



Material - EN 1.4409

Standard Specification for Austenitic and Austenitic-Ferritic Steel Castings for Pressure Purposes

Group - Ferrous Stainless Steel Alloys

Sub Group - EN 1.4409 Austenitic and Austenitic-Ferritic Steel Castings for Pressure Purposes Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries Grade Belongs to the Industry - Casting

| Chemical Composition | | | Heat Treatment | |
|----------------------|------|-----------------|-------------------------|-----------|
| Carbon | C % | 0.030 max. | | |
| Silicon | Si % | 1.500 max. | | |
| Manganese | Mn % | 2.000 max. | Solution Annealing | |
| Phosphorus | P % | 0.035 max. | | |
| Sulphur | S % | 0.025 max. | | |
| Chromium | Cr % | 18.000 - 20.000 | | |
| Nickel | Ni % | 9.000 - 12.000 | | |
| Molybdenum | Mo % | 2.000 - 2.500 | | |
| Nitrogen | N % | 0.200 max | Mechanical Properties | |
| Iron | Fe % | Balance | Tensile Strength in Mpa | 440 - 640 |
| - | - | - | Yield Strength in Mpa | 195 min. |
| - | - | - | Elongation in % | 30 min. |
| - | - | - | Reduction of Area in % | - |
| - | - | - | Hardness in BHN | - |
| - | - | - | Impact in Joule | 80 @ RT |

| Cross Reference Table | | | | | |
|-----------------------|----------|---------|---|--|--|
| Material | Standard | Country | Grade Belong to the Industry | | |
| 1.4409 | DIN | Germany | Casting | | |
| 316 | AISI | USA | Bar, Wire, Strip, Plat, Sheet and Forging | | |
| 316 S17 | BS | British | Wire | | |
| SUS 316 | JIS | Japan | Bar | | |
| 03CH17N14M3 | GOST | Russia | Pipes, Fittings, Bar, Sheet and Forging | | |
| A743 CF8M | ASTM | USA | Casting | | |
| A351 CF8M | 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

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.