



**GRAVITY CAST PVT. LTD.**  
**GRAVITY GROUP OF COMPANIES**

## Material - ASTM A 29 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 - ASTM A 29 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 %	0.100 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
1039	AISI	USA	Steel and Bar
A 1040 1039	ASTM	USA	Steel
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)**

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.

**ONE STOP SOLUTION FOR METAL PARTS**