



Trust Meets Unmatched Strength



High Ductile

TMT
BAR

Powering the Skyline of a New India

Vasuki Global Industries has established a strong presence across multiple sectors by consistently delivering quality products and dependable services. With a foundation built on operational excellence and customer commitment, the company continues to support the evolving needs of construction and infrastructure development.

Today, Vasuki strengthens its contribution to modern construction with Vasuki TMT Bars, designed to meet the growing demands of strength, safety, and structural performance.

Vasuki TMT Bars are manufactured using advanced Thermax QST German Technology, ensuring the ideal combination of strength, ductility and durability.

Designed to perform under demanding construction conditions, Vasuki TMT Bars offer dependable reinforcement for residential buildings, commercial developments, and infrastructure projects.

Manufactured in accordance with stringent quality standards, every bar is engineered to deliver consistent performance, structural stability, and long-term reliability.

Premium TMT Bars for



Residential



Commercial and



Infrastructure Projects.



Thermax QST German Technology

Manufactured using advanced technology to achieve superior strength and performance.



Earthquake Resistant

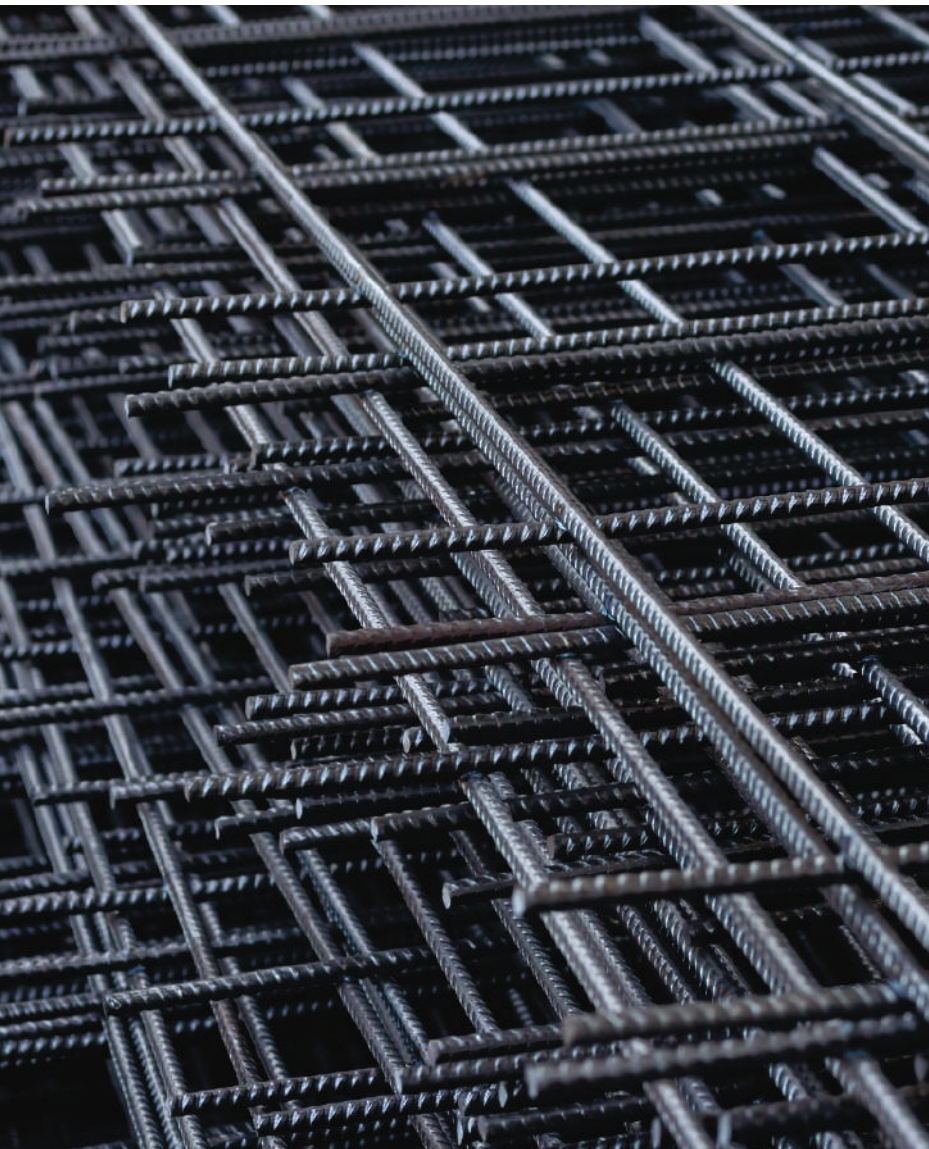
High ductility helps structures absorb and withstand seismic forces effectively.



Superior Ductility

Excellent flexibility and bend ability without compromising structural integrity.

Why Vasuki TMT BARS



Consistent Quality

Produced under controlled manufacturing processes to maintain uniform standards.



BIS Certified

Manufactured in compliance with recognized quality and safety standards.



Reliable Availability

Supported by an efficient logistics network for timely product availability.

Infrastructure That Forges Trust

Vasuki TMT bars are produced using advanced Thermex QST German technology rolling mills that ensure precise thermo-mechanical treatment for enhanced strength, better bendability, and long-lasting structural performance.

Steel Manufacturing process



Fully integrated sponge iron kilns



Induction melting furnaces



Ladle refining furnaces



6/11 continuous casting machines



Continuous high speed rolling mill with Twin block module & Advanced bar handling system with variable AC drives



Three-stage thermo-mechanical treatment facility



Epoxy Coating Plant



Spectrometry facility



Cutting and bending facility



Blast furnace & sinter plant



NABL-approved physical and chemical testing laboratories

Built with Technology. Trusted for Performance.

Every Vasuki TMT bar is manufactured under controlled processes to ensure high tensile strength, better ductility, superior bonding, and long-lasting durability for residential, commercial, and infrastructure projects.

Quality Excellence At Every Stage

From raw material selection to final testing, Vasuki TMT follows stringent quality standards at every step of production. Every bar is engineered to deliver consistent performance, structural reliability, and long-term durability.



Premium Raw Materials

The manufacturing process begins with carefully sourced sponge iron-based billets. Every billet undergoes verification through supplier test certificates and quality documentation before entering production.



Advanced Manufacturing Process

Vasuki TMT bars are manufactured using German technology designed to enhance strength, flexibility, and weldability.

The controlled quenching and self-tempering process creates a strong outer surface with a tough core structure.



Advanced Testing & Inspection

Each batch is subjected to rigorous inspection and testing procedures to maintain superior product standards.

Quality checks include:

- Visual inspection of billets for surface defects
- Dimensional checks for size and length accuracy
- Sample cutting and testing from every heat
- Chemical analysis using advanced spectrometer technology
- Online rolling mill inspection by quality personnel
- Weight-per-meter verification at regular intervals

- Yield strength and tensile strength testing
- Elongation, bend, and rebend testing



Precision Through German QST Technology

Manufactured using advanced Thermex QST German technology rolling mills, Vasuki

TMT bars undergo controlled quenching and self-tempering processes that enhance:

High Tensile Strength

- Better ductility and flexibility
- Superior weldability
- Earthquake resistance
- Long-term structural durability

Reliable Quality Assurance Systems

Vasuki TMT maintains strict quality control through advanced spectrometer testing, calibrated UTM equipment, and continuous process monitoring. Every batch is tested for strength, consistency, and performance before being documented and dispatched with proper lot-wise traceability.

Consistency That Inspires Confidence

Every finished batch is carefully inspected, documented, and stored according to size and lot identification for complete quality assurance and traceability, with proper lot-wise traceability.

Wide Range of Grades Engineered for Every Construcyion Need

Available Grades

Grade	Application & Features	Available Sizes	Certification
FE 500	High-strength TMT bars designed for residential, commercial, and infrastructure projects. Offers an ideal balance of strength and flexibility for dependable structural performance.	Diameter: 8 mm to 32 mm	IS 1786:2008
FE 500D	Manufactured with enhanced ductility for improved elongation and flexibility. Suitable for structures requiring superior seismic resistance and higher energy absorption.	Diameter: 8 mm to 32 mm	IS 1786:2008
FE 550	High tensile strength TMT bars built for heavy-duty construction applications including high-rise buildings, industrial structures, and infrastructure projects.	Diameter: 8 mm to 32 mm	IS 1786:2008
FE 550D	Combines superior strength with enhanced ductility for critical structures where durability, flexibility, and long-term structural reliability are essential.	Diameter: 8 mm to 32 mm	IS 1786:2008
Vasuki Epoxy-Coated TMT Bars	Fusion-bonded epoxy-coated TMT bars designed for superior corrosion resistance in coastal, industrial, humid, and chemically exposed environments. Ideal for infrastructure and long-life construction projects.	Diameter: 8 mm to 32 mm	IS 1786:2008

Available in standard industry specifications and manufactured under strict quality control standards.





FE**500****TMT
BARS**

Built for Everyday Structural Strength

Vasuki FE 500 TMT Bars are engineered to deliver the ideal combination of strength, flexibility, and durability for modern construction requirements. Designed for residential, commercial, and infrastructure projects, these bars provide dependable structural stability and long-lasting performance.

Manufactured using advanced Thermex QST German Technology, FE 500 bars ensure superior bonding with concrete and consistent mechanical properties across every batch.

Advantages

- High tensile strength for reliable structural support
- Excellent bonding with concrete
- Better durability and corrosion resistance
- Suitable for residential and commercial construction
- Consistent quality and dimensional accuracy



Criteria	Mechanical Properties					
	Fe 500 D		Fe 550		Fe 550 D	
	IS 1786: 2008	Vasuki TMT Fe 500 D	IS 1786: 2008	Vasuki TMT Fe 550	IS 1786: 2008	Vasuki TMT Fe 550 D
Yield stress (N/mm ²)(min)	500	520	550	570	550	570
Ultimate tensile stress (N/mm ²) (min)	565	600	585	660	600	660
Elongation (%) (min)	19	18	10	18	14.5	18
Total Elongation (%) (min)	5	6	-	-	5	6
(UTS/YS) (min) ratio	1.10	1.15	1.06	1.15	1.08	1.15
D in 500 D / 550 D denotes enhanced ductility.						

Criteria	Chemical Properties					
	Fe 500 D		Fe 550		Fe 550 D	
	IS 1786: 2008	Vasuki TMT Fe 500 D	IS 1786: 2008	Vasuki TMT Fe 550	IS 1786: 2008	Vasuki TMT Fe 550 D
Carbon (C) % (max)	0.25	0.22	0.30	0.23	0.25	0.22
Manganese (Mn) % (max)	-	1.50	-	1.50	-	1.50
Sulphur (S) % (max)	0.040	0.035	0.055	0.050	0.040	0.030
Phosphorus (P) % (max)	0.040	0.040	0.050	0.050	0.040	0.040
CE % (max)	0.42	0.40	0.42	0.40	0.42	0.40
(S + P) % (max)	0.075	0.075	0.100	0.100	0.075	0.070
Alloying element % (min)	-	-	-	-	-	-

FE
500D

**High Ductility for
Safer Structures**

TMT BARS

Vasuki FE 500D TMT Bars are specially developed for structures that demand enhanced flexibility and superior seismic performance. With improved elongation and ductility, these bars absorb stress more efficiently during earthquakes and dynamic loading conditions.

The controlled thermo-mechanical treatment process creates a strong outer surface and flexible inner core, ensuring both safety and durability.

Advantages

- Enhanced ductility and bendability
- Superior earthquake resistance
- Better energy absorption capacity
- Reduced risk of structural cracking
- Ideal for high-rise and seismic zone projects



FE
550

TMT
BARS

High Strength for Heavy-Duty Construction

Vasuki FE 550 TMT Bars are manufactured for projects that require higher load-bearing capacity and enhanced structural performance. Designed for demanding construction environments, these bars are suitable for industrial structures, bridges, commercial complexes, and high-rise buildings.

Produced using advanced QST rolling mill technology, FE 550 bars offer superior strength while maintaining durability and reliability.

Advantages

- Higher tensile and yield strength
- Superior load-bearing capacity
- Suitable for infrastructure and industrial projects
- Better resistance to stress and fatigue
- Long-lasting structural performance



FE**550D**

TMT BARS

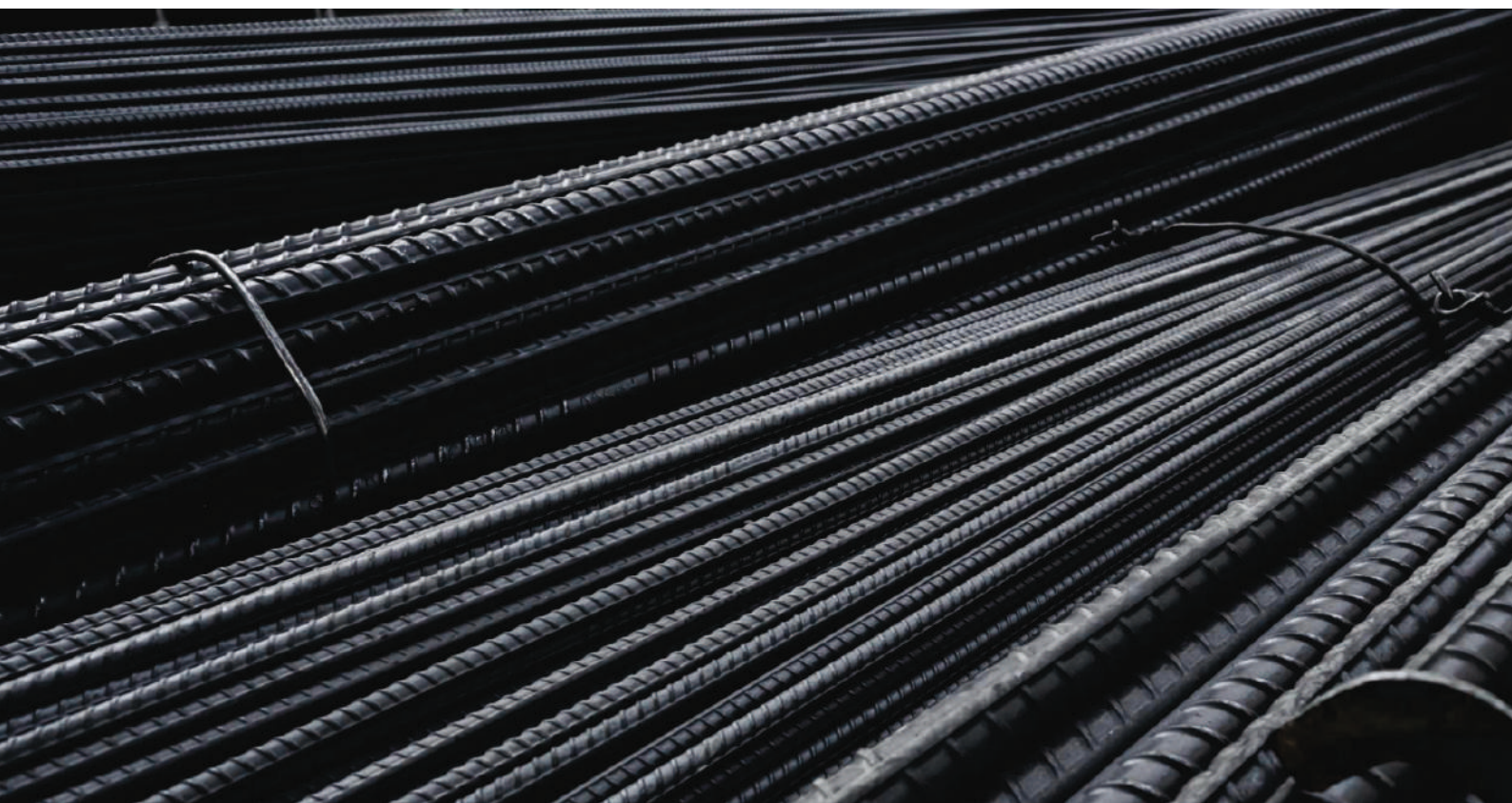
**Strength with
Enhanced Flexibility**

Vasuki FE 550D TMT Bars combine high tensile strength with superior ductility to deliver reliable performance in critical construction applications. These bars are designed for structures where both flexibility and structural endurance are essential.

The advanced thermo-mechanical treatment process improves elongation, making the bars highly suitable for modern infrastructure and seismic-resistant construction.

Advantages

- High strength with improved ductility
- Better flexibility under stress conditions
- Enhanced earthquake resistance
- Excellent structural reliability
- Ideal for critical and high-load structures



TMT BARS

Advanced Protection Against Corrosion

Vasuki Epoxy-Coated TMT Bars are specially designed for construction environments exposed to moisture, chemicals, salinity, and harsh weather conditions. A fusion-bonded epoxy coating forms a protective barrier around the steel surface, significantly reducing corrosion and extending structural life. These bars are ideal for marine structures, bridges, coastal construction, industrial plants, water-retaining structures, and infrastructure projects where long-term durability is critical.



Advantages

- Superior corrosion resistance
- Increased structural lifespan
- Better performance in coastal and humid conditions
- Reduced maintenance and repair costs
- Strong coating adhesion for long-term protection
- Suitable for infrastructure and industrial applications

The Epoxy Coating Process

Surface Preparation	TMT bars are cleaned and prepared to remove surface impurities and ensure proper coating adhesion.
Controlled Heating	Bars are heated under controlled temperature conditions to prepare the surface for epoxy application.
Epoxy Coating Application	Fusion-bonded epoxy powder is uniformly applied across the heated bars to create a durable protective layer.
Cooling & Inspection	The coated bars undergo controlled cooling followed by quality inspection to ensure coating consistency and performance standards.

Thermex QST

German Technology

For Superior Strength & Durability

Vasuki TMT Bars are manufactured using advanced Thermex QST German Technology rolling mills that combine precision engineering with modern thermo-mechanical treatment processes. During production, bars undergo rapid water quenching immediately after rolling, creating a hardened outer surface while maintaining a tough and ductile inner core. This advanced process enhances the overall mechanical properties of the bars and ensures reliable structural performance. The result is TMT bars with superior strength, enhanced flexibility, improved weldability, and better resistance against corrosion and seismic forces.

Key Benefits

- **Superior Tensile Strength**
Engineered to withstand high stress and heavy structural loads, ensuring dependable performance in residential, commercial, and infrastructure projects.
- **Better Weldability & Bendability**
Precision-engineered metallurgy enables smooth welding and bending operations without compromising the structural integrity of the bars.
- **Enhanced Ductility & Flexibility**
The advanced QST process creates a strong outer layer with a ductile core, allowing the bars to absorb stress efficiently without sudden failure.
- **Uniform Grain Structure**
Advanced rolling and quenching technology ensure consistent microstructure and mechanical properties throughout the bar for reliable construction performance.
- **Excellent Earthquake Resistance**
Higher elongation and flexibility help structures perform better during seismic activity and dynamic load conditions.
- **Stronger Bonding with Concrete**
Ribbed surface design and dimensional accuracy provide superior grip with concrete, improving overall structural stability.
- **Improved Corrosion Resistance**
Controlled chemical composition and thermo-mechanical treatment enhance resistance against moisture, corrosion, and harsh environmental conditions.
- **Long-Term Structural Durability**
Manufactured under strict quality control systems to deliver reliable strength, fatigue resistance, and extended service life for modern construction needs.

Technology That Builds Trust

Backed by advanced rolling mill infrastructure and stringent quality control systems, Vasuki TMT delivers reinforcement bars engineered for long-lasting performance across residential, commercial, and infrastructure projects.





VASUKI CEMENT PVT. LTD.

Corporate Office: Office No. B1008 & B1009 Sankalp Square - 3B

Beside Taj Hotel Sindhu Bhavan Main Road Shilaj, Ahmedabad - 380059

+91 88222 82888 | sales@vasukiinfra.com