



## Material - MSZ GX5CrNiMoNb19-11-2

### Standard Specification for Steel Castings for Pressure Purposes

Group - Ferrous Stainless Steel Alloys

Sub Group - MSZ GX5CrNiMoNb19-11-2 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 %         | 0.070 max.      | Normalizing or Quenching or Solution Annealing   |  |
| Silicon              | Si %        | 1.500 max.      |  |  |
| Manganese            | Mn %        | 1.500 max.      |  |  |
| Phosphorus           | P %         | 0.040 max.      |  |  |
| Sulphur              | S %         | 0.030 max.      |  |  |
| Chromium             | Cr %        | 18.000 - 20.000 |  |  |
| Molybdenum           | Mo %        | 2.000 - 2.500   |  |  |
| Nickel               | Ni %        | 9.000 - 12.000  |  |  |
| Copper               | Cu %        | 0.500 max.      |  |  |
| Nb + Ta              | Nb % + Ta % | 1.000 max.      |  |  |
| Iron                 | Fe %        | Balance         | <b>Mechanical Properties</b><br>Tensile Strength in Mpa      440 - 640<br>Yield Strength in Mpa      185 min.<br>Elongation in %      25 min.<br>Reduction of Area in %      -<br>Hardness in BHN      -<br>Impact in Joule      40 J @ RT |  |
| -                    | -           | -               |  |  |
| -                    | -           | -               |  |  |
| -                    | -           | -               |  |  |
| -                    | -           | -               |  |  |
| -                    | -           | -               |  |  |

| Cross Reference Table |          |                |                              |
|-----------------------|----------|----------------|------------------------------|
| Material              | Standard | Country        | Grade Belong to the Industry |
| GX5CrNiMoNb19-11-2    | BS       | British        | Plate, Tubes and Forging     |
| GX5CrNiMoNb19-11-2    | EN       | European Union | Casting                      |
| 1.4408                | EN       | European Union | Casting                      |
| GX5CrNiMoNb19-11-2    | CSN      | Czech Republic | Casting                      |
| 1.4408                | CSN      | Czech Republic | Casting                      |
| 1.4408                | MSZ      | Hungary        | Casting                      |
| GX5CrNiMoNb19-11-2    | DIN      | Germany        | 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](mailto:marketing@gravitycastindia.com)**

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