



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

## Material - ASTM A 513 Grade 1040

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

**Group - Ferrous Mild Steel Alloys**

**Sub Group - ASTM A 513 Grade 1040 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Tubing**

**Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries**

**Grade Belongs to the Industry - Tubing**

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 %	0.040 max.		
Sulphur	S %	0.050 max.		
Iron	Fe %	Balance		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
			Mechanical Properties	
			Tensile Strength in Mpa	450 min
			Yield Strength in Mpa	310 min.
			Elongation in %	5 min.
			Reduction of Area in %	-
			Hardness in HRC	75 - 90
			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 1040 1040	ASTM	USA	Steel
A 108 Grade 1040	ASTM	USA	Bar
A 29 1040	ASTM	USA	Steel
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.

**ONE STOP SOLUTION FOR METAL PARTS**