

Material - Gravity Nimonic Alloy 81

Standard Specification for Seamless Nickel and Nickel Alloy Pipe, Tube, Sheet, Strip, Plate, Round Bar, Flat Bar, Forging Stock, Hexagon and Wire

Group - Non-Ferrous Nickel Alloys

Sub Group - Gravity Nimonic Alloy 81 Seamless Nickel and Nickel Alloy Pipe, Tube, Sheet, Strip, Plate, Round Bar, Flat Bar, Forging Stock, Hexagon and Wire

Application - Intended for Valve, Pump, General Engineering, Automotive and other Industries Grade Belongs to the Industry - Pipe, Tube, Sheet, Strip, Plate, Hexagon and Wire

| Chemical Composition | | | Heat Treatment | |
|----------------------|------|-------------|--------------------------------------|-------------|
| Carbon | C % | 0.050 max. | | |
| Silicon | Si % | 0.500 max. | | |
| Manganese | Mn % | 0.500 max. | | |
| Chromium | Cr % | 30.000 max. | As-Cast or Annealing or Age Hardning | |
| Sulphur | S % | 0.015 max. | | |
| Molybdenum | Mo % | 0.300 max. | | |
| Copper | Cu % | 0.200 max. | | |
| Cobalt | Co % | 2.000 max. | | |
| Aluminium | Al % | 0.900 max. | Mechanical Properties | |
| Boron | В % | 0.003 max. | Tensile Strength in Mpa | 897 - 1094 |
| Iron | Fe % | 1.000 max. | Yield Strength in Mpa | 420 - 633.2 |
| Titanium | Ti % | 1.800 max. | Elongation in % | 30.9 - 38.3 |
| Zirconium | Zr % | 0.060 max. | Reduction of Area in % | 30.9 - 38.3 |
| Nickel | Ni % | Balance | Hardness in HV | 230 min. |
| - | - | - | Impact in Joule | - |
| - | | - | | _ |

| Cross Reference Table | | | | | |
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| Material | Standard | Country | Grade Belong to the Industry | | |
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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.