

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	Mo	Ni
TSW-E12	S 42 4 AB S2Mo	0.06	0.16	1.34	0.45	--
TSW-E41	S 50 4 AB S3Ni1Mo	0.07	0.25	1.70	0.48	0.9

Typical mechanical properties of weld metal:

Wire	AWS A5.23	Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf)	Temperature °C(°F)	PWHT
TSW-E12	F8A5-EA2-A2	516(75)	570(83)	27	60(44)	-46(-50)	A.W
TSW-E41	F9A6-EF3-F3	617(89)	706(102)	27	50(37)	-51(-60)	A.W

* The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and TienTai Electrode Co., Ltd. expressly disclaims any liability incurred from any reliance thereon. Typical data is obtained when welded and tested in accordance with AWS specification. Other tests and procedures may produce different results. No data is to be construed as recommendation for any welding condition or technique not controlled by TienTai Electrode Co., Ltd.