

TL-98B3

AWS A5.5 E9018-B3
EN ISO 3580-B-E6218-2C1M
JIS Z 3223 E6218-2C1M

Characteristics and Applications:

TL-98B3 is an iron powder low hydrogen type electrode for low alloy heat resistance steel. The weld metal contains 2.25%Cr-1%Mo that makes the electrodes more suitable for the welding of piping steels (STPA24, A335-P22), boilers (STBA24, A199T22, A213T22, A200T22), heat exchanger pipes (A182-F22, A336-F22) which the service temperature is at 550°C. Good creep rupture strength also can be obtained at high temperature.

Notes on usage:

1. Clean up the contaminations on the base metal and welding seam so as not to derogate the weld metal quality from particles.
2. Dry the electrodes at 350-400°C for 60 minutes before use.
3. Use back-step method to prevent arc starting from blowholes and hold for 3-5 seconds at every end-up.
4. Maintaining short arc length as possible is highly recommended. While welding with weave method, moving range should be controlled within 3 times of the wire's dia.
5. Do not exceed the range of recommended current. Over heat input might decrease the impact value.
6. Pre-heat the workpiece at 200~350°C and PWHT at 680~730°C.

Typical chemical composition of weld metal (wt%):

C	Mn	Si	P	S	Cr	Mo
0.07	0.7	0.45	0.020	0.01	2.25	1.00

Typical mechanical properties of weld metal:

Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	PWHT
580(84)	710(103)	23	690°C x1hr

Welding position:



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

Diameter (mm)		3.2	4.0		5.0
Length (mm)		350	350	450	450
Amps	F	90-130	140-190		190-240
	V&OH	80-110	130-160		-

* 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.