

## Material - ASTM A 1040 1012

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

**Group - Ferrous Mild Steel Alloys** 

Sub Group - ASTM A 1040 1012 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 %	0.100 - 0.150		
Manganese	Mn %	0.300 - 0.600	As Raw or Annealing or Normalizing or Hardening and Tempering	
Phosphorus	P %	0.035 max.		lizing or Hardoning and
Sulphur	S %	0.035 max.		
Boron	В%	0.0005 - 0.003		
Copper	Cu %	0.200 max.		
Silicon	Si %	0.100 max.		
Iron	Fe %	Balance		
-	-	-	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	330 - 370
-	-	-	Yield Strength in Mpa	180 min.
-	-	-	Elongation in %	19 min.
-	-	-	Reduction of Area in %	40 - 50
-	-	-	Hardn <mark>ess in HB</mark>	95 - 105
-	-	-	Impac <mark>t in Joule</mark>	-

Cross Reference Table				
Material	Standard	Country Grade Belong to the Industry		
G10120	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing	
1012	SAE	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing	
1012	AISI	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing	
A 29 1012	ASTM	USA	Bar	
A 29 M1012	ASTM	USA	Bar	
A 510 1012	ASTM	USA	Wire Rod	
A 512 Grade 1012	ASTM	USA	Tubing	

## Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email marketing@gravitycastindia.com

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