

Thermanit 690

TIG rods, 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 the TIG rods (wt%)								
	С	Si	Mn	Cr	Мо	Ni	Fe	Co
wt-%	0.02	0.2	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	380	600	35	100	

Creep rupture properties: According to matching high temperature steels / alloys

Operating data							
Polarity:	Shielding gas: (EN ISO 14175) I1	Marks: → Ni 6052 / ERNiCrFe	ø (mm) 1.6 2.0	L mm 1000 1000			
Welding instruction							
Materials		Preheating	Postweld heat treatment				
Matching / similar metals		None	None				