



Material - ASTM A 29 1090

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

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A 29 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 max.		
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 -	
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		

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
1090	AISI	USA	Steel and Wire
A 1040 1090	ASTM	USA	Steel
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

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.