THQ80-1 (ER110S-G)

LOW-ALLOY STEEL MIG WELDING WIRE

AWS A5.28 ER110S-G
GB/T 39281 G78A 4U M21 ZN3C1M4T

APPLICATION

Welding 800 MPa class high-strength steel structures in construction machinery, bridges, buildings, and vehicle manufacturing.

CHARACTERISTICS

THQ80-1 is a gas-shielded solid wire for M21 shielding gas, offering good low-temperature impact toughness and good all-position welding performance.

PRECAUTIONS

The welding parameters are for reference. Establish a suitable welding procedure for the actual production conditions. Refer to the general instructions for this product group for additional precautions.

WELDING POSITIONS



MECHANICAL PROPERTIES

Items	Tensile strength (MPa)	Yield strength (MPa)	Elongation (%)	Impact energy at -40 °C (J)
Requirements	770-940	≥690	≥17	≥69
Typical results	823	751	19	84

Test shielding gas: 80% Ar + 20% CO_2

WIRE CHEMICAL COMPOSITION (%)

Items	C	Mn	Si	S	P	Ni	Mo	Cu	Cr
Typical results	0.08	1.67	0.57	0.009	0.011	1.44	0.48	0.11	0.24

TYPICAL OPERATING PROCEDURES

DCEP

Diameter (mm)	0.8	1.0	1.2	1.6
Current (A)	50-180	70-230	80-350	120-500

X-ray radiographic inspection: Level II

CERTIFICATION

ABS 4YQ690SAH5

BRIDGE® 大桥牌 BRIDGE WELDING MATERIALS