



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASTM A 830 G10450

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 G10450 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 %	0.430 - 0.500	As Raw or Annealing or Normalizing or Hardening and Tempering			
Manganese	Mn %	0.600 - 0.900				
Phosphorus	P %	0.035 max.				
Sulphur	S %	0.040 max.				
Silicon	Si %	0.150 - 0.400				
Iron	Fe %	Balance				
-	-	-				
-	-	-	Mechanical Properties			
-	-	-			Tensile Strength in Mpa	570 - 862
-	-	-			Yield Strength in Mpa	310 min.
-	-	-			Elongation in %	10 min.
-	-	-			Reduction of Area in %	35 - 45
-	-	-			Hardness in HB	163 - 321
-	-	-			Impact in Joule	-
-	-	-				

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
G10450	UNS	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1045	SAE	USA	Bars, Wire Rods, Plates, Strip, Sheets and Tubing
1045	AISI	USA	Steel and Bar
A 311 1045 Class A	ASTM	USA	Steel and Bar
A 311 1045 Class B	ASTM	USA	Steel and Bar
A 827 1045	ASTM	USA	Plate, Steel and Forging
A 682 Grade 1045	ASTM	USA	Steel and Strip

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.

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