



ENGINEER'S PRIDE

> TMT REINFORCED BARS (THERMO-MECHANICAL TREATED BARS)

BRAND: TRUSTEEL

GRADE: FE-500 D

RANGE: 8MM DIA TO 32MM DIA

Keeping in mind the unwavering faith and growing demand of its customers, ARS, known in South India for its high-quality rebars, decided to upgrade its Fe 500 grade rebars. The newly launched Fe 500D grade rebars were branded as "TRUSTEEL", to reinforce and reemphasize the importance the company places on trust.

The durability associated with Trusteel surpasses standards, by strictly adhering to the Quality Management Systems of Michigan, USA. These set standards usually specify a minimum YS of 500 N/mm², which is then benchmarked by various structural consultants, engineers, architects, and designers.

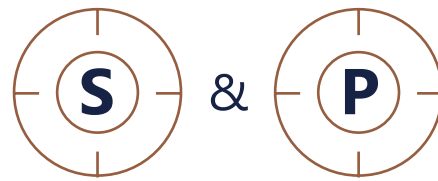
In the case of Trusteel, the typical value of yield strength is observed to be more than 500N/mm² and the typical value of ductility is observed to be more than the specified value of 16% (in accordance with IS:1786), thus guaranteeing higher levels of safety.

The minimum levels of Phosphorous (P) and Sulphur (S) in the manufacturing of billets makes the steel more pure and ductile, providing it with a greater capacity to absorb energy beyond the yield limit.



> WHY CHOOSE ARS TRUSTEEL?

- > HIGH PURITY
- > INTERNATIONAL RIB DESIGN
- > EXCELLENT DUCTILITY
- > BETTER BONDING STRENGTH
- > HIGHER FATIGUE WITH YIELD STRENGTH



ASSURED LESS THAN 0.075%

	MECHANICAL PROPERTIES			CHEMICAL PROPERTIES	
Parameters	BIS- 500 D	Trusteel 500 D	Parameters	BIS- 500 D	Trusteel 500 D
Proof Stress	500 N/mm ²	> 500 N/mm ²	% Carbon	0.250 (Max)	< 0.250
Tensile Strength	565 N/mm ²	> 565 N/mm ²	% Sulphur	0.040 (Max)	< 0.040
Elongation	16 (Min)	> 16	% Phosphorus	0.040 (Max)	< 0.040
Bend	3D & 4D	3D & 4D	% (P + S)	0.075 (Max)	< 0.075
Re-Bend	4D & 6D	4D & 6D	CE %	0.420 (Max)	< 0.420
TS/YS Ratio	>=1.10	> 1.10			

**The above results are based on the samples tested at 2 nationally acclaimed Government Testing Centres in Chennai viz. National Test House and MSME Testing Centre.*

ARS TRUSTEEL 500D STANDS APART DUE TO ITS:

- > TMT (Thermo-Mechanical Treated) reinforced bars Grade Fe 500 D.
- > High weldability that is accompanied by an increase in strength.
- > Exceptional formability due to uniform elongation (Bend 3D and Re-bend 4D).
- > No loss of strength up to 500°C, making it immune to major fire hazards.
- > High ductility, high fatigue strength and a minimum UTS/YS ratio of 1.15 to ensure higher energy absorption capacity, making it earthquake resistant, even as per the international code practices.
- > The excellent bond strength observed during tests results from a specially designed double-cross rib pattern, shaped by automated milling machines, which separates our brand, Trusteel, from the rest.
- > Features of ductility and bendability help fabrication on-site, providing excellent workability for the workers, bar benders, etc.
- > Supplies are always backed by mill test certificates.

ARS GROUP

ARS Steels & Alloy International Pvt. Ltd. is one of the largest Steel and Power producers in Southern India. Committed to the nation's progress, ARS uses sustainable, state-of-the-art technology, and believes in customer-centric excellence in every aspect of business. When you partner with ARS, you have a partnership you can trust.

WIDENING HORIZONS

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ENERGY | STEEL

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