



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - SAE 1146

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 1146 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 %	0.420 - 0.490	As Raw or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	0.700 - 1.000		
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.080 - 0.130		
Lead	Pb %	0.150 - 0.350		
Iron	Fe %	Balance		
-	-	-		
-	-	-	Mechanical Properties Tensile Strength in Mpa 590 - 650 Yield Strength in Mpa 320 min. Elongation in % 12 min. Reduction of Area in % 35 - 40 Hardness in HB 170 - 187 Impact in Joule -	
-	-	-		
-	-	-		
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-	-	-		
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G11460	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1146	AISI	USA	Steel and Bar
A 1040 1146	ASTM	USA	Steel
A 29 1146	ASTM	USA	Steel and Bar
A 510 1146	ASTM	USA	Wire Rod, Round Wire and Steel
A 576 11L46	ASTM	USA	Steel and Bar
A 576 1146	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

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