

Choosing a well-engineered TMT is important for a strong, lasting dream home.

Most cheap and easily available TMT bars fail to meet the quality requirements specified by the Bureau of Indian Standards. Their chemical compositions & physical properties are not safe for use and application of such rebars compromises the construction quality of your home. Also, manufacturers often make false claims about the quality and performance of their products. The reality is far from the promises they make or the grades they print on their rebars.

So don't risk the safety of your dear ones and incur high maintenance costs, invest in top-quality material that fits your budget.



JSW One TMT: 100% Engineered TMT that excels beyond BIS standards

Whether your are building large bridges, awe-inspiring airports or your dream home, the new JSW One TMT is best placed to make them strong from within. Here are ten reasons why -

10 benefits, One TMT





















More benefits:

QUICKER CONSTRUCTION Lesser number of bars are needed for the same load capacity because of higher strength resulting in leaner construction and lesser concrete requirement. Consequently, construction speeds up with quicker bar placement and lighter crane loads, improving overall efficiency.

COST SAVING Reduced TMT re-bar consumption in identical load-bearing structures. Columns are narrower, reducing concrete requirement. Also, reduced labour expenses, as steel & concrete handling is reduced.

INCREASED
CARPET AREA

Low TMT consumption results in narrower columns, thus increasing interior floor space and enabling more area for use.

Manufacturing process

01 Steel Making

- High quality raw material
- Stringent process control of steel refining to remove impurities
- Result: Superior chemistry to ensure better TMT quality

02 Rolling

• High speed modern rolling mill

• Perfect quality roll with precision CNC cut for rib marking • Result : Uniform gauge & dimention, sm

surface and best-in-class RIB design

03 Thermo-mechanical Treatment

- European technology
- Perfect balance between outer Martensite and Ferrite/Pearlite core
- Result : Higher flexibility & blendability, and enhanced structural strength

04 Cutting & bundling

- Accurate length of TMT
- Result: Ease of planning at site with accurate lengths of all the bars

Advantages over ordinary TMT Bars:









and chemical properties across the bar

benchmarks on UTS/YS ratio

columns, higher carpet area and lower cost



Indicator of yield strength of the material. The point at which the material deforms beyond repair Indicator of the material's ductility & toughness. It is the ability of a material to absorb energy (elongate) before it fractures. Higher the value, more is the ability of the rebar to withstand earthquake/seismic load. AR Value Better the AR value and Rib design, stronger is the bond with the concrete. Lower Sulphur & Phosphorus in TMT results in superior ductility (%E) and reduced brittleness. Low (S & P) % is critical for safety of the structure during an earthquake or any other natural calamity. Value V	ADVANTAGE	SIGNIFICANCE	ORDINARY BRANDS	JSW ONE TMT
toughness. It is the ability of a material to absorb energy (elongate) before it fractures. Higher the value, more is the ability of the rebar to withstand earthquake/seismic load. AR Value Better the AR value and Rib design, stronger is the bond with the concrete. Lower Sulphur & Phosphorus in TMT results in superior ductility (%E) and reduced brittleness. Low (S & P) % is critical for safety of the structure during an earthquake or any other 1.16 (exceeds BIS standards) 1.4 (for 8mm) 2.0.12 (Not Qualified) 3.0.75-0.095 max (as per standard)	YS	The point at which the material deforms	415-500 MPa	>570 MPa
Lower Sulphur & Phosphorus in TMT results in superior ductility (%E) and reduced brittleness. Low (S & P) % is critical for safety of the structure during an earthquake or any other 1.10 1.4 (for 8mm) 1.4 (for 8mm) 1.10 1.4 (for 8mm) 1.10 1.4 (for 8mm)	UTS/YS	toughness. It is the ability of a material to absorb energy (elongate) before it fractures. Higher the value, more is the ability of the rebar to withstand	1.06	(exceeds
results in superior ductility (%E) and reduced brittleness. Low (S & P) % is critical for safety of the structure during an earthquake or any other results in superior ductility (%E) and (0.075-0.095 max (as per standard)	AR Value		1.10	1.4 (for 8mm)
	(S+P) %	results in superior ductility (%E) and reduced brittleness. Low (S & P) % is critical for safety of the structure during an earthquake or any other	>0.12 (Not Qualified)	



Best-in-class rib design for supreme concrete grip



Unlike ordinary bars with variable thickness, our bars have uniform



Superior corrosion resistance properties compared to ordinary TMT bars



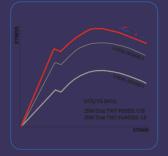
Uniform gauge and dimension

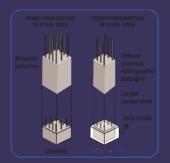


Ability to resist earthquakes and heat



European technology that delivers uniform mechanical **thickness and strength**





Other Technical Specifications:

Product Attribute	Fe 415	Fe 500	JSW One TMT Fe 550	JSW One TMT Fe 500D
YS(Min), Mpa	415	500	570	530
UTS(Min),Mpa	485	545	640	625
UTS/YS, min	1.1	1.08	1.15	1.18
%E, min	14.5%	12%	18%	22%
Product Attribute	Fe 415	Fe 500	JSW One TMT Fe 550	JSW One TMT Fe 500D
%C(Max)	0.30	0.30	0.20	0.18
%P(Max)	0.06	0.065	0.045	0.035
%S(Max)	0.06	0.065	0.035	0.025
%(S+P), Max	0.110	0.105	0.08	0.060
%N2, Max	0.012	0.012	0.010	0.010
CE, Max	0.42	0.42	0.35	0.300

Applications:









Residential Buildings



Commercial Structures



Bridges & Flyovers



Infrastructure Projects



Industrial Plants



Dams





Grain Silos Power Plant Chimneys To know more on why our 10X TMT is ideal for your next construction project, write to us at support@jswonemsme.com





One nation, One TMT