

ER70S-3

Conformance

ISO 14341-B-GS3
AWS A5.18 ER70S-3

Typical Application

- Used for welding low-carbon steel and thin plates
- Used for welding low-carbon steel parts with thorough surface treatment

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (°C)
525	430	28	103, 97, 100	-20

Chemical Composition %

C	Mn	Si	S	P	Cr	Ni	Mo	V	Cu
0.074	1.15	0.63	0.021	0.020	0.021	0.023	0.023	0.004	0.12

Reference

Shielding Gas	CO ₂			
Gas Flow Rate (L/min)	15	15~20	15~25	20~25
Diameter (mm)	0.8	1.0	1.2	1.6
Current(A) DC ⁺	50~100	50~220	80~350	170~550

ER70S-4

Conformance

ISO 14341-B-GS4
AWS A5.18 ER40S-6

Typical Application

- Used for welding low-carbon steel and thin plates
- Used for welding low-carbon steel parts with thorough surface treatment

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (°C)
540	450	30	93, 87, 95	-30

Chemical Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	V	Cu
0.085	1.05	0.718	0.014	0.014	0.005	0.018	0.006	0.003	0.106

Reference

Shielding Gas	CO ₂ / Ar+CO ₂ 5~20%			
Gas Flow Rate (L/min)	15	15~20	15~25	20~25
Diameter (mm)	0.8	1.0	1.2	1.6
Current(A) DC ⁺	50~100	50~220	80~350	170~550