

# TL-128G

AWS A5.5 E12018-G  
EN ISO 18275-B-E8318-G A  
JIS Z 3211 E8318-G

## Characteristics and Applications:

TL-128G is an iron powder low hydrogen type, 830N/mm<sup>2</sup> grade high tensile steel electrode. The product provides excellent crack resistance, good mechanical properties and smooth bead appearance. It features good arc and easy slag removal. It is suitable for heat treatable low alloy steel (such as SCM21/4 chrome-molybdenum steel、SNCM8 Ni-Cr-Mo steel). Proper base metals are also including forging cast iron (ASTM A486 Gr. 120/A508 Gr. 5a.4a)、pressure vessel steel plate (A543 Gr. B3.C3), etc.

## Notes on usage:

1. Dry the electrodes at 350-400℃ for 60 minutes and keep at 100-150℃ before using.
2. Take the backstep method to prevent blowholes at the arc starting.
3. Keep the arc as short as possible.
4. Preheat the plates at 150~200℃ before welding.

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

	C	Mn	Si	P	S	Ni	Mo	Cr	V
AWS	-	≥1.00	-	≤0.03	≤0.03	≥0.50	≥0.20	≥0.30	-
EN ISO	-	-	-	-	-	-	-	-	-
Typical value	0.07	1.35	0.40	0.018	0.007	2.1	0.4	0.74	0.014

## Typical mechanical properties of weld metal:

	Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf) -50℃ (-60°F)
AWS	≥740(107)	≥830(120)	≥14	-
EN ISO	≥740(107)	≥830(120)	≥12	-
Typical value	800(116)	880(128)	20	35(26)

## Welding position:



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

Diameter (mm)		3.2	4.0	5.0
Length (mm)		350	450	450
Amps	F	120-150	160-200	180-240
	V&OH	90-110	130-150	-

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