THQ-60D (ER80S-G)

LOW-ALLOY STEEL MIG WELDING WIRE

AWS A5.28 ER80S-G
GB/T 8110 G55A3C1S4M31T

APPLICATION

Welding steel structures of matching strength, including construction machinery and coal-mining machinery.

CHARACTERISTICS

THQ-60D is a solid gas-shielded welding wire for C1 shielding gas. It offers good high-current welding performance and good impact toughness.

PRECAUTIONS

Remove rust, oil, moisture, and other contaminants from the workpiece before welding. Welding heat input directly affects weld mechanical properties. Select heat input according to the structural criticality. For more critical structures, keep heat input as low as practicable. The listed welding parameters are reference values. Establish a welding procedure suitable for the actual production conditions.

WELDING POSITIONS



MECHANICAL PROPERTIES

Items	Tensile strength (MPa)	Yield strength (MPa)	Elongation (%)	Impact energy at -30 °C (J)
Requirements	550-740	≥460	≥17	≥27
Typical results	600	531	25	100

Test shielding gas: CO_2

WIRE CHEMICAL COMPOSITION (%)

Items	C	Mn	Si	S	P	Mo	Ti	Cu
Requirements	≤0.12	1.20-1.90	0.40-0.80	≤0.025	≤0.025	0.20-0.50	0.05-0.20	≤0.50
Typical results	0.08	1.75	0.59	0.004	0.011	0.33	0.11	0.12

TYPICAL OPERATING PROCEDURES

DCEP

Diameter (mm)	1.0	1.2	1.6
Current (A)	70-230	80-350	120-500

X-ray radiographic inspection: Level II