



## Material - ASTM A 29 1012

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

**Group - Ferrous Mild Steel Alloys** 

Sub Group - ASTM A 29 1012 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Bars Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries Grade Belongs to the Industry - Bar

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 %	0.040 max.		lizing or Hardoning and
Sulphur	S %	0.050 max.		· ·
Boron	В %	0.0005 - 0.003		
Copper	Cu %	0.200 max.		
Silicon	Si %	0.100 max.		
Aluminium	Al %	0.020 max.		
Niobium	Nb %	0.025 max.	Mechanical Properties	
Vanadium	V %	0.050 max.	Tensile Strength in Mpa	330 - 370
Iron	Fe %	Balance	Yield Strength in Mpa	180 min.
-	-	-	Elongation in %	19 min.
-	-	-	Reduction of Area in %	40 - 50
-	-		Hardness in HB	95 - 105
-	-	-	Impa <mark>ct 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 1040 1012	ASTM	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing	
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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