



## 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			Heat Treatment	
Carbon	C %	0.130 - 0.180	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.		
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	<b>Mechanical Properties</b> 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      -	
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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

**Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email [marketing@gravitycastindia.com](mailto:marketing@gravitycastindia.com)**

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