



**GRAVITY CAST PVT. LTD.**  
**GRAVITY GROUP OF COMPANIES**

## Material - IS 8500 Fe440

### Standard Specification for Structural Steel - MiCroalloyed

Group - Ferrous Mild Steel Alloys

Sub Group - IS 8500 Fe440 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 %	0.200 max.	As Raw or Normalizing	
Silicon	Si %	0.450 max.		
Manganese	Mn %	1.300 max.		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.040 max.		
Cerium	Ce %	0.400 max.		
Iron	Fe %	Balance		
-	-	-	<b>Mechanical Properties</b> Tensile Strength in Mpa      440 min. Yield Strength in Mpa      300 min. Elongation in %      22 min. Reduction of Area in %      - Hardness in BHN      - Impact in Joule      -	
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
Fe440B	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](mailto:marketing@gravitycastindia.com)**

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.

**ONE STOP SOLUTION FOR METAL PARTS**