

TS-308H

AWS A5.4 E308H-16
EN ISO 3581-B ES308H-16
JIS Z 3221 ES308-16

Characteristics and Applications:

TS-308H is a titania type electrode. The weld metal is austenite limited + δ -ferrite structure (19%Cr-9%Ni). The product features excellent performances in slag release, weld bead appearance, weldability, corrosion resistibility at high temperature. TS-308H is suitable for the welding of AISI-304 steel, AISI-301 steel and AISI-302 steel in all positions. Proper base metals are including stainless steel plate, steel tube, steel strip, seamless pipe, heat transfer tube, pressure vessel and steel bar.

Notes on usage:

1. Clean up the contaminations on the base metal, groove and pass to pass with stainless steel brush.
2. Maintain short arc length. Moving range should be controlled within 2.5 times of the wire's dia when you are welding with weave method.
3. Dry the electrodes at 250~300°C for 60 minutes before using. Take out consumables for half day consumption and keep in the environment at 100~150°C during welding process.
4. Use lower current to prevent from cracking and minimize base metal dilution.

Typical chemical composition of weld metal (wt%):

	C	Mn	Si	P	S	Cr	Ni
AWS	0.04-0.08	0.5-2.5	≤1.00	≤0.04	≤0.03	18.0-21.0	9.0-11.0
EN ISO	0.04-0.08	0.5-2.5	≤1.00	≤0.04	≤0.03	18.0-21.0	9.0-11.0
Typical value	0.041	0.95	0.61	0.027	0.010	19.24	9.7

Typical mechanical properties of weld metal:

	Tensile strength MPa(ksi)	Elongation %
AWS	≥550(80)	≥30
EN ISO	≥550(80)	≥25
Typical value	580(84)	40

Welding position:



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

Diameter (mm)	2.6	3.2	4.0	4.8	
Length (mm)	300	350	350	350	
Amps	F	60-90	80-130	130-170	180-210
	V&OH	50-80	70-110	100-130	-

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