Thermanit 690

Solid wire, high-alloyed

Classifications		
EN ISO 18274	AWS A5.14	Mat. No.
S Ni 6052 (NiCr30Fe9)	ERNiCrFe-7	2.4642

Characteristics and typical fields of application

High resistance to stress corrosion cracking in oxidizing acids and water at high temperatures. Particularly suited for the conditions in nuclear fabrication. Useable for joining matching and similar steels, surfacing with low-alloy and stainless steels.

Base materials

2.4642 – Alloy 690 – UNS N06690 – NiCr29Fe

Typical analysis of solid wire (wt.-%)

	C	Si	Mn	Cr	Mo	Ni	Fe	Co
wt-%	0.03	0.3	0.3	29.0	0.1	Bal.	9.0	< 0.1

Structure: Austenite

Mechanical properties of all-weld metal

Heat-treatment	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact work ISO-V KV J
	MPa	MPa	%	+20 °C
aw	350	600	35	80

Operating data

Polarity:	Shielding gas:	ø (mm)	Spool:
DC (+)	(EN ISO 14175) I1, M12 (ArHeC-30/0,5)	1.0 1.2	BS300 BS300

Welding instruction

Materials	Preheating	Postweld heat treatment
Matching / similar metals	None	None