DURAMAX®
Inspiring the future generations of welders

Product
Data Sheet

FLUX CORED STAINLESS STEEL ELECTRODE DM316LT-1

Classification: **E316LT-1 AWS A5.22 ASME SFA 5.22**

Description, Characteristics & Applications:

The lower carbon content makes it possible to obtain resistance to inter-granular corrosion without the use of stabilizers such as columbium or titanium. Low carbon alloy is not as strong as higher carbon at elevated temperature.
For best results, set the wire feed speed and adjust the voltage for smoothest operation. Electrode extension range is from 1/2" to 1," with an optimum range of 5/8" to 3/4." Weld using reverse polarity DC(+).

Shielding Gas

75% argon / 25% CO2 (or nearest equivalent) shielding gas; however, straight CO2 may also be used. The 75/25 mixture will produce a smoother arc with virtually no spatter and slightly higher yield and tensile strengths than CO2. The mechanical properties and deposit analyses will meet AWS A5.22 specifications with either gas.

Typical Chemical Composition (%)

C	Cr	Ni	Mo	Mn	Si	P	S	Cu
0.04 max	17.0-20.0	11.0-14.0	2.0-3.0	0.5 - 2.5	1.0 max	0.04 max	0.03 max	0.75 max

Deposited Chemical Composition (%) (Typical)

C	Cr	Ni	Mo	Mn	Si	P	S
0.03	19.00	12.00	2.3	1.2	0.6	0.01	0.01

Typical Mechanical Properties as Welded

Tensile Strength	Yield Strength	Elongation (%)	Hardness	Ferrite WRC (FN)	CVN Impacts (J) @ °C
85,000psi	58,000psi	34%	-------	8 FN	-------

Diameter	Position	WFS	Opt Amps	Opt Volts	Range Amps	Range Volts
.035	Flat	365 / min	130-140	24-25	100-170	21-26
	Horizontal	365 / min	130-140	24-25	100-170	21-26
	Vertical-Up	310 / min	110-120	22-23	110-120	21-23
	Overhead	320 / min	120-130	23-24	120-130	22-24
.045	Flat	450 / min	180-200	25-27	135-250	24-32
	Horizontal	450 / min	180-200	25-27	135-250	24-32
	Vertical-Up	325 / min	150-170	24-26	135-200	24-26
	Overhead	425 / min	175-195	25-27	155-200	25-28
1/16	Flat	264 / min	220-240	25-27	170-300	24-31
	Horizontal	235 / min	200-220	25-27	170-270	24-29
	Vertical-Up	220 / min	190-210	25-26	170-230	24-27
	Overhead	235 / min	200-220	25-26	170-270	24-29

DURAMAX Brand
103 Queens Drive
King of Prussia, PA 19406
Phone: 610-265-3555
Toll Free: 800-692-5930
Fax: 610-265-7806