

# Nuclear Industry Inconel 625 Tube Seamless Pipe With Radiation Resistance

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# **Basic Information**

<ul> <li>Place of Origin:</li> </ul>	China	
<ul> <li>Brand Name:</li> </ul>	Victory	
Certification:	CE,ROHS,ISO 9001	
<ul> <li>Model Number:</li> </ul>	Inconel 625	
Minimum Order Quantity:	1 Kg	
Price:	Negotiable	
<ul> <li>Packaging Details:</li> </ul>	Packed as coil. Special packaging requirements can also be accommodated. OEM is also acceptabl	
<ul> <li>Delivery Time:</li> </ul>	7 to 20 Days	
• Payment Terms:	L/C, D/A, D/P, T/T, Western Union, MoneyGram	
<ul> <li>Supply Ability:</li> </ul>	500 Ton/Tons per Month	



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## **Product Specification**

- Product Name:
- Material:
- Ni (Min):
- Application:
- Density (g/m3):
- Thermal Expansion
   Coefficient:
- Thermal Conductivity:
- Elongation:
- Melting Point:
- Yield Strength:
- Tensile Strength:
- Highlight:

Inconel 625 Pipe Ni Cr Fe 58% Nuclear Reactors, Piping Systems, Storage Vessels 8.44 G/cm3 12.8 X 10^(-6)/°C

13.3 W/(m⋅K) 45% 1290-1350°C 275 MPa

620 MPa

Inconel Alloy Tube, Corrosion Resistant Inconel Alloy Pipe, Nickel Alloy Inconel Tube



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## Introduction:

Inconel 625 tube has important applications in the nuclear industry. It is composed of elements such as nickel, chromium and iron and has excellent properties and characteristics. This pipe is suitable for nuclear reactor equipment such as nuclear fuel elements, coolant pipes and heat exchangers. Inconel 625 tube has high density (8.44 g/cm<sup>3</sup>), thermal expansion coefficient (12.8×10<sup>(-6)/°</sup>C) and thermal conductivity (13.3 W/(m·K)), as well as good ductility (45%). Its melting point is between 1290-1350°C, its yield strength is 275 MPa, and its tensile strength is 620 MPa. In the nuclear industry, Inconel 625 pipes can withstand high temperatures, high pressures and highly corrosive environments, ensuring the safe operation of nuclear reactor equipment. Its excellent corrosion resistance and high temperature strength make it an ideal material choice in the nuclear industry. Overall, Inconel 625 tubes have important application value in the nuclear industry and can meet the stringent requirements of nuclear facilities and ensure the safety and reliability of nuclear energy.

#### **Characteristic:**

Corrosion resistance: Inconel 625 pipe has excellent corrosion resistance and can withstand corrosive media such as acidic, alkaline and salt solutions in the nuclear industry.

High temperature stability: This pipe can maintain high strength and stability in high temperature environments and is suitable for high temperature components and devices in the nuclear industry.

Radiation Resistance: Inconel 625 tubes have certain radiation resistance and are able to withstand the requirements of working in radiation environments in the nuclear industry.

#### Advantage:

Corrosion resistance: One of the advantages of Inconel 625 pipe in the nuclear industry is its excellent corrosion resistance, which can reduce corrosion losses in pipelines and equipment and increase equipment life.

High temperature stability: Inconel 625 pipe can maintain high strength and stability in high temperature environments such as nuclear reactors, and is suitable for high temperature components, pipes and containers in the nuclear industry.

Radiation resistance: The radiation resistance of this pipe can reduce radiation damage to pipelines and equipment, ensuring the reliability and safety of nuclear industry equipment.

#### **Application:**

Nuclear Reactors: Inconel 625 tubes can be used in fuel elements, coolant pipes and heat exchangers in nuclear reactors. It can withstand high temperatures, pressures and corrosive media and is used for energy generation and thermal management in nuclear reactors.

Nuclear fuel cycle: Inconel 625 pipe can be used in enrichment equipment, soaking tubes and pipeline systems in the nuclear fuel cycle process. It can withstand corrosive solutions and high temperature conditions and is used in nuclear fuel extraction and processing processes.

Nuclear waste treatment: Inconel 625 pipe can be used in storage containers, transportation pipelines and processing equipment during nuclear waste treatment. It can withstand the effects of radiation and corrosive media and is used for the safe storage and handling of nuclear waste.

## Other relevant knowledge points:

The nuclear industry refers to a series of industrial fields related to the nuclear energy industry, including nuclear reactor technology, nuclear fuel cycle, nuclear waste processing, etc. In the nuclear industry, material selection requires considerations such as corrosion resistance, high temperature performance, radiation resistance, high strength, and compatibility with nuclear media.

In the nuclear industry, the design and manufacture of equipment needs to follow strict nuclear safety standards and specifications to ensure the safety, reliability and compliance of the equipment with nuclear industry requirements.

The operation and management of the nuclear industry require strict nuclear safety and radiation protection measures to ensure the safety of operators and the environment.

#### Parameter:

## **Chemical Properties of Inconel 625**

Nickel	Chromium	Molybdenum	Iron	Niobium and Tantalum	Cobalt	Manganese	Silicon
58%	20%-23%	8%-10%	5%	3.15%-4.15%	1%	0.5%	0.5%

#### Type we could offer

AMS Number	Alloy	Туре	U N S	Cross Ref. Spec	Misc./Shape	
AMS 5581	Inconel 625	Nickel	N 0 6 2 5			
AMS 5581 Custom Tube	Inconel 625	Nickel	N 6 6 2 5	-	Custom Tube	
AMS 5581 Tubing	Inconel 625	Nickel	N 6 2 5	-	Tubing	

AMS Number	Alloy	Туре	U N S	Cross Ref. Spec	Misc./Shape
AMS 5599	Inconel 625	Nickel	N 0 6 2 5		
AMS 5599 Plate	Inconel 625	Nickel	N 6 2 5		Plate
AMS 5599 Sheet	Inconel 625	Nickel	N 6 2 5	-	Sheet
AMS 5599 Strip	Inconel 625	Nickel	N 6 6 2 5		Strip
AMS 5666	Inconel 625	Nickel	N 6 6 2 5		
AMS 5666 Bar	Inconel 625	Nickel	N 6 6 2 5	-	Bar
AMS 5666 Custom Tube	Inconel 625	Nickel	N 0 6 2 5	-	Custom Tube
AMS 5666 Forging	Inconel 625	Nickel	N 6 2 5	-	Forging
AMS 5666 Ring	Inconel 625	Nickel	N 0 6 2 5	-	Ring
AMS 5869	Inconel 625	Nickel	N 6 6 2 5		
AMS 5869 Plate	Inconel 625	Nickel	N 0 6 2 5		Plate
AMS 5869 Sheet	Inconel 625	Nickel	N 0 6 2 5		Sheet

AMS Number	Alloy	Туре	U N S	Cross Ref. Spec	Misc./Shape
AMS 5869 Strip	Inconel 625	Nickel	N 0 6 2 5	-	Strip

# contact us email:victory@dlx-alloy.com Oem service:

Welcome customized size

We are experience factory for OEM&ODM service





## Q & A:

Q: How is the quality of your Inconel 625 tube ensured? A: Our Inconel 625 tube undergo rigorous quality control measures to ensure their high quality. We conduct extensive testing and inspection, including dimensional checks, chemical analysis, mechanical property testing, and non-destructive testing, to verify the integrity and performance of the tubes.

Q: Are your Inconel 625 tube certified to meet industry standards?

A: Yes, our Inconel 625 tube is manufactured and certified to meet industry standards. They are produced in compliance with international specifications such as ASTM, ASME, and ISO.

