TF-650

Basicity index: 1.8

EN ISO 14174 S A AB 1 67 AC H5

Characteristics and Applications:

TF-650 is an agglomerated, aluminate basic flux, used with single and-or multiple wire process. It's specifically designed for welding longitudinal and spiral pipe, in two-run and-or multiple layer technique. TF-650 has excellent weld bead performance; a low consumption rate and excellent mechanical properties at low temperature can be achieved.

- Pipe steels up to API-5L X-80
- Non-and low alloyed structural steels
- Fine grain structural steels

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 proper quantity of new flux with the used one to maintain good quality of weld metal.

Typical chemical composition of weld metal (wt %) :

Wire	EN ISO 14171-A	C	Si	Mn
TSW-12KM	S 38 2 AB S2Si	0.06	0.23	1.30
TSW-12KH	S 46 5 AB S3Si	0.07	0.32	1.84

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)	Temperature °C(°F)	PWHT
TSW-12KM	F7A2-EM12K	443(64)	496(72)	37	40(30)	-30(-20)	A.W
TSW-12KH	F7A6/P6-EH12K	459(67)	546(79)	38	80(59)	-51(-60)	A.W
		413(60)	521(76)	34	102(75)	-51(-60)	620℃*1hr

FLUXES & WIRES

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