



Material - ASTM A 1040 1046

Standard Specification for Steel Castings for General Engineering Purposes

Group - Ferrous Mild Steel Alloys

Sub Group - ASTM A 1040 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. | | |
| Boron | B % | 0.0005 - 0.0030 | | |
| Copper | Cu % | 0.200 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 - | |
| - | - | - | | |
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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 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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