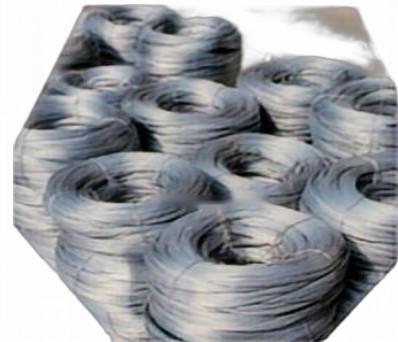


Product Introduction

Pure nickel products

Basic properties: This industrial pure nickel is deformable and has ferromagnetism. It has high plasticity over a wide temperature range and, in the annealed state, has a strength similar to that of medium carbon steel. It can resist corrosion from neutral to moderately reducing environments. Additionally, due to the formation of a passivated oxide film on the alloy surface, it can be used in oxidizing environments.



Pure nickel product grade	product form	standard	as-supplied state	Specification (mm)	Length/Width (mm)
N4 N5 N6 N7 N8 Ni200 Ni201	Round Bar	GB/T5235-2021 GB/T4435-2010	Forged Bar Hot Rolled Bar Machined Bright Bar	20—400	Length:300 — 6000
	Wire	GB/T5235-2021 GB/T21653-2008	Hard Temper Half Hard Temper Soft Temper	∅0.8-8.5	—
	Hot Rolled Plate	GB/T5235-2021 GB/T2054-2013 GB/T2056-2005 ASTM B162-2019	Hot Rolled Condition Pickled Condition	5.0— 80.0	standard width:10 — 640 wide width:650 — 2400
	Cold Rolled sheet	GB/T5235-2021 GB/T2054-2013 ASTM B162-2019	Hard Temper(Y) Half Hard Temper(Y2)	0.2- 4.0	standard board width:100 — 640 standard board width:650- 1350
	Cold Rolled Strip	GB/T5235-2021 GB/T2072-2020	Soft Temper	0.05— 3.0	strip width:40 — 450

Application Fields

Suitable for lithium-ion battery electrode plates and connecting tabs, widely used in chlor-alkali chemical , organic chloride and fluorochemical industries. It performs stably under high-temperature halogen and salt corrosion conditions. Ideal for electronic instrument parts, polyethylene monomer production lines, synthetic fiber manufacturing, fresh water and other water treatment facilities. Also applicable as electrodes for micro-arc oxidation and electrophoretic coating, special lighting fittings, electric vacuum devices, radio parts, as well as welding wires for machinery manufacturing and instrumentation industries

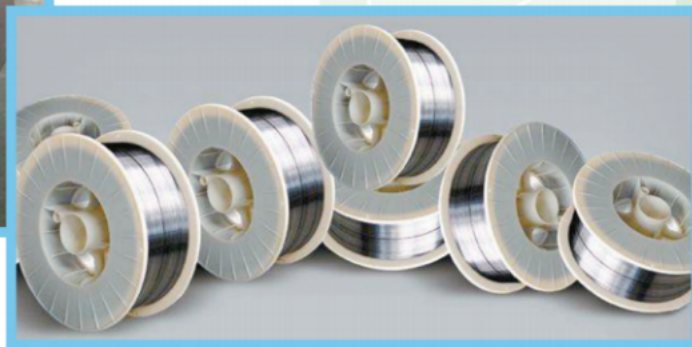
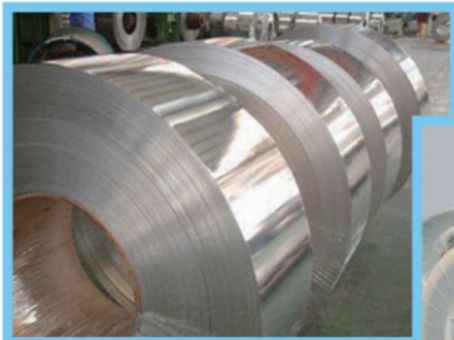


Electric heating resistance alloy

Basic Properties: Ni-Cr alloy offers excellent comprehensive properties, making it the preferred choice for manufacturing high-quality resistance heating

elements. It features outstanding oxidation resistance, high strength, non-magnetism, good corrosion resistance, excellent weldability, and resistance to softening. During prolonged use, it resists deformation and exhibits minimal permanent elongation, with stable electrical resistance and low variation.

Pure nickel product grade	product form	standard	as-supplied state	Specification (mm)	Length/Width (mm)
Cr20Ni80 Cr15Ni60 Cr30Ni70	wire	GB/T1234-2012	Hard Temper(Y)	0.8—8.5	—
			Half hard Temper		
		Soft Temper			
Cr20Ni35 Cr20Ni30	Hot Rolled Plate	GB/T1234-2012	Hot Temper Condition Pickled Condition	5.0—80.0	standard width: 10 — 640
	Cold Rolled sheet	GB/T1234-2012	Hard Temper(Y)	0.2— 4.0	standard width: 100— 640
	Cold Rolled strip	GB/T1234-2012	Half hard Temper Soft Temper	0.05— 3.0	strip width: 40 — 450



Application Fields

It is widely used in annealing furnaces, drying ovens and household electrical appliances. It is also applied in household far-infrared devices, electric heating

equipment and electronic component baking fields. It features low absolute value of temperature coefficient of resistance and excellent stability, so it is commonly adopted in precision instruments and meters such as electric bridges, potentiometers and resistors.

High Temperature & Corrosion Resistant Alloys

Basic Properties: High temperature corrosion resistant alloys are metallic materials based on nickel, iron or cobalt matrices. They can withstand complex and severe mechanical stress under high temperature conditions and possess superior surface stability. These alloys feature outstanding room-temperature and high-temperature strength, great oxidation resistance and hot corrosion resistance, excellent creep resistance and fatigue resistance, as well as stable microstructure.



Grade	product form	standard	as-supplied state	Specification (mm)	Length/Width (mm)
GH625 GH2132 GH4169 GH3600 Incoloy825 Haynes214 HastelloyC-276	Round Bar	GB/T15008-2020 GB/T25932-2010 GB/T25828-2010 YB/T5264-1993	Forged Bar Hot Rolled Bar Machined Bright Bar	20—400	Length: 300 — 6000
	Hot Rolled Plate	YB/T5353-2006 GB/T25932-2010 GB/T14995-2010 GB/T25827-2010	Hot Temperor Condition Solution Annealed & Pickled Condition	5.0— 80.0	standard width :100-400 wide width:400-1500
	Cold Rolled sheet	GB/T38689-2020 GB/T25932-2010 GB/T14996-2010 GB/T25827-2010 GJB1952A-2008	Hard Temper(Y) Harf hard Temperper Soft Temper	0.2— 4.0	standard width :100-400 wide width:400-1200
	Cold Rolled strip	YB/T5355-2012 GB/T25932-2010 GB/T25827-2010		0.05— 3.0	strip width :40— 400

Application Fields

Widely applied in aviation, aerospace, marine, automotive, flue gas desulfurization, denitrification, seawater desalination, nuclear industry, petroleum, chemical industry and other fields.

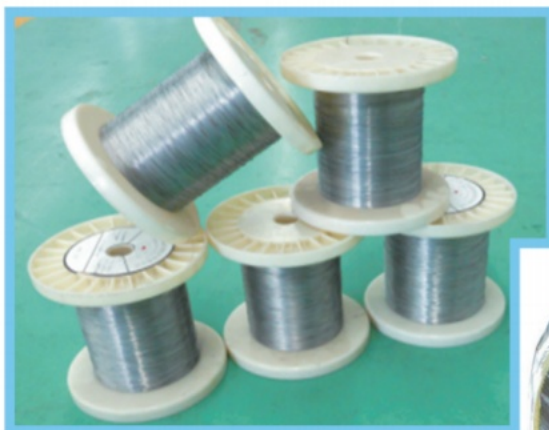
Nickel Alloy Welding Materials

Basic Properties: Nickel-based alloy welding wire boasts excellent corrosion resistance against active gases, caustic media and reducing acid media. It is featured with high strength, great ductility, easy hot & cold deformation, convenient forming processing and good weldability.

Grade	product form	standard	as-supplied state	Specification (mm)	Length/Width (mm)
Invar36 NiFe55 NiFe60 ERNi-1 ERNiCr-3 ERNiCrFe-1 ERNiCrMo-3 ERNiCrMo-4 ERNiCrFe-7A	Welding wire	GB/T15620-2008 GB/T14981-2009 GB/T37609-2019	Hard Temper (M) Harf hard Tempper(Y2) Soft Temper (M)	1.0-5.0	—

Application Fields

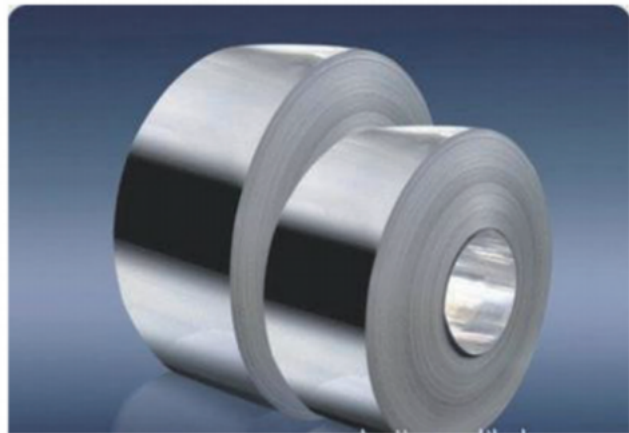
Widely used for TIG welding, MIG/MAG welding and welding electrode manufacturing in shipping, automotive, petrochemical, pressure vessel, marine engineering, aerospace and other industries.



Soft Magnetic Alloy

Basic Properties: Soft magnetic alloys are magnetic alloys that are

easily magnetized under external magnetic field, and their magnetic induction intensity almost disappears once the external magnetic field is removed. The term "soft" means such materials feature easy magnetization with soft magnetic properties. They are classified into low-carbon electrical steel, Armco iron, silicon steel sheet, Ni-Fe soft magnetic alloy, Fe-Co soft magnetic alloy, Fe-Si-Al soft magnetic alloy and other types.

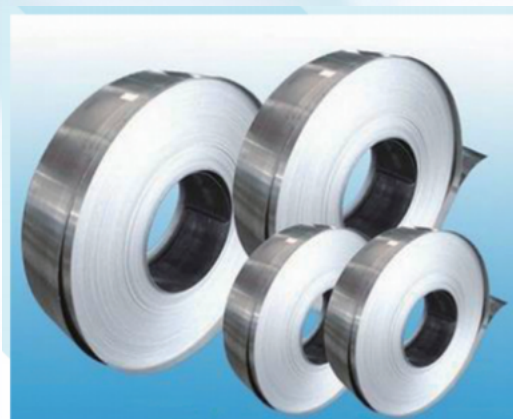


Grade	product form	standard	as-supplied state	Specification (mm)	Length/Width (mm)
1J50 1J77 1J79 1J85	wire	GB/T37797-2019 GB/T32286.1-2015	Hard Temper (M) Half hard Temper(Y2) Soft Temper (M)	0.8—8.5	—
	Hot Rolled Plate	GB/T37797-2019 GB/T32286.1-2015	Hard Temper(Y) Pickled Condition	85.0— 80.0	standard width : 10— 640 wide width:650— 2400
	cold Rolled sheet	GB/T37797-2019 GB/T32286.1-2015	Hard Temper (M) Half hard Temper(Y2)	80.2— 4.0	standard width : 100— 640 wide width: 650— 1350
	Cold Rolled strip	GB/T37797-2019 GB/T32286.1-2015	Soft Temper (M)	60.05— 3.0	strip width : 40— 450

Application Fields

It is widely used as magnetic conductive materials for

magnetic flux paths, such as iron cores of transformers and sensors, magnetic shielding covers , yokes for special magnetic circuits, relays, instrument transformers, magnetic amplifiers, electromagnetic clutches , automotive sensors and other components.



Expansion Alloy

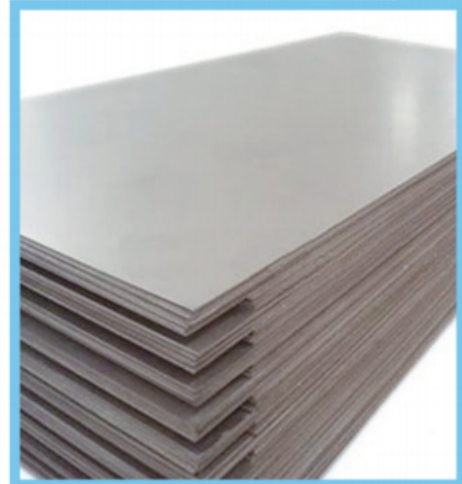
Basic Properties: Expansion alloys are divided into low expansion alloys and

constant expansion alloys, the latter also known as sealing alloys. Apart from specific thermal expansion coefficients, expansion alloys are required to possess excellent sealing

performance, weldability, corrosion resistance, machinability and free-cutting property

according to different applications. No phase transformation that causes obvious changes in expansion characteristics is allowed within the service temperature range. Main product

forms include bars, plates, strips, wires and tubes.



Grade	product form	standard	as-supplied state	Specification (mm)	Length/Width (mm)
4J29	Round Bar	GB/T37797-2019	Forged Bar	20—400	Length:300 — 6000
		GB/T5235-2021	Hot Rolled Bar		
4J36	wire	YB/T5241-2014	Machined Bright Bar	0.8—8.5	—
		YB/T5231-2014			
4J42	Hot Rolled plate	GB/T37797-2019	Hard Temper(M)	5.0— 80.0	standard width : 10— 640 wide width:650 — 2400
4J47		YB/T5241-2014	Half Hard Temper(Y2)		
4J50		YB/T5231-2014	Soft Temper(M)		
4J80	Cold Rolled sheet	GB/T37797-2019	Hot Temperor Condition	0.2— 4.0	standard width : 100— 640 wide width:650 — 1350
		YB/T5241-2014	Pickled Condition		
	Cold Rolled Strip	YB/T5231-2014	Soft Temper (M)	80.05— 3.0	strip width : 40— 450
		YB/T5241-2014	Deep Drawing Condition (DQ)		
		YB/T5231-2014			



Application Fields

Widely applied for glass, metal and ceramic sealing in aerospace electrical appliances, instruments, electro-vacuum industry, electronic components, electric light sources and other related fields.