

MIDALLOY MASTERCOR E2209T1-1/4 AP FLUX-CORED WIRE

CLASSIFICATION

- AWS 5.22 Class E2209T1-1 and E2209T1-4 / ASME SFA 5.22 E2209T1-1 and E2209T1-4
- UNS# W39239 A#8 F#6

DESCRIPTION

- MIDALLOY MASTERCOR E2209T1-4 is an all position flux-cored wire used to weld standard duplex stainless steels such as UNS S31803.
- MIDALLOY MASTERCOR E2209T1-4 can also be used to weld other duplex stainless such as 2304, 2101, and 3RE60.
- This product over-matches the base metal by 2-3% in nickel content, so as to give the correct balance of austenite and ferrite in the microstructure in the as-welded condition.

APPLICATIONS

- Used for pipe work and general fabrication in the offshore oil, gas and chemical process industries.
- Alloy offers high strength with good ductility and excellent corrosion resistance.
- Welding duplex stainless steels to austenitic stainless steels and carbon steel.

TYPICAL CHEMISTRY

C	Cr	Ni	Mo	Mn	Si	P	S	N	Cu
.03	22.5	9.7	3.25	0.95	.60	0.03	.015	0.14	0.20

TYPICAL MECHANICAL PROPERTIES

TENSILE STRENGTH	120,000 PSI
YIELD STRENGTH	95,000 PSI
ELONGATION IN 2"	26%

WELDING PARAMETERS

DIAMETER	VOLTAGE	AMPERAGE	GAS*
.045"	25-30	130-220	CO ₂ or 75 Ar/25 CO ₂
.062"	25-29	170-300	CO ₂ or 75 Ar/25 CO ₂

*100% CO₂ for flat position and or for all positions use 75 Ar/25 CO₂

Note: Special heat input restrictions: 12,500 joules/inch minimum and 63,000 joules/inch maximum. Calculated with formula **Heat Input = Amperage x Voltage x 60 divided by Travel Speed**. Amperage in (amps), Voltage in (volts) and Travel Speed in (inches/min.).

Example: For 200 amps, 24 volts and travel speed of 10 inches per minute
Heat Input = 200 x 24 x 60 / 10 = 28,800 Joules/inch OK to use

STANDARD PACKAGING

- 33 lb. spool

1/26/11

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