

## Material - ASTM B 168 N06617

**Standard Specification for Nickel-Chromium-Iron Alloys and Nickel-Chromium-Cobalt-Molybdenum Alloy Plate, Sheet and Strip**

**Group - Non-Ferrous Nickel Alloys**

**Sub Group - ASTM B 168 N06617 Nickel-Chromium-Iron Alloys and Nickel-Chromium-Cobalt-Molybdenum Alloy Plate, Sheet and Strip**

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

**Grade Belongs to the Industry - Plate, Sheet and Strip**

| Chemical Composition |      |                 | Heat Treatment                                                                                                                                                                                      |  |
|----------------------|------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Carbon               | C %  | 0.050 - 0.150   | As-Cast or Annealing or Age Hardning                                                                                                                                                                |  |
| Silicon              | Si % | 1.000 max.      |                                                                                                                                                                                                     |  |
| Manganese            | Mn % | 1.000 max.      |                                                                                                                                                                                                     |  |
| Copper               | Cu % | 0.500 max.      |                                                                                                                                                                                                     |  |
| Sulphur              | S %  | 0.015 max.      |                                                                                                                                                                                                     |  |
| Chromium             | Cr % | 20.000 - 24.000 |                                                                                                                                                                                                     |  |
| Aluminium            | Al % | 0.800 - 1.500   |                                                                                                                                                                                                     |  |
| Boron                | B %  | 0.006 max.      | <b>Mechanical Properties</b><br>Tensile Strength in Mpa 655 min.<br>Yield Strength in Mpa 240 min.<br>Elongation in % 25 min.<br>Reduction of Area in % -<br>Hardness in BHN -<br>Impact in Joule - |  |
| Iron                 | Fe % | 3.000 max.      |                                                                                                                                                                                                     |  |
| Molybdenum           | Mo % | 8.000 - 10.000  |                                                                                                                                                                                                     |  |
| Cobalt               | Co % | 10.000 - 15.000 |                                                                                                                                                                                                     |  |
| Titanium             | Ti % | 0.600 max.      |                                                                                                                                                                                                     |  |
| Nickel               | Ni % | 44.500 min.     |                                                                                                                                                                                                     |  |
| -                    | -    | -               |                                                                                                                                                                                                     |  |
| -                    | -    | -               |                                                                                                                                                                                                     |  |

| Cross Reference Table |          |         |                              |
|-----------------------|----------|---------|------------------------------|
| Material              | Standard | Country | Grade Belong to the Industry |
| B 166 N06617          | ASTM     | USA     | Rod, Bar and Wire            |
| B 167 N06617          | ASTM     | USA     | Pipe and Tube                |
| B 564 N06617          | ASTM     | USA     | Forging                      |
| B 626 N06617          | ASTM     | USA     | Tube                         |
| B 546 N06617          | ASTM     | USA     | Pipe                         |
| -                     | -        | -       | -                            |
| -                     | -        | -       | -                            |

**For any further inquiries, please do not hesitate to contact us. You may visit our website at [AMTECH TECHNOCAST PVT. LTD.](http://AMTECH TECHNOCAST PVT. LTD.), call us at [+91 9879817994](tel:+919879817994), or email us at [manish@amtechtechnocast.com](mailto:manish@amtechtechnocast.com)**

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