



## **Material - ASTM A 827 1009**

## Standard Specification For Carbon Steel Compositions For Forging

**Group - Ferrous Mild Steel Alloys** 

Sub Group - ASTM A 1040 1009 Carbon Steel Compositions For Forging

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

**Grade Belongs to the Industry - Forging** 

Chemical Composition			Heat Treatment	
Carbon	C %	0.150 max.	As Raw or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	0.600 max.		
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.035 max.		
Silicon	Si %	0.150 - 0.400		
Iron	Fe %	Balance		
-	-	-		
-	-	-		
-	-	-	Mechanical Properties	
-	-		Tensile Strength in Mpa	-
-	-	-	Yield Strength in Mpa	-
-	-	-	Elongation in %	-
-	-	-	Reduction of Area in %	-
-	-	-	Hardness in HB	262 max.
-	-	-	Impact in Joule	-

Cross Reference Table				
Material	Standard	Country Grade Belong to the Industry		
G10090	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing	
1009	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing	
1009	AISI	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing	
A 1040 1009	ASTM	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing	
A 830 1009	ASTM	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing	
A 830 G10090	ASTM	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.