

NiCr3

Comparable specifications

ASME SFA A 5.14: ERNiCr-3
EN ISO 18274: Ni 6082 - NiCr20Mn3Nb
BS 2901: Pt 5 NA 35
Werkstoff Nr.: 2.4806

Description and applications*

* Illustrative, not-exhaustive list

This grade may be used for:

- welding of nickel-chromium alloys and nickel-chromium-iron alloys;
- surfacing of steel with nickel-chromium-iron weld metal;
- joining of steel to stainless steel or nickel-base alloys;
- cladding and welding of dissimilar metal joints (this alloy to steel, to copper/nickel and to other nickel alloys);
- overlaying itself on steel;
- cryogenic applications;
- applications at elevated temperature, e.g. petrochemical and power generation plants.

Weldable base materials*

* Illustrative, not-exhaustive list

Alloy 600, Alloy 601, Alloy 690, Alloy 800, Alloy 330

All-weld metal mech. properties*

* For reference only values

Tensile strength (Rm): $\geq 600 \text{ N/mm}^2$ **Yield Strength (Rp_{0.2}):** $\geq 360 \text{ N/mm}^2$
Elongation: $\geq 30\%$ **Charpy-V Impact (R.T.):** $\geq 100 \text{ J}$

Chemical composition*

* For reference only values

C	Mn	Fe	P	S	Si	Cu	Ni	Co	Ti	Cr	Nb+Ta
max	2.50	max	max	max	max	max	67.00	max	max	18.00	2.00
0.05	3.50	3.00	0.030	0.015	0.50	0.50	min	1.00	0.75	22.00	3.00

Standard packaging data*

Welding process	Product type	Ø mm (inches)	Packing type	Weight kg (lbs)	Length mm (inches)
GMAW **	filler wire	0.80 - 1.20 (0.030 - 0.047)	spools BS300 / D300	15 (33)	n.a.
GTAW **	filler rod	1.60 - 4.00 (1/16 - 5/32)	cardboard boxes / tubes	5 (11)	1000 (39.4)
SAW **	filler wire	1.60 - 4.00 (1/16 - 5/32)	basket rims B450	25 (55)	n.a.


* Other sizes and packing types are available upon request

** GMAW: gas metal arc welding; GTAW: gas tungsten arc welding; SAW: submerged arc welding

Marking

Each filler rod for GTAW welding is durably marked with an identification traceable to the unique product type. Welding filler materials wound on spools or in coils are durably marked on the coil or spool with an identification traceable to the unique product type.

The outside of each unit package is suitably labelled with at minimum the following data: grade, diameter, heat, lot no., classifications.

 marking type-testing performed and available.

Customized labels are available upon request.

Type approvals

TUV Nord Kennblatt nr. 06003 (GMAW)
TUV Nord Kennblatt nr. 06004 (GTAW)
TUV Nord Kennblatt nr. 06195 (SAW)

Lot classification

All our productions fulfil the **Class S3** requirements acc. to EN ISO 14344.