

# Hastelloy

# B

UNS N10001

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Nickel

Molybdenum

[www.arialloy.com/hastelloy-b/](http://www.arialloy.com/hastelloy-b/)

## Chemical Composition

| Ni%     | Mo%         | Fe%       | Cr%    | C%        | Si%   |
|---------|-------------|-----------|--------|-----------|-------|
| Balance | 26.0 ~ 30.0 | 4.0 ~ 6.0 | ≤ 1.0  | ≤ 0.05    | ≤ 1.0 |
| Co%     | Mn%         | P%        | S%     | V%        |       |
| ≤ 2.50  | ≤ 1.0       | ≤ 0.04    | ≤ 0.03 | 0.2 ~ 0.4 |       |

## Mechanical Properties

| Product              | Condition     | T.S.     | Y.S.     | EL     | RA     | Hardness |
|----------------------|---------------|----------|----------|--------|--------|----------|
|                      |               | MPa, min | MPa, min | %, min | %, min | HRB, max |
| Pipe & Tube          | All           | 690      | 310      | 40     | ...    | ...      |
| Bar & Rod            | 7.94 ~ 38.1mm | 795      | 315      | 35     | ...    | ...      |
| Bar & Rod            | 38.1 ~ 88.9mm | 690      | 315      | 30     | ...    | ...      |
| Sheet, Plate & Strip | ≤ 4.76mm      | 795      | 345      | 45     | ...    | 100      |
| Sheet, Plate & Strip | 4.76 ~ 63.5mm | 690      | 310      | 40     | ...    | 100      |

## Physical Properties

| Density            |                   |
|--------------------|-------------------|
| lb/in <sup>3</sup> | g/cm <sup>3</sup> |
| 0.334              | 9.24              |

## Main Standards

| Billet, Rod & Bar        | Plate, Sheet & Strip     | Pipe & Tube                                                             | Fittings                 | Welding Products                                |
|--------------------------|--------------------------|-------------------------------------------------------------------------|--------------------------|-------------------------------------------------|
| ASTM B335<br>ASME SB 335 | ASTM B333<br>ASME SB 333 | ASTM B622/ASME SB 622<br>ASTM B619/ASME SB 619<br>ASTM B626/ASME SB 626 | ASTM B366<br>ASME SB 366 | AWS A5.14/<br>ERNiMo-1<br>AWS A5.11/<br>ENiMo-1 |