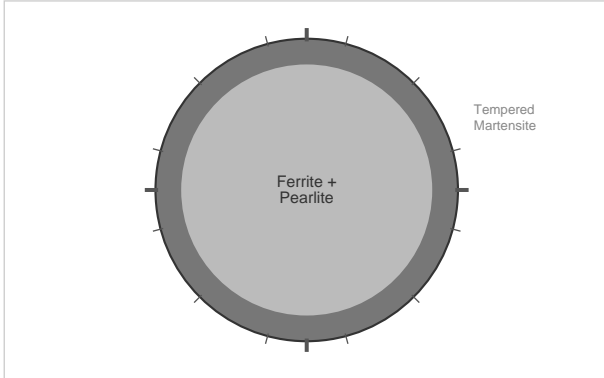


TMT Rebar — Fe 500

Thermo-Mechanically Treated Reinforcement Bar -- IS 1786 : 2008

CROSS SECTION



MECHANICAL PROPERTIES

Min. Yield Strength	500 MPa
Min. Tensile Strength	545 MPa
Min. UTS/YS Ratio	1.08
Min. Elongation	12.0%
Ductility Class	Standard

CHEMICAL COMPOSITION (% by mass, max)

Element	Maximum %
Carbon (C)	0.3%
Sulphur (S)	0.055%
Phosphorus (P)	0.055%
S + P	0.105%
Carbon Equivalent (CE)	0.42%

BEND TEST REQUIREMENTS

Bend test (d ≤ 20mm)	Mandrel dia = 4d
Bend test (d > 20mm)	Mandrel dia = 5d
Rebend test (d ≤ 20mm)	Mandrel dia = 7d
Rebend test (d > 20mm)	Mandrel dia = 9d

STANDARD SIZES AND WEIGHTS

Dia (mm)	Area (mm ²)	Weight (kg/m)	Weight (kg/12m)
6	28.3	0.222	2.66
8	50.3	0.395	4.74
10	78.5	0.617	7.40
12	113.1	0.888	10.66
16	201.1	1.578	18.94
20	314.2	2.466	29.59
25	490.9	3.853	46.24
28	615.8	4.834	58.01
32	804.2	6.313	75.76
36	1017.9	7.990	95.88
40	1256.6	9.865	118.38