



## Material - ASTM A 510 1046

### Standard Specification for Steel Castings for General Engineering Purposes

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A 510 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 %	0.040 max.		
Sulphur	S %	0.050 max.		
Boron	B %	0.0008 max.		
Iron	Fe %	Balance		
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-	-	-	<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      -	
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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 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](mailto:marketing@gravitycastindia.com)**

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