GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

# Material - BS ISO 16143-1 X1NiCrMoCu31-27-4 (4563-080-28-I)

## Standard Specification for Stainless Steels for General Purposes

**Group - Ferrous Stainless Steel Alloys**

**Sub Group - BS ISO 16143-1 X1NiCrMoCu31-27-4 (4563-080-28-I) Stainless Steels for General Purposes**

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

**Grade Belongs to the Industry - Steel**

| Chemical Composition | | |
|---|---|---|
| Carbon | C % | 0.020 max. |
| Silicon | Si % | 0.700 max. |
| Manganese | Mn % | 2.000 max. |
| Phosphorus | P % | 0.030 max. |
| Sulphur | S % | 0.010 max. |
| Chromium | Cr % | 26.000 - 28.000 |
| Molybdenum | Mo % | 3.000 - 4.000 |
| Nickel | Ni % | 30.000 - 32.000 |
| Nitrogen | N % | 0.100 max. |
| Copper | Cu % | 0.700 - 1.500 |
| Iron | Fe % | Balance |
| - | - | - |
| - | - | - |
| - | - | - |
| - | - | - |

| Heat Treatment |
|---|
| As-Raw or Solution Annealing |

| Mechanical Properties | |
|---|---|
| Tensile Strength in Mpa | 500 - 700 |
| Proof Strength in Mpa | 260 min. |
| Elongation in % | 40 min. |
| Reduction of Area in % | - |
| Hardness in HBW | - |
| Impact in Joule | 100 @ RT |

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| Cross Reference Table | | | |
|---|---|---|---|
| **Material** | **Standard** | **Country** | **Grade Belong to the Industry** |
| EN 10088-3 X 1 NiCrMoCu 31-27-4 | UNI | Italy | Steel and Casting |
| EN 10088-3 X1NiCrMoCu31-27-4 | AFNOR NF | France | Steel |
| EN 10088-1 X1NiCrMoCu31-27-4 | AFNOR NF | France | Steel |
| EN 10088-3 X1NiCrMoCu31-27-4 | DIN | Germany | Steel |
| EN 10088-2 1.4563 | DIN | Germany | Steel |
| 10250-4 X 1 NiCrMoCu 31 27 4 | EN | European Union | Steel and Forging |
| 10250-4 1.4563 | EN | European Union | Steel 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**

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.