

Classifications

EN ISO 18274	AWS A5.14 / SFA-5.14
S Ni 6052 (NiCr30Fe9)	ERNiCrFe-7

Characteristics and typical fields of application

Nickel-base TIG rod of S Ni 6052 (NiCr30Fe9) / ERNiCrFe-7 type for joining matching and similar steels, surfacing with low-alloy and stainless steels. Particularly suited for the conditions in nuclear fabrication. High resistance to stress corrosion cracking in oxidizing acids and water at high temperatures.

Base materials

2.4642 NiCr29Fe
UNS N06690
Alloy 690

Typical analysis


	C	Si	Mn	Cr	Ni	Mo	Co	Fe
wt.-%	0.02	0.2	0.3	29	Bal.	0.1	< 0.1	9.0

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A ($L_0=5d_0$)	Impact energy ISO-V KV J
	MPa	MPa	%	20°C
u	380	600	35	100

u untreated, as-welded – shielding gas Ar

Operating data

	Polarity	DC-	Dimension mm	Current A	Voltage V
	Shielding gas (EN ISO 14175)	I1	1.2 × 1000	60 – 80	9 – 11
	Rod marking	Ni 6052 / ERNiCrFe-7	1.6 × 1000		
			2.0 × 1000		
			2.4 × 1000		

Heat input max. 1.0 kJ/mm, interpass temperature max. 100°C.

Creep rupture properties according to matching high temperature steels / alloys.

Approvals

-