



## Material - IS 4522 Grade 3

## **Standard Specification for Heat Resistant Alloy Steel Castings**

**Group - Ferrous Stainless Steel Alloys** 

Sub Group - IS 4522 Grade 3 Heat Resistant Alloy Steel Castings

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries

**Grade Belongs to the Industry - Casting** 

| Chemical Composition |      |                 | Heat Treatment                |          |
|----------------------|------|-----------------|-------------------------------|----------|
| Carbon               | C %  | 1.200 - 1.400   |                               |          |
| Silicon              | Si % | 2.000 max.      |                               |          |
| Manganese            | Mn % | 1.000 max.      |                               |          |
| Phosphorus           | P %  | 0.050 max.      | As - Cast or Annealing        | nnealing |
| Sulphur              | S %  | 0.050 max.      |                               |          |
| Chromium             | Cr % | 27.000 - 30.000 |                               |          |
| Molybdenum           | Mo % | 0.500 max.      |                               |          |
| Iron                 | Fe % | Balance         |                               | _        |
| -                    | -    | -               | Mechanical Properties         |          |
| -                    | -    |                 | Tensile Strength in Mpa       | 390 min. |
| -                    | -    | -               | Yield Strength in Mpa         | -        |
| -                    | -    | -               | Elongation in %               | -        |
| -                    | -    | -               | Reduction of Area in %        | -        |
| -                    | -    | -               | Hardness in BHN               | -        |
| -                    | -    | -               | Impac <mark>t in Joule</mark> | -        |

| Cross Reference Table |          |         |                              |  |
|-----------------------|----------|---------|------------------------------|--|
| Material              | Standard | Country | Grade Belong to the Industry |  |
| 1.4777                | DIN      | Germany | Casting                      |  |
| Gx130GSi29            | 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

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