

# Material: ASTM A 29 1016

## 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 29 1016 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel and

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

**Grade Belongs to the Industry:** Steel and Bar

Chemical Composition		
Carbon	C %	0.130 - 0.180
Manganese	Mn %	0.600 - 0.900
Phosphorus	P %	0.040 max.
Sulphur	S %	0.050 max.
Aluminium	Al %	0.020 max.
Silicon	Si %	0.100 max.
Boron	B %	0.0005 - 0.003
Copper	Cu %	0.200 max.
Niobium	Nb %	0.025 max.
Vanadium	V %	0.050 max.
Iron	Fe %	Balance
-	-	-
-	-	-
-	-	-
-	-	-

Heat Treatment
As Raw or Annealing or Normalizing or Hardening and Tempering

Mechanical Properties	
Tensile Strength in Mpa	380 - 689
Yield Strength in Mpa	210 min
Elongation in %	13 min.
Reduction of Area in %	40 - 50
Hardness in HB	111 - 121
Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G10160	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1016	SAE	USA	Bars, Wire Rods and Tubing
1016	AISI	USA	Tubing
A 1040 1016	ASTM	USA	Steel
A 108 Grade 1016	ASTM	USA	Steel and Bar
A 510 1016	ASTM	USA	Wire Rods
A 512 Grade 1016	ASTM	USA	Tubing

**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)



+91-99090 45075



[info@icastllp.com](mailto:info@icastllp.com)



ICAST ALLOYS LLP, Plot 2527, Road H1, Kranti Gate, GIDC Metoda, Lodhika, Rajkot-360021, Gujarat, India