Crown ALB-30

Gas Metal Arc Welding (GMAW) MIG Wire

Copper Based Alloy



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Universal Aluminum Bronze MIG Wire for a Wide Variety of Ferrous and Nonferrous Metals

Typical Applications

Crown ALB-30 is a versatile and highly alloyed bronze wire used to weld a wide variety of ferrous and nonferrous metals. This alloy is used to join aluminum bronze, high strength copper-zinc alloys, silicon bronze, copper-nickel alloys, manganese bronze, tin bronze (phosphor bronze), cast and malleable iron, high and low carbon steels, tool steels, stainless steel and some nickel alloys to themselves and each other!

Crown ALB-30 is also designed for surfacing wear resistant and corrosion resistant bearing surfaces. This wire is commonly used to repair and maintain bearings, bushings, pump housings, hydraulic pistons, brake drums, paper mill rolls, motor bases, valve seats, gears, press rams, ship propellers & turbine runners.

Specifications

Alloy Type AWS A5.7 and AWS A5.21

ER CuAl-A2

➤ Tensile Strength Up to 91,000 PSI (on steel)

Up to 77,000 PSI (on aluminum bronze)

Yield Strength Up to 35,000 PSI

➤ Elongation in 2" 28%

> Hardness 120 - 160 Brinell

Procedure

Set gas flow rate to 45-50 cfh. Use the "push" or "forehand" technique. 100% argon is used for most applications. A 75% argon – 25% helium shielding gas may be used when welding on high copper alloys. Use DC reverse polarity (dcep). Flat and horizontal positions are preferred, however, out of position welding may be performed with a pulsed type power source. See preheat and interpass temperatures below.

Metal to be welded	Preheat and Interpass Temperatures	
Carbon Steels between 0.29% to 0.60% carbon	300°F to 600°F preheat depending on the carbon content	
Cast Iron	300°F to 400°F preheat (slow cool)	
Aluminum Bronze up to 10% aluminum	no preheat - 300°F interpass temperature	
Aluminum Bronze exceeding 10% aluminum	300°F preheat - 600°F interpass temperature	
Manganese Bronze	300°F preheat	
Copper	1000°F preheat	

Sizes, Volts, Amps and Part Numbers

Diameter	Volts	Amps*	Part Numbers		
			2 lb (4") Spools	8" Spools	30 lb Spools
.035	20 - 26	100 - 200	CSALB2/1F	CSALB2/2F	CSALB2/3F
.045	22 - 28	100 - 250	CSALB2/1G	CSALB2/2G	CSALB2/3G
1/16	29 - 32	250 - 400	CSALB2/1L	CSALB2/2L	CSALB2/3L
3/32	32 - 34	350 - 500	CSALB2/1N	CSALB2/2N	CSALB2/3N

^{*}Use low side of range for iron or nickel based alloys; middle of range for bronze alloys; high side for copper



!!!! **WARNING** !!!!



WELDING FUMES AND GASES CAN BE DANGEROUS TO YOUR HEALTH.

BEFORE USING THIS PRODUCT THE WELDER (END-USER) MUST READ AND UNDERSTAND THE COMPLETE PRODUCT WARNING LABEL AND THE NEW 16 SECTION SAFETY DATA SHEET (SDS).

THE SAFETY DATA SHEET (SDS) WHICH OUTLINES THE POTENTIAL HEALTH HAZARDS AND SAFETY INFORMATION RELATED TO THIS PRODUCT CAN BE DOWNLOADED FROM THE SDS PORTION OF THIS WEBSITE. IT IS ALSO AVAILABLE FROM YOUR EMPLOYER AND WELDING SUPPLY DISTRIBUTOR.

DO NOT PROCEED WITH USE OF THIS PRODUCT UNTIL YOU READ AND UNDERSTAND THE SAFETY DATA SHEET (SDS) AND PRODUCT WARNING STATEMENT.

BE SURE TO CONSULT THE LATEST VERSION OF THE SDS.

SEE THE PRODUCT WARNING LABEL AND SDS FOR COMPLETE WARNING INFORMATION.



