

FREEZAL ENi3 is a basic coated MMA electrode for welding cryogenic steels containing 3.5%Ni. Good weld deposit fracture toughness down to -105 °C. This electrode operates well on AC polarity, thus minimising magnetic arc blow, which is typical for this type of material.

Classification

EN ISO	2560-A: E 46 6 3Ni B 3 2 H5
EN	499: E 46 6 3Ni B 3 2 H5
AWS	A5.5: E 8018-C2

Chemical analysis (Typical values in %)

C	Mn	Si	P	S	Ni
0.04	0.75	0.3	≤ 0.015	≤ 0.015	3.3

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)	
				-75 °C	-105 °C
As Welded	≥ 460	≥ 550	≥ 24	≥ 50	≥ 40
620 °C x 1 h	≥ 450	≥ 540	≥ 24	≥ 60	≥ 50

Materials

12Ni14

A352LC3; ASTM A203 D,E ; A300 D,E ; A333 Gr 3 ; A 334 Gr 3

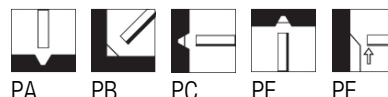
Storage

Keep dry and avoid condensation.

HD = 5: Re-dry at 340-360 °C for 2 hours, 5 times max.

Current condition and welding position

AC; DC+



Packaging data

Diam. (mm)	Length (mm)	Current (A)	Approx. weight (kg/1000)	DRYF	
				PC	Code
2.5	350	70-95	21.8	28	●
3.2	350	100-135	35.7	22	●
4.0	350	130-180	53.9	18	●
5.0	450	185-230	98.1	8	●