

# Material: ISO G17NiCrMo13-6

## Standard Specification for Steel Castings for Pressure Purposes

**Group:** Ferrous Mild Steel Alloys

**Sub Group:** ISO G17NiCrMo13-6 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 %  | 0.150 - 0.190 | Normalizing or Quenching or Solution Annealing                                                                                                                                                       |  |
| Silicon              | Si % | 0.500 max.    |                                                                                                                                                                                                      |  |
| Manganese            | Mn % | 0.550 - 0.800 |                                                                                                                                                                                                      |  |
| Phosphorus           | P %  | 0.015 max.    |                                                                                                                                                                                                      |  |
| Sulphur              | S %  | 0.015 max.    |                                                                                                                                                                                                      |  |
| Chromium             | Cr % | 1.300 - 1.800 |                                                                                                                                                                                                      |  |
| Molybdenum           | Mo % | 0.450 - 0.600 |                                                                                                                                                                                                      |  |
| Nickel               | Ni % | 3.000 - 3.500 |                                                                                                                                                                                                      |  |
| Copper               | Cu % | 0.300 max.    |                                                                                                                                                                                                      |  |
| Vanadium             | V %  | 0.050 max.    |                                                                                                                                                                                                      |  |
| Iron                 | Fe % | Balance       | <b>Mechanical Properties</b><br>Tensile Strength in Mpa 750 - 900<br>Yield Strength in Mpa 600 min.<br>Elongation in % 15 min.<br>Reduction of Area in % -<br>Hardness in BHN -<br>Impact in Joule - |  |
| -                    | -    | -             |                                                                                                                                                                                                      |  |
| -                    | -    | -             |                                                                                                                                                                                                      |  |
| -                    | -    | -             |                                                                                                                                                                                                      |  |
| -                    | -    | -             |                                                                                                                                                                                                      |  |
| -                    | -    | -             |                                                                                                                                                                                                      |  |

| Cross Reference Table  |          |               |                              |
|------------------------|----------|---------------|------------------------------|
| Material               | Standard | Country       | Grade Belong to the Industry |
| EN 10213 G17NiCrMo13-6 | BS       | British       | Plate, Tubes and Forging     |
| 1.6781                 | ISO      | International | Casting                      |
| A 352 Grade LC2-1      | ASTM     | USA           | Casting                      |
| A 352 J42215           | ASTM     | USA           | Casting                      |
| G 17 NiCrMo13 6        | ONORM    | Australia     | Casting                      |
| G 17 NiCrMo13 6        | NBN      | Belgium       | Casting                      |
| G 17 NiCrMo13 6        | BDS      | Bulgaria      | Casting                      |

**Disclaimer:** All information displayed in our data sheets are for reference purpose only and are sole property of their respective owners. Information and or material are used for educational purposes only. Data at actual may vary at actual and case to case basis. ICAST Alloys LLP does not guarantee validity of these parameters. Warranties and liabilities are exclusive to our terms and conditions of business.

Customer Care: +91-99090 45075 Email: [info@icastllp.com](mailto:info@icastllp.com)