A series of OD Mount Flange Facers that quickly machines the largest variety of flange sizes & styles in the industry.

The latest innovation in Climax's line of flange facers, this series of OD Mount Flange Facers set a new standard in safety, versatility, durability and performance, quickly machining all 7 flange types on the market today.

**Industry-Changing Safety**
- Feed control on the outside of the machine - no more reaching in!
- E-stop for quick stops & controlled re-starts
- Low pressure drop-out prevent unintended re-starts after loss of supplied air pressure
- CE Certified

**Flexible and Versatile**
- 1 machine for 7 flange types, no attachments needed
  - Flat face
  - Raised face
  - Ring type joints (RTJ)
  - Tongue & groove
  - Lens ring
  - Grayloc (hub profile)
  - Compact flanges
- Select from 2 models sized to machine flanges up to 12.5 or 24.5 inches (317.5 or 622.3 mm) in diameter
- Automatic & variable feed come standard on both radial and axial feeds for up to **30% time savings**!
  ... no reaching in means higher RPM machining
  ... adjust feed rate while machining - no need to stop, change direction, or replace parts
  ... start & stop feed while machining to machine to a shoulder
  ... easy machining of various types of materials
  ... a better surface finish
- Tool head and tool bit rotate independently, to any angle
- Tool head presets at 0°, 23°, and -23°
### Machine Performance Ranges

<table>
<thead>
<tr>
<th></th>
<th>FF1200 OD Mount Flange Facer</th>
<th>FF2400 OD Mount Flange Facer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mounting range</td>
<td>2 - 12.5 inches (50.8 - 317.5 mm)</td>
<td>8 - 24.4 inches (203.2 - 619.8 mm)</td>
</tr>
<tr>
<td>Mounting range (with setup fingers removed)</td>
<td>2 - 14 inches (50.8 - 355.6 mm)</td>
<td>8 - 26 inches (203.2 - 660.4 mm)</td>
</tr>
<tr>
<td>Facing diameter range</td>
<td>0 - 12.5 inches (0 - 317.5 mm)</td>
<td>0 - 24.5 inches (0 - 622.3 mm)</td>
</tr>
<tr>
<td>Radial tool slide travel</td>
<td>4.5 inches (114.3 mm)</td>
<td>16.5 inches (419.1 mm)</td>
</tr>
<tr>
<td>Axial tool head travel</td>
<td>2 inches (50.8 mm)</td>
<td>2 inches (50.8 mm)</td>
</tr>
<tr>
<td>Feed rate</td>
<td>0 - 0.035 inches/rev. (0 - 0.889 mm/rev)</td>
<td>0 - 0.035 inches/rev. (0 - 0.889 mm/rev)</td>
</tr>
</tbody>
</table>

### Rotational Drive System

<table>
<thead>
<tr>
<th></th>
<th>FF1200</th>
<th>FF2400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive type</td>
<td>Synchronous belt</td>
<td>Synchronous belt</td>
</tr>
<tr>
<td>Gear reduction</td>
<td>5.25 : 1</td>
<td>9.46:1</td>
</tr>
<tr>
<td>Turning arm speed range</td>
<td>10 - 60 RPM</td>
<td>5-30 RPM</td>
</tr>
<tr>
<td>Pneumatic power input requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Hp (0.8 kW)</td>
<td>90 psi @ 57 ft³/min (620 kPa @ 1.53 m³/min)</td>
<td>90 psi @ 74 ft³/min (600 kPa @ 2.1 m³/min)</td>
</tr>
</tbody>
</table>

### Measures

<table>
<thead>
<tr>
<th></th>
<th>FF1200</th>
<th>FF2400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine weight</td>
<td>135 lbs (61.2 kg)</td>
<td>350 lbs (158.8 kg)</td>
</tr>
<tr>
<td>Shipping weight</td>
<td>Wood 260 lbs (117.9 kg) / Metal 300 lbs (136.1 kg)</td>
<td>Wood 510 lbs (231.3 kg) / Metal 550 lbs (249.5 kg)</td>
</tr>
<tr>
<td>Crate dimensions</td>
<td>Wood 30 x 34.5 x 16.5 inch (762 x 876 x 419 mm) / Metal 36 x 32 x 27 inches (914 x 813 x 686 mm)</td>
<td>Wood 47 x 37.5 x 16.5 inch (1194 x 953 x 419 mm) / Metal 41.5 x 38 x 25 inches (1054 x 965 x 635 mm)</td>
</tr>
</tbody>
</table>

### In-House Testing Performance Results

<table>
<thead>
<tr>
<th></th>
<th>FF1200</th>
<th>FF2400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test 1 Material removal</td>
<td>0.05 inches (1.3 mm)</td>
<td>0.005 inches (0.25 mm)</td>
</tr>
<tr>
<td>Test 2 Best Finish</td>
<td>0.005 inches (0.889 mm)</td>
<td>0.005 inches (0.127 mm)</td>
</tr>
<tr>
<td>Depth of cut</td>
<td>44</td>
<td>27</td>
</tr>
<tr>
<td>RPM</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>Feed</td>
<td>0.15 in/rev (0.04 mm/rev)</td>
<td>0.004 in/rev (0.25 mm/rev)</td>
</tr>
<tr>
<td>Dia. of cut</td>
<td>10 - 11 inches (254 - 279 mm)</td>
<td>10 - 11 inches (254 - 279 mm)</td>
</tr>
<tr>
<td>Tool type</td>
<td>Insertable carbide</td>
<td>Insertable carbide</td>
</tr>
<tr>
<td>Finish</td>
<td>N/A</td>
<td>63 Ra</td>
</tr>
<tr>
<td>Metal removal rate</td>
<td>1.2 in³/min (19.7 cm³/min)</td>
<td>0.42 in³/min (6.88 cm³/min)</td>
</tr>
<tr>
<td>Flatness</td>
<td>N/A</td>
<td>0.002 inch (0.05 mm)</td>
</tr>
<tr>
<td></td>
<td>0.005 inch (0.127 mm)</td>
<td>N/A</td>
</tr>
</tbody>
</table>
To order your FF1200 OD Mount Flange Facer, simply select the motor option for your machine. Everything you need comes standard, no other attachments needed!

**Option 1  With Standard Pneumatic Motor**

**FF1200 for 0 - 12.5 inch (0 - 317.5 mm) dia. flanges**
- with wood crate P/N 83012
- with metal container P/N 80012

**FF2400 for 0 - 24.5 inch (0 - 622.3 mm) dia. flanges**
- with wood crate P/N 83024
- with metal container P/N 80024

**Option 2  With Right-Angle Pneumatic Motor**

**FF1200 for 0 - 12.5 inch (0 - 317.5 mm) dia. flanges**
- with wood crate P/N 84012
- with metal container P/N 81012

**FF2400 for 0 - 24.5 inch (0 - 622.3 mm) dia. flanges**
- with wood crate P/N 84024
- with metal container P/N 81024

**Accessories for use with the FF1200 and FF2400 OD Mount Flange Facers**
- Carbide insert holder set, ½ square shank, 80 deg. diamond ⅜ inch P/N 56275
- Vertical dial indicator, inch P/N 29138
- Vertical dial indicator, metric P/N 23628
- Indicator holder, articulated arm with mag base & fine adjust P/N 58369
- Setup finger (1) - can be used to clamp to back side of flange up to 1.75 inches (44.5 mm), or as replacement setup fingers) Purchased by the piece.
- Standard Pneumatic Motor - FF1200 P/N 80570
- Standard Pneumatic Motor - FF2400 P/N 80632
- Right-Angle Pneumatic Motor P/N 80618
FF1200 DIMENSIONS - STRAIGHT MOTOR

Dimensions in Inch (mm)

11.2 [285 mm]
8.6 [218 mm]

Ø18.0 [457 mm] MIN. WHEN CHUCKED TO MIN. FLANGE

Ø17.2 [437 mm]

Ø29.8 [757 mm] MAX. WHEN CHUCKED TO MAX. FLANGE

16.9 [429 mm]

8.0 [203 mm]
5.7 [144 mm]
FF1200 DIMENSIONS - RIGHT ANGLE MOTOR

Dimensions in Inch (mm)

- Ø17.2 [437 mm]
- Ø29.8 [757 mm] WHEN CHUCKED TO MAX. FLANGE
- Ø18.0 [457 mm] WHEN CHUCKED TO MIN. FLANGE
- 11.2 [285 mm] - 8.6 [218 mm]
- 9.9 [252 mm] - 8.0 [203 mm]
- 5.7 [144 mm]
### FF2400 DIMENSIONS - STRAIGHT MOTOR

**Dimensions in Inch (mm)**

- **Ø31.0 [786 mm]**
- **Ø34.5 [876 mm]** MIN. WHEN CHUCKED TO MIN. FLANGE
- **Ø52.2 [1326 mm]** MAX. WHEN CHUCKED TO MAX. FLANGE
- **18.6 [473 mm]**
- **15.5 [393 mm]**
- **18.3 [465 mm]**
- **8.7 [222 mm]**
- **6.5 [165 mm]**
**FF2400 DIMENSIONS - RIGHT ANGLE MOTOR**

Dimensions in Inch (mm)

- Ø31.0 [786 mm]
- Ø34.5 [876 mm] MIN. WHEN CHUCKED TO MIN. FLANGE
- Ø52.2 [1326 mm] MAX. WHEN CHUCKED TO MAX. FLANGE
- 18.3 [465 mm]
- 15.5 [393 mm]
- 10.6 [270 mm]
- 8.7 [222 mm]
- 6.5 [165 mm]
A Fast 6-Step Process

Setup is quick and easy. An experienced operator can usually mount the machine to a flange, center and level it, and start cutting in about 30 minutes.

1. **Determine the chucking range.**
   Use the chart on the side of each chucking foot to determine the correct chucking range for the workpiece.

2. **Attach chucking feet to the machine.**
   Use the holes in the chucking feet that correspond to the selected chucking range.

3. **Mount the machine to the workpiece.**
   Tighten the chucking feet in small increments to secure the machine in place.

4. **Center and level the machine.**

5. **Install the slide assembly.**

6. **Install the cutting tool.**
   Install the tool, then set the cutting angle.
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 United States - the Global Learning Center, situated in our corporate headquarters near Portland, Oregon, our Amherst, New Hampshire Training Facility, and our Houston, Texas Training Facility. 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.

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 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 15 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?

Special Projects
CLIMAX has been solving complicated machining, welding and valve testing problems for our customers since 1964.