



Material - AISI 1042

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

Group - Ferrous Mild Steel Alloys

Sub Group - AISI 1042 Carbon Steel Compositions For Forging To Hot-Rolled And Cold-Finished Bar

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

Grade Belongs to the Industry - Bar

| Chemical Composition | | | Heat Treatment | |
|----------------------|------|----------------|---|--|
| Carbon | C % | 0.400 - 0.470 | As Raw or Annealing or Normalizing or Hardening and Tempering | |
| Manganese | Mn % | 0.600 - 0.900 | | |
| Phosphorus | P % | 0.040 max. | | |
| Sulphur | S % | 0.050 max. | | |
| Boron | B % | 0.0005 - 0.003 | | |
| Aluminium | Al % | 0.020 max. | | |
| Copper | Cu % | 0.200 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 550 - 610 Yield Strength in Mpa 300 min. Elongation in % 12 min. Reduction of Area in % 35 - 45 Hardness in HB 163 - 179 Impact in Joule - | |
| - | - | - | | |
| - | - | - | | |
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| - | - | - | | |

| Cross Reference Table | | | |
|-----------------------|----------|---------|---|
| Material | Standard | Country | Grade Belong to the Industry |
| G10420 | UNS | USA | Bars, Wire Rods, Plates, Strip, Sheets and Tubing |
| 1042 | SAE | USA | Steel |
| A 1040 1042 | ASTM | USA | Steel |
| A 29 1042 | ASTM | USA | Bar |
| A 510 1042 | ASTM | USA | Wire Rod |
| A 576 10L42 | ASTM | USA | Steel and Bar |
| A 830 1042 | ASTM | USA | Plate and Steel |

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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