



GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

Material - ASME SB-564 N06110

Standard Specification for Nickel Alloy Forgings

Group - Non-Ferrous Nickel Alloys

Sub Group - ASME SB-564 N06110 Nickel Alloy Forgings

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

Grade Belongs to the Industry - Forging

| Chemical Composition | | | Heat Treatment | | | | | | | | | | | | | | | |
|-------------------------|-----------|-----------------|--|--|-----------------------|--|-------------------------|----------|-----------------------|----------|-----------------|---------|------------------------|---|-----------------|---|-----------------|---|
| Carbon | C % | 0.150 max. | As-Cast or Annealing or Age Hardning | | | | | | | | | | | | | | | |
| Silicon | Si % | 1.000 max. | | | | | | | | | | | | | | | | |
| Manganese | Mn % | 1.000 max. | | | | | | | | | | | | | | | | |
| Chromium | Cr % | 28.000 - 33.000 | | | | | | | | | | | | | | | | |
| Sulphur | S % | 0.015 max. | | | | | | | | | | | | | | | | |
| Molybdenum | Mo % | 9.000 - 12.000 | | | | | | | | | | | | | | | | |
| Phosphorus | P % | 0.015 max. | | | | | | | | | | | | | | | | |
| Copper | Cu % | 0.500 max. | | | | | | | | | | | | | | | | |
| Nb + Ta | Nb% + Ta% | 1.000 max. | | | | | | | | | | | | | | | | |
| Tungsten | W % | 1.000 - 4.000 | | | | | | | | | | | | | | | | |
| Iron | Fe % | 1.000 max. | <table border="1"> <thead> <tr> <th colspan="2">Mechanical Properties</th> </tr> </thead> <tbody> <tr> <td>Tensile Strength in Mpa</td> <td>621 min.</td> </tr> <tr> <td>Yield Strength in Mpa</td> <td>276 min.</td> </tr> <tr> <td>Elongation in %</td> <td>50 min.</td> </tr> <tr> <td>Reduction of Area in %</td> <td>-</td> </tr> <tr> <td>Hardness in BHN</td> <td>-</td> </tr> <tr> <td>Impact in Joule</td> <td>-</td> </tr> </tbody> </table> | | Mechanical Properties | | Tensile Strength in Mpa | 621 min. | Yield Strength in Mpa | 276 min. | Elongation in % | 50 min. | Reduction of Area in % | - | Hardness in BHN | - | Impact in Joule | - |
| Mechanical Properties | | | | | | | | | | | | | | | | | | |
| Tensile Strength in Mpa | 621 min. | | | | | | | | | | | | | | | | | |
| Yield Strength in Mpa | 276 min. | | | | | | | | | | | | | | | | | |
| Elongation in % | 50 min. | | | | | | | | | | | | | | | | | |
| Reduction of Area in % | - | | | | | | | | | | | | | | | | | |
| Hardness in BHN | - | | | | | | | | | | | | | | | | | |
| Impact in Joule | - | | | | | | | | | | | | | | | | | |
| Aluminium | Al % | 1.000 max. | | | | | | | | | | | | | | | | |
| Titanium | Ti % | 1.000 max. | | | | | | | | | | | | | | | | |
| Nickel | Ni % | 51.000 min. | | | | | | | | | | | | | | | | |
| - | - | - | | | | | | | | | | | | | | | | |

| Cross Reference Table | | | |
|-----------------------|----------|---------|------------------------------|
| Material | Standard | Country | Grade Belong to the Industry |
| B 564 N06110 | ASTM | USA | Forging |
| B 755 N06110 | ASTM | USA | Plate, Sheet and Strip |
| B 756 N06110 | ASTM | USA | Rod and Bar |
| B 757 N06110 | ASTM | USA | Pipe |
| B 758 N06110 | ASTM | USA | Tube |
| B 759 N06110 | ASTM | USA | Pipe and Tube |
| N06110 | UNS | USA | 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.

ONE STOP SOLUTION FOR METAL PARTS