



Material - AISI 1046

Standard Specification for Steel Castings for General Engineering Purposes

Group - Ferrous Mild Steel Alloys

Sub Group - AISI 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	
Manganese	Mn %	0.700 - 1.000		
Phosphorus	P %	0.030 max.		
Sulphur	S %	0.035 max.		
Iron	Fe %	Balance		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
-	-	-		
			Mechanical Properties	
			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
A 1040 1046	ASTM	USA	Casting
A 29 1046	ASTM	USA	Casting
A 510 1046	ASTM	USA	Casting
A 576 1046	ASTM	USA	Casting
A 830 1046	ASTM	USA	Casting

Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email marketing@gravitycastindia.com

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