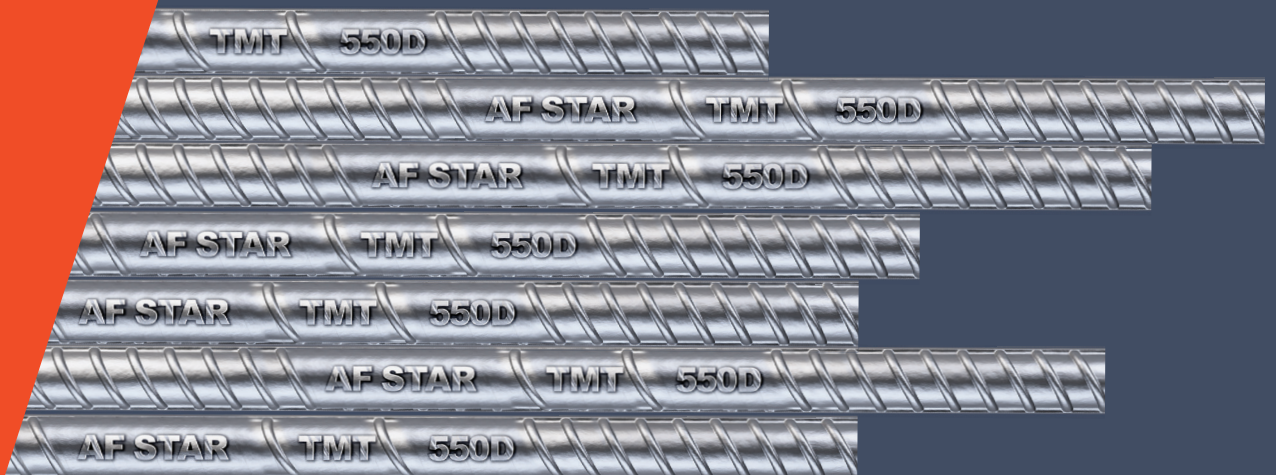




AF STAR
steel for a solid future

Trusted & high-quality
steel products
for building a **stronger**
and a **safer nation**





MS AGARWAL FOUNDRIES PVT. LTD.

PURPOSE

We exist to deliver value to our stakeholders in building a safe & strong Nation and make the World a better place

VISION

We shall be outstanding and trustworthy with our steel product quality and services in the markets we serve

MISSION

We shall achieve 1.2 MTPA by 2026-27



VALUES

Customer Centricity
Result Oriented
Entrepreneurship
Integrity
Empathy
Humility
Sustainability



ABOUT AF STAR

For over years, AF STAR has been consistently pioneering the production of high quality steel products that serve diverse customer needs across the country. Embracing best manufacturing practices and driven by innovative and sustainable solutions, AF STAR has built a distinct reputation of guaranteeing durability, robustness, and diversity across the product range.

AF STAR is a premium class steel products brand coming from Hyderabad based steel producing giant, MS Agarwal Foundries (MSAF). With an enviable track record of producing top notch steel products, MSAF is trusted by top government bodies and institutions, and construction and infrastructure companies.

AF STAR features an exhaustive range, from TMT bars to billets, rounds to cut and bend. AF STAR conforms to international standards in durability and quality, offering corrosion resistance, and cost efficiency through less wastage.



TMT REBARS



ABOUT TMT REBARS

AF STAR TMT is the preferred choice among crucial business segments such as commercial and residential buildings, industrial, manufacturing, and agriculture buildings. Its unmatched strength and durability ensure longevity and safety of critical infrastructure projects, making it a foremost choice for builders and engineers alike.

Our tryst with technology and penchant for innovation invariably ensure superior manufacturing standards at every stage. We have thus adopted Electric Arc Furnace method for steel making and enhancing the TMT process.

We thus ensure least carbon emission, easier scaling up, space optimization and, attaining flexibility in scaling up production.

TMT REBAR FEATURES

High bond strength

Enhanced corrosion resistance

High strength for critical project applications

Superior bendability

Superior weldability

Seismic resistance

High Dimension tolerance

TMT REBAR PRODUCT MIX

AF STAR has a series of inherent advantages like consistent quality, along with uniform grades, dimension and tolerances. The company received ISO and OHSAS certifications, as a testament.

TMT REBAR PROPERTIES

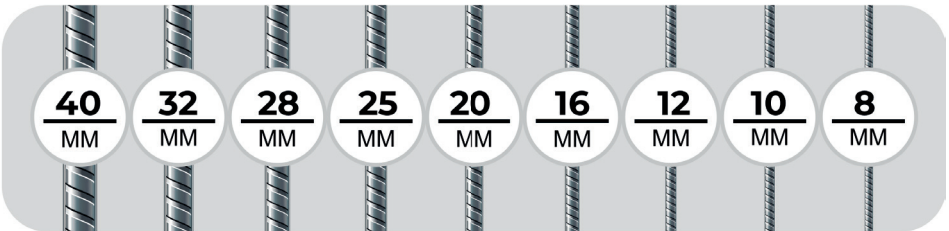
Chemical Properties

Chemical Properties	IS 1786 500D (max)	IS 1786 550D (max)	AF STAR® 500D*	AF STAR® 550D*
Carbon (C)	0.25%	0.25%	0.22%	0.22%
Sulphur (S)	0.04%	0.04%	0.035%	0.035%
Phosphorous (P)	0.04%	0.04%	0.04%	0.04%
S+P	0.075%	0.075%	0.07%	0.07%

Average % across heats

Physical Properties	IS 1786 500D (min)	IS 1786 550D (min)	AF STAR® 500D*	AF STAR® 550D*
Yield Stress (YS) - N/mm ²	500	550	520	570
Ultimate tensile strength (UTS) - N/mm ²	565	600	570	630
% Elongation	16	14.5	17	17

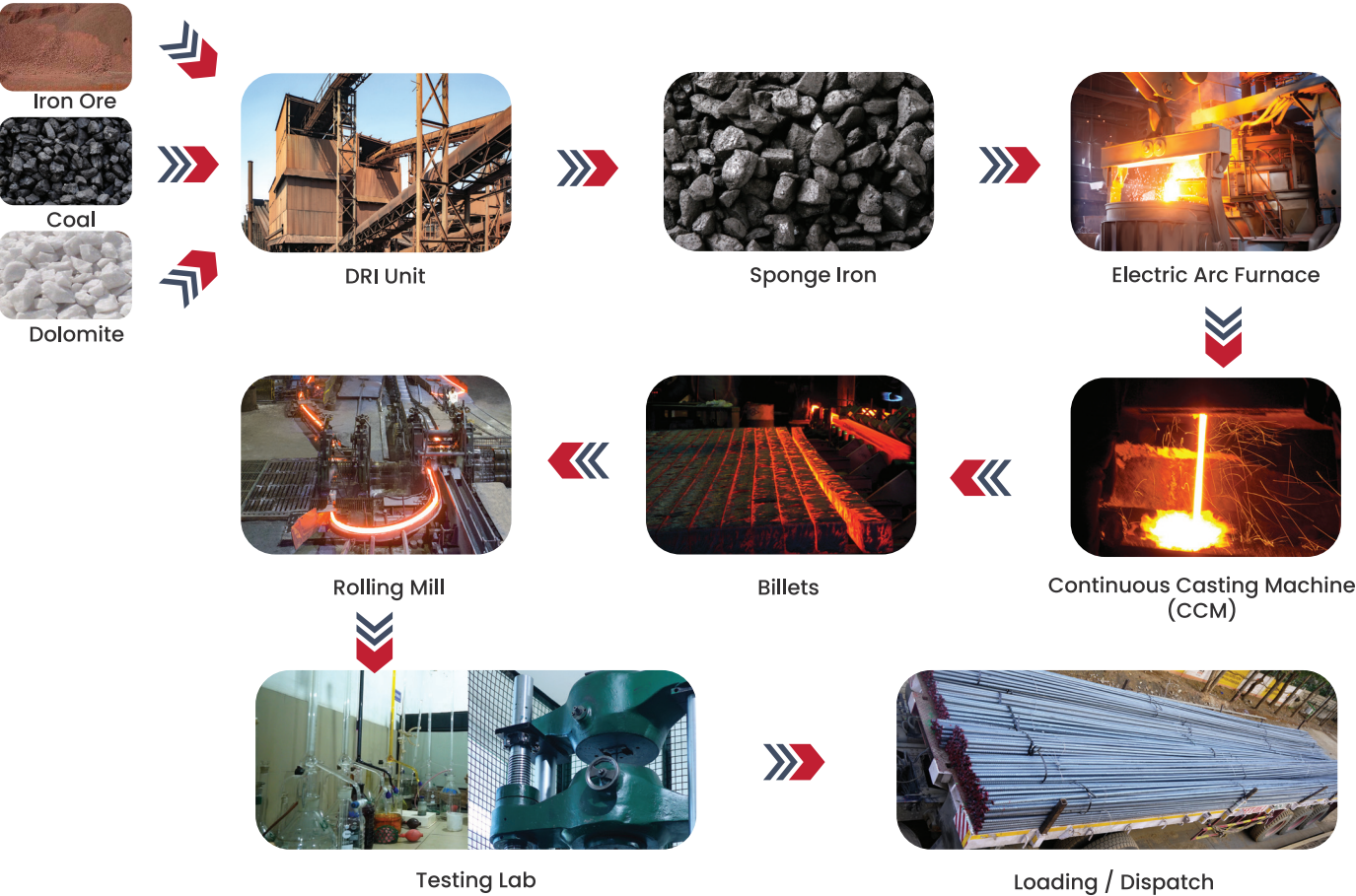
AVAILABLE SIZES



MANUFACTURING PROCESS



WORLD CLASS, SETTING BENCHMARKS



AS PER BIS STANDARDS

CHEMISTRY



AF STAR TMT Rebars are made with proper control over carbon, phosphorous, sulphur and other alloy elements

ROLLING



AF STAR TMT Rebar is rolled with close controls and proper temperature monitoring so as to give prominent rib pattern and surface finish

THERMO MECHANICAL TREATMENT



The Thermax quenching process is adopted after rolling with proper control on water pressure, Nozzle angle and rate of water flow. This helps in achieving the desired properties in AF STAR TMT Rebars

TYPES OF TMT REBARS



AF STAR TMT Rebars come in grades 500D & 550D as per IS 1786 with latest amendments

Fe 500D CORROSION RESISTANT STEEL

Fe 500D Corrosion Resistant Steel TMT Rebars offer the structures an extra and special protection in preventing rusting. The coating comes from materials such as zinc and polymer used as layers that protect steel from being exposed to moisture and other corrosive materials.

BENEFITS AND FEATURES

Known for superior strength, made using advanced technology, ideal for high load-bearing construction projects. Fe 500D offers enhanced chemical resistance against special protection in preventing rusting due to enhance chemical resistance against elements like saltwater and harsh chemicals. Boasts of the highest degree of weldability for complex and custom construction projects

Fe 550D EPOXY COATED TMT REBARS

Popular choice and highly sought after for corrosion resistance and enhanced durability. The epoxy coating acts as a protective barrier preventing damage from moisture and other corrosion agents. Extensively used by buildings of all categories, bridges, marine structures, quake-resistant structures, and rehabilitation structures.

BENEFITS AND FEATURES

Exceptional corrosion resistance, offering flawless protection against moisture, chemicals, and environmental factors. Significantly extends the lifespan of structures, reducing long-term maintenance costs. Improves structural integrity and load-bearing capacity in reinforced concrete structures. Consistently provides high tensile strength, fire, and quake resistance



ELECTRIC ARC FURNACE (EAF)



ROUTE TO STEELMAKING

Our tryst with technology and penchant for innovation invariably ensure superior manufacturing standards at every stage. We have thus adopted Electric Arc Furnace method for steelmaking and enhancing the TMT process. We thus ensure least carbon emission, easier scaling up, space optimization and, attaining flexibility in scaling up production.economical where there is plentiful electricity.

WHAT IS EAF

An Electric Arc Furnace (EAF) is a furnace that heats the material at a stipulated temperature, through electric arc. The charged material is directly exposed to the electric arc and the furnace current flows through the charged material. EAF is one of the most advanced processes that offers super efficiency and flexibility in achieving the desired chemistry. It is the most robust means to melt and refine the material at a faster speed.

Operational Advantages

Melt and refine the material at a super speed

Achieve desired chemistry that ensures deformation quality, durability, and corrosion resistance features of the final product

Reduce carbon emission, keep a tab on phosphorous and sulphur levels in desired manner

The primary benefit accrued from EAF deployment is the large reduction in specific energy (energy per unit weight) required to produce the steel.

EAF – THE ADVANCED BOOST TO TMT PROCESS

Why

To enhance efficiency levels and optimise production capabilities to achieve high-quality finished product

To give a new dimension to desired chemistry achievement as part of our steelmaking and TMT process

What

EAF achieves 25 tonnes per hour capacity and is specifically used for refining purpose where metal reaches it after going through the traditional induction furnace.

How

Achieving Desired Chemistry and Composition

Electric arc furnaces are most effective in removing phosphorus, sulphur, carbon, manganese, nitrogen, and silicon from the steels. This is most significant when compared to the traditional induction furnace, where chemistry cannot be altered at the desired level.

Most critical for Fe550D family with Fe550D becoming the most preferred and patronised product for infra and construction sectors, EAF is well-suited to regulate the levels of certain metals.

STAINLESS STEEL TMT REBARS

LATEST IN THE ARRAY

AF STAR Stainless Steel TMT Rebars is the latest addition to the AF STAR array that is unmatched in its tensile strength and perfection in appearance, ideally suited for critical industrial and construction applications.

AF STAR TMT Rebars are manufactured at our world-class production facilities that adhere to global standards and surpass international benchmarks on the production, safety and quality fronts.

Complementing the broad range that caters to the steel requirements of critical and complex infra projects across the country, AF STAR SS TMT Rebars deliver the vital edge and exposure in the existing and newer markets.

AF STAR STAINLESS STEEL TMT REBAR PRODUCTS

SS500

SS 550

SS 600



AF STAR TMT 600 SS



ADVANTAGES



Excellent durability,
fire resistance and
structural
performance



Exceptional corrosion
resistance in harsh
marine environments,
resisting chlorides
and pitting corrosion



Minimal maintenance
costs & therefore less
disruption of service
for refurbishment or
replacement

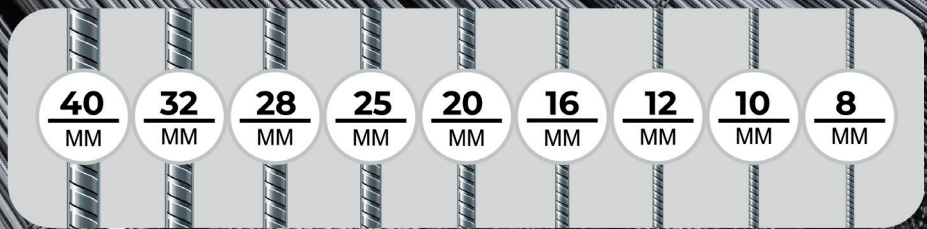


Easy to
cut and bend,
good weldability



Extended service life
and reduced
life cycle costs

AVAILABLE SIZES



CUT & BEND



Cut and Bend steel is produced by cutting and bending steel bars according to specific sizes and shapes as per project specifications. MSAF is one of the first steel companies in the country to introduce Cut and Bend TMT bars.

01

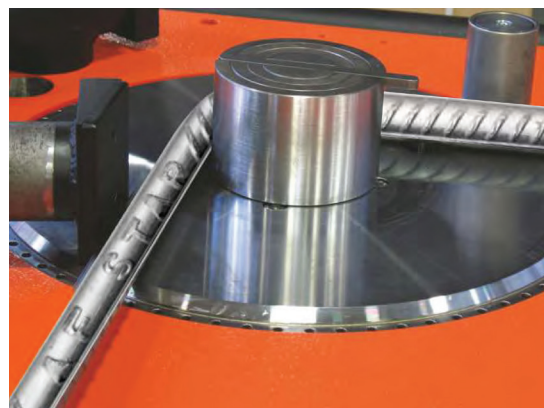
TIME AND MANPOWER EFFICIENCY

Cut and Bend TMT bars save time and labour by eliminating the need for on-site cutting and shaping. This accelerates construction progress, enhances project timelines, and reduces labour expenses.

02

ENHANCED STRUCTURAL INTEGRITY

Cut and Bend TMT bars are manufactured with precision, ensuring accurate reinforcement placement in concrete structures. This results in improved structural integrity, reducing the risk of cracks, failures, and extending the structure's life span.



BENEFITS AND FEATURES



03

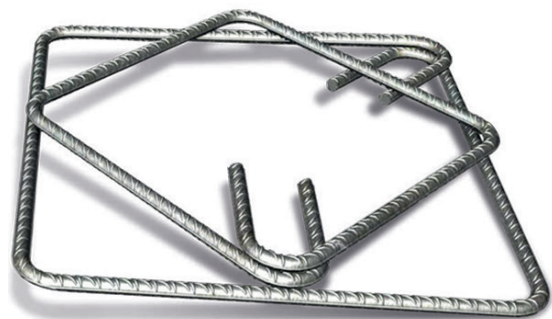
COST-EFFECTIVE

Significant cost savings due to reduced labour, minimal wastage, and improved construction efficiency. Their long-term durability and low maintenance needs also contribute to cost-effectiveness.

04

STRUCTURAL DESIGN FLEXIBILITY

Provide design flexibility, making it easier for engineers and architects to create complex and innovative structural designs.



05

ZERO MATERIAL WASTE

Precisely shaped according to blueprint specifications, eliminating material wastage. This zero-waste approach not only reduces project costs but also promotes sustainable construction practices by minimizing material waste.

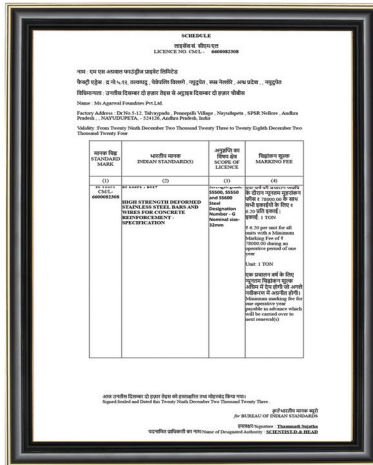


CERTIFICATIONS

NABL AND ISO



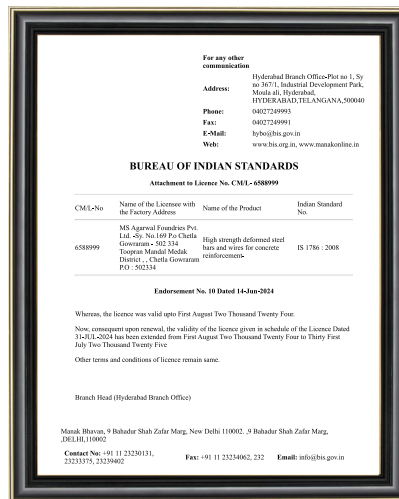
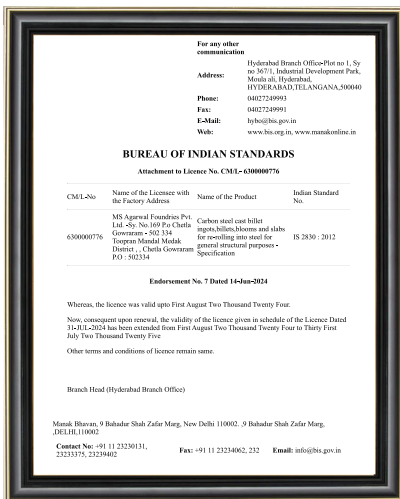
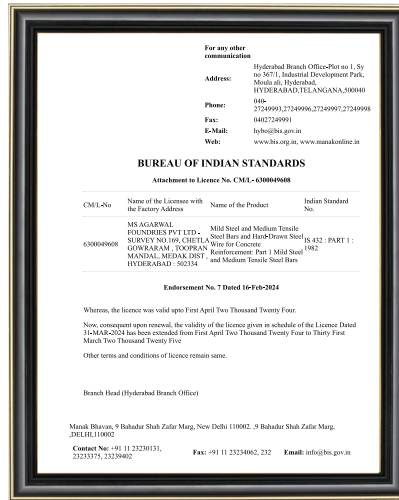
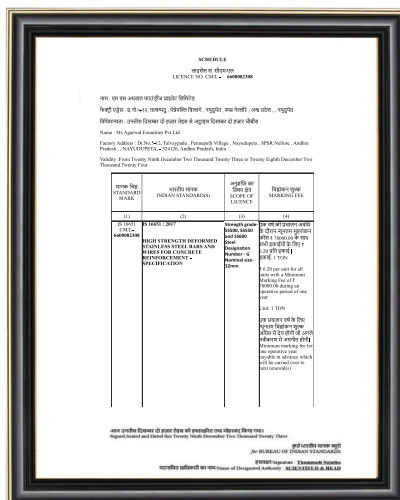
BIS 16651 : 2017



SRI LANKA STANDARDS



BUREAU OF INDIAN STANDARDS



CERTIFICATIONS

AFSTAR TMT 550D



CUSTOMERS

AFSTAR TMT 550D

ABOUT MS AGARWAL FOUNDRIES

For decades, MS Agarwal Foundries (MSAF) has been consistently pioneering the production of high quality steel products that serve diverse customer needs. MSAF has built a distinct reputation for adopting benchmark, research driven manufacturing practices, well entrenched organizational values that ensure ideal practices, a purpose driven performance and penchant to constantly evolve and excel. All these have transformed MSAF into a leading main steel producer in the country that serves a multitude of business streams and organizations, from both public and private sectors

Founded in 2005 and headquartered in Hyderabad, MSAF continuously added strength to its efforts, and wings to its vision. Today, it operates state of the art integrated steel plants at two strategic locations, one at Medak, Telangana state, near Hyderabad, while the second plant is located in Naidupeta, Nellore district in the state of Andhra Pradesh. Together, the plants manufacture virgin steel under the brand names, AF STAR & MS Life.

MSAF also operates a sophisticated material testing laboratory that ensures and certifies the quality of the products. It operates a DRI unit, Maruti Ispat & Energy Pvt. Ltd., in Mantralayam in Kurnool district, Andhra Pradesh, and an SMS unit with continuous billet casting, along with its sophisticated rolling mill.

MSAF is driven by a legion of enthusiastic and efficient performers whose commitment and efficiency power production, customer servicing, and business development.



CORPORATE SOCIAL RESPONSIBILITY (CSR)

Our commitment to positive change is evident through a range of initiatives aimed at uplifting communities. We actively sponsor vocational courses for skill development, empowering individuals to acquire valuable skills for a brighter future. Clean water access is another priority, with our sponsorship of a 500 Litres per hour RO plant benefiting villagers.

In the realm of healthcare, we conduct quarterly medical camps, providing essential health services to the community. Furthermore, we are dedicated to nurturing young talent by sponsoring scholarships for bright students at the primary school level.



Great
Place
To
Work®

Certified

JAN 2024-JAN 2025
INDIA

AF STAR

TMT

550D



MS AGARWAL FOUNDRIES PVT. LTD.

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Works:

Unit - 1: Survey No. 169, Near Rangaipalle, Chetla Gowraram Post, Manoharabad Mandal, Medak Dist. Telangana - 502 336

Unit - 2: Door No. 5-12, Pennepalli Village, Pellakuru Mandal, Naidupeta, Tirupati Dist. Andhra Pradesh - 524 126

Regional Offices:

Delhi :

409-B, 4th Floor,
D21 Corporate Park,
Dwaraka Sector 21,
Dwaraka,
Nearest Metro Station
(Dwaraka Sector - 8)
New Delhi - 110 077

Mumbai :

Room No. 1.1,
91 Springboard Business
Hub Private Limited,
Godrej and Boyce,
Gate No 2, LBS Marg,
Vikhroli West,
Mumbai - 400 079

Chennai :

No. 6,
7th Floor,
Awfis Space Solutions P Ltd,
Arihanth Technopolis,
Perungudi,
Chennai - 600 096

Bengaluru :

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George Thangaiyah Complex,
Near Sir C.V. Raman General Hospital,
80 Feet Road, Indiranagar,
Bengaluru - 560 038

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