

AK ER100S-1

Description: ER100S-1 was developed for welding high strength low alloy steel plates such as HY80, HY100 and other similar steels. This wire produces high tensile strength, high impact resistant weld deposits that retain their toughness to -70°F making it suitable for low temperature and critical applications. ER100S-1 can be welded at an interpass temperature as low as 300°F.

Typical Chemical Composition(%):

	C	Mn	Si	P	S	Ni	Cr	Mo	Cu
Requirement	0.08	1.25-1.80	0.20-0.55	0.010	0.010	1.4-2.1	0.30	0.25-0.55	0.25
Actual Result	0.07	1.63	0.53	0.010	0.008	1.42	0.28	0.27	0.06

Typical Mechanical Properties:

	Tensile strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact Values (J)
Requirement	760-960	≥ 680	≥ 18	≥54(-40°C)
Actual Result	805	752	20	70 75 82