THM-EH14 (EH14)

SUBMERGED ARC WELDING WIRE

AWS A5.17 EH14
GB/T 5293 SU41

APPLICATION

490 MPa class carbon and low-alloy steel structures, including Gr.50.

CHARACTERISTICS

THM-EH14 (EH14) is a copper-coated solid wire for automatic submerged arc welding with a suitable flux. Mechanical properties apply to the flux-wire combination specified for the test.

PRECAUTIONS

Remove rust, oil, moisture, and other contaminants before welding. Heat input affects deposited weld metal mechanical properties; lower heat input is recommended.

MECHANICAL PROPERTIES

Items	Tensile strength (MPa)	Yield strength (MPa)	Elongation (%)	Impact energy at -20 °C (J)
Requirements	490-670	≥390	≥20	≥27
Typical results	550	460	31	140

The mechanical property values shown in the specifications apply to the TH.SJ101/THM-EH14 flux-wire combination.

WIRE CHEMICAL COMPOSITION (%)

Items	C	Mn	Si	S	P	Cr	Ni	Cu
Requirements	0.10-0.20	1.80-2.20	≤ 0.10	≤ 0.030	≤ 0.030	≤ 0.20	≤ 0.30	≤ 0.35
Typical results	0.16	2.0	0.03	0.012	0.015	0.01	0.01	0.10

CERTIFICATION

CE

Applies to the TH·SJ101 + THM-EH14 flux-wire combination.