

ER70S-6

Conformance

ISO 14341-4-G424C13Si1

AWS A5.18 ER70S-6

Typical Application

- Used for welding all kinds of 500MPa structural steel parts
- Used for welding all kinds of 500MPa plates and pipes

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (°C)
555	450	29	77, 95, 83	-40

Chemical Composition %

C	Mn	Si	S	P	Cr	Ni	Mo	V	Cu
0.077	1.45	0.87	0.013	0.012	0.031	0.017	0.002	0.004	0.125

Reference

Shielding Gas	100%CO ₂ / 80%Ar+20%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-6 (Copper Free)

Conformance

ISO 14341-4-G424C13Si1

AWS A5.18 ER70S-6

Typical Application

- Used for welding low-carbon steel and all kinds of 500MPa structural steel parts

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (°C)
555	450	29	77, 95, 83	-40

Chemical Composition %

C	Mn	Si	S	P	Cr	Ni	Mo	V	Cu
0.007	1.54	0.88	0.011	0.012	0.011	0.008	0.010	0.002	0.15

Reference

Shielding Gas	100%CO ₂ / 80%Ar+20%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