

## Material: SAE 1085

### Standard Specification For Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel

**Group:** Ferrous Mild Steel Alloys

**Sub Group:** SAE 1085 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel

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

**Grade Belongs to the Industry:** Steel

Chemical Composition			Heat Treatment	
Carbon	C %	0.800 - 0.930	As Raw or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	0.700 - 1.000		
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.035 max.		
Boron	B %	0.0005 - 0.003		
Chromium	Cr %	0.150 max.		
Copper	Cu %	0.200 max.		
Molybdenum	Mo %	0.060 max.		
Nickel	Ni %	0.200 max.		
Lead	Pb %	0.150 - 0.350		
Iron	Fe %	Balance	<b>Mechanical Properties</b> Tensile Strength in Mpa 690 - 830 Yield Strength in Mpa 460 min. Elongation in % 10 min. Reduction of Area in % 25 - 40 Hardness in HB 192 - 248 Impact in Joule -	
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G10850	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1085	AISI	USA	Plate and Steel
A 1040 1085	ASTM	USA	Steel
A 510 1085	ASTM	USA	Wire Rods, Round Wire and Steel
A 682 G10850	ASTM	USA	Steel and Strip
A 682 Grade 1085	ASTM	USA	Steel and Strip
A 684 Grade 1085	ASTM	USA	Steel and Strip

**Disclaimer:** All information displayed in our data sheets are for reference purpose only and are sole property of their respective owners. Information and or material are used for educational purposes only. Data at actual may vary at actual and case to case basis. ICAST Alloys LLP does not guarantee validity of these parameters. Warranties and liabilities are exclusive to our terms and conditions of business.

Customer Care: +91-99090 45075 Email: [info@icastllp.com](mailto:info@icastllp.com)