



Material - AISI 1151

Standard Specification For Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel and Bar

Group - Ferrous Mild Steel Alloys

Sub Group - AISI 1151 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Steel and Bar

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

Grade Belongs to the Industry - Steel and Bar

| Chemical Composition | | | Heat Treatment | |
|----------------------|------|---------------|---|-----------|
| Carbon | C % | 0.480 - 0.550 | As Raw or Annealing or Normalizing or Hardening and Tempering | |
| Manganese | Mn % | 0.700 - 1.000 | | |
| Phosphorus | P % | 0.040 max. | | |
| Sulphur | S % | 0.080 - 0.130 | | |
| Aluminium | Al % | 0.020 max. | | |
| Niobium | Nb % | 0.015 max. | | |
| Silicon | Si % | 0.100 max. | | |
| Vanadium | V % | 0.020 max. | | |
| Iron | Fe % | Balance | Mechanical Properties | |
| - | - | - | Tensile Strength in Mpa | 630 min. |
| - | - | - | Yield Strength in Mpa | 340 min. |
| - | - | - | Elongation in % | 10 min. |
| - | - | - | Reduction of Area in % | 30 - 35 |
| - | - | - | Hardness in HB | 187 - 321 |
| - | - | - | Impact in Joule | - |

| Cross Reference Table | | | |
|-----------------------|----------|---------|---|
| Material | Standard | Country | Grade Belong to the Industry |
| G11510 | UNS | USA | Bars, Wire Rods, Plates, Strip, Sheets and Tubing |
| 1151 | SAE | USA | Bars, Wire Rods, Plates, Strip, Sheets and Tubing |
| A 1040 1151 | ASTM | USA | Steel |
| A 108 Grade 1151 | ASTM | USA | Steel and Bar |
| A 29 1151 | ASTM | USA | Steel and Bar |
| A 510 1151 | ASTM | USA | Wire Rod, Round Wire and Steel |
| A 576 11L51 | ASTM | USA | Steel and Bar |

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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