



## Material - AISI 1039

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

**Group - Ferrous Mild Steel Alloys**

**Sub Group - AISI 1039 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 %	0.370 - 0.440	As Raw or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	0.700 - 1.000		
Phosphorus	P %	0.040 max.		
Sulphur	S %	0.050 max.		
Boron	B %	0.0005 - 0.003		
Aluminium	Al %	0.020 max.		
Copper	Cu %	0.200 max.		
Niobium	Nb %	0.015 max.		
Silicon	Si %	0.150 max.		
Vanadium	V %	0.020 max.		
Iron	Fe %	Balance	<b>Mechanical Properties</b> Tensile Strength in Mpa      560 - 610 Yield Strength in Mpa      300 min. Elongation in %      12 min. Reduction of Area in %      35 - 40 Hardness in HB      156 - 179 Impact in Joule      -	
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G10390	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1039	SAE	USA	Steel
A 1040 1039	ASTM	USA	Steel
A 29 1039	ASTM	USA	Steel and Bar
A 510 1039	ASTM	USA	Wire Rod and Round Wire
A 576 10L39	ASTM	USA	Steel and Bar
A 830 1039	ASTM	USA	Plates and Steel

**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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