



## Material - ASTM A 29 1040

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

**Group - Ferrous Mild Steel Alloys** 

Sub Group - ASTM A 29 1040 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	
C %	0.370 - 0.440	As Raw or Annealing or Normalizing or Hardening and Tempering	
Mn %	0.600 - 0.900		
P %	0.040 max.		lizing or Hardoning and
S %	0.050 max.		•
Al %	0.020 max.		ıg
Si %	0.100 max.		
В %	0.0005 - 0.003		
Cu %	0.200 max.		
Nb %	0.015 max.	Mechanical Properties	
V %	0.020 max.	Tensile Strength in Mpa	418 min.
Fe %	Balance	Yield Strength in Mpa	290 min.
-	-	Elongation in %	5 min.
-	-	Reduction of Area in %	35 - 40
-	-	Hardness in HB	149 - 170
-	-	Impact in Joule	-
	C % Mn % P % S % Al % Si % B % Cu % Nb % V % Fe %	C % 0.370 - 0.440  Mn % 0.600 - 0.900  P % 0.040 max.  S % 0.050 max.  Al % 0.020 max.  Si % 0.100 max.  B % 0.0005 - 0.003  Cu % 0.200 max.  Nb % 0.015 max.  V % 0.020 max.  Fe % Balance	C %         0.370 - 0.440           Mn %         0.600 - 0.900           P %         0.040 max.           S %         0.050 max.           Al %         0.020 max.           Si %         0.100 max.           B %         0.0005 - 0.003           Cu %         0.200 max.           Nb %         0.015 max.           V %         0.020 max.           Fe %         Balance           Fe %         Balance           Fe %         Balance           Fe duction of Area in %           Reduction of Area in %           Hardness in HB

Cross Reference Table				
Material	Standard	Country	Grade Belong to the Industry	
G10400	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing	
1040	SAE	USA	Steel	
1040	AISI	USA	Tubing	
A 1040 1040	ASTM	USA	Steel	
A 108 Grade 1040	ASTM	USA	Bar	
A 513 Grade 1040	ASTM	USA	Tubing	
A 510 1040	ASTM	USA	Wire Rod and Round Wire	

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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