



## **Material - ISO 1.4409**

## **Standard Specification for Steel Castings for Pressure Purposes**

**Group - Ferrous Stainless Steel Alloys** 

Sub Group - ISO 1.4409 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.      | Normalizing or Quenching or Solution Annealing |           |
| Manganese            | Mn % | 2.000 max.      |  |           |
| Phosphorus           | P %  | 0.035 max.      |  |           |
| Sulphur              | S %  | 0.025 max.      |  |           |
| Chromium             | Cr % | 18.000 - 20.000 |  |           |
| Molybdenum           | Mo % | 2.000 - 2.500   |  |           |
| Nickel               | Ni % | 9.000 - 12.000  |  |           |
| Nitrogen             | N %  | 0.200 max.      | Mechanical Properties                          |           |
| Iron                 | Fe % | Balance         | Tensile Strength in Mpa                        | 440 min.  |
| -                    | -    | -               | Yield Strength in Mpa                          | 195 min.  |
| -                    | -    | -               | Elongation in %                                | 30 min.   |
| -                    | -    | -               | Reduction of Area in %                         | -         |
| -                    | -    | -               | Hardness in BHN                                | -         |
| -                    | -    |                 | Impac <mark>t in Joule</mark>                  | 80 J @ RT |

| Cross Reference Table |          |               |                              |  |
|-----------------------|----------|---------------|------------------------------|--|
| Material              | Standard | Country       | Grade Belong to the Industry |  |
| GX2CrNiMo19-11-2      | BS       | British       | Plate, Tubes and Forging     |  |
| GX2CrNiMo19-11-2      | ISO      | International | Casting                      |  |
| SCS 16A               | JIS      | Japan         | Casting                      |  |
| A 743 Grade CF-3M     | ASTM     | USA           | Casting                      |  |
| A 743 J92800          | ASTM     | USA           | Casting                      |  |
| A 744 Grade CF-8M     | ASTM     | USA           | Casting                      |  |
| GX2CrNiMo19-11-2      | MSZ      | Hungary       | 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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