



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

## Material - ASTM A 1040 1212

**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 1212 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.	As Raw or Annealing or Normalizing or Hardening and Tempering			
Manganese	Mn %	0.700 - 1.000				
Phosphorus	P %	0.070 - 0.120				
Sulphur	S %	0.160 - 0.230				
Silicon	Si %	0.100 max.				
Iron	Fe %	Balance				
-	-	-				
-	-	-	<b>Mechanical Properties</b>			
-	-	-			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	110 - 255
-	-	-			Impact in Joule	-
-	-	-				
-	-	-				
-	-	-				

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G12120	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1212	SAE	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1212	AISI	USA	Steel and Bar
A 576 1212	ASTM	USA	Steel and Bar
SA-29 1212	ASME	USA	Steel
A 108 Grade 1212	ASTM	USA	Steel and Bar
A 29 1212	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](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.

**ONE STOP SOLUTION FOR METAL PARTS**