



Material - ASTM A 1040 1213

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 1213 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 %	0.130 max.		
Manganese	Mn %	0.700 - 1.000	As Raw or Annealing or Normalizing or Hardening and Tempering	
Phosphorus	P %	0.070 - 0.120		lining on Hondoning and
Sulphur	S %	0.240 - 0.330		· ·
Silicon	Si %	0.100 max.		
Iron	Fe %	Balance		
-	-	-		
-	-	-		
-	/	-	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	390 - 540
-	-	-	Yield Strength in Mpa	230 min.
-	-	-	Elongation in %	10 min.
-	-	-	Reduction of Area in %	35 - 45
-	-	-	Hardness in HB	121 - 167
-	-	-	Impact in Joule	-
	Carbon Manganese Phosphorus Sulphur Silicon	Carbon C % Manganese Mn % Phosphorus P % Sulphur S % Silicon Si % Iron Fe %	Carbon C % 0.130 max. Manganese Mn % 0.700 - 1.000 Phosphorus P % 0.070 - 0.120 Sulphur S % 0.240 - 0.330 Silicon Si % 0.100 max. Iron Fe % Balance - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	Carbon C % 0.130 max. Manganese Mn % 0.700 - 1.000 Phosphorus P % 0.070 - 0.120 Sulphur S % 0.240 - 0.330 Silicon Si % 0.100 max. Iron Fe % Balance - - - - - Tensile Strength in Mpa - - Yield Strength in Mpa - - Elongation in % - - Reduction of Area in % - - Hardness in HB

Cross Reference Table					
Material	Standard	Country	Grade Belong to the Industry		
G12130	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing		
1213	SAE	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing		
1213	AISI	USA	Steel and Bar		
A 576 1213	ASTM	USA	Steel and Bar		
SA-29 1213	ASME	USA	Steel		
A 108 Grade 1213	ASTM	USA	Steel and Bar		
A 29 1213	ASTM	USA	Steel and Bar		

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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