

## Material - ASTM A 217 Grade C5

### Standard Specification for Steel Castings for Pressure Purposes

Group - Ferrous Stainless Steel Alloys

Sub Group - ASTM A 217 Grade C5 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 %  | 0.200 max.    | Normalizing or Quenching or Solution Annealing                                                                                                                                                                     |  |
| Silicon              | Si % | 0.750 max.    |                                                                                                                                                                                                                    |  |
| Manganese            | Mn % | 0.500 - 0.800 |                                                                                                                                                                                                                    |  |
| Phosphorus           | P %  | 0.040 max.    |                                                                                                                                                                                                                    |  |
| Sulphur              | S %  | 0.045 max.    |                                                                                                                                                                                                                    |  |
| Chromium             | Cr % | 4.000 - 6.500 |                                                                                                                                                                                                                    |  |
| Molybdenum           | Mo % | 0.450 - 0.650 |                                                                                                                                                                                                                    |  |
| Copper               | Cu % | 0.500 max.    |                                                                                                                                                                                                                    |  |
| Tungsten             | W %  | 0.100 max.    |                                                                                                                                                                                                                    |  |
| Other                | Ot % | 1.000 max.    |                                                                                                                                                                                                                    |  |
| Iron                 | Fe % | Balance       | <b>Mechanical Properties</b><br>Tensile Strength in Mpa 620 - 795<br>Yield Strength in Mpa 415 min.<br>Elongation in % 18 min.<br>Reduction of Area in % 35 min.<br>Hardness in BHN -<br>Impact in Joule 27 J @ RT |  |
| -                    | -    | -             |                                                                                                                                                                                                                    |  |
| -                    | -    | -             |                                                                                                                                                                                                                    |  |
| -                    | -    | -             |                                                                                                                                                                                                                    |  |
| -                    | -    | -             |                                                                                                                                                                                                                    |  |
| -                    | -    | -             |                                                                                                                                                                                                                    |  |

| Cross Reference Table |          |               |                              |
|-----------------------|----------|---------------|------------------------------|
| Material              | Standard | Country       | Grade Belong to the Industry |
| EN 10213 GX15CrMo5    | BS       | British       | Plate, Tubes and Forging     |
| GX15CrMo5             | ISO      | International | Casting                      |
| 1.7365                | ISO      | International | Casting                      |
| SCPH 61               | JIS      | Japan         | Casting                      |
| A 217 J42045          | ASTM     | USA           | Casting                      |
| 1.7365                | BS       | British       | Casting                      |
| GX 15 CrMo 5          | SS       | Sweden        | Casting                      |

**For any further inquiries, please do not hesitate to contact us. You may visit our website at [AMTECH TECHNOCAST PVT. LTD.](http://AMTECH TECHNOCAST PVT. LTD.), call us at [+91 9879817994](tel:+919879817994), or email us at [manish@amtechtechnocast.com](mailto:manish@amtechtechnocast.com)**

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