



Material - SAE 1090

Standard Specification For Carbon Steel Compositions For Forging To Hot-Rolled Steel and Wire

Group - Ferrous Mild Steel Alloys

Sub Group - SAE 1090 Carbon Steel Compositions For Forging To Hot-Rolled Steel and Wire

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

Grade Belongs to the Industry - Steel and Wire

Chemical Composition			Heat Treatment			
Carbon	C %	0.700 - 1.000	As Raw or Annealing or Normalizing or Hardening and Tempering			
Manganese	Mn %	0.200 - 0.600				
Phosphorus	P %	0.025 max.				
Sulphur	S %	0.030 max.				
Silicon	Si %	0.100 - 0.300				
Iron	Fe %	Balance				
-	-	-				
-	-	-	Mechanical Properties			
-	-	-			Tensile Strength in Mpa	700 - 3344
-	-	-			Yield Strength in Mpa	460 min.
-	-	-			Elongation in %	10 min.
-	-	-			Reduction of Area in %	25 - 40
-	-	-			Hardness in HB	197 - 248
-	-	-			Impact in Joule	-
-	-	-				
-	-	-				
-	-	-				

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G10900	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1090	AISI	USA	Steel and Wire
A 1040 1090	ASTM	USA	Steel
A 29 1090	ASTM	USA	Steel and Bar
A 510 1090	ASTM	USA	Wire Rod, Round Wire and Steel
A 576 10L90	ASTM	USA	Steel and Bar
A 713 G10900	ASTM	USA	Steel and Wire

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

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