



**GRAVITY CAST PVT. LTD.**  
**GRAVITY GROUP OF COMPANIES**

## Material - IS 3444 Grade 6

**Standard Specification for Corrosion Resistant High Alloy Steel and Nickel Base Castings for General Applications**

**Group - Ferrous Stainless Steel Alloys**

**Sub Group - IS 3444 Corrosion Resistant High Alloy Steel and Nickel Base Castings for General Applications**

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

**Grade Belongs to the Industry - Casting**

| Chemical Composition |      |                 | Heat Treatment  |  |
|----------------------|------|-----------------|---|--|
| Carbon               | C %  | 0.160 max.      | Solution Annealing  |  |
| Silicon              | Si % | 2.000 max.      |   |  |
| Manganese            | Mn % | 1.500 max.      |   |  |
| Phosphorus           | P %  | 0.170 max.      |   |  |
| Sulphur              | S %  | 0.040 max.      |   |  |
| Chromium             | Cr % | 18.000 - 21.000 |   |  |
| Molybdenum           | Mo % | 1.500 max.      |   |  |
| Nickel               | Ni % | 9.000 - 12.000  |   |  |
| Selenium             | Se % | 0.200 - 0.350   |   |  |
| Iron                 | Fe % | Balance         |   |  |
| -                    | -    | -               | <b>Mechanical Properties</b><br>Tensile Strength in Mpa      480 min.<br>Yield Strength in Mpa      210 min.<br>Elongation in %      23 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                 |
| A743 CF8              | ASTM     | USA            | Casting                                      |
| 304                   | AISI     | USA            | Bar, Wire, Strip, Plate, Sheet and Forging   |
| 1.4308                | DIN      | Germany        | Casting                                      |
| 1.4301                | EN       | European Union | Forging                                      |
| 304 S 11              | BS       | British        | Bright Bars, Hot Rolled and Cold Rolled Coil |
| SUS 304               | JIS      | Japan          | Hot Rolled Equal Leg Angles                  |
| 08CH18N10             | GOST     | Russia         | Pipes, Fittings, Bar, Sheet and Forging      |

**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)**

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.

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