



## Material - BS ANC 2

### Standard Specification for Martensitic Stainless Steel; Investment Castings

Group - Ferrous Stainless Steel Alloys

Sub Group - BS ANC 2 Martensitic Stainless Steel; Investment Castings

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

Grade Belongs to the Industry - Casting

| Chemical Composition    |      |                 | Heat Treatment        |  |
|-------------------------|------|-----------------|-----------------------|--|
| Carbon                  | C %  | 0.120 - 0.250   | Hardening + Tempering |  |
| Silicon                 | Si % | 0.200 - 1.000   |                       |  |
| Manganese               | Mn % | 0.200 - 1.000   |                       |  |
| Phosphorus              | P %  | 0.035 max.      |                       |  |
| Sulphur                 | S %  | 0.035 max.      |                       |  |
| Chromium                | Cr % | 15.500 - 20.000 |                       |  |
| Nickel                  | Ni % | 1.500 - 3.000   |                       |  |
| Iron                    | Fe % | Balance         |                       |  |
| -                       | -    | -               |                       |  |
| Mechanical Properties   |      |                 |                       |  |
| Tensile Strength in Mpa |      | 850 - 1000      |                       |  |
| Yield Strength in Mpa   |      | 630 min         |                       |  |
| Elongation in %         |      | 8 min.          |                       |  |
| Reduction of Area in %  |      | -               |                       |  |
| Hardness in HB          |      | 248 - 302       |                       |  |
| Impact in Joule         |      | -               |                       |  |

| Cross Reference Table |          |         |                              |
|-----------------------|----------|---------|------------------------------|
| Material              | Standard | Country | Grade Belong to the Industry |
| J91803                | UNS      | USA     | Casting                      |
| AoX 20 CrNi 17-2      | MSZ      | Hungary | Casting                      |
| 1.4059                | DIN      | Germany | Casting                      |
| Z 20 Cn 17.2M         | AFNOR NF | France  | Casting                      |
| G X 22 CrNi 17        | DIN      | Germany | Casting                      |
| A743 CB30             | ASTM     | USA     | Casting                      |
| 3444 Grade 12         | IS       | India   | 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)**

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.