

# Material: ASTM A 830 1046

## Standard Specification for Steel Castings for General Engineering Purposes

**Group:** Ferrous Mild Steel Alloys

**Sub Group:** ASTM A 830 1046 Steel Castings for General Engineering Purposes

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

**Grade Belongs to the Industry:** Casting

Chemical Composition			Heat Treatment	
Carbon	C %	0.430 - 0.500	As Cast or Annealing or Normalizing or Hardening and Tempering	
Silicon	Si %	0.150 - 0.400		
Manganese	Mn %	0.700 - 1.000		
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.030 max.		
Iron	Fe %	Balance		
-	-	-		
-	-	-	<b>Mechanical Properties</b> Tensile Strength in Mpa 590 - 650 Yield Strength in Mpa 320 min. Elongation in % 12 min. Reduction of Area in % 35 - 45 Hardness in BHN 170 - 187 Impact in Joule -	
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		

Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
AW2	BS	British	Casting
1046	SAE	USA	Casting
1046	AISI	USA	Casting
A 1040 1046	ASTM	USA	Casting
A 29 1046	ASTM	USA	Casting
A 510 1046	ASTM	USA	Casting
A 576 1046	ASTM	USA	Casting

**Disclaimer:** All information displayed in our data sheets are for reference purpose only and are sole property of their respective owners. Information and or material are used for educational purposes only. Data at actual may vary at actual and case to case basis. ICAST Alloys LLP does not guarantee validity of these parameters. Warranties and liabilities are exclusive to our terms and conditions of business.

Customer Care: +91-99090 45075 Email: [info@icastllp.com](mailto:info@icastllp.com)