# SelectAlloy 347-AP

Stainless Steel / Gas Shielded / Flux Cored

#### **PRODUCT DATA SHEET**

#### FEATURES

#### CONFORMANCES

<ul> <li>The added carbon (C) provides higher tensile and creep strength at elevated temperatures.</li> </ul>	AWS A5.22	E347HT1-1 E347HT1-4
The addition of niobium (Nb) reduces the possibility		E347T1-1
of intergranular chromium carbide precipitation and thus susceptibility to intergranular corrosion.		E347T1-4
<ul> <li>Designed for welding in all positions where well</li> </ul>		
washed beads can be achieved with minimal	ASME SFA 5.22	E347HT1-1
weaving.		E347HT1-4
<ul> <li>Smooth arc transfer produces minimal spatter.</li> </ul>		E347T1-1
<ul> <li>Applications for this alloy type includes welding</li> </ul>		
chromium-nickel stainless steel base metals of similar composition stabilized with either Nb or		E347T1-4
titanium (Ti).	ASME Section IX	A8

#### **DIAMETERS (in (mm))**

0.035 (0.9), 0.045 (1.2), 1/16 (1.6)

#### POSITIONS



#### SHIELDING GAS

75-80% Ar + Balance CO2, 100% CO2 Flow Rate: 40 - 50 CFM

#### POLARITY

Direct Current Electrode Positive (DCEP)

### **TYPICAL WELD DEPOSIT CHEMISTRY (WT%)**

Shielding Gas	с	Cr	Cu	Mn	Мо	Nb + Ta	Ni	Ρ	S	Si	WRC- 1992 Ferrite
100%CO2	0.06	19.10	0.14	1.10	0.07	0.61	9.60	0.02	0.01	0.71	7
75%Ar / 25%CO2	0.06	19.30	0.13	1.15	0.06	0.63	9.62	0.02	0.01	0.79	7

Bismuth is not intentionally added and levels are not known to be greater than 0.002 (WT%)

## TYPICAL MECHANICAL PROPERTIES

Shielding Gas	Tensile Strength ksi (MPa)	Yield Strength ksi (MPa)	Elongation (%)	Weld Condition	PWHT Temp
100%CO2	96 (662)	66 (455)	34	As-Welded	-
75%Ar / 25%CO2	99 (683)	71 (490)	33	As-Welded	-



Notice: Be sure to follow all your employers safety practices, policies and procedures when using this product. Refer to CSA W117.2 and ANSI Z49.1 Safety in Welding, Cutting and Allied Processes for further information and the manufactures SDS sheet. 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. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. 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.

Diameter in (mm)	Shielding Gas	Position	WFS* in/min (m/min)	Amps	Volts	CTWD* in (mm)
0.035 (0.9 mm) 75% Ar/25% CO2		All Positions	325 (8.3)	110	23	1/2 (13)
		All Positions	400 (10.2)	120	24.5	1/2 (13)
	75% Ar/25% CO2	All Positions	470 (11.9)	130	26	1/2 (13)
		Flat & Horizontal	565 (14.4)	145	27.5	1/2 - 5/8 (13 - 16)
	Flat & Horizontal	660 (16.8)	160	29	1/2 - 5/8 (13 - 16)	
	All Positions	215 (5.5)	130	23	1/2 - 5/8 (13 - 16)	
		All Positions	260 (6.6)	145	24.5	1/2 - 5/8 (13 - 16)
0.045 (1.2 mm)	75% Ar/25% CO2	All Positions	310 (7.9)	160	26	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	420 (10.7)	180	27.5	5/8 - 3/4 (16 - 19)
	Flat & Horizontal	450 (11.4)	200	29	5/8 - 3/4 (16 - 19)	
1/16 (1.6 mm) 75% Ar/25% CO2	All Positions	135 (3.4)	160	23	5/8 - 3/4 (16 - 19)	
		All Positions	190 (4.8)	195	24.5	5/8 - 3/4 (16 - 19)
	75% Ar/25% CO2	All Positions	225 (5.7)	210	26	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	255 (6.5)	225	27.5	3/4 - 1 (19 - 25)
		Flat & Horizontal	290 (7.4)	245	29	3/4 - 1 (19 - 25)

#### **RECOMMENDED WELDING PARAMETERS**

\* WFS = Wire Feed Speed, CTWD = Contact Tip To Work Distance

Parameters were established in 75% Ar/25% CO2. Raise by 1-1.5 volts when using 100% CO2.

#### PACKAGING (lbs (kgs))

33 (15) Spools, 60 (27.2) Coils, 500 (226.8) Round Drum, 800 (362.9) Hex Drum, 900 (408.2) Hex Drum \*Some packaging options may not be available depending on diameter and product. Special package options may be available upon request.

#### **STORAGE AND HANDLING**

All products should be stored in original packaging, in dry conditions and handled with care. For more information refer to our website.



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