Stainless Steel SMAW Electrodes

Welding Notes

- 1. Recommending low electrical current (low heat input and low dilution rate) of avoiding sensitization due to carbonate chromium precipitation in the HAZ (Heat Affected Zone).
- 2. To control the welding current within the recommended range for avoiding of core wire overheat and coating peeling off.
- 3. Short arc welding technique to prevent N₂ and O₂ into arc creating blow hole and alloy elements burning loss, excessive spatter occurrence and detrimental of weld metal microstructure.
- 4. To keep weaving width 3 times of core wire diameter as maximum while necessary.
- 5. Recommending to use jigs, fixtures or proper welding sequence to limit welding deformation.
- 6. 200~250°C x 1 hr baking prior to use. Proper cleaning of welding groove or joint surface before welding and complete removal of spatter after welding.
- 7. To follow welding parameter described in welding procedure specification (groove type, weldment thickness, welding current and voltage range, etc) to guaranty the quality.
- 8. Recommending pre-heat and inter-pass temperatures table :

Steel Type	Pre-heat Temperature	Inter pass Temperature
Austenite Type	15°C (60°F)	150°C (300°F)
Martensite Type	200°C (400°F)	310°C (600°F)
Ferrite Type	150°C (300°F)	260°C (500°F)

9. The polarity illustration:

DCEP (DC+): Electrode positive or DC reverse polarity. DCEN (DC-): Electrode negative or DC straight polarity.

