------|------------------|
| A. Chemical Tests(% by wt.) | | | | |
| 1. Carbon | 0.16 | 0.25 Max. | Yes | IS: 228 Part(1) |
| 2. Sulfur | 0.015 | 0.040 Max. | Yes | IS: 228 Part(9) |
| 3. Phosphours | 0.020 | 0.040 Max. | Yes | IS: 228 Part(3) |
| 4. Sulfur + Phosphorus | 0.035 | 0.075 Max. | Yes | IS: 1786-2008 |
| B. Physical Tests | | | | |
| 1. TS/YS ratio ¹ | 1.24 | >= 1.10 but TS | Yes | IS: 1786-2008 |
| Tensile Strength, N/mm ² | 659 | not less than 565.0 | Yes | IS: 1608-2005 |
| 2. Yield Stress, N/mm ² | 532 | 500 Min. | Yes | IS: 1608-2005 |
| 3. Elongation (%) (Gauge Length 5.65 Sq Root Area) | 23.6 | 16.0 Min. | Yes | IS: 1608-2005 |
| 4. Bend Test | Satisfactory | To satisfy the test | Yes | IS: 1599-2012 |
| 5. Rebend Test | Satisfactory | To satisfy the test | Yes | IS: 1786-2008 |
| 6. Mass per metre run (Kg) | 6.373 | Not less than 6.058 | Yes | IS: 1786-2008 |
| 7. Deformation & Surface Characteristics | | | | |
| a. Mean ribs area in mm ² /mm length | 6.11 | 5.44 Min. | Yes | IS: 1786-2008 |
| b. Mean projected area of transvers ribs in mm ² /mm length | 6.11 | 1.81 Min. | Yes | IS: 1786-2008 |

Remarks: The sample Conforms to IS: 1786-2008 amendment No. 2 for Grade FE 500D w.r.t. above tests.

Note: - TS/YS ratio refers to ratio of tensile strength to the yield stress of the test piece.

DOR: 06/06/2015

DOC: 15/06/2015

(Signature)
AUTHORISED SIGNATORY
(EMPLOYEE CODE: 5065)

CC-01(Rev-04)


Page 1 of 1

19, University Road, Delhi - 110007.
E-Mail: sridhi@vsnl.com Website: <http://www.shriraminstitute.org>

Ph: 91-11-27667267, 27667983, 27667860
Fax: 91-11-27667676, 27667207 P.T.O

THIRD PARTY INSPECTION REPORTS

APPRECIATION LETTER



SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH

(A unit of Shriram Scientific and Industrial Research Foundation)
An ISO - 9001:2008 Certified Institute

TEST CERTIFICATE


000371071

Issued To:
Client Code : J0161
JSW STEEL LIMITED
THAPAR HOUSE, 3RD FLOOR,
EASTERN SIDE OF CENTRAL WING,
124, JANPATH LANE
NEW DELHI
NEW DELHI-110001

Sample Description :
ONE SAMPLE DESCRIBED AS TMT GRADE : FE-500D, 36 MM DIA, MARKED AS : JSW TMT PLUS WAS RECEIVED.

The sample was not carried out by SHRIRAM INSTITUTE FOR INDUSTRIAL RESEARCH.
The sample particulars provided in the Test Certificate are based on the declaration by the party.

Date 15/06/2015
Job No. 1506-1-171-1091
Booking No. RG1516/1/2187
Booking Date 06/06/2015
Customer Ref No. -
Customer Ref Date 06/06/2015




TEST RESULTS
(As Per IS: 1786-2008 with amendment No. 2)

| S.No. | Tests | Observation | Requirement Grade Fe-500D | Conformity | Protocol Adopted |
|---|---|--------------|---------------------------|------------|------------------|
| A. Chemical Tests(% by wt.) | | | | | |
| 1. | Carbon | 0.17 | 0.025 Max. | Yes | IS: 228 Part(1) |
| 2. | Sulfur | 0.018 | 0.040 Max. | Yes | IS: 228 Part(9) |
| 3. | Phosphorus | 0.022 | 0.040 Max. | Yes | IS: 228 Part(3) |
| 4. | Sulfur + Phosphorus | 0.040 | 0.075 Max. | Yes | IS: 1786-2008 |
| B. Physical Tests | | | | | |
| 1. | TS/YS ratio' | 1.23 | >= 1.10 but TS | Yes | IS: 1786-2008 |
| | Tensile Strength, N/mm ² | 662 | not less than 565.0 | Yes | IS: 1608-2005 |
| 2. | Yield Stress, N/mm ² | 540 | 500 Min. | Yes | IS: 1608-2005 |
| 3. | Elongation (%) (Gauge Length 5.65 Sq Root Area) | 20.4 | 16.0 Min. | Yes | IS: 1608-2005 |
| 4. | Bend Test | Satisfactory | To satisfy the test | Yes | IS: 1599-2012 |
| 5. | Rebend Test | Satisfactory | To satisfy the test | Yes | IS: 1786-2008 |
| 6. | Mass per metre run (Kg) | 8.048 | Not less than 7.670 | Yes | IS: 1786-2008 |
| 7. Deformation & Surface Characteristics | | | | | |
| a. | Mean ribs area in mm ² /mm length | 6.44 | 6.12 Min. | Yes | IS: 1786-2008 |
| b. | Mean projected area of transvers ribs in mm ² /mm length | 6.44 | 2.04 Min. | Yes | IS: 1786-2008 |

Remarks: The sample Conforms to IS: 1786-2008 amendment No. 2 for Grade FE 500D w.r.t. above tests.
Note: - TS/YS ratio refers to ratio of tensile strength to the yield stress of the test piece.

DOR: 06/06/2015
DOC: 15/06/2015


 AUTHORISED SIGNATORY
(EMPLOYEE CODE: 5065)

GC-01(Rev-04) Page 1 of 1

19, University Road, Delhi - 110007.
E-Mail: sridhi@vsnl.com Website: <http://www.shriraminstitute.org>

Ph: 91-11-27667267, 27667983, 27667860
Fax: 91-11-27667676, 27667207 P.T.O.

 Engineering Services
 IL&FS Engineering and Construction Company Limited
 4th Floor Paras Down Town Centre Golf Course Road Sector 53, Gurgaon
 T +91-124-4988700
 F +91-124-4988750
 W www.il&fs.com
Date: 17.7.2015
 CN: LA5201AP1988PLC008624

To
JSW Steel Ltd,
Thapar House, New Delhi

Sub: Letter for Supplies to our Rapid Metro Project.

We thank you for your prompt deliveries to our Rapid Metro Project.

In our business we must get our deliveries to the project sites on a regular schedule.

We have found the quality of your TMT consistent for our Rapid Metro project and at par with requirement of IS: 1786-2008.

In addition the timely deliveries from you help us keep our schedule and complete the projects in time.

We want you to know that we appreciate your efforts and look forward to continuing our business relationship.

Thanking You

Yours Sincerely
 For IL&FS Engineering and Construction Company Ltd.


Aniruddh Solanki
 SCM



Registered Office: D. No. B-2-120/113/3, 4th Floor, Sarani Info Park, Cyber Towers, Road No 2, Banjara Hills, Hyderabad-500 033.
 T + 91 40 4040 9333
 F + 91 40 4040 9444

APPRECIATION LETTER



Date: 15th July, 2015

To,
JSW Steel Ltd,
Thapar House, New Delhi.

Sub : Letter for Supplies to our Project

We thank you for your prompt deliveries to our various Projects at Gurgaon.

In our business we must get our deliveries to the project sites on a regular schedule.

We have found the quality of your TMT consistent for our projects and at par with SAIL, RINL and TATA.

In addition the timely deliveries from you help us keep our schedule and complete the projects in time.

We want you to know that we appreciate your efforts and look forward to continuing our business relationship.

Regards,

For Ireo Pvt. Ltd.

Authorised Signatory



Ireo Private Limited
Registered Office: A-11, First Floor, Neeti Bagh, New Delhi-110049
Main Project Office: Ireo Campus, Sector-59, Near Behrampur, Gurgaon (Haryana)-122101, Tel: 0124-479 5000, CIN No: U70101DL2004PTC125163
Email: ipl@ireo.in, www.ireoworld.com

APPRECIATION LETTER



Date: 10.07.2015

To,
JSW Steel Ltd,
Thapar House, New Delhi

Sub: Appreciation Letter for Supplies to our various Projects.

With reference to supplies of Reinforcement Steel against our orders for various projects, we have found the quality of your TMT consistent and at par with SAIL, RINL and TATA. In addition to this, the timely delivery from you has helped us to keep-up our schedule.

Some of the projects where we have taken supplies from you are mentioned below;

1. DLF Crest, Gurgaon.
2. Adani M2K, Oyster Grande, Gurgaon.
3. Experion Windchante, Gurgaon.
4. DMRC Projects at Delhi & Haryana.
5. MGM- Merlin and Golf Estate Ph-1 & Ph-2, Gurgaon.
6. Delhi Agra Road Project.
7. Lucknow Metro Project.
8. Indira Gandhi Hospital.

We hereby appreciate your efforts and look forward to continue our business relationship.

Regards

L&T Construction

Sudhir Kumar
DGM Materials
Head North Zone, Delhi

Larsen & Toubro Limited, Construction
Head Office: Maxia Postgraduate Road, Marolli Nagar, 4th Fl. An. 4th Chennai - 600 059, INDIA
Tel: +91 44 2462 6000, 2462 6005 Fax: +91 44 2252 6568 / 2252 6569 www.larsen.com
Delhi Regional Office: KCI Tower, 24th Floor, 1st Main Place,
New Delhi - 110 016, INDIA. Tel: +91 11 41253600 / 4388888. Fax: +91 11 4161626-26 www.larsen.com
CIN: L90509MH1901PL0051700

Registered Office:
L&T House, W. E. Marg,
Conrad Estate
Delhi-110 001, INDIA

MOS - PM TROPHY FOR EXCELLENCE IN PERFORMANCE(2012-13)

जी. मोहन कुमार
G. Mohan Kumar



सचिव
उद्योग मंत्रालय,
भारत सरकार
उद्योग भवन, नई दिल्ली
SECRETARY
MINISTRY OF STEEL
GOVERNMENT OF INDIA
UDYOG BHAWAN, NEW DELHI-110107
TEL : 23063812
FAX : 23063488
e-mail : secy-steel@nic.in
D.O. No. 14(1)/2013-TW (Pl. File)
27th May, 2014

Dear Shri Jindal,

I am glad to inform you that the process of evaluation of Integrated Steel Plants in India for awarding Prime Minister's Trophy for excellence in performance for the assessment year 2012-2013 has been completed and the Panel of Judges (POJs) have adjudged JSW Steel Ltd, Vijayanagar Works, Bellary as the best integrated Steel Plant in the country during 2012-2013 based on its overall performance on subjective as well as objective parameters as laid down in the scheme. The Ministry of Steel is pleased to intimate you that Government has accepted the recommendations of the Panel of Judges and decided to award the Prime Minister's Trophy and a cash award of Rs. 2 crore to JSW Steel, Bellary.

2. I congratulate you personally and the entire management and workforce of JSW Steel, Bellary on this great achievement. The basic objective of the Prime Minister's Trophy Scheme is to give recognition to outstanding performance in the vital sector of the national economy and I am sure this Trophy will greatly motivate the JSW collective and will inspire them to achieve several new benchmarks in efficiency and productivity in the coming years.

3. The date, time and venue of the award function will be intimated to you separately.

With regards,

Yours sincerely,

(G. Mohan Kumar)

Shri Sajjan Jindal,
Chairman and Managing Director
JSW Steel Ltd.
JSW Centre, Bandra Kurla Complex
Mumbai - 400051

MOS - CATEGORISATION OF STEEL PRODUCERS

तार का पता: "मिनीस्टील"

Telegraphic Address : "MINISTEEL"



सं० _____

No. No. 4(8)/2010-SD-1

भारत सरकार
GOVERNMENT OF INDIA
इस्पात मंत्रालय
MINISTRY OF STEEL
उद्योग भवन
UDYOG BHAWAN

नई दिल्ली-110107 23.8.2012
New Delhi-110107

To

Shri Sushil Kumar Mittal
Director General
CPWD
Nirman Bhawan, New Delhi

Sub: Classification / Categorization of various Steel Plants

Sir,

I am directed to refer to Suptd. Engineer (TAD)'s letter No. SE/TADC/20-E dated 19.3.2012 and No. SE/TADC/40-E dated 24.4.2012 on the subject cited above and to say that contents of this Ministry's letter dated 14th June, 2011 (copy enclosed) are self explanatory. As explained in para 2 of this Ministry's letter the classification of steel producers as 'main', 'major' and 'other' producers has evolved historically in Joint Plant Committee (JPC) essentially for facilitation in data collection and statistical purposes. These categories, in no way, indicate anything about either the quality of steel produced or the method of manufacturing and processes involved. The various categorization used by JPC for data collection and dissemination purposes, should not be linked to quality specification and standards.

2. Steel is a deregulated sector. But suitable steps are necessary to ensure quality standards. However, it may not be appropriate to deny accesses to raw materials or deprive certain steel plants a level playing field based on general categorization like main, major or primary etc. evolved by the JPC for the purpose of data collection.

3. The Ministry of Steel has received several representations from different steel plants being discriminated on the grounds of being not classified as main, major, primary producers, etc. You are requested to redress the grievances of steel plants being faced by them on this account under intimation to this Ministry.

Yours faithfully,

(Molly Tiwari)

Deputy Secretary to the Govt. of India
Tele: 23062874

Encl : as above

Copy Forwarded for information to: As per list attached

हिन्दी का प्रयोग उपेक्षित नहीं है, पत्र का उत्तर शीघ्र दिया जायेगा।

MINISTRY OF STEEL AS MAJOR STEEL PRODUCER

तार का पता : "मिनीस्टील"
Telegraphic Address : "MINISTEEL"

UDAI PRATAP SINGH
Joint Secretary
Tele: 23063138

D.O. No. 4(8)/2010-DI



सं 0 _____

No. _____

भारत सरकार
GOVERNMENT OF INDIA

इस्पात मंत्रालय

MINISTRY OF STEEL

Dated: 14th June, 2011

उद्योग भवन

UDYOG BHAWAN

Dear

नई दिल्ली-110107

New Delhi-110107

Ministry of Steel has received several representations from some of the steel producers requesting categorization of their companies as main/major/integrated steel producers in the statistical information list published by Joint Plant Committee (an organization under the Ministry entrusted with official data collection and compilation of statistics related to steel sector). References have also been received from certain government organizations requesting Ministry of Steel to enlist quality steel producers in the country for use of steel in various public projects. It has been brought out by various small and medium sector steel producers that the categorization of steel producers as main/ major/integrated etc. are used by government organizations as a basis of qualification on quality of steel.

2. The above have been examined in the Ministry and it is observed that the classification of steel producers as 'main', 'major' and 'other' producers has evolved historically in Joint Plant Committee (JPC) essentially for facilitation in data collection and statistical purposes. These categories, in no way, indicate anything about either the quality of steel produced or the method of manufacturing and processes involved.

3. It is also to be noted that each and every application in engineering and architecture design may require specific quality of steel, defined by various governing specifications and standards. It is the responsibility of the respective user organization to ensure quality and standard. Therefore, a general categorization by JPC, which is purely drawn out for data collection, should not be linked to any engineering, technical or general quality requirement.

4. In the light of the above, your Ministry/Department may like to look into the matter and take a suitable view on advising respective PSUs/ organizations to strictly adhere to the necessary quality standards, through established standards and corresponding quality procedures. The various categorization used by JPC, for data collection and dissemination purposes, should not be linked to quality specification and standards.

5. This issues with approval of the competent authority.

Yours sincerely,


(Uday Pratap Singh)

Shri/Ms/Dr. _____
Ministry/Department of _____
New Delhi

(As per list enclosed)

हिन्दी का प्रयोग उपेक्षित नहीं है, पत्र का उत्तर शीघ्र दिया जायेगा।

GOI-MOS APPROVAL FOR CPWD PROJECTS

No. 11(33)/2009-IDW
GOVERNMENT OF INDIA
MINISTRY OF STEEL

Udyog Bhawan, New Delhi 110 011
Dated 7 December, 2009

To


Sh. Rajamani Krishnamurti,
General Manager – Corporate Relations
JSW Steel Ltd.,
UGF, NBCC Tower,
15 Bhikaji Cama Place,
New Delhi 110 066

Sir,

This has reference to your letter No. nil dated 16.11.2009 regarding status of JSW Steel for participating in CPWD Projects. In this connection, it is remarked that,

"JSW Steel Limited is an existing Integrated Steel Producers (ISP) having its production unit at Vijayanagar, Karnataka. The status of JSW Steel Limited is at par with Steel Authority of India Limited, Rashtriya Ispat Nigam Limited and Tata Steel Ltd. and other such integrated steel producers."

Yours faithfully,


07/12/2009
(Nihar Ranjan Dash)
Director

CPWD APPROVAL AS MAJOR PRODUCER


Govt. of India
(Technology Application and Standards Unit)
Central Public Works Department
Nirman Bhawan, New Delhi

No: T-2 /CPEC/SE(TAS)/2010-11/76 E Dated: 6/1/2010

To

✓
M/s J.S.W. Steel Ltd.,
Jindal Central - 12,
Bikaji Cama Place,
New Delhi- 110066

Subject: Approval of JSW TMT Bars as Primary Producer
Ref: Your application dated 19th Nov. 2009

With reference to your above mentioned application, it is intimated that CPEC has approved JSW Steel Ltd. as major producer of TMT bars subjected to the production/submission of certificate from BIS for your steel confirming to IS 1786: 2008 (Grade 500 D).

You are, therefore, requested to submit the above certification from BIS so that further necessary action can be taken.

This issues with the approval of CE(CSQ).


Executive Engineer (TAD)

JPC MAJOR PRODUCER APPROVAL




JPC/P&P/Cap_Cert/09/

29.1.2009

TO WHOM IT MAY CONCERN

As per technical definition provided by Ministry of Steel, Government of India, Integrated Steel Plants are those "using iron ore as the basic raw material for production of crude steel which is further rolled into finished shapes in-house. Conventionally, these plants have captive coke ovens also and the sensible heat of the outgoing gases from iron/coke making are utilised as fuel for various applications. It therefore, includes units with in-house coke making (optional), iron making followed by production of liquid steel & crude steel and finished steel. So all ISPs adopting BF- BOF route and Major producers adopting Corex-BOF or DRI-EA For MBF-EOF technology would technically, fall under this category."

M/s JSW Steel Ltd., being a Major Producer, with Registered Office at Jindal Mansion, 5A, Dr. G. Deshmukh Marg, Mumbai, India and steel manufacturing processes at Toranagallu, Salem, Vasind and Tarapur is therefore certified as an integrated steel plant, as it adheres to criteria as laid down in the above definition.


G.K. Basak
Executive Secretary

'ISPAT NIKETAN', 52/1A, Ballygunge Circular Road, Kolkata - 700 019
'इस्पत निकेतन', 52/1A, बालीगंज सरक्युलर रोड, कोलकाता - 700 019
Phone : 91 (033) 2461-4055/4058/4068 • Fax : 2461-4063 • E-mail : jpc@wb.nic.in • Website : www.jpcindiansteel.org

SARDAR SAROVAR NARMADA NIGAM LTD.



Sardar Sarovar Narmada Nigam Ltd. "A wholly owned Govt. of Gujarat Undertaking"

Block No. 12, 2nd Floor,
New Sachivalaya Complex,
Gandhinagar - 382 010. Gujarat

Fax : 079-23223056

No. : STL-10-2013-1-HP

Date:11/07/2017.

To,
The All Chief Engineers,
Sardar Sarovar Narmada Nigam Ltd.

Sub.: Approval of vendor registration of M/s. JSW Steel Limited for Steel Supply in SSNNL works.

Ref.: (1) Letter of M/s. JSW Steel Limited, Mumbai dated 04/05/2017.
(2) Ministry of Steel letter no. 11(33)/2009-IDW, Dated 7-12-2009.

Preamble:

M/s. JSW Steel Limited vide letter under ref. (1) has requested SSNNL for vendor registration as steel manufacturer/supplier citing letter of Ministry of Steel dated 07.12.2009 at ref. (2). The production capacity of M/s. JSW Steel is 18 million ton per annum (MTA). According to old definition of primary steel manufacturers, 1 MTA production capacity was widely accepted as specified by the Ministry of steel.

In this connection, I am directed to convey you the Nigam approval as under:

Order:-

The competent authority of Nigam has approved the M/s. JSW Steel Limited as steel manufacturer/supplier for supply of steel in SSNNL works and incorporated M/s. JSW Steel Limited in SSNNL's identified vendor list. Further, it is also decided that necessary changes should be done in SSNNL's model tender paper in this regard.

This is issued with an approval of competent authority on Nigam File of even number.


Deputy General Manager
(Hydro Power)

Copy Submitted to:

- (1) The Chief Engineer (CPC), SSNNL, Gandhinagar -Request for Necessary changes in SSNNL's model tender paper, please.
- (2) The Chief Engineer (QC), SSNNL, Gandhinagar
- (3) Mr. Vinod Kumar Nigam (AGM), M/s. JSW Steel Limited, Regd. Office: JSW Centre, BandraKurla Complex, Bandra(East), Mumbai - 400 051.

JPC MAJOR PRODUCER APPROVAL




ज्वाइन्ट प्लान्ट कमिटी
(भारत सरकार द्वारा गठित)
JOINT PLANT COMMITTEE
(Constituted by Govt. of India)
An ISO 9001 : 2000 Organisation



JPC/P&P/Cap_Cert/09/

29.1.2009

TO WHOM IT MAY CONCERN

As per technical definition provided by Ministry of Steel, Government of India, Integrated Steel Plants are those "using iron ore as the basic raw material for production of crude steel which is further rolled into finished shapes in-house. Conventionally, these plants have captive coke ovens also and the sensible heat of the outgoing gases from iron/coke making are utilised as fuel for various applications. It therefore, includes units with in-house coke making (optional), iron making followed by production of liquid steel & crude steel and finished steel. So all ISPs adopting BF- BOF route and Major producers adopting Corex-BOF or DRI-EAFor MBF-EOF technology would technically, fall under this category."

M/s JSW Steel Ltd., being a Major Producer, with Registered Office at Jindal Mansion, 5A, Dr. G. Deshmukh Marg, Mumbai, India and steel manufacturing processes at Toranagallu, Salem, Vasind and Tarapur is therefore certified as an integrated steel plant, as it adheres to criteria as laid down in the above definition.


G.K. Basak
Executive Secretary

"ISPAT NIKETAN", 52/1A, Ballygunge Circular Road, Kolkata - 700 019
"इस्पत निकेतन", 52/1A, बालीगंज सरक्यूलर रोड, कोलकाता - 700 019
Phone : 91 (033) 2461-4055/4058/4068 • Fax : 2461-4063 • E-mail : jpc@wb.nic.in • Website : www.jpcindiansteel.org

JPC MAJOR PRODUCER APPROVAL



Classification / Re-classification of Steel Industry

List of Integrated Steel Producers and Primary Producers as on 12.2.2016

- Vide Notification No. 4(8)/2010-SD-1 dated 24th April 2015, the Ministry of Steel, Government of India had laid down the overall guidelines for the purpose of classification of Steel Plants in the country.
- Thereafter, under the directive of the Ministry of Steel, Government of India, a high level Technical Committee comprising of representatives from Joint Plant Committee (JPC), MECON Ltd., National Institute of Secondary Steel Technology (NISST) and Economic Research Unit (ERU)/JPC was constituted for working out the modalities regarding the classification / re-classification of steel plants.
- After extensive deliberations, the Committee had formulated guidelines for steel companies for applying for classification/re-classification of their units.
- The said guidelines were approved by the Ministry of Steel, Government of India.
- Thereafter, the Committee had screened the applications received so far from steel plants, to examine whether the applications conformed to the laid-down specifications.
- Following is the list of units falling under the different classifications, which has emerged out of this screening exercise based on data submitted by the steel plants and earlier directive of the Ministry of Steel, Government of India.

| Integrated Steel Producers | Primary Steel Producers |
|--|------------------------------------|
| 1. Steel Authority of India Ltd | 1. SRMB Srijan Limited |
| 2. Rashtriya Ispat Nigam Ltd/Vizag Steel Plant | 2. Real Ispat & Power Limited |
| 3. Tata Steel Ltd | 3. Shri Bajrang Power & Ispat Ltd. |
| 4. Essar Steel Ltd. | |
| 5. JSW Steel Ltd. | |
| 6. Jindal Steel & Power Ltd. | |
| 7. Electrosteel Steels Limited | |

NOTE:

- The said list is with effect from 12th February 2016 and is valid up to 30th April 2016.
- For statistical purpose, JPC follows the reporting system of 'Integrated Steel Plants' and 'Other Producers'.
- However, if an unit in the 'Integrated Steel Producer' list as published above, does not submit its monthly production data to JPC on a regular basis, the said unit will be included in the 'Other Producers' category by JPC in all its regular reports.

'ISPAT NIKETAN', 52/1A, Ballygunge Circular Road, Kolkata - 700 019

'इस्पत निकेतन', 52/1A, बालीगंज सरकुलर रोड, कोलकाता - 700 019

Phone : 91 (033) 2461-4055/4058/4068 Fax : 2461-4063 E-mail : jpc-wb@nic.in Website : www.jpcindiansteel.nic.in

GOI-DG - CPWD APPROVAL AS MAJOR PRODUCER



No: T-2/CPWC/TAS/TADC/ 337 -E

Dated: 26/11/2010

MEMORANDUM

Sub: Approval of M/s JSW Steel Ltd., Jindal Centre 12, Bhikaji Cama Place, New Delhi - 110066 for classification as major producer with facility of integrated steel plant for CPWD works.

Director General (W), CPWD is pleased to approve M/s JSW Steel Ltd., Jindal Centre 12, Bhikaji Cama Place, New Delhi, as major producer with facility of integrated steel plant for TMT bars 8 mm to 40 mm grade 500 D and TMT bars 36 mm to 40 mm, Grade Fe 415 & Fe 500.

The Supervisory Officers shall ensure that the products manufactured/supplied by M/s JSW Steel Limited should conform to the specifications of relevant IS codes.

The approval given above does not absolve the executive/supervisory officers from their overall responsibility for using these products. It is only after, they are satisfied about the quality, rate and performance, the product will be used. To achieve this, proper check on the quality of the product, actually to be used, should be exercised.

This issues with the approval of DG (W), CPWD, New Delhi.

Superintending Engineer (TAS)

Copy to:

- The Director General, CPWD, Nirman Bhawan, New Delhi.
- ADG (TD), ADG(S&P), ADG (Border), ADG (Arch.), ADG (WR), ADG (SR), ADG (ER), ADG(Trg.), ADG (NZ) and Engineer-in-Chief PWD, Govt. of Delhi for information.
- All Chief Engineers, CPWD & PWD, Delhi. Deputy Director General, CPWD.
- All Chief Architects CPWD.
- Chief Engineer, PWD, Andaman & Nicobar, Port Blair.
- All Superintending Engineers, District Valuation Officer, Senior Architects. They are requested to kindly circulate the memorandum amongst their Executive Engineers, Valuation Officers & Architects in their respective units.
- M/s JSW Steel Limited, Jindal Centre 12, Bhikaji Cama Place, New Delhi - 110066
- Concerned file.

Superintending Engineer (TAS)

TAB-4

DRDO APPROVAL

RAJASWA BHAWAN
NATIONAL TAX HEADQUARTERS



CCE (R-D) NORTH
DRDO

LIST OF APPROVED MAKES

All materials and products shall conform to the relevant standard specification, IS codes and other relevant codes etc. and shall be of approved makes and design.
The list of approved makes for products and materials is given below. Other equivalent manufacturers will only be considered with prior approval of the Employer in case of non-availability or unforeseen difficulties.

A- STRUCTURAL, ARCHITECTURAL FINISHES, SANITATION & PLUMBING WORK

| SR.NO | ITEM | Manufacturers / Suppliers |
|-------|--|---|
| 1 | Cement | L&T, ACC, GRASIM, Gujarat Ambuja, Shree, Lakshmi, J.X |
| 2 | Reinforcement Bars | Primary sources viz. TISCO, SAIL, RINL, JSW |
| 3 | Admixtures | FOSROC, MBT, Asian Lab, MC Baucheme, CICO Plast Super, Chouksey, Chembound, Sika. |
| 4 | Structural Steel Steel Metal Deck | TATA Steel, Jindal, Arcelor Mittal, Nippon Steel, SAIL JSW, TATA |
| 5 | Formwork Release Agent | FOSROC, MBT, MC Baucheme, CICO |
| 6 | Ready Mix Concrete (RMC) | ACC, Unitech, Grasim, L & T. |
| 7 | Reinforcement Couplers | Dextra, Moment |
| 8 | expansion joint system Material shall | [C-S] Construction Specialties |
| 9 | Non Shrink grout | ACC, Fosroc chemical (India), CICO, MC Baucheme, Sika |
| 10 | Bonding Coat | CICO, FOSROC, Fosroc |
| 11 | Pre-stressing system | Freyssinet, BBR, VSL, |
| 12 | Epoxy | FOSROC, Sika QUALCRETE, Araldite, MBT, MYK Schomburg |
| 13 | flush door shutters | Kitply, Anchor Plywood and boards Greenply Industries Limited, |
| | Flush door -Hardware | Godrej Locks, Godrej & Boyce Mfg.Co.Ltd., Doorset, Classic |
| 14 | UPVC top hung casement /sliding windows/doors | Torfenster systems (India) Pvt. Ltd. Fenesta VEKA India Pvt. Ltd. |

Signature(s) and Seal of the Tenderers

List of Approved Makes

Page 565 1

DRDO APPROVAL

RAJASWA BHAWAN
NATIONAL TAX HEADQUARTERS



CCE (R-D) NORTH
DRDO

| SR.NO | ITEM | Manufacturers / Suppliers |
|-------|--|---|
| 15 | UL tested Fire rated steel Single/ double leaf steel doorsets | Indigatech Building Solutions (India) Pvt. Ltd. Agew Steel Manufacturers Pvt. Ltd. Teckentrup |
| 16 | Dry wall / wet wall | EVEREST INDUSTRIES LTD Rondo Metal Systems Pvt.Ltd. |
| 17 | Glass in partitions | Asahi India Glass Limited Saint-Gobain India |
| 18 | PVB Interlayer for Laminated Glass | DuPont, 3M |
| 19 | Toilet cubicle system | MERINO INDUSTRIES LTD: T Line Toilet Cubicles system Niveeta Modular Systems Pvt. Ltd. |
| 20 | UL tested Fire Rated - Motorised Rolling Shutter | Gandhi Automations Pvt Ltd Teckentrup |
| 21 | Glazed Ceramic floor/dado tiles | Kajaria Ceramics Nitco Varmora Granite Pvt. Ltd. RAK Ceramics |
| 22 | Vitrified tiles | Nitcoiles-NITCO Ltd RAK Ceramics ASIAN GRANITO INDIA LTD Kajaria Ceramics |
| 23 | Epoxy grout mix-flooring joints | Laticrete KERAKOLL Ferrox |
| 24 | Raised Floor System- Calcium sulphate | Lindner Group Mero TSK |
| 25 | 6.6 Nylon Flocked Flooring | Forbo Milliken |
| 26 | High Pressure Laminate | Sundek India Ltd Greenoly Industries LTD Merino India |
| 27 | Anti Skid tapes | 3M Building and Commercial Services |

Signature(s) and Seal of the Tenderers

List of Approved Makes

Page 566 2

DRDO APPROVAL

RAJASWA BHAWAN
NATIONAL TAX HEADQUARTERS



CCE (R-D) NORTH
DRDO

| SR.NO | ITEM | Manufacturers / Suppliers |
|-------|--|--|
| | | Green Tech Solutions Tapelndia |
| 28 | GI Clip in Metal False Ceiling System | Lindner Group SAS international |
| 29 | PVC Laminated Gypsum Tile- false ceiling | Armstrong World Industries (India) Pvt. Ltd Gyproc (Saint Gobain) Boral |
| 30 | Oil bound washable distemper | Asian Paints,Dulux Distemper,Berger Paints, Nerolac Paints,Ganware Paints Limited |
| 31 | Synthetic enamel paint | Nerolac Paints Ltd. Dulux Enamel Paints Asian Paints Berger |
| 32 | Exterior Texture Paint | Sherwin Williams NCL ALLTEK & SECCOLOR LTD Asian Paints |
| 33 | Anti corrosive epoxy paint top coat | Asian Paints PPG Pvt. Ltd. Jotun India Private Limited Newkem Products Corporation (NPC) |
| 34 | Anti corrosive Polyurethane top coat | Asian Paints PPG Pvt. Ltd. Jotun India Private Limited Newkem Products Corporation (NPC) |
| 35 | Column guards- EPDM extruded rubber mounted | Kiran Rubber Industries Pvt. Ltd. Shiv Safety Solutions Frontier Polymers Pvt. Ltd. |
| 36 | Road marking strips (retroreflective) | APCOMARK -Asian paints Imperial Lube Chem Pvt Ltd Sunrise Overseas |
| 37 | Basement waterproofing & Waterproofing of un-confined Retaining Wall | CETCO's Ultraseal xp & Swelltite |
| 38 | Podium water proofing (self adhesive, cold applied, HDPE membrane) | Bituthene 8000 of GRACE waterproofing products |
| 39 | Spray Applied Rigid Closed Cell Polyurethane Thermal Insulation | Coating & Lining Solutions Lloyd insulations(India)Limited Bayer |

Signature(s) and Seal of the Tenderers

List of Approved Makes

Page 567 3

DRDO APPROVAL

RAJASWA BHAWAN
NATIONAL TAX HEADQUARTERS



CCE (R-D) NORTH
DRDO

| SR.NO | ITEM | Manufacturers / Suppliers |
|-------|--|---|
| 40 | Thermoplastic Waterproofing Membrane with Active Polymer Core (APC) for roof waterproofing | Coreflex 60 product manufacturer CETCO Lining Technologies India Private Limited |
| 41 | Unitized Glazing | SCHEUCO Ponzio India Private Limited Sapa Extrusion India Private Ltd |
| 42 | Spray applied Cementitious Fireproofing | Grace(Monokote) ISOATEK Newkem Products Corporation |
| 43 | Mechanical car parking system | Klaus Multiparking Systems Wöhr Parking Systems (WPS) Dantal Hydraulics Pvt Ltd. |
| 44 | LIFTS/Elevators | Schindler India Pvt. Ltd. Otis Elevator Company (India) Ltd Mitsubishi KONE Elevator India Private Limited |
| 45 | Dumbwaiters | East India Elevator Ltd, Olympus, KONE Elevator India Private Ltd. Blue Star Elevators (India) Ltd. Beacon Elevator Co. Pvt. Ltd. EASA ELEVATORS PRIVATE LIMITED |
| 46 | S.W.R PVC PIPES, PVC pipes & fittings | Astral, Supreme, Prince |
| 47 | uPVC pipes & fittings | Astral, Supreme, Precision |
| 48 | Underground Drainage pipes | Astral Foamcore, UDS, Supreme Eco-Drain |
| 49 | Sewage Treatment Plant (SIBF / SBT) | Energy Tech Solutions Pvt Ltd / e-Ally Consulting (I) Pvt. Ltd. |
| 50 | CPVC Pipes / fittings | Astral Bendable / Lubrizol . Supreme, Kisan |
| 51 | C.P. Fittings/ Dual flush, Flush Valves | Jaquar, Hindware, Aqual, Cera |
| 52 | Sanitary wares | Hindware, Parryware, Cera |
| 53 | Stainless Steel kitchen sink | Njrall, Jayna, Anupam |
| 54 | Toilet Accessories | Technocrats, Technical Concepts products |
| 55 | G.M.Valves (Gun metal-valves) | RB, Sant Valves Pvt. Ltd, M/s. Leader Valves Ltd.,Itap |
| 56 | Cast Iron Cover | Jayaswal Neco Industries Limited |
| 57 | Polyethylene Water Tank | Sintex Industries Limited Ace Polymers (India) Shobha Products |
| 58 | GI / MS Pipes | Tata, Zenith, Surya, Jindal |
| 59 | C.I. PIPES | NECO, Kapilansh, HEPCO |
| 60 | Fire Fittings / Hydrant Valves / Connections/Hoses | NewAge Industries manufactures, Minimax-Gunnebo India Private Ltd, Nitin Fire Protection Industries Ltd. |
| 61 | CI Valves | Lehry Instrumentation & Valves Pvt. Ltd Marck Engineers ,LP |

Signature(s) and Seal of the Tenderers

List of Approved Makes

Page 568 4

DRDO APPROVAL

RAJASWA BHAWAN
NATIONAL TAX HEADQUARTERS



CCE (R-D) NORTH
DRDO

| SR.NO | ITEM | Manufacturers / Suppliers |
|--------------------------|-------------------------------------|---|
| 62 | Pumps | Grundfos India, Kirloskar Ebara Pumps Limited, Kirloskar Brothers Limited |
| 63 | Pressure Gauge | Fieber, Guru |
| 64 | Flow Switches | Flowell, Flowman |
| 65 | Sprinkler heads | Tyco, Newage, Minimax |
| B ELECTRICAL WORK | | |
| 1 | Cables ISI Mark, 1100v (Grade) Xlpe | Finolex/ Havells/ RPG/CCI/UNIVERSAL |
| 2 | Wires: 1100v Grade ISI Mark Frs | Finolex/ RR cables/ RPG/Havells |
| 3 | ERW M.S. Conduits ISI Mark | BEC, NIC, Wlmco. |
| 4 | Casing Capping & Accessories | Precision, Modi, Asian, Diamond |
| 5 | Trunkings & Trunklinks | Precision, Modi, Asian, Diamond. |
| 6 | ERW/Pvc Conduits | Precision, Asian, AKG, BEC, Diamond. |
| 7 | Distribution Boards, Mcb's, 1Dka | Schneider/Legrand/Mk India |
| 8 | 6/16a Modular Switch & Sockets | Legrand, Siemens, Schneider, L&T, Mk |
| 9 | Elcb/Rccb | Legrand, Siemens, Schneider, L&T |
| 10 | Electrical Fittings | Philips, Wipro, Crompton, Trilux |
| 11 | Fans And Exhaust Fans | Cromptons, Gec, Usha. |
| 12 | HRC Switch Fuse Units | Gepc, L&T, Siemens, Schneider, ABB. |
| 13 | Change Over Switches | L&T, Havells, Gepc. |
| 14 | Cable Glands & Lugs | Siemens, Dowels, Braco, Connectwell |
| 15 | Industrial Sockets | Legrand, Pace, Scame, BCH |
| 16 | Flourescent Tubes & Bulbs | Philips, Crompton, Osram |
| 17 | LED's | Cree, Nixie, HQ 4 Or Equivalent. |
| 18 | Contactors | L&T, Siemens, Schneider, Gepc.ABB |
| 19 | MCCBs | L&T, Schneider, ABB, Siemens. |
| 20 | C.T 'S | A.E., Imp, Meco, Siemens |
| 21 | Capacitors | Siemens, Asian, L&T, Or Equivalent. |
| 22 | P.F. Relay | L&T, Crompton, ABB, Schneider. |
| 23 | Indication Lamps | Technic, L&T Or Equivalent. |
| 24 | Control Relays | DEN/Pla Or Equivalent |
| 25 | Load/ Power Manager | Conzerve/Schneider/Siemens/L&T / ABB |
| 26 | ACB's | L&T, Schneider, ABB, Siemens. |
| 27 | A Vfd's | L&T/Siemens/ABB. |
| 28 | Cable Trays GI | Factory fabricated as per approval |
| 29 | Aluminium Raceways | Indal/Jindal/Hjndalco |
| 30 | Transformers | Universal/Raychem Rpg/ABB/Esennar electricals / Volt Amp/Kirloskar |
| 31 | Ht 33kv Breakers/Rmu | ABB/Schneider/Siemens |
| 32 | 33 Kv Cables | Finolex/ RPG/Universal /CCI |

Signature(s) and Seal of the Tenderers

List of Approved Makes

Page 568 5

RDSO - RAILWAYS



भारत सरकार - रेल मंत्रालय
अनुसंधान अभिकल्प और मानक संगठन
लखनऊ - 226 011
EPBX (0522) 2451200
Fax (0522) 2458500

Government of India-Ministry of Railways
Research Designs & Standards Organisation
Lucknow - 226 011
DID (0522) 2450115
DID (0522) 2465310



Date: 31.05.2016

No. WKS/85/TMT/JSW

M/s JSW Steel Limited,
607, 6th floor,
Bhikaji Cama Bhawan,
Bhikaji Cama Place,
New Delhi - 110066

Sub: Registration of your firm as supplier for the supply of TMT Reinforcement steel bars in Indian Railway.

Ref: i) Railway Board letter no. 2007/CE-I/CT/8 dated 07.03.2014, 31.03.2015 & 22.01.16.

ii) Your application no. JSW/DEL/TMT/14-15/Jan/002 dated 19.01.2015.

Your application under ref. (ii) above regarding empanelment of your firm **"M/s JSW Steel Limited, 607, 6th floor, Bhikaji Cama Bhawan, Bhikaji Cama Place, New Delhi** as supplier of TMT Reinforcement bars was scrutinized in accordance with Railway Board letters under ref. (i) above. After satisfactory scrutiny of documents, the plant visit was carried out by Director/Works/RDSO and infrastructure found in order. Accordingly, competent authority has approved registration of your firm as primary producer of TMT Reinforcement bars for the period of three years i.e. upto **31.05.2019** with following details:

| | |
|--|--|
| <ul style="list-style-type: none"> • Head Office : M/s JSW Steel Limited, JSW Centre, Bandra Kurla Complex, Bandra (East), Mumbai -400051 | <ul style="list-style-type: none"> • Work Address : Village- Vijayanagar, Taluka - Toranagallu, Distt.- Bellary, Karnataka |
| <ul style="list-style-type: none"> • Trademark : | NEOSTEEL |
| <ul style="list-style-type: none"> • Registration for TMT Steel Reinforcement bars Fe500 (8-40mm), Fe500D (8-40mm), Fe550 (8-40mm), Fe550D(8-40mm), Fe600 (8-40mm) and Corrosion Resistance Steel (8mm-40mm) nominal dia confirming to IS-1786:2008 with latest amendment. | |
| <ul style="list-style-type: none"> • Validity of Registration : Upto 31.05.2019 | |

This registration has been done on the basis of information and documents provided by you and the facilities available/ shown during inspection in the plant. If, during the course of time, any outsourcing of finished product is done by your firm, affecting the current status of manufacturing / production capacity, this registration shall not be valid unless & until prior approval is taken from RDSO for the modified manufacturing and out sourcing process/ capacity.

RDSO - RAILWAYS

This registration is also subjected to timely renewal of your BIS and other licenses and fulfillment of other conditions as per "Guidelines for vendor approval for supply of TMT reinforcement bars on Indian Railways" available at RDSO website under 'Vendor Interface'. You will also be required to intimate this office regarding renewal of your licenses and any deviation in the firm's identity and business well in advance.

DA: Nil.


(Sandeep Kumar)
Director/Works/RDSO

RDSO - RAILWAYS

Copy to:

1. Executive Director/CE (G), Railway Board, Room no. 127, Rail Bhawan , New Delhi – 110001: For kind information.

Copy for information and necessary action to:

2. Principal Chief Engineer, Central Railway, GM Building, 2nd Floor, PCEs office, CST Mumbai – 400 001
3. Principal Chief Engineer, Eastern Railway, 17 N.S. Road, Fairlie Place, Kolkata – 700 001.
4. Principal Chief Engineer, East Central Railway, Engineering Department, 4th Floor, New GM Building, Hajipur- 844 101.
5. Principal Chief Engineer, East Coast Railway, Rail Sadan, Chandrashekharpur, Bhubaneswar– 751 017.
6. Principal Chief Engineer, Northern Railway, Baroda House, New Delhi – 110 001.
7. Principal Chief Engineer, North Central Railway, HQ office, Subedarganj, Allahabad – 211 015.
8. Principal Chief Engineer, North Eastern Railway, GM office, Gorakhpur – 273 012.
9. Principal Chief Engineer, Northeast Frontier Railway, HQ office, Maligaon, Guwahati – 781 011.
10. Principal Chief Engineer, North Western Railway, HQ office, Near Jawahar Circle, Malviya Nagar, Jaipur – 302 017.
11. Principal Chief Engineer, Southern Railway, HQ office, Park Town, Chennai – 600 003.
12. Principal Chief Engineer, South Eastern Railway, GM office, 11-Garden Reach Road, Kolkata – 700 043.
13. Principal Chief Engineer, South East Central Railway, GM Building, 3rd Floor, Bilaspur (Chhattisgarh) – 495 004.
14. Principal Chief Engineer, South Central Railway, Rail Nilayam, Secunderabad-500071.
15. Principal Chief Engineer, South Western Railway, GM office, Club road, Hubli – 580 023.
16. Principal Chief Engineer, Western Railway, Engineering Department, 2nd Floor, GLO Building, Church Gate, Mumbai – 400 020.
17. Principal Chief Engineer, West Central Railway, GM office, Indra Market, Jabalpur – 482 001.
18. Chief Administrative Officer of Zonal Railways.
19. CMDs of IRCON, RITES, RVNL, RLDA, CONCOR, DMRC, KRCL, MRVC, DFCCIL, RailTel and CRIS.

DA: Nil.


(Sandeep Kumar)
Director/Works/RDSO

METRO RAIL – DELHI METRO

No. DMRC/20/II-37/2009

Date: 11.03. 2010

NOTE

Sub: Updated list of approved manufactures/suppliers

Please find enclosed herewith the list of approved manufactures/suppliers. In this list, the name of JSW Steel has been added for Reinforcement steel bars.

| | |
|--------------------|---|
| Reinforcement Bars | SAIL Plants, Rashtriya Ispat Nigam Ltd. (Vizag Steel Plant, Andhra Pradesh), Tata Steel (Jharkhand), Ispat Industries (Maharashtra), JSW Steel (Karnataka) and Essar Steel (Gujarat). |
|--------------------|---|

This for your information please.

S. S. Singh
CE/Tender

To,

1. All CPM's

METRO RAIL – DELHI METRO

**EMPLOYER'S REQUIREMENTS
APPROVED MANUFACTURERS/SUPPLIERS**

All materials and products shall conform to the relevant standard specification, BIS codes and other relevant codes etc. and shall be of make as approved by Engineer.

The list of approved makes for products and materials is given below. Other equivalent manufacturers may also be considered with prior approval of the Engineer, if found conforming to all standards. Such requests should be made with all documents to the Engineer at least 45 days before the material is required and any order shall be placed only after receiving the written approval of the Engineer.

| S.No. | Details of Materials / Products | Manufacturer's Name |
|-------|---------------------------------|--|
| 1 | Cement | ACC, Ultratech, Gujarat, Ambuja, Grasim, JK Lakshmi |
| 2 | Reinforcement Bars | SAIL Plants, Rashtriya Ispat Nigam Ltd. (Vizag Steel Plant, Andhra Pradesh), Tata Steel (Jharkhand), Ispat Industries (Maharashtra), JSW Steel (Karnataka), JSP, Essar Steel (Gujarat), Shyam Steel (Durgapur) and any other integrated steel plant as per Ministry of Steel's definition. |
| 3 | Epoxy | FOSROC, SIKA QUALCRETE, Aradite, BASF, Kunal Conchem, SWC, Don Chemicals, STP, Cleantech SA, TAM |
| 4 | Expansion Joints | Empanelled Suppliers as per Ministry of Road Transport & Highways letter no. RW/NH-34059/1/96-S&R dated 20 Feb 2001 & any amendments to the same or as approved by DMRC |
| 5 | Admixtures | FOSROC, MBT, MC Bauchemie, Sika, APEX, Pidilite, Polygon, SWC, Choksey, STP, MYK Schomburg, BASF, MAPEI, Kunal Conchem, Durabuild, Conproof, CAC, H & R Johnson, Asian Lab., TAM, Additives, STP |
| 6 | Pile Integrity Testing Agency | CBRI, FUGRO-KND, Pile Dynamic, AIMIL, Geo dynamic, CEG Test House |
| 7 | Anchor Fastener | HILTI, FISHER, Canon, Pooja Forge, AXEL Industries, Panchsheel, Pioneer Nuts and Bolts (TUFF Brand) |
| 8 | Structural Steel | TATA, SAIL, ESSAR, Maharashtra Pipes, Jindal Steel & Power Ltd., JSW |
| 9 | Stainless Steel | Jindal, SAIL or equivalent |
| 10 | Pre-stressing Strand (LRPC) | TATA SSL Ltd, USHA Martin, (DP wires, Ramsarup Nirman only if first two supplies are short) |
| 11 | Welding Electrodes | ESAB, Advani – Orlikon Weld Alloy, Modi, ArcWeld Excel India, GEE, Honavar, K.M. Crown Welding Consumables, Supercor Schweißtechnik, Dwekam Electrodes, L&T Eutectic, Victor |
| 12 | Pot/Elastomeric Bearings | Prequalified Manufacturers as per RDSO's latest approved list or as approved by DMRC. |

Rajan Kataria 9/3/2012
RAJAN KATARIA
Chief Engineer (Design)
Delhi Metro Rail Corporation Ltd.
Metro Bhawan, Fire Engage Lane,
Barakhamba Road, New Delhi-110001

Contd... 2/-

METRO RAIL – CHENNAI METRO



EMBYE Consortium
General Consultant for Chennai Metro
Phase 1

Ref: GCC-282-COE-1106367

Date 29, April 2011

Issued By: DFU ()

To
Mr. S.Balaji,
Project Manager,
M/s., Larsen & Toubro Limited, ECC Division,
Old No.60, New No.44, 3rd street,
Kasi estate, Jafferhanpet,
Chennai 600083.

Project: Chennai Metro Rail Project-Phase-I
Elevated Viaduct from Little Mount to OTA – ECV 03

Sub : Details of Jindal (JSW) Steel Private Limited for TMT Reinforcement
Ref : Submittal No.: 008 Dated: 14 April 2010
Submittal No.: 279 Dated: 15 April 2011
Our Reference: GCC-282-COE-1002028 Dated: 21 April 2010
GCC-282-COE-1002288 Dated: 07 May 2010

Dear Sir,

Reference to your Submittal No.: 279 dated 15 April 2011 in response to our letter reference GCC-282-COE-1002288 dated 07 May 2010 regarding Contractor submission of details of Jindal Steel Private Limited for TMT reinforcement.

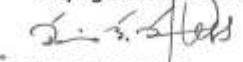
The Employer's Representative hereby accords No Objection to the use of Jindal (JSW) Steel Private Limited as a supplier of TMT reinforcement for Chennai Metro Rail Project.

However, this accord is given on the condition that you shall maintain quality control in accordance with your Quality Assurance Plan at Site and mandatory checks regarding the quality in accordance with Indian Standard IS: 1786: 2008.

The Employer's Representative shall monitor the quality, review the performance of the product and carry out checks and inspections, as and when required. In the event of negative feedback and deterioration in quality, this No Objection shall stand cancelled.

Yours faithfully,

For **Egis Rail S.A., Maunsell AECOM,**
YEC, Egis India & BARSYL (Consortium)


for **Pierre Preumont**
Employer's Representative

Encl. : Nil

Cc To : MD, CGM(C), GM(EC) - CMRL – for information please.

No.42/54, Apex Tower 4th floor, 2nd Main Road, R.A. Puram, Chennai - 600028. Ph: 044-43973973, Fax: 044-43973999

Email: embye.gc@gmail.com (or) general.consultant@embye.com

Page 1 of 1

METRO RAIL – BANGALORE METRO

Contract No: BMR/STN/NS/R3-2 (Construction of Rajajinagar, Kuvempu & Malleshwaram Metro Station)
Special Specifications - Structural Works

List of Approved Makes / Likely Suppliers.

All materials and products shall conform to the relevant Standard Specification, IS codes and other relevant codes etc. and shall be of approved make and design.

The list of approved makes for products and materials is given below. Other equivalent manufacturers can only be considered with prior approval of the Employer subject to testing of the material for equivalent specification and properties.

- | | | |
|-----|--|---|
| 1. | Cement | Ultratech, ACC, Gujarat Ambuja, Shree, Lakshmi, J.K Cement, and Grasim. |
| 2. | Reinforcement Bars | Primary sources viz. TISCO, SAIL, JSW, RINL, In case of shortfall of any particular diameter, their approved Conversion Agents viz. SRMB, Ramsarup Utpadak, Usha Martin, Rathi, Shyam Steel. However the billet has to be procured from the primary producers only and proper quality control to be ensured. |
| 3. | Epoxy | FOSROC, MBT, SIKA QUALCRETE, Araldite, CIBA, GEIGY. |
| 4. | Expansion Joints | Empanelled Suppliers as per Ministry of Road Transport & Highways letter no. RW/NH-34059/1/96-S&R dated 20 Feb 2001 & any amendments to the same |
| 5. | Admixtures | FOSROC, MBT, Asian Lab, MC Baucheme, Sika, BASF, Pidilite. |
| 6. | Waterproofing System | CICO, FOSROC, MBT, SIKA, SUPREME, SILTECH Chemicals, Krypton Build mat Co., Pidilite |
| 7. | Pile Integrity Test | CBRI, FUGRO-KND, Pile Dynamic, AIMIL, Geotech, Geo Dynamic, Struct geotech research laboratories Pvt.Ltd., Bangalore. |
| 8. | Anchor Fastener | HILTI, BOSCH, Tyrolite. |
| 9. | Structural Steel | TATA SAIL, JSW, Jindal, RINL. |
| 10. | Pre-stressing Strand | TATA SSL Ltd, Indore Wire(LRPC), Usha Martin, Sumitomo Wire Corporation |
| 11. | Pot/ Elastomeric Bearings | a) Prequalified Manufacturers as per Ministry of Road Transport & Highways letter no. RW/NH-34057/1/95-S&R dated 2 Nov 2002 & any amendments to the same b) RDSO, Lucknow Prequalified/ approved Manufacturers. |
| 12. | Horizontal Tie bars / Shear Key System & Hold-down devices | BB Bars System, ETIC System, Macalloy System |
| 13. | HDPE Sheathing | Rex Polyextrusion, Gwalior Polypipe Ltd. Dywidag (Grips India) |

Bangalore Metro Rail Corporation Ltd

Page 170 of 171

TRANSMISSION CORP OF TELANGANA LTD APPROVAL

TRANSMISSION CORPORATION OF TELANGANA LIMITED

From : Chief Engineer / 400kV
TSTRANSCO,
Vidyut Soudha, Hyderabad - 500 082.
Tele Fax No : 040 2332 3933.

To : M/s. JSW Steel Limited.,
Regd. Office: JSW Centre,
Bandra Kurla Complex,
Bandra (East), Mumbai-400 051
Ph: +91 22 4286 1000
Fax: +91 22 4286 3000

Lr.No. CE / 400kV / SE-I / DE-1/A4 /EJSW / D.No. 547 / 2017, Dt: 30-06-2017

Sir,
Sub: Approval of M/s. JSW Steel Ltd., for supply of Fe-500/500D/550D grade Reinforcement Steel for Projects of TSTRANSCO - Issued - Reg.
Ref: JSW/MUM/TMT/VKN/1757, Dt: 17.05.2017.
-oO-

M/s.JSW Steel Ltd, have requested approval for supply of Reinforcement Steel for Transmission Lines & Sub-Station projects of TSTRANSCO vide letter cited above.

TSTRANSCO have examined the documents & credentials and hereby accords approval for "JSW make" Reinforcement Steel of Grade Fe-500/500D/550D for Transmission Lines & Substation projects.

However this approval does not absolve M/s.JSW Steel Ltd of their responsibility for supplying the above material and conforming to the relevant specifications, standards and to ensure satisfactory performance as per the terms and conditions of the contract specification. If, at any point of time, any abnormality is noticed, TSTRANSCO reserves the right to withdraw the approval with immediate effect.

Yours faithfully,

[Signature]
Chief Engineer / 400kV

Copy submitted to :-
Chief Engineer / 400kV / TSTRANSCO / Warangal.

- Copies to :-
Superintending / Civil / TSTRANSCO / Vidyut Soudha / Hyderabad.
Superintending Engineer / 400kV/ Metro Circle/ TSTRANSCO/Hyderabad.
Superintending Engineer / 400kV / Construction / Rural / GTS Colony / Erragadda / Hyderabad,
Superintending Engineer/400kV/Construction/Warangal.
Superintending Engineer/400kV/Construction/Karimnagar.
Superintending-II / 400kV / Construction / TSTRANSCO / Vidyut Soudha / Hyderabad.
Superintending / Civil / TSTRANSCO / Karimnagar.
Superintending / Civil / TSTRANSCO / Warangal.
Superintending / Civil / Metro Circle / TSTRANSCO/Hyderabad.
Superintending / Civil / Rural / TSTRANSCO/Hyderabad.
Executive Engineer/Civil/ TSTRANSCO/Warangal

MONO RAIL - MUMBAI

Details of Purchase Order

Page 1 of 2

TRANSMISSION CORPORATION OF TELANGANA LIMITED
B06240/EPR03777 Home

PO Code: B06240/EPR03777 PO Date: 17 Mar 2017
Job / Dept: MUMBAI MONO RAIL Job Code: LE080344
HR Code: 846250/EMR03145 HR Type: Revenue
Warehouse: Mumbai, Mono Rail Vendor Code: V022018
Vendor: JSW STEEL LTD. (CHENNAI) Vendor Offer ID: 1A0001/OPR29236/1
Order ID: 1A0001/OPR29236 Delivery End Date: 31 Mar 2017
Delivery Start Date: 17 Mar 2017 Delivery End Date: 31 Mar 2017
Delivery Term: AT OUR SITE STOCKS Payment Term: 2&6L
Payment Center: Shared Service Centre - Accounting Center Stock Type: REGULAR STOCK-REVENUE
Inserted By: Sachin M. Shekh Approved Date: 13 Mar 2017
Approval L1: S.K.RAJENDRAN Approved Date: 13 Mar 2017
Approval L2: T S Sundaresan Approved Date: 15 Mar 2017
Authorized By: T S Sundaresan Authorized Date: 15 Mar 2017
Inspection Required: Yes File Attachment:
Exchange Rate for Native INR: 1.00 Terms & Conditions:
Reverse Auction ID: HSS Agreement: NOT Applicable
Exchange Rate for Company INR: 1.00 Transport Work Order: No
E1Transaction NO: Initiated BU: Bridges, Metro & Ports

| High Value PO | | Values in INR | | | |
|------------------------|--------|---------------|--------------|----------------------|-------------|
| Tax Details | | | | | |
| Discount | 0.0000 | Excise Duty | 6261537.5000 | Packing & Forwarding | 0.0000 |
| Additional Excise Duty | 0.0000 | Sales Tax | 0.0000 | Freight Charges | 308194.7500 |
| Surcharge | 0.0000 | Turn Over Tax | 0.0000 | Other Charges | 0.0000 |
| Octroi | 0.0000 | Insurance | 0.0000 | | |

Additional Comments:
PRICES ARE FOR SITE MONO RAIL WADALA PROJECT WADALA. TEST CERTIFICATE/TEST REPORT WILL BE SUBMITTED ALONG WITH SUPPLY. YOU SHALL SUBMIT ALL RELEVANT DOCUMENT AT SITE AND THE MATERIALS WILL BE DESPATCHED TO MONO RAIL SITE ON FREIGHT PAID AND ON OR DELIVERY BASIS AFTER INSPECTION AND OBTAINING THE CLEARANCE FROM SITE. CST IS NIL AGAINST FORM C. L&T WILL ISSUE FORM C. THE OCTROI WILL BE PAID BY L&T SITE. IN CASE OF ANY REJECTION AT SITE YOU SHALL REPLACE MATERIALS IMMEDIATELY AND THE TRANSPORTATION CHARGES WILL BE BORNE BY YOU. THE SITE CONTACT PERSON IS MR. M SRINATH MOB NO 09702475294 FOR CO ORDINATING FOR ALL FORMALITIES. SITE STORE INCHARGE IS MR. A K PATHAK MOB NO 9/02/5230, HR DEEPAK 9/02/5231 OR MR KHAJA MOB NO 09702475256. THE PRICES ARE FIRM TILL COMPLETION OF ENTIRE PURCHASE ORDER.

| Item Code | Item Description | Quantity | Price | Amount | Unit |
|-----------|---|----------|-------|---------|------|
| 626405012 | Tor Steel-1:1786 Fe 500 12 Min Dia Is: 1786-1985 | 512 MT | 12000 | 6144000 | MT |
| 626405016 | Tor Steel-1:1786 Fe 500 16 Min Dia Is: 1786-1985 | 362 MT | 12000 | 4344000 | MT |
| 626405020 | Tor steel-1:1786 Fe 500 20 Min Dia Is: 1786-1985 | 512 MT | 12000 | 6144000 | MT |
| 626405025 | Tor Steel-1:1786 Fe 500 25 Min Dia Is: 1786-1985 | 504 MT | 12000 | 6048000 | MT |
| 626405036 | Tor Steel-1:1786 Fe 500 | 180 MT | 12000 | 2160000 | MT |

https://www.latecc.com/MultiItemPODetails.asp?strBackURL=POVI_list.asp&strPOCode=... 5/19/2017

GSIDC APPROVAL

10 Apr 2013 12:50PM jsupto 5555567 p.1



GOA STATE INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED

(A Government of Goa Undertaking) Registered Address: 7th Floor, EDC House, Dr. Amrerni Parkar Road, Panaji - Goa 403 001.

Ref.: GSIDC/Engg/822/ 216

8 April 2013

To M/s. JSW Steel Ltd., UGH, NHCC Tower, 5 Bhubaji Cama Place, New Delhi - 110 066

Sir,

Sub: Approval of JSW TMT Plus for projects in Goa.

With reference to the above cited subject, it is clarified that, if the production of your unit conforms to the criteria laid down in the tender document of GSIDC (Copy enclosed as Annexure -I) or complies to the CPWD Works Manual year 2012 clause 27.2(1) special conditions for steel (Copy enclosed as Annexure -II) then your steel starts permitted for use in the project of GSIDC.

This is for your information.

Thanking you,

Yours faithfully,

(Dilip Joshi) Manager (Engg.)-I

Copy to: 1. M/s. Uttam's Office Plot No. D-12/11, Nessai Industrial Estate, Margao - Goa - 403 709

2. An consultants of GSIDC Ltd. - kthmgh - email

GSIDC APPROVAL

10 Apr 2013 12:50PM jsupto 5555567 p.2

ANNEXURE - I

EMPLOYER: GOA STATE INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED PROJECT: CONSTRUCTION OF 2nd PHASE OF GOA DENTAL COLLEGE AND HOSPITAL AT BAMBOLIM, GOA-CIVIL, PLUMBING, INTERNAL ELECTRICAL, HVAC AND FIRE FIGHTING WORKS

CHAPTER 3: APPROVED BRANDS/MAKES AND MANUFACTURERS

1B: APPROVED BRANDS/MAKES AND MANUFACTURERS OF CIVIL AND PLUMBING

1) Cement for RCC works [43 grade (conforming to IS 8112) Ordinary Portland Cement]

a. ACC, Ultra-Tech, J.P. Rawls, Vikram, Shree Cement Birla Jute and Cement Corporation of India or from reputed manufacturers of cement having production capacity not less than one million tonnes or more per annum as approved by the Ministry of Industry, Government of India and holding license to use ISI certification mark for their product.

2) Cement for Non-RCC Works: ACC, Rajashree, Ultra-Tech, Vasavadatta, Gujarat Ambuja Zuari, Ceromondal, Ramco or from reputed manufacturers of cement having production capacity not less than one million tonnes or more per annum as approved by the Ministry of Industry, Government of India and holding license to use ISI certification mark for their product.

(1) The Contractor shall procure TMT bars of Fe415/Fe500/Fe550 grade (the grade to be procured is to be specified) from primary producers such as SAIL or TISCO or RINL or equivalent as approved by Ministry of Steel. In case of non-availability of steel from primary producers the NIT approving authority may permit use of TMT reinforcement bars procured from secondary producers. In such cases following conditions are to be stipulated in the NIT by NIT approving authority:

- (i) The grade of steel such as Fe415/Fe500/Fe550 or other grade to be procured is to be specified as per BIS 1786-2008.
(ii) The secondary producers must have valid BIS license to produce HSD bars conforming to IS 1786 : 2008. In addition to BIS license, the secondary producer must have valid license from either of the firms Tempcore, Thermex, Evcon Turbo & Turbo Quench to produce TMT Bars.
(iii) The TMT bars procured from secondary producers shall conform to the specifications as laid by Tempcore, Thermex, Evcon Turbo & Turbo Quench as the case may be.
(iv) TMT bars procured either from primary producers or secondary producers, the specifications shall meet the provisions of IS 1786 : 2008 pertaining to Fe 4150 or Fe 5000 or Fe 5500 grade of steel as specified in the tender.

(2) MILD STEEL (Fe 250) : SAIL / TISCO / RINL or equivalent or main product and secondary product having valid BIS license

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10 Apr 2013 12:50PM jsuptc

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ANNEXURE-II *CF*

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SECTION 27

Chief Engineers may change the brand of Cement depending upon availability in local market, if needed. Instructions in this respect can be issued by them at regular intervals. The name of manufacturers should be finalized after taking into consideration the suggestions of contractors during pre bid meeting, if any. Similar conditions for cement of other types like slag cement etc. may be incorporated wherever required by the NIT approving authority by providing for relevant BIS Codes, suitable brands of cement and technical circulars issued by the department.

- (1) The contractor shall procure TMT bars of Fe415/ Fe500/ Fe550 grade (the grade to be procured is to be specified) from primary producers such as SAIL or TISCO or RINL as approved by Ministry of Steel. In case of non-availability of steel from primary producers the NIT approving authority may permit use of TMT reinforcement bars procured from secondary producers. In such cases following conditions are to be stipulated in the NIT by NIT approving authority:
- The grade of the steel such as Fe415/Fe500/Fe 550 or other grade to be procured is to be specified as per BIS 1786-2008.
 - The secondary producers must have valid BIS licence to produce HSD bars conforming to IS 1786 : 2008. In addition to BIS licence, the secondary producer must have valid licence from either of the firms Tempcore, Thermex, Evcon Turbo & Turbo Quench to produce TMT Bars.
 - The TMT bars procured from primary producers shall conform to manufacture's specifications.
 - The TMT bars procured from secondary producers shall conform to the specifications as laid by Tempcore, Thermex, Evcon Turbo & Turbo Quench as the case may be.
 - TMT bars procured either from primary producers or secondary producers, the specifications shall meet the provisions of IS 1786 : 2008 pertaining to Fe 415D or Fe 500D or Fe 550D grade of steel as specified in the tender (while preparing NIT the grade of the steel to be specified). *(Modified as per OM/MAN/168)*
- (2) The contractor shall have to obtain and furnish test certificates to the Engineer-in-charge in respect of all supplies of steel brought by him to the site of work.
- (3) Samples shall also be taken and got tested by the Engineer-in-Charge as per the provisions in this regard in relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to the specifications as defined under para (1)(d) & (1)(e) above, the same shall stand rejected, and it shall be removed from the site of work by the contractor at his cost within a week time or written orders from the Engineer-in-Charge to do so. *(Modified as per OM/MAN/168)*
- (4) The steel reinforcement bars shall be brought to the site in bulk supply of 10 tonnes or more, or as decided by the Engineer-in-charge.
- (5) The steel reinforcement bars shall be stored by the contractor at site of work in such a way as to prevent their distortion and corrosion, and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.
- (6) For checking nominal mass, tensile strength, bend test, re-bend test etc. specimens of sufficient length shall be cut from each size of the bar at random, and at frequency not less than that specified below:

| Size of bar | For consignment below 100 tonnes | For consignment above 100 tonnes |
|-------------------------|---|---|
| Under 10 mm dia bars | One sample for each 25 tonnes or part thereof | One sample for each 40 tonnes or part thereof |
| 10 mm to 16 mm dia bars | One sample for each 35 tonnes or part thereof | One sample for each 45 tonnes or part thereof |
| Over 16 mm dia bars | One sample for each 45 tonnes or part thereof | One sample for each 50 tonnes or part thereof |

NATIONAL HIGHWAY AUTHORITY OF INDIA AS A MAJOR STEEL PRODUCER



भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
(सड़क परिवहन और राजमार्ग मंत्रालय)
National Highways Authority of India
(Ministry of Road Transport & Highways)
C-5 & 6, SECTOR-10, DWARKA, NEW DELHI 110045

PHONE : 91-11-5074109/5074230
Fax : 91-11-5093607/5093614
Etn. : 223/316/268/269

No. 11041/218/2007-Admn.

August 18, 2010

POLICY MATTER: TECHNICAL (66 /2010)
[Decision taken in TIC File No. NHAI/11018/43/2008/PQ]

NHAI is receiving reference to review the standards for steel to be used for NHAI projects on the pretext that some of the secondary producers are able to produce steel matching with the laid down standards as being produced by primary producers.

It is reiterated that the steel should be conforming to specifications laid down in Section 1009 of MOST Specification for Road and Bridge Works 4th Edition and in case of PPP projects provisions of Section 8.8 of IRC-SP: 84-2009 will also apply.

The extract of Section 8.8 of IRC-SP:84-2009 along with list of main and major producers of steel as per website of Ministry of Steel is enclosed as appendix for ready reference.

No deviation from the Existing Standards is permitted by NHAI, any case of deviation noticed in any contract will be reported to NHAI-IHQ for examination.

This issues with the approval of Chairman.

Sentral
(M Chandrashekhar)
(GM (TIC))

To

PS to Chairman
PS to All Members
All CGMs/CVO
All GMs/DGMs
All PILs/CMUs/SPVs

Copy to:
Library / Hindi Officer

8.8 Steel

8.8.1 Steel for prestressing

In addition to the requirement mentioned in Clause 1009.2 of MOI, the steel for prestressing shall satisfy following conditions:

- i) Uncoated stress relieved low relaxation steel conforming to IS:1426B.
- ii) Prestressing steel shall be subjected to acceptance tests in respect of modulus of elasticity, relaxation loss at 1000 hrs., minimum ultimate tensile strength, stress-strain curve etc. prior to actual use on works as per guidelines contained in BS:4447. The modulus of elasticity value, as per acceptance tests, shall conform to the design value, which shall be within a range not more than 5 percent between the maximum and the minimum.

8.8.2 Reinforcement/Untensioned Steel

- i) Only Fe 500 grade of steel shall be used on works and all reinforcing steel for use in works shall be procured from main/major producers. Fe 415 grade of steel can also be used where permissible as per IRC Codes and Guidelines.
- ii) Only fresh steel shall be brought to the site. Every bar shall be inspected before assembling on the work; and defective, brittle or burnt bars shall be discarded. Cracked ends of bars shall be cut before use.
- iii) Only Thermo Mechanically Treated (TMT) bars conforming to IS:1786 shall be used as reinforcing steel.
- iv) All reinforcement shall be free from loose rust and coats of paints, oil, mud or any other substance, which may destroy or reduce bond. The reinforcement bars bent and fixed in position shall be free from loose rust or scales, coats of paints, oil, mud or chloride contamination and other corrosion products. Where cleaning of corroded portions is required, proposal for effective method of cleaning such as sand blasting shall be submitted to the IE for prior review and comments.
- v) Proprietary steel products will be permissible provided they conform to the minimum requirements.

8.8.3 Steel for bearings

Mild steel, high tensile steel, cast steel, steel forgings, and stainless steel shall conform to the provisions contained in Clause 925.1 of IRC:83 (Part III).

8.8.4 Structural Steel

All structural steel, castings and forgings, fasteners (bolts, nuts, washers and rivets), welding consumables and wire ropes and cables shall conform to the provisions of Clause 505.1.2, 505.2, 505.3, 505.4 and 505.6 respectively of IRC:24.



Home Organisation Setup Contact Us Glossary (Iron & Steel) Sitemap

Indian Iron & Steel Makers

I Steel Producers

A. Main Producers

- 1 Steel Authority of India Ltd. (SAIL) <http://www.sail.co.in/>
- 2 Rashtriya Ispat Nigam Ltd. (RINL) <http://www.vizagsteel.com/>
- 3 TATA Steel Ltd. (TSL) <http://www.tatasteel.com>

B. Major Producers

- 4 JSW Steel Ltd. <http://www.jsw.in>
- 5 ESSAR Steel Ltd. <http://www.essar.com>
- 6 Ispat Industries Ltd. <http://www.ispatind.com/>
- 7 Jindal Steel & Power Ltd. <http://www.jindalsteelpower.com/>

C. Other Producers (Mini Steel Plants)

- 8 EAF based Units : 33 working units
- 9 Induction Furnace based units : 970 working units
- 10 MBF-ETP based units : 2 units

II Sponge Iron Producers

A. Gas based Sponge Iron Units

- 11 ESSAR Steel Ltd. <http://www.essar.com>
- 12 Ispat Industries Ltd. <http://www.ispatind.com/>
- 13 Vikram Ispat Ltd.

B. Coal based Sponge Iron Units : 321 units

- C. Sponge Iron India Limited** <http://spongeironindia.com/>
- D. Orissa Mining Development Corporation**

NATIONAL HIGHWAY AUTHORITY OF INDIA AS A MAJOR STEEL PRODUCER

Submittal form of Approval

Project : Design , Engineering Construction, Development , Finance, Operation and Maintenance of KM 40.000 to KM 221.500 on NH-9 in the state of Andhra Pradesh
 Client : National Highways Authority of India
 Independent Engineer : ICT- Intercontinental Consultants and Technocrats Pvt., Ltd.,
 Concessionaire : GMR Hyderabad Vijayawada Expressways Pvt. Ltd.

Submittal No: GHVEPL / APPROVAL / No. PLL / Materials / 088

Submission for approval of M/s JSW Steel Ltd

@ Ch. 159+000 LMS

Details of enclosures:

| Sr. No | Particulars of enclosures / Tests | Ref. of enclosures | Result / Remarks |
|--------|---|--------------------|------------------|
| 1 | Profile & Product Details | | Enclosed |
| 2 | Bis Certification License | | Enclosed |
| 3 | Product Details | | Enclosed |
| 4 | Previously Supplied Client List, Project Details And Approval Letters | | Enclosed |

Submission Details:

| | | | |
|--------------|---------------------|--------------|--------------------|
| Submitted By | Mr. Manvinder Singh | Received By | S. Lokanadhram |
| Organization | Punj Lloyd | Organization | GMR - Highways |
| Submitted on | 14-09-10 | Received on | 14-09-10 |
| Signature | <i>[Signature]</i> | Signature | <i>[Signature]</i> |

Approval Details:

| | | |
|---|-------------------------------|----------------|
| Comments of Approving Authority - The above said M/s JSW Steel Ltd's approval is accorded. However every lot shall be tested as per MORTH 900 sections and compared with relevant code provisions. | | |
| Approved / Approved with condition / Returned for correction | | |
| Name: S. Lokanadhram | Signature: <i>[Signature]</i> | Date: 14/09/10 |

Receipt of Approval:

| | | | |
|-------------|---------------------|--------------|------------|
| Received By | Mr. Manvinder Singh | Organization | Punj Lloyd |
| Signature | <i>[Signature]</i> | Date on | 14/09/10 |

NMDC APPROVAL

Standard Bidding Document for NMDC Project Nagarav, which is followed by NMDC for their expansion project.

Price Schedule given in Appendix-1 except on account of impact due to price variation, if applicable.

11.2.2 The Contract Price does not include Customs Duty, Counter Veiling Duty, Cess and Additional Duty of Customs, if any, on the imported plant & equipment specified in the Contract, for which prices indicated in the Contract are in Foreign Currencies. However, Contract Price includes Customs Duty & Counter Veiling Duty, Cess and Additional Duty of Customs, if any, on the imported plant & equipment for which prices indicated in the Contract are in Indian Rupees.

Customs Duty, Counter Veiling Duty, Cess and Additional Duty of Customs, if any, for replacement against short supply, damaged, defective items, of such imported Plant & Equipment for which prices indicated in the Contract are in Foreign Currencies shall be borne by the Contractor.

11.2.3 The Contract Price does not include Income Tax & Research & Development (R&D) Cess and Service Tax on imported Engineering / Technical Services/Foreign Supervision & Training by overseas experts for which prices indicated in the Contract are in Foreign currencies.

11.2.4 The Contract Price includes price towards supervision by Foreign Experts for a number of mandays specified in Appendix-1. Should the actual mandays deployed is more than the number indicated in Appendix-1, the Employer shall not pay any extra price to the Contractor for extra mandays unless additional deputation is required for the reasons attributable to the employer.

11.2.5 The prices for imported supplies for which prices are quoted in foreign currency, are for delivery on F.O.B. (Free on Board) Port of shipment basis. However, the Contract price shall include the prices towards ocean freight, Customs & Port clearances (excluding Customs, Counter Veiling Duty, Cess and Additional Duty of Customs, if any) handling including loading & unloading, inland freight & insurance up to plant site for items for which prices are quoted in Foreign currencies. The prices for indigenous supplies for which prices are quoted in Indian Rupees, are for delivery at plant site basis.

11.2.6 As per provisions of VAT Act, TDS towards VAT will be deducted on the value of civil work, erection of plant & equipment, structures and refractories and fabrication of structures at site from the running account bills of the Contractor.

11.2.7 Raw Water & Electrical Power required for Construction & Erection Work at site, shall be supplied by the Employer free of cost as per Sub-Clause 20.4.2 & 20.4.3 hereof. However, Electrical Power for fabrication work, if any, envisaged at site, shall be supplied metered & charged at the rates prevailing from time to time.

11.2.8 The Contractor shall use such items of steel as are made by Steel Authority of India Limited (SAIL) / TATA Steel/ RINL/Essar/JSW and which are required for execution of all civil and building structural work including steeling and technological structures. Such items of steel as are made by SAIL/TATA Steel/ RINL/Essar/JSW and required for the work shall be procured from SAIL/ TATA Steel/ RINL/Essar/JSW - Stockyards.

Subsequently NMDC has approved JSPL excepting reinforcements rods

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GCC (General condition of contract)

NPCIL APPROVAL

Sh. MC Patel
R

| | | |
|---|-------------------------------------|----------------|
| NUCLEAR POWER CORPORATION OF INDIA LIMITED KAKRAPAR ATOMIC POWER PROJECT – 3&4 | Procedure no LT/KAPP34/Civil/191 | Page 1 of 6 |
| THE QUALIFICATION OF JSW Steel Limited FOR SUPPLY OF HYSD AND TMT Bar | Rev. No R0 | |

Nuclear Power Corporation of India Ltd.

Kakrapar Atomic Power Project 3&4

Document Acceptance Note


Procedure Number : LT/KAPP34/Civil/191 Rev No. 0
 Name of Documents : QUALIFICATION OF JSW STEEL LIMITED FOR SUPPLY OF HYSD AND TMT Bar
 Submitted By : Larsen & Toubro Ltd.
 WO / Contract No. : KAPP-3&4/20000/Civil/02/2009/5/WO-80001 dtd. 4th Dec. 2009
 Name of Work : Main Plant Buildings

ABOVE DOCUMENT/PROPOSAL HAS BEEN REVIEWED AND FOUND CONFIRMED WITH THE REQUIREMENTS OF NPCIL SPECIFICATION AND RELEVANT CODES, HENCE ACCEPTED.

REGISTRATION No. KAPP3&4/CIVIL/20000/ DT.

| | NAME & DESIGNATION | SIGNATURE |
|--------------|---------------------------------------|---|
| REVIEWED BY | M. C. PATEL 501D RAMESHA. H V PECC | <i>M. C. Patel</i> <i>Ramesha</i> 10/12/2010 |
| CONCURRED BY | S. B. Kulkarni | <i>S. B. Kulkarni</i> 27/12/2010 |
| CONCURRED BY | — | — |
| ACCEPTED BY | S. SHARMA | <i>S. Sharma</i> 12/7/2010 |


NPCIL APPROVAL

| | | | |
|---|--|------------------------------------|----------------|
|  | LARSEN & TOUBRO LIMITED, ECCD. KAKRAPAR ATOMIC POWER PROJECT – 3&4 | Document no LT/KAPP34/Civil/191 | Page 2 of 6 |
| | THE QUALIFICATION OF JSW STEEL LIMITED FOR SUPPLY OF HYSD AND TMT Bar | Rev. No R0 | |

DOCUMENT FOR
 THE QUALIFICATION OF JSW Steel Limited
 FOR HYSD AND TMT Bar
 MAIN PLANT BUILDINGS

DOCUMENT NO.: LT/KAPP34/Civil/191

NPCIL APPROVAL

| | | | |
|---|---|------------------------------------|----------------|
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| | THE QUALIFICATION OF JSW STEEL LIMITED FOR SUPPLY OF HYSD AND TMT Bar | Rev. No R0 | |

WORK ORDER NO. : KAPP-3&4/CIVIL/02/2009/S/WO-80001 Dated: 04.12.2009

L&T DOCUMENT NO. : LT/KAPP34/Civil/191

| |
|--|
| <p>PREPARED BY :</p>  <p>(SUNIL KUMAR SINGH) Asst. Construction Manager (Civil)</p> |
| <p>REVIEWED BY :</p>  <p>(G. SHEKHAR) QA/QC IN-CHARGE</p> |
| <p>CONCURRED BY:</p>  <p>(PRADEEP KHARE) PLANNING IN-CHARGE</p> |
| <p>APPROVED BY :</p>  <p>(I. CHANDRAN) PROJECT MANAGER</p> |

NPCIL APPROVAL



| | | | |
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NPCIL APPROVAL

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1.0 INTRODUCTION

This document consist of action taken and results in line with the WORK PROCEDURE FOR THE PRE QUALIFICATION OF VENDOR FOR HYSD AND TMT BARS (K34LTCM090A, Rev No. 0) for the pre qualification of JSW Steel Limited to supply the HYSD and TMT Bars as per Section - V of Technical Specification and relevant Codes .

2.0 REFERENCES

- Section –V of Technical Specification
- IS code : 1786
- L&T letter No-LT/KAPP34/Civil/107 dated 10th March 2010

3.0 PURPOSE

To pre qualify the JSW Steel Limited for supply of HYSD and TMT Bars .

4.0 APPLICABILITY

Kakrapar Atomic Power Project -3 & 4.


5.0 VENDOR EVALUATION

5.1. Document

Documents attached to review the following:

1. Credentials
2. Capacity to deliver the goods both quality as well as quantity wise
3. Communication with JSW Steel
4. Visit of Joint Inspection Team
3. QA system, in house testing facilities.
4. Past performance
5. Proof of supply of materials to reputed firm.
6. Third Party Certificate.

NPCIL APPROVAL

| | | | |
|---|---|------------------------------------|----------------|
|  | LARSEN & TOUBRO LIMITED, ECCD. KAKRAPAR ATOMIC POWER PROJECT – 3&4 | Document no LT/KAPP34/Civil/191 | Page 6 of 6 |
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5.2 . Sampling of material at vendor's premises:

The Test samples collected at vendor's premises by L&T & NPCIL joint inspection team for testing in NPCIL approved third party laboratory.

5.3. Verification of Third Party Test Reports:

The third party test reports and in house test reports are verified with respect to relevant standards as specified in Technical Specification.

6.0. Conclusion

After making all process in line with Work Procedure for the pre qualification of vendor for HYSD and TMT bars (K34LTCM090A, Rev No. 0) and-

- Verification of documents provided by JSW Steel.
- Correspondences with JSW steel regarding the quality requirement and action & confirmation from their end.
- Inspection of JSW Steel Plant, by Mr. K. Eswara Rao (L&T-QA) and in line with his recommendation.
- Inspection of JSW Steel Plant, jointly by NPCIL Team along with L&T and test reports of randomly selected samples verification.

JSW Steel Limited is capable to deliver the HYSD and TMT Bars with quality requirement of Section – V of Technical Specification and IS: 1786.

NTPC APPROVAL FOR NTECL POWER PROJECT(VALLUR TPP)

CORPORATE CENTRE

NOIDA



Inter Office Memo

From : AGM [CM] To : AS PER DISTRIBUTION LIST

Our Ref: 01/CM/SIMG/STEEL/2010

Date : 05/03/2010 CC :

SUB: LIST OF MAIN STEEL PRODUCERS OF INDIA.

Procurement of steel from notified main steel producers falls under DOP Clause No 7A(i) of Section - I. As per remarks (i) of the above clause, Competent Authority has approved following main steel producers listed below.

1. Steel Authority of India Ltd.
2. Tata Iron & Steel Co. Ltd.
3. Rashtriya Ispat Nigam Limited.
4. Essar Steel Ltd.
5. Ispat Industries Ltd.
6. JSW Steel Ltd.
7. Lloyd's Steel Industries Ltd.
8. Jindal Steel & Power Ltd.
9. Jai Balaji Industries Ltd., Village - Banskopa, PO - Rajbandh, Durgapur - 713212, West Bengal [Only for TMT Bars Size 08 - 40 mm]
10. Sunflag Steel & Iron Co., PO - Bhandara road, Distt. Bhandara - 441905, Maharashtra [Only for Rounds (15 - 105 mm), Flats (45 - 120 mm width & 4.75 - 28 mm Thick), Hex Rods (15.5 - 42 mm) and Wire Rods (5.5 - 38 mm)]

The above list shall remain valid for Three (3) years from the date of this IOM i.e. till 04/03/2013, unless notified otherwise during the said period.

This is for information and further necessary action.


Manoj Sah

NTPC APPROVAL FOR NTECL POWER PROJECT(VALLUR TPP)

DISTRIBUTION

HEAD OF CONTRACTS & MATERIALS / FINANCE / O&M :-

SINGRAULI/KORBA/RAMAGUNDAM/FARAKKA/VINDHYACHAL/RIHAND/KAHALGAON/NCPS/TALCHER SUPER/TALCHER THERMAL/UNCHAHAR/SIMHADRI/SIPAT/TANDA/BADARPUR/BARH/NORTHKARANPURA/BONGAIGAON/SOLAPUR/GADARWAR/MAUDA/RUPSIYABAGAR/KOLDAM/TAPOVAN VISHNUGAD/LOHARI NAGPALA

ANTA/AURIYA/KAWAS/GANDHAR/KAYAKULAM/FARIDABAD

HEAD OF PROJECT/STATION

SINGRAULI/KORBA/RAMAGUNDAM/FARAKKA/VINDHYACHAL/RIHAND/KAHALGAON/NCPS/TALCHER SUPER/TALCHER THERMAL/UNCHAHAR/SIMHADRI/SIPAT/TANDA/BADARPUR/BARH/NORTHKARANPURA/BONGAIGAON/SOLAPUR/GADARWAR/MAUDA/RUPSIYABAGAR/KOLDAM/TAPOVAN VISHNUGAD/LOHARI NAGPALA

ANTA/AURIYA/KAWAS/GANDHAR/KAYAKULAM/FARIDABAD

COPY FOR KIND INFORMATION PLEASE

ED(NR)/ED(ER-I)/ED(ER-II)/ED(WR)/ED(SR)/ED(ENGG)/ED(FIN)/ED(OS)/ED(HYDRO)
ED(CC&M)

GM(CIVIL)/GM(FIN)/GM(VIG)/CO. SECY

STA TO CMD/D(PROJ)/D(OPN.)/D(COMML)/D(T)/D(FIN)/CVO

NTPC APPROVAL FOR NTECL POWER PROJECT(VALLUR TPP)

| CLAUSE NO. | QUALITY ASSURANCE | | | | | |
|---|--|---|--|---|--|--------------|
| | <p>Even after clearance of re-rollers, induction of billets with identified and correlated Mill test certificates (TC's) in the process of re-rolling, sampling of steel, quality checks thereof and stamping of final product for further identification and correlation with TC's prior to dispatch shall be the responsibility of the contractor and these shall be performed in presence of the authorised representative of the main Contractor.</p> <p>Reinforcement steel shall be procured from main steel producers like SAIL, TISCO, IISCO, RINL, Essar Steel, Ispat Industries, JSW Steel, Lloyds Steel, Jindal Steel & Power and mill test certificates (TC) is to be obtained and submitted to owner for co-relation. In case any size /diameter specified is not available and are proposed to be supplied from the conversion agent of the main Steel producer – the name of such conversion agent / re roller shall have to be approved by owner for which details such as –BIS approval, Main steel producer's approval, Past experience for production of sections of specified material, details of machines, plants testing facilities etc., and confirmation that the process control and manufacturing of steel sections by re-rollers is the same as that of main steel producers, that billets for re-rolling are sourced from main steel producers only shall be furnished with regards to re-roller.</p> | | | | | |
| 7.0.0 | STRUCTURAL STEEL WELDING REQUIREMENTS | | | | | |
| 7.1.0 | <p>The Contractor shall submit to the NTPC Field Welding Schedule for field welding activities in the format No.: QS-01-CQA-W11/F1, this format shall be furnished to the Contractor at pre-award stage. The field-welding schedule shall be submitted to the NTPC along with all supporting documents, like welding procedures, heat treatment procedures, NDT procedures etc. at least ninety days before schedule start of erection work at site. The Contractor shall submit Welding Procedure Specification (WPS) in the format No: QS-01-QAI-W-06/F1 for NTPC approval/ acceptance, this format shall be furnished to the Contractor during post bid discussion stage.</p> <p>All welding and brazing shall be carried out as per procedure drawn and qualified in accordance with requirements of ASME Section IX/BS-4870 or other International equivalent standard acceptable to the NTPC.</p> <p>All welding/brazing procedures shall be submitted to the NTPC or its authorized representative for approval prior to carrying out the welding/brazing.</p> <p>All brazers, welders and welding operators employed on any part of the contract either in the Contractor's/ sub-Contractor's works or at site or elsewhere shall be qualified as per AWS D1.1/ASME Section-IX or BS-4871 or other equivalent International Standards acceptable to the NTPC.</p> <p>Welding procedure qualification and Welder qualification test results shall be furnished to the NTPC for approval. However, where required by the NTPC, tests shall be conducted in presence of NTPC/authorized representative.</p> <p>No welding shall be carried out on cast iron components for repair.</p> <p>All the heat treatment results shall be recorded on time temperature charts and verified with recommended regimes.</p> <p>All Non-destructive examination shall be performed in accordance with written procedures as per International Standards and as mentioned elsewhere in the</p> | | | | | |
| | <table border="1"> <tr> <td>NTECL POWER PROJECT (3X500 MW) (VALLUR THERMAL POWER PROJECT 3X500 MW) DESALINATION PLANT PACKAGE</td> <td>BID DOC. NO. CS-0260-189-2</td> <td>TECHNICAL SPECIFICATIONS SECTION VI, BOOK 2 OF 2 PART-B</td> <td>SUB-SECTION – III E-14 SAMPLING, TESTING AND QUALITY ASSURANCE FOR CIVIL WORKS</td> <td>Page 7 of 33</td> </tr> </table> | NTECL POWER PROJECT (3X500 MW) (VALLUR THERMAL POWER PROJECT 3X500 MW) DESALINATION PLANT PACKAGE | BID DOC. NO. CS-0260-189-2 | TECHNICAL SPECIFICATIONS SECTION VI, BOOK 2 OF 2 PART-B | SUB-SECTION – III E-14 SAMPLING, TESTING AND QUALITY ASSURANCE FOR CIVIL WORKS | Page 7 of 33 |
| NTECL POWER PROJECT (3X500 MW) (VALLUR THERMAL POWER PROJECT 3X500 MW) DESALINATION PLANT PACKAGE | BID DOC. NO. CS-0260-189-2 | TECHNICAL SPECIFICATIONS SECTION VI, BOOK 2 OF 2 PART-B | SUB-SECTION – III E-14 SAMPLING, TESTING AND QUALITY ASSURANCE FOR CIVIL WORKS | Page 7 of 33 | | |

ENGINEERS INDIA LTD (EIL) MRPL APPROVAL



अनुसंधान एवं विकास परिसर, सैक्टर 16, गुडगांव – 122001 (हरियाणा)
Research & Development Complex, Sector 16, Gurgaon - 122001 (Haryana)
EIL/1050/PRATIBHA/32 29.11.2011

Sunil Syal, Sr. Vice President- Business Development.
M/s Pratibha Industries Limited
B-85, 1st Floor, Bhisma-Pitamah Marg,
Defence Colony,
New Delhi-110024
Fax No. (011-39559999)

Sub.: Laying of Interceptor Sewer along Najafgarh, Supplementary & Shahdara drains for abatement of pollution in river Yamuna – Makes of TMT rebar.

Dear Sir,

In order to make uniformity in use of reinforcement steel in execution of various components of Interceptor sewer project, it is recommended to use selected brands which are available at the website of Ministry of Steel under heading Indian Iron and Steel Makers "Main producers and Major producers."

All TMT bars procured from above referred list (SAIL, RINL, TATA Steel Ltd., JSW Steel Ltd., ESSAR Steel Ltd., Ispat Industries Ltd., Jindal Steel and Power Ltd.) and confirming to IS: 1786:2008 are acceptable.

The Other manufacturer's TMT bars are acceptable for use in Interceptor Sewer Project subject to fulfilling the following requirements:

- 1) The manufacturer must have a valid BIS license to produce the TMT bars confirming to IS: 1786:2008. In addition to BIS license manufacturer must possess a valid license from any of the firms Tempcore, Thermax, Evon Turbo & Turbo Quench to produce TMT bars.
- 2) Raw material/ingots/billets to be used for re-bars shall be duly certified by any of the third party inspection agencies Viz. BVIS, LRS, TUV, CEIL, DNV.
- 3) For each lot of material received at site, sample shall be taken and tested as per relevant BIS code in approved laboratories as put in tender document, and shall meet the specified reference values as laid in the relevant BIS code.

You are requested to follow the same and ensure the compliance of the same at an earliest.

Thanking You,


(Sanjoy Mukherjee)

DGM (Infrastructure-Proj 07)
Telephone No. 0124-4794337

सर्व शिक्षा अभियान
उत्कृष्टता का आधार – हमारे कर्मों
DELIVERING EXCELLENCE THROUGH PEOPLE
फोन/Phone: 4794000, 4794100 फैक्स/Fax: 91-124-2391420
Visit us at <http://www.engineersindia.com>



पंजीकृत कार्यालय : इंजीनियर्स इंडिया भवन, 1, भीकाजी कामा प्लेस, नई दिल्ली-110066
Regd. Office : Engineers India Bhawan, 1, Bhikaiji Cama Place, New Delhi-110066
हिन्दी देश की एकता की कड़ी है।

ENGINEERS INDIA LTD (EIL) MRPL APPROVAL

Handwritten notes:
 5/5/10/OP
 Aug 27/11
 m



CONSTRUCTION DIVISION
 R&D Centre Gurgaon

Circular No. 8519-QA-07-19-41- CIR-1049

Sub: Approved suppliers for Structural steel, TMT bars and Cement.

Further, to Circular No. CONSTN 1/2010 dated 15.06.2010, the list of suppliers for Structural steel, TMT bars and Cement has recently been reviewed and revised list is attached as 9-1940-0020 Rev 1.

All RCM/ Site In charge are advised to ensure that all materials utilized at site henceforth are strictly from the listed suppliers only.

However, in case of non availability of structural steel & TMT bars from the listed supplier and based on Project specific requirements for including other suppliers in consultation with client/Project Manager (as applicable), RCM /site in charge shall forward their credentials to HO construction in line with procedure no: 5-1940-9210 (under updation /revision) for further needful action.

Handwritten signature:
 (T Balraj)
 ED(P&C)

Date: 21.05.2012

Distribution :

All RCM's/ Site-in-Charges

- CC : CMD
- : Director (Projects)
- : Shri RK Das, GM(C)
- : Shri M Deshpande, GM(C)
- : Shri Vinay Kumar, GM,Engg.
- : Sh. S. Mukherjee, Divisional QA Manager (C)
- : RK/KKG/AVB/AP/PKR/AKS/SM
- : File QA-07.MF

ENGINEERS INDIA LTD (EIL) MRPL APPROVAL



VENDOR LIST FOR TMT BARS,
 STRUCTURAL STEEL & CEMENT

Document No
 9-1940-0020
 Rev No: 1
 Page 1 of 1

I. STRUCTURAL STEEL

A) Main/Major Producers

| Sl No | Name of Company | Address | Product | Remarks |
|-------|------------------------------|--|---|---------|
| 1. | SAIL | Ispat Bhawan, Lodi road, Delhi | All rolled sections having validity of BIS approval on the date of ordering | |
| 2. | RINL | Rashtriya Ispat Nigam Limited, Visakhapatnam, A.P. | All rolled sections having validity of BIS approval on the date of ordering | |
| 3. | TATA STEEL LTD (TSL) | Tata steel, Jamshedpur | All rolled sections having validity of BIS approval on the date of ordering | |
| 4. | ESSAR STEEL | Essar House 11 Keshavrao Khadye Marg, Mahalaxmi, Mumbai - 400 034. | All rolled sections having validity of BIS approval on the date of ordering | |
| 5. | JINDAL STEEL & POWER LIMITED | 12, Bhikaji Cama Place, New Delhi- 110066, India | All rolled sections having validity of BIS approval on the date of ordering | |
| 6. | JSW STEEL LIMITED | 5A, Dr G Deshmukh Marg, Mumbai Maharashtra, 400261 | All rolled sections having validity of BIS approval on the date of ordering | |
| 7. | ISPAT INDUSTRIES LIMITED | JSW Ispat Steel Limited Victoria House Pandhurang budhkar Marg, Lower parel, Mumbai-13 | All rolled sections having validity of BIS approval on the date of ordering | |

II) TMT Bars

A) Main/Major Producers

| Sl No | Name of Company | Address | Product | Remarks |
|-------|----------------------|--|---|---------|
| 1. | SAIL | Ispat Bhawan, Lodi road, Delhi | All types of bars having validity of BIS approval on the date of ordering | |
| 2. | RINL | Rashtriya Ispat Nigam Limited, Visakhapatnam, A.P. | All types of bars having validity of BIS approval on the date of ordering | |
| 3. | TATA STEEL LTD (TSL) | Tata steel, Jamshedpur | All types of bars having validity of BIS approval on the date of | |

Template No: 5-0000-0001-T2 Rev: 1

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ENGINEERS INDIA LTD (EIL) MRPL APPROVAL

ENGINEERS INDIA LTD
VENDOR LIST FOR TMT BARS,
STRUCTURAL STEEL & CEMENT

Document No
EIL/00-0020
Rev. No. 1
Page 2 of 2

| Sl No | Name of Company | Address | Product | Remarks |
|-------|------------------------------|---|--|---------|
| 4. | JINDAL STEEL & POWER LIMITED | 12, Bhikaji Cama Place, New Delhi- 110066, India | All types of bars having validity of BIS approval on the date of ordering. | |
| 5. | JSW STEEL LIMITED | NA, Dr G Deshmukh Marg, Mumbai Maharashtra 400261 | All types of bars having validity of BIS approval on the date of ordering. | |
| 6. | ISPAT INDUSTRIES LIMITED | JSW Ispat Steel Limited Victoria House, Pandhurang budhkar Marg, Lower parel, Mumbai-13 | All types of bars having validity of BIS approval on the date of ordering. | |

III) CEMENT

| Sl No | Name of Company | Address | Product | Remarks |
|-------|---------------------------|--|---|---------|
| 1. | ACC | ACC Limited Cement House 121, Maharishi Karve Road Mumbai - 400 020 India | Cement with IS 269/1489/ 8112/ 12269/6452/8041 mark | |
| 2. | ADITYA /ULTRA TECH CEMENT | Aditya Birla, 1 st floor Cwing, SK Ahire Marg, Worli, Mumbai | Cement with IS 269/1489/ 8112/ 12269/6452/8041 mark | |
| 3. | BIRLA | Birla Cement Works / Chanderia Cement Works Madhav Nagar, Sector-III, P.O.Cement Factory, Chanderia Distt. Chittorgarh - 312021 (Raj.) | Cement with IS 269/1489/ 8112/ 12269/6452/8041 mark | |
| 4. | GUJARAT AMBUJA | Elegant Business Park, MIDC Cross Road 'B', Off Andheri - Kurla Road, Andheri (East), Mumbai 400 059 | Cement with IS 269/1489/ 8112/ 12269/6452/8041 mark | |
| 5. | SHRI CEMENT | 21, Strand Road Kolkata - 700 001 | Cement with IS 269/1489/ 8112/ 12269/6452/8041 mark | |
| 6. | LAFARGE | Lafarge India Pvt Ltd Bakhtawar, 14th Floor 229 Nariman Point Mumbai 400 021 | Cement with IS 269/1489/ 8112/ 12269/6452/8041 mark | |

Form No. EIL/00-0020-12 Rev. 1

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ENGINEERS INDIA LTD (EIL) MRPL APPROVAL

ENGINEERS INDIA LTD
VENDOR LIST FOR TMT BARS,
STRUCTURAL STEEL & CEMENT

Document No
EIL/00-0020
Rev. No. 1
Page 3 of 3

| | | | |
|-----|--------------------------------|---|---|
| 7. | JK LAXMI CEMENT | House Bahadur shah Zafar marg, New Delhi | Cement with IS 269/1489/ 8112/ 12269/6452/8041 mark |
| 8. | JAYPEE CEMENT | Sector-12B Noida 201304 Uttar Pradesh India | Cement with IS 269/1489/ 8112/ 12269/6452/8041 mark |
| 9. | CCI | CON V SCOPE COMPLEX 7 LODHI ROAD, NEW DELHI PIN - 110 003 | Cement with IS 269/1489/ 8112/ 12269/6452/8041 mark |
| 10. | MADRAS CEMENTS LIMITED (RAMCO) | Madras Cements Limited Corporate Centre, 98-A, Dr Radhakrishnan Salai, Mylapore, Chennai-600004 | Cement with IS 269/1489/ 8112/ 12269/6452/8041 mark |

Note:

- In case of non availability of Structural Steel & TMT bars from Main/ major producers, Engineer in Charge may permit procurement from other manufacturers provided the same is satisfying the technical requirement as per EIL approved procedure. However the order for supply of such items shall be placed by contractor only after approval of the same by EIL/Owner based on project specific requirement.
- In case of supply of Structural Steel & TMT bars from other than Main/Major producers, EIL/Owner shall be entitled to obtain rebate as per norms specified in the tender.

Form No. EIL/00-0020-13 Rev. 1

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EIL APPROVAL AS MAJOR PRODUCER



अनुसंधान एवं विकास परिसर, सैक्टर 16, गुड़गांव - 122001 (हरियाणा)
Research & Development Complex, Sector 16, Gurgaon - 122001 (Haryana)
EIL/1050/PRATIBHA/32 29.11.2011

Sunil Syal, Sr. Vice President- Business Development,
M/s Pratibha Industries Limited
B-85, 1st Floor, Bhisma-Pitamah Marg,
Defence Colony,
New delhi-110024
Fax No. (011-39559999)

Sub.: Laying of Interceptor Sewer along Najafgarh, Supplementary & Shahdara drains for abatement of pollution in river Yamuna - Makes of TMT rebar.

Dear Sir,

In order to make uniformity in use of reinforcement steel in execution of various components of Interceptor sewer project, it is recommended to use selected brands which are available at the website of Ministry of Steel under heading Indian Iron and Steel Makers "Main producers and Major producers."

All TMT bars procured from above referred list (SAIL, RINL, TATA Steel Ltd., JSW Steel Ltd., ESSAR Steel Ltd., Ispat Industries Ltd., Jindal Steel and Power Ltd.) and confirming to IS: 1786:2008 are acceptable.

The **Other manufacturer's TMT bars** are acceptable for use in Interceptor Sewer Project subject to fulfilling the following requirements:

- 1) The manufacturer must have a valid BIS license to produce the TMT bars confirming to IS: 1786:2008. In addition to BIS license manufacturer must possess a valid license from any of the firms Tempcore, Thermax, Evon Turbo & Turbo Quench to produce TMT bars.
- 2) Raw material/ingots/billets to be used for re-bars shall be duly certified by any of the third party inspection agencies Viz. BVIS, LRS, TUV, CEIL, DNV.
- 3) For each lot of material received at site, sample shall be taken and tested as per relevant BIS code in approved laboratories as put in tender document, and shall meet the specified reference values as laid in the relevant BIS code.

You are requested to follow the same and ensure the compliance of the same at an earliest.

Thanking You,


(Sanjoy Mukherjee)

DGM (Infrastructure-Proj 07)
Telephone No. 0124-4794337

सर्व शिक्षा अभियान
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फोन/Phone: 4794000, 4794100
फैक्स/Fax: 91-124-2391420
Visit us at <http://www.engineersindia.com>

पंजीकृत कार्यालय : इंजीनियर्स इंडिया भवन, 1, भीकाएजी कामा प्लेस, नई दिल्ली-110066
Regd. Office: Engineers India Bhawan, 1, Bhikaji Cama Place, New Delhi - 110066
हिन्दी देश की एकता की कड़ी है।



TSGENCO APPROVAL



Telangana State Power Generation
Corporation Ltd

From
The Chief Engineer, Civil,
Hydel & General Services,
TSGENCO, Vidyut Soudha,
Hyderabad - 500 082.

To
M/s JSW Steel Limited,
JSW Centre,
Bandra Kurla Complex,
Bandra (East), Mumbai - 400051.

Lr.No.CE/C/Hydel & GS/HD-II/D.No. 39 /2017-18, Dt.26.07.2017

Sir/Madam,

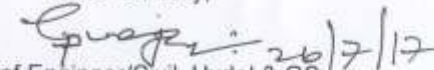
Sub: TSGENCO - Procurement of Steel and other materials - Reg.

Ref: Lr. No.JSW/MUM/TMT/VKN/1757, Dt:17.05.2017 of M/s JSW Steel Limited

With reference to the above, it is to inform that you can submit your Bid for supply of Reinforcement steel against the 'Notice Inviting Tenders' to be published on TSGENCO on e-procurement platform, in future as when tenders called for.

However, you are required to get yourself registered on e-procurement website (www.eprocurement.gov.in) to participate further tenders called for on e-procurement platform.

Yours faithfully,


Chief Engineer/Civil, Hydel & GS

Copy Submitted to:

Executive Director/Civil/Thermal, TSGENCO, Vidyut Soudha, Hyderabad - 500 082 ---with a copy of note approved by CMD for open tender for procurement of steel with technical specification specifying integrated steel manufacturers confining to notification dt.12.02.2016, Ministry of Steel, Govt. of India.

J. KUMAR CERTIFICATE

J. Kumar Infraprojects Ltd.

We dream ... So we achieve...

Regd. OE: 16-A, Andheri Industrial Estate, Veera Dada Road, Andheri (W), Mumbai - 400053, INDIA
Ph.: +91-22-6774 3555. Fax+91-22-2673 0814. E mail : info@jkuar.com Website : www.jkuar.com
CIN No. : L74210MH1999PLC122886



Reference No: - JKIL/008

Date - 08/01/2018

TO WHOM IT MAY CONCERN

This is to certify that M/s JSW steel Ltd having its office at JSW centre Bandra Kurla complex, Bandra (East) Mumbai - 400051, has supplied around 15000 MT of TMT Bars from their Dolvi Plant confirming to IS 1786: 2008 Fe 500D grade to our Mumbai Metro Rail Projects.

The quality of material was found acceptable.

For J KUMAR INFRAPROJECT LIMITED

AUTHORIZED SIGNATORY



TS 16949-2009



CERTIFICATE

Management system as per
ISO/TS 16949:2009
(3rd edition, 2009-06-15)

Evidence of conformity with the above standard has been furnished and is certified for

JSW Steel Limited
Geetapuram, Dolvi - Taluka - Pen,
District Raigad - 402 107,
Maharashtra,
India

with the remote functions according to appendix

Scope

Manufacture of Hot Rolled Steel Coils, Plates and Sheets
(SMS, Caster & Hot Strip Mill Division)
without product design responsibility (according to section 7.3)

IATF Registration No. 0246522
Certificate Registration No. 44 111 131435
Audit Report No. 3518 3422

Issue date: 2016-08-29
Expiry date: 2018-09-14
Audit cycle: 12 months from 2016-07-09

Certification body
at TÜV NORD CERT GmbH

Essen, 2016-08-29

This certification was conducted in accordance with the IATF Rules for auditing and certification and is subject to regular surveillance audits.

TÜV NORD CERT GmbH

Langemarckstraße 20

45141 Essen

www.tuev-nord-cert.de



02-IAO-QMC-01021

page 1/2

A13F200e rev. 02/04.16

PGCIL, BELLARY - RENEWAL APPROVAL

पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)



POWER GRID CORPORATION OF INDIA LIMITED पावरग्रिड
(A Government of India Enterprise)

केन्द्रीय कार्यालय - नवीदमिनी प्लॉट नं. 2, सेक्टर-29, गुरुगंज-122 001, हरियाणा
फोन : 2571700 - 719, फैक्स : 2571760, 2571761, 011-2571761
Corporate Office - "Saudamini" Plot No. 2, Sector-29, Gurgaon-122 001, Haryana
Tel. 2571700 - 719, Fax : 2571760, 2571761 Gram : NATGRID

Ref: C/QA&I/VA/JSW

Date: 10.08.2016

JSW Steel Ltd.
Granade Palladium, 6th Floor,
175 CST Road, Kalina, Santacruz east
Mumbai-400 098

Kind Attention: Sh. Ashok Bharadwaj, Sr. V.P-Marketing

Subject: Renewal of approval of JSW Steel Ltd, Bellary for MS/HT billet/bloom/slabs,
wire rod for fasteners and reinforcement steel/TMT bars Grade Fe 500/Fe 500D

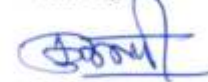
Dear Sir,

This has reference to your letter dated 27.07.2016 submitting documents for renewal. Based on the submitted documents, we hereby extend our acceptance of JSW Steel Ltd, Vijayanagar, Vidyanagar, Toranagallu, Bellary, Karnataka-583275 for MS/HT billet/bloom/slabs as per IS 2830, wire rod for fasteners and reinforcement steel/TMT bars Grade Fe 500/Fe 500D size 8 mm to 40 mm as per IS 1786 (latest revision) on self certification basis with validity up to 31.08.2018. Further approval shall be considered based on supply and quality performance.

The test certificates of billet/blooms/slabs must show IS 2830 and comply the chemical composition as agreed with POWERGRID. Further test certificate of TMT bars should comply the relevant IS 1786 and indicate the IS no in the certificate.

Please ensure that all items shall meet the requirement of POWERGRID. If, at any point of time, any abnormality is noticed in this regard, we reserve the right to withdraw this approval with immediate effect.

With Regards,



(K.K. Tyagi)
DGM (QA&I)

पंजीकृत कार्यालय - बी-9, कृताब इंस्टीटयूशनल एरिया, कटरवा सराई, नई दिल्ली - 110016, फ़ोन : 6560121, फैक्स : 011-6560039, ग्राम : 'नैटग्रिड'
Registered Office - B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110016 Tel. : 6560121 Fax : 011-6560039 Gram : 'NATGRID'

RAJSTHAN URBAN INFRASTRUCTURE LTD APPROVAL



Government of Rajasthan
Office of Project Director
Rajasthan Urban Infrastructure Development Project
AVS Building, Jawahar Circle, JLN Marg, Jaipur - 302017

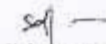
Tel No.: 0141-2721966, Fax No.: 0141-2721919, email : mail@ruidp.gov.in, web site : www.ruidp.gov.in
F3 (106) (63)/PMU/RUSDIP/Vendor approval/ 2010/ Dated: .07.2010

1. **Executive Engineer, IPIU, RUSDIP**
Alwar/ Jaisalmer/ Jhalawar/ Baran/ Barmer/ Bharatpur/ Bundi/ Chittorgarh,
Churu/ Dholpur/ Karauli/ Nagaur/ Rajsamand/ Sawai Madhopur/ Sikar
2. **Team Leader,**
IPMC, Jaipur/ DSC-I, Bharatpur, /DSC-II, Nagaur/DSC-III, Jhalawar

Sub: Approval of Vendor for TMT steel.

Following makes are allowed for use of TMT steel bars in RCC structures being primary billet manufacturers:

- (i) TATA (ii) SAIL (iii) RINL
- (iv) JSW steel Ltd. (v) JSPL
- (vi) ESSAR steels (vii) ISPAT
- (viii) JAI BALAJI Industries Ltd. and
- (ix) SHYAM steel Ltd.


(Vaibhav Galriya)
Project Director

F3 (106) (63)/PMU/RUSDIP/Vendor approval/ 2010/ pc 93 Dated: 10.07.2016
Copy to the following for information and compliance:
1. Addl. P. D./F.A./Dy. P D (A)/(T)/SE (WS)/SE(WW)/SE(R&B), RUIDP, Jaipur
2. PU/APO, PMU, RUIDP, Jaipur.


Dy. Project Director (T)

IL & FS TRANSPORTATION NETWORK LTD APPROVAL

 **IL&FS Transportation**

IL&FS Transportation Networks Limited

KSEL/PRJ/TEC/CLO-579/077

4th February, 2014

To,
Sr. Project Manager,
Montecarlo Limited,

Kind Attention: Mr. Rajeshwara Rao Sajja

Project: Four Lanning of Khed-Sinnar Section of NH-50 from Km 42+000 to Km 177+000 (Design Length – 137.946 Km) under NHDP Phase IV in the state of Maharashtra on DBFOT Basis.

Subject: Submission for Source Approval -Reg.

Ref: ML(P)/RD/4180/CLT/13-14/1121, dt: 21-01-2014

Dear Sir,

This is in reference to the subject cited above.

As proposed by you vide above letter, we hereby provisionally approve the following sources:

- 1) Ultratech Cement Limited for OPC 43/53
- 2) ACC (ACC Limited) for OPC 43/53
- 3) JSW Steel Limited for Fe 500 steel
- 4) Hindcof for Emulsion RS 1& SS 1

However, final approval for both the cements shall be given based on submission of the test results and concrete mix designs with the above cements and final approval for JSW Steel Limited will be given after factory visit and getting concurrence from IE/Client.

Kindly inform us the updated list of NHAI projects or similar projects where JSW Steel Limited is/has been used. Also submit the revised BIS & ISO certificates for JSW Steel Limited as same are already expired.

It is requested to arrange for a factory inspection for all above brands from where you plan to take the material and convey us the date for same in well advances.

Yours Faithfully,

For Khed-Sinnar Expressway Limited


S.P. Singh
Project Director

Received by


Registered Office : The IL&FS Financial Center, Plot C-22, G Block, BandraKurla Complex, Bandra (East), Mumbai- 400051
Ph : 022-26533333 Fax : 022-26523979

HIMACHAL PRADESH CORPN LTD.- SHONGTONG KARCHHAM APPROVAL



HIMACHAL PRADESH POWER CORPORATION LIMITED

(A- State Government Undertaking)

General Manager

Shongtong-Karchham HEP (450 MW) Reckong Peo

Distt. Kinnaur (H.P)-172107

Fax: 01786-223174 Tel:01786-223310 Email:-skhep.hppcl@gmail.com

NO.HPPCL/STKHEP/EPC Contract /2013- 5010-14

Dated:- 31/12/2013

To

The General Manager (P),
M/s Patel Engineering Ltd,
Shongtong Karchham HEP,
Near State Bank of Patiala,
V.P.O. Khawangi, Teh. Kalpa,
Distt. Kinnaur (HP).


Subject: "EPC Contract Package for 450 MW Shongtong – Karchham, Hydroelectric Project located in Kinnaur District of Himachal Pradesh, India (Civil & Hydro Mechanical Works. Approval of source for construction materials i.e. reinforcement steel.

Reference:- Your office letter No. 100/335/STKHEP/2013/257 dated 27/11/2013.

Sir,

With reference to above letter source approval for TMT Reinforcement Steel of M/s JSW Ltd. is hereby accorded subject to the conditions that material shall comply with all the latest / relevant IS/BIS codes and technical specifications of the subject cited contract agreement.

Yours Sincerely,


General Manager
Shongtong- Karchham HEP
HPPCL, Reckong Peo
Distt. Kinnaur (H.P.).

C.C.

1. The Director (Civil), HPPCL, Himfed Bhawan, Panjri, Tutikandi, Shimla-5, for kind information please.
2. The General Manager (Contracts), Corporate Contracts Procurement Cell, HPPCL, Shanti Kutir, Kamana Nagar, Chakkar, Shimla, for information please.
3. The General Manager (CP), HPPCL, Himfed Bhawan, Panjri, Tutikandi, Shimla-5, for information please.
4. The Dy. General Manager (QC), HPPCL, BBMB Colony, Sundernagar, Distt. Mandi, for information please.

L & T-ECC QUALITY CERTIFICATE FOR DELHI AIRPORT PROJECT



LARSEN & TOUBRO LIMITED

ENGINEERING CONSULTANTS DESIGNERS & CONTRACTORS

Delhi Airport T3 Works, C/o Delhi International Airport Limited, IGI Airport New Delhi - 110037
Phone 011 - 46097400 Fax : 011 46097405 Website : www.lntec.com

REF: LTCD/DIAL/PUR/2312

Dec. 22, 2008

TO WHOMSOEVER IT MAY CONCERN

This is to certify that M/s JSW Steel Limited, 'D' Estate, No. 121, 3rd Floor, Dickenson Road, Bangalore - 560042, has supplied around 5800MT of MS TMT bars conforming to IS 1786 Fe 500 to our Delhi International Airport Project.

The quality of the materials were found to be satisfactory.

For LARSEN & TOUBRO LIMITED
ECC DIVISION


(K.P. Sudheesh Kumar)
Head - Purchase
DIAL Project



Regd. Office: L & T House, Ballard Estate, P.O. Box 276, Mumbai - 400 001
ECC Division Head Quarters: Mount Poonamallee Road, Manapakkam, P.O. Box 979, Chennai - 600 088

STUP CONSULTANTS APPROVAL



STUP Consultants P. Ltd.

Post Bag No. 9994, 1004 & 5, Raheja Chambers,
213, Nariman Point, Mumbai - 400 021.
Tel: 40868686 Fax: 22048424
E-mail: mumbai@stupmail.com

JSW Steel Ltd,
Mumbai

Com/201/su.scd/

22nd March, 2010

Attn. Mr. D. Pramaik - DGM

Sub : Approval & Enlistment of JSW Steel Ltd. for supply of Reinforcement Steel (TMT Re-bars) for various Upcoming and Ongoing Projects

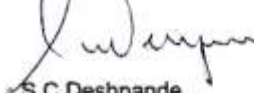
Dear Sir,

We thank you for sending us your complete Dossier of the range of products that you are manufacturing for review.

- We also note that you are one of the leading Producers of Steel and Steel Products in India.
- From the accompanying documents, we gather that you have been supplying your products to several Agencies including leading Contractors like HCC, L&T/ECC, TATA Projects, Nagarjuna Construction Ltd, Shapoorji Pallonji Ltd, who are engaged in the execution of various Government and Private Projects.
- Finally on reading through the entire Dossier at hand we wish to state and inform you as follows:
 - This letter of ours may be deemed as our 'Approval' of the range of products manufactured and supplied by you.
 - Your name shall be included in our Approved Suppliers List for supply of Reinforcing Steel for the various Projects for which we have been commissioned as Consulting Engineers.

Thanking you,

Yours faithfully,
For STUP Consultants P. Ltd.


S.C. Deshpande
Advisor

LANCO INFRATECH



LANCO INFRATECH LIMITED

EPC Division : Plot No. 229, Udyog Vihar, Phase-I,
Gurgaon-122 016 Haryana Tel. : 0124-4691000/01/02/03/04
Fax : 0124-4692554 Web. : www.lancogroup.com



Date: 12.02.2009

TO WHOMSOEVER IT MAY CONCERN

This is to certify that M/s. JSW Steel Ltd, "The Estate, No.121, 3rd Floor, Dickenson Road, Bangalore – 560 042, has supplied around 9500 MT of MS TMT bars Confirming to IS 1786 Fe500 Grade to our Udupi Thermal Power Project at Padubidri, Karnataka.

The quality of TMT bars supplied was found to be satisfactory.

For Lanco Infratech Limited

(R.N.S Tomar)
Vice President
Procurement & Contracts



Regd. Office : Plot No. 4, Software Units Layout,HITEC City, Madhapur, Hyderabad - 500 081, Andhra Pradesh, India
Tel. : +91-40-4009 0400, Fax : +91-40-2311 6127

CARES CERTIFICATE



UK Certification Authority for Reinforcing Steels

Pembroke House
21 Pembroke Road
Sevenoaks, Kent, TN13 1XR, UK
Tel: 00 44 1732 450000
Fax: 00 44 1732 455917
Email : ayhantugrul@ukcares.com
Website: www.ukcares.com

Our Ref: APP2505 - 700

16 June 2017

Mr. N Sharma
DGM (Internation Marketing)
JSW Steel Ltd.,
JSW Centre, Bandra Kurla Complex Bandra (East),
Mumbai

40051
India

Dear Mr. Sharma

I am pleased to inform you that your application for CARES approval for the products listed below has been successful:

Production of BS 4449 2005 Grade B500B Bar 8 – 40mm

A separate QMS certificate (1504) has been issued for Production o continuously cast steel billets and hot rolled steel bars for the reinforcement of concrete. Please find enclosed your certificate of approval and do not hesitate to contact this office if you require any further assistance.

Yours sincerely

Ayhan Tugrul
General Manager

A Company limited by Guarantee.
Registered in England No. 1762448
The use of the Accreditation Mark indicates accreditation
in respect of those activities covered by the accreditation certificate number 002.

CERTIFICATE OF APPROVAL



Quality Management System Certification

This is to certify that
JSW Steel Ltd., Vijayanagar Works
 at its establishment at
Karnataka, India

has been approved by the Authority to the following management system standard using the processes and procedures registered with the Authority:

BS EN ISO 9001: 2008

Scope of certification:

Production of continuously cast steel billets and hot rolled steel bars for the reinforcement of concrete

This certificate remains the property of the Authority and is issued subject to the Regulations of the Authority. This certificate is uncontrolled when printed. To check the validity of this certificate please visit www.ukcares.com or contact us on +44 1732 450000.

| CERTIFICATE NUMBER | FIRST APPROVAL | ISSUE DATE | EXPIRY DATE |
|--------------------|------------------|---------------------|--------------------------|
| 1504 | June 2017 | 16 June 2017 | 16 September 2018 |

SIGNED FOR UK CERTIFICATION AUTHORITY FOR REINFORCING STEELS

Lee Brankley

Lee Brankley,
 Chief Executive Officer



The use of the Accreditation Mark indicates accreditation in respect of those activities covered by the accreditation certificate number 002.
 UK Certification Authority for Reinforcing Steels, Pembroke House, 21 Pembroke Road, Sevenoaks, Kent, TN13 1XR, UK.
 A Company Limited by Guarantee. Registered in England No. 1762448.
 Cert. Ref: ALLC112010 70001 1306

CERTIFICATE OF APPROVAL



Product Conformity Certification

This is to certify that
JSW Steel Ltd., Vijayanagar Works
 at its establishment at
Karnataka, India

has satisfied the Authority that it operates a quality management system that complies with the requirements of BS EN ISO 9001 2008 and the relevant CARES Quality and Operations Assessment Schedules. Where appropriate, and as listed below, it has further satisfied the Authority that it manufactures and/or supplies products that conform with the stated product standards and is entitled to use the CARES marks on its products using the processes and procedures registered with the Authority.

Scope of certification:

BS 4449 2005 Grade B500B Bar 8 - 40mm

This certificate remains the property of the Authority and is issued subject to the Regulations of the Authority. This certificate is uncontrolled when printed. To check the validity of this certificate please visit www.ukcares.com or contact us on +44 1732 450000.

| CERTIFICATE NUMBER | FIRST APPROVAL | ISSUE DATE | EXPIRY DATE |
|--------------------|------------------|---------------------|-------------------------|
| 170403 | June 2017 | 16 June 2017 | 31 December 2017 |

SIGNED FOR UK CERTIFICATION AUTHORITY FOR REINFORCING STEELS

Lee Brankley

Lee Brankley,
 Chief Executive Officer



The use of the Accreditation Mark indicates accreditation in respect of those activities covered by the accreditation certificate number 002.
 UK Certification Authority for Reinforcing Steels, Pembroke House, 21 Pembroke Road, Sevenoaks, Kent, TN13 1XR, UK.
 A Company Limited by Guarantee. Registered in England No. 1762448.
 Cert. Ref: ALLC112010 70001 1306

CIDCO APPROVAL TMT-PLATES



CITY AND INDUSTRIAL DEVELOPMENT CORPORATION OF MAHARASHTRA LIMITED

(CIN - U99999 MH 1970 SGC - 014574)

REGD. OFFICE:

"NIRMAL", 2nd Floor, Nariman Point,
Mumbai - 400 021.
PHONE : 00-91-22-6650 0900
FAX : 00-91-22-2202 2509

HEAD OFFICE:

CIDCO Bhavan, CBD Belapur,
Navi Mumbai - 400 614.
PHONE: 00-91-22-6791 8100
FAX : 00-91-22-6791 8166

Ref. No. CIDCO/ENGG/EE (PA&R)/P-1093/747

Date : 06.09.2017

To;

M/s JSW Steel Ltd.,
JSW Centre, Bandra Kurla Complex,
Bandra (East), Mumbai-400 051
Tel:022 4286 1000

Sub: **Registration as an Approved Vendor.**

Ref: Your application dated 31.01.2017

Dear Sir,

With reference to your request/application on subject matter, we are pleased to inform you that your registration as an approved vendor for our projects/works for the following products is approved herewith for a period of (02) two years.

| Sr. No. | Material Description | Material/Size/Range/Type/Specification |
|---------|-----------------------------|---|
| 1 | TMT Bars & Structural Steel | 1) TMT Bars of Fe 500, Fe 500D, Fe 550, Fe 550D & CRS grades 2) HR Structural Coils & Plates |

Kindly note that,

- The validity of this enlistment is valid for **Two Years i.e. up to 31st August, 2019**. However, the Corporation reserves the right to cancel the same in case complaints are received from users within that period.
- The product shall be in conformity with requirements of BIS/ISO Standards. You shall keep your BIS/ISO registration valid and any changes in the same shall be intimated to this office.

1

In case of any corruption related complaints, please visit :
cidco.maharashtra.gov.in / CIDCO VIGILANCE MODULE NEW / Userlogin.aspx

CIDCO APPROVAL TMT-PLATES

- The approval has been granted on the basis of documents/information furnished by you. The approval would be cancelled if any details are found in variance to the details already furnished during the inspection of manufacturing unit. CIDCO Ltd. reserves the right to visit the manufacturing unit at any time.
- The registration shall not bind CIDCO Ltd. to give you any priority or preference in the issue of enquiry and placement of purchase orders and does not guarantee that all or any of the enquiries for the above items would necessarily be sent to you.
- You are also required to intimate us the changes, if any, in the postal address, the contact Phone Number, Fax Nos. in the constitutions or working of your firm during the currency of registration of your firm with us.
- You are required to apply 60 days in advance for revalidation before expiry of current validity of enlistment along with all documents and information as required.
- During the period of enlistment, if, your company improves your product value by acquiring additional quality accreditation and/or achieves better financial performance then such changes shall be invariably informed to the Corporation.
- If a contractor working for CIDCO Ltd. works place purchase order for the material, the same will have to be supplied on priority, adhering time schedule required by CIDCO, failing which CIDCO Ltd. may cancel the registration of product which may please be noted.

Thanking you,

Yours faithfully,

(S.S. Pol)

Executive Engineer (PA & R),
3rd Floor, CIDCO Bhavan,
CBD Belapur,
Navi Mumbai - 400 614

M/s JSW Steel Limited

2



Mumbai Metro Rail Corporation
DOCUMENT SUBMISSION REPORT (DSR) - STATUS SHEET

| | | | |
|---------------------------------------|--|--------------------------|--------------------------|
| Contract No: | MM3-CBS-UGC-05 | DSR Code: | GCC-JKC-QAS-P05-171661-A |
| Contractor Name & Address: | Kumar Infraprojects Ltd. & China Railway No. 3 Engineering Group Co. Ltd. 16-A Andheri Industrial Estate, Veera Desai Road, Andheri West, Mumbai - 400 053 | Discipline: | Quality Assurance |
| Attention: | Mr. Peter | Assessor: | Pramesh Kammaran |
| Reference of Letter/Transmittal: | JKC-GCC-CVG-P05-TRN-175052-A0 | Discipline Coordinator: | Roger Lai |
| Reception date of Letter/Transmittal: | 22-02-2017 | Prepared by Team Leader: | Michael Tang <i>MT</i> |

| SUBJECT Vendor Approval - M/s. JSW STEEL LIMITED - TMT RE BARS (UGC-05) | | | | | | |
|--|---|----------|------------|---------------|---|---|
| List of documents submitted: | | | | | | |
| No. | Document Reference | Revision | Date | *Notification | | |
| | | | | A | B | C |
| 1 | JKC/MAT/P05/047 (Reinforcement Steel from JSW) | 01 | 22-02-2017 | | | ✓ |

*Definition of Notification:
A. Objection. A complete resubmission is required
B. No Objection with comments
C. Notice of No Objection

Area of Deficiency

No Comments. However, JKC should inspect and satisfy all the related requirements from their end to ensure that all the documentation and records are as per Employer's Requirements.
Any use of the actual product at site shall be ONLY after successful testing of the products/ its compliance to all Contractual requirement of the Project and Engineer's approval.

| | |
|------------------------|---|
| Comment Items | |
| No. of Total Comments | 0 |
| No. of New Comments | 0 |
| No. of Repeat Comments | - |

Engineer

| | | | |
|-------------------------------|--|---------------------|-----------------------------------|
| Printed Name: Jorgen Holst | Position: Dy. Project Manager - Civil | Date: 13-04-2017 | Signature: <i>Jorgen Holst</i> |
|-------------------------------|--|---------------------|-----------------------------------|

Encl: Nil
CC: CPM - UGC05, MMRC
File

- The comments are given to ensure the submission conforms to the Contract provisions
- The issue of NONO shall not in any way relieve the Contractor of his obligations under Contract, nor does it in any way imply any change to the Contract Price or Time for Completion



Mumbai Metro Rail Corporation
DOCUMENT SUBMISSION REPORT (DSR) - STATUS SHEET

| | | | |
|---------------------------------------|--|--------------------------|--------------------------|
| Contract No: | MM3-CBS-UGC-05 | DSR Code: | GCC-JKC-QAS-P05-173918-A |
| Contractor Name & Address: | J Kumar Infraprojects Ltd. & China Railway No. 3 Engineering Group Co. Ltd. 16-A Andheri Industrial Estate, Veera Desai Road, Andheri West, Mumbai - 400 053 | Discipline: | Quality Assurance |
| Attention: | Mr. Peter Andrikopoulos | Assessor: | Sunil Saini |
| Reference of Letter/Transmittal: | JKC-GCC-GEN-P05-T-175200-A0 | Discipline Coordinator: | Pramesh Kammaran |
| Reception date of Letter/Transmittal: | 31-05-2017 | Prepared by Team Leader: | Roger Lai <i>Roly</i> |

| SUBJECT Vendor Approval M/s JSW Steel Ltd. - Structural Steel (UGC-05) | | | | | | |
|---|---|----------|------------|---------------|---|---|
| List of documents submitted: | | | | | | |
| No. | Document Reference | Revision | Date | *Notification | | |
| | | | | A | B | C |
| 1 | JKC/MAT/P05/046 (Structural Steel: M/s JSW Steel Ltd.) | A0 | 31-05-2017 | | | ✓ |

*Definition of Notification:
A. Objection. A complete resubmission is required
B. No Objection with comments
C. Notice of No Objection

Area of Deficiency

This DSR deals with ONLY approving the Vendor and not the products - any use of the Vendor's products shall be ONLY after Technical Review of the Product intended to be used in the Project, its compliance with approved design, project specification and Engineer's approval

| | |
|------------------------|---|
| Comment Items | |
| No. of Total Comments | - |
| No. of New Comments | - |
| No. of Repeat Comments | - |

Engineer

| | | | |
|-------------------------------|-----------------------------------|---------------------|----------------------------|
| Printed Name: Michael Tang | Position: Construction Manager | Date: 24-07-2017 | Signature: <i>MTang</i> |
|-------------------------------|-----------------------------------|---------------------|----------------------------|

Encl: NIL
CC: CPM - UGC05, MMRC
File

- The comments are given to ensure the submission conforms to the Contract provisions
- The issue of NONO shall not in any way relieve the Contractor of his obligations under Contract, nor does it in any way imply any change to the Contract Price or Time for Completion



Mumbai Metro Rail Corporation
DOCUMENT SUBMISSION REPORT (DSR) - STATUS SHEET

| | | | |
|---------------------------------------|---|--------------------------|--------------------------|
| Contract No: | MM3-CBS-UGC-06 | DSR Code: | GCC-JKC-QAS-P06-171895-A |
| Contractor Name & Address: | J. Kumar Infraprojects Ltd. China Railway No. 3 Engineering Group Co. Ltd. JV, 16-A, Andheri Industrial Estate, Veera Desai Road, Andheri (W), Mumbai - 400 053 | Discipline: | Quality Assurance |
| Attention: | Mr. Haluk Emre | Assessor: | Pranesh Kammaran |
| Reference of Letter/Transmittal: | JKC-GCC-CVG-P06-TRN-175073-A0 | Discipline Coordinator: | Roger Lai |
| Reception date of Letter/Transmittal: | 15-03-2017 | Prepared by Team Leader: | Michael Tang <i>MT</i> |

SUBJECT Submission of Vendor Profile - M/s. JSW Steel Ltd. (UGC-06)

List of documents submitted:

| No. | Document Reference | Revision | Date | *Notification | | |
|-----|---|----------|------------|---------------|---|---|
| | | | | A | B | C |
| 1 | JKC/Mat/P06/046 (Approval of Reinforcement Steel from M/s. JSW Steel Ltd.) | A0 | 15-03-2017 | | | ✓ |

*Definition of Notification:

- A. Objection. A complete resubmission is required
B. No Objection with comments
C. Notice of No Objection

Area of Deficiency

Any use of the actual product at site shall be ONLY after successful testing of the products/ its compliance to all Contractual requirement of the Project and Engineer's approval

| Comment Items | |
|------------------------|---|
| No. of Total Comments | 0 |
| No. of New Comments | 0 |
| No. of Repeat Comments | - |

Engineer

| | | | |
|-------------------------------|--|---------------------|-----------------------------------|
| Printed Name: Jorgen Holst | Position: Dy. Project Manager - Civil | Date: 24-04-2017 | Signature: <i>Jorgen Holst</i> |
|-------------------------------|--|---------------------|-----------------------------------|

Encl.: Nil
CC: CPM - UGC06, MMRC
File

- The comments are given to ensure the submission conforms to the Contract provisions



HEAD OFFICE:
AECOM Asia COMPANY LIMITED
9/F, INFINITY TOWER - 'C',
DLF CREEK CITY, DLF PHASE II,
GURGAON, HARYANA, INDIA 122002
TEL: +91 124 4830100
FAX: +91 124 4830857
WEBSITE: WWW.AECOM.COM
E-MAIL ID: info@aecom.com

PROJECT OFFICE:
AECOM Asia COMPANY LIMITED
IN ASSOCIATION WITH
VAISHNAVI INFRASTRUCTURE SERVICES PVT. LTD.
FLAT NO. 601, 602 & 603, "B" WING,
SWASTIKA BHARATI APARTMENT,
PLOT NO. 4, SECTION-5, ULWE, DIST. RAJARA,
NASH MUMBAI 400 707, MAHARASHTRA (INDIA)
E-MAIL: aecom.via@ipst@gmail.com

TL/AECOM -VISPL/JK-JMM (JV)/JNPT/PKG-1/180

Date: 13th December 2016

To
Project Manager
J.Kumar-J.M. Mhatre (JV)
16-A, Andheri Industrial Estate,
Veera Desai Road Andheri, (W),
Mumbai-400 053

Subject: Construction of Karalpatha Interchange from Km 3.600 to 6.073 of NH-4B & from Km 5.300 to Km 7.422 of NH-348 (old SH-54) and connectivity to proposed 4th Terminal of JNPT on EPC mode. Package 1 - Source approval for Construction Material (JSW Steel Bar) under contract clause 11.2.3 and MORT&H (5th revision) clause 118 -reg.

Ref: Your letter no JKIL-JMM (JV)/Pkg-1/2016/124 dated 17.11.2016.

Dear Sir,

As per MORT&H Technical Specifications (5th revision) clause 1009.3.1 and clause 8.8.2 of IRC-SP-84-2009 all reinforcement steel to be used for reinforced cement concrete (RCC) and pre-stressed concrete (PSC) works are to be procured from main/ major producers who manufacture billets directly from iron ores and roll the billets to produce steel conforming to IS:1786.

Since JSW Steel Ltd. is enlisted as major producer of steel as per website of Ministry of Steel, Government of India and NHA, Ministry of Road Transport and Highways as referred in their circular no 11041/218/2007-Admine dated 18.08.2010 source approval of steel of Fe 500 from JSW Steel Ltd. proposed by you is hereby approved. The JSW Factory at Alibagh has also been visited by our RE cum Bridge Engineer on 26.11.2016.

Thanking and assuring you of our best services at all times.

Yours faithfully

For and on behalf of AECOM Asia Co. Ltd. in association with AECOM India Pvt Ltd. & Vaishnavi Infratech Services Pvt Ltd.

M Rahman
Team Leader

Cc:

Project Director, PIU, Panvel for kind information please.

NTPC MAJOR PRODUCER ENLISTMENT



एन टी पी सी लिमिटेड
(भारत सरकार का उद्यम)
NTPC Limited
(A Govt. of India Enterprise)
(Formerly National Thermal Power Corporation Ltd.)

उद्योग कार्यालय/Corporate Centre

REF : 01/CMM/CMPG/ENLISTMENT/2017

DATE: 19.01.2017

JSW STEEL LTD.

JSW Centre, Bandra Kurla Complex,
Bandra (East), Mumbai-400051

Sub: Our Notice Inviting Tender for Enlistment of "Main Steel Producers" for supply of Steel Items Issued vide Ref 01/CC&M/CMPG/STEEL/2016 dated 24.06.2016.

Kind Attn. : Sh. VIKRAM GUPTA

Dear Sir,

This is to intimate you that **JSW STEEL LTD.** has been enlisted as a Main Steel Producer for the supply of Steel for a period of 03 years from the date of this letter i.e. till 18.01.2020 unless notified otherwise during the said period.

Regards,

S. DATTA

DCM (Corporate Materials)

| | | |
|--------------------|---|---|
| NABCB CMR22 | ISO 9001 : 2008 VEXIL 2012 | उद्योगाधिकारी कार्यालय परिसर, प्लॉट नं. ए - ८ ए, सेक्टर २४, पोस्ट बॉक्स नं. १३, नोएडा (उ.प्र.), पिन: २०१३०१ ENGINEERING OFFICE COMPLEX, Plot No. A-8A, Sector-24, Post Box No. 13, NOIDA (U.P.), Pin: 201301 कार्यालय परिसर संदर्भ पत्र, यू-१११ सी. एच. ११९ सी. सी. शा. २०१३०१, नोएडा, यूपी-२०१३०१ Corporate Material Number : L40101DL1975G0407686, Website: www.ntpc.co.in टेलीफोन नं.: ०१२०-२४१०३३३ (१५ लाईन), ०१२०-२४१०११६ (१५ लाईन), फॅक्स: ०१२०-२४१०३३०, ०१२०-२४१०१३७ Telephone No: 0120-2410333 (15 Lines) 0120-2410116 (15 Lines), Fax: 0120-2410130, 0120-2410137 फॅक्स नंबर: एन.टी.पी.सी. बवन, कर्नाट काम्प्लेक्स, ४ इन्टरनेशनल एरिया, लोदी रोड, नई दिल्ली - ११०००३ Regd. Office: NTPC Bhawan, SCOPE Complex, 4 International Area, Lodhi Road, New Delhi - 110003 |
| | ०१२०-२४१०३३३ (१५ लाईन), ०१२०-२४१०११६ (१५ लाईन), फॅक्स: ०१२०-२४१०३३०, ०१२०-२४१०१३७ Telephone No: 0120-2410333 (15 Lines) 0120-2410116 (15 Lines), Fax: 0120-2410130, 0120-2410137 फॅक्स नंबर: एन.टी.पी.सी. बवन, कर्नाट काम्प्लेक्स, ४ इन्टरनेशनल एरिया, लोदी रोड, नई दिल्ली - ११०००३ Regd. Office: NTPC Bhawan, SCOPE Complex, 4 International Area, Lodhi Road, New Delhi - 110003 | |

PGCIL RENEWAL DOLVI

पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)



POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

केन्द्रीय कार्यालय : 'सादामिनी' प्लॉट नं. २, सेक्टर-२९, गुरुग्राम-१२२००१, हरियाणा
 फोन : २५७१७०० - ७१९, फॅक्स : २५७१७६०, २५७१७६१ कार्यालय
 Corporate Office : 'Saudamini' Plot No. 2, Sector-29, Gurgaon-122 001, Haryana
 Tel. : 2571700 - 719, Fax : 2571760, 2571761 Gram : 'NATGRID'

Ref: C/QA&I/JSW-Dolvi

Date: 28.02.2017

JSW Steel Ltd
JSW Center, 7th Floor
Bandra, Kurla Complex
Bandra (East), Mumbai-400051

Kind attention- Sh Beno Dsouza, Marketing

Subject: Renewal approval of JSW Steel Ltd, Dolvi for supply of MS & HT billets/blooms as per IS 2830 and MS & HT plates up to 20 mm thickness as per IS 2062

Dear Sir,

This has reference to the subject matter. Based on the submitted documents, we hereby convey our acceptance of JSW Steel Ltd, Geetapuram, Dolvi, Raigad, Maharashtra for supply of MS & HT billets/blooms as per IS 2830 and MS & HT Plates with thickness up to 20 mm as per IS 2062 up to 28.02.2019. Further approval shall be considered based on supply and quality performance. The chemistry of billets/blooms should be as per the chemistry finalized with POWERGRID.

Please note that if at any point of time during this period, supplied materials found not conforming to agreed chemistry or not meeting relevant IS, POWERGRID reserves the right to withdraw this approval with immediate effect.

Yours faithfully,

(K.K. Tyagi)
DGM (QA & I)

पंजीकृत कार्यालय : ४-५, कृष्ण इंस्टीट्यूशनल एरिया, कान्हावा सराई, नई दिल्ली - ११००१६ फ़ोन : ६५६०१२१ फ़ैक्स : ०११-६५६००३९ ग्राम : 'नैटग्रिड'
 Registered Office : 4-5, Krishna Institutional Area, Kanwana Sarai, New Delhi - 110016 Tel. : 6560121 Fax : 011-6560039 Gram : 'NATGRID'

QUALITY REPORT - MATERIALS & VENDORS STATUS

GC Quality Assurance - Vendor NONO Status

| Sr No. | Materials | Vendor | P01 | P02 | P03 | P04 | P05 | P06 | P07 |
|----------------|----------------|----------------------|-------|-----------|-----|-----|------|------|-----|
| 1 | Cement | ACC | C | C | B | C | C | C | C |
| | | Ambuja Cement | C | C | B | C | C | C | |
| | | Ultratech | C | C | C | C | C | C | C |
| | | Kalburgi | | | | A | | | A |
| | | Keshoram | | | | | | | A |
| | | JSW Cement | | | | | | | A |
| | | | | | | | | | |
| 2 | Steel & Rebar | SAIL | C | C | C | C | C | C | C |
| | | RINL | C | C | | C | C | C | |
| | | Tata | C | C | B | | C | C | B |
| | | JSW | C | A | | A | | | B |
| | | Arrcelor Mittal | A | | | | | | A |
| | | Steel Vendor | | A | | | | | |
| | | Balbir Rolling Mill | | | | | A | A | |
| | | ElectroSteel | | A | | | A | A | |
| | | JSPL | | | B | | | | |
| | | Reinforcement Steel | | A | | | | | |
| | | | | | | | | | |
| | | 3 | Admix | Sika | B | B | B | B | C |
| Fosroc | C | | | B | B | B | | | B |
| BASF | C | | | B | B | B | C | C | B |
| CAC Admixture | | | | | | A | | | |
| Polygel | | | | | | | A | A | |
| AddoAdditive | | | | | | | A | A | A |
| Pinacle | | | | A | | | | | |
| Polygon | | | | | A | | A | A | |
| Chryso | B | | | | | | | | |
| Sigma Polychem | | | | A | | A | | | |
| | | | | | | | | | |
| 4 | RMC | | | ACC, Sion | C | C | A | C | |
| | | ACC, Deonar | | | | | | | C |
| | | ACC, Borivali | | C | | | | | C |
| | | ACC, Blue Moon | A | B | | | | | |
| | | ACC India Bull Worli | A | | A | | | | |
| | | UltraTech, Deonar | C | C | C | B | | | C |
| | | UltraTech, Worli | A | C | | | | | |
| | | Readymix, Ghatkoper | | | | | | | B |
| | | Lafarge, Wadala | C | C | | C | | | |
| | | Relcon, Chandivali | | | | | | | A |
| | | Skyway, Andheri | A | | | | | | A |
| | | | | | | | | | |
| 5 | Batching Plant | JayKumar, Wadala | | | A | | Inf. | Inf. | |

QUALITY REPORT - MATERIALS & VENDORS STATUS

| Sr No. | Materials | Vendor | P01 | P02 | P03 | P04 | P05 | P06 | P07 |
|--------|---------------------|--------------------------|-----|-----|-----|-----|-----|-----|-----|
| 6 | GGBS | JSW | C | C | | | C | C | B |
| | | Counto Micro Fine | | | A | | | | |
| 7 | Flyash | Ashtech | C | C | A | | B | B | |
| | | Tata - Chemical Terminal | | | | | | | |
| 8 | Micro Silica | Elkem | C | C | | C | | | |
| | | Rockfit | | A | | | | | |
| | | Normet | A | | | | | | |
| 9 | MT Labs | Spectra | C | C | C | C | C | C | |
| | | Structwel | C | C | | | C | C | |
| | | Buearu Varitas | B | | B | B | | | B |
| | | Contractor Site Labs | | | | | | | |
| | | Global Lab | | A | | | | | |
| 10 | Site Lab | S K G LABORATORIES | | | | | A | A | |
| | | Lab Equipments | B | | | | | | |
| 11 | Copulers | Era Steel | A | | | | | | A |
| | | Dextra | B | B | | | | | |
| | | SainField | | | | | A | A | |
| | | Kridhan Gr. | A | A | | | | | |
| 12 | Binding Wire | J B Engg. | A | | | | | | |
| | | Nikko International | | | | | A | A | |
| 13 | Welding Rod | R D Welds | | | | | A | A | |
| | | | | | | | | | |
| 14 | Gasket | Daeyong | | | | C | C | B | |
| | | VIP Polymers | | | | | A | A | |
| 15 | Cover Blocks | KGM Exports | A | | | | | | |
| | | Recon Conc. | A | | | | | | |
| | | Astra Conc. | B | | | A | | | B |
| 16 | Bentonite | Vidhya Enterpise | | | | | | | A |
| | | Ganatra Mines | | | | A | | | |
| 17 | Bolts & Aecessories | Panchsheel | | | | A | A | | |
| 18 | Segment Mould | Korea Mould | | | | | | B | |
| 19 | Aggregates | Sri Ganesh Enterprises | | | | A | | | |

Status:

A A : Rejection with Comment

B B : No objection with Comment

C C : NoNO (Notice of No Objection)

MAPLE - QAT
23-01-2017

SUPPLY CERTIFICATE FROM L&T



Larsen & Toubro Limited,
Construction
Landmark 'A', 4th Floor,
Suren Road, Off. Angkorli Kurla Road,
Chakala, Andheri (East),
Mumbai - 400 033, INDIA
Tel : +91-22-6696 5200 / 5271
Fax : +91-22-6696 5343
www.Lntec.com

Ref no: L&T/Dec/VE/01

Date: 27th Dec 2017

TO WHOM IT MAY CONCERN

This is to be certified that **M/s JSW steel Ltd**, JSW centre **Bandra Kurla complex, Bandra (East) MUMBAI – 400051**, has supplied has supplied around **15,000MT** of **MS TMT Bars** from their **Dolvi Plant** confirming to **IS 1786: 2008 Fe 500D** grade to our various project like **Obeori skycity, Bombay Dying, Godrej Trees, WDFCC 15A**.

The quality of material was found satisfactory.



Central Materials Department

L&T, MBRO

022-66965403

Headquarters : P.B. No. 979, Mount Poonamallee Road, Manapakkam, Chennai - 600 089, INDIA
Registered Office: L&T House, N. M. Marg, Ballard Estate, Mumbai - 400 001, INDIA
Licence No.: CIN - L99999MH1946PLC004768

L&T Construction is a brand of Larsen & Toubro Limited

AIRPORT AUTHORITY LETTER



AIRPORTS AUTHORITY OF INDIA
DEPARTMENT OF STRUCTURE

No. AAI/Str/Vendors/2017/1534

17th August, 2017

Shri Vinod Kumar Nigam, AGM (S&M)
JSW Steel Limited,
JSW Centre, Bandra Kurla Complex
Bandra (East)
Mumbai - 400051

Sub: Approval of JSW TMT bars of JSW Steel Limited in all ongoing and future projects.

Sir,

This office is in receipt of your letter no. JSW/MUM/TMT/VKN/1777 dt. 17.07.2017 on the subject matter. In AAI, no separate enlistment of TMT bar manufacturers are being done. In this regard, AAI is adopting the following norms:

'Procurement/usage of TMT reinforcement bars for AAI works shall continue to be as per CPWD Works Manual with latest amendments'.

This is for your kind information.

Yours sincerely,


(S. Ghosh)
AGM Engg(Str.)

Operational Offices, Gurgaon Road, New Delhi - 110 037. Phone: 25654433, 25652809 Fax: 25653246

MICROLAB TEST REPORT



AN ISO/IEC 17025 METALLURGICAL TEST HOUSE

Accredited by NABL, Dept. of Science & Technology, Govt. of India,

SP101, 2nd Main Road, Ambattur Industrial Estate, Chennai - 600 058. Ph : 044 2624 2525, Fax : 044 2624 4872
E-mail : cre@microlabchennai.com, Web : www.microlabchennai.com



TEST REPORT

| | | |
|--|---|----------------------------------|
| Customer M/s JSW Steel KRM Plaza, 5th Floor, No: 2 Harrington Road, Chelvet Chennai - 600 006 | Report No / Date | ML/34513/2/16-17 DI-1 / Mar 2017 |
| | Your ref. / Date | Letter Dt-16 Mar 2017 |
| | Our ref. / Date | TOCR 34513/16-17 DI: 16 Mar 2017 |
| | Date of Testing | 16 Mar 2017 - 17 Mar 2017 |
| | Sample Drawn By | Customer |
| Sample Description | TMT Rods Size: Dia 12mm Material: IS 1786 Grade Fe 500D Qty: 1No | |

| 1 | Chemical Analysis (TMT) | IS 8811-1998 | |
|---|----------------------------------|-----------------|----------------|
| | Test Parameter | Specified Value | Observed Value |
| | Carbon (C) (%) | 0.25 max | 0.227 |
| | Phosphorus (P) (%) | 0.040 max | 0.017 |
| | Sulphur (S) (%) | 0.040max | 0.018 |
| | Phosphorus (P) + Sulphur (S) (%) | 0.075 max | 0.035 |

Remarks : The above chemical composition meets the requirement of IS 1786 Grade Fe 500D

| 2 | Tensile Test (TMT) | IS 1786-2008 | |
|---|---------------------------------|-----------------|----------------|
| | Test Parameter | Specified Value | Observed Value |
| | Yield Strength (N/mm2 or Mpa) | 500 min | 544 |
| | Tensile Strength (N/mm2 or Mpa) | 565 min | 663 |
| | Elongation in 5D GL (%) | 16 min | 21 |

Remarks : The above Tensile parameters meets the requirement of IS 1786 Grade Fe500D

| 3 | Bend Test | IS 1599 - 2012 | |
|---|----------------|--------------------|--|
| | Test Parameter | Observed Value | |
| | Observation | No Cracks Observed | |

Remarks : Bend Test Found Satisfactory

| 4 | Rebend Test | IS 1786-2008 (RA 2013) | |
|---|----------------|------------------------|--|
| | Test Parameter | Observed Value | |
| | Observation | No Cracks Observed | |

Remarks : Rebend Test Found Satisfactory

| 5 | Mass Per Unit Weight* | IS 1786-2008 | |
|---|-----------------------|----------------|--|
| | Test Parameter | Observed Value | |
| | | | |

NOTE : This report relates only to the particular sample submitted for test. Any correction in the report will invalidate this report. Samples will be destroyed after 15 days from date of completion of tests unless informed by the customer. Any complaints about this report should be communicated in writing within 7 days from the date of receipt of report. This report cannot be reproduced except in full. Sample description is given as described by the customer. Sample is not carried out by the laboratory.

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MICROLAB TEST REPORT



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E-mail : cre@microlabchennai.com, Web : www.microlabchennai.com



ML/34513/2/16-17 DI-17 Mar 2017

| | |
|----------------------------------|-------|
| Observation (Kg/m ³) | 0.871 |
|----------------------------------|-------|

Verified By:

*Test reference not covered in our NABL scope

For MICROLAB

End of the test report

S.R. Balasubramaniam, M.E., (Met. Engg)
Authorized Signatory

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E-mail : cre@microlabchennai.com, Web : www.microlabchennai.com



TEST REPORT

| | | |
|---|---|----------------------------------|
| Customer : M/s.JSW Steel KRM Plaza 5th Floor No: 2 Harrington Road, Chetpet Chennai - 600 008 | Report No./ Date: | ML/34513/3/16 17 Dt:17 Mar 2017 |
| | Your ref./ Date: | Letter Dt:16 Mar 2017 |
| | Our ref / Date: | TOCR :34513/6-17 Dt: 16 Mar 2017 |
| | Date of Testing: | 16 Mar 2017 - 17 Mar 2017 |
| | Sample Drawn By: | Customer |
| Sample Description: | TMT Rods Size: Dia 16mm Material: IS 1786 Grade Fe 500D Qty: 1No | |

| 1 | Chemical Analysis (TMT) | IS 8811-1998 | Specified Value | Observed Value |
|---|----------------------------------|--------------|-----------------|----------------|
| | Carbon (C) (%) | | 0.25 max | 0.211 |
| | Phosphorus (P) (%) | | 0.040 max | 0.026 |
| | Sulphur (S) (%) | | 0.040max | 0.019 |
| | Phosphorus (P) + Sulphur (S) (%) | | 0.075 max | 0.045 |

Remarks : The above chemical composition meets the requirement of IS 1786 Grade Fe 500D

| 2 | Tensile Test (TMT) | IS 1786-2008 | Specified Value | Observed Value |
|---|---|--------------|-----------------|----------------|
| | Yield Strength (N/mm ² or Mpa) | | 500 min | 543 |
| | Tensile Strength (N/mm ² or Mpa) | | 565 min | 654 |
| | Elongation in 5D GL (%) | | 16 min | 23 |

Remarks : The above Tensile parameters meets the requirement of IS 1786 Grade Fe500D

| 3 | Bend Test | IS 1598 - 2012 | Observed Value |
|---|-------------|----------------|--------------------|
| | Observation | | No Cracks Observed |

Remarks : Bend Test Found Satisfactory

| 4 | Rebend Test | IS 1786-2008 (RA 2013) | Observed Value |
|---|-------------|------------------------|--------------------|
| | Observation | | No Cracks Observed |

Remarks : Rebend Test Found Satisfactory

| 5 | Mass Per Unit Weight* | IS 1786-2008 | Observed Value |
|---|-----------------------|--------------|----------------|
| | Observation | | |

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MICROLAB TEST REPORT



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ML/34513/3/16 17 Dt:17 Mar 2017

| | |
|--------------------|-------|
| Observation (Kg/m) | 1.565 |
|--------------------|-------|

Verified By:

*Test reference not covered in our NABL scope

For MICROLAB

End of the test report

S.R.Balasubramaniam, M.E., (Met. Engrg)
Authorized Signatory



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MICROLAB TEST REPORT



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TEST REPORT

| | | |
|---|---|-----------------------------------|
| Customer : M/s. JSW Steel KRM Plaza, 5th Floor, No: 2 Harrington Road, Chetpet, Chennai - 600 008 | Report No / Date | ML/34513/16 Dt:17 Mar 2017 |
| | Your ref./ Date | Letter Dt:16 Mar 2017 |
| | Our ref./ Date | TOCR :34513/16-17 Dt: 16 Mar 2017 |
| | Date of Testing | 16 Mar 2017 - 17 Mar 2017 |
| | Sample Drawn By | Customer |
| Sample Description | TMT Rods Size: Dia 10mm Material: IS 1786 Grade Fe 500D Qty: 1No | |

| 1 | Chemical Analysis (TMT) | IS 8811-1998 | |
|---|----------------------------------|-----------------|----------------|
| | Test Parameter | Specified Value | Observed Value |
| | Carbon (C) (%) | 0.25 max | 0.208 |
| | Phosphorus (P) (%) | 0.040 max | 0.021 |
| | Sulphur (S) (%) | 0.040max | 0.020 |
| | Phosphorus (P) + Sulphur (S) (%) | 0.075 max | 0.041 |

Remarks : The above chemical composition meets the requirement of IS 1786 Grade Fe 500D

| 2 | Tensile Test (TMT) | IS 1786-2008 | |
|---|---------------------------------|-----------------|----------------|
| | Test Parameter | Specified Value | Observed Value |
| | Yield Strength (N/mm2 or Mpa) | 500 min | 559 |
| | Tensile Strength (N/mm2 or Mpa) | 565 min | 645 |
| | Elongation in 5D GL (%) | 16 min | 20 |

Remarks : The above Tensile parameters meets the requirement of IS 1786 Grade Fe500D

| 3 | Bend Test | IS 1599 - 2012 | |
|---|----------------|--------------------|--|
| | Test Parameter | Observed Value | |
| | Observation | No Cracks Observed | |

Remarks : Bend Test Found Satisfactory

| 4 | Rebend Test | IS 1786-2008 (RA 2013) | |
|---|----------------|------------------------|--|
| | Test Parameter | Observed Value | |
| | Observation | No Cracks Observed | |

Remarks : Rebend Test Found Satisfactory

| 5 | Mass Per Unit Weight* | IS 1786-2008 | |
|---|-----------------------|----------------|--|
| | Test Parameter | Observed Value | |
| | | | |

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MICROLAB TEST REPORT



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ML/34513/16 Dt:17 Mar 2017

| | |
|--------------------|-------|
| Observation (Kg/m) | 0.621 |
|--------------------|-------|

Verified By:

*Test reference not covered in our NABL scope

For MICROLAB

End of the test report

S.R. Balasubramaniam, M.E., (Met. Engrg)
Authorized Signatory

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MICROLAB TEST REPORT



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TEST REPORT

| | | |
|---|---|-----------------------------------|
| Customer : M/s.JSW Steel KRM Plaza, 5th Floor, No. 2 Harrington Road, Chetpet, Chennai - 600 038 | Report No / Date | ML/34513/5/18-17 DI-17 Mar 2017 |
| | Your ref./ Date | Letter Dt-16 Mar 2017 |
| | Our ref./ Date | TOCR :34513/18-17 Dt: 16 Mar 2017 |
| | Date of Testing | 16 Mar 2017 - 17 Mar 2017 |
| | Sample Drawn By | Customer |
| Sample Description | TMT Rods Size: Dia 25mm Material: IS 1786 Grade Fe 500D Qty: 1No | |

| 1 | Chemical Analysis (TMT) | IS 8811-1998 |
|----------------------------------|-------------------------|----------------|
| Test Parameter | Specified Value | Observed Value |
| Carbon (C) (%) | 0.25 max | 0.215 |
| Phosphorus (P) (%) | 0.040 max | 0.019 |
| Sulphur (S) (%) | 0.040max | 0.016 |
| Phosphorus (P) + Sulphur (S) (%) | 0.075 max | 0.035 |

Remarks : The above chemical composition meets the requirement of IS 1786 Grade Fe 500D

| 2 | Tensile Test (TMT) | IS 1786-2008 |
|---------------------------------|--------------------|----------------|
| Test Parameter | Specified Value | Observed Value |
| Yield Strength (N/mm2 or Mpa) | 500 min | 564 |
| Tensile Strength (N/mm2 or Mpa) | 565 min | 665 |
| Elongation in 5D GL (%) | 16 min | 22 |

Remarks : The above Tensile parameters meets the requirement of IS 1786 Grade Fe500D

| 3 | Bend Test | IS 1599 - 2012 |
|----------------|--------------------|----------------|
| Test Parameter | Observed Value | |
| Observation | No Cracks Observed | |

Remarks : Bend Test Found Satisfactory

| 4 | Rebend Test | IS 1786-2008 |
|----------------|--------------------|--------------|
| Test Parameter | Observed Value | |
| Observation | No Cracks Observed | |

Remarks : Rebend Test Found Satisfactory

| 5 | Mass Per Unit Weight* | IS 1786-2008 |
|----------------|-----------------------|--------------|
| Test Parameter | Observed Value | |
| | | |

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MICROLAB TEST REPORT



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E-mail : cre@microlabchennai.com, Web : www.microlabchennai.com



ML/34513/5/18-17 DI-17 Mar 2017

| | |
|--------------------|-------|
| Observation (Kg/m) | 3.784 |
|--------------------|-------|

Verified By :

*Test reference not covered in our NABL scope

For MICROLAB

End of the test report

S.R. Balasubramaniam, M.E., (Met. Engg)
Authorized Signatory



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MICROLAB TEST REPORT



AN ISO/IEC 17025 METALLURGICAL TEST HOUSE

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TEST REPORT

| | | |
|---|--|-----------------------------------|
| Customer: Ms. JSW Steel KRM Plaza, 5th Floor, No: 2 Harington Road, Chetpet, Chennai - 600 008 | Report No / Date | ML/34513/4/16-17 Dt: 17 Mar 2017 |
| | Your ref./ Date | Letter Dt: 16 Mar 2017 |
| | Our ref./ Date | FOCR: 34513/16-17 Dt: 16 Mar 2017 |
| | Date of Testing | 16 Mar 2017 - 17 Mar 2017 |
| | Sample Drawn By | Customer |
| Sample Description | TMT Rods Size: Dia 20mm Material: IS 1786 Grade Fe 500D Qty: 1 No | |

| 1 | Chemical Analysis (TMT) | IS 8611-1998 | |
|---|----------------------------------|-----------------|----------------|
| | Test Parameter | Specified Value | Observed Value |
| | Carbon (C) (%) | 0.25 max | 0.212 |
| | Phosphorus (P) (%) | 0.040 max | 0.022 |
| | Sulphur (S) (%) | 0.040 max | 0.026 |
| | Phosphorus (P) + Sulphur (S) (%) | 0.075 max | 0.048 |

Remarks: The above chemical composition meets the requirement of IS 1786 Grade Fe 500D

| 2 | Tensile Test (TMT) | IS 1786-2008 | |
|---|---|-----------------|----------------|
| | Test Parameter | Specified Value | Observed Value |
| | Yield Strength (N/mm ² or Mpa) | 500 min | 566 |
| | Tensile Strength (N/mm ² or Mpa) | 565 min | 670 |
| | Elongation in 5D GL (%) | 16 min | 23 |

Remarks: The above Tensile parameters meets the requirement of IS 1786 Grade Fe500D

| 3 | Bend Test | IS 1599 - 2012 |
|---|----------------|--------------------|
| | Test Parameter | Observed Value |
| | Observation | No Cracks Observed |

Remarks: Bend Test Found Satisfactory

| 4 | Rebend Test | IS 1786-2008 (RA 2013) |
|---|----------------|------------------------|
| | Test Parameter | Observed Value |
| | Observation | No Cracks Observed |

Remarks: Rebend Test Found Satisfactory

| 5 | Mass Per Unit Weight* | IS 1786-2008 |
|---|-----------------------|----------------|
| | Test Parameter | Observed Value |
| | | |

NOTE: This report relates only to the particular sample submitted for test. Any correction in the report will invalidate the report. Samples will be destroyed after 15 days from date of completion of tests unless informed by the customer. Any complaints about this report should be communicated in writing within 7 days from the date of receipt of report. This report cannot be reproduced except in full. Sample description given as described by the customer. Sampling is not carried out by the laboratory.

Formist No: ML/5.10/ADR/01

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MICROLAB TEST REPORT



AN ISO/IEC 17025 METALLURGICAL TEST HOUSE

Accredited by NABL, Dept. of Science & Technology, Govt. of India.

SPTOL, 2nd Main Road, Ambattur Industrial Estate, Chennai - 600 058. Ph: 044 2624 2525, Fax: 044 2624 4872
E-mail: cre@microlabchennai.com, Web: www.microlabchennai.com



ML/34513/4/16-17 Dt: 17 Mar 2017

| | |
|--------------------|-------|
| Observation (Kg/m) | 2.422 |
|--------------------|-------|

Verified By:

*Test reference not covered in our NABL scope

For MICROLAB

End of the test report

S.R. Balasubramaniam, M.E. (Met. Engg)
Authorized Signatory



NOTE: This report relates only to the particular sample submitted for test. Any correction in the report will invalidate the report. Samples will be destroyed after 15 days from date of completion of tests unless informed by the customer. Any complaints about this report should be communicated in writing within 7 days from the date of receipt of report. This report cannot be reproduced except in full. Sample description given as described by the customer. Sampling is not carried out by the laboratory.

Formist No: ML/5.10/ADR/01

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L&T-STEEL JV MUMBAI

| L&T-STEEL JV Mumbai | |
|--|---|
| PB No 100, L&T BUSINESS PARK, TC - 2, TOWER-B 1ST FLOOR, Mumbai - 400008, Maharashtra, India | |
| SCM Purchase Order - MM004PO7004859 - Revenue and Domestic - Dt.14-Nov-2017 | |
| Job : MM160001 - N5 - L&T SCOPE in UGC01 - Design and Construction of Underground Section including Four Underground Stations at Cuffe Parade viadha, Ebnan Churchgate and Hubburt Chowk and Associated tunnels together with two tunnel Siding at Cuffe Parade | |
| MR Number : MM004EHR7004111 DT: 07-Nov-2017 | MR Number : MM004EHR7004111 DT: 07-Nov-2017 |
| LST Reg No : 27901411385V/C8-Dec-2016 | CST Reg No : 27901411385C/08-Dec-2016 |
| Our Ref : MM004OFR7005250 DT: 14 Nov 2017 | Your Ref : MM004OFR7005250/1 DT: 14-Nov-2017 |
| Vendor : VQ00041 - JSW STEEL LTD. (CHENNAI) NO.74, 5TH FLOOR, FACUNMANSON, EGMORE, CHITRAJESAI AI, CHENNAI, TAMILNADU, INDIA, 600028, RAGHURAMKOKA, MANOJ JAIN, 04440159925, raghuram.koka@jswltd.com, AAACJ29C2K | |
| Consignee GSTIN : 27AABAL67702Z | |
| Delivery Warehouse : F - PG YARD WADALA BakthiPark, Opp Monokali, Mumbai, Maharashtra, India | |
| Delivery Period From : 14-Nov-2017 | LD Clause : \d |
| Delivery Term : AT OUR SITE STORES | Payment Centre : LMT - MMLB - UGC01 |
| Price Variation : No | |
| Created By : SOUVENDU KUMAR SENGUPTA DT: 14 Nov 2017 | |
| Authorized By : | |
| Remarks : ALL STRAIGHT 12MTR LONG PRICE IS F.O.R. AT SITE. DELIVERY AS PER SCHEDULE PROVIDED BY PMAS. ALONG WITH MTC. BILLING ADDRESS AS PER MAIL. Delivery Address: Wadala : L&T STEEL JV MUMBAI, LINE 03 UGC01, NEAR BHAKTI PARK, MONORAIL STATION WADALA, MUMBAI, 400037. SUBMIT BILL ONLY IN BILLING DESK LOCATED AT LVAL MALWAN OFFICE Site Store Person for delivery address / unloading/ MRN H: Mr Sarkar : 7005541270 | |
| Payment Terms : 1. 45% ADVANCE ON ORDER, 55% ON DELIVERY | |
| GSTIN Details | |
| Country : India | State : Maharashtra |
| Vertical : | Consignor GSTIN : 27AAACJ4373N1ZG |

Sales Offices

Corporate Head Office

JSW Steel Ltd.
JSW Centre
Bandra Kurla Complex, Bandra (East), Mumbai - 400 051
Tel.: +91 22 - 42861000 | Fax: +91 22 - 42863000



Sales Offices

AHMEDABAD
410, Abhishilp Complex, Near Keshavbag Party Plot, Manasi
Cross Road, Satellite, Ahmedabad - 380 015
Tel: 079-40029508, 40029510, 40029509.

BENGALURU
The Estate,
3rd Floor, West Wing, 121,
Dickenson Road, Bengaluru - 560 042
Tel: 080-42448888

CHENNAI
5th Floor, KRM Plaza, No. 2,
Harrington Road, Chetpet, Chennai - 600 031
Tel: 044-28297420, 28297422

COIMBATORE
T. V. Swamy Road (West), Coimbatore - 641 002
Tel: 0422-2541870

DELHI
NTH Complex (4th Floor),
A-2, Shaheed Jeet Singh Marg,
Qutub Institutional Area, New Delhi - 110016
Tel: 011-48178600 | Fax: 011-48178699

FARIDABAD
Plot No. 161, Sector 24, Faridabad - 121 004, Haryana
Tel: 0129-2239248, 2232387

NOIDA
14A, Industrial Area, Buland Shar Road,
Ghaziabad - 201 009
Tel: 0120-3262875, 2867142

GUWAHATI
106, 3rd Floor, Meer Market, Masjid Lane, Kamarpaty, Guwahati
- 781 001
Tel: 0361-2730054

HYDERABAD
7th Floor, Surya Towers, 105, Sardar Patel Road,
Secunderabad - 500 003
Tel: 040-27846669/79

INDORE
3rd Floor, Lakshya Badgara, 13/1,
New Palasia, Near Curewell Hospital, Indore - 452 001
Tel: 0731-2532156/57/58/59, 4043613

JAIPUR
Evershine Tower, F-1, 705, 7th floor,
Amarpali Circle, Vaishali Nagar, Jaipur - 302 021
Tel: 0141-4026760/62/63/64

KANPUR
Room No.105, Ratan Esquire, Chunniganj,
Kanpur - 208 001
Tel: 0512-3271907

KOCHI
Mitsun Enterprise, 30/1854 B4, 1st Floor, Ponnurruni
Road, Chalikkavattom Junction, Vytilla P.O.,
Kochi - 682 019
Tel: 0484-4026392/4063294

KOLKATA
Godrej Waterside, 10th floor, Tower - 1, Unit No. 1003,
Block - DP, Plot - 5, Sector V, Salt Lake City, Kolkata - 700 091,
Tel: 033-40002020 | Fax: 033-40002021

LUDHIANA
109, Modelgram, Near Kochar Market, Opp. Malwa
School, Ludhiana - 141 002
Tel: 0161-6578944, 6450816

MUMBAI
Grande Palladium, 6th Floor, 175,
CST Road, Kalina, Santacruz (East),
Mumbai - 400 098
Tel: 022-61871000

NAGPUR
Poonam Plaza, Palm Road, Civil Lines, Nagpur-440 001
Tel: 0712- 2520333

PATNA
1, Tilak Nagar East, Behind Patna Diesel, Kankarbagh, Patna - 800
020
Tel: 08002230517

PUNE
Epicentre
2nd Floor, CTS No. 4/6, Above Royal Enfield Showroom
Shivajinagar, Wakdevadi, Pune - 411005
Tel: 020-64104547, 27111427

RUDRAPUR
Plot No. 264, By Pass Road, Village Kishanpur, Kichha, District Udam
Singh Nagar, Uttarakand - 263 148
Tel: 05944-263290

Middle East Office

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