

TFW-309LMo

AWS A5.22 E309LMoT1-1
EN ISO 17633-A-T 23 12 2 L P C1

Characteristics and Applications:

TFW-309LMo is a modified type of TFW-309L with the addition of molybdenum. It is suitable for joining stainless steels to unalloyed steels. The addition of molybdenum enhances creep strength and improves corrosion resistance.

Notes on usage:

1. Before welding, oil, rusty, and moisture should be cleaned off the base material that should have the proper protection from the wind in welding site.
2. Use 99.8% purity or higher CO₂ shielding gas.
3. Keep the product dry, while it is stored or delivered.

Typical chemical composition of weld metal (wt%):

	C	Mn	Si	P	S	Cr	Ni	Mo	Cu
AWS	≤ 0.04	0.5-2.5	≤ 1.0	≤ 0.04	≤ 0.03	21.0-25.0	12.0-16.0	2.0-3.0	≤ 0.75
EN ISO	≤ 0.04	≤ 2.5	≤ 1.2	≤ 0.030	≤ 0.025	22.0-25.0	11.0-14.0	2.0-3.0	≤ 0.5
Typical value	0.025	1.16	0.57	0.023	0.007	23.46	12.51	2.20	0.04

Typical mechanical properties of weld metal:

	Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %
AWS	-	≥ 520(75)	≥ 25
EN ISO	≥ 320(46)	≥ 550(80)	≥ 25
Tensile strength	590(86)	685(99)	33

Welding position:



Sizes and recommended parameter range (DC <+ >):

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

Position	Diameter (mm)	1.2
F, HF		150A-220A/24V-33V
H		140A-180A/25V-29V
V-UP		130A-160A/24V-28V
OH		150A-180A/25V-29V

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