# **TFS-303**

## **Characteristics and Applications:**

TFS-303 is a fused type of flux for various applications. It is designed primarily for SAW of 5%, 9%Ni alloys and joining of dissimilar base metals. You can produce good results when weld pipes and steels in combination with appropriate TW-17 wire electrodes.

- 5% & 9%Ni alloys
- Pipe or plate join

#### Notes on usage:

- 1. Drying the flux at 150°C~300°C for 1hr if moisture pick-up of flux is suspected.
- 2. Adding proper quantity of new flux with the used one to maintain good quality of weld metal.
- 3. While using TW-17 as combination, keep the inter-pass temperature under  $100^{\circ}$ C.

# Typical chemical composition of weld metal (wt %) :

Wire	С	Mn	Si	Р	S	Ni	Cr	Мо	V	Со	W	Fe
TW-17 (ERNiCrMo-4)	0.015	0.40	0.43	0.02	0.004	57.8	15.4	15.5	0.13	0.05	3.40	5.70

### Typical mechanical properties of weld metal:

Wire	Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf) -196°C(-320°F)	
TW-17	470(68)	680(99)	40	75(55)	

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