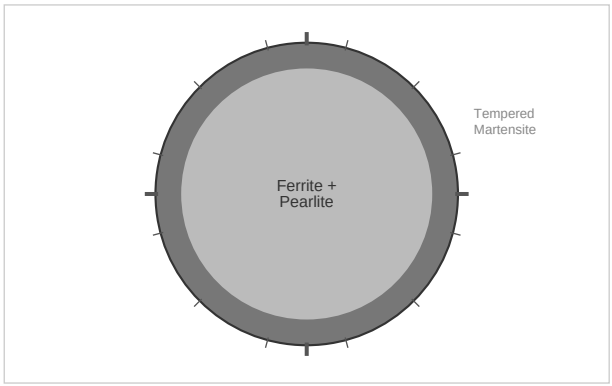
TMT Rebar — Fe 500D

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

CROSS SECTION



MECHANICAL PROPERTIES

Min. Yield Strength	**500 MPa**
Min. Tensile Strength	**565 MPa**
Min. UTS/YS Ratio	**1.1**
Min. Elongation	**16.0%**
Ductility Class	**D (High Ductility)**

CHEMICAL COMPOSITION (% by mass, max)

Element	Maximum %
Carbon (C)	**0.25%**
Sulphur (S)	**0.04%**
Phosphorus (P)	**0.04%**
S + P	**0.075%**
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 (mm2)	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