



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

## Material - ASTM A 576 1213

**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 1213 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 %	0.130 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 %	0.240 - 0.330		
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 - 167
			Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G12130	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1213	SAE	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1213	AISI	USA	Steel and Bar
A 1040 1213	ASTM	USA	Steel
SA-29 1213	ASME	USA	Steel
A 108 Grade 1213	ASTM	USA	Steel and Bar
A 29 1213	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.

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