



## Material - ASTM A 1040 1085

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

**Group - Ferrous Mild Steel Alloys**

**Sub Group - ASTM A 1040 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.		
Silicon	Si %	0.100 max.		
Copper	Cu %	0.200 min.		
Boron	B %	0.0005 - 0.003		
Iron	Fe %	Balance		
-	-	-	Mechanical Properties	
-	-	-	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	SAE	USA	Steel
1085	AISI	USA	Plate and 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

**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)**

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