



Material - IS 8500 Fe590B

Standard Specification for Structural Steel - MiCroalloyed

Group - Ferrous Mild Steel Alloys

Sub Group - IS 8500 Fe590B Structural Steel - MiCroalloyed

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries

Grade Belongs to the Industry - Plate and Bar

Chemical Composition			Heat Treatment	
Carbon	C %	0.220 max.	As Raw or Normalizing	
Silicon	Si %	0.450 max.		
Manganese	Mn %	1.800 max.		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.040 max.		
Cerium	Ce %	0.480 max.		
Iron	Fe %	Balance		
-	-	-	Mechanical Properties Tensile Strength in Mpa 590 min. Yield Strength in Mpa 450 min. Elongation in % 20 min. Reduction of Area in % - Hardness in BHN - Impact in Joule 45 J @ RT	
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-	-	-		
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
Fe590	IS	India	Plate and Bar
2062 E 350	IS	India	Steel, Plate, Wire, Rod, Tube and Forging
1018	SAE	USA	Steel, Plate, Wire, Rod, Tube and Forging
1018	AISI	USA	Steel, Plate, Wire, Rod, Tube and Forging
A 830 G10180	ASTM	USA	Steel, Plate, Wire, Rod, Tube and Forging
G10180	UNS	USA	Steel, Bar, Wire, Rod, Tube and Forging
SA-29 1018	ASME	USA	Steel, Plate, Wire, Rod, Tube and Forging

Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email marketing@gravitycastindia.com

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