High Temperature Nickel Alloy Inconel 600 718 625 Wireused In The Aerospace Industries

Our Product Introduction

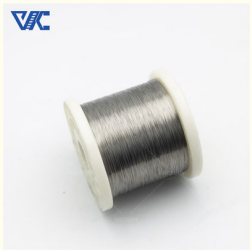
Basic Information

- Place of Origin: China
- Brand Name: Victory
- Certification: ISO9001 ROHS
- Model Number: Inconel 600
- Minimum Order Quantity: 10 Kg
- Price: Negotiable
- Packaging Details: Inconel 600 rod packed in Spool Carton box, Coil package with polybag,then in woodencase
- Delivery Time: 20~40 Days
- Payment Terms: L/C, T/T, Western Union, MoneyGram
- Supply Ability: 300 tons per month

Product Specification

- Name: High-temperature Nickel Alloy Inconel 600 718 625 Wireused In The Aerospace Industries
- Material: Nickel Chromium Iron
- Ni (Min): 72%
- Density: 8.47 G/cm3
- Melting Point: 1,370-1,425°C
- Elongation (≥ %): 30 %
- Thermal Conductivity: 15.9 W/m·K
- Finishing: Bright,Oxided
- Application: Construction, Industry Oil, Piping Systems
- Yield Strength: 240 MPa
- Tensile Strength: 550 MPa
- Hardness: ≤ 160 HB
- Standard: ASTM, ASME
- Size: 0.~500mm

More Images



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Our P

Product Description

why we choose inconel material

Thermal expansion:

Inconel alloys have a relatively low coefficient of thermal expansion, which means they undergo minimal dimensional changes when exposed to temperature fluctuations.

This is important in applications where thermal cycling is common, as it helps to maintain the integrity of the overall system.

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Oxidation resistance:
Inconel alloys form a protective oxide layer that helps to resist high-temperature oxidation, making them ideal for use in environments with high oxygen content.
This property is essential in applications like jet engines, where the materials are exposed to high-temperature, oxygen-rich environments.

Compatibility with other materials:
Inconel alloys can be easily welded, brazed, or joined with other materials, such as stainless steel, making them versatile for a wide range of applications.

How to use inconel wire to make mesh

Inconel is a nickel-based alloy that is known for its high-temperature resistance and corrosion resistance. The general steps to manufacture Inconel meshes are as follows:

Select the appropriate Inconel wire size. The wire diameter, strength, and flexibility will affect the final performance of the mesh. Typically, Inconel wires with a diameter of 0.1-0.5 mm are used.

Design the structure and dimensions of the mesh. Determine the required aperture size, density, and strength based on your application needs.

Use a mesh weaving or braiding machine to fabricate the mesh. Both manual weaving and mechanical braiding methods can be used. Pay attention to maintaining uniform tension in the wires during the weaving process.

Perform heat treatment and surface treatment on the woven mesh. Heat treatment can improve the strength and high-temperature resistance of the Inconel mesh. Surface treatment can enhance the appearance and corrosion resistance.

Inspect the quality and dimensions of the mesh to ensure they meet the requirements. Tensile strength and aperture size tests can be conducted.

Parameter:

Chemical Properties of Inconel 600

C	Cr	Ni+Co	Al	Ti	Fe	Nb+ Ta	Mn	Si	P	S
≤0.15	14.0 17.0	≥72	≤0.35	≤0.50	6.0 10.0	≤1.0	≤1.0	≤0.5	≤0.04	≤0.015

ITEM	θ/℃	TENSIE STRENGTH				HBS
		σb/MPa	σP0.2/MPa	δ5/%	φ/%	
BAR/ROD	20	≥585	≥240	≥30	-	134 217
RING	20	≥520	≥205	≥35	-	≥187
HOT ROLL PLATE	20	≥550	≥240	≥35	≥40	-
	900	≥95	≥45	≥40	≥50	-
COLD ROLLED SHEET	20	≥550	≥240	≥30	-	-
	900	≥90	≥40	≥60	-	-
COLD ROLLED SHEET	20	≥550	≥200	≥30	-	-
STRIP	20	≥550	≥240	≥30	-	-
WIRE	20				-	HV≤151

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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Oem service:
Welcome customized size
We are experience factory for OEM&ODM service

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