



Material - AISI 420F

Standard Specification for Castings, Iron-Chromium, Iron-Chromium-Nickel, Corrosion Resistant, for General Application

Group - Ferrous Stainless Steel Alloys

Sub Group - AISI 420F Castings, Iron-Chromium, Iron-Chromium-Nickel, Corrosion Resistant, for General Application

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

Grade Belongs to the Industry - Casting

| Chemical Composition | | | Heat Treatment | |
|----------------------|------|-----------------|------------------------------------|----------|
| Carbon | C % | 0.200 - 0.400 | Annealing or Hardening + Tempering | |
| Silicon | Si % | 1.500 max. | | |
| Manganese | Mn % | 1.000 max. | | |
| Phosphorus | P % | 0.040 max. | | |
| Sulphur | S % | 0.200 - 0.400 | | |
| Chromium | Cr % | 11.500 - 14.000 | | |
| Nickel | Ni % | 1.000 max. | | |
| Molybdenum | Mo % | 0.500 max. | | |
| Iron | Fe % | Balance | | |
| - | - | - | | |
| | | | Mechanical Properties | |
| | | | Tensile Strength in Mpa | 690 min. |
| | | | Yield Strength in Mpa | 485 min. |
| | | | Elongation in % | 12 min. |
| | | | Reduction of Area in % | - |
| | | | Hardness in HB | 269 max. |
| | | | Impact in Joule | - |

| Cross Reference Table | | | |
|-----------------------|----------|---------|-------------------------------|
| Material | Standard | Country | Grade Belong to the Industry |
| J9154 | UNS | USA | Casting |
| A895 Type 420F | ASTM | USA | Plate, Sheet and Strip |
| A959 Type 420F | ASTM | USA | Bar, Wire, Shapes and Forging |
| A 582 Type 420F | ASTM | USA | Bar and Forging |
| SUS 420F | JIS | Japan | Bar and Forging |
| S 42020 | UNS | USA | Casting |
| A743 CA40F | 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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