



# 宝鸡难熔金属开发公司

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## NICKEL PRODUCTS

### ❖ Chemical Composition:

Grade	Chief component	Impurities max														
	%	%														
	Ni+Co	Cu	Si	Mn	C	Mg	S	P	Fe	Pb	Bi	As	Sb	Zn	Cd	Sn
N4	99.9	0.015	0.03	0.002	0.01	0.01	0.001	0.001	0.04	0.001	0.001	0.001	0.001	0.005	0.001	0.001
N6	99.5	0.10	0.10	0.05	0.10	0.10	0.005	0.002	0.10	0.002	0.002	0.002	0.002	0.007	0.002	0.002

Note:

NUS N02201 (ASTM B 162) same as N4 (GB/T 2054).

NUS N02200 (ASTM B 162) same as N6 (GB/T 2054).

### ❖ Products Properties:

—Melting point—1453°C

— Boiling Point—2732°C

—Density —8.9g/cm<sup>3</sup>

—Nonmagnetic, Non-toxic and high electrical conductivity

—Excellent resistance to electrochemical corrosion and good resistance to effect of heat

### ❖ Specification:

Description	Diameter (mm)	Length (mm)
Wire	0.03~3.200	—
Rod	0.800~12.00	50~2000
Bar	12.00~20.00	50~2000
	20.00~30.00	50~1200
	30.00~70.00	50~800
	>70.00	50~600
Tube	3.00~300.00	<1300

Note:All the products can be supplied in according to customer's requirement.

## ● PURE NICKEL——Bar/Rod

### ✧ Range of use:

- Food processing equipment
- Salt production
- Manufacture and handling of sodium hydroxide, particularly at temperatures above 300° F
- Reactors and vessels in which fluorine is generated and reacted with hydrocarbons
- Marine and offshore engineering
- Caustic handling equipment

### ✧ Tolerance:

#### Cold-rolling bar (rod)

Diameter (mm)	Tolerance (mm)	
	I	II
3~6	±0.03	±0.05
>6~10	±0.04	±0.06
>10~18	±0.05	±0.08
>18~30	±0.06	±0.10
>30~50	±0.09	±0.13
>50~65	±0.12	±0.16

Note:Special demands on tolerance available.

#### Thermal processing bar (rod)

Diameter (mm)	Tolerance (mm)				Forging
	Extrusion		Hot-rolling		
	I	II	+	-	
6~15	±0.60	±0.80	0.60	0.50	±1.00
>15~30	±0.75	±1.00	0.70	0.50	±0.50
>30~50	±1.00	±1.20	1.50	1.00	±2.00
>50~80	±1.20	±1.55	2.00	1.00	±3.00
>80~120	±1.55	±2.00	2.20	1.20	±3.50
>120~160	—	—	—	—	±5.00
>160~200	—	—	—	—	±6.50
>200~254	—	—	—	—	±7.00

Note:Special demands on tolerance available.

## ● PURE NICKEL — Wire

### ✧ Range of use:

Used in electric apparatus and chemical machinery

- For vacuum coating
- For making lead, supporting wire
- Strong base of the filter
- For making valves grid, inner components of vacuum valves
- Components inside the electron tubes
- For battery production
- Components inside the electron tubes

### ✧ Tolerance:

Diameter (mm)	Tolerance (mm)
0.03	±0.0025
>0.03~0.10	±0.005
>0.10~0.40	±0.006
>0.40~0.80	±0.013
>0.80~1.2	±0.02
>1.2~2.0	±0.03
>2.0~3.2	±0.04
>3.2~4.8	±0.05
>4.8~8.0	±0.06
>8.0~10.0	±0.07

Note: Special demands on tolerance available.



## ● Nickel Tube

### ✧ Tolerance:

Outside diameter,inch (mm)	OD tolerance,inch(mm)	Permissible variation in wall thickness,%
<0.095 (2.4)	±0.002 (0.05)	±10
0.095~0.19 (2.4-4.8)	±0.003 (0.08)	±10
0.19~0.400(4.8-10)	±0.004(0.10)	±10
0.400~0.625(10-16)	±0.005 (0.13)	±15
0.625~1.5(16-38)	±0.0075 (0.19)	±10
1.5~3(38-76)	±0.010(0.25)	±10
3~4.2(76-114)	±0.015(0.38)	±10
4.2~6(114-152)	±0.020 (0.51)	±12.5
6~6.625 (152-168)	±0.025 (0.64)	±12.5
6.625~8.625 (168-219)	±0.031 (0.79)	±12.5

Note:Special demands on tolerance available.

