



Alloy 600 / 2.4816

Alloy 600 is a nickel-chrome-iron alloy which is characterized by:

- Good mechanical properties at low, room and elevated temperatures
- very good resistance to stress-corrosion cracking , even at elevated temperatures
- very good resistance to high-temperature corrosion in dry chlorine and hydrogen chloride
- Good resistance to oxidation, carburization and nitriding

Gehe zu



Material Data Sheet

Material Designation	2.4816
Alloy	Alloy 600
EN Material Symbol	NiCr15Fe
UNS	N 06600
Trademark	Nicrofer® 7216
ISO	NiCr15Fe8
VdTÜV Data Sheet	305

Main fields of application of alloy 600

Alloy600 is versatile. Some Applications of Alloy 600 are:

- Furnace casing seals, fans and fittings - stable in furnace atmospheres
- vessels and heat exchanger tubes in the production of vinyl chloride
- components for the preparation of chlorinated and fluorinated hydrocarbons
- Tubes for pyrolysis-dichloroethylene – resistant to carburization, chlorine, hydrogen chloride and oxidation
- Production of caustic alkalis, particularly with existence of sulfur compounds
- In nuclear reactors for parts such as ducts for control rods, reactor vessels and seals, steam dryers and separators in boiling water reactors
- Transport rollers, nozzles and other fittings in industrial furnaces
- Metamorphosis from uranium oxide to tetrafluoride by hydrofluoric acid – stable against hydrofluoric acid
- Thermocouple Protection Tubes – resistant to carburizing and nitriding atmosphere

Chemical composition of alloy 600

C	Si	Mn	P	S	Cr
≤ %	≤ %	≤ %	≤ %	≤ %	%
0.05-0.1	0.5	1.0	0.02	0.015	14.0-17.0

Al	Ni	Ti	Cu	Fe
%	%	%	≤ %	≤ %
0.3	72	0.3	0.5	6.0-10.0

Characteristics of alloy 600

Temperature Range	Due to its higher creep rupture strength, Alloy 600 can also be used for temperatures above 700 ° C
Density	8,42 g/cm ³
Melting Range	1370°C – 1425°C
Elongation at break of Alloy 600 sheet at 20 ° C	30 %
ISO-V notch impact toughness at room temp.	across ≥ 150 J/cm ² , lengthwise ≥ 200 J/cm ²
Forgings	across ≥ 120 J/cm ²

Filler metal (for welding with alloy 600)

Alloy 600 can be welded using covered electrodes by all conventional processes such as TIG, MIG pulse technology, manual arc welding. For TIG and MIG welding an addition type 2.4806 and a coated electrode to the appropriate type 2.4648 should be used. Moreover 2.4620 serves as filler material for 2.4816.

Delivery program

Sheets / Plates mm

2 - 15

Coils mm

3

With short delivery time:

plates or sheets, tubes, flanges, forged or die-cut rings and round blanks, elbows, T-fittings, reductions, screws, nuts or washers according to your request. According to your individual wishes, we are able to cut our material with our plasma- or water jet cutter. Our material is stocked in superformats of 2000x6000mm. Cut to size on request.

Material Outlet by Hempel

ECONOXX.com offers buyers a new and uncomplicated procurement channel, which also includes small quantities and materials in special alloys at favourable conditions.

Contact us



Wido Glombitza

Sales Manager Industry & Econoxx

+41 (0)44 823 88 27

Services



Waterjet cutting



Laser cutting



Plasma cutting



Shear cutting

Weight Calculator