

TL-118G

AWS A5.5 E11018-G
EN ISO 18275-B E7618-G A
JIS Z3211 E7618-G

Characteristics and Applications:

TL-118G is an iron powder low hydrogen type, 760N/mm² grade high tensile steel electrode. The product provides excellent crack resistance, good mechanical properties, lower moisture pick up and smooth bead appearance. It features good arc and easy slag removal. It is suitable for TSTE 620V and TSTE 690V high tensile steel welding.

Notes on usage:

1. Dry the electrodes at 350-400°C for 60 minutes and keep at 100-150°C 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 100°C 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	-	-
EN ISO	-	-	-	-	-	-	-	-	-
Typical value	0.07	1.50	0.40	0.020	0.007	2.0	0.37	0.04	0.015

Remark: In order to meet the alloy requirements of the "G" group, the undiluted weld metal shall have the min. of at least one of the elements listed in this table.

Typical mechanical properties of weld metal:

	Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf) -40°C (-40°F)
AWS	≥670(97)	≥760(110)	≥15	-
EN ISO	≥670(97)	≥760(110)	≥13	-
Typical value	760(110)	830(120)	20	80(59)

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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