



BHAROSA

majbusti ka



MANUFACTURER OF

FE500 | FE500 D | FE550 | FE550 D | CRS | EPOXY COATED

Using German Thermex Technology (TMX)

About Us

The Sanjay Group of Industries began its journey in 1976 in Sihor, Gujarat, establishing a nearly five-decade-long legacy in the iron and steel sector, built on a foundation of trust and quality.

The group has expanded into an integrated business with three key firm divisions:

A Foundry with 24,000 MT/year capacity for heavy Castings; a Steel unit producing 95,000 MT/year of Mild Steel Billets; and a Trading Firm supplying all the essential Metals, Alloys and Consumables for the manufacturing sector.

Built from decades of excellence, SR TMX TMT Bars- introduced in 2021 by Sanjay Ferro Metal Private Limited - stand as a premium benchmark of strength and quality in the steel and iron industry.

Our Commitment for a Legacy of Strength -

SR TMX TMT bars are manufactured using the advanced, licensed H&K-India Thermex® (QST) technology, ensuring superior quality in every bar. We are an ISO 9001:2015 certified company.

We conduct import and export operations in countries such as Africa, the Middle East, Indonesia, Vietnam, and the United Nations, built on a strong base of customer satisfaction and decade-long relations in both national and international markets.

Our purpose is to power a more secure and robust construction industry, driven by our modern manufacturing facility and high-quality TMT Bars.

SR TMX TMT Bars

TESTED STRENGTH

Globally preferred **Thermomechanical Tested Bars** known for superior durability & reliability.

LICENSED TECHNOLOGY

Produced using the trusted **H&K India Thermex (QST)** system for consistent performance.

QST ADVANTAGE

The **Quenching & Self-Tempering** process ensures high strength with excellent ductility.

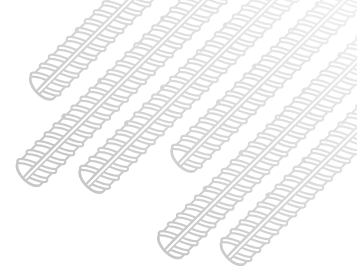
BIS CERTIFIED

Manufactured as per **Industry-leading BIS standards** for assured quality and safety.

GEO-ENGINEERED DESIGN

Tailored to suit **Indian geographical and seismic conditions** for enhanced resilience.

Why Choose SR TMX TMT Bars?



- 1** **Consistent Quality & Accurate Weight**
ensures every bar meets BIS and ISO standards for reliable performance.
- 2** **Superior Strength (Fe-550D)**
provides 16%+ elongation for the ideal mix of strength and flexibility.
- 3** **German Thermex (QST) Technology**
ensures uniform metallurgical quality and long-lasting performance.
- 4** **Fully Automated Production**
with Parker automation delivers precision and eliminates manual errors.
- 5** **Double Rib Design**
provides superior cement bonding for stronger, crack-free structures.
- 6** **On-Time Delivery & Trusted Support**
ensures timely supply and dependable service for every project.



**Corrosion
Resistant**



**Earthquake
Resistant**



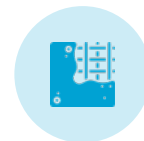
**Fire
Resistant**



**Exceptional
Bendability**



**High
Strength & Toughness**



**High Bonding
with Concrete**



**Consistent
Weight & Size**



**Uniform
Rib Pattern**

Products



FE-550

MECHANICAL PROPERTIES

Yield Strength	570N/mm²
Ultimate Tensile Strength	630N/mm²
Elongation	16%
YS Ratio	1.12

CHEMICAL COMPOSITION

Carbon Content	0.25%
Sulphur Content	0.040%
Phosphorus Content	0.040%
S+P	0.075%



FE-550 D

MECHANICAL PROPERTIES

Yield Strength	530N/mm²
Ultimate Tensile Strength	600N/mm²
Elongation	18%
YS Ratio	1.15

CHEMICAL COMPOSITION

Carbon Content	0.25%
Sulphur Content	0.040%
Phosphorus Content	0.040%
S+P	0.075%



FE-500

MECHANICAL PROPERTIES

Yield Strength	530N/mm²
Ultimate Tensile Strength	580N/mm²
Elongation	16%
YS Ratio	1.15

CHEMICAL COMPOSITION

Carbon Content	0.3%
Sulphur Content	0.055%
Phosphorus Content	0.055%
S+P	0.105%



FE-500 D

MECHANICAL PROPERTIES

Yield Strength	530N/mm²
Ultimate Tensile Strength	600N/mm²
Elongation	18%
YS Ratio	1.15

CHEMICAL COMPOSITION

Carbon Content	0.25%
Sulphur Content	0.040%
Phosphorus Content	0.040%
S+P	0.075%

CRS TMT Bars

Coating

Alloyed with anti-corrosive elements (like copper, chromium, and phosphorus) - no external coating needed.

Application Method

Used directly like regular TMT bars - No extra treatment needed.

Purpose

Resists rust and corrosion in harsh environments.

MAINLY USED IN

- Coastal & marine constructions
- Industrial & humid environments
- Foundations exposed to moisture
- Bridges & flyovers
- Water treatment plants

Epoxy Coated TMT Bars

Coating Type

Fusion Bonded Epoxy (FBE) Powder Coating

Application Method

Electrostatic coating in a controlled factory setup

Purpose

Long-lasting anti-corrosion protection for rebars

BENEFITS



Excellent
Corrosion Protection



High Resistance
to Cathodic Disbondment



Resistance
to Chemical Contaminants



45+ years of
Proven Technology



Excellent
Steel Adhesion



Good Resistance
to Abrasion & Impact



Resistance
Against Heat

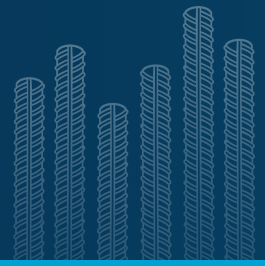


Cost-Efficient
Service Life



TMT Bars

Manufacturing Process



STEEL MELTING & REFINING

High-quality mild steel is produced in a 20 MT/Hour induction furnace using a precise blend of Sponge Iron (DRI) and Heavy Melting Scrap.



CAST BILLETS

Chemically examined molten steel is rapidly cast into precise square billets using Continuous Casting Equipment.



ROLLING MILL

BILLETS are shaped into TMT bars via rollers, refining the microstructure for superior strength.



QUENCHING & TEMPERING

Bars undergo specialized quenching to achieve optimal toughness and ductility.



QUALITY TESTING

Rigorous assessments (tensile strength, yield strength, UTM, Spectrometer) guarantee superior durability.



STORAGE & DISPATCH

An effective supply chain and robust network of Builders, Distributors, and Dealers ensure all SRTMX grades are delivered on time.



Quality Assurance

The SRTMX TMT Commitment

At SR TMX TMT, quality is at the core of everything we do. We are dedicated to meeting the highest standards through rigorous testing processes, innovative solutions, and strict quality control measures. This ensures that every bar is crafted to perfection.



RIGOROUS TESTING FOR UNMATCHED DURABILITY

Our commitment to quality is backed by advanced testing and compliance with global standards.

NABL Approved Testing Laboratory

Our accredited laboratory thoroughly tests every SR TMX TMT Fe 550D bar for strength, flexibility, and durability, guaranteeing their ability to withstand even the most challenging conditions.

Parker Automation

With Parker automated systems, we achieve the highest levels of productivity and quality, ensuring every batch of TMT bars is consistently uniform.

Analysis

Identifying phases like Pearlite, Ferrite, and Martensite provides key insights into the steel's mechanical properties.

Shimadzu Spectrometer

We use a Shimadzu spectrometer for precise chemical analysis, ensuring our bars meet global standards for composition, strength, and corrosion resistance.

Etching Test

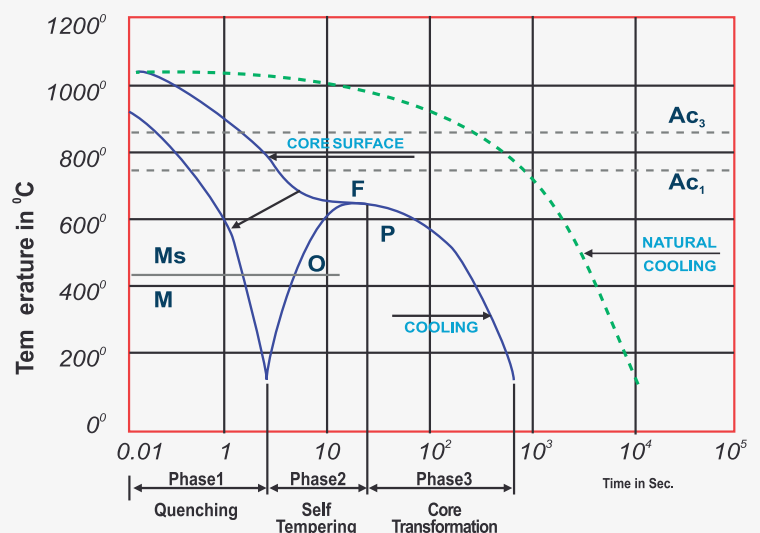
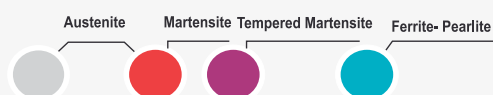
This crucial quality control step provides valuable microstructural analysis of the TMT rebars.

Compliance with Standards

The testing ensures that the rebar meets specifications set by standards like IS:1786 in India.

Phase Transformation In Steel

A critical part of manufacturing our high-quality TMT bars



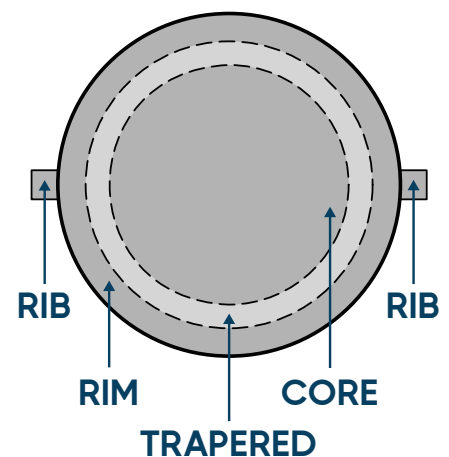
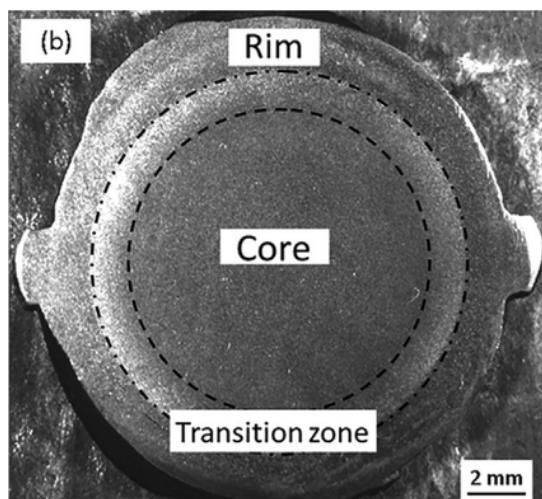
Engineering for Generations

The "SR TMX FE 550D"

Advantage

We live in a world where change is the only constant, and the construction industry is no exception. To meet these evolving challenges and the increasing demands for exceptional strength and durability, SR TMX TMT proudly introduces FE 550D bars — engineered to last for generations. Be it a high-rise building or a complex infrastructure project, our bars deliver outstanding performance.

SR TMX TMT FE 550D bars are meticulously designed to strike the perfect balance between strength and flexibility, guaranteeing top-tier performance. By choosing SR TMX TMT bars, you are investing in materials that surpass industry standards, enhancing the lifespan and resilience of your construction projects.



The Smarter Choice

SR TMX TMT FE 550D Bars

1

BETTER BAR SPACING

Optimized bar spacing ensures enhanced structural stability while reducing the amount of steel required without compromising strength.

2

FASTER CONSTRUCTION TIME

SR TMX FE 550D TMT rebars are designed for efficient installation, significantly speeding up the construction process.

3

SUPERIOR STRENGTH

Engineered with high tensile strength, SR TMX FE 550D TMT Rebars offer greater resistance to stress, ensuring the durability of your structures.

4

REDUCED STEEL CONSUMPTION

By maximizing bar spacing with, we reduce steel consumption, making your construction projects more cost-effective.

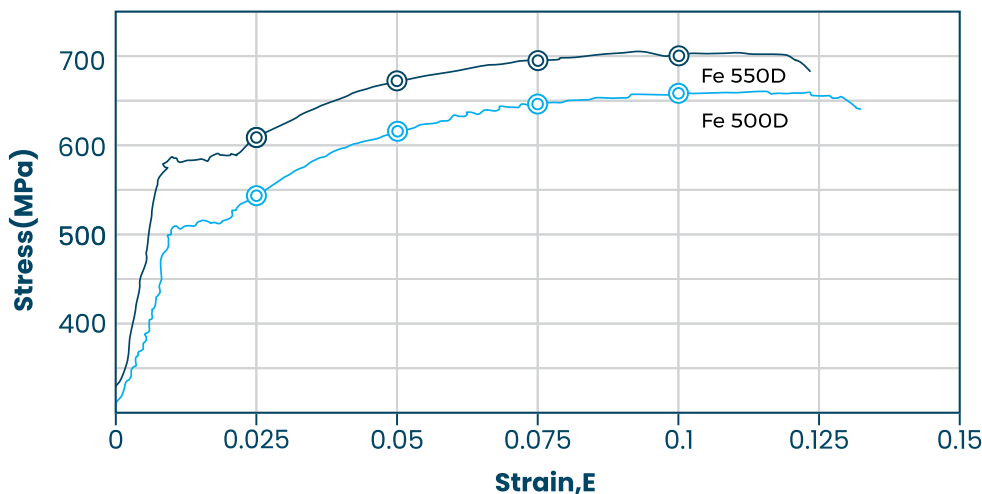
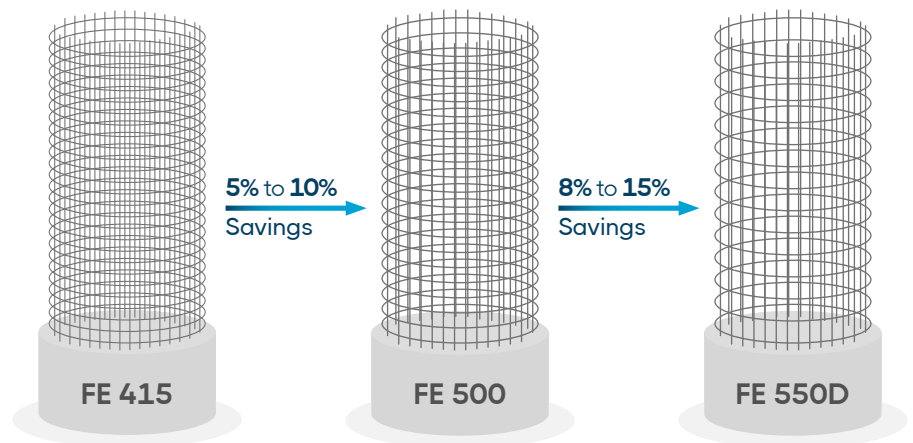
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COST SAVINGS

With reduced steel & faster construction times, SR TMX FE 550D TMT rebars help deliver significant savings.

**BUILD
STRONGER
WITH
LESS STEEL**

A Comparison of
TMT Rebar Grades
(FE415, FE500 &
FE550D)



**FE 500D
VS
FE 550D**

**STRESS STRAIN
COMPARISON**

Chemical & Physical/ Mechanical

PROPERTIES AS PER
IS 1786:2008 OF SR TMX BAR

MECHANICAL PROPERTIES

Grade		Fe500		Fe500D		Fe550		Fe550D		CRS Fe500		CRS Fe500D	
	Unit	IS 1786:2008	SR TMX	IS 1786:2008	SR TMX	IS 1786:2008	SR TMX	IS 1786:2008	SR TMX	IS 1786:2008	SR TMX	IS 1786:2008	SR TMX
Yield Stress (min)	N/mm ²	500	530	500	530	550	570	550	570	500	530	500	530
Ultimate Tensile Strength (min)	N/mm ²	545	610	565	610	585	630	600	640	545	600	565	600
TS/Ys Ratio (min)		1.08	1.15	1.10	1.15	1.06	1.10	1.08	1.12	1.08	1.12	1.1	1.12
Elongation (min)	%	12	16	16	18	10	16	14.5	16	12	16	16	18
Total Elongation (min)	%			5	6			5	6			5	6

CHEMICAL PROPERTIES

Grade		Fe500		Fe500D		Fe550		Fe550D		CRS Fe500		CRS Fe500D	
	Unit	IS 1786:2008	SR TMX	IS 1786:2008	SR TMX	IS 1786:2008	SR TMX	IS 1786:2008	SR TMX	IS 1786:2008	SR TMX	IS 1786:2008	SR TMX
Carbon (max)	%	0.30	0.26	0.25	0.23	0.30	0.25	0.25	0.22	0.15	0.15	0.15	0.10
Sulphur (max)	%	0.055	0.050	0.040	0.040	0.055	0.050	0.040	0.040	0.055	0.050	0.040	0.040
Phosphorus (max)	%	0.055	0.055	0.040	0.040	0.050	0.050	0.040	0.040	0.120	0.100	0.120	0.080
S+P (max)	%	0.105	0.105	0.075	0.075	0.100	0.100	0.075	0.075	0.170	0.145	0.155	0.115
Copper	%										0.22-0.45		0.10-0.20
Chromium	%	..	..	..	..	..	..	..	..	..	0.22-0.45	..	0.35-0.45
CE (max)	%	0.42	0.42	0.50	0.42	0.50	0.42	0.61	0.42	0.53	0.42	0.53	0.42
ALLOY ELEMENT (min)	%	..	..	..	..	..	..	..	..	0.40	0.50	0.40	0.50

Standard Size & Useful Data

MECHANICAL PROPERTIES

Size (MM)	ISI Standard Nominal Weight Kg./Mtr.	SR TMX Nominal Weight Kg./Mtr.	Tolerance Limit as per ISI in Kg./Mtr.	SR TMX Tolerance Limit in Kg./Mtr.	No. of pieces per bundle 12 Mtr.	Weight per bundle in Kgs. 12 Mtr.
8	0.395	0.370	0.367 - 0.423	0.370 - 0.390	15	69
10	0.617	0.580	0.574 - 0.660	0.580 - 0.595	10	71
12	0.888	0.852	0.844 - 0.932	0.850 - 0.865	7	72
16	1.580	1.580	1.500 - 1.659	1.520 - 1.540	4	74
20	2.470	2.410	2.395 - 2.544	2.420 - 2.440	2	58
25	3.850	3.760	3.735 - 3.966	3.750 - 3.800	1	45
32	6.310	6.210	6.121 - 6.499	6.250 - 6.300	1	75

BEND USE MANDREL SIZE

	Fe415	Fe415D	Fe500	Fe500D	Fe550	Fe550D	Fe600
BEND TEST MANDREL SIZE (BMM TO 20MM)	3XD	2XD	4XD	3XD	5XD	4XD	5XD
BEND TEST MANDREL SIZE (BMM TO 20MM)	4XD	3XD	5XD	4XD	6XD	5XD	6XD

REBEND USE MANDREL SIZE

REBEND TEST MANDREL SIZE upto includ (10MM)	5XD	4XD	5XD	4XD	7XD	6XD	7XD
REBEND TEST MANDREL SIZE (OVER 10MM)	7XD	6XD	7XD	6XD	8XD	7XD	8XD

TMT SIZES

8mm | 10mm | 12mm | 16mm | 20mm | 25mm | 32mm

CERTIFICATIONS



A Promise Lived, Every Time. Everywhere.

A Commitment Delivered to Your Doorstep



Bharosa Majbooti ka
International Quality QST Bars

CORPORATE OFFICE:

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Atabhai Road, Bhavnagar - 364001, Gujarat(india)

SALES OFFICE:

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