

## Material - ASTM B 444 N06625 Grade 1

Standard Specification for Nickel-Chromium-Molybdenum-Columbium Alloys and Nickel-Chromium-Molybdenum-Silicon Alloy Pipe and Tube

Group - Non-Ferrous Nickel Alloys

Sub Group - ASTM B 444 N06625 Grade 1 Nickel-Chromium-Molybdenum-Columbium Alloys and Nickel-Chromium-Molybdenum-Silicon Alloy Pipe and Tube

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

Grade Belongs to the Industry - Pipe and Tube

| Chemical Composition |           |                 | Heat Treatment                       |          |
|----------------------|-----------|-----------------|--------------------------------------|----------|
| Carbon               | C %       | 0.100 max.      | As-Cast or Annealing or Age Hardning |          |
| Silicon              | Si %      | 0.500 max.      |                                      |          |
| Manganese            | Mn %      | 0.500 max.      |                                      |          |
| Chromium             | Cr %      | 20.000 - 23.000 |                                      |          |
| Sulphur              | S %       | 0.015 max.      |                                      |          |
| Phosphorus           | P %       | 0.0150 max.     |                                      |          |
| Nb + Ta              | Nb% + Ta% | 3.150 - 4.150   |                                      |          |
| Cobalt               | Co %      | 1.000 max.      | Mechanical Properties                |          |
| Molybdenum           | Mo %      | 8.000 - 10.000  |                                      |          |
| Iron                 | Fe %      | 5.000 max.      |                                      |          |
| Aluminium            | Al %      | 0.400 max.      |                                      |          |
| Titanium             | Ti %      | 0.400 max.      |                                      |          |
| Nickel               | Ni %      | 58.000 min.     |                                      |          |
| -                    | -         | -               |                                      |          |
| -                    | -         | -               |                                      |          |
|                      |           |                 | Tensile Strength in Mpa              | 827 min. |
|                      |           |                 | Yield Strength in Mpa                | 414 min. |
|                      |           |                 | Elongation in %                      | 30 min.  |
|                      |           |                 | Reduction of Area in %               | -        |
|                      |           |                 | Hardness in BHN                      | -        |
|                      |           |                 | Impact in Joule                      | -        |

| Cross Reference Table |          |         |                              |
|-----------------------|----------|---------|------------------------------|
| Material              | Standard | Country | Grade Belong to the Industry |
| B 443 N06625 Grade 1  | ASTM     | USA     | Plate, Sheet and Strip       |
| B 443 N06625 Grade 2  | ASTM     | USA     | Plate, Sheet and Strip       |
| B 444 N06625 Grade 2  | ASTM     | USA     | Pipe and Tube                |
| B 446 N06625          | ASTM     | USA     | Rod and Bar                  |
| B 704 N06625          | ASTM     | USA     | Tube                         |
| B 705 N06625 Grade 1  | ASTM     | USA     | Pipe                         |
| B 705 N06625 Grade 2  | 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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