

# Thermanit 690

Stick electrode, nickel-alloy, basic

#### Classifications

EN ISO 14172	AWS A5.11	Mat. No.
E Ni 6152 (NiCr30Fe9Nb)	ENiCrFe-7	2.4642

### Characteristics and typical fields of application

Basic covered stick electrode with high resistance to stress corrosion cracking in pure water environments and resistance in oxidizing media e.g. nitric acid.

Particularly suited for conditions in nuclear fabrication. Applicable for joining matching or similar steels, surfacing of low alloy and stainless steels.

#### **Base materials**

Alloy 690 - UNS N06690 - NiCr29 Fe (2.4642)

Typical analysis of all-weld metal							
	С	Si	Mn	Cr	Ni	Nb	Fe
wt%	0.03	0.5	3.8	28.0	Bal.	1.8	8.5

## Mechanical properties of all-weld metal

Heat- treatment	Yield strength R <sub>p0.2</sub>	Yield strength R <sub>m</sub>	Elongation A ( $L_0=5d_0$ )	Impact work ISO-V CVN J
	MPa	MPa	%	+20 °C
aw	> 350	> 600	> 35	> 80

#### **Operating data**

	Polarity:	ø mm	L mm	Amps A
	DC +	3.2	300	80 – 110
<`		4.0	350	100 – 130

Welding instruction				
Materials	Preheating	Post weld heat treatment		
Matching / similar materials	None	None		
Approvals				

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