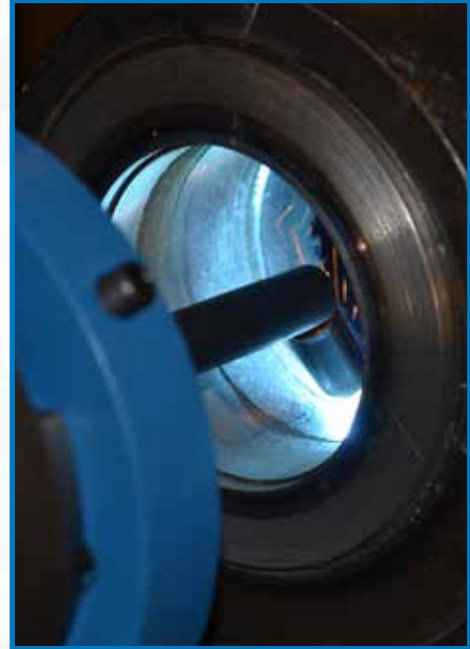


Advanced Automated Step Welding System for Bore, Flange, and Valve Repair.



HIGH QUALITY AND PRECISION

Offset head provides torch diameter adjustment without changing the angle of the torch, always providing optimal torch angle, a key parameter for successful bore welding.

Centralized control box allows the operator to make changes to ALL welding parameters while closely monitoring the weld process.

Quickly adjust "step" size, rotation speed, rotation direction, wire feed rate, and arc voltage, all from this one location.

Arc interrupt, contactor control, gas purge, and extended utilization of Auto-Skip function are also performed from the control.

Consistent and uniform weld reduces cutting tool wear, reducing the cutting time by up to 50%.

Infinitely adjustable step allows bead placement from 0.40 - 0.220 inches (1.0 - 5.6 mm).

Wire Feeder choices of shop style or enclosed feeders let you select the best feeder for the application.

Push pull system and wire straightener options allow welding with exotic metals or smaller cast wires.

FLEXIBLE AND VERSATILE

Auto skip feature is perfect for skipping keyways or any other area that needs to be skipped.

Pie mode allows the operator to weld up localized oblong worn sections of bores "bi-directionally," saving time and weld material.

Carriage return allows operators to weld uphill or downhill only when in out of position (horizontal) orientation. This one-way welding makes the control of the welding process much easier, with more uniform results.

Reversible rotation gives the operator the ability to weld in either rotation direction. The operator can weld up quality bores pass after pass more consistently by reversing direction.

The BB5000 interface kit with a spherical connection clamp collar allows quick alignment and attachment of the BW3000, shortening

the time between welding and boring allowing the operator to complete jobs faster.

Adjustable mounting base allows mounting of the BW3000 to fit any workpiece when not using a boring bar. The non-magnetic mounting base makes welding in job shops, shop jobs, or machine shops simple and easy.

SAFETY

The comprehensive 170 controller allows operators to safely monitor, modify, and consistently repeat the process with a built-in rotation speed timer, travel speed readout, wire-speed timer, and accurate digital display of the critical weld parameters rotation speed, step size, wire speed, mode state and switch positions.

Adjustable coarse/fine resolution of the step size, rotation speed and wire speed controls for maximum operator convenience

The centralized control reduces smoke and arc ray exposure to operators.

Auto-Stop allows the operator to automatically shutdown the machine at the end of the bore.

BW3000 AUTO BORE WELDER

SPECIFICATIONS, APPLICATIONS

	Inch	Metric
Welding Process	MIG (GMAW)	
Axial Travel (longer stroke options available upon request)	6 or 12 inches	152.4 or 304.8 mm
Step Range	0.040 - 0.220 inches	1.0 - 5.6 mm
Wire Diameter Range	0.023 - 0.045 inches	0.58 - 1.14 mm
Amperage Rating	175A Continuous	
Base Package Extension Reach	39 inches	990.6 mm
Torch Welding Diameter Ranges		
ID Bores #000* through #13 & #24	0.50 - 54 inches	12.7 - 1371.6 mm
OD Torches, max dia.	14, 28 or 56 inches	355.6, 711.2 or 1422.4 mm
Face Torch	1.0 - 20.0 inches	25.4 - 508.0 mm
Torch Extensions	3, 6, 12 and 18 inches	76.2, 152.4, 304.8 and 457.2 mm
Unsupported Torch Reach	60 inches	1524.0 mm
Control Box Voltages	120 VAC 50/60Hz or 230 VAC 50/60 Hz	
Wire feeder		
4-roll drive system accepts standard spools	30 lb spools	13.6 kg spools
Power Supply Requirements:	Recommended 300 Amp Rating CV power source with remote voltage control capability (power supply not included in BW3000 AutoBoreWelder Package)	
Weights and Dimensions Final weights will be determined at the time of your order. Standard BW3000 is shipped in 3 boxes: (Weights and Dimensions are approximate)		
Box #1	28 lbs 19 x 16 x 12 inches	12.7 kg 482.6 x 406.4 x 304.8 mm
Box #2	27 lbs 21 x 18 x 9 inches	12.2 kg 533.4 x 457.2 x 228.6 mm
Box #3	106 lbs 30 x 20 x 13 inches	48.1 kg 762 x 508 x 330.2 mm
*Contact your CLIMAX sales representative for information on the #000 Torch and its use.		

APPLICATIONS

The BW3000 is widely used by these industries:

- Mining & Heavy Construction
- Power Generation
- Pulp & Paper
- Shipbuilding

Typical Applications:

- Bores, pivot points, buckets and hitches
- Valve and pump repairs
- Gears and gear boxes
- Motor housings and shafts
- Electric motor repair
- Loader bucket & hitch repair
- Nozzles on pressure vessels and heat exchangers
- Compressors and turbines
- Shaft OD repair
- Mud pumps
- Hydraulic cylinder eyes
- Presses
- Castings and injection molds
- Continuous miners and drag lines
- Rotary crushers
- Jaw crusher pitman arms
- Whole tree chippers
- Rudder Bore
- Stern Tube
- Diveter Vane



BW3000 AUTO BORE WELDER

TOOL CONFIGURATIONS

Configure your BW3000 Auto Bore Welder in 3 easy steps by selecting:

1. Base Package
2. Control Cable
3. Mounting Option

1. Base Package - Includes support rod, gas hose, positive weld cable, clamp collar, torch kit extensions 3, 6, 12 and 18 inch (76.2, 152.4, 204.8 and 457.2 mm), tool kit, consumables starter kit, weld head, conduit wire feed 5-foot (1.5 m), torches #00 to #5, .88 to 13 inches (22.4 to 330.2 mm), 8 foot (2.4 m) control cable, welding head, cable assembly, wire feeder, 170 Control Box (Metal 120/230V).

Weld Head Stroke	Wire Feeder	Part Number
6-inch (152.4 mm)	Enclosed	104708
6-inch (152.4 mm)	Shop Style	104709
12-inch (304.8 mm)	Enclosed	104711
12-inch (304.8 mm)	Shop Style	104710

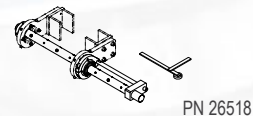
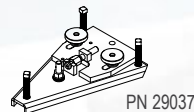
2. Power Supply Cables (Additional cables available on request)

Miller 14 PIN Control Cable 25 foot (7.6 m)	53249
Lincoln Control Cable 25 foot (7.6 m)	53991



3. Mounting Options

- Adjustable Base (Must be used with a 5 in/127 mm (28208) and/or a 10 in/254 mm (35006) Radial Mount) **29037**
- Adapter Kit to BB3000 1-1/4 inch (31.8 mm) Bar **26795**
- Adapter Kit to BB4500 1-3/4 inch (44.5 mm) Bar **43731**
- Adapter Kit to BB5000 2-1/4 inch (57.2 mm) Bar **26518**



ACCESSORIES

Controller

170 Controller, Metal 120/230V* **98040**

Controller Accessories

Isolation Transformer 500 VA 115 VAC 50/60 HZ **103450**
NEMA5-15 Plugs

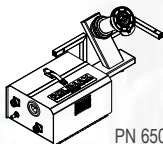
Isolation Transformer 500 VA 115 VAC 50/60 HZ **103451**
NEMA5-15 Plugs

Power Supply Uninterruptible 120 VAC 600 VA 5-15 Plugs **103615**

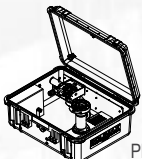
Wire Feeder, Push/Pull Ready

Shop Style, 24 VAC (Accepts wire straightener option) **65054**

Enclosed, 24 VAC (Does not accept wire straightener option) **66946**



PN 65054



PN 66946

Mounting Options

Tool Alignment for BB3000 1-1/4 in. (31.8 mm) Bar **26656**

Tool Alignment for BB4500 1-3/4 in. (44.5 mm) Bar **36062**

Tool Alignment for BB5000 2-1/4 in. (57.2 mm) Bar **26487**

Adjustable Base (Must be used with a 5 in/127 mm (28208) and/or a 10 in/254 mm (35006) Radial Mount) **29037**

Radial Mount 5 in. (127.0 mm), Radius Standard Spacer **28208**

Mounting Options Continued

Radial Mount 10 in. (254.0 mm), Radius Spacer **35006**

Mounting Rod Extender **30831**

Wire Feed Accessories

Top Mount Feeder **64288**

Wire Straightener (compatible only with shop style wire feeder) **35357**

Torches

#000 Torch Kit, 0.5 - 1 in. (12.7 - 25.4 mm) **103311**

#00 to #5 Torch Kit, 0.88 - 13 in. (22.4 - 330.2 mm)* **69896**

#00 to #5 Torch & Bearing Clearance Kit, 0.88 - 27 in. (22.4 - 685.8 mm) **70197**

Torch Kit #13 - #24, 26 - 54 in. (660.4 - 1371.6 mm) Dia. **103289**
(includes slow rotation belt and pulley)

Torch Bearing Clearance Package, 12 - 27 in. (304.8 - 685.8 mm) **63916**

ACCESSORIES

Torches Continued

#0 Torch, 1.75 - 3 in. (44.5 - 76.2 mm) Dia.	28448
#00 Torch, 0.88 - 1.8 in. (22.4 - 45.7 mm) Dia.	29063
#1 Torch, 2.75 - 5.5 in. (69.9 - 139.7 mm) Dia.	29064
#2 Torch, 4.5 - 7.5 in. (114.3 - 190.5 mm) Dia.	29032
#3 Torch, 6 - 9 in. (152.4 - 228.6 mm) Dia.	29033
#4 Torch, 8 - 11 in. (203.2 - 279.4 mm) Dia.	29034
#5 Torch, 10 - 13 in. (254.0 - 330.2 mm) Dia.	29035

Torches (#6 - #12 require counterbalance when in the horizontal axis)

#6 Torch, 12 - 15 in. (304.8 - 381.0 mm) Dia.	30345
#7 Torch, 14 - 17 in. (355.6 - 431.8 mm) Dia.	31792
#8 Torch, 16 - 19 in. (406.4 - 482.6 mm) Dia.	30346
#9 Torch, 18 - 21 in. (457.2 - 533.4 mm) Dia.	30710
#10 Torch, 20 - 23 in. (508.0 - 584.2 mm) Dia.	30711
#11 Torch, 22 - 25 in. (558.8 - 635.0 mm) Dia.	30712
#12 Torch, 24 - 27 in. (609.6 - 685.8 mm) Dia.	30713

Torch Systems and Accessories

Trammel OD Torch Package, up to 14 in. (355.6 mm) Dia. **	27013
Trammel Torch 28 in. (711.2 mm). Maximum OD Capability**	38506
Extended Trammel Torch Dia. to 56 OD.**	53004
Face Torch 8 in. (203.2 mm)**	28186
Compact Face Torch 6 in. (152.4 mm) Swing**	48013
Conical Seat Torch**	28020
Torch Counterbalance**	30756

Torch Extensions

Torch Extension 3 in. (76.2 mm)**	29038
Torch Extension 6 in. (152.4 mm)**	29039
Torch Extension 12 in. (304.8 mm)**	29040
Torch Extension 18 in. (457.2 mm)**	29065
Torch Extension Support Kit**	33256

Extended Length Power Supply Cables

Miller 14 Pin, 50 foot (15.2 m)	58564
Lincoln 14 Pin, 50 foot (15.2 m)	53988

Extended Length Bore Welder Control Cable

15 foot (4.6 m) Control Cable with Metal Connectors	58615
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Wire Feed Conduits

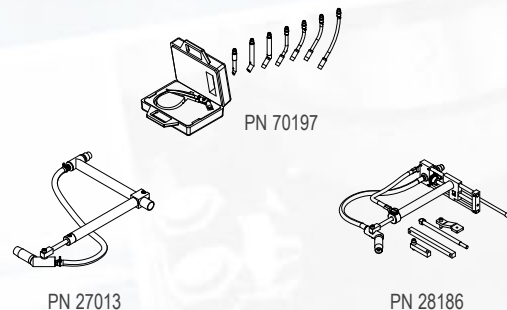
Wire Feed Conduit 5 foot (1.5 m)*	34813
Wire Feed Conduit 6 foot (1.8 m)	69889
Wire Feed Conduit 8 foot (2.4 m)	69890
Wire Feed Conduit 10 foot (3.0 m)	34043
Wire Feed Conduit 15 foot (4.6 m)	45256

Additional Consumables

Welding Tip #00, SPEZ Feed 0.045 in. (1.2 mm)	69554
Welding Tip #00, 0.035 in. (0.9 mm) *	69521
Welding Tip #00, 0.035 in. (0.9 mm) - Chromium/Zirconium	69891
Welding Tip #0, SPEZ Feed 0.045 in. (1.2 mm)	69555
Welding Tip #0, Standard 0.035 in. (0.9 mm) *	69520
Welding Tip #0, Standard 0.035 in. (0.9 mm) - Chromium/Zirconium	70204
Welding Tip, 0.035 in. (0.9 mm) *	69865
Welding Tip, 0.045 in. (1.2 mm)	70149
Welding Tip, 0.035	62642
Diffusers *	69778
Nozzle #00, Braze On *	72974
Nozzle #0, Braze On *	36531
Nozzle, Screw On	69866

* INCLUDED IN BASE PACKAGE

** PARTS NEED ADDITIONAL COMPONENTS. CONTACT YOU CLIMAX SALES REPRESENTATIVE FOR MORE INFORMATION



Proper equipment maintenance and repair are crucial to its performance, safety, uptime, and longevity.

Preventative Maintenance Kit: 97277

An assortment of recommended spare parts needed over the next two years.

Tool bag (1), Pressure Bearing Wire Roll (2), 0.035 in. (0.9 mm) Tips Consumable Kit (1), Bore Welder Spindle Liner (1), Liner, .065 ID X .144 OD X 16 ft for .023/.045 Wire (1), O Ring 1/16 X 1/2 ID X 5/8 OD (6), Roller Wire Feed .035/.045 (2), Step Limit Switch (1).

