Our Product Introduction



BLX

# Medical Device Bright Soft Nickel Alloy Inconel 718 Bar With Wear Resistance

## **Basic Information**

. Place of Origin: China . Brand Name: Victory ISO9001 · Certification: Inconel 718 Model Number: Minimum Order Quantity: 5 Kg • Price: Negotiable

• Packaging Details: Inconel 718 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**

Inconel 718 Bar Name: · Material: Ni Cr Fe • Ni (Min): 50%

. Application: Construction, IndustrySurgical Instruments,

Artificial Joints, Instrument Accessories

8.2 G/cm3 . Density: . Melting Point: 1,330°C 965 MPa • Tensile Strength: • Yield Strength: 550 MPa Bright, Oxided · Sureface: • Thermal Conductivity: 6.4 W/m·K

• Highlight: corrosion resistant inconel alloy,

high temperature resistant inconel alloy



## More Images







### Introduction:

Inconel 718 rod is a commonly used high-performance alloy material in the field of medical devices. Due to its excellent corrosion resistance, high temperature strength and biocompatibility, Inconel 718 rod can handle the harsh environmental requirements in medical device manufacturing.

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In medical device manufacturing, Inconel 718 rod is often used to manufacture equipment and components in high-temperature and high-pressure environments. It is widely used in high-temperature heating systems, high-pressure gas storage and delivery equipment in medical equipment, etc. Due to its excellent high temperature strength and corrosion resistance, Inconel 718 rod is able to withstand the high temperatures, pressures and corrosive media requirements found in medical devices.

Overall, Inconel 718 rod plays an important role in the field of medical devices due to its excellent corrosion resistance, high temperature strength and biocompatibility. It is widely used in key components such as high-temperature and high-pressure equipment, implants and medical imaging equipment to ensure the reliability, safety and performance of medical devices. The wide application range and excellent performance of Inconel 718 rod make it one of the indispensable materials in medical device manufacturing.

#### Characteristic:

High Strength: Inconel 718 rod has excellent strength and can provide the structural support and load-bearing capacity required by medical devices.

Corrosion resistance: This alloy has good corrosion resistance and can resist corrosion from corrosive media in medical environments, such as body fluids, drugs, etc.

Biocompatibility: Inconel 718 rod has good biocompatibility in medical device applications and can come into contact with human tissue and liquids without causing allergic or toxic reactions.

Wear resistance: This alloy has good wear resistance and can maintain a long life in long-term use.

#### Advantage:

Lightweight and high strength: Compared with traditional metal materials, Inconel 718 rods have a lower density, so they can reduce the weight of medical devices while providing sufficient strength and rigidity.

High temperature performance: The alloy has good high temperature stability and is able to maintain its performance and structural integrity during high temperature disinfection and sterilization processes.

Corrosion resistance: Inconel 718 rods can resist corrosion from corrosive media such as body fluids and drugs, making medical devices less susceptible to corrosion damage during long-term use.

#### **Application:**

Surgical instruments: Inconel 718 rod can be used to make surgical instruments, such as surgical forceps, clamps, implants, etc. Its high strength and corrosion resistance make it an ideal material for surgical instrument manufacturing.

Orthopedic Implants: This alloy has a wide range of applications in the manufacture of orthopedic implants. Its excellent biocompatibility and high strength can provide reliable support and fixation functions, and it is often used in the manufacture of bone grafting plates, screws, artificial joints and other orthopedic implants.

Medical device accessories: Inconel 718 rods can also be used to manufacture various accessories for medical devices, such as connectors, inserts, valves, etc.

#### Other relevant knowledge points:

Inconel 718 is a nickel-based high-temperature alloy, mainly composed of nickel, chromium, iron and other alloying elements. It has good high temperature strength, corrosion resistance and biocompatibility.

In the field of medical devices, there are important requirements for biocompatibility, corrosion resistance and strength of materials. Selecting the appropriate materials can improve the performance, reliability and safety of medical devices.

Medical devices need to withstand various harsh environmental conditions and mechanical requirements during use, so the selection of materials is of critical significance. Inconel 718 rod is widely used in medical device manufacturing due to its excellent properties and advantages.

#### Parameter:

Item	С	Mn	Fe	Р	S	Si	Cu	Ni	Co	Al	Ti	Cr	Nb+Ta	Мо	В
Inconel 718	≤0.08	≤0.35	rest		≤0.01	≤0.35	≤0.3	50-55	≤1	0.2-0.8		17-21	4.75-5.5	2.8-3.3	

AMS Number	Alloy	Туре	UNS	Cross Ref. Spec	Misc./Shape
AMS 5590	Inconel 718	Nickel	N07718	-	Tubing
AMS 5596 Foil	Inconel 718	Nickel	N07718	-	Foil
AMS 5596 Plate	Inconel 718	Nickel	N07718	-	Plate
AMS 5596 Sheet	Inconel 718	Nickel	N07718	-	Sheet
AMS 5596 Strip	Inconel 718	Nickel	N07718	-	Strip
AMS 5597 Plate	Inconel 718	Nickel	N07718	-	Plate
AMS 5597 Sheet	Inconel 718	Nickel	N07718	-	Sheet
AMS 5597 Strip	Inconel 718	Nickel	N07718	-	Strip
AMS 5662 Bar	Inconel 718	Nickel	N07718	-	Bar
AMS 5662 Custom Tube	Inconel 718	Nickel	N07718	-	Custom Tube
AMS 5662 Ring	Inconel 718	Nickel	N07718	-	Ring
AMS 5663 Bar	Inconel 718	Nickel	N07718	-	Bar
AMS 5663 Custom Tube	Inconel 718	Nickel	N07718	-	Custom Tube
AMS 5663 Ring	Inconel 718	Nickel	N07718	-	Ring
AMS 5664 Bar	Inconel 718	Nickel	N07718	-	Bar
AMS 5664 Custom Tube	Inconel 718	Nickel	N07718	-	Custom Tube
AMS 5664 Ring	Inconel 718	Nickel	N07718	-	Ring
AMS 5832	Inconel 718	Nickel	N07718	-	Wire
AMS 5962 Bar	Inconel 718	Nickel	N07718	-	Bar
AMS 5962 Wire	Inconel 718	Nickel	N07718	-	Wire



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					

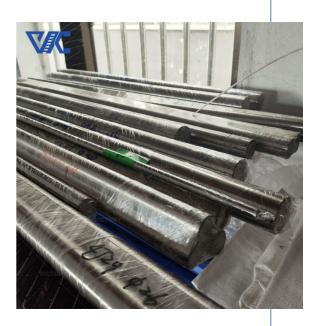
### contact us email:victory@dlx-alloy.com

Oem service:

Welcome customized size

We are experience factory for OEM&ODM service





## Q & A:

Q1: In which industries is Inconel 718 bar commonly used?

A1: Inconel 718 bar finds extensive application in industries such as aerospace, oil and gas, and power generation. It is utilized in components like turbine blades, rocket motors, oil well tools, and high-temperature fasteners where excellent strength and corrosion resistance are crucial.

Q2: What are some key applications of Inconel 718 bar?

A2: Inconel 718 bar is commonly used in applications such as aircraft engine parts, gas turbine components, nuclear reactors, and cryogenic storage tanks. Its superior strength, corrosion resistance, and ability to withstand high temperatures make it an ideal choice for critical components in extreme operating conditions.



Changzhou Victory Technology Co., Ltd









