



Since 1972



# RATHI STEEL AND POWER LTD.



**THE BACKBONE OF  
MODERN CONSTRUCTION**

In the realm of steel, Rathi Steel and Power Limited is more than a name – it's a commitment to excellence by the promoters since 1940's. We strive to pioneer the steel industry through revolutionary sustainable steel solutions. Our vision is to create a future where our innovative steel products and services drive progress, inspire growth, and shape a more robust and sustainable world. By investing in technology and product quality, our mission is to secure and expand market share while being aligned with our stakeholders' interests - shareholders, the Government, employees, and customers. Our installed capacity is approximately 2,00,000 TPA for rolled products and around 80,000 TPA for melting facilities.

## QUALITY ASSURANCE

**Rigorous Testing:** Each bar undergoes stringent quality checks at every stage of production.

**State-of-the-Art Manufacturing:** Using Cantilever Stands and Block Mill

**Lesser Carbon Foot Print:** Using Green Energy

**Best Quality Rebars:** Superior Quality raw material tested in house ensure production of best quality rebars.

## WHERE INNOVATION TAKES SHAPE:

### Our Cutting-Edge Manufacturing Facilities

- ✓ Hot Charging Conveyers
- ✓ Stereo Microscope
- ✓ Optical Emission Spectrometer
- ✓ Cantilever Stands
- ✓ Inverted Type Metallurgical Microscope
- ✓ Universal Testing Machine
- ✓ State-of-Art Block Mill
- ✓ Mechanical Extensometer
- ✓ Rockwell Hardness Tester

# BENEFITS OF 550D



Fe 550 D rebars offer significant advantages over lower grades, making them a superior choice for modern construction. The "Fe 550" denotes iron with a minimum yield strength of 550 N/mm<sup>2</sup>, and the crucial "D" signifies enhanced ductility

## Superior Strength:

- **Higher Yield Strength** : Minimum yield strength : 550 N/mm<sup>2</sup>,
- **Higher Tensile Strength**: Higher ultimate tensile strength - resist breaking under maximum stress.

## Enhanced Ductility (the "D" factor):

- **Seismic Resistance**: - Vital in earthquake-prone zones.
- **Bendability**: Good bendability
- **Better Corrosion Resistance**: Lower carbon content - better corrosion resistance.
- **Good Weldability**: Controlled chemical composition
- **Thermal Resistance**: Higher resistance to softening at elevated temperatures- beneficial in case of fire.



## Chemical Composition of Rathi Powertech TMT Rebars (Grade FE 550)

Specification	%C	%S	%P	%(S+P)	%Cr + %Cu
Fe 550	0.30Max	0.055Max	0.050Max	0.100Max	
Fe 550D	0.25Max	0.040Max	0.040Max	0.075Max	
Fe 550 CRS	0.15Max	0.040Max	0.040Max	0.075Max	0.40 Min

## Physical Properties of Rathi Powertech TMT Rebars (Grade FE 550)

Specification	0.2% Y.S. (N/mm <sup>2</sup> )	UTS (N/mm <sup>2</sup> )	% Elongation	% Total Elongation at Max Force	C.E
Fe 550	550 min	> 585	14.5 Min	-	0.42 max
Fe 550D	550 min	> 600	18.0 Min	5	0.42 max
Fe 550 CRS	550 min	> 600	18.0Min	5	0.42 max

## WHY RATHI® POWERTECH® TMT REINFORCEMENT BARS ?

- **Just in Time Delivery** – Ready Stock with regular stockturnover
- **Superior Strength (550 D Grade)**: Meets and exceeds IS 1786:2008 standards.
- **Enhanced Ductility**: High elongation for excellent seismic resistance.
- **Advanced Rib Pattern**: Ensures a stronger bond with concrete.
- **Corrosion Resistance**: Specially treated for extended lifespan.
- **Excellent Weldability**: Reduces fabrication time and costs.
- **Thermal Resistance**: Maintains properties even at high temperatures.
- **Eco-Friendly Production**: Manufactured with sustainable practices.



