



Covered electrode, high-alloyed, nickel-base

## Classifications

EN ISO 14172 AWS A5.11 / SFA-5.11

E Ni 6152 (NiCr30Fe9) ENiCrFe-7

# Characteristics and typical fields of application

Basic coated nickel-base electrode of E Ni 6152 / ENiCrFe-7 type. 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**

2.4642 NiCr29Fe UNS N06690 Alloy 690

## **Typical analysis**

	C	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 - typical values (min. values)

Condition	Yield strength R <sub>p0.2</sub>	Tensile strength R <sub>m</sub>	Elongation A (L <sub>0</sub> =5d <sub>0</sub> )	Impact energy ISO-V KV J	
	MPa	MPa	%	20°C	
U	380	600	35	100	

u untreated, as-welded

## **Operating data**

<b>*</b>	Polarity	DC +	Dimension mm	Current A
	Electrode	Thermanit 690 E NiCrFe-7	3.2 × 350	80 – 110
	identification		4.0 × 350	100 – 130

Suggested heat input is max. 1.5 kJ/mm and interpass temperature max. 100°C. Preheating and post-weld heat treatment not needed.

# **Approvals**