

RAMSARUP™ TMT BARS

TOTAL MAJBOOTI AUR BACHAT

Thermex® Technology, Germany



THERMEX®

IS 1786

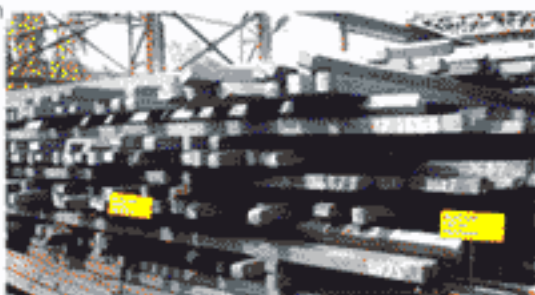


FE 415/500/550

RAMSARUP™ TMT BARS - AN OVERVIEW:

Ramsarup TMT Bars- Total Majbooti Aur Bachat-derives its strength from the following:

- Raw Material used
- Technology Adopted
- Complete Size Range from 8 mm to 40 mm
- State-of-the-art Laboratory
- Dedicated workforce
- Customer friendly approach



The raw material used for producing the bars is of IS2830 Billets and the technology is Thermex, provided by H & K Rolling Mills Engineers Pvt. Ltd., Mumbai, the exclusive collaborator for Indian territory, of M/s HSE Germany, the developers and patent holder of the coveted Thermex® Technology.

PROCESS & SIZE RANGE:

Thermex® TMT bars derives its strength from a PLC controlled, on line rapid water quenching process. Thermex® Cooling is a process specifically developed to meet the demand for high strength steel reinforcement bars with high ductility.

Ramsarup is the only company to offer complete size range of 8 mm to 40 mm by Thermex Technology.



ADVANTAGE RAMSARUP TMT:

The biggest advantage of Ramsarup TMT Bars over others is the state-of-the-art Physical & Chemical Labs, where every material has to pass through stringent Quality Control under the watchful eyes of the Quality Control Department. Apart from this, samples are drawn every hour, to check whether the material produced is conforming to all the specified standards.

EXTRA STRENGTH

The process used ensures combination of tempered martensite on the surface and fine grain ferrite-pearlite in the core providing higher strength, toughness and ductility.

THERMAL STABILITY

Ramsarup TMT Bars have high thermal stability unlike ordinary bars. It can be used even at high temperature till 600 °C without any drop in strength.

EXCELLENT STRAIGHTNESS

Ramsarup TMT bars are produced in straight length unlike most of the mills, which produces the rebars in coil form. Straightening of rebars by decoiling process does not provide the same straightness as provided by



"Ramsarup". After passing through the cooling system Ramsarup TMT is passed through a Special Rotary Flying Shear which ensures perfect straightness .

HIGHER ELONGATION

Ramsarup TMT bars has elongation over 15% even for FE 550 grade.

BETTER CORROSION RESISTANCE

Ramsarup TMT bars show virtually no rusting even after a long time, as there is absence of residual stress.

HIGHER WELDABILITY

Ramsarup TMT Bars are produced from IS 2830 Billets. Hence, it can be used in making of pre-welded meshes. The same is done without reduction in strength of weld joints.

EARTHQUAKE RESISTANT

Indian code does not permit use of steel bars with less than 14.5% elongation in Earthquake zones No. 4 & 5. All grades of Ramsarup TMT bars guarantee elongation well above 15% - 18%.

MORE VALUE FOR MONEY

Ramsarup TMT bars provide more value for money due to saving of as high as 10%-24% in steel consumption compared to ordinary bars.

NEGATIVE TOLERANCE

Ramsarup TMT bars can be supplied in negative tolerance also as per customer's requirements.

EASY IDENTIFICATION

"Ramsarup TMT" is embossed on every meter for easy identification.

The dedicated & committed workforce are the biggest asset of the company and they are all working hand in hand to take Ramsarup TMT bars to a new height. Ramsarup is very focused towards their customer's requirements and demands. Timely delivery and delivery at short notice for their customers is uppermost in their mind. Stock of the entire size range from 8 mm to 40 mm is maintained to provide this service.

Today Ramsarup TMT bars are being used in various sectors- Railways, Power, Housing, Roads & Bridges, Water Management, Defence and it's customers list includes some of the biggest names of the country.



TRADE MARK	: RAMSARUP TMT
SPECIFICATION	: As per IS 1786/85 Grade FE 415, FE 500 & FE550 for Chemical and Physical properties. Material can also be supplied as per International Standards like ASTM A 615 / BS 444 Gr 450 / DIN 488-BSt 500 / GOST 5781-82 or as per specific requirements of the customer.
FIXED LENGTH	: 11/12 Meters or any length as per customer's requirement .

ADVANTAGE RAMSARUP TMT

	IS 1786 FE 415	RAMSARUP TMT 415	IS 1786 FE 500	RAMSARUP TMT 500	IS 1786 FE 550	RAMSARUP TMT 550
YIELD STRENGTH-MPA	415 MIN	450 MIN	500 MIN	530 MIN	550 MIN	575 MIN
TENSILE STRENGTH-MPA	485 MIN	530 MIN	545 MIN	630 MIN	585 MIN	675 MIN
ELONGATION - %	14.5 MIN	20 MIN	12 MIN	18 MIN	8 MIN	15 MIN
BEND-UPTO 22 MM	3d	2d	4d	2d	5d	3d
REBEND-UPTO 10 MM	5d	4d	5d	4d	7d	4d
OVER 10 mm	7d	4d	7d	4d	8d	4d

IDENTIFICATION

HSD Bars have embossing of "RAMSARUP TMT" at every metre and every bundle has "RAMSARUP TMT" metallic tags.

WEIGHT TABLE OF HSD BARS

Size (mm)	As per IS 1786 Kg / Metre	Offered by RAMSARUP Kg / Metre
8.0	0.367 - 0.423	0.370 - 0.400
10.0	0.574 - 0.660	0.580 - 0.620
12.0	0.844 - 0.932	0.850 - 0.900
16.0	1.499 - 1.660	1.520 - 1.600
20.0	2.396 - 2.544	2.420 - 2.480
25.0	3.734 - 3.965	3.780 - 3.850
28.0	4.685 - 4.975	4.750 - 4.850
32.0	6.121 - 6.499	6.200 - 6.350
36.0	7.750 - 8.229	7.800 - 8.000
40.0	9.554 - 10.145	9.600 - 9.950

PHYSICAL PROPERTIES

	As per IS:1786	Offered by RAMSARUP
0.2% Proof Stress	415 N/mm ² min.	460 N/mm ² min.
Tensile Strength	485 N/mm ² min.	510 N/mm ² min.
Elongation	14.5% min.	16% to 23%



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