

52M

Comparable specifications

ASME SFA A 5.14: ERNiCrFe-7A (UNS N06054)
EN ISO 18274: Ni 6054 (NiCr29Fe9)
EN 10302: ≈ NiCr29Fe
Werkstoff Nr.: 2.4642

Description and applications*

* *Illustrative, not-exhaustive list*

Nickel-based filler metal characterized by an high chromium level, which provides excellent resistance to stress corrosion cracking. Welds made with this composition are even particularly resistant to ductility-dip-cracking (DDC), and oxide inclusions, mainly due to the increased niobium and to the presence of boron and zirconium.

This grade may be used for:

- welding of nickel-chromium-iron alloy 690 to itself a/o to steels;
- overlaying of carbon steels and stainless steels to provide a nickel-chromium alloy corrosion resistant surface;
- use in applications requiring resistance to oxidizing acids;
- use in the power boiler and nuclear power industries.

Weldable base materials*

* *Illustrative, not-exhaustive list*

Alloy 690 - ASTM B163, B166, D167 and B168 having UNS number N06690.

All-weld metal mech. properties*

* *For reference only values*

Tensile strength (Rm): ≥ 590 N/mm²

Chemical composition*

* *For reference only values*

C	Mn	Si	Ni	Cr	Fe	Ti	Al	Nb	B	Zr
max	max	max	Rem.	28.00	7.00	max	max	0.50	max	max
0.04	1.00	0.50		31.50	11.00	1.00	1.10	1.00	0.005	0.02

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.

Customized labels are available upon request.

Lot classification

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