

# TF-500

Basicity index: 1.4

EN ISO 14174 S AAB 1 67 AC H5

## Characteristics and Applications:

TF-500 is an agglomerated aluminates basic flux, used with single and multiple wires process for butt and fillet welds, designed for two-run or multiple layers with both AC and DC technique. It has excellent slag detachability, good operation performance and good mechanical properties at low temperatures. It is suitable to be applied in following industries.

- Shipbuilding
- Wind tower
- Boiler and Pressure Vessel
- Pipemill up to API 5L-X70
- Low alloy and High Tensile/Strength Steel Structural Fabrication

## Notes on usage:

1. The flux must be re-dried at a temperature of 300~350°C for 1~2hr holding time when it is affected by moisture pick-up.
2. Adding a certain amount of new flux with used one to maintain good quality of weld metal.

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

Wire	EN ISO 14171-A	C	Si	Mn	P	S
TSW-12KM	S 42 4 AB S2Si	0.06	0.44	1.47	0.022	0.011

## Typical mechanical properties of weld metal:

Wire	AWS A5.17	Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf) -40°C(-40°F)
TSW-12KM	F7A4-EM12K	450(65)	554(80)	32	87(64)

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