

## 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

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