



Material - ASTM A 1040 1038

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

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A 1040 1038 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	
Carbon	C %	0.350 - 0.420		
Manganese	Mn %	0.600 - 0.900	As Raw or Annealing or Normalizing or Hardening and Tempering	
Phosphorus	P %	0.030 max.		olizing or Hordoning and
Sulphur	S %	0.035 max.		•
Boron	В %	0.0005 - 0.003		lig
Copper	Cu %	0.200 max.		
Silicon	Si %	0.100 max.		
Iron	Fe %	Balance		
-	-		Mechanical Properties	
-	-	-	Tensile Strength in Mpa	520 - 570
-	-	-	Yield Strength in Mpa	280 min.
-	-	-	Elongation in %	12 min.
-	-	-	Reduction of Area in %	35 - 40
-	-	-	Hardness in HB	149 - 163
-	-	-	Impact in Joule	-
Silicon Iron	Si % Fe %	0.100 max.	Tensile Strength in Mpa Yield Strength in Mpa Elongation in % Reduction of Area in % Hardness in HB	520 - 570 280 min. 12 min. 35 - 40

Cross Reference Table					
Material	Standard	Country Grade Belong to the Industry			
G10380	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing		
1038	SAE	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing		
1038	AISI	USA	Steel and Bar		
A 29 1038	ASTM	USA	Steel and Bar		
A 510 1038	ASTM	USA	Wire Rod and Round Wire		
A 576 10L38	ASTM	USA	Steel and Bar		
A 830 1038	ASTM	USA	Plates and Steel		

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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