

**AWS CLASSIFICATION** A5.22-95 E316LT1-X

**OPERATIONAL CHARACTERISTICS / WELDING PARAMETERS (DCEP)**

**DESCRIPTION**

Stoody AP stainless steel wires are designed for welding in all positions with either 100% CO<sub>2</sub> (X=1) or Argon / CO<sub>2</sub> (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 316LT-1 AP wires can be used to join AISI 316 and 316L commonly used in the rubber, chemical, petrochemical and dye industries.

**.035" (0.9mm)**

Amps	100 <sup>1</sup>	120 <sup>1</sup>	150 <sup>1</sup>	170 <sup>1</sup>
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 <sup>1</sup>	165 <sup>1</sup>	190 <sup>1</sup>	220 <sup>2</sup>
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 <sup>1</sup>	210 <sup>1</sup>	250 <sup>2</sup>	300 <sup>2</sup>
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 <sub>2</sub>	100% CO <sub>2</sub>
Carbon	0.031	0.030
Manganese	0.8	0.7
Silicon	0.8	0.7
Chromium	18.9	18.7
Nickel	12.1	12.1
Molybdenum	2.6	2.6
Ferrite Number	7	6

**NOTES:**

- Electrical stick-out 1/2"
- <sup>1</sup> Flat and vertical welding
- <sup>2</sup> Flat welding only

**NOTES:**

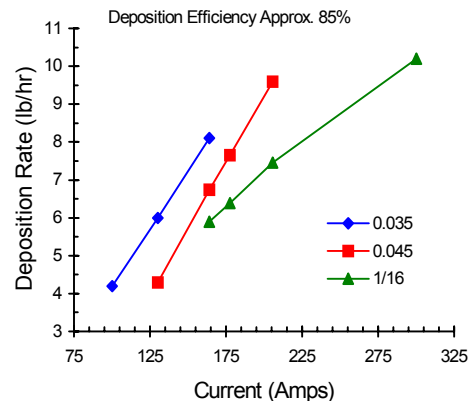
- Chemical composition values are typical and were developed using in accordance with AWS A5.22-95 procedures. Actual test results may vary depending on welding parameters and base metal composition.
- Ferrite values were determined with the Magna Gage.
- Ferrite values may vary depending on specific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

**TYPICAL DEPOSIT CHARACTERISTICS**

GAS	75 Ar / 25 CO <sub>2</sub>	100% CO <sub>2</sub>
Tensile Strength, Ksi (MPa)	88 (610)	86 (600)
Elongation (%)	36	39
Yield Strength, Ksi (MPa)	66 (460)	62 (430)

**STANDARD SIZES & PACKAGING**

Diameter	Packaging	Part #
.035" (0.9mm)	25# WB, Can Pack	11893900
.045" (1.2mm)	33# WB, Can Pack	11910400
1/16" (1.6mm)	33# WB, Can Pack	11910300



## Stoody Company

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PDS-SS-W-003

Revision 5  
02/25/02

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