



**AF STAR**  
steel for a solid future

# AF STAR STAINLESS STEEL REBARS



## SUPERIOR STRUCTURAL PERFORMANCE



## 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 steel manufacturing company 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 strategic location, 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.



### 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 market we serve.

### MISSION



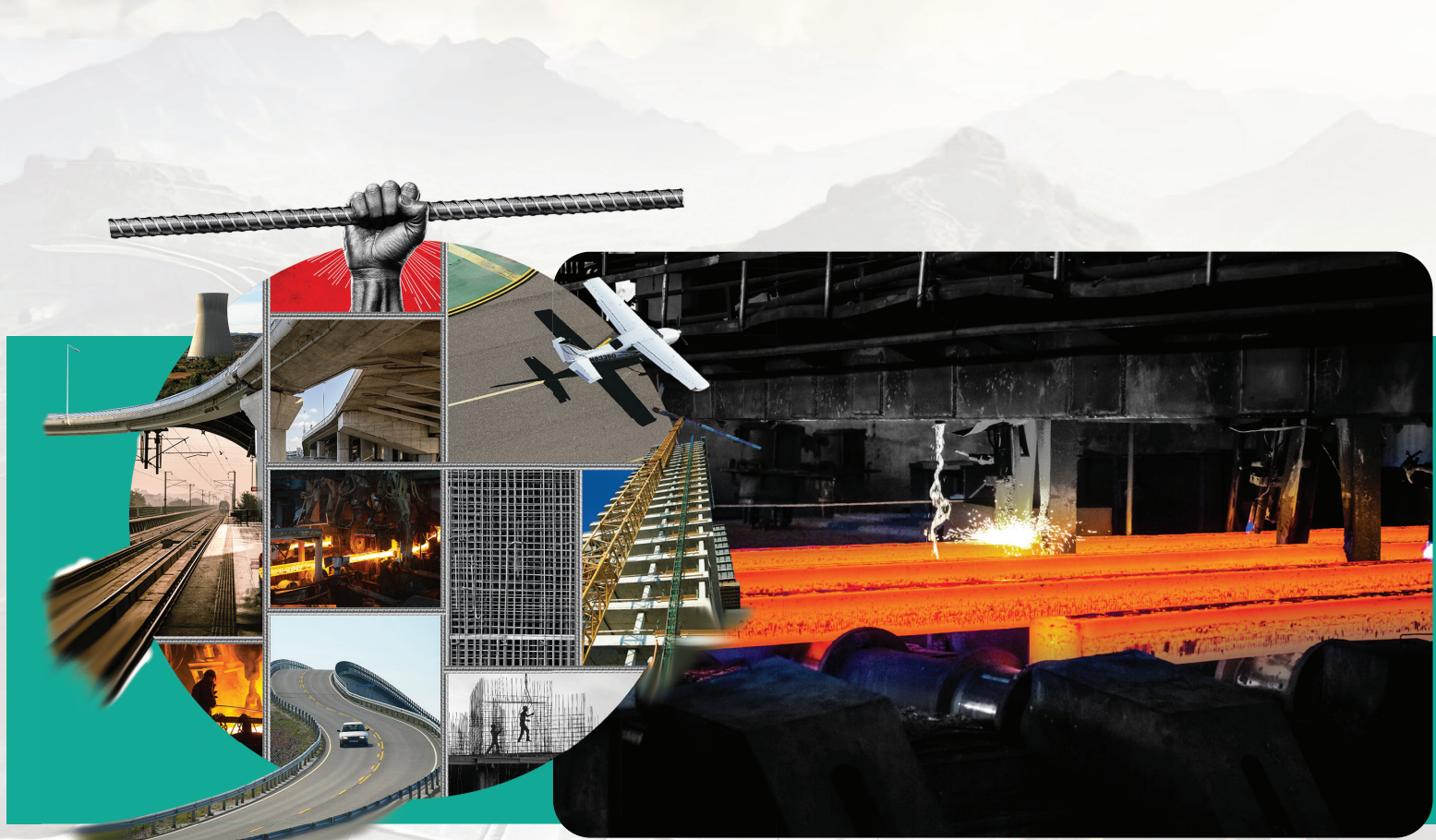
We shall achieve 1.2 MTPA by 2026-27.

### VALUES



Customer Centricity  
Result Oriented  
Entrepreneurship  
Empathy  
Integrity  
Humility  
Sustainability





## ABOUT AF STAR

For over decades, AF STAR, the premium-class steel products brand, has been consistently pioneering the production of high-quality steel products, serving diverse customer needs.

Produced out of best manufacturing practices, AF STAR enjoys a distinct reputation of guaranteeing durability, robustness, and diversity across the product range. These come together successfully to serve more than 20000 customers, through partnering in steel supply for more than 100 projects, across a multitude of business and construction streams, from major corporations to established dealers.

AF STAR is a premium-class steel products brand coming from Hyderabad-based integrated steel producer MS Agarwal Foundries (MSAF). Through flagship AF STAR, MSAF produces an exhaustive range, from TMT Re bars, rounds, and cut-and-bend products.





## **STAINLESS STEEL REBARS FUTURE-PERFECT & INNOVATION-DRIVEN**

For decades, MS Agarwal Foundries (MSAF) has been steadily pioneering the production of high-quality steel products, in a distinct range, through its flagship brand - AF Star. Rising high with the famed 550 D range of TMT Bars that have been structurally defining several infra projects of the nation, today our AF Star stainless steel Rebars are all set to redefine structural performance and corrosion resistance in harsher environments.

### **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 SS TMT REBARS - SNAPSHOT**

High-grade Stainless Steel Rebars ensuring superior yield, tensile strengths and perfection in appearance

Excellent durability, fire resistance and structural performance

Exceptional corrosion resistance in harsh marine environments, resisting chlorides and pitting corrosion Extended service life and reduced life cycle costs

Minimal maintenance costs and therefore less disruption of service for refurbishment or Replacement



**Strength and superiority to our comprehensive  
range of steel products**

# ADVANTAGES

## PRODUCTS



**SS 500**

**SS 550**

**SS 600**

Excellent durability, fire resistance and structural performance

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

Extended service life and reduced life cycle costs

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

Easy to cut and bend, good weldability

## AS PER BIS STANDARDS

### CHEMISTRY

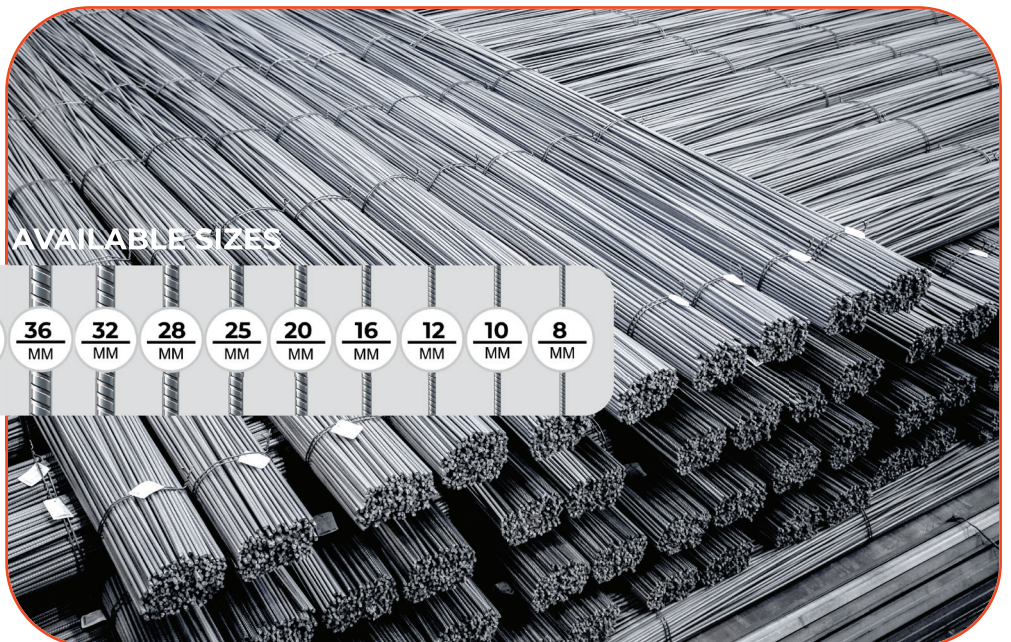
AF Star Stainless Steel TMT are made with proper control over carbon, phosphorous, sulphur and other alloying elements.

### ROLLING

AF Star Stainless Steel 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



AVAILABLE SIZES

40 MM 36 MM 32 MM 28 MM 25 MM 20 MM 16 MM 12 MM 10 MM 8 MM



## MECHANICAL PROPERTIES OF SS 410 L

Grade Types	0.2 percent proof stress, Min, N/mm <sup>2</sup>	Tensile strength Mpa
SS 500	500	565
SS 550	550	600
SS 600	600	660

## CHEMICAL COMPOSITION OF SS 410 L

Chemical	C	Ni	Mn	Si	P	S	Cu	Cr	N
Min%	-	0.0	-	-	-	-	-	11	-
Max%	0.03	0.60	1.0	1.0	0.040	0.030	-	13.50	-

## UNIT WEIGHT OF STEEL BARS

Nominal Diameter (mm)	Nominal Mass/M (kg/m)	Nominal Sectional Area (mm <sup>2</sup> )
8	0.389	50.3
10	0.608	78.5
12	0.876	113.1
16	1.555	201.1
20	2.430	314.2
25	3.797	490.9
32	6.222	804.2

## CHEMICAL COMPOSITION (CAST ANALYSIS), PERCENT BY MASS (CLAUSE 4.3.1)

As per : BIS - 16651:2017

Steel Designation Number	International Standard Designation	C Max	Si Max	Mn Max	S Max	Cr Min/Max	Ni Min/Max	Mo Min/Max	P Max	Cu Min/Max	N Min/Max
G Ferritic	410L	0.03	1.0	1.0	0.030	11.00/13.50	0.0/0.60	-	0.040	-	-

# NABL AND ISO CERTIFICATIONS



**SCHEDULE**  
 सार्वजनिक सं. सीएस एल  
 LICENCE NO CML - 6600082308

नाम : एम एस अग्रवाल फाउंड्रीज प्राइवेट लिमिटेड  
 फैक्ट्री पतेस : डी नो ५, १२, तलवयदु, पेनेपल्लि विलेज, नायुधुपेट, अंध्र प्रदेश, नायुधुपेट  
 विधिमन्यता : उपनतिस दिसम्बर दो हजार तेइस से अट्टाहस दिसम्बर दो हजार चौबीस  
 Name : Ms Agarwal Foundries Pvt.Ltd.  
 Factory Address : Dr.No 5-12, Talavayadu, Pennepalli Village, Nayudhupeta, SPSR Nellore, Andhra Pradesh, NAYUDHUPETA, 524126, Andhra Pradesh, India  
 Validity From Twenty Ninth December Two Thousand Twenty Three to Twenty Eighth December Two Thousand Twenty Four

मानक चिह्न STANDARD MARK	भारतीय मानक INDIAN STANDARD(S)	अनुज्ञाति का विषय क्षेत्र SCOPE OF LICENCE	विहितन शुल्क MARKING FEE
(1)	(2)	(3)	(4)
IS 16651 CML- 6600082308	IS 16651 : 2017  HIGH STRENGTH DEFORMED STAINLESS STEEL BARS AND WIRES FOR CONCRETE REINFORCEMENT - SPECIFICATION	Strength grade- S5500, S5550 and S5600 Steel Designation Number - G Nominal size- 32mm	एक वर्ष की प्रवर्तन अवधि के दौरान न्यूनतम मुद्रांकन फीस ₹ 78000.00 के साथ सभी इकाईयों के लिए ₹ 6.20 प्रति इकाई। Nominal size- 32mm  ₹ 6.20 per unit for all units with a Minimum Marking Fee of ₹ 78000.00 during an operative period of one year Unit: 1 TON  एक प्रवर्तन वर्ष के लिए न्यूनतम मुद्रांकन शुल्क अंशिम में देना होगा जो अगले वर्षांतर में उपलब्ध होगा। Minimum marking fee for one operative year payable in advance which will be carried over to next renewal(s)

अब उपनतिस दिसम्बर दो हजार तेइस को हस्ताक्षरित तथा मोहरबंद किया गया।  
 Signed Sealed and Dated this Twenty Ninth December Two Thousand Twenty Three.

कुंभ भारतीय मानक अड्डे  
 for BUREAU OF INDIAN STANDARDS  
 हस्ताक्षर/Signature : Thammaji Sejjath  
 पदनामित प्राधिकारी का नाम/Name of Designated Authority : SECRETARY & HEAD

## BIS CERTIFICATE 16651 : 2017



Great  
Place  
To  
Work®

Certified

JAN 2024-JAN 2025  
INDIA

AF STAR TMT 600 SS



**MS AGARWAL FOUNDRIES PVT. LTD.**

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Godrej and Boyce, Gate No 2, LBS Marg, Vikhroli West, Mumbai- 400079, Mumbai

MS Agarwal Foundries Pvt Ltd, No 6, 7th Floor, Awfis Space Solutions P Ltd, Arihanth Technopolis, Perungudi, Chennai -600096

**Unit - 1:** Survey No. 169, Near Rangaipalle chetla Gowraram Post, Manoharabad Mandal, Medak Dist. Telanagana State - 502 336

**Unit - 2:** Door. No.5-12, Pennepalli Village, Talavaypadu, Naidupet, SPSR Nellore Dist. Andhra Pradesh State - 524 126

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