



## Material - AISI 1044

**Standard Specification For Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Bars, To Wire Rods, Plates, Strip, Sheets and Tubing**

**Group - Ferrous Mild Steel Alloys**

**Sub Group - AISI 1044 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Bars, Wire Rods, Plates, Strip, Sheets and Tubing**

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

**Grade Belongs to the Industry - Bars, Wire Rods, Plates, Strip, Sheets and Tubing**

Chemical Composition			Heat Treatment	
Carbon	C %	0.430 - 0.500	As Raw or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	0.300 - 0.600		
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      550 min. Yield Strength in Mpa      300 min. Elongation in %      16 min. Reduction of Area in %      40 min. Hardness in HB      163 max. Impact in Joule      -	
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G10440	SAE	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1044	SAE	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
M1044	SAE	USA	Steel
M1044	AISI	USA	Steel
A 1040 1044	ASTM	USA	Steel
A 29 1044	ASTM	USA	Steel and Bar
A 575 M1044	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)**

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.