# 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°



FF1200 Shown with Straight Motor

### High Quality, Robust Design

- No broken shear pin in an event of a crash just reset, and keep working
- Robust chucking mechanism and unique bearing design provide superior rigidity and machining performance
- Smooth-running rotational drive produces a high quality finish





	FF1200 OD Mount Flange Facer	FF2400 OD Mount Flange Facer	
Machine Performance Ranges			
Mounting range	2 - 12.5 inches (50.8 - 317.5 mm)	8 - 24.4 inches (203.2 - 619.8 mm)	
Mounting range (with setup fingers removed)	2 - 14 inches (50.8 - 355.6 mm)	8 - 26 inches (203.2 - 660.4 mm)	
Facing diameter range	0 - 12.5 inches (0 - 317.5 mm)	0 - 24.5 inches (0 - 622.3 mm)	
Radial tool slide travel	4.5 inches (114.3 mm)	16.5 inches (419.1 mm)	
Axial tool head travel	2 inches (50.8 mm)	2 inches (50.8 mm)	
Feed rate	0 - 0.035 inches/rev. (0 - 0.889 mm/rev)	0 - 0.035 inches/rev. (0 - 0.889 mm/rev)	
Rotational Drive System	-		
Drive type	Synchronous belt	Synchronous belt	
Gear reduction	5.25 : 1	9.46:1	
Turning arm speed range	10 - 60 RPM	5-30 RPM	
Pneumatic power input requirements 1.1 Hp (0.8 kW)	90 psi @ 57 ft³/min (620 kPa @ 1.53 m³/min)	90 psi @ 74 ft3/min (600 kPa @ 2.1 m³/min)	
Measures	For machine dimensions, please r	For machine dimensions, please refer to dimensional drawings.	
Machine weight	135 lbs (61.2 kg)	350 lbs (158.8 kg)	
Shipping weight	Wood 260 lbs (117.9 kg) / Metal 300 lbs (136.1 kg)	Wood 510 lbs (231.3 kg) / Metal 550 lbs (249.5 kg)	
Crate dimensions	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)	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)	

### In-House Testing Performance Results

	FF1	200	FF2	400
	Test 1	Test 2	Test 1	Test 2
	Material removal	Best Finish	Material removal	Best Finish
Depth of cut	0.05 inches	0.005 inches	0.035 inches	0.005 inches
	(1.3 mm)	(0.25 mm)	(0.889 mm)	(0.127 mm)
RPM	44	27	25	30
Feed	0.15 in/rev	0.004 in/rev	0.015 in/rev.	0.005 in/rev.
	(0.04 mm/rev)	(0.25 mm/rev)	(0.381 mm)	(0.127 mm)
Dia. of cut	10 - 11 inches	10 - 11 inches	19 - 21 inches	19 - 21 inches
	(254 - 279 mm)	(254 - 279 mm)	(482.6 - 533.4 mm)	(482.6 - 533.4 mm)
Tool type	Insertable carbide	Insertable carbide	Insertable carbide	Insertable carbide
Finish	N/A	63 Ra	N/A	110 Ra
Metal removal rate	1.2 in³/min	0.42 in <sup>3</sup> /min	0.8 in³/min	0.05 in³/min
	(19.7 cm³/min)	(6.88 cm <sup>3</sup> /min)	(13.1 cm³/min)	(0.82 cm³/min)
Flatness	N/A	0.002 inch (0.05 mm)	N/A	0.005 inch (0.127 mm)

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 gasses or dust.



## **TOOL CONFIGURATIONS**

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!

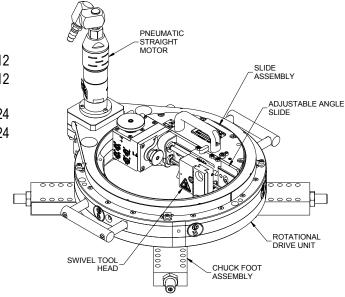
### Option 1 With Standard Pneumatic Motor

### 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



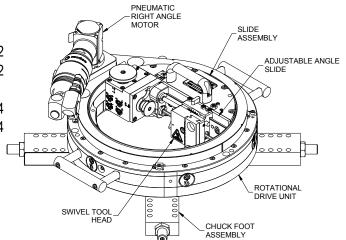
### Option 2 With Right-Angle Pneumatic Motor

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

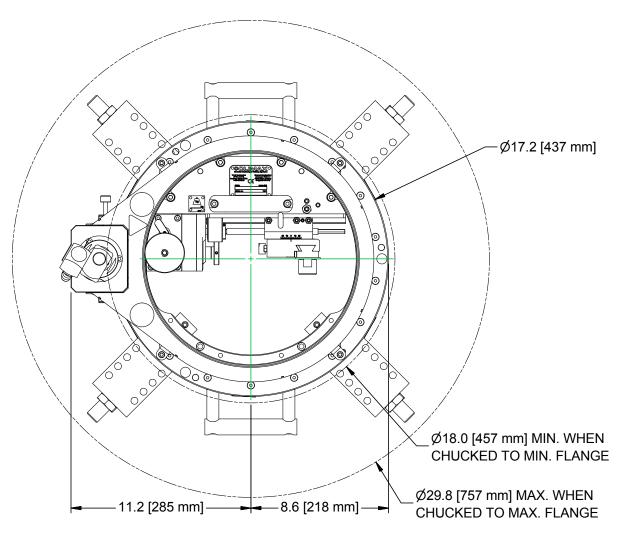
with wood crate P/N 84024 with metal container P/N 81024

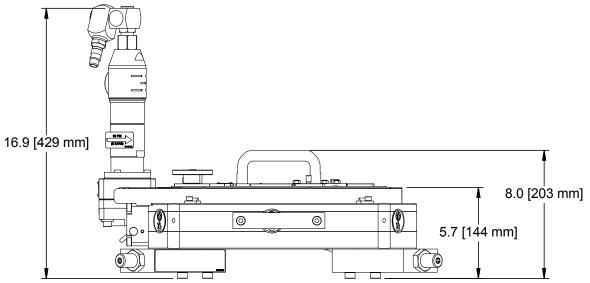


#### Accessories for use with the FF1200 and FF2400 OD Mount Flange Facers

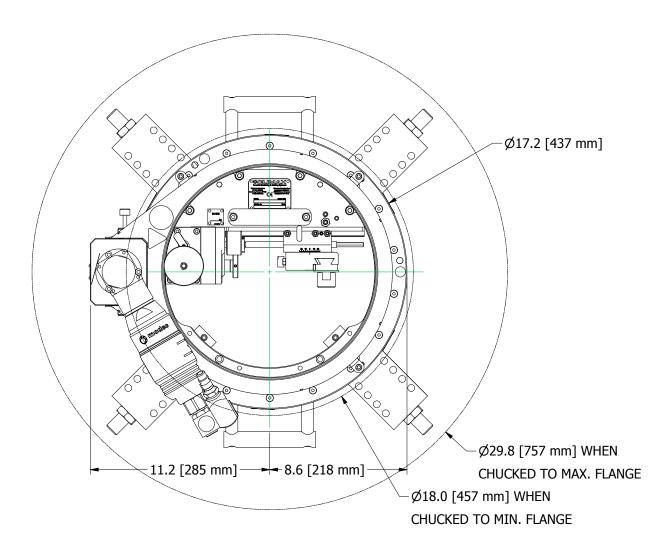
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Carbide insert holder set, ½ square shank, 80 deg. diamond ¾ inch	P/N 56275
Vertical dial indicator, inch	P/N 29138
Vertical dial indicator, metric	P/N 23628
Indicator holder, articulated arm with mag base & fine adjust	P/N 58369
Setup finger (1) - 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.	P/N 80210
Standard Pneumatic Motor - FF1200	P/N 80570
Standard Pnuematic Motor - FF2400	P/N 80632
Right-Angle Pneumatic Motor	P/N 80618

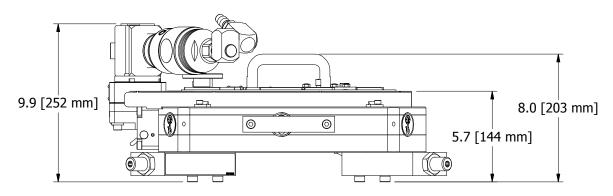
### FF1200 DIMENSIONS - STRAIGHT MOTOR



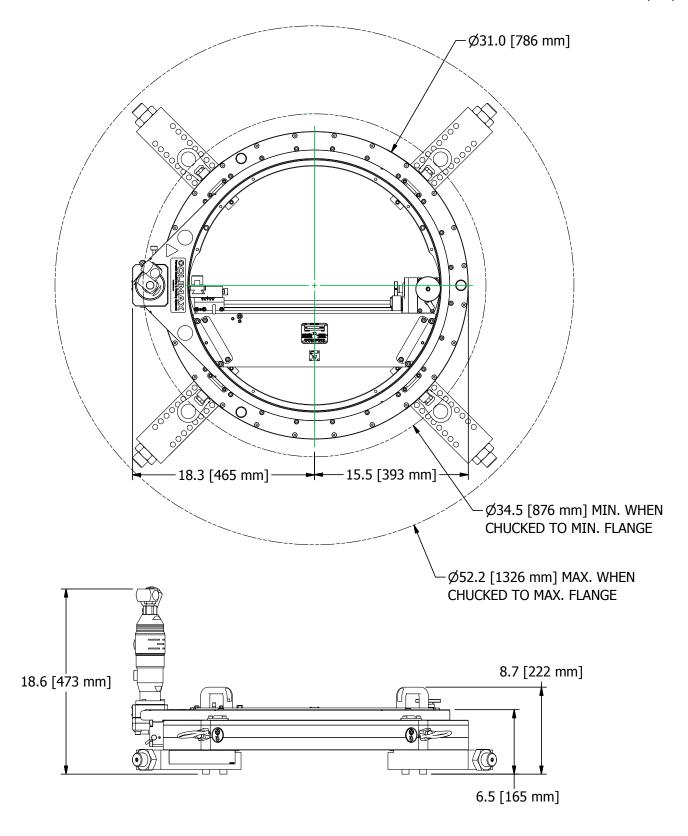


### FF1200 DIMENSIONS - RIGHT ANGLE MOTOR

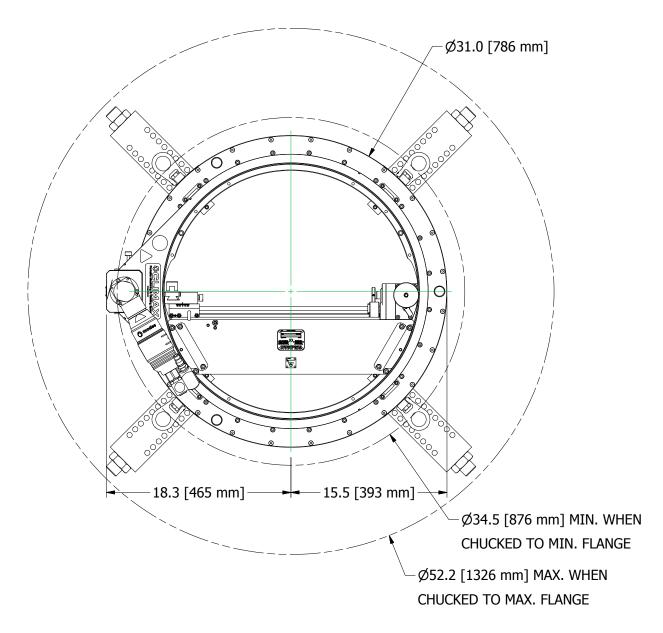


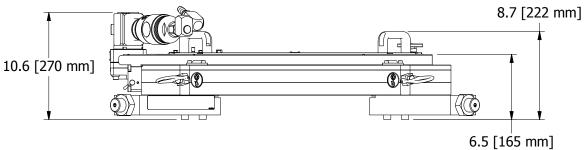


## FF2400 DIMENSIONS - STRAIGHT MOTOR



### FF2400 DIMENSIONS - RIGHT ANGLE MOTOR





### 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.

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

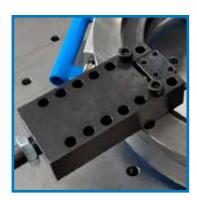
	RANGE	1
MAX	inch	4.50
	mm	114
Z	inch	2.00
	mm	51

Center machine

Center and level the machine



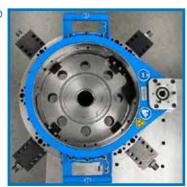
Attach chucking feet to the machine.
Use the holes in the chucking feet that correspond to the selected chucking range.



Install the slide assembly



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



Install the cutting tool.
Install the tool, then
set the cutting angle.



## CLIMAX Training Facilities

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.



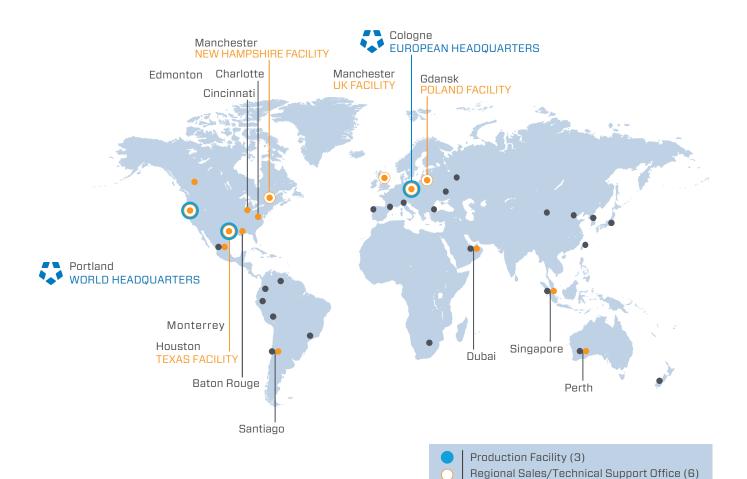
The CLIMAX instructional team includes specialists in shipbuilding, power generation, civil engineering, bridge re-building, petrochemical and other industries.

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.



### **CLIMAX GLOBAL LOCATIONS**



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#### **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**

International Distributor (23)

Rental Location (15)

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

Connect with us: f v in 8







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