TH-MN

AWS A5.13 EFeMn-A

Characteristics and Applications:

TH-MN deposits the weld metal of high 13Mn austenitic structure for repair welding. The weld metal provides good crack resistance due to the Ni (3%) content. Work hardening, tensile strength, toughness and mechanical properties are excellent and available for machining and cutting after welding.

Crusher Cone

Notes on usage:

1. Dry the electrodes at 150-200℃ for 30-60 minutes before using.
2. When the base metal (13%Mn steel) is hardened, remove off the hardened zone before Welding. Low current without pre-heating are recommended during welding.
3. Clean up the contaminations on the base metal to avoid porosity and crack.
4. Use back-step method to prevent arc starting from blowholes and hold for 3-5 seconds at every end-up.
5. 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.
6. Austenitic stainless stick electrode (ex TS-309/309L) is recommended for root pass of high-carbon steel and low-alloy steel.

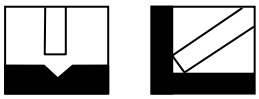
Typical chemical composition of weld metal (wt%):

	C	Mn	Si	Ni
AWS	0.5-1.0	12-16	≦1.3	2.5-5.0
Typical value	0.60	14.5	0.13	3.2

Typical hardness of weld metal:

Testing Condition	Vicker's Hardness (HV)	Rockwell's Hardness (HRC)	Shore's Hardness (HS)
Work Hardening	490	48	65

Welding position:



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

Diameter (mm)	3.2	4.0	5.0
Length (mm)	350	350	450
Amps	90-140	140-190	190-240

COVERED ELECTRODES

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