



## Material - ASTM A 311 1050 Class A

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

**Group - Ferrous Mild Steel Alloys**

**Sub Group - ASTM A 311 1050 Class A Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel and Bar**

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

**Grade Belongs to the Industry - Steel and Bar**

Chemical Composition			Heat Treatment	
Carbon	C %	0.480 - 0.550	As Raw or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	0.600 - 0.900		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.050 max.		
Lead	Pb %	0.150 - 0.350		
Iron	Fe %	Balance		
-	-	-		
-	-	-	<b>Mechanical Properties</b> Tensile Strength in Mpa      585 min. Yield Strength in Mpa      520 min. Elongation in %      10 min. Reduction of Area in %      30 min. Hardness in HB      - Impact in Joule      -	
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-	-	-		
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G10500	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1050	SAE	USA	Steel, Sheet, Strip and Plate
1050	AISI	USA	Steel, Sheet, Strip and Plate
A 311 1050 Class B	ASTM	USA	Steel and Bar
A 513 Grade 1050	ASTM	USA	Steel and Tubing
A 684 Grade 1050	ASTM	USA	Steel and Strip
A 108 Grade 1050	ASTM	USA	Steel and Bar

**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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