

# Alloy B-2, UNS N10665, Nickel Alloy Steel Pipe/Tube

# **Basic Information**

Place of Origin: ChinaBrand Name: KASUGAI

Certification:
ASTM B622/ASTM B619/ASTM B626/ASTM

B366

Model Number: Alloy B-2, UNS N10665

Minimum Order Quantity: 5 tonsPrice: USD

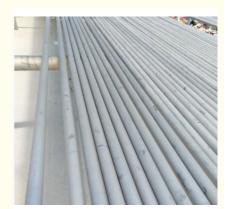
Packaging Details: Seaworthy Packing

• Delivery Time: 45 55days depends on quantity

Payment Terms: L/C,T/T,D/PSupply Ability: 300 t per month



# **Product Specification**



# More Images



## **Product Description**

Alloy B-2 (UNS N10665) is a nickel-molybdenum alloy widely recognized for its outstanding resistance to reducing environments, such as hydrochloric acid, hydrogen chloride gas, sulfuric acid, and phosphoric acid. When manufactured into Nickel Alloy Steel Pipes and Tubes, Alloy B-2 provides excellent mechanical strength, corrosion resistance, and reliability in demanding chemical process applications.

#### **Product Features**

- **1.Superior Corrosion Resistance:** Excellent performance against hydrochloric acid across the full concentration and temperature range.
- **2.High Purity Composition:** Low iron and carbon minimize carbide precipitation and maintain corrosion resistance after welding.
- **3.Good Fabricability:** Alloy B-2 pipes and tubes can be formed and welded using standard methods, making them suitable for complex engineering projects.
- 4.Thermal Stability: Maintains strength and toughness even at elevated temperatures.
- 5.Versatility: Ideal for heat exchangers, piping systems, pressure vessels, and evaporators in harsh chemical environments.

## Advantages of Alloy B-2 (UNS N10665) Steel Pipe

- 1.Long service life due to resistance to uniform and localized corrosion.
- 2. Reduced maintenance costs compared to conventional stainless steels.
- 3. Reliable performance in industries where process purity and safety are critical.
- 4. Adaptable for both seamless and welded pipe/tube production.
- 5. Global availability in customized sizes and wall thicknesses.

#### **Technical Specifications**

1. Chemical Composition Requirements

Ni	Cr	Мо	Fe	С	Si	Со	Mn	Р	S
Remainder	≤1.0	26.0~30.0	≤2.0	≤0.02	≤0.10	≤1.0	≤1.0	≤0.04	≤0.03

2. Mechanical Properties of ASTM B622 UNS N10665

Tensile Strength, min.		Yield S	Strength, min.	Elongation	
ksi	MPa	ksi	MPa	min. %	
110	760	51	350	40	

#### Hastelloy B2 vs B3

Hastelloy b2	Hastelloy b3
High resistance to medium-concentrated sulphuric acid and a variety of non-oxidizing acids	Outstanding resistance to knife-line and heat-affected zone attacks

	The majority of alloy B2 is utilised in equipment for gas processing, specialty chemicals, pharmaceuticals, chemicals, and seawater applications.	It is utilized in petrochemicals, power generation, off- shore oil drilling, heat exchangers, condensers, and the pulp and paper industries
	Significant corrosion resistance in a reducing environment	Outstanding resistance to pitting and stress corrosion cracking
	Excellent resistance to a wide variety of organic acids	Hydrochloric acid resistance at all concentration leve

## **Frequently Asked Questions (FAQ)**

#### Q1: What is Alloy B-2 (UNS N10665)?

A: Alloy B-2 is a nickel-molybdenum alloy known for superior resistance to reducing environments, especially hydrochloric

#### Q2: What industries commonly use Alloy B-2 pipes and tubes?

A: They are widely used in chemical, petrochemical, pharmaceutical, and pollution control industries.

#### Q3: Can Alloy B-2 be welded easily?

A: Yes, it has good weldability, but care must be taken to avoid heat-affected zone corrosion. Proper post-weld cleaning is recommended.

#### Q4: What standards apply to Alloy B-2 pipes and tubes?

A: The common standards are ASTM B619, ASTM B622, and ASTM B626.

#### Q5: Why choose Alloy B-2 over stainless steel?

A: While stainless steels may fail in aggressive hydrochloric acid environments, Alloy B-2 maintains resistance, reducing downtime and repair costs.

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