

**MIDALLOY MASTERCOR® E2553T1-1/4 AP FLUX-CORED WIRE**

**CLASSIFICATION**

- AWS 5.22 Class E2553T1-1 and E2553T1-4 / ASME SFA 5.22 Class E2553T1-1 and E2553T1-4
- UNS# W39533 A#8 F#6

**DESCRIPTION**

- MIDALLOY MASTERCOR E2553T1-4 is an all-position flux-cored wire designed to run on 75% Ar / 25% CO<sub>2</sub>.
- This wire is designed to have excellent slag removal and runs with a spatter-free globular transfer.

**APPLICATIONS**

- MIDALLOY MASTERCOR E2553T1-4 AP flux-cored wire is used for joining duplex stainless steel alloys with approximately 25% Chromium.
- These duplex stainless steel alloys combine high tensile and yield strengths with improved resistance to pitting, corrosion, and stress corrosion cracking. These requirements are typically found in the marine, chemical, and petroleum industries.
- If post-weld annealing is required, this weld metal will require a higher annealing temperature than that required by the duplex base metal.

**PROCEDURE**

- No preheat. Maximum interpass temperature of 300° F.
- Annealing may be required to achieve uniform hardness on multi-pass weldments.
- Heat input should be limited to 5-40 KJ/IN.

**TYPICAL CHEMISTRY**

C	Cr	Ni	Mo	Mn	Si	P	S	N	Cu
0.02	25.3	9.8	3.37	0.80	0.70	0.03	0.015	0.14	1.87

**TYPICAL MECHANICAL PROPERTIES**

<b>HARDNESS</b>	25 RC as welded 35 RC work hardened
<b>TENSILE STRENGTH</b>	110,000 PSI Min.
<b>ELONGATION</b>	15% Min.

**WELDING PARAMETERS**

<b>SIZE</b>	<b>VOLTAGE</b>	<b>AMPERAGE</b>	<b>GAS</b>
.045"	25-30	130-220	75% Ar / 25% CO <sub>2</sub> or 100% CO <sub>2</sub>

**STANDARD PACKAGING**

- 33 lb. spool

8/4/11

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