

AWS CLASSIFICATION A5.22-95 E309LT1-X

OPERATIONAL CHARACTERISTICS / WELDING PARAMETERS (DCEP)

DESCRIPTION

Stoody[®] AP stainless steel wires are designed for welding in all positions with either 100% CO₂ (X=1) or Argon / CO₂ (X=4) gas mixtures. These wires exhibit a spray like arc transfer, easy slag removal and can be welded within a wide range of parameters.

Stoody[®] 309LT-1 AP wires can be used to join AISI 309 steels. It is also used to join AISI 304 to carbon and low alloy steels.

.035" (0.9mm)

Amps	100 ¹	120 ¹	150 ¹	170 ¹
Volts	25	26	27	27
WFS in/min	275	374	480	600
(m/min)	(6.9)	(9.5)	(12.2)	(15.3)

.045" (1.2mm)

Amps	130 ¹	165 ¹	190 ¹	220 ²
Volts	24	26	26	27
WFS in/min	227	315	445	565
(m/min)	(5.8)	(8.7)	(11.3)	(14.4)

1/16" (1.6mm)

Amps	170 ¹	210 ¹	250 ²	300 ²
Volts	25	26	27	28
WFS in/min	155	195	245	320
(m/min)	(3.9)	(4.9)	(6.2)	(8.2)

TYPICAL DEPOSIT CHEMISTRY (wt%)

GAS	75 Ar / 25 CO ₂	100% CO ₂
Carbon	0.031	0.030
Manganese	0.8	0.7
Silicon	0.9	0.8
Chromium	23.8	23.4
Nickel	12.5	12.5
Ferrite Number	17	16

NOTES:

- 3/8" - 1/2" (10 - 12mm) electrical stick out.
- ¹ Flat and vertical welding
- ² Flat welding only

NOTES:

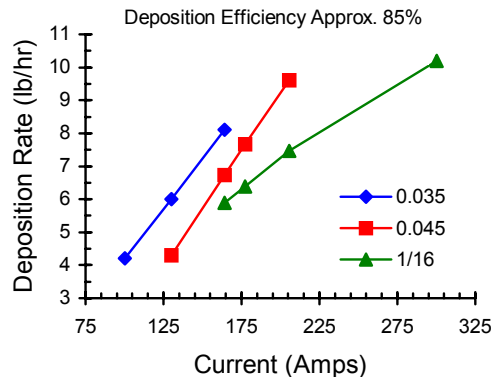
- Chemical composition values are typical and were developed using in accordance with AWS A5.22-95 procedures. Actual test results may vary depending on welding parameters and base metal composition.
- Ferrite values were determined with the Magna Gage.
- Ferrite values may vary depending on specific operating parameters.

TYPICAL DEPOSIT CHARACTERISTICS

GAS	75 Ar / 25 CO ₂	100% CO ₂
Tensile Strength, Ksi (MPa)	88 (610)	86 (600)
Elongation (%)	34	38
Yield Strength, Ksi (MPa)	69 (480)	64 (440)

STANDARD SIZES & PACKAGING

Diameter	Packaging	Part #
.035" (0.9mm)	25# WB, Can Pack	11894100
.045" (1.2mm)	33# WB, Can Pack	11910600
1/16" (1.6mm)	33# WB, Can Pack	11909400



Stoody Company

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