# HIGHEST QUALITY AND STRONGEST PRIMARY TMT

MONNET STEEL TMT 500D PLUS

## What is MONNET Group?

### MONNET is part of an elite group of Integrated Primary Steel Manufacturers with a 1.5 MTPA Integrated Steel facility

Established in 1994, Monnet Ispat & Energy Limited (MIEL) commenced its business as a producer of coal based sponge iron and Ferro alloys. Over the years, the company has grown to become the second largest coal based sponge iron producer in the country with manufacturing facilities at Raigarh and Raipur, Chhattisgarh.

As yet another leap forward, MIEL has expanded its Raigarh plant to become a fully integrated 1.5 MTPA primary steel producer. The integrated steel manufacturing facility includes the following:

**Iron Making:** DRI Plants, Sinter Plant, Blast Furnace and Pellet Plant.

**Steel Making:** The State-of-the-art Melting & Refining facilities viz. UHP/EBT Electric Arc Furnaces, Ladle Refining Furnaces, Multi Nozzle Type VD Unit, Slab Caster & 6 strand Combi Billet Caster.

**Finishing Mills:** State-of-the-art Bar Mill, with technical know-how from NCO Italy and a 2500 mm wide Plate & 1550 mm wide Strip Steckel Mill.

Product Range from Steel Division of Monnet Group includes:

- TMT rebars from 8mm to 32mm sizes.
- 500D PLUS grade TMT rebars for retail & general sale.
- Other higher grade TMT rebars viz. Fe 500S, Fe 550D etc as per IS 1786:2008.
- Customised TMT rebar grades like High Corrosion Resistant (HCR) against specific project requirements.
- Medium and high strength Structurals (I-beams, Channels, Angles) up to 500 mm size.
- Plates of Structural, Boiler Quality and API grades in width up to 2500 mm, thickness range from 8 mm to 120 mm, in length as per customer's requirement.
- Cast rounds up to 350 mm diameter for seamless pipes and blooms upto 280 x 320 mm.

## Why should you buy Primary TMT Rebars?

### When you buy Primary TMT you are buying the highest quality & strongest TMT

**What is Primary Steel Producer?**

Primary Steel is the Highest Quality and Strongest TMT. A **PRIMARY STEEL PRODUCER** is one which starts its operation of production, irrespective of the process, using virgin or processed iron ore, with necessary fully owned refining & rolling/ processing facilities. Furthermore, the finished product should also be from the raw material made by the same producer. Monnet is an Integrated Steel producer and uses the latest **High Precision NCO Technology from Italy** to ensure uniform high quality and strength across the length of the bar.

**What are the prominent features of the Monnet TMT Bar Mill?**

- A fully automated mill with bar slitting & double twin channel system imported from Italy.
- Walking hearth type reheating furnace.
- Horizontal and vertical stands configuration
- Roughing mill, Intermediate mill, Finishing mill with convertible stands.
- Series of zero-tension loopers.
- Low level of sulphur and phosphorous reduces brittleness.
- Fully automated bar bundling & bar strapping system.
- Complete range from 8mm to 32mm.

**What is MONNET STEEL 500D PLUS TMT Rebar? (for Retail & General Sale)**

The TMT BAR Mill having H-V configuration under technical know-how from NCO Italy, produces Earth Quake Resistant (EQR) Reinforcement Steel Bars in sizes ranging from 8mm to 32mm with properties far exceeding the minimum requirements of Grade Fe 500D to IS 1786:2008 and accordingly the product is branded as Fe 500D PLUS offering dual benefits of higher strength with higher ductility. Latest technology of COMPUTER CONTROLLED QUENCHING & SELF TEMPERING enables the mill to produce TMT Rebars of HIGHER STRENGTH with HIGHER ELONGATION & UTS/YS ratio to ensure excellent Earth Quake Resistance properties. The entire feed stock is from 160 sq. mm billet made through close casting route which is unique to ensure International standard with consistency.

**Customised & Higher Grade MONNET TMT REBARS:**

Against specific customer requirements MIEL can produce higher grades TMT Rebars like Fe 500S, Fe 550D, High Corrosion Resistant (HCR) Re-bars for marine & coastal applications etc.

**1.5 MTPA Integrated Steel Plant at Raigarh, Chhatisgarh**

**What are the product strengths of MONNET TMT Rebars?**

- **Superior Bond Strength**

The critically designed and unique rib pattern of Monnet Steel TMT Rebars makes them ideal for superior bonding with concrete. Precise rolling, computer controlled quenching & self tempering process by NCO Italy, & guide equipment by Hallteck, UK ensure uniformity in the lug pattern and physical properties across the length of the TMT Rebars.

**Are MONNET TMT Rebars Earthquake Resistant? Do they have High Flexibility & High Strength?**

A superior and controlled steel making practice reduces the level of impurities present in the finished product. Infact, in Monnet Steel TMT Rebars, the level of impurities (sulphur and phosphorous) are much below the standard specifications as per IS 1786:2008. This guarantees that Monnet Steel TMT Rebars provide good flexibility combined with high strength, resilience and toughness - a characteristic essential for safety of construction against earthquakes.

**Do MONNET TMT Rebars have Superior Bendability, Longevity & Ductility?**

Critical control over levels of impurities coupled with computer controlled online heat treatment ensures that Monnet Steel TMT Rebars have bendability, longevity & ductility far exceeding the IS 1786:2008 prescribed minimum norms.

**Are Monnet TMT Rebars Corrosion Resistant*?**

For higher corrosion resistance (HCR) requirements in case of marine & coastal applications, if stipulated by customers, the chemical composition is modified by adding appropriate alloying elements for enhancing corrosion resistance.

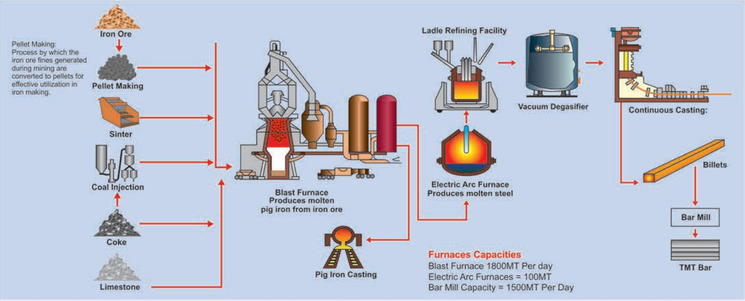
*supplied against specific customer requirements.

**What are the Advantages of MONNET STEEL TMT Rebars?**

- A product from a primary steel producer made from Billets manufactured in Monnet's 1.5 MTPA Integrated Steel Manufacturing facility.
- Latest and state-of-the-art facilities with technologically advanced equipment at each stage of steel making based on BSE, German Technology.
- Electric Arc Furnace & Ladle Refining Furnace for stringent control on chemistry.
- Complete automated process control for achieving desired mechanical & chemical properties.
- Quality Management through well-equipped in-house testing facilities handled by a team of qualified professionals backed by a strict QMS.
- Higher STRENGTH with higher Elongation and UTS/YS Ratio to ensure earth quake resistance property through latest COMPUTER CONTROLLED QUENCHING & SEL TEMPERING process.
- Excellent tempered Co-centric Martensitic Ring with Fine Ferrite-Pearlite Core at the Centre ensuring unique combination of higher strength and ductility.
- Free from Eutectoid Angular Carbide and Carbon dispersed uniformly in tempered structure avoiding Tri-axial Stresses.
- Excellent combination of strength, resilience and toughness ensuring higher EQR.
- Assured compact bonding with concrete for strong constructions through deep rooted ribs.

## What is the kind of technology that MONNET uses?

### Monnet uses the latest Technology from NCO Italy to ensure highest quality & uniformity of strength across the length of the bar.




- **DRI Sponge Iron making:** An energy saving process to directly reduce the iron bearing material to iron for direct use in steel making.
- **Sinter Making:** Process by which iron bearing fines which can not be directly used in the steel making can be agglomerated and used as a feed stock for Pig Iron Making.
- **Blast Furnace Iron Making:** Process by which lumpy iron bearing oxides are reduced to Pig Iron as feed stock to steel making.
- **Steel Making:** Process of oxidation of pig iron for removal of impurities as oxides through slag and production of molten steel for further processing in to various shapes to produce rectangular billets, round blooms, and flat slabs which are further rolled to sheets and plates.

## Why should you buy MONNET TMT Rebars?

# BECAUSE YOU DON'T GET A SECOND CHANCE TO BUILD YOUR DREAM HOME

## THUS USE HIGHEST QUALITY AND STRONGEST PRIMARY TMT REBARS