

## Material: SAE 1018

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

**Group:** Ferrous Mild Steel Alloys

**Sub Group:** SAE 1018 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel

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

**Grade Belongs to the Industry:** Steel

Chemical Composition			Heat Treatment	
Carbon	C %	0.150 - 0.200	As Raw or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	0.600 - 0.900		
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.035 max.		
Boron	B %	0.0005 - 0.003		
Chromium	Cr %	0.150 max.		
Copper	Cu %	0.200 max.		
Molybdenum	Mo %	0.060 max.		
Nickel	Ni %	0.200 max.		
Lead	Pb %	0.150 - 0.350		
Iron	Fe %	Balance	<b>Mechanical Properties</b> Tensile Strength in Mpa 400 - 440 Yield Strength in Mpa 220 min. Elongation in % 15 min. Reduction of Area in % 40 - 50 Hardness in HB 241 max. Impact in Joule -	
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G10180	UNS	USA	Bars, Wire Rods and Tubing
1018	AISI	USA	Tubing
A 1040 1018	ASTM	USA	Steel
A 108 Grade 1018	ASTM	USA	Steel and Bar
A 29 1018	ASTM	USA	Steel and Bar
A 311 1018 Class A	ASTM	USA	Steel and Bar
A 510 1018	ASTM	USA	Wire Rod and Round Wire

**Disclaimer:** All information displayed in our data sheets are for reference purpose only and are sole property of their respective owners. Information and or material are used for educational purposes only. Data at actual may vary at actual and case to case basis. ICAST Alloys LLP does not guarantee validity of these parameters. Warranties and liabilities are exclusive to our terms and conditions of business.

Customer Care: +91-99090 45075 Email: [info@icastllp.com](mailto:info@icastllp.com)