For your BB5000 Portable Boring Machine

Robust, high quality facing head expands BB5000 capabilities

• This rugged, heavy-duty facing head has a much higher removal rate to handle large diameter facing jobs with ease.

• Broad facing range, from 2.25 to 24 inches (57.2 - 609.6 mm) without repositioning.

• Swing diameter from 20.1 to 25.3 inches (510.5 to 642.6 mm).

• Simple and robust feed trip mechanism moves the carrier inward or outward automatically.

• Rigid tool carrier and slide assembly.

• Automatic radial feed is provided by a trip-activated feed mechanism that advances from 0 to 0.011 inches (0 to 0.279 mm) per revolution.

Easy, flexible setup and operation

• The adjustable facing head will face in either direction.

• Quickly mount the facing head anywhere on the boring bar; saves time and helps get your job done quickly.
## SPECIFICATIONS

<table>
<thead>
<tr>
<th>US</th>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facing Diameter</td>
<td>2.25 – 24.0</td>
</tr>
<tr>
<td>Swing Diameter</td>
<td>20.1 – 25.3</td>
</tr>
<tr>
<td>Feed, Feed Rate</td>
<td>Automatic, 0 – 0.11/revolution</td>
</tr>
<tr>
<td>Operating Weight</td>
<td>40 lbs</td>
</tr>
<tr>
<td>Shipping Weight</td>
<td>110 lbs</td>
</tr>
<tr>
<td>Shipping Dimensions</td>
<td>38-1/8 x 17-13/16 x 6-1/8 inches</td>
</tr>
</tbody>
</table>

### Machining Example #1
- **Material:** A-36 steel plate
- **Motor:** Hydraulic with 11.3 in³ (185.2 cm³) displacement (Climax PN 21532)
- **HPU/Flow:** 5 Hp, 4.7 gpm (5 Hp, 17.8 L/min)
- **Feed Rate:** 0.004 inches (0.102 mm) per revolution
- **Feed Direction:** Feeding in
- **Bar RPM:** 24
- **Depth of Cut:** 0.020 inches (0.508 mm)
- **Surface Finish:** 250 µin
- **Flatness:** 0.003 over 20 inches (0.08 over 508 mm)
- **Tool Bit:** HSS cutter (Climax PN 32344)
- **Bearing Spacing:** 49.5 inches (1257.3 mm) from back side of bearing mounts
- **Cutting Oil:** None
- **Machine Orientation:** Boring bar mounted vertically with 2 double arm mounts

### Machining Example #2
- **Material:** A-36 steel plate
- **Motor:** Electric 112/55 bar RPM (Climax PN 37557)
- **Feed Rate:** 0.007 inches (0.178 mm) per revolution
- **Feed Direction:** Feeding in
- **Bar RPM:** 24
- **Depth of Cut:** 0.030 inches (0.762 mm)
- **Surface Finish:** 350 µin
- **Flatness:** 0.002 over 15 inches (0.051 over 381 mm)
- **Tool Bit:** HSS cutter (Climax PN 32344)
- **Bearing Spacing:** 49.5 inches (1257.3 mm) from back side of bearing mounts
- **Cutting Oil:** None
- **Machine Orientation:** Boring bar mounted horizontally with 2 double arm mounts

### Ordering Information

<table>
<thead>
<tr>
<th>Climax PN</th>
<th>31412</th>
<th>30051</th>
<th>30044</th>
<th>35858</th>
<th>36936</th>
<th>36954</th>
<th>45040</th>
<th>60301</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bar Dia.</td>
<td>1-¼ (31.8)</td>
<td>2.0 (50.8)</td>
<td>2-¼ (57.2)</td>
<td>1-3/4 (44.5)</td>
<td>2-¼ (57.2)</td>
<td>2-¼ (57.2)</td>
<td>2-¼ (57.2)</td>
<td>2-¼ (57.2)</td>
</tr>
<tr>
<td>Swing Dia.</td>
<td>6.6 - 9.4 (167.6 - 238.8)</td>
<td>9.1 - 22.2 (231.1 - 563.9)</td>
<td>10.0 - 18.6 (254 - 472.4)</td>
<td>13.5 (342.9)</td>
<td>13.5 (342.9)</td>
<td>20.3 (515.6)</td>
<td>20.1 - 25.3 (510.5 - 642.6)</td>
<td></td>
</tr>
<tr>
<td>Facing Dia.</td>
<td>2.1 - 8.8 (53.3 - 223.5)</td>
<td>2.5 - 18 (63.5 - 452.7)</td>
<td>2.5 - 18 (63.5 - 452.7)</td>
<td>2.5 - 12 (63.5 - 304.8)</td>
<td>2.5 - 12 (63.5 - 304.8)</td>
<td>2.5 - 19.0 (63.5 - 482)</td>
<td>2.25 - 24.0 (57.2 - 609.6)</td>
<td></td>
</tr>
<tr>
<td>Grooving Dia.</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>3.5 - 12 (88.9 - 304.8)</td>
<td>4.0 - 12.0 (101.6 - 304.8)</td>
<td>4.0 - 19.0 (101.6 - 482.6)</td>
<td>3.3 - 24.0 (83.8 - 609.6)</td>
<td></td>
</tr>
</tbody>
</table>

All dimensions should be considered reference. Contact your Climax Representative for precision dimensions. Specifications are subject to change without notice. There are no systems or components on this machine that are capable of producing hazardous EMC, UV or other radiation hazards. The machine does not use lasers nor does it create hazardous materials such as gases or dust.
OPERATIONAL DIMENSIONS

Dimensions in inch (mm)
APPLICATION PHOTOS

[Image of a machining system]

[Image of a welding system]
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.

At the Climax Global Learning Center situated in our corporate headquarters near Portland, Oregon, we provide training for machine tool operators on portable machine tool 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.

The Climax instructional team includes specialists in shipbuilding, power generation, civil engineering, bridge re-building, petrochemical and other industries.

Whether it’s a regularly scheduled course at the Global Learning Center, 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:

**On-site Training**
Need some refresher courses in setting up and operating your Climax machine tool?

**Special Projects**
Climax has been solving complicated on-site machining and welding problems for our customers since 1964.

**Rentals**
With 16 worldwide rental depot locations, you are never far away from a Climax portable machine tool.