

Automated Spiral Welding System for Bore, Flange, and Valve Repair

10 | 2022
BW1



The CLIMAX BW1000 Auto Bore Welder is an automated spiral welding system that provides high quality bore welding technology in a ruggedly constructed, highly portable, and easily affordable package.

Now you can:

- Increase both your welding and machining productivity.
- Dramatically reduce repair time and costs.
- Repair equipment on-site.
- Maximize equipment uptime.
- Extend the working life of your capital equipment.

HIGH QUALITY AND PRECISION

Swivel head provides torch adjustment through a simple and robust ball and seat

arrangement, the simplest design in the industry.

Reverse Rotation allows the operator to reverse the rotation direction. This is typically used when the borewelder is in the horizontal axis and the operator needs to weld multiple passes. This feature alternates the uphill weld over the downhill weld of the last complete pass, simplifying multi-pass welding.

FLEXIBLE AND VERSATILE

Welds in any axis: vertical, horizontal or inverted.

Operation is extremely simple.

Interfaces with most wire feeders.

Swivel head provides torch adjustment through a simple and robust ball and seat arrangement, the simplest design in the industry.

Boring Bar Interface Kit allows quick alignment and attachment of the BW1000 to CLIMAX Line Boring Systems for quick turnover between welding and boring for fast completion of jobs.

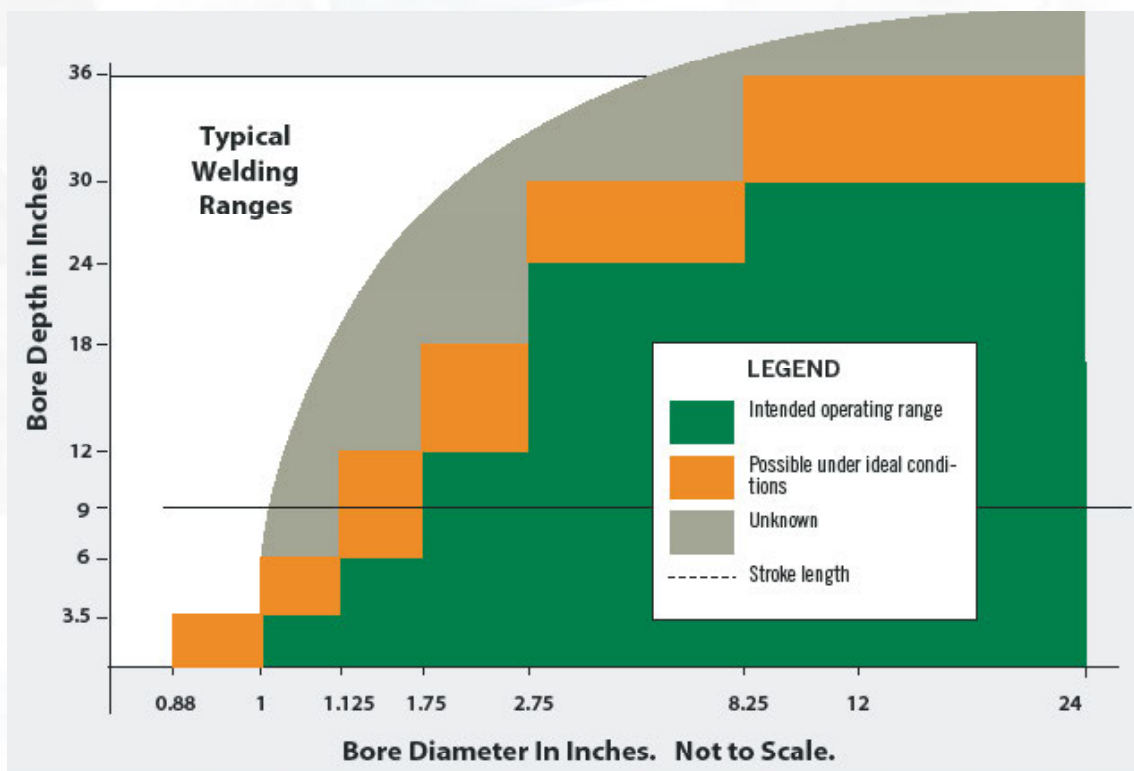
Adjustable base allows mounting of the BW1000 to fit any workpiece when not using a boring bar. The non-magnetic mounting base makes welding in job shops, machine shops, or specialized applications simple and easy.

Lightweight and portable, weighs just 17 lbs (7.7 kg) allowing for easy transport from the shop to the field.

BW1000 AUTO BORE WELDER

SPECIFICATIONS, WELD RANGE INFO

	Inch	Metric
Welding Process	MIG (GMAW)	
Axial Feed Per Revolution	8TPI – 0.125 inch	8TPI – 3.2 mm
Axial Travel	9 inches	228.6 mm
Wire Diameter Range	0.030 - 0.045 inches	0.76 - 1.14 mm
Amperage Rating	140A Continuous	
Torch Extension Arms	3, 6, and 12 inch arms	76.2, 152.4, and 304.8 mm arms
Max. reach without support:	40 inches	1016 mm
Standard package torches:	Swivel #1, Swivel #2	
Torch range:	0.88 to 12 inches	22.4 to 304.8 mm
Power Supply Requirements	120 VAC 50/60Hz or 230 VAC 50/60Hz, 175 Amp Rating CV power source (power supply not included in Auto Bore Welder 1000 System package).	
Weights and Measures		
Weight (does not include mounting options)	41 lbs	18 kg
Shipping Weight (does not include mounting options)	69 lbs	31 kg
Shipping Dimensions	24 L x 19.5 W x 12 H in.	609.6 x 495.3 x 304.8 mm



BW1000 AUTO BORE WELDER

TOOL CONFIGURATIONS

Configure your BW1000 Auto Bore Welder in 3 easy steps by selecting:

1. Base Package
2. Mounting Option
3. Conduit Assembly

1. Base Unit includes tool kit, weld head 9 in. (228.6 mm) stroke, rod, clamp collar, standard torch extension 3, 6, and 12 in. (76.2, 152.4, and 304.8), consumable package, power cord, radial mount, swivel torch assembly, and pelican case	
Standard - includes base unit, small bore kit 0.88 - 3 in. (22.4 - 76.2 mm) with standard torch adapter (36750), swivel torch kit #1 & #2, 2.75 - 12 in. (69.9 - 304.8 mm) dia. (70200)	70594
European - includes base unit, #0 torch 1.75 - 3 in. (44 - 76 mm) dia. (28448), torch adapter with standard torches to swivel assembly (33804), conduit switch assembly for Euro (36862)	99691
2. 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 in. (31.8 mm) bar	26795
Adapter kit to BB4500 1-3/4 in. (44.5 mm) bar	43731



Adapter kit to BB5000 2-1/4 in. (57.2 mm) bar	26518
3. Conduit Assemblies	
Conduit switch assembly for Miller	37688
Conduit switch assembly for Euro	36862
Conduit switch assembly for Tweco	39408
Conduit switch assembly for Lincoln	43071
Conduit switch assembly for Hobart & Thermal Arc Hefty II	69282

ACCESSORIES

Standard Torches		
Torch bearing clearance package 12 - 27 in. (304.8 - 685.8 mm)		63916
Torch kit, #00 - #5, range: 0.88 - 13 in. (22.4 - 330.2 mm) dia.		69896
Torch	Size Range Diameter	PN
<i>Requires torch adapter and standard to swivel</i>		
#00	0.88 - 1.8 in. (22 - 46 mm)	29063
#0	1.75 - 3 in. (44 - 76 mm) dia.	28448
#1	2.75 - 5.5 in. (70 - 139 mm)	29064
#2	4.5 - 7.5 in. (114.3 - 190.5 mm)	29032
#3	6 - 9 in. (152 - 228 mm)	29033
#4	8-11 in. (203.2 - 279.4 mm)	29034
#5	10 - 13 in. (254 - 330 mm)	29035
<i>Requires torch adapter, standard to swivel and torch counterbalance</i>		
#6	12 - 15 in. (304.8 - 381 mm)	30345
#7	14 - 17 in. (356 - 432 mm)	31792
#8	16 - 19 in. (406.4 - 482.6 mm)	30346
#9	18 - 21 in. (457 - 533 mm)	30710
#10	20 - 23 in. (508 - 584.2 mm)	30711
Trammel OD torch package up to 14 in. (355.6 mm) dia.		27013
Trammel torch 28 in. (711.2 mm) maximum OD capability		38506
Torch counterbalance		30756
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 1-3/4 in. (44.5 mm) bar		26487
Radial mount 5 in. (127.0 mm), radius standard spacer		28208
Radial mount 10 in. (254.0 mm), radius spacer		35006
Weld head support rod		30773
Mounting rod extender		30831
Standard Torch Consumables		
Welding tip #00, 0.035 in. (0.9 mm)		69521
Welding tip #00, SPEZ feed 0.045 in. (1.2 mm)		69554
Welding tip #0, standard 0.035 in. (0.9 mm)		69520

Welding tip #0, large radius 0.035 in. (0.9 mm)	67997
Welding tip #0, standard radius 0.045 in. (1.2 mm)	68622
Welding tip #0, SPEZ feed 0.045 in. (1.2 mm)	69555
Welding tip, 0.035 in. (0.9 mm)	69865
Welding tip, 0.045 in. (1.2 mm)	70149
Welding tip, 0.030 in. (0.8 mm)	70150
Welding tip, 0.035 in. (0.9 mm) chromium/zirconium	62642
Welding tip #00, 0.035 in. (0.9 mm) chromium/zirconium	69891
Welding tip #0, standard 0.035 in. (0.9 mm) chromium/zirconium	70204
Welding tip 0.045 in. (1.2 mm) dia. chromium/zirconium	70205
Welding nozzle (for all torches except #00 & #0)	69866
Torch Extensions	
Torch extension kit 3 - 18 in. (76.2 - 457.2 mm), includes 3, 6, 12 & 18 in. (76.2, 152.4, 304.8 & 457.2 mm)	69895
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	40877
Swivel Torch Assembly	
Swivel Torch Options	
Swivel torch #1, 2.75 - 8.2 in. (70.0 - 208.0 mm) Dia.	39725
Swivel torch #2, 8 - 12 in. (203.0 - 305.0 mm) dia.	39726
Swivel torch kit #1 & #2, 2.75 - 12 in. (69.9 - 304.8 mm) dia.	70200
Swivel Torch Consumables	
Welding tip 0.035 in. (0.9 mm)	69865
Standard welding nozzle (for all torches except #0 & #00)	69866
Welding diffuser	69778
Standard Torch Adapter (Swivel to Standard)	
Torch adapter, standard torches to swivel assembly	33804
Small bore kit 0.88 to 3 in. (22.4 to 76.2 mm), includes standard torch adapter	36750