

Material - ASME SB-637 N07080

Standard Specification for Precipitation-Hardening and Cold Worked Nickel Alloy Bars, Forgings, and Forging Stock for Moderate or High Temperature Service

Group - Non-Ferrous Nickel Alloys

Sub Group - ASME SB-637 N07080 Precipitation-Hardening and Cold Worked Nickel Alloy Bars, Forgings, and Forging Stock for Moderate or High Temperature Service

Application - Intended for Valve, Pump, General Engineering, Automotive and other Industries Grade Belongs to the Industry - Bars, Forgings and Forging

| Chemical Composition | | | Heat Treatment | |
|----------------------|------|-----------------|--------------------------------------|----------|
| Carbon | C % | 0.100 max. | | |
| Silicon | Si % | 1.000 max. | | |
| Manganese | Mn % | 1.000 max. | | |
| Chromium | Cr % | 18.000 - 21.000 | As-Cast or Annealing or Age Hardning | |
| Sulphur | S % | 0.015 max. | | |
| Aluminium | Al % | 0.500 - 1.800 | | |
| Iron | Fe % | 3.000 max. | | |
| Titanium | Ti % | 1.800 - 2.700 | | |
| Nickel | Ni % | Balance | Mechanical Properties | |
| - | - | - | Tensile Strength in Mpa | 930 min. |
| - | - | - | Yield Strength in Mpa | 620 min. |
| - | - | - | Elongation in % | 20 min. |
| - | - | - | Reduction of Area in % | • |
| - | 1 | - | Hardness in BHN | - |
| - | - | - | Impac <mark>t in Joule</mark> | - |

| Cross Reference Table | | | | | |
|-----------------------|----------|---------|---------------------------------------------------|--|--|
| Material | Standard | Country | Grade Belong to the Industry | | |
| Nimonic Alloy 80A | Gravity | India | Pipe, Tube, Sheet, Strip, Plate, Hexagon and Wire | | |
| B 637 N07080 | ASTM | USA | Bars, Forgings and Forging | | |
| N07080 | UNS | USA | Bars, Forgings and Forging | | |
| - | - | - | - | | |
| - | - | - | - | | |
| - | - | - | - | | |
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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.