

Characteristics and Applications:

TWE-81W2 is a titania type flux-cored wire and suitable for butt or fillet MAG welding of 590N/mm² weather-proof grade steel and A588 A234 A242 A333 or COR-TEN 60 (used normally without painting) at low temperatures. It can be applicable for all-position welding and show smooth bead appearance and shape, spattering.

Notes on usage:

1. Must pre-heat ;inter-pass temperature should be controlled around 50 ~150 .
2. To keep the toughness, the plates should not be welded with excessive heat input.
3. Use DC(+) polarity and CO₂ gas.
4. Keep the product dry, while it is stored or delivered.

Typical chemical composition of weld metal (wt%):

C	Mn	Si	P	S	Cr	Ni	Cu
0.03	0.85	0.42	0.015	0.007	0.53	0.60	0.40

Typical mechanical properties of weld metal:

Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf) -30°C (-20)
603(87)	646(94)	26	60(44)

Welding position:

Sizes and recommended parameter range (DC +):
Stick out:15-25(mm), gas flow rate:20-25(l/min):

Position	Diameter (mm)	1.2	1.6
	F HF H		180A-300A / 26V-36V
VU OH		150A-220A / 24V-28V	180A-230A / 20V-24V
VD		220A-320A / 24V-32V	250A-350A / 25V-

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