# **BW2600 AUTO BORE WELDER**

A compact blend of simplicity and reliability; small enough to fit in a service truck, yet capable enough to tackle aggressive field applications with ease.



## **HIGH QUALITY AND PRECISION**

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

Automated skip / fill is a simple cam operated feature that allows the operator to easily program WELD ONLY or NO WELD sections of the bore up to 180 degrees. Simply set the cams and the machine takes care of the rest. Machine fully rotates between skip / fill sections.

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. Hand held pendant allows operator to control welder operations from one hand held control panel. Rotation jog, weld stop/ start, arc interrupt, and rotation speed

## FLEXIBLE AND VERSATILE

Free position allows the operator to move the spindle freely for torch placement, or move the spindle quickly to change consumables when the need arises.

Adjustable step feed allows adjustability of bead placement and eliminates weld void at ends of weld.

Run mode allows the operator to move the spindle with the worm gear knob, allowing incremental fine adjustment of the axial start point, or when small adjustments are needed when welding.

Step lock-out allows the ability to face weld, greatly expanding the versatility of the welder. This feature also allows operators to

reduce or eliminate axial feed for the first or last passes.

2017 BW26

Boring Bar Interface Kit allows quick alignment and attachment of the BW2600 to Climax Line Boring Systems for quick turnover between welding and boring for fast completion of jobs.

Adjustable base allows mounting of the BW2600 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.

## SAFETY

Hand held pendant allows operator to control the equipment from the most advantageous location, allowing precise adjustments that customers require for best results.



# SPECIFICATIONS, APPLICATIONS

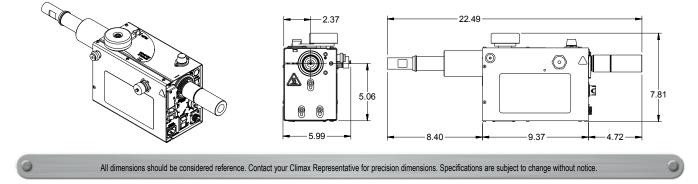
	US	Metric
Welding Process	Metal-Inert-Gas (MIG)	
Axial Travel / Stroke	9 inches	228.6 mm
Step Range (variable)	0.050 - 0.200 inches per rev.	1.27 - 5.08 mm per rev.
Wire Diameter Range	0.030 - 0.045 inches	0.76 - 1.14 mm
Base Package Extension Reach	21 inches	533.4 mm
Torch Extensions	3, 6, and 12 inches	76.2, 152.4 and 304.8 mm
Torch Welding Diameter Ranges ID Bores #00 - #10 OD Torches, max dia. Face Torch	0.88 - 24 inches 1 - 24 inches 1 - 20 inches	22.4 - 609.6 mm 25.4 - 609.6 mm 25.4 - 508.0 mm
Unsupported Torch Reach	36 inches	914.4 mm
Max Continuous Welding Current	175 Amps	
Typical Voltage Operating Range	(short arc/.035 wire) 17 - 19 volts	
Power supply with burnback control required to us	se skip/fill funtion	
Weight (does not include mounting options)	41 Lbs	18 kg
Shipping Weight (does not include mounting options)	69 Lbs	31 kg
Shipping Dimensions	19.5 x 24 x 12 Inches	495.3 x 609.6 x 304.8 mm

## WELD TIME IN MINUTES

		LENGTH OF BORE (INCHES)									
		1	2	3	4	5	6	7	8	9	10
	1	1.3	2.5	3.8	5	6.3	7.5	8.8	10	11.3	12.6
	2	2.5	5	7.5	10	12.6	15.1	17.6	20.1	22.6	25.1
	3	3.8	7.5	11.3	15.1	18.8	22.6	26.4	30.1	33.9	37.7
	4	5	10	15.1	20.1	25.1	30.1	35.2	40.2	45.2	50.2
ŝ	5	6.3	12.6	18.8	25.1	31.4	37.7	44	50.2	56.5	62.8
(INCHES)	6	7.5	15.1	22.6	30.1	37.7	45.2	52.8	60.3	67.8	75.4
	7	8.8	17.6	26.4	35.2	44	52.8	61.5	70.3	79.1	87.9
BORE	8	10	20.1	30.1	40.2	50.2	60.3	70.3	80.4	90.4	100.5
B	9	11.3	22.5	33.9	45.2	56.5	67.8	79.1	90.4	101.7	113
ROF	10	12.6	25.1	37.7	50.2	62.8	75.4	87.9	100.5	113	125.6
E	11	13.8	27.6	41.4	55.3	69.1	82.9	95.7	110.5	124.3	138.2
DIAMETER	12	15.1	30.1	45.2	60.3	75.4	90.4	105.5	120.6	135.6	150.7
ā	13	16.3	32.7	49	65.3	81.6	95	114.3	130.6	147	163.3
	14	17.6	35.2	52.8	70.3	87.9	105.5	123.1	140.7	158.3	175.8
	15	18.8	37.7	56.5	75.4	94.2	113	131.9	150.7	169.6	188.4
	16	20.1	40.2	60.3	80.4	100.5	120.6	140.7	160.8	180.9	201

Weld deposition rate of 20 inches per minute & step of 0.125 inches

# OPERATIONAL DIMENSIONS



Climax Portable Machining & Welding Systems Web site: climaxportable.com

page 2

Worldwide Phone: +1 503 538 2185 N. America Toll-Free: 1 800 333 8311 Fax: +1 503 538 7600 E-mail: Info@cpmt.com



### Configure your BW2600 in 3 easy steps.

- 1 Select Base Package
- 2 Select Conduit Assembly
- 3 Select Mounting Option

To configure the auto bore welder you require, simply select the option you need in each step, then contact your CLIMAX representative.

1 Base Package - Includes support rod, 7.5 foot (2.3 m) power cord, weld head, clamp collar, extensions 3, 6, and 12 inch (76.2, 152.4, and 304.8) tool kit, consumables starter kit, weld head, swivel torches #1 & #2, 2.75 - 12 inches (69.9 - 304.8 mm) diameter. (Power supply with burnback control required to use skip / fill funtion)

	Machine Stroke, 9 inches (228.6 mm)	86686
2	Conduit Assembly Conduit Switch Assembly - Miller Conduit Switch Assembly - Euro Connection Conduit Switch Assembly - Tweco Conduit Switch Assembly - Lincoln Conduit Switch Assembly - Lincoln PowerMig Conduit Switch Assembly - Lincoln Tweco Style - with 5 pin Amp	85476 85435 85534 85536 85527 86046
3	Mounting Options Adjustable Base, includes 5 inch (127 mm) radial mount Adapter Kit to BB3000 1-1/4 inch (31.8 mm) Bar Adapter Kit to BB4500 1-3/4 inch (44.5 mm) Bar Adapter Kit to BB5000 2-1/4 inch (57.2 mm) Bar	29037 26795 43731 26518
4	Options Small Bore Kit, Torch #00 & #0, 0.88 to 3 inches	36750

Small Bore Kit, Torch #00 & #0, 0.88 to 3 inches (22.4 to 76.2 mm) - Includes Standard Torch Adapter Remote Control Pendant - NOT REQUIRED to operate welder

85341

## ACCESSORIES

### Swivel Torches

#1 Swivel Torch 2.75 - 8.2 inches (70mm - 208mm) * #2 Swivel Torch 8 - 12" inches (203mm - 305mm) *	39725 39726
Torches (#00 - #11 torches require torch adapter, standa #00 Torch, 0.88 - 1.8 inches (22 - 46 mm) dia. #0 Torch, 1.75 - 3 inches (44 - 76 mm) dia. #1 Torch, 2.75 - 5.5 inches (70 - 208 mm) dia. #2 Torch, 4.5 - 7.5 inches (114.3 - 190.5 mm) dia. #3 Torch, 6 - 9 inches (152 - 228 mm) dia. #4 Torch, 8 - 11 inches (203.2 - 279.4 mm) dia. #5 Torch, 10 - 13 inches (254 - 330 mm) dia.	ard to swivel) 29063 28448 29064 29032 29033 29033 29034 29035
Torches (#6 - #11 torches require counterbalance when horizontal axis) #6 Torch, 12 - 15 inch (304.8 - 381.0 mm) Dia. #7 Torch, 14 - 17 inch (355.6 - 431.8 mm) Dia. #8 Torch, 16 - 19 inch (406.4 - 482.6 mm) Dia. #9 Torch, 18 - 21 inch (457.2 - 533.4 mm) Dia. #10 Torch, 20 - 23 inch (508.0 - 584.2 mm) Dia. #11 Torch, 22 - 25 inch (558.8 - 635.0 mm) Dia.	used in 30345 31792 30346 30710 30711 30712
Torch Systems and Accessories Torch Kit, #00 - #5, 0.88 - 13 inch (22.4 - 330.2 mm) Dia.	69896



Image includes optional components

Swivel Torch Kit #1 & #2,	70200	
- 2.75 - 12 inch (69.9 - 304.8 mm) Dia		
Torch & Bearing Clearance Kit, #00 to #5	70197	
- 0.88 - 24 inch (22.4 - 609.6 mm) Dia.		
Torch Bearing Clearance Kit	63916	
- 12 - 24 inch (304.8 - 609.6 mm) Dia.		
Trammel OD Torch Package	27013	
- up to 14 inch (355.6 mm) Dia.		
Trammel Torch 24 inch (609.6 mm)	38506	
- Maximum OD Capability		
Face Torch 8 inch (203.2 mm)	28186	
Compact Face Torch 6 inch (152.4 mm) Swing	48013	
Conical Seat Torch	28020	
Torch Counterbalance	30756	
Torch Extension 3 inch (76.2 mm) *	29038	
Torch Extension 6 inch (152.4 mm) *	29039	
Torch Extension 12 inch (304.8 mm) *	29040	
Torch Extension 18 inch (457.2 mm) *	29065	
Torch Extension Support Kit	40877	
Torch Adapter, Standard Torches to Swivel Assembly	33804	

PN 27013

PN 28186

28208

35006 30831

#### Additional Consumables

PN 70197

Welding Tip #00, SPEZ Feed 0.045 inch (1.2 mm)	69554
Welding Tip #00, 0.035 inch (0.9 mm) *	69521
Welding Tip #00, 0.035 inch (0.9 mm)	69891
- Chromium/Zirconium	
Welding Tip #0, SPEZ Feed 0.045 inch (1.2 mm)	69555
Welding Tip #0, Standard 0.035 inch (0.9 mm) *	69520
Welding Tip #0, Standard 0.035 inch (0.9 mm)	70204
- Chromium/Zirconium	
Welding Tip, 0.035 inch (0.9 mm) *	69865
Welding Tip, 0.045 inch (1.2 mm)	70149
Diffusers *	69778
Nozzle #00, Braze On *	72974
Nozzle #0, Braze On *	36531
Nozzle, Screw On	69866
Mounting Options	
Tool Alignment for BB3000 1-1/4 inch (31.8 mm) Bar	26656
Tool Alignment for BB4500 1-3/4 inch (44.5 mm) Bar	36062
Tool Alignment for BB5000 2-1/4 inch (57.2 mm) Bar	26487

Radial Mount 5 inch (127.0 mm), Radius Standard Spacer

Radial Mount 10 inch (254.0 mm), Radius Spacer

#### \* INCLUDED IN BASE PACKAGE

Mounting Rod Extender

#### Climax Portable Machining & Welding Systems Web site: climaxportable.com

## CLIMAX APPLICATIONS, TRAINING AND SUPPORT

## Applications



## The BW2600 is widely used by these industries:

Mining & Hoover Const

Mining & Heavy Construction Pulp & Paper

On-site Maintenance and Repair Factory Maintenance

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
- Shaft OD repair
- · Mud pumps
- Hydraulic cylinder eyes
- Presses
- Castings and injection molds
- Continuous miners and drag lines
- Rotary crushers
- Jaw crusher pitman arms
- Diverter Vane

## **Training Program**

CLIMAX has been teaching the fundamentals and fine points of portable machine tool operation for practically as long as we've been inventing and building the tools.

We offer several training facilities across the world - all facilities offer training for machine tool operators on safety and machine setup and operation. Trainees also receive technical tips and tools to improve operational efficiencies, with the vast majority of every program devoted to hands-on activities and skill development.

Whether it's a regularly scheduled course at one of our training facilities, or custom curriculum conducted at your facility, your machinists will benefit from courses developed by some of the most respected authorities in the business.

Call us today to register for a regularly scheduled class, or talk to us about how we can customize a training program for your specialized application.



## Call CLIMAX for:

### Rentals

With worldwide rental depot locations, you are never far away from a CLIMAX tool.

## **On-site Training**

Need some refresher courses in setting up and operating your CLIMAX machine tool?

## **Custom Projects**

CLIMAX has been solving complicated machining, welding and valve testing problems for our customers since 1966

## World Headquarters

2712 E. Second Street Newberg, Oregon 97132 USA Tel: +1 503 538 2185 N. America Toll-Free: 1 800 333 8311 Fax: +1 503 538 7600 Email: info@cpmt.com

## Asia Pacific

316 Tanglin Road #02-01 Singapore 247978 Tel: +65 9647 2289 Fax: +65 6801 0699 Email: info@cpmt.com

## European

Am Langen Graben 8 52353 Düren, Germany Tel: (+49) (0) 2421 9177 0 Fax: (+49) (0) 2421 9177 29 Email: info@cpmt.de

#### Middle East Warehouse #5, Plot: 369 272 Um Sequim Road Dubai, UAE Tel: +971 4 321 0328 Email: info@cpmt.com

## United Kingdom

Unit 7 Castlehill Industrial Estate Bredbury Industrial Park Horsfield Way Stockport SK6 2SU Tel: +44 (0) 161 406 1720 Email: info@cpmt.com

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Vortland