

Material - ASME SA-513 1018

Standard Specification for Hot Rolled Medium and High Tensile Structural Steel

Group - Ferrous Mild Steel Alloy

Sub Group - ASME SA-513 1018 Hot Rolled Medium and High Tensile Structural Steel
Application - Intended for Valve, Pump, General Engineering, Construction and Other Industries
Grade Belongs to the Industry - Steel, Plate, Wire, Rod, Tube and Forging

| Chemical Composition | | | Heat Treatment | |
|----------------------|------|---------------|-------------------------|-----------|
| Carbon | C % | 0.140 - 0.200 | | |
| Manganese | Mn % | 0.600 - 0.900 | | |
| Phosphorus | P % | 0.035 max. | Quench and Temper | |
| Sulphur | S % | 0.035 max. | | |
| Iron | Fe % | Balance | | |
| - | - | - | | |
| - | - | - | | |
| - | - | | | |
| - | - | - | Mechanical Properties | |
| - | - | - | Tensile Strength in Mpa | 400 - 440 |
| - | - | - | Yield Strength in Mpa | 220 min. |
| - | - | - | Elongation in % | 15 min. |
| - | - | | Reduction of Area in % | 40 - 50 |
| - | - | | Hardness in BHN | 241 max. |
| - | - | - | Impact in Joule | - |

| Cross Reference Table | | | | |
|-----------------------|----------|---------|---|--|
| Material | Standard | Country | Grade Belong to the Industry | |
| 2062 E 350 | IS | India | Steel, Plate, Wire, Rod, Tube and Forging | |
| 1018 | SAE | USA | Steel, Plate, Wire, Rod, Tube and Forging | |
| 1018 | AISI | USA | Steel, Plate, Wire, Rod, Tube and Forging | |
| A 830 G10180 | ASTM | USA | Steel, Plate, Wire, Rod, Tube and Forging | |
| G10180 | UNS | USA | Steel, Bar, Wire, Rod, Tube and Forging | |
| SA-29 1018 | ASME | USA | Steel, Plate, Wire, Rod, Tube and Forging | |
| SA-311 1018 Class A | ASME | USA | Steel, Plate, Wire, Rod, Tube and Forging | |

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

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.