

## Material - ASTM B 619 R30556

### Standard Specification for Nickel and Nickel-Cobalt Alloy Pipe

Group - Non-Ferrous Nickel Alloys

Sub Group - ASTM B 619 R30556 Nickel and Nickel-Cobalt Alloy Pipe

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

Grade Belongs to the Industry - Pipe

| Chemical Composition |      |                 |
|----------------------|------|-----------------|
| Carbon               | C %  | 0.050 - 0.150   |
| Silicon              | Si % | 0.200 - 0.800   |
| Manganese            | Mn % | 0.500 - 2.000   |
| Chromium             | Cr % | 21.000 - 23.000 |
| Sulphur              | S %  | 0.015 max.      |
| Molybdenum           | Mo % | 2.500 - 4.000   |
| Phosphorus           | P %  | 0.040 max.      |
| Cobalt               | Co % | 16.000 - 21.000 |
| Aluminium            | Al % | 0.100 - 0.500   |
| Lanthanum            | La % | 0.005 - 0.100   |
| Boron                | B %  | 0.020 max.      |
| Niobium              | Nb % | 0.030 max.      |
| Tantalum             | Ta % | 0.300 - 1.250   |
| Nitrogen             | N %  | 0.100 - 0.300   |
| Tungsten             | W %  | 2.000 - 3.500   |

| Chemical Composition                 |          |                 |
|--------------------------------------|----------|-----------------|
| Zirconium                            | Zr %     | 0.001 - 0.100   |
| Nickel                               | Ni %     | 15.000 - 22.500 |
| Iron                                 | Fe %     | Balance         |
| -                                    | -        | -               |
| -                                    | -        | -               |
| Heat Treatment                       |          |                 |
| As-Cast or Annealing or Age Hardning |          |                 |
| Mechanical Properties                |          |                 |
| Tensile Strength in Mpa              | 690 min. |                 |
| Yield Strength in Mpa                | 310 min. |                 |
| Elongation in %                      | 40 min.  |                 |
| Reduction of Area in %               | -        |                 |
| Hardness in BHN                      | -        |                 |
| Impact in Joule                      | -        |                 |

| Cross Reference Table |          |         |                                |
|-----------------------|----------|---------|--------------------------------|
| Material              | Standard | Country | Grade Belong to the Industry   |
| B 622 R30556          | ASTM     | USA     | Pipe and Tube                  |
| B 626 R30556          | ASTM     | USA     | Tube                           |
| B 435 R30566          | ASTM     | USA     | Plate, Sheet and Strip         |
| B 472 R30566          | ASTM     | USA     | Billets and Bars for Reforging |
| B 572 R30566          | ASTM     | USA     | Rod                            |
| SB-619 R30556         | ASME     | USA     | Pipe                           |
| SB-622 R30556         | ASME     | USA     | Pipe and Tube                  |

**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)**

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.