

BLX

之信科技有限公司

Energy Industry Inconel 718 Forging Bar With Fatigue Resistance

Basic Information

Place of Origin:	China	VAC	
 Brand Name: 	Victory		- 1
 Certification: 	ISO9001		
 Model Number: 	Inconel 718		
Minimum Order Quantity:	5 Kg		R.
Price:	Negotiable		
 Packaging Details: 	Inconel 718 bar packed in Spool Carton box, Coil package with polybag,then in woodencase		1
 Delivery Time: 	7-20 Days		
 Payment Terms: 	L/C, T/T, Western Union, MoneyGram		
Supply Ability:	300 tons per month		

Product Specification

Namo:
Name.

Name:	Inconel 718 Bar
Material:	Ni Cr Fe
• Ni (Min):	50%
Application:	Chemical Reactors, Petroleum Processing Equipment, Nuclear Energy Industry
Density:	8.2 G/cm3
 Melting Point: 	1,330°C
 Tensile Strength: 	965 MPa
 Yield Strength: 	550 MPa
 Thermal Conductivity: 	6.4 W/m·K
• Sureface:	Bright,Oxided



More Images

Highlight:



Inconel 718 Forging Bar, Inconel 718 Round Bar

Introduction:

Inconel 718 rod is a commonly used high temperature alloy material in the energy industry. Composed of elements such as nickel, chromium and iron, it has excellent high-temperature strength, corrosion resistance and oxidation resistance. Inconel 718 rod has a high density (8.2 grams per cubic centimeter) and a high melting point (approximately 1,260°C), making it suitable for applications in high temperatures and extreme environments.

In the energy industry, Inconel 718 rod is widely used in various critical equipment and components, especially in high temperatures and corrosive environments. It is used to manufacture high-temperature components such as combustion chambers, turbine blades and combustor nozzles of gas turbine generators. Due to its excellent high temperature strength and oxidation resistance, Inconel 718 rod is able to withstand the challenges of high pressure and temperature in high temperature combustion environments.

Overall, Inconel 718 rod plays an important role in the energy industry due to its excellent high temperature strength, corrosion resistance and oxidation resistance. It is widely used in key equipment and components in gas turbine power generation, nuclear energy, oil and gas and other fields to ensure the safe and reliable operation of energy facilities. The wide application range and excellent performance of Inconel 718 rod make it one of the indispensable materials in the energy industry.

Characteristic:

High Temperature Strength: Inconel 718 rod has excellent high temperature strength and is able to maintain its mechanical properties and structural integrity in high temperature environments.

Corrosion resistance: The alloy has good corrosion resistance and can resist erosion by corrosive media such as acids, alkalis, oxides and salts.

Oxidation resistance: Inconel 718 rods can resist the influence of high-temperature oxidizing environments and have good antioxidant properties.

Good machinability: The alloy has good machinability and can be shaped and processed through processes such as hot working and cold working.

Advantage:

High Temperature Applications: Inconel 718 rod is widely used in the energy industry for components and equipment operating in high temperature environments. Its high-temperature strength and oxidation resistance make it suitable for use in hightemperature equipment such as combustion chambers, gas turbines, and nuclear reactors.

Corrosion Resistance: The corrosion resistance of this alloy in the energy industry makes it ideal for equipment handling corrosive media, such as chemical reactors, petroleum processing equipment, etc.

Fatigue resistance: Inconel 718 rod has good fatigue resistance and can maintain its strength and stability under cyclic stress, making it suitable for high load and vibration environments in the energy industry.

Application:

Combustion chambers and gas turbines: Inconel 718 rods are widely used in the manufacture of high-temperature equipment such as combustors and gas turbines. Its high-temperature strength and oxidation resistance allow it to withstand the extreme conditions found in high-temperature combustion environments while maintaining its structural integrity.

Nuclear energy industry: This alloy is also commonly used in nuclear reactors. Its corrosion resistance and high-temperature strength make it an ideal material in the nuclear energy industry for manufacturing key components such as nuclear fuel pipelines and reactor pressure vessels.

Petroleum and chemical industry: Inconel 718 rod is used in the petroleum and chemical industry to manufacture corrosionresistant and high-temperature equipment, such as chemical reactors, petroleum processing equipment, pipes and valves, etc.

Other relevant knowledge points:

Inconel 718 is a nickel-based high-temperature alloy containing chromium, iron, molybdenum and other alloying elements. It has good high temperature strength, corrosion resistance and oxidation resistance.

In the energy industry, there are strict requirements for high-temperature stability, corrosion resistance, oxidation resistance and fatigue resistance of materials. Therefore, choosing the right materials is critical to the reliability, safety and performance of energy equipment.

Parameter:

ltem	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:

Q: Can the supplier provide documentation such as material certificates and test reports for Inconel 718 bar? A: Yes, the supplier can provide material certificates and test reports to ensure traceability and quality assurance for Inconel 718 bar.

Q: What is the lead time for the delivery of Inconel 718 bar?

A: The lead time for Inconel 718 bar can vary depending on quantity and availability, but the supplier strives to provide prompt delivery and meet customer timelines.

