Characteristics and Applications:

TF-580 is for submerged arc multi-layer welding of 590N/mm² high tensile steel. It is suitable for single or tandem submerged arc welding with lower flux consumption rate, excellent porosity resistance, good slag release, smooth bead appearance and good workability. High welding efficiency, good toughness can also be obtained. It is suitable for multi-layer welding.

Notes on usage:

- 1. Dry the flux at 300~350°C for 1~2hr if there is any concern about moisture pick-up while opening the pack.
- 2. TF-585 is a neutral flux.
- 3. When performing first pass welding, it's recommended to use lower current to prevent cracking.
- 4. 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	С	Si	Mn	Р	S	Мо
TSW-60G	S 46 4 AB SZ	0.05	0.35	1.6	0.025	0.010	0.50

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)	
TSW-60G	F8A4-EG-G	540 (78)	620 (90)	28	54(40)	-40°C (-40°F)	

^{*} 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.

