



Material - SAE 1042

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

Group - Ferrous Mild Steel Alloys

Sub Group - SAE 1042 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 %	0.400 - 0.470	As Raw or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	0.600 - 0.900		
Phosphorus	P %	0.030 max.		olizing or Hordoning and
Sulphur	S %	0.035 max.		
Boron	В %	0.0005 - 0.003		
Chromium	Cr %	0.150 max.		
Copper	Cu %	0.200 max.		
Molybdenum	Mo %	0.060 max.		
Nickel	Ni %	0.200 max.	Mechanical Properties	
Lead	Pb %	0.150 - 0.350	Tensile Strength in Mpa	550 - 179
Iron	Fe %	Balance	Yield Strength in Mpa	300 min.
-	-	-	Elongation in %	12 min.
-	-		Reduction of Area in %	35 - 45
-	-	-	Hardn <mark>ess in HB</mark>	163 - 179
-	-	-	Impact in Joule	-

Cross Reference Table					
Material	Standard	Country	Grade Belong to the Industry		
G10420	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing		
1042	AISI	USA	Bar		
A 1040 1042	ASTM	USA	Steel		
A 29 1042	ASTM	USA	Bar		
A 510 1042	ASTM	USA	Wire Rod		
A 576 10L42	ASTM	USA	Steel and Bar		
A 830 1042	ASTM	USA	Plate 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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