

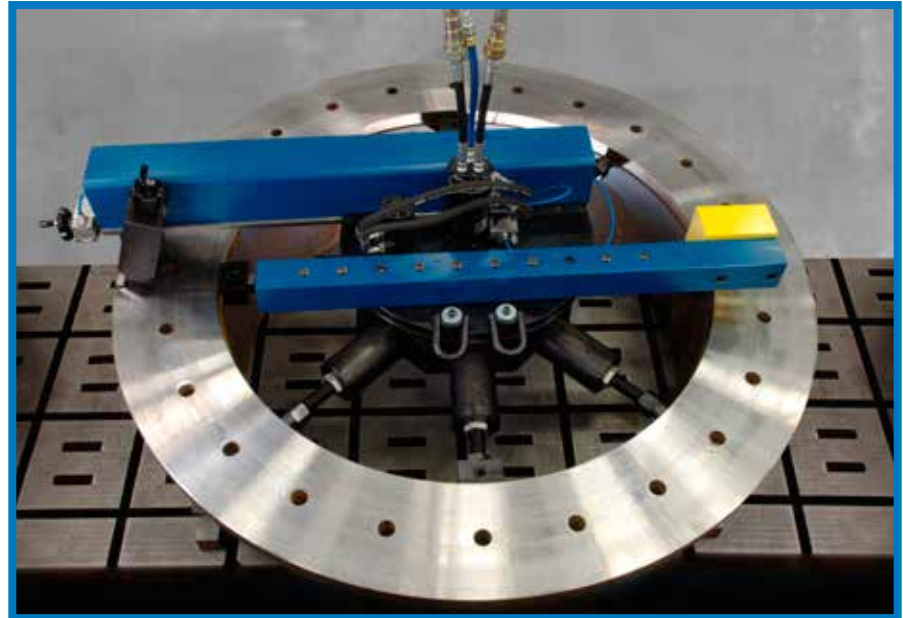
## Rugged, Heavy-Duty Flange Facers

### Rugged Machine Design

- Large, heavy-duty construction-grade bearings provide powerful, rigid performance throughout the entire machine facing range, even machining over bolt hole patterns.
- Oversized ring gear accommodates extremely high torque levels for challenging flange repair applications, and these machines are able to generate a phonographic finish.

### Flexible and Versatile

- Both radial and axial feed is achieved with a pneumatic feedbox. Manual feeding for rapid positioning is also possible.
- Feed rate is adjusted remotely at the pneumatic conditioning unit, providing the ultimate in operator safety and the flexibility for feed rate adjustments even during machining operations.
- Infinitely variable feed rates from 0.002-0.035 in. (0.05 - 0.89 mm)/rev provides operational flexibility.
- Reversible feed box can be mounted to provide either radial or axial feed.
- Turning and counterweight arms can both be adjusted for the desired swing clearance and machining range.
- Pneumatic & hydraulic drive options available.



- Chucking system can be removed to allow the flange facer to be face-mounted.
- Tool head can be rotated a full 360° providing the ability to create a variety of chamfers, O-Ring grooves, lens rings and other angular surfaces as needed.
- Can be mounted ID or surface-mounted. Call for custom OD mounting options.
- Grinding option available for fine finish work.
- Back facing attachment available for heat exchanger repair.

### Quick and Easy Setup

- Modular design allows many of the machine components to be removed to facilitate easier setup and storage.
- Unique chucking system minimizes parts to greatly simplify machine setup and tear down.
- Quick-adjust leveling feet make setup quick and easy.



# SPECIFICATIONS

	US	Metric
<b>Machine Performance Ranges</b>		
ID: Mounting range	30 - 72 inches	762.0 - 1828.8 mm
Facing diameter range	30 - 72 inches	762.0 - 1828.8 mm
Grinding diameter range	30 - 72 inches	762.0 - 1828.8 mm
Swing diameter @ minimum with feedbox on end of arm	55.8 inches	1417.3 mm
Radial tool slide travel	12 inches	304.8 mm
Axial tool head travel	4 inches	101.6 mm
Depth required inside bore for ID chuck (± 0.25 inches (± 6.4 mm) is travel of leveling foot)	4.03 ± 0.25 inches	102.4 ± 6.4 mm
Feed Rate	0.002 - 0.035 in/rev	0.051 - 0.889 mm/rev
Surface Mount: minimum machining diameter	28.0 inches	711.2 mm
Milling Option: Vertical Stroke, milling head	8 inches	203.2 mm
<b>Rotational Drive System</b>		
Drive type	Pneumatic or hydraulic drive with pinion and internal ring gear	
Pinion gear to ring gear reduction	5.143:1	
Single point turning speed range:		
Pneumatic	12 - 31 RPM	
Hydraulic (based on motor choice)	2.4 - 20 RPM	
Milling and grinding speed ranges (with 150:1 reducer):		
Pneumatic	0.006 - 0.25 RPM	
Feed rate at 72 inch (1828.8 mm) diameter	1.4 - 58 inches/minute	35.6 - 1473.2 mm/minute
Hydraulic (based on motor choice)	0.01 - 0.54 RPM	
Power input requirements		
Pneumatic - 3.5 Hp (2.6 kW)	95 ft <sup>3</sup> /min @ 90 psi	2.69 m <sup>3</sup> /min @ 620 kPa
Hydraulic	10 gpm @ 1200 psi	37.9 L/min @ 8273 kPa
<b>Measures</b>		
For machine dimensions, please refer to dimensional drawings		
ID machine weight, approximate	1500 lbs	680.4 kg
Shipping weight, approximate	2140 lbs	970.7 kg
ID Crate dimensions (WxDxH)		
Wood, approx.	80.5 x 37 x 32 in	2045 x 940 x 813 mm
Metal, approx.	90 x 40 x 35 in	2286 x 1016 x 889 mm
<b>Testing Data</b>		
Flatness at 72 inch (1829 mm) diameter: 0.006 inches (0.15 mm)		
On a dedicated fixture made of A-36 steel in a controlled environment with single point machine, after warm-up.		

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

The FF7200 can be configured in several ways to meet your specific machining needs.

Select **OPTION 1** for single pointing only

Select **OPTION 2** for milling only

Select **OPTION 3** for BOTH milling and single pointing

## OPTION 1: To configure your FF7200 for Single-Point Machining Only

To configure your machine, please follow these steps.

- 1 Select a Base Package
  - 2 Select a Feed Assembly
  - 3 Select a Drive Motor Assembly
  - 4 Select a Hydraulic Motor
  - 5 Select an Optional Grinder Attachment
  - 6 Select a Hydraulic Power Unit
  - 7 Select a Turning Arm Assembly
  - 8 Select a Counterweight Assembly
  - 9 Select a Chuck Assembly
  - 10 Select a Shipping Container
- 
- 1 **Base Package**
    - Rotary table, tool kit, operator's manual, . **58184**
  - 2 **Feed Assembly**
    - Pneumatic Feed Assembly with Remote Air Control **58671**
  - 3 **Drive Motor Assembly**
    - Pneumatic Motor and Drive Assembly **58186**  
(Pneumatic drive system includes: Pneumatic motor w/fittings and mount, rotary union, hoses, feed trip valve, cam, and pneumatic conditioning unit with low pressure drop out.)
    - Hydraulic Drive Assy w/ Feed Conditioning Unit **58180**  
- DOES NOT INCLUDE MOTOR  
(Hydraulic drive system includes: Hyd motor mount, hoses, fittings, rotary union, feed trip valve, cam, and feed pneumatic conditioning unit.)
  - 4 **Hydraulic Motor**  
(If Hydraulic drive is selected in step 3)
    - Rated at 10 gpm, 1200 PSI
    - Hydraulic Motor, 11.9 cu in (195.0 cu cm), 6 - 31 RPM **67730**
    - Hydraulic Motor, 14.9 cu in (244.2 cu cm), 3.6 - 18 RPM **69216**
    - Hydraulic Motor, 18.7 cu in (306.4 cu cm), 2.8 - 14 RPM **69217**
    - Hydraulic Motor, 24.0 cu in (393.3 cu cm), 2.2 - 11 RPM **69218**
    - Hydraulic Motor, 29.8 cu in (488.3 cu cm), 1.8 - 9 RPM **69219**
    - \* Multiple units may be ordered.
  - 5 **Optional Grinder Attachment**
    - Grinding Attachment for Pneumatic Table Drive Motor **62537**
    - Grinding Attachment for Hydraulic Table Drive Motor **62570**

- Grinder Rotational Gearbox**
  - Slow Rotation Gearbox for Pneumatic Motor **62568**  
(gear ratio 150:1)
  - Slow Rotation Gearbox for Hydraulic Motor **62538**  
(gear ratio 150:1)
- Grinder Tooling**
  - Grinding Wheel 1.5 in (38.1 mm), CBN 125 Grit **62633**
  - Grinding Wheel 2.25 in (57.2 mm), CBN 125 Grit **62634**
- 6 **Hydraulic Power Unit**
  - For Hydraulic Drive Machine
  - Single Pump (single pointing only):**
    - HPU 230V, 10 HP (7.5 kW) Single pump **63264**
    - HPU 380V, 10 HP (7.5 kW) Single pump **63265**
    - HPU 415V, 10 HP (7.5 kW) Single pump **63266**
    - HPU 460V, 10 HP (7.5 kW) Single pump **63267**
    - HPU 575V, 10 HP (7.5 kW) Single pump **63268**
  - Single Pump with Air (for use with grinder):**
    - HPU 230V, 10 HP (7.5 kW) Single pump with Air **62759**
    - HPU 380V, 10 HP (7.5 kW) Single pump with Air **62760**
    - HPU 415V, 10 HP (7.5 kW) Single pump with Air **62761**
    - HPU 460V, 10 HP (7.5 kW) Single pump with Air **62762**
    - HPU 575V, 10 HP (7.5 kW) Single pump with Air **62763**
  - Pendant Cable, Hose**
    - 0.5 in (12.7 mm) Hose and Pendant Cable Assy, 20 ft (6.1 m) **62799**
    - 0.5 in (12.7 mm) Hose and Pendant Cable Assy, 30 ft (9.1 m) **62800**
    - 0.5 in (12.7 mm) Hose and Pendant Cable Assy, 50 ft (15.2 m) **62801**
    - 0.5 in (12.7 mm) Hose and Pendant Cable Assy, 100 ft (30.5 m) **62802**
- 7 **Turning Arm Assembly**
  - Turning Arm Assembly with Single Point Tool Head **57873**
  - Milling Arm Assembly w/ Single Point Tool Head **62577**
- 8 **Counterweight Assembly**
  - Counterweight Assembly **58063**
  - Counterweight Milling Arm Assembly **62514**
- 9 **Chuck Assembly**
  - ID Chuck Assembly **57877**
- 10 **Shipping Container**
  - Wooden Crate for ID Mount Machine **58358**
  - Metal Container for ID Mount Machine **59304**

# TOOL CONFIGURATIONS

## OPTION 2: To configure your FF7200 for Milling Only

To configure your machine, please follow these steps.

1	Select a Base Package	
2	Select a Drive Motor Assembly	
3	Select a Hydraulic Motor	
4	Select an Optional Grinder Attachment	
5	Select a Hydraulic Power Unit	
6	Select a Turning Arm Assembly	
7	Select a Counterweight Assembly	
8	Select a Milling Head	
9	Select a Hydraulic Motor	
10	Select Tooling	
11	Select a Chuck Assembly	
12	Select a Shipping Container	
<b>1 Base Package</b>		
	Rotary table, tool kit, drag brake assemblies, operator's manual.	<b>62569</b>
<b>2 Drive Motor Assembly</b>		
	Pneumatic Motor and Drive Assembly (Pneumatic drive system includes: Pneumatic motor w/fittings and mount, gearbox, rotary union, hoses, feed trip valve, and pneumatic conditioning unit with low pressure drop out.)	<b>62571</b>
	Hydraulic Drive Assy w/Gearbox & Feed Conditioning Unit - DOES NOT INCLUDE MOTOR (Hydraulic drive system includes: Hyd motor mount, gearbox, hoses, fittings, and rotary union.)	<b>62585</b>
<b>3 Hydraulic Motor</b>		
	(If Hydraulic drive is selected in step 2)	
	Rated at 10 gpm, 1200 PSI	
	Fast RPM = Single Point Machining / Slow RPM = Milling	
	Hydraulic Motor, 4.9 cu in (80.3 cu cm), 24 - 80 RPM / 0.15 - 0.50 RPM	<b>69213</b>
	Hydraulic Motor, 8.0 cu in (131.1 cu cm), 16 - 48 RPM / 0.10 - 0.30 RPM	<b>69214</b>
	Hydraulic Motor, 11.9 cu in (195.0 cu cm), 6 - 31 RPM / 0.04 - 0.19 RPM	<b>67730</b>
	Hydraulic Motor, 24.0 cu in (393.3 cu cm) 3.2 - 16 RPM / 0.015 - 0.07 RPM	<b>69218</b>
	* Multiple units may be ordered.	
<b>4 Optional Grinder Attachment</b>		
	Grinding Attachment for Pneumatic Table Drive Motor	<b>62552</b>
	Grinding Attachment for Hydraulic Table Drive Motor (tool head included)	<b>62588</b>
	<b>Grinder Tooling</b>	
	Grinding Wheel 1.5 in (38.1 mm), CBN 125 Grit	<b>62633</b>
	Grinding Wheel 2.25 in (57.2 mm), CBN 125 Grit	<b>62634</b>
<b>5 Hydraulic Power Unit</b>		
	<b>Single Pump (for pneumatic table rotation):</b>	
	HPU 230V, 25HP Single pump with Air	<b>62774</b>
	HPU 380V, 25HP Single pump with Air	<b>62775</b>
	HPU 415V, 25HP Single pump with Air	<b>62776</b>
	HPU 460V, 25HP Single pump with Air	<b>62777</b>
	HPU 575V, 25HP Single pump with Air	<b>62778</b>
	<b>Dual Pump (with air) For hydraulic table rotation, hydraulic milling head, and air for grinding attachment:</b>	
	HPU 230V, 25HP Dual Pump with Air	<b>62779</b>
	HPU 380V, 25HP Dual Pump with Air	<b>62780</b>
	HPU 415V, 25HP Dual Pump with Air	<b>62781</b>
	HPU 460V, 25HP Dual Pump with Air	<b>62782</b>
	HPU 575V, 25HP Dual Pump with Air	<b>62783</b>

	<b>Dual Pump (for hydraulic table rotation and hydraulic milling head)</b>	
	HPU 230V, 25HP Dual Pump	<b>62784</b>
	HPU 380V, 25HP Dual Pump	<b>62785</b>
	HPU 415V, 25HP Dual Pump	<b>62786</b>
	HPU 460V, 25HP Dual Pump	<b>62787</b>
	HPU 575V, 25HP Dual Pump	<b>62788</b>
	<b>Pendant Cable &amp; Hose, Single Pump</b>	
	0.75 in (19.1 mm) Hose and Pendant Cable Assy, 20 ft (6.1 m)	<b>62803</b>
	0.75 in (19.1 mm) Hose and Pendant Cable Assy, 30 ft (9.1 m)	<b>62804</b>
	0.75 in (19.1 mm) Hose and Pendant Cable Assy, 50 ft (15.2 m)	<b>62805</b>
	0.75 in (19.1 mm) Hose and Pendant Cable Assy, 100 ft (30.75 m)	<b>62806</b>
	<b>Pendant Cable &amp; Hose, Dual Pump</b>	
	0.5 in (12.7 mm) & 0.75 in (19.1 mm) Dual Hose & Pendant Cable Assy, 20 ft (6.1 m)	<b>62807</b>
	0.5 in (12.7 mm) & 0.75 in (19.1 mm) Dual Hose & Pendant Cable Assy, 30 ft (9.1 m)	<b>62808</b>
	0.5 in (12.7 mm) & 0.75 in (19.1 mm) Dual Hose & Pendant Cable Assy, 50 ft (15.2 m)	<b>62809</b>
	0.5 in (12.7 mm) & 0.75 in (19.1 mm) Dual Hose & Pendant Cable Assy, 100 ft (30.5 m)	<b>62810</b>
<b>6 Turning Arm Assembly</b>		
	Milling Arm Assembly (does not include tool head)	<b>72697</b>
<b>7 Counterweight Assembly</b>		
	Counterweight Milling Arm Assembly	<b>62414</b>
<b>8 Milling Head</b>		
	Milling Head Assembly Inch #50 Taper NMTB	<b>62282</b>
	Milling Head Assembly Inch #50 Taper CATV	<b>62734</b>
	Milling Head Assembly Metric #50 Taper NMTB	<b>62644</b>
	Milling Head Assembly Metric #50 Taper CATV	<b>62735</b>
<b>9 Tooling (for inch milling head assembly only)</b>		
	#50, NMTB 4 in (101.6 mm) Face Mill w/ Inserts	<b>47383</b>
	#50, NMTB 5 in (127.0 mm) Face Mill w/ Inserts	<b>47384</b>
	#50, NMTB 6 in (145.4 mm) Face Mill w/ Inserts	<b>47385</b>
	#50, NMTB 8 in (203.2 mm) Face Mill w/ Inserts	<b>47386</b>
	#50, NMTB 10 in (254.0 mm) Face Mill w/ Inserts	<b>56175</b>
	Carbide Inserts	<b>47229</b>
<b>10 Milling Head Swivel Assembly</b>		
	Milling Head Swivel Plate Assembly	<b>63250</b>
<b>11 Hydraulic Motor</b>		
	Hydraulic Motor Assembly 8.0 cu in (131.1 cu cm)	<b>53459</b>
	Hydraulic Motor Assembly 9.6 cu in (157.3 cu cm)	<b>53458</b>
	Hydraulic Motor Assembly 11.9 cu in (195.0 cu cm)	<b>46950</b>
	Hydraulic Motor Assembly 14.9 cu in (244.2 cu cm)	<b>46375</b>
	Hydraulic Motor Assembly 18.7 cu in (306.4 cu cm)	<b>46549</b>
	Hydraulic Motor Assembly 24.0 cu in (393.3 cu cm)	<b>46550 1</b>
<b>12 Chuck Assembly</b>		
	ID Chuck Assembly	<b>57877</b>
<b>13 Shipping Container</b>		
	Wooden Crate for ID Mount Machine	<b>58358</b>
	Metal Container for ID Mount Machine	<b>59304</b>

# TOOL CONFIGURATIONS

## OPTION 3: To configure your FF7200 for Milling AND Single Point Machining

To configure your machine, please follow these steps.

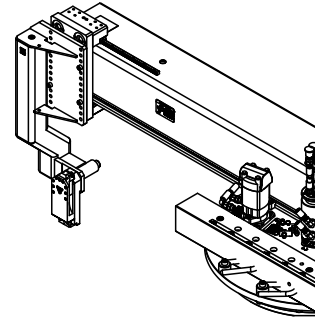
1	Select a Base Package				
2	Select a Feed Assembly				
3	Select a Drive Motor Assembly				
4	Select a Hydraulic Motor				
5	Select an Optional Grinder Attachment				
6	Select a Hydraulic Power Unit				
7	Select a Turning Arm Assembly				
8	Select a Counterweight Assembly				
9	Select a Milling Head				
10	Select a Hydraulic Motor				
11	Select Tooling				
12	Select a Chuck Assembly				
13	Select a Shipping Container				
<b>1</b>	<b>Base Package</b>				
	Rotary table, tool kit, drag brake assemblies, operator's manual.	<b>62623</b>			
<b>2</b>	<b>Feed Assembly</b>				
	Pneumatic Feed Assembly w/ Remote Air Control	<b>58671</b>			
<b>3</b>	<b>Drive Motor Assembly</b>				
	Pneumatic Motor and Drive Assembly (Pneumatic drive system includes: Pneumatic motor w/fittings and mount, gearbox, rotary union, hoses, feed trip valve, cam, & pneumatic conditioning unit with low pressure drop out.)	<b>62591</b>			
	Hydraulic Drive Assy w/Gearbox & Feed Conditioning Unit - DOES NOT INCLUDE MOTOR (Hydraulic drive system includes: Hydraulic motor mount, gearbox, hoses, fittings, rotary union, feed trip valve, cam, and feed pneumatic conditioning unit.)	<b>62594</b>			
<b>4</b>	<b>Hydraulic Motor</b>				
	(If Hydraulic drive is selected in step 3) Rated at 10 gpm, 1200 PSI				
	Fast RPM = Single Point Machining / Slow RPM = Milling				
	Hydraulic Motor, 4.9 cu in (80.3 cu cm), 24 - 80 RPM / 0.15 - 0.50 RPM	<b>69213</b>			
	Hydraulic Motor, 8.0 cu in (131.1 cu cm), 16 - 48 RPM / 0.10 - 0.30 RPM	<b>69214</b>			
	Hydraulic Motor, 11.9 cu in (195.0 cu cm), 6 - 31 RPM / 0.04 - 0.19 RPM	<b>67730</b>			
	Hydraulic Motor, 14.9 cu in (244.2 cu cm), 4.5 - 24 RPM / 0.03 - 0.15 RPM	<b>69216</b>			
	Hydraulic Motor, 18.7 cu in (306.4 cu cm), 4 - 20 RPM / 0.025 - 0.12 RPM	<b>69217</b>			
	Hydraulic Motor, 24.0 cu in (393.3 cu cm), 3.2 - 16 RPM / 0.02 - 0.1 RPM	<b>69218</b>			
	Hydraulic Motor, 29.8 cu in (488.3 cu cm), 2.4 - 12 RPM / 0.015 - 0.07 RPM	<b>69219</b>			
	* Multiple units may be ordered.				
<b>5</b>	<b>Optional Grinder Attachment</b>				
	Grinding Attachment for Pneumatic Table Drive Motor	<b>62537</b>			
	Grinding Attachment for Hydraulic Table Drive Motor	<b>62570</b>			
	<b>Grinder Tooling</b>				
	Grinding Wheel 1.5 in (38.1 mm), CBN 130 Grit	<b>62633</b>			
	Grinding Wheel 2.25 in (57.2 mm), CBN 130 Grit	<b>62634</b>			
<b>6</b>	<b>Hydraulic Power Unit</b>				
	<b>Single Pump (for pneumatic table rotation):</b>				
	HPU 230V, 25HP Single pump with Air	<b>62774</b>			
	HPU 380V, 25HP Single pump with Air	<b>62775</b>			
	HPU 415V, 25HP Single pump with Air	<b>62776</b>			
	HPU 460V, 25HP Single pump with Air	<b>62777</b>			
	HPU 575V, 25HP Single pump with Air	<b>62778</b>			
	<b>Dual Pump (with air) for hydraulic table rotation, hydraulic milling head, and air for grinding attachment:</b>				
	HPU 230V, 25HP Dual Pump with Air	<b>62779</b>			
	HPU 380V, 25HP Dual Pump with Air	<b>62780</b>			
	HPU 415V, 25HP Dual Pump with Air	<b>62781</b>			
	HPU 460V, 25HP Dual Pump with Air	<b>62782</b>			
	HPU 575V, 25HP Dual Pump with Air	<b>62783</b>			
	<b>Dual Pump (for hydraulic table rotation and hydraulic milling head):</b>				
	HPU 230V, 25HP Dual Pump	<b>62784</b>			
	HPU 380V, 25HP Dual Pump	<b>62785</b>			
	HPU 415V, 25HP Dual Pump	<b>62786</b>			
	HPU 460V, 25HP Dual Pump	<b>62787</b>			
	HPU 575V, 25HP Dual Pump	<b>62788</b>			
	<b>Pendant Cable &amp; Hose, Single Pump</b>				
	0.75 in (19.1 mm) Hose and Pendant Cable Assy, 20 ft (6.1 m)		<b>62803</b>		
	0.75 in (19.1 mm) Hose and Pendant Cable Assy, 30 ft (9.1 m)		<b>62804</b>		
	0.75 in (19.1 mm) Hose and Pendant Cable Assy, 50 ft (15.2 m)		<b>62805</b>		
	0.75 in (19.1 mm) Hose and Pendant Cable Assy, 100 ft (30.75 m)		<b>62806</b>		
	<b>Pendant Cable &amp; Hose, Dual Pump</b>				
	0.5 in (12.7 mm) & 0.75 in (19.1 mm) Dual Hose & Pendant Cable Assy, 20 ft (6.1 m)		<b>62807</b>		
	0.5 in (12.7 mm) & 0.75 in (19.1 mm) Dual Hose & Pendant Cable Assy, 30 ft (9.1 m)		<b>62808</b>		
	0.5 in (12.7 mm) & 0.75 in (19.1 mm) Dual Hose & Pendant Cable Assy, 50 ft (15.2 m)		<b>62809</b>		
	0.5 in (12.7 mm) & 0.75 in (19.1 mm) Dual Hose & Pendant Cable Assy, 100 ft (30.5 m)		<b>62810</b>		
<b>7</b>	<b>Turning Arm Assembly</b>				
	Milling Arm Assembly with Single Point Tool Head		<b>62577</b>		
<b>8</b>	<b>Counterweight Assembly</b>				
	Counterweight Milling Arm Assembly		<b>62526</b>		
<b>9</b>	<b>Milling Head</b>				
	Milling Head Assembly Inch #50 Taper NMTB		<b>62282</b>		
	Milling Head Assembly Inch #50 Taper CATV		<b>62734</b>		
	Milling Head Assembly Metric #50 Taper NMTB		<b>62644</b>		
	Milling Head Assembly Metric #50 Taper CATV		<b>62735</b>		
	Optional Milling Head Swivel Plate		<b>63250</b>		
<b>11</b>	<b>Tooling (for inch milling head assembly only)</b>				
	#50, NMTB 4 in (101.6 mm) Face Mill w/ Inserts		<b>47383</b>		
	#50, NMTB 5 in (127.0 mm) Face Mill w/ Inserts		<b>47384</b>		
	#50, NMTB 6 in (145.4 mm) Face Mill w/ Inserts		<b>47385</b>		
	#50, NMTB 8 in (203.2 mm) Face Mill w/ Inserts		<b>47386</b>		
	#50, NMTB 10 in (254.0 mm) Face Mill w/ Inserts		<b>56175</b>		
	Carbide Inserts		<b>47229</b>		
<b>12</b>	<b>Milling Head Swivel Assembly</b>				
	Milling Head Swivel Plate Assembly		<b>63250</b>		
<b>10</b>	<b>Hydraulic Motor for Milling Head</b>				
	Hydraulic Motor Assembly 8.0 cu in (131.1 cu cm)		<b>53459</b>		
	Hydraulic Motor Assembly 9.6 cu in (157.3 cu cm)		<b>53458</b>		
	Hydraulic Motor Assembly 11.9 cu in (195.0 cu cm)		<b>46950</b>		
	Hydraulic Motor Assembly 14.9 cu in (244.2 cu cm)		<b>46375</b>		
	Hydraulic Motor Assembly 18.7 cu in (306.4 cu cm)		<b>46549</b>		
	Hydraulic Motor Assembly 24.0 cu in (393.3 cu cm)		<b>46550</b>		
<b>12</b>	<b>Chuck Assembly</b>				
	ID Chuck Assembly		<b>57877</b>		
<b>13</b>	<b>Shipping Container</b>				
	Wooden Crate for ID Mount Machine		<b>58358</b>		
	Metal Container for ID Mount Machine		<b>59304</b>		

# ACCESSORIES, MACHINE OVERVIEW

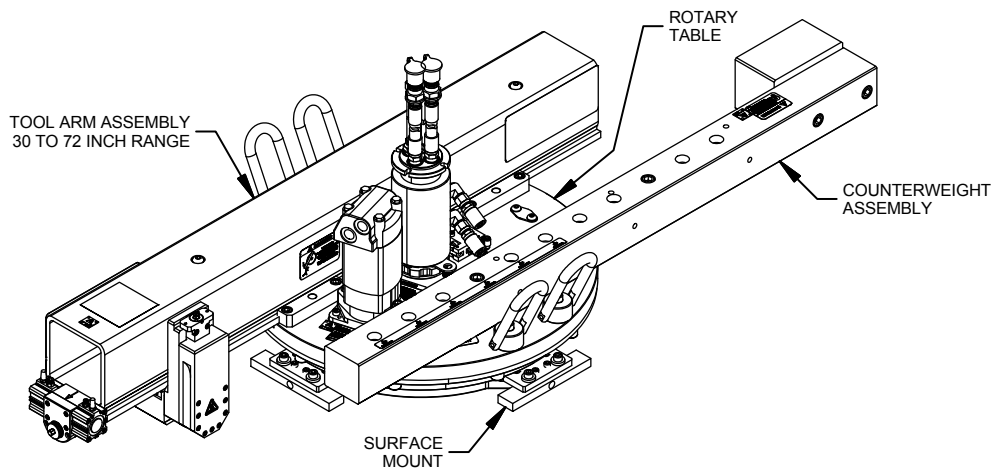
Get even more out of your Flange Facer with these accessories:

- Surface mount PN 79550
- Backfacing attachment PN 69711  
(requires milling arm PN 62577 and counterweight arm PN 62526)
- Surface mount retrofit kit PN 80045  
(for existing machines)

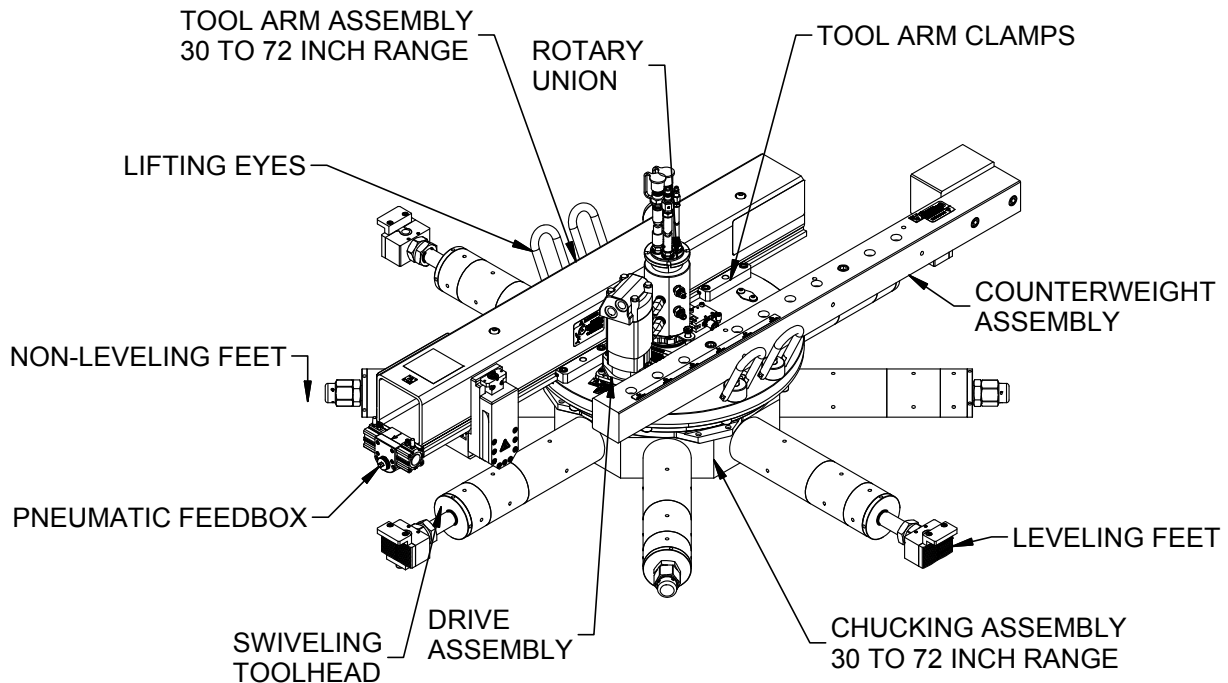
## Backfacing Attachment



## Machine Overview, Surface Mount Configuration



## Machine Overview, ID-Mount Configuration



# SETUP AND OPERATION

## A Fast Eight-Step Process

This model is so fast and easy to set up that an experienced operator can usually mount the machine into the flange bore, align it, and start cutting in less than an hour. ID-mounting steps shown.

**1** Measure the bore diameter. This will be used to determine the leg length.



**5** Set machine onto flange using setup fingers. Lightly tighten leveling feet in the flange.



**2** Select the appropriate leg length and foot.



**6** Extend feet into flange. Indicate, level and tighten leveling feet and stationary feet.



**3** Install setup fingers.



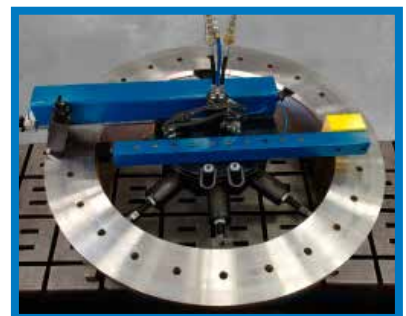
**7** Install tool bit. Connect to power.



**4** Tighten legs.



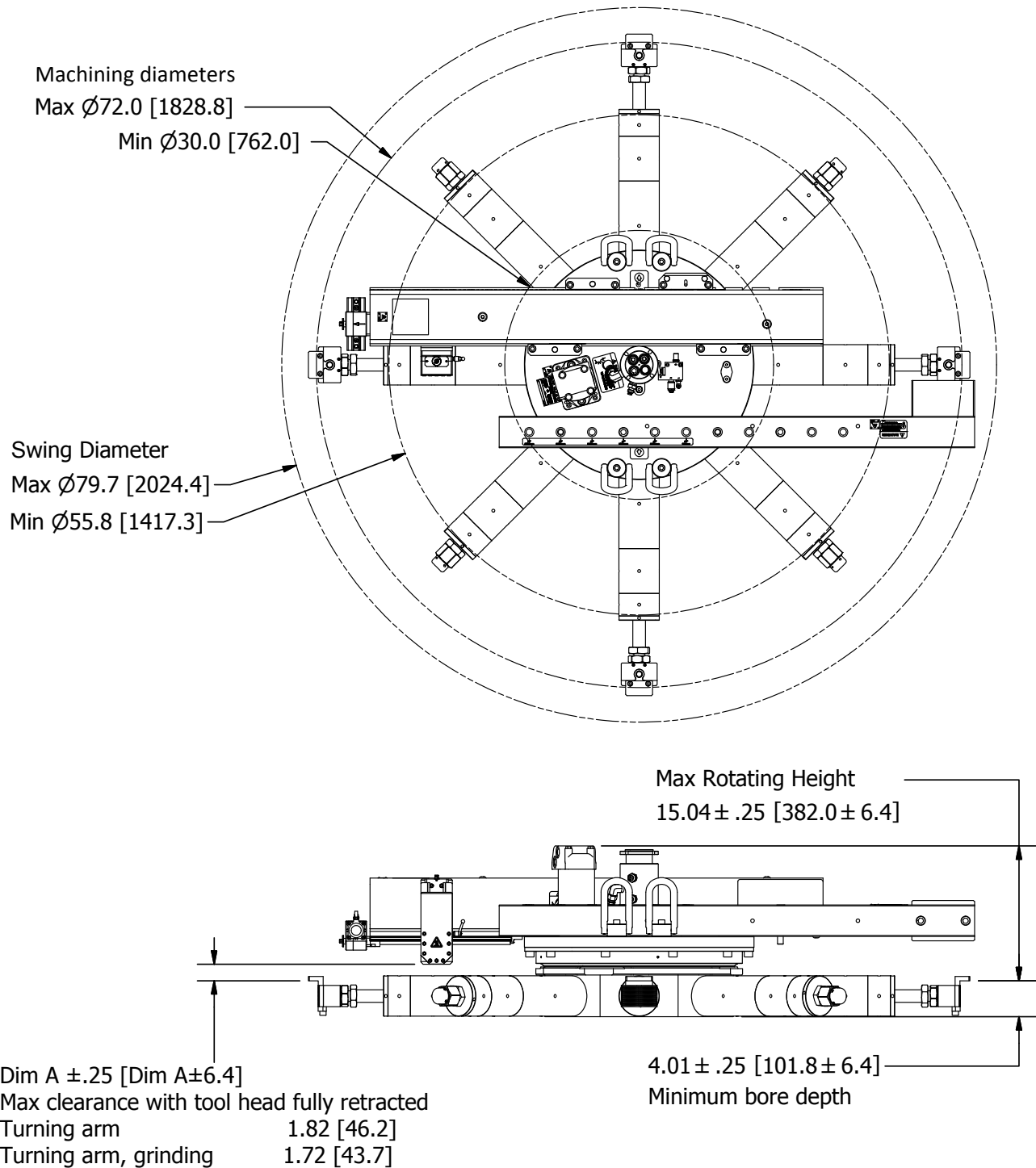
**8** You are ready to begin machining!



# OPERATIONAL DIMENSIONS

Dimensions in Inch (mm)

## ID Chuck Assembly, ID-Mount Configuration, Single-Point Machining



NOTE:  $\pm .25$  is travel of leveling foot



Dimensions in Inch (mm)

## ID Chuck Assembly, ID-Mount Configuration, Milling

Machining diameters (CL of spindle)

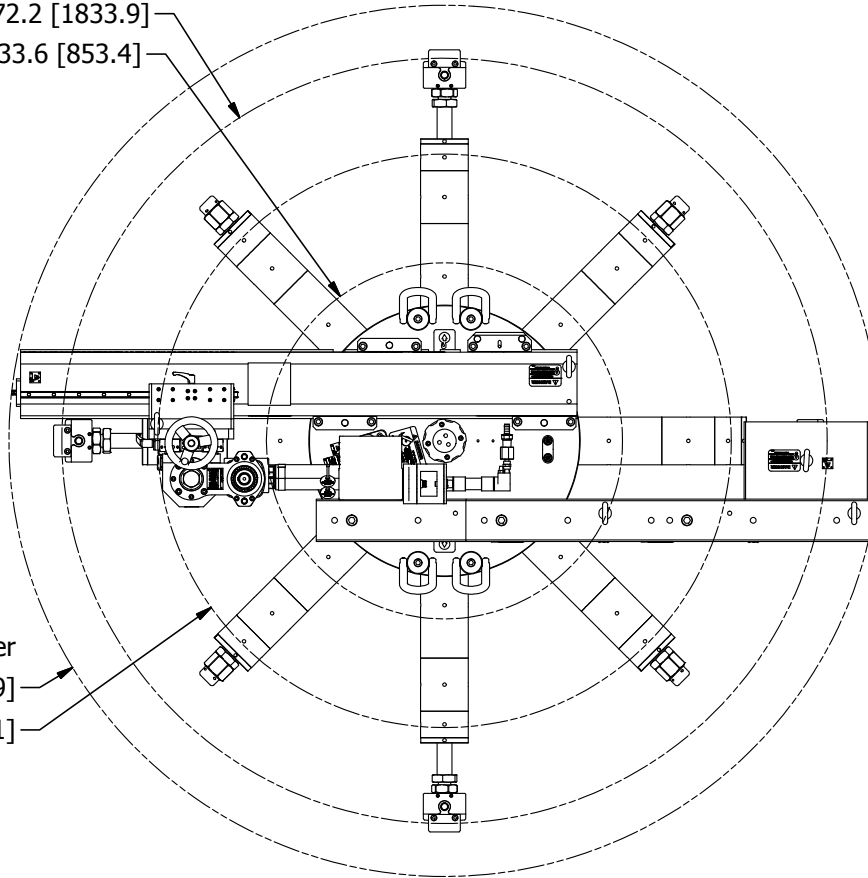
Max  $\varnothing 72.2$  [1833.9]

Min  $\varnothing 33.6$  [853.4]

Swing Diameter

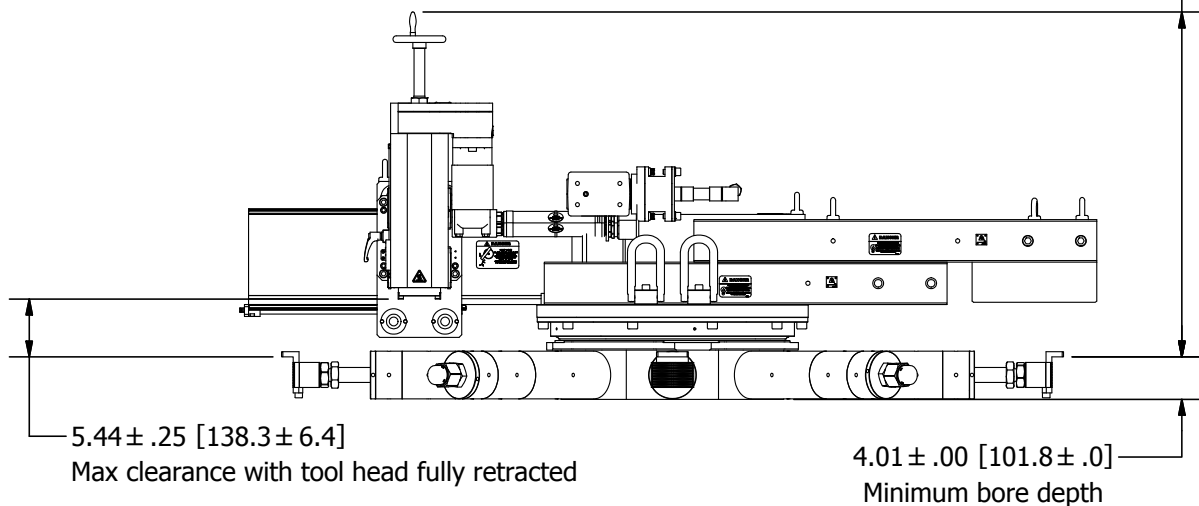
Max  $\varnothing 82.2$  [2087.9]

Min  $\varnothing 54.1$  [1374.1]



Max Rotating Height

$32.54 \pm .25$  [826.5  $\pm$  6.4]



$5.44 \pm .25$  [138.3  $\pm$  6.4]

Max clearance with tool head fully retracted

$4.01 \pm .00$  [101.8  $\pm$  .0]

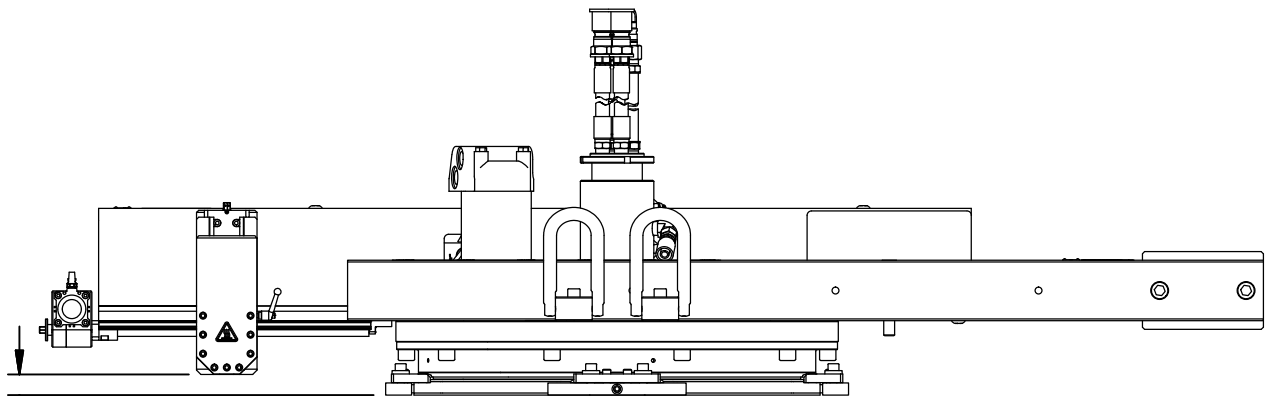
Minimum bore depth

NOTE:  $\pm .25$  is travel of leveling foot

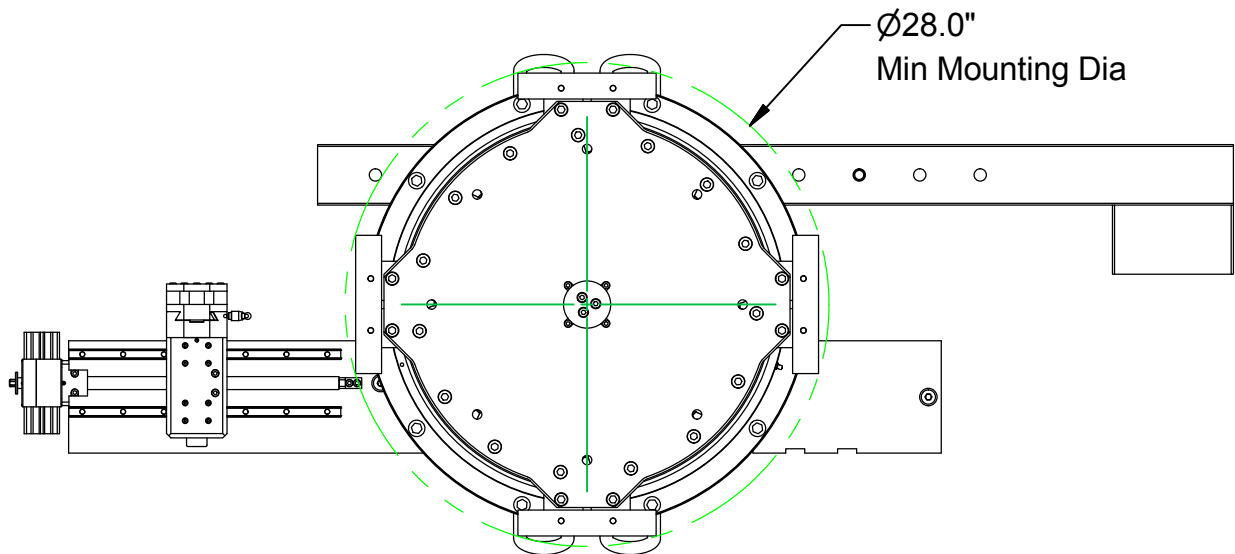
# OPERATIONAL DIMENSIONS

Dimensions in Inch (mm)

## Surface Mount Configuration



- Clearance with tool head fully retracted
- 1.2" with turning arm, single point only
- 1.2" with milling arm with milling head or single point head
- 1.1" with milling arm or turning arm and grinder



# 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.



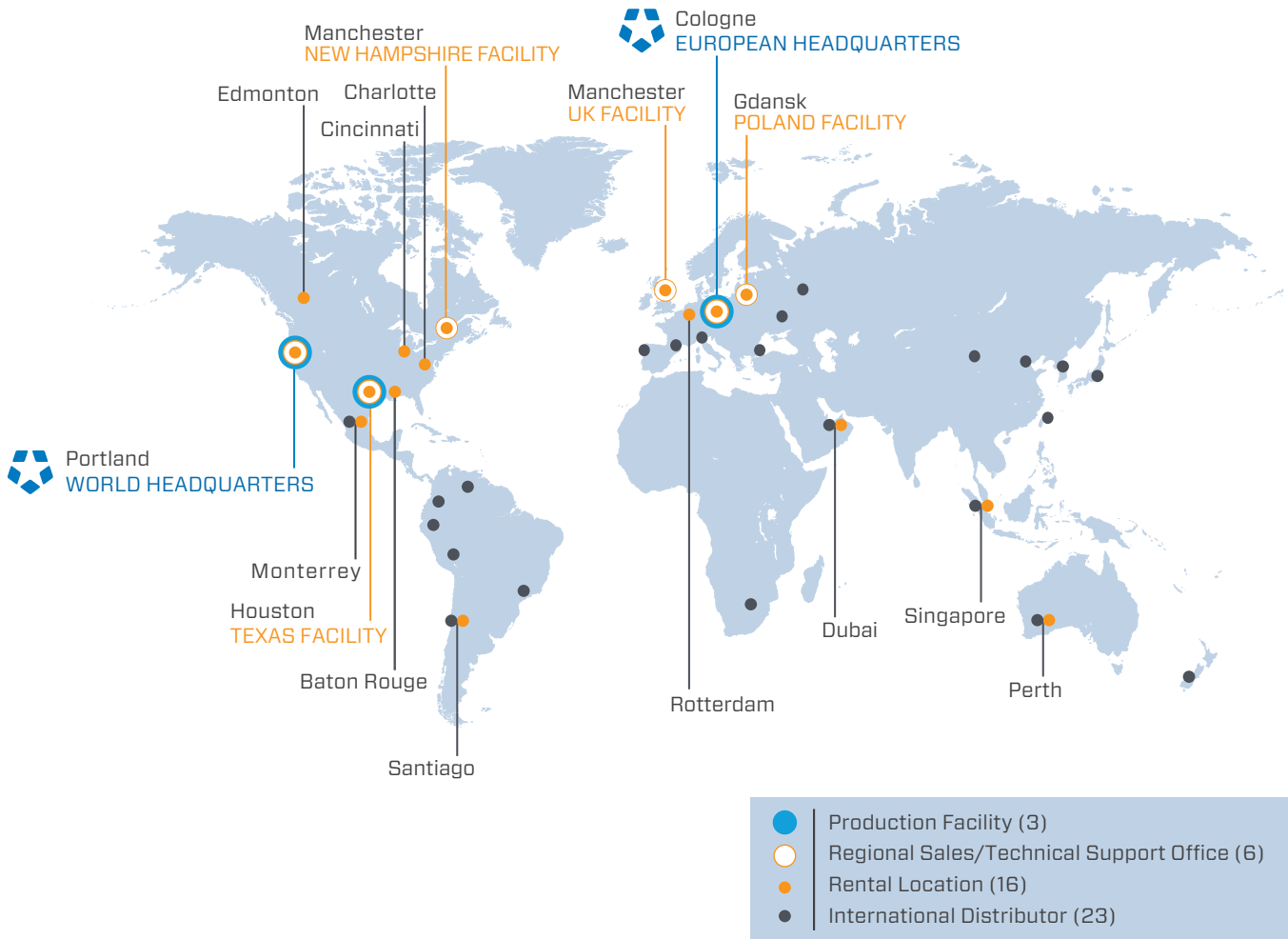
The CLIMAX instructional team includes specialists in shipbuilding, power generation, civil engineering, bridge re-building, petrochemical and other industries.

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



## Call CLIMAX for:

### Rentals

With 16 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.

Connect with us:    

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