Lucas-Milhaupt EASY FLO 45 Silver Based Cadmium-Bearing Filler Metal

Category : Metal , Nonferrous Metal , Precious Metal , Silver Alloy

Material Notes:

Applications: Easy-Flo 45 is very versatile and can be used successfully on nearly all nickel, iron and copper base alloys. In certain instances, special fluxes, may be required to obtain good wetting and bonding. In brazing gray cast iron it is necessary to treat the surface prior to brazing to remove graphite, in order to assure good wetting by the brazing filler metal. A complete list of the uses of Easy-Flo 45 would include practically all applications for which silver brazing filler metals have been used. Characteristics: Easy-Flo 45 is a eutectic type, free-flowing filler metals that, because of their narrow melting range, are less sensitive to the rate of heating and should not liquate (i.e. separate into low and high melting constituents). This high fluidity makes well-fitted joints essential and prevents bridging or large fillet formation. Handy Flux should be used with either of these filler metals.Some base metals when brazed under high stress may crack during brazing when the stressed base metal is wetted by the brazing filler metal. This is a form of stress corrosion cracking. The low flow temperature of Easy-Flo is below the stress relaxation temperature of some nickel base alloys. The cure is to relieve the stress before the brazing alloy is applied. A higher melting brazing filler metal may be preferred since stress relief will then occur before the filler metal melts. Specifications:This filler metal conform to the following specifications: AWS A5.8 BAg-1, SAE-AMS 4769, ASME Boiler and Pressure Vessel Code Section II-C SFA 5.8 BAg-1 Information provided by Lucas-Milhaupt, Inc.

Order this product through the following link:
http://www.lookpolymers.com/polymer_Lucas-Milhaupt-EASY-FLO-45-Silver-Based-Cadmium-Bearing-Filler-Metal.php

Physical Properties	Metric	English	Comments
Density	9.42 g/cc	0.340 lb/inÂ³	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	379 MPa	55000 psi	Armco Iron (0.05% C) butt joint
	414 MPa	60000 psi	Stainless Steel (18-8) Annealed butt joint
	448 MPa	65000 psi	1020 Steel butt joint
	586 MPa	85000 psi	1095 (Drill Rod) butt joint
	621 MPa	90000 psi	High Speed Steel (18 W, 4 Cr, 1 V) butt joint
	758 MPa	110000 psi	4140 Steel butt joint
	896 MPa	130000 psi	Stainless Steel 918-8) Cold Rolled butt joint
	310 MPa @Temperature 23.0 Â°C	45000 psi @Temperature 73.4 Â°F	
	483 MPa @Temperature 23.0	70000 psi @Temperature 73.4 Â°F	

Mechanical Properties	Metric	English	Comments
	696 MPa @Temperature 23.0 Â°C	101000 psi @Temperature 73.4 Â°F	
Tensile Strength, Ultimate	55.2 MPa @Temperature 482 Â°C	8000 psi @Temperature 900 Â°F	Inconel butt joint
	82.7 MPa @Temperature 427 Â°C	12000 psi @Temperature 800 Â°F	Stainless Steel (18-8) butt joint
	89.6 MPa @Temperature 482 Â°C	13000 psi @Temperature 900 Â°F	Monel butt joint
	262 MPa @Temperature 260 Â°C	38000 psi @Temperature 500 Â°F	Inconel butt joint
	331 MPa @Temperature 260 Â°C	48000 psi @Temperature 500 Â°F	Monel butt joint
	338 MPa @Temperature 260 Â°C	49000 psi @Temperature 500 Â°F	Stainless Steel (18-8) butt joint
Elongation at Break	0.00 % @Temperature 260 Â°C	0.00 % @Temperature 500 Â°F	in 2", Stainless Steel (18-8) butt joint
	0.00 % @Temperature 260 Â°C	0.00 % @Temperature 500 Â°F	in 2", Inconel butt joint
	0.00 % @Temperature 427 Â°C	0.00 % @Temperature 800 Â°F	in 2", Stainless Steel (18-8) butt joint
	0.00 % @Temperature 482 Â°C	0.00 % @Temperature 900 Â°F	in 2", Inconel butt joint
	0.00 % @Temperature 482 Â°C	0.00 % @Temperature 900 Â°F	in 2", Monel butt joint
	0.00 % @Temperature 23.0 Â°C	0.00 % @Temperature 73.4 Â°F	
	0.00 % @Temperature 23.0 Â°C	0.00 % @Temperature 73.4 Â°F	
	3.1 %	3.1 %	

Mechanical Properties	Metric	English	Comments
	@Temperature 260 Â°C	@Temperature 500 Â°F	in 2", Monel butt joint
	7.3 % @Temperature 23.0 Â°C	7.3 % @Temperature 73.4 Â°F	

Thermal Properties	Metric	English	Comments
Melting Point	607.2 - 618.3 Â°C	1125 - 1145 Â°F	
Solidus	607.2 Â°C	1125 Â°F	Melting Point
Liquidus	618.3 Â°C	1145 Â°F	Flow Point

Component Elements Properties	Metric	English	Comments
Cadmium, Cd	23 - 25 %	23 - 25 %	
Copper, Cu	14 - 16 %	14 - 16 %	
Other, total	<= 0.15 %	<= 0.15 %	
Silver, Ag	44 - 46 %	44 - 46 %	
Zinc, Zn	14 - 18 %	14 - 18 %	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	0.00000606 ohm-cm	0.00000606 ohm-cm	

Processing Properties	Metric	English	Comments
Processing Temperature	618.3 - 732 Â°C	1145 - 1350 Â°F	Brazing Range

Descriptive Properties	Value	Comments
Color	Light Yellow	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com
Email : sales@lookpolymers.com
Tel : +86 021-51131842
Mobile : +86 13061808058
Skype : lookpolymers
Address : United North Road 215,Fengxian District, Shanghai City,China