

TS-307HM

Characteristics and Applications:

The weld metal of TS-307HM is fully nonmagnetic austenite structure. It is especially suitable for the military use (e.g. mine sweepers).

Pre-heating or post-weld heat treatment is not necessary. We strongly recommend to apply the product to 18%Cr-8%Ni stainless steel, 14% Mn steel and the steels with poor weld ability or root pass welding.

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
0.08	5.50	0.40	0.038	0.010	18.60	9.10

Typical mechanical properties of weld metal:

Tensile strength MPa(ksi)	Elongation %
590(86)	42

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	80-120	130-170	180-210
	V&OH	50-70	70-110	100-130	-

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