

# Think big, India

100% engineered TMT that exceeds  
BIS standards



**10X  
TMT**

**10 benefits, One TMT**



**JSW ONE TMT**

One nation, One TMT

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 and physical properties are not safe for use, and the 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 you're 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



Best-in-class  
Rib Design



Superior  
Chemistry



Corrosion  
Resistant



European  
Technology



Budget  
Friendly



Higher Flexibility  
& Bendability



Enhanced  
Structural Strength



Supreme  
Concrete Grip



Uniform Gauge  
& Dimension



Heat/Quake  
Resistant

### 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 rebar consumption in identical load-bearing structures. Columns are narrower, reducing concrete requirement. Also, reduced labour expenses, as steel and 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 Steelmaking

- 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 and dimension, smooth 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 and bendability, and enhanced structural strength



## 04 Cutting & bundling

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





# Advantages over ordinary TMT bars

Advantage	Significance	Ordinary Brands	JSW One TMT
YS	Indicator of yield strength of the material. The point at which the material deforms beyond repair	415-500 MPa	>570 MPa
UTS/YS	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.	1.06	1.15 (exceeds BIS standards)
AR Value	Better the AR value and rib design, stronger is the bond with the concrete.	1.10	1.4 (for 8mm)
(S+P) %	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.	>0.12 (Not qualified)	0.075/0.095 max (As per standard)



Best-in-class rib design for supreme concrete grip



Unlike ordinary bars with variable thickness, our bars have uniform thickness and strength



Superior corrosion resistance properties compared to ordinary TMT bars



Uniform gauge and dimension

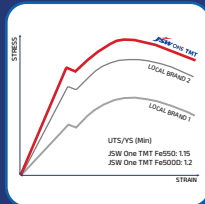


EARTHQUAKE RESISTANT

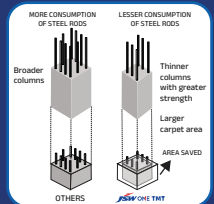
Ability to resist earthquakes and heat



European technology that delivers uniform mechanical and chemical properties across the bar



Compared to local bars, JSW One TMT exceeds benchmarks on the UTS/YS ratio



High-strength bars lead to thinner columns, higher carpet area and lower cost

## 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
%N, Max	0.012	0.012	0.010	0.010
CE, Max	0.42	0.42	0.35	0.300



## Applications



Residential buildings



Commercial structures



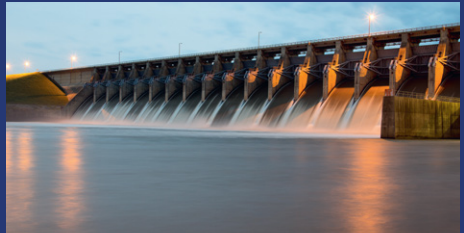
Bridges & flyovers



Infrastructure projects



Industrial plants



Dams



Grain silos



Power plant chimneys





To know more about why our 10X TMT is ideal for your next construction project, write to us at [support@jswonemsme.com](mailto:support@jswonemsme.com)

The logo for JSW ONE TMT, featuring the letters 'JSW' in a bold, italicized font with a red swoosh above the 'W', followed by 'ONE' in a clean, sans-serif font, and 'TMT' in a bold, sans-serif font.

One nation, One TMT