



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - SAE J403 | SAE J1397 UNS G12144 - 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 G12144 - 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 %	0.150 max.	As Raw or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	0.850 - 1.050		
Phosphorus	P %	0.040 - 0.090		
Sulphur	S %	0.260 - 0.350		
Lead	Pb %	0.150 - 0.350		
Iron	Fe %	Balance		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
			Mechanical Properties	
			Tensile Strength in Mpa	390 min.
			Yield Strength in Mpa	230 min.
			Elongation in %	22 min.
			Reduction of Area in %	45 min.
			Hardness in BHN	121 max.
			Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
12L14	SAE	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
12L14	AISI	USA	Steel and Bar
A 1040 12L14	ASTM	USA	Steel
SA-29 12L14	ASME	USA	Steel
A 510 12L14	ASTM	USA	Wire Rod, Round Wire and Steel
A 519 12L14	ASTM	USA	Tubing
A 576 12L14	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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