China

Victory

Inconel 600

Wooden Case

50 - 500 kgs \$29-\$35

21-45 working days

10 Tons Per Month

Bright/Acid White

8.47 G/cm3

550 Mpa

240 Mpa

30%

50KGS

L/C, T/T, Western Union, Paypal

ISO

# ASTM B168 UNS N06600 Nickel-Chromium Alloy 600 Foil Inconel 600 Flat Strip Sheet Plate

# **Basic Information**

- Place of Origin:
- Brand Name:
- Certification:
- Model Number:
- Minimum Order Quantity: 50 KGS
- Price:
- Packaging Details:
- Delivery Time:
- Payment Terms:
- Supply Ability:



BLX

之德科技有限公司

# **Product Specification**

- Surface:
- Density:
- Tensile Strength:
- Yield Strength (0.2% Offset):
- Elongation:
- Melting Range:
- MOQ:

• Highlight:

- Delivery Lead Time:
- ASTM B168 Inconel 600 Flat Strip, UNS N06600 Nickel-Chromium Alloy 600, UNS N06600 Inconel 600 Flat Strip

1370-1425°C (2500-2600°F)

21-40 Working Days



# More Images



Our Product Introduction for more pr

## ASTM B168 UNS N06600 Nickel-Chromium Alloy 600 Foil Inconel 600 Flat Strip, Sheet, Plate

Inconel 600 is a high-performance nickel-chromium alloy known for its excellent resistance to oxidation and corrosion, especially at elevated temperatures. It is widely used in various industrial applications where these properties are crucial.

## Key Characteristics of Inconel 600 strip:

**High Nickel Content:** Inconel 600 contains a high percentage of nickel (around 72%), which provides it with significant resistance to a variety of corrosive environments, especially those that are reducing in nature.

**Chromium Content:** With 14-17% chromium, it offers good resistance to oxidation and scaling at high temperatures. **Good Mechanical Properties:** It maintains high strength and toughness over a wide temperature range, from cryogenic temperatures to high temperatures up to about 2000°F (1093°C).

**Resistance to Various Corrosive Environments:** Inconel 600 is highly resistant to corrosion by a wide range of organic and inorganic compounds. It performs well in acidic and alkaline environments, as well as in oxidizing conditions. **Non-Magnetic:** The alloy remains non-magnetic even after being exposed to cold working conditions.

**High Temperature Stability:** It does not easily succumb to thermal shock and maintains its mechanical integrity at elevated temperatures.

### Main Applications of Inconel 600 strip:

Chemical Processing Equipment: Used in components like heaters, stills, condensers, and evaporator tubes.

Aerospace Industry: Utilized in engine and airframe components exposed to high temperatures.

Heat Treatment: Suitable for furnace components and fixtures due to its oxidation resistance.

Nuclear Industry: Used in reactors and other equipment due to its resistance to corrosion in high-purity water and steam at high temperatures.

**Food Processing:** Utilized in equipment that must resist corrosive acids and other chemicals. **Fabrication:** 

Inconel 600 can be easily fabricated using standard procedures. It can be hot and cold worked, machined, and welded using conventional methods, though special care must be taken due to its work-hardening properties.

#### Heat Treatment:

The alloy is typically annealed at temperatures between 1850°F and 2100°F (1010°C - 1150°C) to relieve stresses and achieve optimal mechanical properties.

Overall, Inconel 600 is a versatile and reliable material in environments that require both high mechanical strength and excellent resistance to corrosion and heat.

## **Inconel Alloy Series Composition:**

Item	Inconel 600	Inconel 601	Inconel 617	Inconel 625	Inconel 690	Inconel718	Inconel X750	Inconel 825
С	≤0.15	≤0.1	0.05-0.15	≤0.08	≤0.05	≤0.08	≤0.08	≤0.05
Mn	≤1	≤1.5	≤0.5	≤0.35	≤0.5	≤0.35	≤1	≤1
Fe	6-10	rest	≤3	rest	7-11	rest	5-9	≥22
Р	≤0.015	≤0.02	≤0.015					
S	≤0.015	≤0.015	≤0.015	≤0.015	≤0.015	≤0.01	≤0.01	≤0.03
Si	≤0.5	≤0.5	≤0.5	≤0.35	≤0.5	≤0.35	≤0.5	≤0.5
Cu	≤0.5	≤1		≤0.3	≤0.5	≤0.3	≤0.5	1.5-3
Ni	≥7.2	58-63	≥44.5	50-55	≥58	50-55	≥70	38-46
Co			10-15	≤10		≤1	≤1	
AI		1-1.7	0.8-1.5	≤0.8		0.2-0.8	0.4-1	≤0.2
Ti			≤0.6	≤1.15		≤1.15	2.25-2.75	0.6-1.2
Cr	14-17	21-25	20-24	17-21	27-31	17-21	14-17	19.5-23.5
Nb+Ta				4.75-5.5		4.75-5.5	0.7-1.2	
Мо			8-10	2.8-3.3		2.8-3.3		2.5-3.5
В			≤0.006					

Property	Value	Units
Density	8.47	g/cm³

Property	Value	Units
Melting Point	1370-1425	°C
Thermal Conductivity	14.9	W/m⋅K at 20°C
Specific Heat Capacity	427	J/kg·K
Electrical Resistivity	1.03	µΩ·m at 20°C
Modulus of Elasticity	205	GPa
Poisson's Ratio	0.31	-
Coefficient of Thermal Expansion	13.3 (20-100°C range)	µm/m⋅°C
Magnetic Permeability	1.003 (at 200 Oersted)	-
Sound Velocity	5730	m/s

These properties make Inconel 600 an excellent choice for applications requiring high temperature resistance, mechanical strength, and resistance to corrosion. If you need any more specific details or additional properties, just let me know!



