

Exaton NiCr-3

NiCr-3 is filler material for joining NiCrFe alloys, 9% Ni steels used at cryogenic temperatures, stainless steels to carbon steels, high service temperature NiCu alloys to carbon steels and NiCu alloys to nickel alloys. NiCr-3 can be used in air up to 1175°C (2145°F) and in sulphur dioxide atmospheres up to 800°C (1470°F). NiCr-3 is suitable for MIG, TIG, PAW and SAW and available as wire and rods. It is used for TIG-welding.

Classifications Wire Electrode	SFA/AWS A5.14 : ERNiCr-3 EN ISO 18274 : S Ni 6082 (NiCr20Mn3Nb)
Approvals	CE EN 13479 VdTUV 00515

Approvals are based on factory location. Please contact ESAB for more information.

Alloy Type	Alloyed nickel (Ni + 20 % Cr + 3 % Mn + 2.5 % Nb)
Shielding Gas	I1, I3 (EN ISO 14175)

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As Welded	20 °C (68 °F)	230 J (170 ft-lb)
As Welded	-196 °C (-321 °F)	150 J (111 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
<0.02	3.2	0.01	0.003	<0.003	73	20	0.01	0.01	0.03

Typical Weld Metal Analysis %

Nb	Ti	Co	Fe	Nb+Ta
2.2	0.4	<0.02	≤1	2.5

Typical Wire Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	Al	Cu
≤0.03	3	0.1	≤0.01	≤0.01	73	20	≤0.05	0.4	≤0.05

Typical Wire Composition %

N	Nb	Ti	Co	Fe	Nb+Ta
≤0.05	2.5	0.4	≤0.1	≤1	2.6