Date: 1/4/2016
Product: **DM1100**

PRODUCT DATA SHEET

DURAMAX ALUMINUM BARE WIRE DM1100

Classification: ER1100 AWS A5.10 / ASME SFA 5.10

Description, Characteristics & Applications:

DURAMAX1100 (commonly referred to as Al99.5) is a 99% aluminum filler metal that is available in spools or cut lengths for MIG or TIG welding processes. DM1100 is commonly used for architectural and decorative applications, furniture, piping, deep drawing applications and spun hollow ware. Common applications would include base metal 1100, 3003, Aic. 3003 to similar base metals or to 1060, 1070, 1080 and 1350. Slight golden color after anodizing. Average tensile strength as welded is 13,500 psi.

Typical Chemical Composition (%)

AWS Spec.	Si + Fe	Mn	Al	Zn	Be	TOE
A5.10	0.05 - 0.20	0.05 max	99.0 Min	0.10 max	<0.0003	0.15 max
Typical	0.19	0.006	99.70	0.006	<0.0001	0.05 Each

Typical Mechanical Properties as Welded

Ultimate Tensile Strength:	14,000 - 23,000 psi	Density:	0.098 lbs/in³
Yield Strength:	8,000 - 22,500 psi	Melting Range:	1,090 - 1,215°F
Elongation in 2 inch (%):	5 - 32%	Post Color:	White - gold

Typical Welding Parameters (GMAW) DCEP :

DIAMETER	WFS (imp)	AMPERAGE	VOLTS	Consumption lb/100ft	ARGON (cfh)
0.030"	480 - 625	60 - 175	15 - 24	0.65 - 1.25	25 - 30
0.035"	450 - 750	70 - 185	15 - 27	1.00 - 4.25	30 - 35
3/64"	330 - 500	125 - 260	20 - 29	1.00 - 4.25	35 - 45
1/16"	250 - 450	170 - 300	24 - 30	3.80 - 6.6	45 - 75
3/32"	160 - 200	275 - 400	26 - 31	3.5 - 6.6	60 - 85

Typical Welding Parameters (GTAW) ACHF (-) :

BASE	Filler Size	Tungsten	AMP's	Consumption lb/100ft	Gas Cup Size	ARGON (cfh)
1/16"	1/16"	1/16"	60 - 80	0.75	3/8"	20
3/32"	3/32"	3/32"	85 - 120	1.00	3/8"	20
1/8"	3/32"	3/32"	125 - 160	1.50	3/8"	20
3/16"	1/8"	1/8"	190 - 220	4.5 - 6.0	7/16"	25
1/4"	5/32"	5/32"	200 - 300	8.0 - 10.0	1/2"	30

Note: Maintaining proper welding procedure, including pre-heat and interpass temperatures, may be critical depending on the type and thickness of material to be welded.

If additional information is needed visit us on the web at www.duramaxwelding.com