



## Material - SAE 1039

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

**Group - Ferrous Mild Steel Alloys** 

Sub Group - SAE 1039 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	
C %	0.370 - 0.440	As Raw or Annealing or Normalizing or Hardening and Tempering	
Mn %	0.700 - 1.000		
P %	0.030 max.		olizing or Hordoning and
S %	0.035 max.		•
В%	0.0005 - 0.003		ııg
Cr %	0.150 max.		
Cu %	0.200 max.		
Mo %	0.060 max.		
Ni %	0.200 max.	Mechanical Pr	operties
Pb %	0.150 - 0.350	Tensile Strength in Mpa	560 - 610
Fe %	Balance	Yield Strength in Mpa	300 min.
-	-	Elongation in %	12 min.
-	-	Reduction of Area in %	35 - 40
-	-	Hardn <mark>ess in HB</mark>	156 - 179
-	-	Impact in Joule	-
	C % Mn % P % S % B % Cr % Cu % Mo % Ni % Pb % Fe %	C % 0.370 - 0.440  Mn % 0.700 - 1.000  P % 0.030 max.  S % 0.035 max.  B % 0.0005 - 0.003  Cr % 0.150 max.  Cu % 0.200 max.  Mo % 0.060 max.  Ni % 0.200 max.  Pb % 0.150 - 0.350  Fe % Balance	C %         0.370 - 0.440           Mn %         0.700 - 1.000           P %         0.030 max.           S %         0.035 max.           B %         0.0005 - 0.003           Cr %         0.150 max.           Cu %         0.200 max.           Ni %         0.200 max.           Pb %         0.150 - 0.350           Fe %         Balance           Fe %         Balance           Fe %         Reduction of Area in %           Reduction of Area in %           Hardness in HB

Cross Reference Table				
Material	Standard	Country Grade Belong to the Industry		
G10390	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing	
1039	AISI	USA	Steel and Bar	
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

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