

# 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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-	-	-		
-	-	-		
-	-	-		
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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

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