



Material - AISI 1090

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

Group - Ferrous Mild Steel Alloys

Sub Group - AISI 1090 Carbon Steel Compositions For Forging To Hot-Rolled 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 %	0.850 - 0.980	As Raw or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	0.600 - 0.900		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.050 max.		
Silicon	Si %	0.100 - 0.300		
Aluminium	Al %	0.020 max.		
Boron	B %	0.0005 - 0.003		
Copper	Cu %	0.200 max.		
Niobium	Nb %	0.015 max.		
Vanadium	V %	0.020 max.		
Iron	Fe %	Balance	Mechanical Properties Tensile Strength in Mpa 700 - 840 Yield Strength in Mpa 460 min. Elongation in % 10 min. Reduction of Area in % 25 - 40 Hardness in HB 197 - 248 Impact in Joule -	
-	-	-		
-	-	-		
-	-	-		
-	-	-		
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G10900	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1090	SAE	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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