# ASTM Standard Inconel Alloy Heat Resistant Nickel Chromium Superalloy

# **Basic Information**

Place of Origin: ChinaBrand Name: Victory

Model Number: Inconel Alloy



# **Product Specification**

• Coefficient Of 14.0 μm/m °C (20 – 100°C) Expansion:

• Application: Airplanes, Cars, Ships, Etc.

Heat Resistance: High Delivery State: Sosoloid

• Curie Point: -319°F (-195°C)

Standard: ASTM AISI JIS DIN GB

• Tolerance: ±1%

Type: Nickel-Chromium-Based Superalloy

• Highlight: Nickel Chromium Inconel Alloy,

ASTM Standard Inconel Alloy, Heat Resistant Inconel Alloy

## **Product Description:**

The Inconel Alloy is an ideal choice for applications that require high strength and resistance to extreme temperatures. This alloy is made of nickel-chromium and is known for its excellent corrosion resistance. Its magnetic permeability is 1.0035, which makes it an attractive choice for many applications. The Inconel Alloy has a specific heat capacity of 0.435 J/g-°C, making it ideal for use in high-temperature environments

The Inconel Alloy is widely used in the aerospace industry, where it is used to make various parts for airplanes and spacecraft. It is also used in the automotive industry to make parts that require high strength, such as exhaust systems and engine components. In the marine industry, the Inconel Alloy is used to make various parts for ships, including propellers, valves, and piping systems. It is also used in the chemical processing industry to make equipment for handling corrosive materials.

The Inconel Alloy is known for its excellent corrosion resistance. It can withstand a wide range of corrosive environments, including seawater, acids, and alkaline solutions. It is also resistant to oxidation and can maintain its strength and integrity even in high-temperature environments. This makes it an ideal choice for applications that require high resistance to corrosion and high-temperature strength. The Inconel Alloy is manufactured to strict tolerances, with a tolerance of £1%. This ensures that the alloy parts produced are of consistent quality and meet the required specifications. This alloy is available in various forms, including sheets, plates, bars, and wires. In summary, the Inconel Alloy is a high-performance alloy agent in steel that is widely used in various industries. Its excellent corrosion resistance, high-temperature strength, and good weldability make it an ideal choice for applications that require high resistance to corrosion and high-temperature strength. The Inconel Strip is a popular form of this alloy in the market. It is used in a wide range of applications, including airplanes, cars, ships, and many other industrial applications. It is manufactured to strict tolerances, with a tolerance of ±1%, ensuring that the alloy parts produced are of consistent quality and meet the required specifications.

#### Features:

Product Name: Inconel Alloy Curie Point: -319°F (-195°C) Heat Resistance: High

Coefficient Of Expansion: 14.0 µm/m °C (20 - 100°C)

Wall Tolerance: ±3-5%

Application: Airplanes, Cars, Ships, Etc.

Alloy Parts: Yes Elastic Alloy: Yes Fesimg Alloy: No

#### **Technical Parameters:**

Technical Parameter	Value
Туре	Nickel-Chromium-Based Superalloy
Coefficient Of Expansion	14.0 μm/m °C (20 – 100°C)
Outer Diameter	1/2"~48"
Curie Point	-319°F (-195°C)
Magnetic Permeability	1.0035
Corrosion Resistance	Excellent
Application	Airplanes, Cars, Ships, Etc.
Tolerance	±1%
Delivery State	Sosoloid
Heat Resistance	High

#### **Applications:**

The plain end, beveled end, and threaded pipe ends of Victory Inconel Alloy make it suitable for various piping systems. The pipes are available in the outer diameter range of 1/2" to 48", with a tolerance level of ±1%. The pipes are designed to withstand high temperatures and pressure, making it a reliable choice for critical applications.

One of the unique features of Victory Inconel Alloy is its low magnetic permeability of 1.0035, making it an excellent choice for applications where magnetic interference needs to be avoided. The curie point of -319°F (-195°C) makes it suitable for cryogenic applications as well.

The Victory Inconel Alloy finds its applications in chemical processing industries where it is used in the construction of reactors, heat exchangers, and piping systems. It is also used in aerospace applications due to its strength and resistance to corrosion and high temperatures. In marine engineering, it is used for seawater cooling systems, while in nuclear reactors, it is used for fuel elements and control rods.

Power generation is another sector where Victory Inconel Alloy finds its use. It is used in gas turbines, steam turbines, and heat exchangers due to its high-temperature strength and corrosion resistance properties. The product is designed to perform under critical

conditions, making it an ideal choice for power generation industries.

In summary, Victory Inconel Alloy is a reliable and versatile product of Inconel Special Metals. Its unique features such as low magnetic permeability and high-temperature strength make it an excellent choice for various industries such as chemical processing, aerospace, marine engineering, nuclear reactors, and power generation.

#### **Customization:**

Our brand, Victory, offers product customization services for our Inconel Alloy, a nickel-based deformed superalloy with high heat resistance and a tolerance of ±1%. Our product is sourced from China and meets the ASTM, AISI, JIS, DIN, and GB standards. In addition, our Inconel Alloy has a specific heat capacity of 0.435 J/g-°C.

Our customization services for the Inconel Alloy include:

Expansion Alloy customization

Alloy Steels customization

Alloy Target customization

## Support and Services:

The Inconel Alloy product technical support and services offered include:

Expert technical assistance and guidance for selecting the appropriate Inconel alloy product for specific applications.

Assistance with product installation and maintenance.

Training and education on Inconel alloy product properties, performance, and applications.

Product testing and analysis to ensure quality and performance.

Customized product development and engineering services to meet unique application requirements.

On-site technical support and troubleshooting.

Access to online resources, including technical data sheets, material safety data sheets, and product literature.

## Packing and Shipping:

The Inconel Alloy product will be packed securely in a durable and moisture-resistant packaging material to ensure safe delivery.

The packaging will be labeled with the product name, quantity, and any other necessary information.

The package will be sealed with tamper-evident tape.

Shipping:

The Inconel Alloy product will be shipped via a trusted and reliable shipping carrier.

The shipping method will be selected based on the destination and delivery timeframe required.

The customer will be provided with a tracking number to monitor the status of their shipment.

Any shipping fees will be calculated and added to the customer's order total.

## FAQ:

#### Q: What is Victory Inconel Alloy?

A: Victory Inconel Alloy is a high-performance nickel-chromium-based superalloy that is known for its excellent resistance to high temperatures, corrosion, and oxidation.

#### Q: What are the applications of Victory Inconel Alloy?

A: Victory Inconel Alloy is widely used in industries such as aerospace, chemical processing, and nuclear power generation due to its excellent high-temperature strength and corrosion resistance.

Q: Where is Victory Inconel Alloy manufactured?

A: Victory Inconel Alloy is manufactured in China.

Q: What are the available forms of Victory Inconel Alloy?

A: Victory Inconel Alloy is available in various forms such as sheets, plates, bars, wire, and tubes.

Q: What are the advantages of using Victory Inconel Alloy?

A: Victory Inconel Alloy offers several advantages such as high-temperature strength, excellent corrosion and oxidation resistance, and good fabrication and weldability.



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