THT50-6 (ER70S-6)

CARBON STEEL TIG FILLER ROD

AWS A5.18 ER70S-6
ISO 636-B-W49A4 W6
GB/T 39280 W49A4U6

APPLICATION

Welding 490 MPa class carbon steel and low-alloy steel structures, including all-position pipeline TIG welding and root passes.

CHARACTERISTICS

THT50-6 is a carbon steel TIG filler wire. The weld metal offers good ductility, toughness, crack resistance, and low-temperature impact toughness.

PRECAUTIONS

Remove rust, oil, moisture, and other contaminants from the workpiece before welding. Establish a suitable welding procedure for the actual production conditions.

WELDING POSITIONS



MECHANICAL PROPERTIES

Items	Tensile strength (MPa)	Yield strength (MPa)	Elongation (%)	Impact energy at -40 °C (J)
Requirements	490-670	≥390	≥18	≥47

Test shielding gas: Ar

WIRE CHEMICAL COMPOSITION (%)

Items	C	Mn	Si	S	P	Ni	Cr	Mo	V
Requirements	0.06-0.15	1.40-1.85	0.80-1.15	≤0.025	≤0.025	≤0.15	≤0.15	≤0.15	≤0.03
Items	**Cu**								
Requirements	≤0.50								

X-ray radiographic inspection: Level II

CERTIFICATION

ABS 3YSA · BV SA4YH5 · CCS 4Y · DNV IV YMS(H5) · LR 4Ym · RINA 4YH5 · RS 3Y