



## Material - SAE 1212

**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 1212 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 %	0.130 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		
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	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	AISI	USA	Steel and Bar
A 1040 1212	ASTM	USA	Steel
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)**

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