TLH-581

AWS A5.1 E7018-1 H4
EN ISO 2560-A E 46 4 B 1 2 H5
JIS Z 3211 E4918-1 H5

Characteristics and Applications:

TLH-581 is an iron-powder low hydrogen type electrode for all-position welding of 490N/mm^2 grade high tensile steel. It is designed for single and multiple pass applications. The product has good welder appeal and produces a stable arc with low spatter generation. TLH-581 produces weld metals with excellent mechanical properties and impact toughness at low temperature (-45℃) and low diffusible hydrogen. Its features make the product suitable for low alloy steels, medium carbon steels, heavy steel plates, cast steels, aluminum killed steel of LPG and especially for welding of steels with poor weldability.

Notes on usage:

1. Be sure to clean up the contaminations on the base metal.
2. Unless the storage condition is secured and the packing is not damaged, we highly recommend to dry the electrodes at 350-400℃ for 1-2 hours before using.
3. Take the back-step method to prevent blowholes at the arc starting.
4. Maintaining short arc length is highly recommended to prevent moisture pick-up.

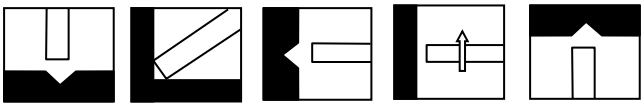
Typical chemical composition of weld metal (wt%):

C	Mn	Si	P	S
0.065	1.40	0.60	0.02	0.007

Typical mechanical properties of weld metal:

Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf) -45°C (-50°F)
460(67)	570(83)	32	120(89)

Welding position:



Sizes and recommended current range (AC or DC＜+＞) :

Diameter (mm)		2.6	3.2	4.0		5.0
Length (mm)		350	350	350	450	450
Amps	F	80-110	90-130	140-180		170-240
	V&OH	70-100	80-120	120-160		150-180

COVERED ELECTRODES

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