



410-AP

Classifications:

E410T1-1, E410T1-4 per AWS A5.22

Description:

Unibraze 410-AP is a gas-shielded, flux cored, stainless steel electrode designed for single or multipass welding in all positions. It contains 12% Cr. The weld deposit is air hardening and is normally heat-treated after welding. It is designed for use with 100% carbon dioxide or a blend of 75-80% argon/balance carbon dioxide. Shielding gas mixtures with more than 75-80% Argon are not recommended.

Characteristics:

Unibraze 410-AP provides superb performance characteristics in all positions, using either CO₂ or argon + 20-25% CO₂ shielding gas. Flat, well washed beads can be achieved with minimal weaving. Spatter is very low and slag peeling is excellent, minimizing cleanup.

Applications:

Unibraze 410-AP is used to weld straight 410 stainless steel. It provides good corrosion and oxidation resistance up to 1200°F.

Typical Mechanical Properties (SR 1 Hr. at 1375° F):

	CO ₂	Ar-25%CO ₂
Ultimate Tensile Strength (psi)	96,700	91,900
Yield Strength (psi)	79,000	73,400
Percent Elongation	20	20

Typical Weld Deposit Chemistry:

	CO ₂	Ar-25%CO ₂
C -	0.08	0.08
Cr -	12.30	11.50
Mn -	0.70	0.50
Si -	0.50	0.57

Typical Welding Parameters (CO₂)*:

Diameter	Position	Optimum			Range	
		Amperage	WFS	Voltage	Amperage	Voltage
1/16"	Flat	330	330	29	150-400	22-34
	Overhead	225	180	26	150-310	22-28
	Vertical up	225	180	25	150-280	22-27
.045"	Flat	250	450	28	130-300	21-32
	Overhead	190	305	26	150-280	21-30
	Vertical up	190	305	25	130-260	21-29

*Reduce by 1 volt when using Ar+20-25% CO₂.

Notice: The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. Thus the results are not guarantees for use in the field. The manufacturer disclaims any warranty of merchantability or fitness for any particular purpose with respect to its products.