



## Material - ASTM A 1040 1021

**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 1021 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 %	0.180 - 0.230	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				
-	-	-	<b>Mechanical Properties</b>			
-	-	-			Tensile Strength in Mpa	345 min.
-	-	-			Yield Strength in Mpa	230 min.
-	-	-			Elongation in %	5 min.
-	-	-			Reduction of Area in %	40 - 48
-	-	-			Hardness in HB	116 - 131
-	-	-			Impact in Joule	-
-	-	-			-	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G10210	UNS	USA	Bars, Wire Rods and Tubing
1021	SAE	USA	Bending and Flaring
1021	AISI	USA	Tubing
A 29 1021	ASTM	USA	Steel and Bar
A 510 1021	ASTM	USA	Wire Rod and Round Wire
A 512 Grade 1021	ASTM	USA	Tubing
A 513 Grade 1021	ASTM	USA	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](mailto:marketing@gravitycastindia.com)**

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