



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

## Material - ASTM A 1040 1040

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

**Group - Ferrous Mild Steel Alloys**

**Sub Group - ASTM A 1040 1040 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	
Carbon	C %	0.370 - 0.440	As Raw or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	0.600 - 0.900		
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.035 max.		
Boron	B %	0.0005 - 0.003		
Copper	Cu %	0.200 max.		
Silicon	Si %	0.100 max.		
Iron	Fe %	Balance		
-	-	-	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	418 min.
-	-	-	Yield Strength in Mpa	290 min.
-	-	-	Elongation in %	5 min.
-	-	-	Reduction of Area in %	35 - 40
-	-	-	Hardness in HB	149 - 170
-	-	-	Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G10400	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1040	SAE	USA	Steel
1040	AISI	USA	Tubing
A 108 Grade 1040	ASTM	USA	Bar
A 29 1040	ASTM	USA	Steel
A 513 Grade 1040	ASTM	USA	Tubing
A 510 1040	ASTM	USA	Wire Rod and Round Wire

**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.

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