

TF-250

Basicity index: 2.7

EN ISO 14174 S A FB 1 55 AC H5

Characteristics and Applications:

TF-250 is a high-basic agglomerated submerged arc flux. It is suitable for using DC+ single, AC single, DC+/AC and AC/AC. It provides excellent weld ability even in narrow groove. Due to its neutral behavior, good mechanical properties of weld metal can be controlled by using the appropriate wire grade.

With combination of low phosphorus wires (TSW-E22R or TSW-E23R), the X and J factors can be controlled to satisfy the step cooling requirement.

- Heat treatable and heat resistant low-alloy CrMo steel
- Pressure vessel
- Fine grain structural steels for low temperature requirements
- High tensile fine grain steels

Notes on usage:

1. Dry the flux at 300~350°C for 2~4hr holding time.
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	P	S	Cr	Mo	Cu
TSW-12KM	S 38 6 FB S2Si	0.06	0.40	1.08	0.018	0.004	0.020	0.020	0.046
TSW-12KH	S 42 6 FB S3Si	0.08	0.36	1.53	0.015	0.005	0.020	0.006	0.05

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	F7A8 -EM12K	416(60)	495(73)	34	111(82)	-62(-80)	--
	F6P8-EM12K	376(55)	468(68)	40	297(219)	-62(-80)	620°C *1hr
TSW-12KH	F7A8-EH12K	547(79)	560(81)	34	118(87)	-62(-80)	--
	F7P8-EH12K	415(60)	526(76)	34	172(127)	-62(-80)	620°C *1hr

* 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.