



Material - JIS SUM 31

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

Group - Ferrous Mild Steel Alloys

Sub Group - JIS SUM 31 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 %	0.140 - 0.200	As Raw or Annealing or Normalizing or Hardening and Tempering			
Manganese	Mn %	1.000 - 1.300				
Phosphorus	P %	0.040 max.				
Sulphur	S %	0.080 - 0.130				
Iron	Fe %	Balance				
-	-	-				
-	-	-	Mechanical Properties			
-	-	-			Tensile Strength in Mpa	430 - 480
-	-	-			Yield Strength in Mpa	230 min.
-	-	-			Elongation in %	15 min.
-	-	-			Reduction of Area in %	40 - 47
-	-	-			Hardness in HB	121 - 248
-	-	-			Impact in Joule	-
-	-	-				
-	-	-				
-	-	-				

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G11170	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1117	SAE	USA	Steel, Bar, Forging and Tubing
1117	AISI	USA	Steel and Bar
A 576 1117	ASTM	USA	Steel and Bar
SA-311 1117 Class A	ASME	USA	Steel and Bar
A 576 11L17	ASTM	USA	Steel and Bar
A 29 1117	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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