# Nuclear Industry Nickel Alloy Inconel 600 Round Bar With Corrosion Resistance

Our Product Introduction

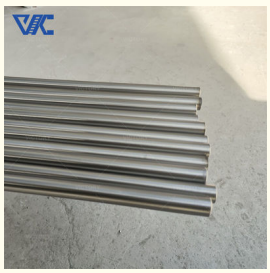
## Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: ISO9001
- Model Number: Inconel 600
- Minimum Order Quantity: 5 Kg
- Price: Negotiable
- Packaging Details: Inconel bar packed in Spool Carton box, Coil package with polybag,then in woodencase
- Delivery Time: 7-20 Days
- Payment Terms: L/C, T/T, Western Union, MoneyGram
- Supply Ability: 300 tons per month

## Product Specification

- Name: Inconel 600 Bar
- Material: Nickel Chromium Iron
- Ni (Min): 72%
- Density: 8.47 G/cm3
- Melting Point: 1,370-1,410°C
- Elongation (≥ %): 30 %
- Thermal Conductivity: 15.9 W/m·K
- Sureface: Bright,Oxided
- Application: Nuclear Reactor Components, Storage Tanks, Processing Devices
- Yield Strength: 240 MPa
- Tensile Strength: 550 MPa
- Hardness: ≤ 160 HB
- Highlight: **corrosion resistant inconel alloy**, **high temperature resistant inconel alloy**

## More Images



## Product Description

Our Product Introduction

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## Introduction:

Inconel 600 Bar is a nickel-chromium-iron alloy material with excellent properties that is widely used in the nuclear industry. It has a minimum nickel content of 72% and a density of 8.47 g/cm3, with a melting point between 1,370-1,410°C. The material has an elongation of 30% and a thermal conductivity of 15.9 W/m·K. Surface treatments can appear bright or oxidized.
Inconel 600 Bar is mainly used in the nuclear industry for nuclear reactor components, storage tanks and processing equipment. It is widely used to manufacture key components of nuclear reactors, such as control rod guides, reactor core support structures, etc., to ensure the safe operation of nuclear reactors. Additionally, it is used in the nuclear industry in storage tanks and processing equipment for handling nuclear materials and nuclear waste. Inconel 600 Bar's corrosion resistance, high strength and high temperature resistance make it ideal for these applications.
All in all, Inconel 600 Bar plays an important role in the nuclear industry. Its excellent properties make it an ideal material for manufacturing nuclear reactor components, storage tanks and processing equipment, ensuring the safe operation of nuclear facilities.

## Characteristic:

Corrosion resistance: Inconel 600 rod has excellent corrosion resistance and can withstand corrosive media in the nuclear industry, including acidic and alkaline media, salt water and radioactive media.
High-temperature stability: The alloy has good high-temperature stability and can maintain strength and structural stability in high-temperature environments, making it suitable for high-temperature applications in the nuclear industry.
Radiation resistance: Inconel 600 rods show good radiation resistance and can reduce radiation damage in the nuclear industry.

## Advantage:

Corrosion Resistance: One of the main advantages of Inconel 600 rod in the nuclear industry is its excellent corrosion resistance. It can resist the erosion of corrosive media in nuclear power plants, nuclear fuel processing facilities and other environments, ensuring long-term stable operation of equipment.
High-temperature stability: This alloy can maintain strength and structural stability under high-temperature conditions, and is suitable for high-temperature components in nuclear reactors, such as fuel elements, fuel cladding, etc.
Radiation resistance: Inconel 600 rods show good radiation resistance, which can reduce radiation damage in the nuclear industry and improve the durability and reliability of equipment.

## Application:

Nuclear reactor components: Inconel 600 rods can be used to manufacture key components in nuclear reactors, such as fuel elements, fuel cladding, fuel delivery systems, etc. Its corrosion resistance, high temperature stability and radiation resistance can meet the requirements of nuclear reactors.
Nuclear fuel processing facilities: Alloy rods can be used in equipment and piping systems in nuclear fuel processing facilities, such as enrichment equipment, solvent extraction devices, etc. It is able to withstand corrosive media and high temperature environments during nuclear fuel processing.
Nuclear waste storage and processing: Inconel 600 rods can be used in equipment and containers in nuclear waste storage and processing facilities, such as storage tanks, processing units, etc. Its corrosion resistance and high temperature stability ensure the safe storage and handling of nuclear waste.

## Other relevant knowledge points:

Applications of Inconel 600 rods in the nuclear industry require compliance with relevant material specifications and standards to ensure their quality and suitability.
In the nuclear industry, when selecting and designing applications using Inconel 600 rod, specific nuclear reactor types, process conditions, radiation environments and engineering requirements need to be considered to ensure optimal performance and safety.
Material selection and application design in the nuclear industry are often subject to strict safety regulations and inspection requirements, requiring cooperation with nuclear industry professionals and relevant agencies.

## Parameter:

**Chemical Properties of Inconel 600**

| Element | Percent |
|---|---|
| Nickel (plus Cobalt) (Min) | 72 |
| Chromium | 14-17 |
| Iron | 6-10 |
| Carbon (Max) | .15 |
| Manganese (Max) | 1 |
| Sulfur (Max) | .015 |
| Silicon (Max) | .5 |
| Copper (Max) | .5 |

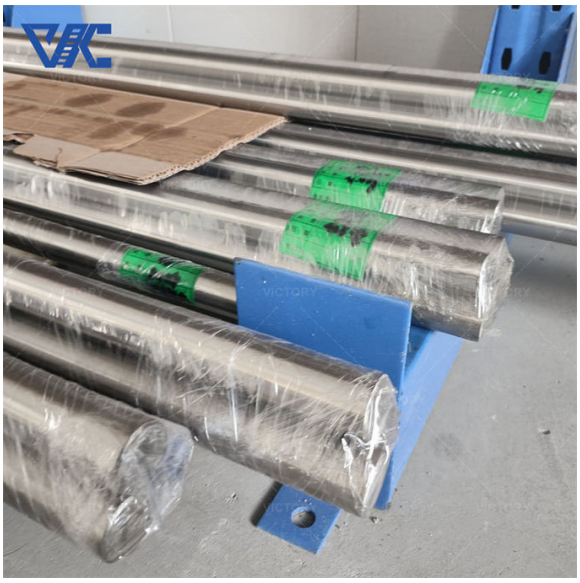
**Type we could offer**

| AMS Number | Alloy | Misc./Shape |
|---|---|---|
| **AMS 5540** | Inconel 600 | |
| AMS 5540 Plate | Inconel 600 | Plate |
| AMS 5540 Sheet | Inconel 600 | Sheet |
| AMS 5540 Strip | Inconel 600 | Strip |

| AMS Number | Alloy | Misc./Shape |
|---|---|---|
| AMS 5580 Custom Tube | Inconel 600 | Custom Tube |
| AMS 5580 Tubing | Inconel 600 | Tubing |
| AMS 5665 Bar | Inconel 600 | Bar |
| AMS 5665 Custom Tube | Inconel 600 | Custom Tube |
| AMS 5665 Ring | Inconel 600 | Ring |
| **AMS 5961** | Inconel 600 | Wire |

**contact us**
**email:victory@dlx-alloy.com**
Oem service:
Welcome customized size
We are experience factory for OEM&ODM service

| Shape | Size(mm) |
|---|---|
| WIre | 0.5-7.5 |
| Rod/Bar | 8.0-200 |
| Strip | (0.5-2.5)*(5-180) |
| Tube | custom made |
| Plate | custom made |

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