



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - SAE J403 | SAE J1397 UNS G11170 - Hot Rolled Standard Specification For Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Bars, To Wire Rods, Plates, Strip, Sheets and Tubing

Group - Ferrous Mild Steel Alloys

Sub Group - SAE J403 | SAE J1397 UNS G11170 - Hot Rolled Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Bars, Wire Rods, Plates, Strip, Sheets and Tubing

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries

Grade Belongs to the Industry - Bars, Wire Rods, Plates, Strip, Sheets and Tubing

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 %	0.030 max.		
Sulphur	S %	0.080 - 0.130		
Iron	Fe %	Balance		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
			Mechanical Properties	
			Tensile Strength in Mpa	430 min.
			Yield Strength in Mpa	230 min.
			Elongation in %	23 min
			Reduction of Area in %	47 min.
			Hardness in BHN	121 max.
			Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
1117	SAE	USA	Steel, Bar, Forging and Tubing
1117	AISI	USA	Steel and Bar
SUM 31	JIS	Japan	Steel
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

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.

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