

AK ER80S-Ni2

Description: AK-ER80S-Ni2 is a mild and low alloy steel MIG wire used for welding. It is used for welding 2.5% nickel steels and other materials requiring a tensile strength of 85ksi (590MP) and good toughness at temperatures as low as -80°F (-62 °C). The weld deposits of this filler metal are similar to E8018-Cl electrodes.

Typical Chemical Composition(%):

	C	Si	Mn	S	P	Ni	Cu	—	—
Actual Result	0.12	0.4-0.8	1.25	0.025	0.025	20.-2.75	0.35	—	—

Typical Mechanical Properties:

	Tensile strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Actual Result	610	540	29	82 90 86 /-30°C

Recommended welding parameters:

Diameter/ mm	0.9	1.0	1.2
AMPERAGE	180-230	250-350	280-400
VOLTAGE	25-28	25-30	26-36
GAS	80%Ar/20%CO2	80%Ar/20%CO2	80%Ar/20%CO2