

## Material - ASTM A 576 11L46

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

**Group - Ferrous Mild Steel Alloys** 

Sub Group - ASTM A 576 11L46 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished 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 %	0.420 - 0.490	As Raw or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	0.700 - 1.000		
Phosphorus	Р%	0.040 max.		
Sulphur	S %	0.080 - 0.130		
Lead	Pb %	0.150 - 0.350		
Silicon	Si %	0.100 max.		
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
-	-	-	Hardn <mark>ess in HB</mark>	170 - 187
-	-		Impact in Joule	-
		-		

		Cross Reference Table				
	Material	Standard	Country	Grade Belong to the Industry		
	G11460	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing		
	1146	SAE	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		
Г	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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