

TLH-88B2

AWS A5.5 E8018-B2 H4
EN ISO 3580-B-E5518-1CM H5
JIS Z 3223 E5518-1CM H5

Characteristics and Applications:

TLH-88B2 is an iron powder low hydrogen electrode. The weld metal contains 1.25%Cr-0.5%Mo that makes the electrodes more efficient at 550°C, With the characters of stable arc, little spatter, complete slag covering, low hydrogen content and low impurity, it's suitable for the welding of steel tube for heat transfer of boiler (STPA22,23, A335-P11,P12, A199T11 · A200T11 · A213T11 · 12), drawing steel (A387Gr11 · 12), casting iron (A217-WC6), and forging and forging steel (A182-F11,F12).

Notes on usage:

1. Clean up the contaminations on the base metal and welding seam so as not to derogate the weld metal quality from particles.
2. Dry the electrodes at 350-400°C for 60 minutes before using.
3. Use back-step method to prevent arc starting from blowholes and hold for 3-5 seconds at every end-up.
4. Maintain short arc length. Moving range should be controlled within 3 times of the wire's dia when you are welding with weave method..
5. Do not exceed the range of recommended current. Over heat input might decrease the impact value.

Typical chemical composition of weld metal (wt%):

	C	Mn	Si	P	S	Cr	Mo
AWS	0.05-0.12	≤0.90	≤0.80	≤0.03	≤0.03	1.00-1.50	0.40-0.65
EN ISO	0.05-0.12	≤1.00	≤1.00	≤0.030	≤0.030	1.00-1.50	0.40-0.65
Typical value	0.082	0.65	0.18	0.010	0.007	1.1	0.50

Typical mechanical properties of weld metal:

	Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf) -20°C (0°F)	PWHT
AWS	≥460(67)	≥550(80)	≥19	-	690°Cx1hr
EN ISO	≥460(67)	≥550(80)	≥17	-	690°Cx1hr
Typical value	560(81)	630(91)	26	90(66)	690°Cx1hr

Welding position:



Sizes and recommended current range (AC or DC <+>):

Diameter (mm)		3.2	4.0		5.0
Length (mm)		350	350	450	450
Amps	F	90-140	140-190		190-240
	V&OH	90-110	130-160		-

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