

# 690 MPa Inconel 690 tape Nickel Alloy Coil Steel Strip For Chemical Processing Industry

BLX

之信科技有限公

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## **Basic Information**

| <ul> <li>Place of Origin:</li> </ul>   | China  |   |
|--|--|---|
| <ul> <li>Brand Name:</li> </ul>        | Victory  |   |
| <ul> <li>Certification:</li> </ul>     | CE,ROHS,ISO 9001   |   |
| <ul> <li>Model Number:</li> </ul>      | Inconel 690  |   |
| Minimum Order Quantity:                | 1 Kg   |   |
| • Price:                               | Negotiable   |   |
| <ul> <li>Packaging Details:</li> </ul> | Packed as coil. Special packaging<br>requirements can also be accommodated.<br>OEM is also acceptabl | 6 |
| <ul> <li>Delivery Time:</li> </ul>     | 7 to 20 Days   |   |
| • Payment Terms:                       | L/C, D/A, D/P, T/T, Western Union,<br>MoneyGram  |   |
| Supply Ability:                        | 100 Ton/Tons per Month   |   |

Inconel 690 Strip

Ni Cr Fe

58-63% 8.19 G/cm3

1340-1380°C

690 MPa

310 MPa

40%

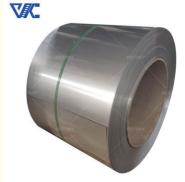
11.2-12.6 W/(m·K)

Industrial, Construction, Building

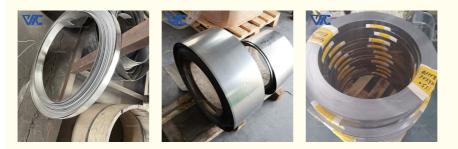
Nickel Inconel Alloy Strip, Inconel Alloy Strip

## **Product Specification**

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



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#### Introduction:

Inconel 690 tape is a commonly used high temperature alloy tape in the chemical processing industry. It is composed of nickel, chromium, iron and other alloying elements and has excellent corrosion resistance and high temperature stability.

The chemical composition of Inconel 690 tape includes nickel (58-63%), chromium (27-31%), iron (7-11%), molybdenum (0.5% max), manganese (0.5% max), titanium (0.5% max) ) and copper (max. 0.5%). The tape has a density of 8.19 g/cm<sup>3</sup> and a thermal expansion coefficient of 13.3  $\mu$ m/m·°C (20-1000°C). The minimum tensile strength can reach 690 MPa, and the minimum yield strength can reach 310 MPa.

In the chemical processing industry, Inconel 690 tape is widely used in equipment and process equipment operating in high temperature, corrosive and oxidizing environments. Since chemical processing often involves corrosive media, high temperature reactions and oxidizing atmospheres, Inconel 690 belts can provide excellent corrosion resistance and high temperature performance to ensure reliable operation of equipment.

Inconel 690 tape has excellent corrosion resistance and can withstand acidic media, oxides, salt solutions and other corrosive chemicals. At the same time, it can maintain good mechanical properties and stability in high temperature environments and meet the requirements of the chemical processing industry for corrosion resistance, high strength and high temperature performance.

In the chemical processing industry, Inconel 690 tape is widely used in equipment such as reactors, pipelines, storage tanks, heat exchangers and catalyst units. It can withstand the harsh working environment of high temperature, high pressure and corrosive media, ensuring the long-term operation and safety of process equipment.

#### **Product Features:**

Corrosion resistance: Inconel 690 belt has excellent corrosion resistance and can resist corrosive media in the chemical processing industry, including acidic, alkaline and oxidizing media.

High temperature strength: This strip has excellent high temperature strength and toughness, and can maintain stable performance in high temperature environments.

Anti-oxidation properties: Inconel 690 tape exhibits excellent antioxidant properties and can maintain stable performance for a long time in high-temperature oxidizing environments.

#### Advantage:

Corrosion resistance: Inconel 690 belt has excellent corrosion resistance in the chemical processing industry. It can resist the erosion of equipment by chemical media and extend the service life of the equipment.

High-temperature strength: This strip has excellent high-temperature strength and toughness and can withstand high-temperature environments and high-temperature media in the chemical processing industry.

Anti-oxidation performance: Inconel 690 tape shows excellent anti-oxidation properties and can maintain stable performance for a long time in high-temperature oxidizing environments, reducing oxidation and corrosion of equipment.

#### **Specific applications:**

Reactors and storage tanks: Inconel 690 belts can be used in equipment such as reactors and storage tanks in the chemical processing industry to resist the erosion of acidic, alkaline and high-temperature corrosive media.

Pipes and Valves: Suitable for piping and valve systems in the chemical processing industry, including delivery pipes and fluid control valves, to provide corrosion resistance and high temperature strength.

Heat exchangers and evaporators: Inconel 690 tape can also be used in equipment such as heat exchangers and evaporators in the chemical processing industry to withstand high temperatures and the action of corrosive media.

### Other relevant knowledge:

Composition of Inconel 690 alloy: Inconel 690 alloy is mainly composed of alloying elements such as nickel, chromium and iron. The reasonable ratio of these elements gives the alloy excellent corrosion resistance, high temperature strength and oxidation resistance.

Heat Treatment and Processing: Inconel 690 tape typically requires heat treatment to improve its mechanical properties and corrosion resistance. In addition, alloys can be formed and processed through processes such as cold working and welding to meet the needs of the chemical processing industry.

Safety and environmental protection: The use of Inconel 690 belts can improve the safety and reliability of chemical processing industry equipment, reduce corrosion and leakage problems, and ensure the safe operation of the chemical processing industry.

#### Parameter:

Diameter range: from 0.03 mm to 12 mm

Standard specifications: ASTM B166, AMS 5599, AMS 5666

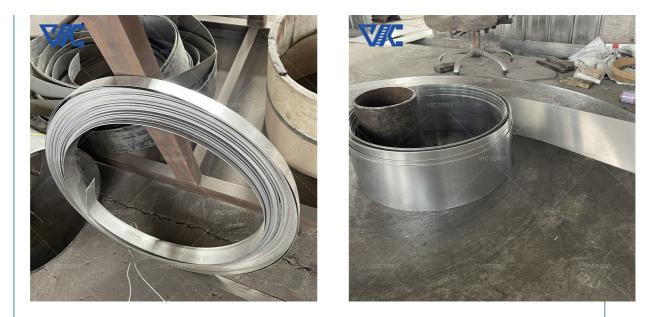
Typical chemical composition: nickel (58-63%), chromium (27-31%), iron (7-11%), molybdenum (0.5-1.0%), zirconium (0.02-0.12%), etc.

Typical mechanical properties: tensile strength 690 MPa (minimum), yield strength 310 MPa (minimum), elongation at break 40% (minimum)

| Item        | С     | Mn   | Fe   | Р | S      | Si   | Cu   | Ni  | Со | Al | Ti | Cr    | Nb+Ta | Мо | В |
|-------------|-------|------|------|---|--------|------|------|-----|----|----|----|-------|-------|----|---|
| Inconel 690 | ≤0.05 | ≤0.5 | 7-11 |   | ≤0.015 | ≤0.5 | ≤0.5 | ≥58 |    |    |    | 27-31 |       |    |   |

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

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



### **Q&A:**

Q: Can Inconel 690 strip be customized to specific requirements? A: Yes, Inconel 690 strip can be customized in terms of dimensions, thickness, and surface finish to meet specific application needs.

Q: What benefits does the customization of Inconel 690 strip offer?A: The customization of Inconel 690 strip allows for tailored solutions, ensuring optimal fit and performance in critical components requiring high-temperature and corrosion-resistant properties.

