

ER90S-G

Conformance

AWS A5.28 ER90S-G

Typical Application

• Suitable for welding 620MPa high strength steel structures, such as construction machinery, pipelines, ships, pressure vessels, etc.

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (°C)
660	545	25	103, 111, 121	-20

Chemical Composition %

C	Mn	Si	S	P	Mo	Ti	Cu
≤0.10	1.40~1.90	0.50~0.95	≤0.025	≤0.025	0.20~0.60	≤0.12	≤0.50

Reference

Shielding Gas	Ar+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

ER100S-G

Conformance

AWS A5.28 ER100S-G

Typical Application

• Suitable for welding 690MPa high strength steel structures, such as construction machinery, hoisting machinery, bridges, pipelines, shipbuilding, pressure vessels, etc

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (°C)
660	545	25	103, 111, 121	-20

Chemical Composition %

C	Mn	Si	S	P	Cr	Ni	Mo	Ti	Cu
≤0.11	1.40~1.90	≤0.80	≤0.025	≤0.025	≤0.30	0.20~0.60	0.010	≤0.16	≤0.50

Reference

Shielding Gas	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