



TRANSFORMING STEEL PRODUCTION
USING THE MOST ADVANCED DANIELI TECHNOLOGY
THROUGH BLAST FURNACE ROUTE.

**ASIA'S
FIRST**

INTEGRATED
ENDLESS CASTING
& ROLLING
TECHNOLOGY FOR
Fe 550 D
TMT REBAR



GREEN BY NATURE
PERFECTED
FOR
STRENGTH



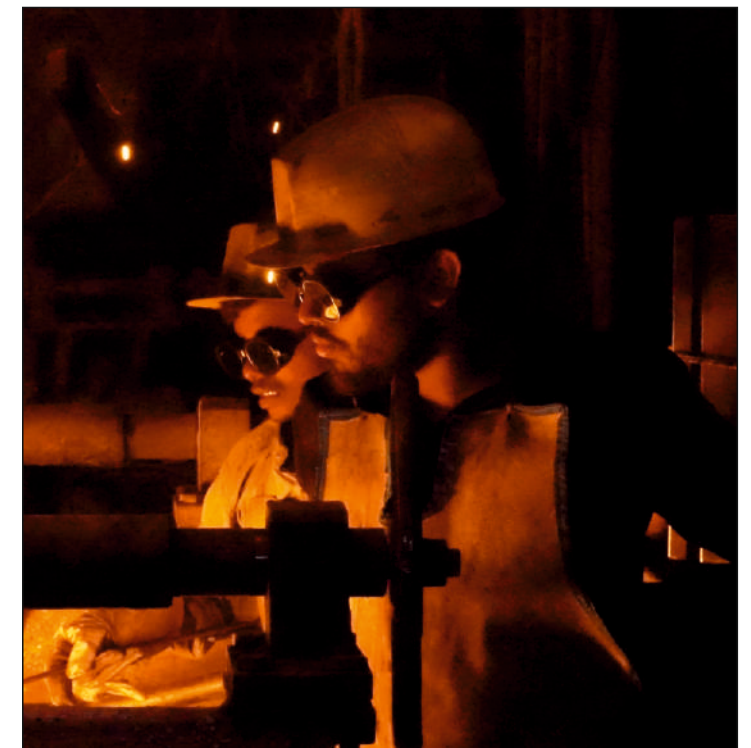


JAIRAJ STEEL

Since its inception in 1984, Jai Raj Ispat Limited has been at the forefront of steel manufacturing, blending decades of expertise with a relentless drive for innovation. As a pioneer in the industry, we have consistently expanded our capabilities and product range, focusing on producing high-quality Pig Iron, MS Rounds, Sponge Iron, MS Billets and TMT Rebars. Our commitment to excellence is reflected in our robust quality control measures and adherence to international standards.

THE JOURNEY SO FAR

- 1985- Established Ingot manufacturing unit in Hyderabad.
- 1997- First manufacturer of TMT Rebars in Hyderabad.
- 2000- 1st company in the world to make TMT Rebars using Induction Furnace and Continuous Caster.
- 2008- Sponge Iron/DRI unit in Bellary, Karnataka with 2 pre-heating kilns of 100 TPD.
- 2018- Began work at OMIH, Kurnool, AP, establishing a 0.45 MTPA modern integrated steel plant.



LEADERSHIP



Mr. S.K. Goenka

Visionary Founder & Managing Director

Mr. S.K. Goenka, the visionary Managing Director and founder of Jai Raj Ispat Limited, initiated a transformative journey when he relocated to Hyderabad in 1985 with the objective of establishing the company. He holds an esteemed honours degree in Commerce from Kolkata University, which served as a solid foundation for his professional career. Upon completing his education, he actively engaged in the family business, acquiring critical experience that ultimately led to the creation of Jai Raj. His unwavering dedication and strategic foresight have been pivotal in positioning the company as a leading force in the industry.



Mr. Siddharth Jain

Strategic Leader - Executive Director

Mr. Siddharth Jain, a distinguished alumnus with a Bachelor's Degree in Entrepreneurship from Indiana University, USA, and an Executive education from Harvard University, USA, has been serving as the Executive Director of Jai Raj Ispat Limited since April 2015. Widely recognized as the company's strategic leader, he brings over 22 years of extensive managerial experience and deep industry expertise to his role. His leadership, characterised by a strategic vision and a comprehensive understanding of the steel sector, has been instrumental in driving the company's sustained growth and success. Throughout his tenure, Mr. Jain has played a crucial role in shaping Jai Raj Ispat Limited's vision, ensuring it remains at the forefront of innovation and excellence in the industry.



Mrs. Rajshree Jain

Financial Strategist and
Asset Management - Director

Mrs. Rajshree Jain joined Jai Raj Ispat Limited as a Director in 2005, bringing a wealth of academic and practical expertise to her role. She holds a Bachelor's degree in Finance and a Master's degree in Accountancy from Bentley University in Boston, USA. Her strategic acumen was instrumental in the planning and implementation of the DRI unit in Bellary. Currently, Rajshree Jain oversees the company's financial operations and asset management, ensuring robust financial health and strategic asset utilisation.



KURNOOL PLANT



ASIA'S 1ST

ENDLESS CASTING AND ROLLING TECHNOLOGY

We are excited to unveil our state-of-the-art manufacturing facility at the Orvakal Mega Industrial Hub in Kurnool, Andhra Pradesh, which marks a new era in steel production. As Asia's first to implement the advanced Endless Casting and Rolling technology, developed in collaboration with Danieli S.p.A., Italy, this facility showcases cutting-edge infrastructure designed to revolutionize the industry.

We are proud to introduce two premium grades of TMT Rebars: **Fe 550 D** and **Fe 600** (available on special order), in diameters ranging from 8mm to 40mm.



PLANT HIGHLIGHTS

COMPREHENSIVE INFRASTRUCTURE

The plant covers 432 acres with an additional 600 acres for future expansion. It also features a 45-acre water reservoir to harvest rainwater, a 1st of its kind in the industry.

INNOVATIVE TECHNOLOGY

The Kurnool Plant is the 1st in the world to produce TMT Rebars using Energy Optimization Furnace (EOF) Technology, Ladle Refining Furnace (LRF) and Blast Furnace (BF). It is also the 1st in Asia to use Endless Casting and Rolling Technology, in partnership with Danieli S.p.A, Italy.

ENVIRONMENT-FRIENDLY

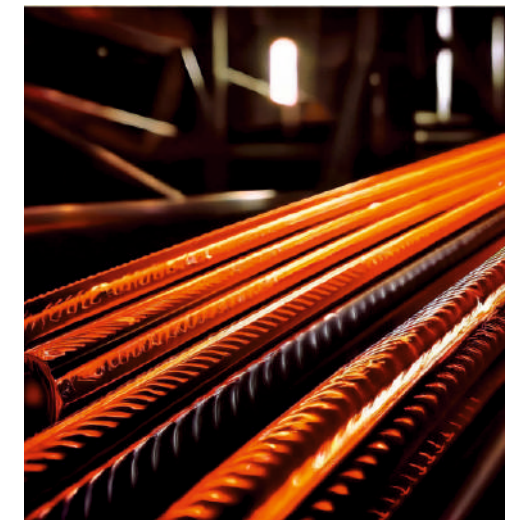
Our steel production facility leads the way in sustainable manufacturing, proudly achieving exceptionally low CO₂ emission levels. In fact, by adopting the latest technologies we have lowered CO₂ emissions by 63,000 TPA compared to other steel plants.

STRATEGIC LOCATION

Just 20 km from Kurnool city and 4 km from Kurnool Airport, with easy access to major ports and proximity to the Iron Ore belt of Bellary.

UNLEASHING POTENTIAL

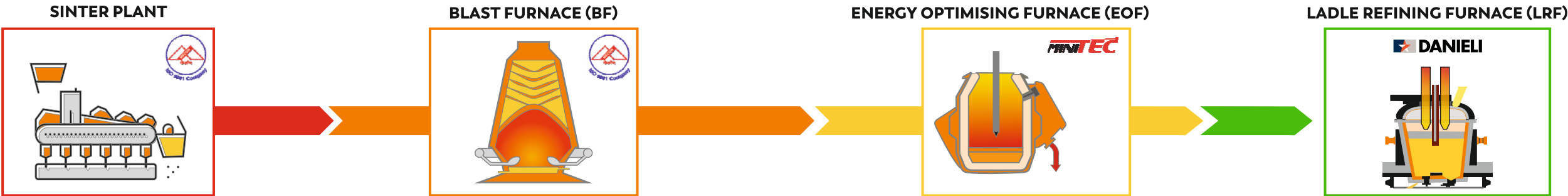
The plant features an annual production of 5,00,000 MT and there are plans to enhance it to 2.2 million tonnes.



MANUFACTURING PROCESS

IN COLLABORATION WITH DANIELI S.p.A., ITALY

Jai Raj 550 D TMT Rebars are crafted in advanced facilities, overseen by expert metallurgists and engineers, using sustainable and eco-friendly methods.



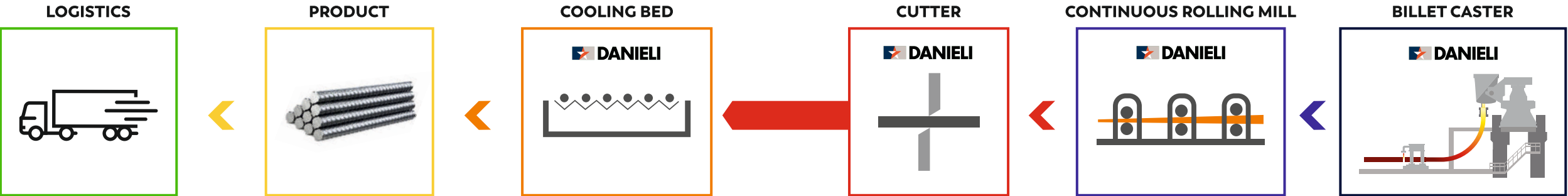
DESIGN EXPERTISE FROM **MECON**
(VIRGIN METAL)
NO SCRAP ADDITION

HOT METAL PRODUCTION
THROUGH LATEST BLAST FURNACE (BF)
DESIGN EXPERTISE FROM **MECON**
(VIRGIN METAL)
NO SCRAP ADDITION

STEEL MAKING
MINITEC BRAZIL TECHNOLOGY
1ST IN WORLD TO MAKE TMT REBAR WITH
LOW LEVELS OF SULPHUR & PHOSPHORUS
CORROSION-FREE

STEEL REFINING
TECHNOLOGY EXPERTISE
FROM **DANIELI**
MICRO-ALLOYING FOR
HIGHER GRADES

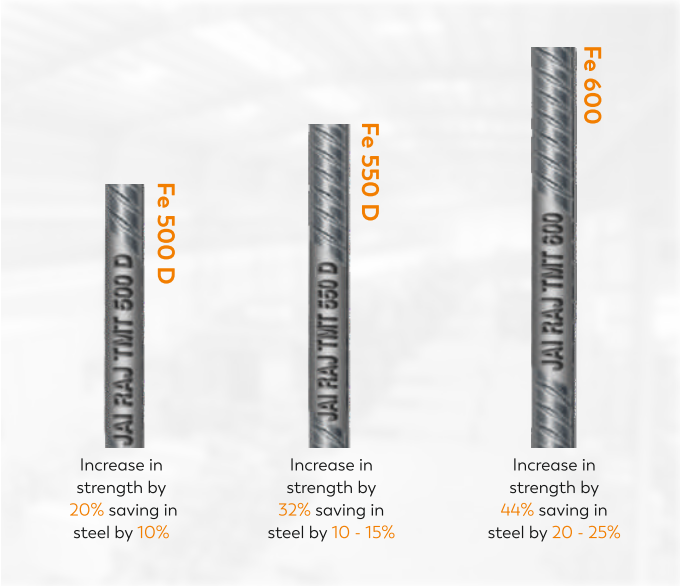
**TMT REBAR THROUGH ENDLESS CASTING-ROLLING,
TECHNOLOGY PARTNER - DANIELI S.p.A., ITALY
(FIRST TIME IN ASIA)**











JAI RAJ Fe 550 D TMT

Jai Raj Fe 550 D TMT Rebars are engineered for exceptional strength and durability, making them ideal for demanding construction applications. Designed to withstand high stress and seismic activity, these bars offer superior performance in structural reinforcement for bridges, high-rise buildings, and infrastructure projects. Our advanced manufacturing process ensures consistent quality and reliability, making Jai Raj 550 D a preferred choice for engineers and builders seeking robust and long-lasting solutions.



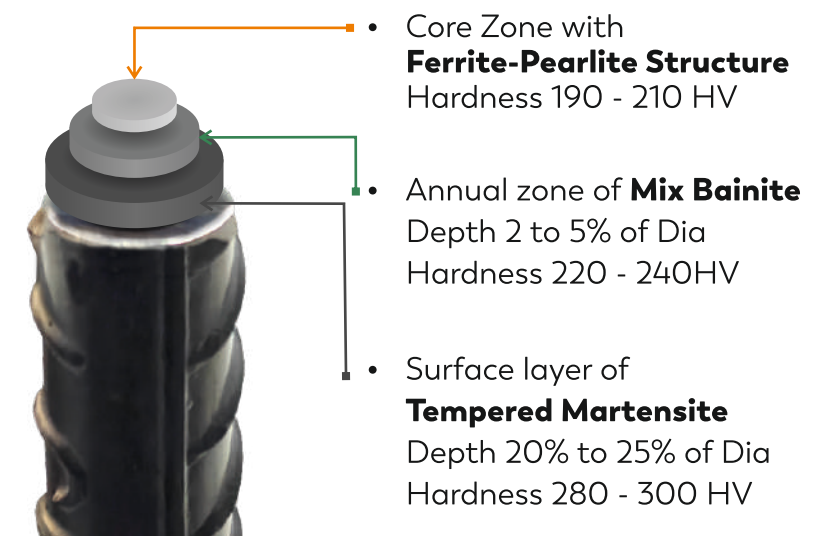
- **EXCELLENT BONDING STRENGTH WITH CONCRETE**
Due to uniform and parallel rib pattern engraved through computer controlled notch making machines
- **GREATER RESISTANCE TO CORROSION, EARTHQUAKES AND FIRE**
Due to highly controlled production technology & better UTS/YS ratio and higher percentage elongation
- **SUPERIOR WELDABILITY, STRENGTH & DUCTILITY**
Due to low levels of carbon & carbon equivalent, the tempered martensite on surface ring & ferrite and pearlite core using self and controlled cooling process
- **REDUCES CONGESTION**
Due to the strength and quality of the bars, fewer bars with lower bar diameter are required to be placed and tied.
- **UNIFORM CONSISTENCY IN ALL PARAMETERS**
Automation in mill and periodic maintenance of mill rolls ensure the perfect roundness, uniform weight/mt & strength of the rebar.
- **COST EFFECTIVE**
Due to the quality of the TMT bars, lesser quantity is required at a similar unit price. This also reduces the time and labour involved in the construction process.



MiD α TECHNOLOGY

Micro Mill Danieli with endless casting and rolling technology

The Danieli MIDA DCR design capitalises on the best available technologies, where melting, casting and rolling are carried out in one continuous and uninterrupted production process, from hot-metal to finished product, which can guarantee energy conservation and improving yield and final product quality. The core of the process is the high speed caster equipped with a Fast Cast Cube (FCC) oscillator and Power Mould, so as to be able to cast at very high speed then quickly hot charge the rolling mill at a temperature in excess of 850°C-950°C, having the possibility of additional heating when necessary through an induction heater.





MECHANICAL PROPERTIES

CHEMICAL PROPERTIES

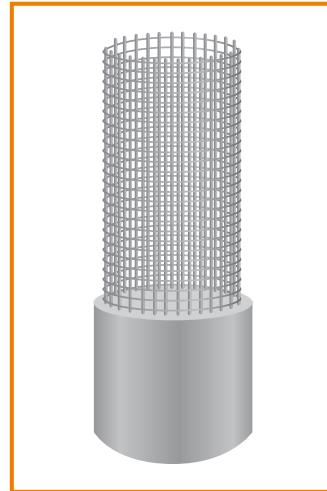
PARAMETERS	BIS Fe 550 D	JAI RAJ Fe 550 D	BIS Fe 600	JAI RAJ Fe 600
0.2% Proof Stress/ Yield Stress(N/mm ²) max	550	575	600	620
% Elongation (min)	14.50	18	10	15
Tensile Strength (N/mm ²) min	600	660	660	680
UTS/YS Ration (min)	1.08	1.15	1.06	1.10
% Total Elongation (min)	5	8	-	8

PARAMETERS	BIS Fe 550 D	JAI RAJ Fe 550 D	BIS Fe 600	JAI RAJ Fe 600
% Carbon	0.25	< 0.25	0.30	< 0.25
% Silicon	-	0.15-0.25	-	0.15-0.30
% Manganese	-	0.95-1.05	-	0.75-0.95
% Phosphorous max	0.04	0.02	0.04	0.02
% Sulphur max	0.04	0.02	0.04	0.02
% Sulphur +Phosphorous max	0.075	0.04	0.075	0.035
% Carbon Equivalent max	0.61	0.45	0.42	0.40

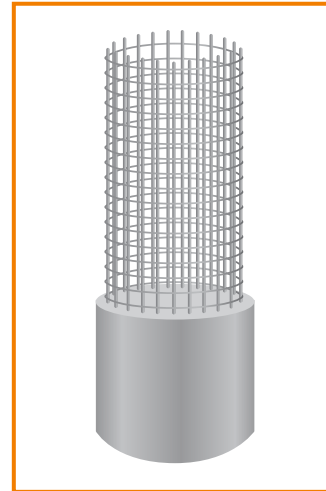
JAIRAJ Fe 550 D ADVANTAGES

APPLICATION

- High-strength structural applications, including bridges, high-rise buildings, and industrial structures.
- Reinforced concrete for enhanced durability and load-bearing capacity.



HIGH DENSITY OF
Fe 500D GRADE
TMT REBARS



INCREASED SPACING
DUE TO LESSER TMT
REBARS OF Fe 550 D

WHY US?

- **INNOVATIVE MANUFACTURING**
Embracing the latest technology for optimal performance and efficiency.
- **QUALITY ASSURANCE**
Rigorous quality control at every stage of production to ensure superior products.
- **SUSTAINABLE PRACTICES**
Commitment to environmental responsibility with advanced water harvesting systems and reduced CO₂ emission.
- **STRATEGIC LOCATION ADVANTAGE**
Prime location for seamless production and distribution, backed by a robust infrastructure. The new plant's strategic location, just 20 km from Kurnool city and 4 km from Kurnool Airport, ensures seamless access to major markets and transport hubs.



CORPORATE OFFICE

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FLAGSHIP PLANT - KURNOOL

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Orvakal Mandal, Village,
Guttapadu, Andhra Pradesh - 518 010

www.jairajispat.com

AVAILABLE AT

