Automated Spiral Welding System for Bore, Flange and Valve Repair

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.

Lightweight & Portable:

• Weighs just 17 lb (7.7 kg).
• Easy to transport from the shop to the field.

Extremely Versatile & Easy to Operate:

• Welds in any axis: vertical, horizontal or inverted.
• Operation is extremely simple.
• Interfaces with most wire feeders.

One setup for Both Welding & Boring:

The CLIMAX Bore Welder Interface Kit simplifies your boring and welding setup process:

• Allows quick attachment of the BW1000 Auto Bore Welder directly to the CLIMAX BB3000, BB4500 or BB5000 Boring System mounting fixtures.
• Ensures perfect alignment for both welding and machining.
• One setup for both welding and boring saves time, and helps you get your job done quickly.

Weld & Bore at the Same Time:

Because the BW1000 Auto Bore Welder uses the same mounting fixtures as the CLIMAX BB3000, BB4500 or BB5000 Boring Systems, you can weld up one section of your job and bore out another section at the same time. Simply use an extra set of bearing mounts to line bore one set of bores while bore welding another…cuts your work time!
## SPECIFICATIONS, WELD RANGE INFO

<table>
<thead>
<tr>
<th>US</th>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axial feed per revolution: 8TPI – 0.125 inch</td>
<td>8TPI – 3.3 mm</td>
</tr>
<tr>
<td>Welding process: MIG (GMAW)</td>
<td></td>
</tr>
<tr>
<td>Axial travel: 9.0 inch</td>
<td>228.6 mm</td>
</tr>
<tr>
<td>Wire diameter range: 0.030 - 0.045 inch</td>
<td>0.76 - 1.14 mm</td>
</tr>
<tr>
<td>Amperage rating: 140 A Continuous</td>
<td></td>
</tr>
<tr>
<td>Length of standard pkg extension arms: 1 each: 3, 6, and 12 inch arms</td>
<td>1 each, 76.2, 152.4, and 304.8 mm arms</td>
</tr>
<tr>
<td>Max. reach without support: 40 inches</td>
<td>101.6 mm</td>
</tr>
<tr>
<td>Standard package torches: Swivel #1, Swivel #2</td>
<td></td>
</tr>
<tr>
<td>Torch range: 2.75 to 12 inches</td>
<td>69.9 to 304.8 mm</td>
</tr>
<tr>
<td>Power Supply Requirements: 120 VAC 50/60Hz or 230 VAC 50/60Hz, 175 Amp Rating CV power source (power supply not included in AutoBoreWelder 1000 System package).</td>
<td></td>
</tr>
</tbody>
</table>

---

### Typical Welding Ranges

**LEGEND**
- **Green**: Intended operating range
- **Orange**: Possible under ideal conditions
- **Gray**: Unknown
- **Dashed line**: Stroke length

**Bore Diameter In Inches**  **Bore Depth In Inches**

**Not to Scale.**
Configure your BW1000 Auto Bore Welder in ten easy steps.

To configure your BW1000 Auto Bore Welder:

1. Select a Base Unit
   - Tool Kit, Weld Head 9 inch (228.6 mm) Stroke,
     Rod, Collar, Standard Torch Extension Kit, Consumable Package,
     Power Cord, Radial Mount, Liner & Pelican Case
   - 70198

2. Swivel Torch Assembly
   - Swivel Assembly
   - 35603

3. Swivel Torch Options
   - Swivel Torch #1, 2.75 to 8.2 inch (70.0 to 208.0 mm) Dia.
     - 39725
   - Swivel Torch #2, 8 to 12 inch (203.0 to 305.0 mm) Dia.
     - 39726
   - Swivel Torch Kit #1 & #2
     - 70200
   - 2.75 to 12 inch (69.9 to 304.8 mm) Dia.

4. Swivel Torch Consumables
   - Welding Tip 0.035 inch (0.9 mm)
     - 69865
   - Welding Nozzle, Standard
     - 69866
   - (For All Torches Except #0 & #00)
   - Welding Diffuser
     - 69778

5. Standard Torch Adapter (Swivel to Standard)
   - Torch Adapter, Standard Torches to Swivel Assembly
     - 33804
   - Small Bore Kit 0.88 to 3 inch (22.4 to 76.2 mm), Includes Standard Torch Adapter
     - 36750

6. Standard Torches (continued)
   - (Must have torch adapter or small bore kit)
     - Torch bearing clearance package 12 to 27 inch (304.8 to 685.8 mm)
     - 63916
   - #00 Torch (requires torch adapter, standard to swivel)
     - Size range: 2.68 to 3 inches (68.4 - 76.2 mm) dia.
     - 29063
   - #0 Torch (requires torch adapter, standard to swivel)
     - Size range: 1.75 to 3 inches (44.7 - 76.2 mm) dia.
     - 28448
   - #1 Torch (requires torch adapter, standard to swivel)
     - Size range: 2.75 to 5.5 inches (70.4 to 139.7 mm) dia.
     - 29064
   - #2 Torch (requires torch adapter, standard to swivel)
     - Size range: 2.75 to 5.5 inches (70.4 to 139.7 mm) dia.
     - 29032
   - #3 Torch (requires torch adapter, standard to swivel)
     - Size range: 4.5 to 7.5 inches (114.3 to 190.5 mm) dia.
     - 29033
   - #4 Torch (requires torch adapter, standard to swivel)
     - Size range: 6 to 9 inches (152.4 to 228.6 mm) dia.
     - 29034
   - #5 Torch (requires torch adapter, standard to swivel)
     - Size range: 8.1 to 11 inches (203.2 to 279.4 mm) dia.
     - 29035
   - #6 Torch (requires torch adapter, standard to swivel & torch counterbalance)
     - Size range: 12 to 15 inches (304.8 to 381.0 mm) dia.
     - 30345
   - #7 Torch (requires torch adapter, standard to swivel & torch counterbalance)
     - Size range: 14 to 17 inches (356.4 to 432.0 mm) dia.
     - 31792

6. Standard Torches, continued
   - #8 Torch (requires torch adapter, standard to swivel & torch counterbalance)
     - Size range: 16 to 19 inches (406.4 to 482.6 mm) dia.
     - 30346
   - #9 Torch (requires torch adapter, standard to swivel & torch counterbalance)
     - Size range: 18 to 21 inches (457.2 to 533.4 mm) dia.
     - 30710

7. Standard Torch Consumables
   - Welding Tip #00, 0.035 inch (0.9 mm)
     - 69521
   - Welding Tip #00, SPEZ Feed 0.045 inch (1.2 mm)
     - 69554
   - Welding Tip #0, Standard 0.035 inch (0.9 mm)
     - 69520
   - Welding Tip #0, Large Radius 0.035 inch (0.9 mm)
     - 67997
   - Welding Tip #0, Standard Radius 0.045 inch (1.2 mm)
     - 68622
   - Welding Tip #0, SPEZ Feed 0.045 inch (1.2 mm)
     - 69555
     - Welding tip, 0.035 inch (0.9 mm)
       - 69865
     - Welding tip, 0.045 inch (1.2 mm)
       - 70149
     - Welding tip, 0.030 inch (0.8 mm)
       - 70150
     - Welding tip, 0.035 inch (0.9 mm)
       - 62642
     - Chromium/Zirconium
       - 69891
   - Welding Tip #0, Standard 0.035 inch (0.9 mm)
     - 70204
   - Chromium/Zirconium
     - 70205
   - Welding Tip #0.045 inch (1.2 mm) Dia.
     - 70206
   - Chromium/Zirconium
     - 69866

8. Additional Torch Extensions
   - Torch Extension Kit 3 to 18 inch (76.2 - 457.2 mm), Includes 3, 6, 12 & 18 inch (76.2, 152.4, 304.8 & 457.2 mm)
     - 69895
     - 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
       - 40877

9. Mounting Options
   - Mounting Options
     - Adjustable Base
       - 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
     - Tool Alignment for BB3000 1-1/4 inch (31.8 mm) Bar
       - 26568
     - Tool Alignment for BB4500 1-3/4 inch (44.5 mm) Bar
       - 36062
     - Radial Mount 5 inch (127.0 mm), Radius Standard Spacer
       - 28208
     - Radial Mount 10 inch (254.0 mm), Radius Standard Spacer
       - 35006
     - Weld Head Support Rod
       - 30773
     - Mounting Rod Extender
       - 30831

10. Conduit Assembly
    - Conduit Assembly
      - Conduit Switch Assembly for Miller
        - 37688
      - Conduit Switch Assembly for Lincoln
        - 37688
      - Conduit Switch Assembly for Hobart & Thermal Arc Hefty II
        - 69282
OEM OPERATIONAL TRAINING

Backed by Over 50 Years of Experience

CLIMAX pioneered the concept of portable machine tools in 1964. Since that time, CLIMAX has grown to become the world’s largest provider of innovative on-site machining solutions.

Professional, Experienced Instructors

All training programs are taught by experienced OEM CLIMAX trainers. Your instructor will provide valuable information on operator safety, tool set-up, mounting, and operation that will help you complete your on-site machining tasks quickly and to the highest quality standards.

Sign up today for training at one of our seven Global CLIMAX training centers.

• Portland, Oregon
• Houston, Texas
• Baton Rouge, Louisiana
• Cleveland, Ohio
• Manchester, United Kingdom
• Düren, Germany
• Dubai, United Arab Emirates

Call CLIMAX for:

RENTALS

On selected models. With 20+ worldwide rental depot locations, you are never far away from CLIMAX.

OEM TRAINING

If you need training or on-site consultation, we’re famous for it!

SPARES, REPAIR & MAINTENANCE

Call us for anything you need to keep your system running in top condition.

CUSTOM PROJECTS

Custom turn-key system design services from the most experienced engineers in the business!