

## Material - ASTM A 1040 1013

Standard Specification For Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Bars, To Wire Rods, Plates, Strip, Sheets and Tubing

**Group - Ferrous Mild Steel Alloys** 

Sub Group - ASTM A 1040 1013 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Bars, Wire Rods, Plates, Strip, Sheets and Tubing

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries Grade Belongs to the Industry - Bars, Wire Rods, Plates, Strip, Sheets and Tubing

Chemical Composition			Heat Treatment	
Carbon	C %	0.110 - 0.160		
Manganese	Mn %	0.300 - 0.600	As Raw or Annealing or Normalizing or Hardening and Tempering	
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.035 max.		
Boron	В%	0.0005 - 0.003		
Copper	Cu %	0.200 max.		
Silicon	Si %	0.100 max.		
Iron	Fe %	Balance		
-	1	-	Mechanical Properties	
-	-	-	Tensile Strength in Mpa	370 Min.
-	-	-	Yield Strength in Mpa	310 min.
-	-	-	Elongation in %	19 min.
-	-	-	Reduction of Area in %	40 min.
-	-	-	Hardness in HB	105 max.
-	-	-	Impac <mark>t in Joule</mark>	-

Cross Reference Table					
Material	Standard	Country	Grade Belong to the Industry		
G10130	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing		
1013	SAE	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing		
1013	AISI	USA	Bar		
A 29 1013	ASTM	USA	Bar		
A 510 1013	ASTM	USA	Wire Rod		
SA-29 1013	ASME	USA	Bar		
K11430	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing		

Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email 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.