



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

## Material - ASTM A 830 1049

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

**Group - Ferrous Mild Steel Alloys**

**Sub Group - ASTM A 830 1049 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Plate and Steel**

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

**Grade Belongs to the Industry - Plate and Steel**

Chemical Composition			Heat Treatment	
Carbon	C %	0.460 - 0.530	As Raw or Annealing or Normalizing or Hardening and Tempering	
Manganese	Mn %	0.600 - 0.900		
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.030 max.		
Silicon	Si %	0.150 - 0.400		
Iron	Fe %	Balance		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
			Mechanical Properties	
			Tensile Strength in Mpa	600 - 670
			Yield Strength in Mpa	330 min.
			Elongation in %	10 min.
			Reduction of Area in %	30 - 40
			Hardness in HB	179 - 197
			Impact in Joule	-

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G10490	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1049	SAE	USA	Steel
1049	AISI	USA	Bar
A 830 G10490	ASTM	USA	Plate and Steel
A 576 10L49	ASTM	USA	Steel
A 29 1049	ASTM	USA	Steel and Bar
A 510 1049	ASTM	USA	Wire Rods, Round Wire and Steel

**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**