

OK Autrod 19.49

A continuous solid Cu-Ni wire for welding of similar alloys like 90Cu10Ni-, 80Cu20Ni- and 70Cu30Ni-alloys. The nickel addition strengthens the weld metal and improves the corrosion resistance, particularly against salt water. The alloy is used for overlay welding of steels and widely used for welding of Cu-Ni components to desalination plants.

Specifications

Classifications

EN ISO 24373
SFA/AWS A5.7 : ERcNi
EN 14640 : S Cu 7158 (CuNi30)

Alloy Type

Alloyed copper (Cu + 30 % Ni)

Shielding Gas

I1, I2, I3 (EN 439)

Tensile Properties

Testing Condition	Yield Strength	Tensile Strength	Elongation
As Welded	180 MPa	350 MPa	40 %

Typical Wire Composition %

C	Mn	Si	Ni	Cu	Fe
0.02	0.7	0.05	31	Bal	0.5

Typical Weld Metal Analysis %

Mn	Si	P	Ni	Al	Pb	Fe
0.8	0.05	0.04	31	0.001	0.005	0.6

Welding Parameters

Amps	Wire Diameter	Volts	Wire Feed Speed
60-165 A	0.8 mm	13-17.5 V	4.0-13.0 mm/min
80-210 A	1.0 mm	12.5-18 V	4.0-12.0 mm/min
150-320 A	1.2 mm	16-29 V	5.0-11.5 mm/min