



**GRAVITY CAST PVT. LTD.**  
**GRAVITY GROUP OF COMPANIES**

## Material - ASTM A 576 12L14

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

**Group - Ferrous Mild Steel Alloys**

**Sub Group - ASTM A 576 12L14 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel and Bar**

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

**Grade Belongs to the Industry - Steel and Bar**

Chemical Composition			Heat Treatment	
Carbon	C %	0.150 max.	As Raw or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	0.850 - 1.150		
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 - 540
-	-	-	Yield Strength in Mpa	230 min.
-	-	-	Elongation in %	10 min.
-	-	-	Reduction of Area in %	35 - 45
-	-	-	Hardness in HB	121 - 163
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G12140	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
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

**Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email [marketing@gravitycastindia.com](mailto: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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