



**DISCOVER THE
NEW DIMENSION**
of steel construction with
GAJKESARI TMT 550D bars.

+91 7391044094

02482 – 221499 , 221599

sales@gajkesaristeels.com

gajkesaristeels.com

Plot No. F-18/19, Phase 2, Addl. MIDC, Jalna – 431203

TMT 550D



ABOUT US

An Everlasting Trust of 'STRENGTH'

Gajkesari Steels and Alloys Pvt. Ltd. is a leading name in the manufacturing of a wide range of TMT 550D bars. We are known for quality, innovation and advanced technological solutions in the segment. Our products range from a wide variety such as 8mm, 10mm, 12mm, 16mm, 20mm, 25mm, 32mm TMT 550D bars with certified ISI standards.

We are backed by a team of experienced, dedicated & skilled engineers working continuously for designing, manufacturing and commissioning of all our plants since many years. Despite of our premium quality products, our fast, safe and client centric services also help us earn name and fame in the industry.

We have served a number of customers located different regions of India so far. Our clients are satisfied with our products as they are working seamlessly for over the years with our in-depth technical expertise and industrial experience, we are able to offer efficient and prompt services to the clients. In order to ease the burden of our clients, we provide supervision of installation and commissioning services at client's site by our technical experts.

We do not compromise with the quality of our products, hence making them unparalleled in the industry. Trouble free operation, low maintenance cost, reliability and durability are some of the unique features of our products. As ISI certified & quality TMT 550D bar manufacturer and supplier provider, Gajkesari Steels and Alloys Pvt. Ltd. has an unbeatable ability to offer short lead delivery times, competitive pricing, volume flexibility and comprehensive facilities that make sure, consistency is guaranteed.

WEIGHT TOLERANCE

SIZE (DIA) OF BAR (MM)	CROSS SECTIONAL AREA (M ²)	SECTION WT.(KG/M) AS PER IS 1786			GAJKESARI 550D SECTION WT.(KG/M)		LENGTH OF BAR (M)	GAJKESARI 550D WEIGHT OF 1 BAR OF KG		NO. OF BARS IN 1 BUNDLE	GAJKESARI 550D BUNDLE WEIGHT IN KG		NO. OF BARS IN 1 MT	NO. OF BUNDLES IN 1 MT
		LOWER	STANDARD	HIGHER	LOWER	HIGHER		LOWER	HIGHER		LOWER	HIGHER		
		08	50.30	0.367	0.395	0.423		0.371	0.399		12	4.452		
10	78.60	0.574	0.617	0.660	0.580	0.623	12	6.960	7.476	11	76.560	82.236	136	12
12	113.10	0.844	0.888	0.932	0.848	0.897	12	10.176	10.176	08	81.408	86.112	95	12
16	201.20	1.501	1.580	1.659	1.508	1.595	12	18.096	19.140	04	72.384	76.560	53	13
20	314.30	2.396	2.470	2.544	2.405	2.492	12	28.860	29.904	03	86.580	89.712	34	11
25	491.10	3.735	3.850	3.966	3.758	3.894	12	45.096	46.723	02	90.192	93.446	22	11
28	615.80	4.685	4.830	4.975	4.713	4.884	12	56.556	58.608	01	56.556	58.608	17	17
32	804.60	6.121	6.310	6.499	6.159	6.379	12	73.884	76.548	01	73.884	76.548	13	13

BEND PROPERTIES

Properties	Fe 500D	Fe 550	Fe 550D
Up to and including 20mm	3d	5d	4d
Over 20mm	4d	6d	5d

REBEND PROPERTIES

Properties	Fe 500D	Fe 550	Fe 550D
Up to and including 10mm	4d	7d	6d
Over 10 mm	6d	8d	7d

VISION

To be a global leader in the steel industry, renowned for our unwavering commitment to innovation, quality, and sustainability, setting new benchmarks in steel manufacturing and contributing to the development of enduring infrastructure.

MISSION

To produce superior quality TMT steel bars through advanced technologies and rigorous quality control, ensuring strength, durability, and safety in every product. We strive to support infrastructure projects with reliable steel solutions while fostering a sustainable and environmentally-friendly manufacturing process.



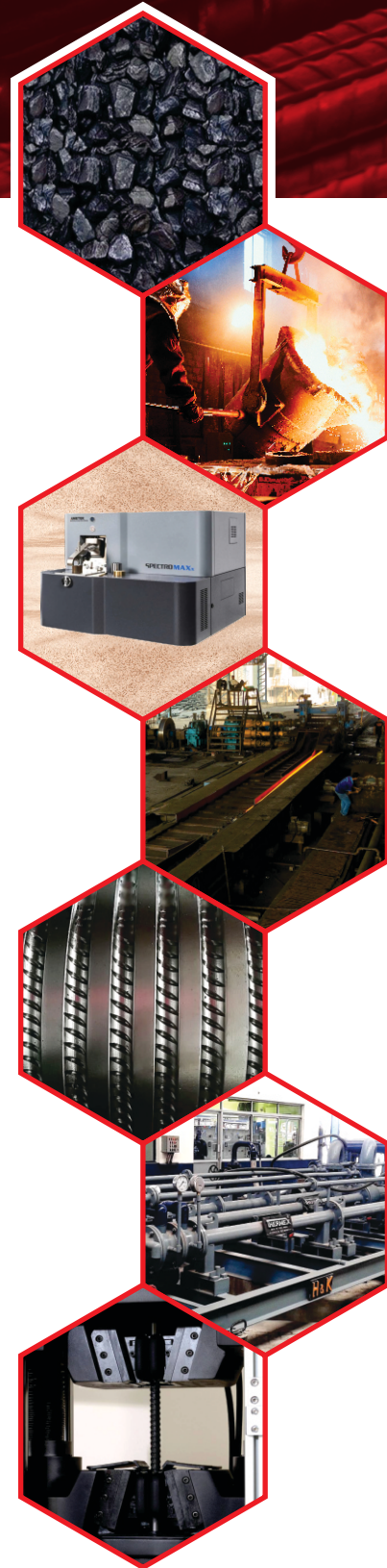
UNIVERSAL TESTING MACHINE



SPECTROMETER TESTING

PROCESS

PRODUCTS



PROCUREMENT OF RAW MATERIAL

Iron Ore being the primary raw material, is procured from various parts of the country.

STEEL MELTING SHOP FACILITY

At our SMS facility, we melt the raw material at 1600°C, and transform it into molten metal.

SPECTROMETER TESTING

We then check the chemical composition of the molten metal. As per ISI 1786 standards, we predominantly check for Carbon, Sulphur, Phosphorous & Manganese and other chemical elements.

RE-ROLLING MILL

The molten metal passes through various stands in the re-rolling mill to achieve desired sizes ranging from 8 to 40mm.

THERMAX PROCESS

For the quenching process, we utilize German-approved Thermo-Max technology. This is done to maintain a soft inner core and a hardened exterior for better physical properties.

UTM MATERIAL TESTING

At the Universal Testing Machine, we check the physical properties of TMT bars before dispatching them. These properties include grade, yield, ductility, and elongation.



Steel is an integral and vital aspect of all construction and infrastructure development projects. TMT 550D bars also play an instrumental role in shaping the developments. We manufacture a wide range of products, customized to client requirements. Besides world-class standards, our range of products ensures precision in length, sectional weight, packing and grade of steel.

OUR RANGE OF TMT 550D BARS :

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

PRODUCT DETAILS	SIZE	GRADES			
GAJKESARI Construction Steel Bars (QST & CRS)	6 mm to 32 mm	Fe 500 Fe 500 D	Fe 550 Fe 550 D	CRS 500 CRS 500 D	CRS 550 CRS 550 D


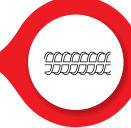






CHEMICAL COMPOSITION - IS 1786:2008		
Elements	Indian Standard (IS 1786:2008)	GAJKESARI Specifications

	Fe 500	Fe 500D	Fe 550	Fe 550D	500	500D	550	550D
Carbon, Max	0.30	0.25	0.30	0.25	0.25	0.25	0.25	0.25
Sulfur, Max	0.055	0.040	0.055	0.040	0.050	0.040	0.050	0.040
Phosphorus, Max	0.055	0.040	0.050	0.040	0.050	0.040	0.050	0.040
S+ P, Max	0.105	0.075	0.100	0.075	0.095	0.075	0.095	0.075

MECHANICAL PROPERTIES-NES - IS 1786:2008		
Properties	Indian Standard (IS 1786:2008)	GAJKESARI Specifications

	Fe 500	Fe 500D	Fe 550	Fe 550D	500	500D	550	550D
Yield Strength, Min (N/mm ²)	500	500	550	550	530	530	580	580
Ultimate Tensile Strength, Min (N/mm ²)	545	565	585	600	585	610	630	670
Elongation, Min (%)	12	16	10	14.5	16-20	18-22	16-20	16-20
UTS/YS Ratio	1.08	1.10	1.06	1.08	1.10	1.15	1.10	1.15

KEY FEATURES AND BENEFITS

-  Enhanced Strength With Durability
-  Best in class Rib Pattern
-  Earthquake resistant
-  Easy Weldability
-  Low carbon content
-  Easy Bendability
-  Higher Fatigue resistance
-  Made with ISI standards

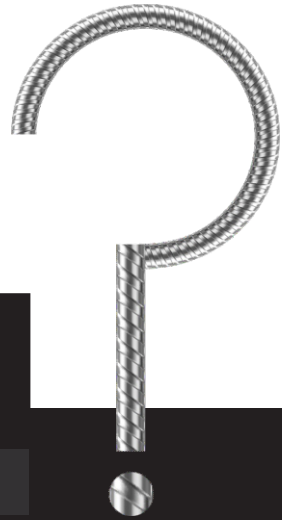


QUALITY TESTING

- **CHEMICAL COMPOSITION ANALYSIS**
Ensuring the correct composition of elements like carbon, manganese, sulfur, phosphorus, and others to meet specified standards.
- **MECHANICAL TESTING**
Tensile strength testing to verify the maximum load a TMT bar can withstand. Yield strength testing to determine the stress level at which the bar permanently deforms. Elongation testing to measure the ability of the bar to stretch before breaking.
- **DIMENSIONAL INSPECTION**
Checking the diameter, length, and straightness of the TMT bars to ensure they conform to specified tolerances.
- **TESTING FOR BENDABILITY AND REBENDABILITY**
Evaluating the ability of the TMT bar to bend without breaking and its capacity to return to its original shape after bending.
- **ULTRASONIC TESTING (UT)**
Detecting internal defects such as cracks, voids, or inclusions using ultrasonic waves.
- **MAGNETIC PARTICLE INSPECTION (MPI)**
Identifying surface and near-surface defects like cracks or laps by applying a magnetic field and inspecting for magnetic particles.
- **CORROSION RESISTANCE TESTING**
Assessing the resistance of TMT bars to corrosion through accelerated corrosion tests.
- **MACROSCOPIC EXAMINATION**
Visual inspection of the TMT bars for any surface irregularities or imperfections.

WHY

GAJKESARI



THIS MAKES US AN IDEAL **STEEL PARTNER**

- STEEL & COST savings with our Actual FE 550 grade with compare to Regular FE 415 & 500 grade bars
- State of the art Manufacturing Plant
- Advanced Technology for the World-class output
- Handpicked and High Quality Raw Material
- Agile Quality Control Measures
- Faster Delivery
- Robust After Sales Support
- Wide Network of Dealers & Distributors across India



QUALITY ASSURANCE PLAN

The Quality Assurance Plan at Gajkesari TMT Steel Bars is designed to ensure the production of high-quality steel bars that meet stringent industry standards.

RAW MATERIAL INSPECTION

Gajkesari conducts thorough inspections of incoming raw materials, including iron ore and scrap metal, to verify quality and composition. Chemical analysis and mechanical testing are performed to ensure materials meet specifications.

PRODUCTION PROCESS CONTROL

Close monitoring of the entire manufacturing process, from heating and rolling to cooling and finishing. Process parameters such as temperature, rolling speed, and cooling rate are controlled to achieve desired mechanical properties.

QUALITY TESTING

Regular sampling and testing of steel bars during production to check for properties like tensile strength, elongation, and ductility. Non-destructive testing methods such as ultrasonic testing and magnetic particle inspection are employed to detect internal defects.

HEAT TREATMENT CONTROL

Precise control of the heat treatment process to ensure uniform and consistent properties throughout the steel bars. Cooling rates and quenching techniques are optimized to achieve the desired microstructure.

DIMENSIONAL INSPECTION

Regular checks on dimensions and tolerances of the finished steel bars to ensure they conform to standards and customer requirements.

CERTIFICATIONS AND COMPLIANCE

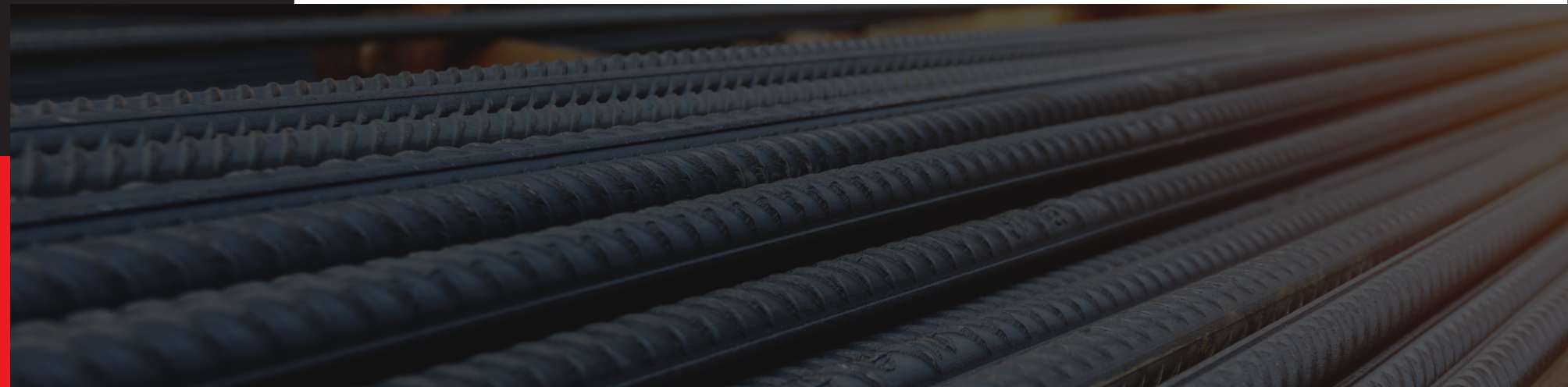
Adherence to national and international quality standards such as IS 1786:2008 (BIS) and ISO 9001:2015. Regular audits and certifications from accredited agencies to validate compliance.

TRACEABILITY AND DOCUMENTATION

Comprehensive documentation of all quality-related activities, including test results, inspection reports, and production records. Each batch of steel bars is tagged and traceable back to raw material sources for accountability.

CUSTOMER FEEDBACK AND CONTINUOUS IMPROVEMENT

Soliciting feedback from customers to identify areas for improvement. Implementing corrective and preventive actions to enhance product quality and customer satisfaction.



POLICIES

CORE VALUES THAT MATTER

QUALITY

Quality is our strength in the face of competition. We believe in maintaining the highest Quality for all its supplies to customers (industrial and domestic). We take the full responsibility to give our customers an uninterrupted supply of quality and ISI certified bars. Raw materials, intermediate production sampling as well as finished product are tested by latest techniques using accurate instrumentation control. It assures that all our products are manufactured as per international standards with respect to efficacy, quality, carbon content etc.

Being privately held company we have given utmost importance to the quality of the equipment supplied and backed up with a high level of service. Our business has survived very well since many years and stands testimony to the quality of equipment and service we provide. We have the necessary infrastructure and adequate personnel consisting of highly qualified engineers to assist in the supervision of erection and commissioning of our plants. Quality is checked for all production stages of TMT bars so that our customers get the full value for their money

STRENGTH

GajKesari Steels and Alloys Pvt. Ltd. prides in its highly efficient marketing team with innovative and out of the box ideas to think ahead of the time and turn challenges into opportunities. The company has its centralized marketing office at Jalna, Maharashtra backed with a committed chain of over hundreds dealers and distributors spread across the entire country for steel business. The company has been consistently creating better brand awareness of its products, which now enjoys a comprehensive reach across the country.

SAFETY

GajKesari Steels and Alloys Pvt. Ltd. recognizes that safety is essential to all. We are committed to providing a safe and healthy work environment to all employees and require that safety should not be compromised for any other business priority. It is our responsibility to provide the facilities, equipment, tools, procedures, safety programs and training for employees to work injury free.

It is the responsibility of each employee to work safely for the benefit of the individual as well as co-workers. This responsibility includes appropriate safety rules and planning each work activity using appropriate risk assessment, good judgment and skills, along with a sincere dedication to work safely. We have established itself as a customer friendly organization and a strong safety culture that the company possesses has only further cemented this vision.

CUSTOMER SATISFACTION

We are engaged in promoting and supplying a wide range of 500 TMT bars. Our high quality bars are reckoned all over for their excellent properties on for specified use in diverse industrial conditions. Based on our transparent dealings and customer-oriented approach, we have attracted a huge client base from all corners of India. Our products are demanded widely across the country and we strive to locate new avenues in the world market as the potential markets for sale of our products

OUR CLIENTS

