

AK W707Ni

Description: AK-W707Ni is a low-temperature steel electrode with a low-hydrogen sodium coating containing Ni, DC reverse connection, and can be welded in all positions. The deposited metal still has good impact toughness at -70°C .

Application: Welding low temperature steel structures such as 09Mn2V, 06MnVAl and 3.5Ni steel working at -70°C .

Typical Chemical Composition(%):

	C	Si	Mn	S	P	Ni	—	—	—
Requirement	0.12	0.6	1.25	0.030	0.030	2.0-2.75	—	—	—
Actual Result	0.053	0.28	0.85	0.004	0.010	2.36	—	—	—

Typical Mechanical Properties:

	Tensile strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	≥ 540	≥440	≥ 17	27J(-70°C)
Actual Result	570	480	28	120(-70°C)

Recommended welding parameters: DC+

Diameter/ mm	2.5	3.2	4.0	5.0
Electrode Length (mm)	300	350	400	400
Welding current / A	60-100	80-130	140-200	180-240

1. The electrode must be baked at about 350C for 1 hour before welding, and it can be used as it is baked.
2. Before welding, the rust, oil, moisture and other impurities in the weldment must be removed.