

# TWE-811B2

AWS A5.29 E81T1-B2C

## Characteristics and Applications:

TWE-811B2 is a gas-shielded and all-position flux-cored wire intended for 1~1.25%Cr-0.5%Mo low alloy steel welding. It is used with 100%CO<sub>2</sub> shielding gas and offers good operator appeal. TWE-811B2 is ideal for welding Cr-Mo steel pipe and Cr-Mo steel, which need high creep resistance.

## Notes on usage:

1. Pre-heat at 150-300°C, and PWHT at 690°Cx1hr.
2. Keep the product dry, while it is stored or delivered.
3. Use 99.8% or higher purity of CO<sub>2</sub> Gas.
4. Use DC(+) polarity.

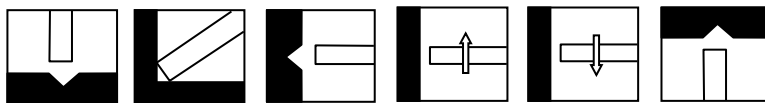
## Typical chemical composition of weld metal (wt%):

	C	Mn	Si	P	S	Cr	Mo
AWS	0.05-0.12	≤ 1.25	≤ 0.80	≤ 0.030	≤ 0.030	1.00-1.50	0.40-0.65
Typical value	0.06	0.60	0.28	0.014	0.008	1.12	0.55

## Typical mechanical properties of weld metal:

	Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	PWHT
AWS	≥ 470(68)	550-690(80-100)	≥ 19	690±15°C
Typical value	560(81)	640(93)	23	690°Cx1hr

## Welding position:



## Sizes and recommended operating range (DC <+>) :

Stick out:15-25(mm), flow rate:20-25(l/min):

Position	Diameter(mm)	1.2	1.6
	F、HF		180A-300A/26V-36V
VU、OH		150A-220A/24V-28V	160A-230A/24V-28V

\* 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.