



Nickel Alloys Product overview

ThyssenKrupp Christon



Alloys and their applications

| Alloy | W.S.Nr | UNS Nr | Density | Information/ Application |
|-------|----------------|--------|---------|---|
| 200 | 2.4060, 2.4066 | N02200 | 8,89 | Commercially pure (99,6%) wrought nickel with good mechanical properties and resistance to a range of corrosive media. Good thermal, electrical, and magnetostrictive properties. |
| 201 | 2.4061, 2.4068 | N02201 | 8,89 | Commercially pure (99,6%) wrought nickel essentially the same as alloy 200 but with a lower carbon content to prevent embrittlement by intergranular carbon at temperatures over 600°F (315°C). |
| 400 | 2.4360, 2.4361 | N04400 | 8,80 | Alloy 400 is a nickel-copper alloy with high strength and excellent corrosion resistance in a range of media. |
| K500 | 2.4375 | N05500 | 8,44 | A precipitation-hardenable nickel-copper alloy that combines the corrosion resistance of alloy 400 with greater strength and hardness. |
| 600 | 2.4816 | N06600 | 8,47 | Alloy 600 is a nickel-chromium alloy with good oxidation resistance at high temperatures and resistance to chloride-ion stress-corrosion cracking. |
| 601 | 2.4851 | N06601 | 8,11 | A nickel-chromium alloy for outstanding resistance to oxidation and other forms of high-temperature corrosion. |
| 625 | 2.4856 | N06625 | 8,45 | A nickel-chromium-molybdenum alloy with an addition of niobium that acts with the molybdenum to stiffen the alloy's matrix and thereby provide high strength without a strengthening heat treatment. |
| 718 | 2.4668 | N07718 | 8,19 | Alloy 718 combines corrosion resistance and high strength with outstanding weldability including resistance to post-weld cracking. |
| X750 | 2.4669 | N07750 | 8,28 | A nickel-chromium alloy similar to alloy 600 but made precipitation hardenable by additions of aluminium and titanium. |
| C22 | 2.4602 | N06022 | 8,61 | By virtue of its contents of chromium, molybdenum, and tungsten and controlled iron, this alloy exhibits excellent resistance to both oxidizing and reducing acid environments. |
| C276 | 2.4819 | N10276 | 8,89 | A nickel-molybdenum-chromium alloy with an addition of tungsten having excellent corrosion resistance in a wide range of severe environments. |
| 800 | 1.4876 | N08800 | 7,94 | A nickel-chromium alloy with good strength and excellent resistance to oxidation and carburization in high-temperature atmospheres. |
| 800H | 1.4958 | N08810 | 7,94 | Nickel-iron-chromium alloys having the same basic composition as alloy 800 but with significantly higher creep-rupture strength. |
| 800HT | 1.4959 | N08811 | 7,94 | Nickel-iron-chromium alloys having the same basic composition as alloy 800 but with significantly higher creep-rupture strength. |
| 825 | 2.4858 | N08825 | 8,14 | Alloy 825 is a nickel-iron-chromium alloy with additions of molybdenum and copper. It has excellent resistance to both reducing and oxidizing acids, to stress-corrosion cracking, and to localized attack such as pitting and crevice corrosion. |
| 20 | 2.4363 | N08020 | 8,08 | A nickel-iron-chromium alloy with additions of copper and molybdenum. It also contains niobium for stabilization against sensitization and resultant intergranular corrosion. |
| 28 | 1.4563 | N08028 | 8,00 | A highly corrosion-resistant austenitic alloy offering resistance to a variety of corrosive media. |
| 75 | 2.4630 | N06075 | 8,37 | A nickel-chromium alloy with good mechanical properties and oxidation resistance at high temperatures. |
| 80A | 2.4952, 2.4631 | N07080 | 8,19 | A nickel-chromium alloy similar to alloy 75 but made precipitation hardenable by additions of aluminium and titanium. |
| 90 | 2.4632 | N07090 | 8,18 | A precipitation-hardenable nickel-chromium-cobalt alloy having high stress-rupture strength and creep resistance at temperatures to about 1700°F (920°C). |
| 36 | 1.3912 | K93600 | 8,11 | A nickel-iron low-expansion alloy, containing 36% nickel, with a low coefficient of expansion from cryogenic temperatures to about 500°F (260°C). |

Pollution control & waste processing

Aerospace

Oil & gas extraction

Electrical resistance heating

Automotive

MARKETS

Petrochemical

Marine engineering

Power generation

Chemical

Thermal processing & heat treatment



ThyssenKrupp Christon

Brandstraat 11, 9160 Lokeren, Belgium

Phone +32 (0)9 349 36 35, Fax +32 (0)9 349 36 50

www.thyssenkrupp-christon.be - info.tkchriston.be@thyssenkrupp.com

