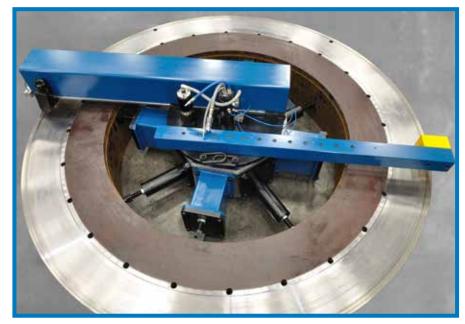
# One of a family of rugged, heavy-duty flange facers with facing AND milling capabilities.

#### 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 inches (0.0508 - 0.889 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.
- 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.



- Pneumatic & hydraulic drive options available.
- Chucking system can be removed to allow the flange facer to be facemounted.
- Can be mounted both OD and ID or surface-mounted
- Milling option available with precision downfeed ball screw
- 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.





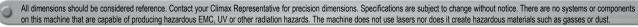


	US	Metric
Machine Performance Ranges ID: Mounting range Facing diameter range Milling diameter range Grinding diameter range Swing diameter @ minimum with feedbox on end of arm	45 - 120 inches 45 - 120 inches 45 - 120 inches 45 - 120 inches 84.7 inches	1143.0 - 3048.0 mm 1143.0 - 3048.0 mm 1143.0 - 3048.0 mm 1143.0 - 3048.0 mm 2151.4 mm
Radial tool slide travel Axial tool head travel Depth required inside bore for ID chuck (± 0.25 inches (± 6.4 mm) is travel of leveling foot) Feed Rate	12 inches 4 inches 12.13 ± 0.25 inches 0.002 - 0.040 in/rev	304.8 mm 101.6 mm 308.1 ± 6.4 mm 0.051 - 1.016 mm/rev
OD: Mounting range * Facing diameter range Milling diameter range Grinding diameter range (w/ feed box) Grinding diameter range (w/o feed box) Refer to ID for specifications not listed	89.8 - 136.4 inches 45 - 120 inches 45 - 113.5 inches 45 - 118 inches 45 - 120 inches	2280.9 - 3464.6 mm 1143.0 - 3048.0 mm 1143.0 - 2882.9 mm 1143.0 - 2997.2 mm 1143.0 - 3048.0 mm
Surface Mount: minimum machining diameter Milling Option:	36.0 inches	914.4 mm
Vertical Stroke, milling head  Rotational Drive System  Drive type	8 inches  Pneumatic or hydraulic driven pinion and internal ring geal	
Pinion gear to ring gear reduction	7.429:1	
Single point turning speed range: Pneumatic Hydraulic (based on motor choice)	5 - 29 RPM 1.8 - 18 RPM	
Milling & grinding speed ranges (with 150:1 reducer): Pneumatic Feed rate at 120 inch (3048.0 mm) diameter	0.004 - 0.173 RPM 1.5 - 65.2 inches/minute	38.1 - 1656.1 mm/minute
Hydraulic (based on motor choice)	0.002 - 0.374 RPM	
Power input requirements Pneumatic - 3.5 Hp (2.6 kW) Hydraulic	50 ft³/min @ 90 psi 10 gpm@1200 psi	1.42 m³/min @ 620 kPa 37.9 L/min @ 8273 kPa
Measures For machine dimensions, please refer to dimensional drawings ID machine weight, approximate ID machine weight with mill, approximate OD machine weight, approximate ID machine weight with mill, approximate	4000 lb 4150 lbs 3775 lb 3925 lbs	1814.4 kg 1882.4 kg 1712.3 kg 1780.4 kg
Chuck crate dimensions, (for ID and OD machines) (WxDxH) Wood, approx. Metal, approx. Leg crate dimensions (for ID and OD machines) (WxDxH) Wood, approx.	93 x 40.5 x 40 in 90.2 x 40.2 x 36.2 in 94 x 43.5 x 19 in	2362 x 1029 x 1016 mm 2291 x 1021 x 920 mm 2388 x 1105 x 483 mm
Metal, approx.	94.2 x 42.7 x 19.2 in	2393 x 1085 x 488 mm
OD mount hardware crate dimensions (for OD machine only) (WxD	•	
Wood, approx. Metal, approx.	94 x 43.5 x 19 in 94.2 x 42.7 x 19.2 in	2388 x 1105 x 483 mm 2393 x 1085 x 488 mm
Testing Data		

#### **Testing Data**

Flatness at 82 inch (2083 mm) diameter: .0068 inches (0.17 mm) On a dedicated fixture made of A-36 steel in a controlled environment with single point machine, after warm-up.

<sup>\*</sup> OD mount minimum arm swing is 84.7 inches (2151.4 mm) diameter. An additional customer supplied structure will be required to chuck below the minimum swing diameter with the feedbox attached...





# **TOOL CONFIGURATIONS**

The FF8200 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 FF8200 for Single Pointing Only

_	#			,	
To 1 2 3 4	configure your machine, please follow these s Select a Base Package Select a Feed Assembly Select a Drive Motor Assembly Select a Hydraulic Motor	steps.	6	Hydraulic Power Unit For Hydraulic Drive Machine Single Pump (single pointing only): HPU 230V, 10 HP (7.5 kW) Single pump	63264
5	Select an Óptional Grinder Attachment			HPU 380V, 10 HP (7.5 kW) Single pump	63265
6	Select a Hydraulic Power Unit			HPU 415V, 10 HP (7.5 kW) Single pump	63266
7 8	Select a Turning Arm Assembly Select a Counterweight Assembly			HPU 460V, 10 HP (7.5 kW) Single pump	63267
9	Select a Counterweight Assembly Select a Chuck Assembly			HPU 575V, 10 HP (7.5 kW) Single pump	63268
10				Single Pump with Air (for use with grinder):	
	D D I			HPU 230V, 10 HP (7.5 kW) Single pump with Air	62759
1	Base Package			HPU 380V, 10 HP (7.5 kW) Single pump with Air	62760
	Rotary table, tool kit, operator's manual .	58187		HPU 415V, 10 HP (7.5 kW) Single pump with Air	62761
2	Food Accomply			HPU 460V, 10 HP (7.5 kW) Single pump with Air	62762
2	Feed Assembly Pneumatic Feed Assembly with Remote Air Control	58671		HPU 575V, 10 HP (7.5 kW) Single pump with Air	62763
	Thoundar out tooms, wantened in control	00011		Pendant Cable and Hose	
3	Drive Motor Assembly			0.5 in (12.7 mm) Hose and Pendant Cable Assy,	62799
	Pneumatic Motor and Drive Assembly	58186		20 ft (6.1 m)	
	(Pneumatic drive system includes: Pneumatic motor w/fittings and mount, rotary union,			0.5 in (12.7 mm) Hose and Pendant Cable Assy, 30 ft (9.1 m)	62800
	hoses, feed trip valve, cam, and pneumatic conditioning unit with low pressure drop out.) Hydraulic Drive Assy w/ Feed Conditioning Unit	58180		0.5 in (12.7 mm) Hose and Pendant Cable Assy, 50 ft (15.2 m)	62801
	- DOES NOT INCLUDE MOTOR     (Hydraulic drive system includes: Hyd motor mount, hoses, fittings, rotary union, feed trip	30100		0.5 in (12.7 mm) Hose and Pendant Cable Assy, 100 ft (30.5 m)	62802
	valve, cam, and feed pneumatic conditioning unit.)		7	Turning Arm Assembly	
4	Hydraulic Motor for Rotary Table Drive			Turning Arm Assembly with Single Point Tool Head Milling Arm Assembly with Single Point Tool Head	57872 62578
	(If Hydraulic drive is selected in step 3)			Willing Am Assembly with Oligic Form 1901 Fleat	02370
	Rated at 10 gpm, 1200 PSI		8	Counterweight Assembly	
	Hydraulic Motor, 14.9 cu in (244.2 cu cm), 3.6 - 18 RPM	69216		Counterweight Assembly	58066
		69217		Counterweight Milling Arm Assembly	62515
	Hydraulic Motor, 18.7 cu in (306.4 cu cm), 2.8 - 14 RPM	09217			
	Hydraulic Motor, 24.0 cu in (393.3 cu cm),	69218	9	Chuck Assembly	<del></del>
	2.2 - 11 RPM			ID Chuck Assembly OD Chuck Assembly	57881 61372
	Hydraulic Motor, 29.8 cu in (488.3 cu cm), 1.8 - 9 RPM	69219		ID/OD Chuck Assembly	61454
	* Multiple units may be ordered.		10	Shipping Container	
5	Optional Grinder Attachment			Wooden Crate for ID Mount Machine	58421
5	Grinding Attachment for Pneumatic Table Drive Motor	62537		Metal Container for ID Mount Machine Wooden Crate Set for ID/OD Mount Machine	59936 62679
	Grinding Attachment for Hydraulic Table Drive Motor	62570		Metal Container Set for ID/OD Mount Machine	61724
	Grinder Rotational Gearbox	020.0			
	Slow Rotation Gearbox for Pneumatic Motor (gear ratio 150:1)	62568			
	Slow Rotation Gearbox for Hydraulic Motor (gear ratio 150:1)	62538			
	Grinder Tooling				
	Grinding Wheel 1.5 in (38.1 mm), CBN 130 Grit	62633			
	Grinding Wheel 2.25 in (57.2 mm), CBN 130 Grit	62634			
	Ormanig Wileel 2.25 iii (57.2 IIIIII), ODN 130 OIIL	UZUJ <del>4</del>			

# TOOL CONFIGURATIONS

OPTION 2: To o	configure your FF8200 fo	r Millina Onlv			
	machine, please follow these			hydraulic milling head)	
1 Select a Base	Package	•		HPU 230V, 25HP Dual Pump	62784
	Motor Assembly			HPU 380V, 25HP Dual Pump	62785
	Select an Óptional Grinder Attachment Select a Hydraulic Power Unit			HPU 415V, 25HP Dual Pump	62786
				HPU 460V, 25HP Dual Pump	62787
				HPU 575V, 25HP Dual Pump	62788
	ng Arm Assembly			Pendant Cable & Hose, Single Pump	
<ul><li>7 Select a Count</li><li>8 Select a Milling</li></ul>	terweight Assembly			0.75 in (19.1 mm) Hose and Pendant Cable Assy,	62803
9 Select a Hydra				20 ft (6.1 m)	
10 Select Tooling	idile Motor			0.75 in (19.1 mm) Hose and Pendant Cable Assy,	62804
11 Select a Chuck	c Assembly			30 ft (9.1 m)	
12 Select a Shipp				0.75 in (19.1 mm) Hose and Pendant Cable Assy,	62805
1 Base Package	ŭ			50 ft (15.2 m)	
Rotary table, tool k	kit, drag brake assemblies,.	62673		0.75 in (19.1 mm) Hose and Pendant Cable Assy	62806
operator's manual.	•			100 ft (30.75 m)	
2 Drive Motor Asse	embly			Pendant Cable & Hose, Dual Pump	
	Pneumatic Motor and Drive Assembly (Pneumatic drive system includes: Pneumatic			0.5 in (12.7 mm) & 0.75 in (19.1 mm) Dual Hose	62807
				& Pendant Cable Assy, 20 ft (6.1 m)	02001
motor w/fittings a	nd mount, gearbox, rotary			0.5 in (12.7 mm) & 0.75 in (19.1 mm) Dual Hose	62808
, ,	d trip valve, and pneumatic			& Pendant Cable Assy, 30 ft (9.1 m)	
· ·	with low pressure drop out.)			0.5 in (12.7 mm) & 0.75 in (19.1 mm) Dual Hose	62809
,	sy w/Gearbox - DOES NOT	62585		& Pendant Cable Assy, 50 ft (15.2 m)	
	R OR PNEUMATIC SYSTEM			0.5 in (12.7 mm) & 0.75 in (19.1 mm) Dual Hose	62810
` ,	(Hydraulic drive system includes: Hyd motor			& Pendant Cable Assy,100 ft (30.5 m)	
<u> </u>	hoses, fittings, and rotary union.)		6	Turning Arm Assembly	
3 Hydraulic Motor fo				Milling Arm Assembly (does not include tool head)	72698
	e is selected in step 2)		7	Counterweight Assembly	
Rated at 10 gpm	.9 cu in (80.3 cu cm),	69213	1	Counterweight Milling Arm Assembly	62415
0.1 - 0.35 RPM	.9 ca iii (00.3 ca ciii),	03213	0		02410
	.0 cu in (131.1 cu cm),	69214	8	Milling Head	62202
0.05 - 0.20 RPM	.o ca iii (131.1 ca ciii),	03214		Milling Head Assembly Inch #50 Taper NMTB Milling Head Assembly Inch #50 Taper CATV	62282 62734
	4.9 cu in (244.2 cu cm),	69216		Milling Head Assembly Metric #50 Taper NMTB	62644
0.02 - 0.11 RPM	4.9 cu iii (244.2 cu ciii),	03210		Milling Head Assembly Metric #50 Taper CATV	62735
	9.8 cu in (488.3 cu cm),	69219	9		
0.012 - 0.06 RPM			9	Tooling (for inch milling head assembly only) #50, NBTB 4 in (101.6 mm) Face Mill w/ Inserts	47383
* Multiple units ma	v be ordered.			#50, NBTB 5 in (127.0 mm) Face Mill w/ Inserts	47384
4 Optional Grinder A	•			#50, NBTB 6 in (152.4 mm) Face Mill w/ Inserts	47385
The second second second	for Pneumatic Table Drive Motor	62948		#50, NBTB 8 in (203.2 mm) Face Mill w/ Inserts	47386
(tool head included)		02010		#50, NBTB 10 in (254.0 mm) Face Mill w/ Inserts	56175
,	for Hydraulic Table Drive Motor	62947		Carbide Inserts	47229
(tool head included)			10	Milling Head Swivel Assembly	
Grinder Tooling	,			Milling Head Swivel Plate Assembly	63250
Grinding Wheel 1.	5 in (38.1 mm), CBN 130 Grit	62633	44	•	
Grinding Wheel 2.2	25 in (57.2 mm), CBN 130 Grit	62634	- 11	Hydraulic Motor for Milling Head Hydraulic Motor Assembly 8.0 cu in (131.1 cu cm)	53459
5 Hydraulic Power	Unit			Hydraulic Motor Assembly 9.6 cu in (151.1 cu cm)	53458
•	r pneumatic table rotation):			Hydraulic Motor Assembly 11.9 cu in (195.0 cu cm)	46950
	Single pump with Air	62774		Hydraulic Motor Assembly 14.9 cu in (244.2 cu cm)	46375
	Single pump with Air	62775		Hydraulic Motor Assembly 18.7 cu in (306.4 cu cm)	46549
	Single pump with Air	62776		Hydraulic Motor Assembly 24.0 cu in (393.3 cu cm)	46550
	Single pump with Air	62777	12	Chuck Assembly	
	Single pump with Air	62778		ID Chuck Assembly	57881
	air) for hydraulic	··•		OD Chuck Assembly for Turning with Milling Arm	62666
• •	d hydraulic milling head,			ID/OD Chuck Assembly for Turning with Milling Arm	62674
			13	Shipping Container	
and air for grindi HPU 230V, 25HP I		62779		Wooden Crate for ID Mount Machine	58421
HPU 380V, 25HP I		62780		Metal Container for ID Mount Machine	59936 62670
HPU 415V, 25HP I		62781		Wooden Crate Set for ID/OD Mount Machine Metal Container Set for ID/OD Mount Machine	62679 61724
HPU 460V, 25HP I	•	62782		Motal Container Cot for 15/OD Mount Machine	01124
HPU 575V, 25HP I	•	62783			
111 0 010 0, 20111 1	I willy mull/10	J 00			



#### OPTION 3: To configure your FF8200 for Milling, or Milling with Single Pointing

OPTION 3: To configure you	r FF8200 for Milling, (	or Milling with Single Pointing	
To configure your machine, please	follow these steps.	and hydraulic milling head):	
1 Select a Base Package	9 Select a Milling Head	HPU 230V, 25HP Dual Pump	62784
2 Select a Feed Assembly	10 Select a Tooling	HPU 380V, 25HP Dual Pump	62785
3 Select a Drive Motor Assy	12 Select a Chuck Assem	HPU 415V, 25HP Dual Pump	62786
	13 Select a Shipping Con		62787
•	13 Select a Shipping Con	HPU 575V, 25HP Dual Pump	62788
5 Select an Optional Grinder		Pendant Cable & Hose, Single Pump	
6 Select a Hydraulic Power Unit	1 Base Package	0.75 in (19.1 mm) Hose and Pendant Cable Assy,	62803
7 Select a Turning Arm Assembly		20 ft (6.1 m)	02000
8 Select a Counterweight Assy		0.75 in (19.1 mm) Hose and Pendant Cable Assy,	62804
Rotary table, tool kit, drag brake asser	mblies,. <b>62670</b>	30 ft (9.1 m)	02004
operator's manual.		0.75 in (19.1 mm) Hose and Pendant Cable Assy,	62805
2 Feed Assembly		50 ft (15.2 m)	02003
Pneumatic Feed Assembly w/ Remote	Air Control 58671	0.75 in (19.1 mm) Hose and Pendant Cable Assy,	62806
3 Drive Motor Assembly		100 ft (30.75 m)	02000
Pneumatic Motor and Drive Assembly	62591	,	
(Pneumatic drive system includes: Pr		Pendant Cable & Hose, Dual Pump	
motor w/fittings and mount, gearbox,	rotary	0.5 in (12.7 mm) & 0.75 in (19.1 mm) Dual Hose	62807
union, hoses, feed trip valve, cam, & p		& Pendant Cable Assy, 20 ft (6.1 m)	
conditioning unit with low pressure dro		0.5 in (12.7 mm) & 0.75 in (19.1 mm) Dual Hose	62808
Hydraulic Drive Assy w/Gearbox & Fe		& Pendant Cable Assy, 30 ft (9.1 m)	
Conditioning Unit - DOES NOT INCL		0.5 in (12.7 mm) & 0.75 in (19.1 mm) Dual Hose	62809
MOTOR (Hydraulic drive system incl		& Pendant Cable Assy, 50 ft (15.2 m)	
Hyd motor mount, gearbox, hoses, fill rotary union, feed trip valve, cam, an		0.5 in (12.7 mm) & 0.75 in (19.1 mm) Dual Hose	62810
feed pneumatic conditioning unit.)	u	& Pendant Cable Assy,100 ft (30.5 m)	
	ive	7 Turning Arm Assembly	
4 Hydraulic Motor for Rotary Table Dr		Milling Arm Assembly with Single Point Tool Head	62578
(If Hydraulic drive is selected in st	ep 3)	8 Counterweight Assembly	
Rated at 10 gpm, 1200 PSI	DI DOM MILL	Counterweight Milling Arm Assembly	62527
Fast RPM = Single Point Machining / S	=		V-V
Hydraulic Motor, 4.9 cu in (80.3 cu cm	), 69213	9 Milling Head	
16 - 56 RPM / 0.1 - 0.35 RPM	\	Milling Head Assembly Inch #50 Taper NMTB	62282
Hydraulic Motor, 8.0 cu in (131.1 cu cr	n), <b>69214</b>	Milling Head Assembly Inch #50 Taper CATV	62734
8 - 32 RPM / 0.05 - 0.20 RPM	,	Milling Head Assembly Metric #50 Taper NMTB	62644
Hydraulic Motor, 14.9 cu in (244.2 cu d	cm), <b>69216</b>	Milling Head Assembly Metric #50 Taper CATV	62735
3.6 - 18 RPM / 0.02 - 0.11 RPM		10 Tooling (for inch milling head assembly only)	
Hydraulic Motor, 18.7 cu in (306.4 cu o	cm), <b>69217</b>	#50, NBTB 4 in (101.6 mm) Face Mill w/ Inserts	47383
2.8 - 14 RPM / 0.018 - 0.09 RPM		#50, NBTB 5 in (127.0 mm) Face Mill w/ Inserts	47384
Hydraulic Motor, 24.0 cu in (393.3 cu d	cm), <b>69218</b>	#50, NBTB 6 in (152.4 mm) Face Mill w/ Inserts	47385
2.2 - 11 RPM / 0.014 - 0.07 RPM		#50, NBTB 8 in (203.2 mm) Face Mill w/ Inserts	47386
Hydraulic Motor, 29.8 cu in (488.3 cu o	cm), <b>69219</b>	#50, NBTB 10 in (254.0 mm) Face Mill w/ Inserts	56175
1.8 - 9 RPM / 0.012 - 0.06 RPM		Carbide Inserts	47229
* Multiple units may be ordered.		11 Milling Head Swivel Assembly	
5 Optional Grinder Attachment		Milling Head Swivel Plate Assembly	63250
Grinding Attachment for Pneumatic Table D	Prive Motor 62537	12 Hydraulic Motor for Milling Head	
Grinding Attachment for Hydraulic Table Dri		Hydraulic Motor Assembly 8.0 cu in (131.1 cu cm)	53459
Grinder Tooling		Hydraulic Motor Assembly 9.6 cu in (157.3 cu cm)	53458
Grinding Wheel 1.5 in (38.1 mm), CBN	N 130 Grit 62633	Hydraulic Motor Assembly 11.9 cu in (195.0 cu cm)	46950
Grinding Wheel 2.25 in (57.2 mm), CB		Hydraulic Motor Assembly 14.9 cu in (244.2 cu cm)	46375
6 Hydraulic Power Unit		Hydraulic Motor Assembly 18.7 cu in (306.4 cu cm)	46549
•	rotation):	Hydraulic Motor Assembly 24.0 cu in (393.3 cu cm)	46550
Single Pump (for pneumatic table HPU 230V, 25HP Single pump with Air		13 Chuck Assembly	
HPU 380V, 25HP Single pump with Air		ID Chuck Assembly	57881
HPU 415V, 25HP Single pump with Air		OD Chuck Assembly for Milling Arm	62669
HPU 460V, 25HP Single pump with Air		ID/OD Chuck Assembly for Milling Arm	62677
HPU 575V, 25HP Single pump with Air	62778		
Dual Pump (with air) for hydraulic		14 Shipping Container	E0404
table rotation, hydraulic milling hea	nd.	Wooden Crate for ID Mount Machine	58421
and air for grinding attachment:	•	Metal Container for ID Mount Machine	59936
HPU 230V, 25HP Dual Pump with Air	62779	Wooden Crate Set for ID/OD Mount Machine	62679
HPU 380V, 25HP Dual Pump with Air	62780	Metal Container Set for ID/OD Mount Machine	61724
HPU 415V, 25HP Dual Pump with Air	62781		
HPU 460V, 25HP Dual Pump with Air	62782		
HPU 575V, 25HP Dual Pump with Air	62783		
Dual Pump (for hydraulic table rot			
_ aa a.mp (rot injuration table for			

# **ACCESSORIES, MACHINE OVERVIEW**

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

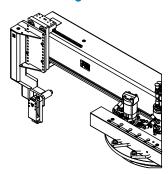
Surface mount PN 79540

Backfacing attachment PN 69711 (requires milling arm PN 62578 and counterweight arm PN 62527)

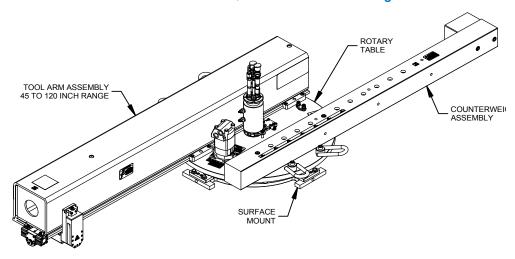
Surface mount retrofit kit (for existing machines)

PN 80046

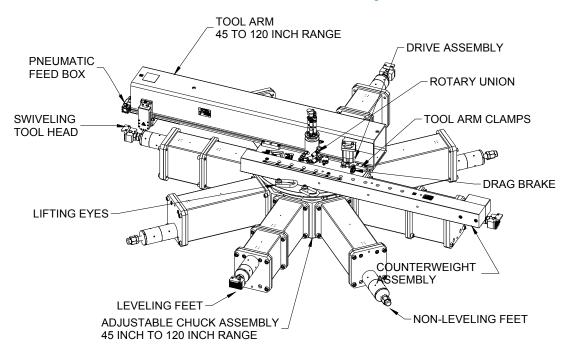
#### **Backfacing Attachment**



### Machine Overview, Surface Mount Configuration



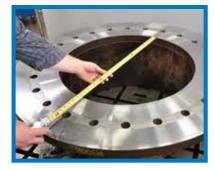
# Machine Overview, ID-Mount Configuration



# 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.

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



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



Select the appropriate leg length and foot.



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



Install setup fingers.



Install tool bit.
Connect to power.



Tighten legs.

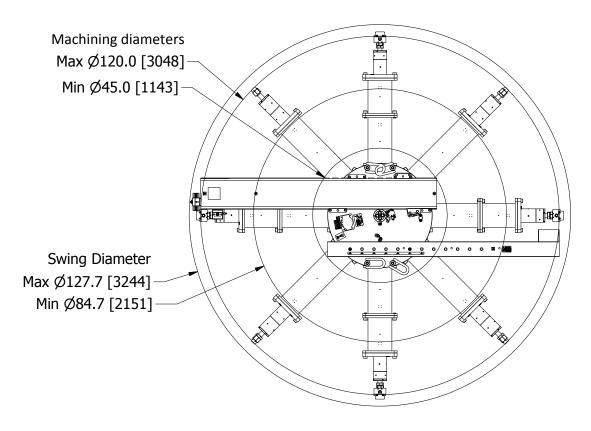


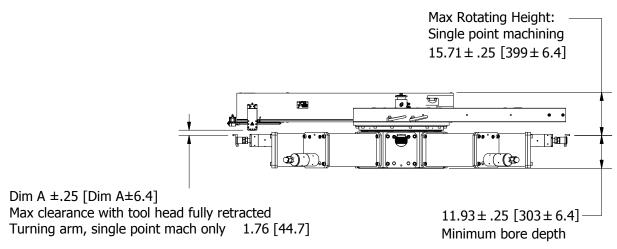
You are ready to begin machining!





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



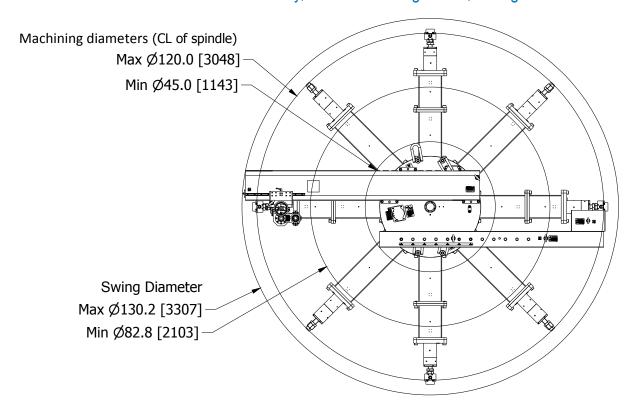


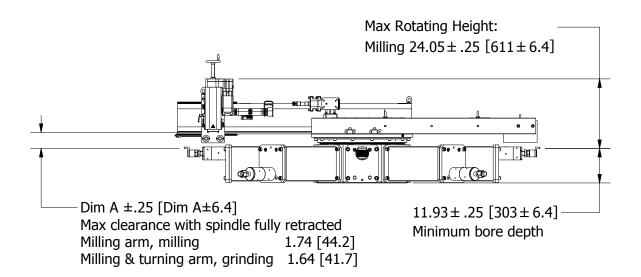
NOTE: ±.25 is travel of leveling foot

# OPERATIONAL DIMENSIONS

Dimensions in Inch (mm)

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

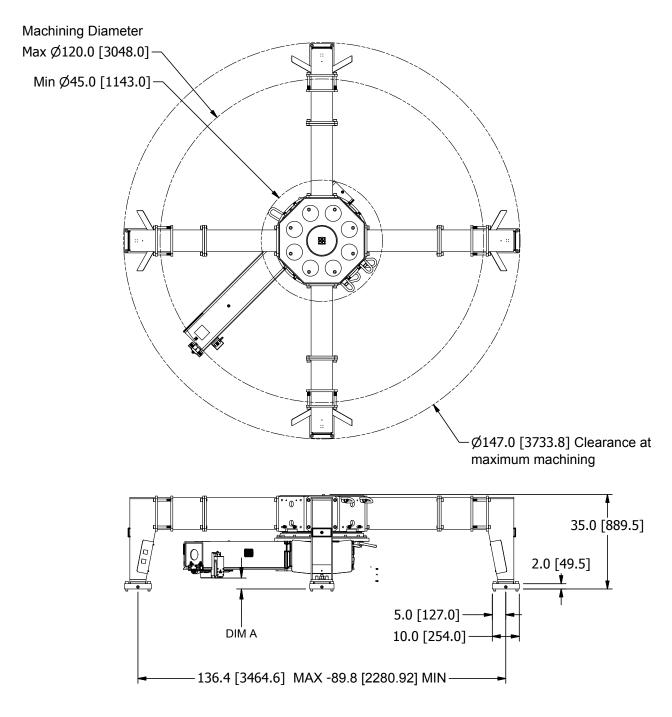




NOTE: ±.25 is travel of leveling foot



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



Dim A ±.25 [Dim A±6.4]

Max clearance with tool head fully retracted

Turning arm, single point mach only 4.2 [106.7]

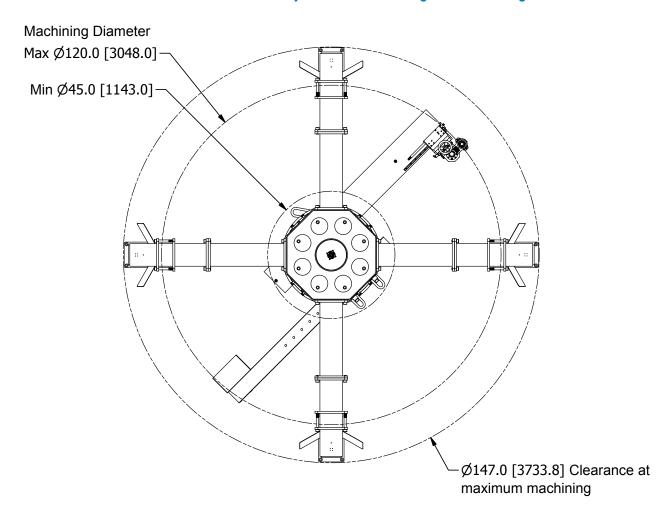
Milling & turning arm 4.2 [106.7]

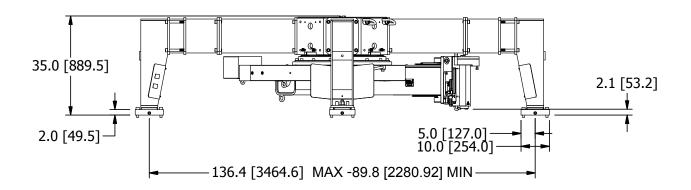
(either milling or single point machining)

Milling & turning arm, grinding 4.1 [104.1]



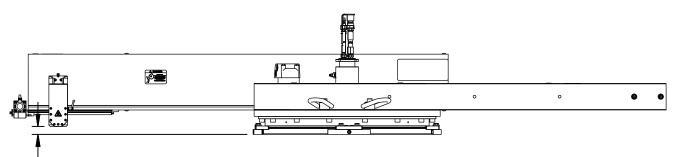
### OD Chuck Assembly, OD-Mount Configuration, Milling





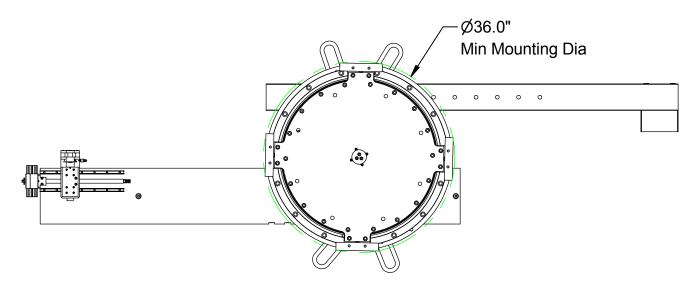


### Surface Mount Configuration, Milling



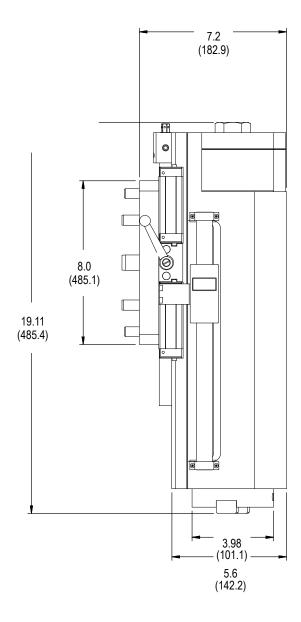
Clearance with tool head fully retracted

- 1.38" with turning arm, single point only
- 1.36" with milling arm with milling head or single point head
- 1.26" with milling arm or turning arm and grinder





## Milling Head Assembly



# **CLIMAX TRAINING AND SUPPORT**

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



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 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.

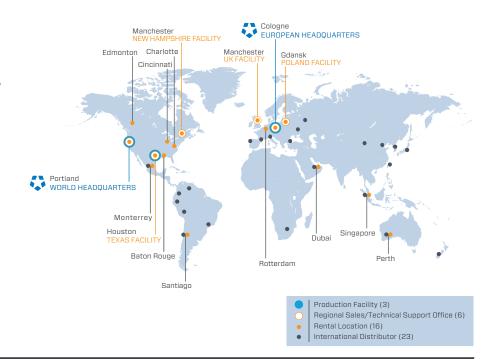
Connect with us: f y in 8











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