

ER70S-G

Conformance

ISO 14341-B-GS1
AWS A5.18 ER70S-3

Typical Application

- Used for welding all kinds of 500MPa structural steel parts
- Applied for high-speed welding steel plate of 500MPa

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (°C)
545	455	29	114, 131, 127	-40

Chemical Composition %

C	Mn	Si	S	P	Ti+Zr	Cu
0.061	1.44	0.73	0.012	0.009	0.16	0.124

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

ER80S-G

Conformance

AWS A5.18 ER80S-G

Typical Application

- Suitable for welding 550MPa high strength weathering steel, such as vehicles, offshore projects, bridges, etc

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (°C)
590	495	28	112, 120, 118	-40

Chemical Composition %

C	Mn	Si	S	P	Ni	Cr	Cu
0.057	1.4	0.46	0.008	0.016	0.33	0.48	0.3

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