


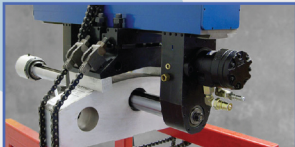


BORING MACHINES

Climax boring machines support boring diameters from 1.375 to 80 inches (35 to 2030 mm), with the precision and speed of stationary machines. Specially designed mounting brackets, spherical bearings, self-centering setup cones and movable rotational drive and feed units simplify setup and allow the tools to work in spaces too tight for most boring machines. All models feature rugged rotational drive and axial feed systems, precision bars and heavy duty bearings, with electric, pneumatic and hydraulic options available. They can share the same mounting system with AutoBoreWelding Systems for single-setup machining and welding.



PRODUCT COMPARISON CHART

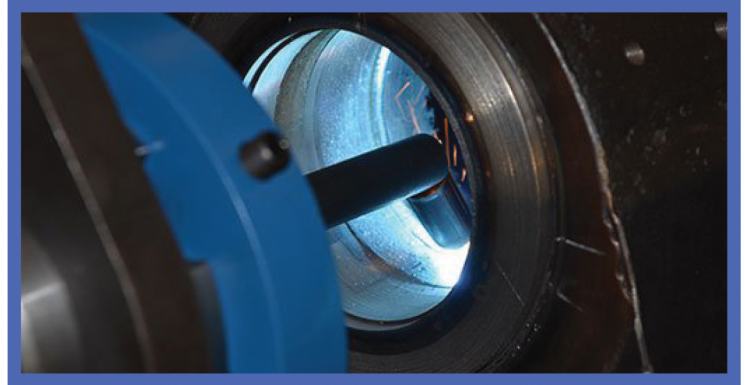
	Bar Diameters	Boring Diameters	Torque at the Bar	Power Options	
BB3000	1.25 inches (31.8 mm)	1.5 - 5 inches (38.1 - 127 mm)	40 ft-lb (54.2 N•m)	Electric	
BB4500	1.75 inches (1.25 inches opt) (44.5, 31.8 mm opt)	1.5 - 10 inches (38.1 - 254 mm)	417 ft-lb (hydraulic) (565.4 N•m)	Electric Pneumatic Hydraulic	
BB5000	2.25 inches (1.25 inches opt) (57.2, 31.8 mm opt)	1.5 - 24 inches (38.1 - 609.6 mm)	417 ft-lb (hydraulic) (565.4 N•m)	Electric Pneumatic Hydraulic	
BB5500	2.5 inches (1.875 inches opt) (63.5, 47.6 mm opt)	2 - 4.2 inches (50.8 - 106.7 mm)	65 ft-lb (88.1 N•m)	Pneumatic Hydraulic	
BB6100	3.5 inches 88.9 mm)	8.8 - 40.8 inches (223.5 - 1036.3 mm)	470 - 1820 ft-lb (637.2 - 2467.6 N•m)	Hydraulic	
BB7100	5 inches (127 mm)	10.25 - 58.25 inches (260.4 - 1479.6 mm)	750 - 2900 ft-lb (1020 - 3930 N•m)	Hydraulic	
BB8100	8 inches (203.2 mm)	17.1 - 85.1 inches (434.3 - 2161.5 mm)	3350 - 6068 ft-lb (4542 - 8227 N•m)	Hydraulic	



WELDING MACHINES

Our automated welding systems are designed to attach directly to several of Climax' boring machine mounting fixtures, allowing a single setup for both welding and machining operations.

These automated welders offer high quality, affordable welding performance for bore, flange and valve repair.

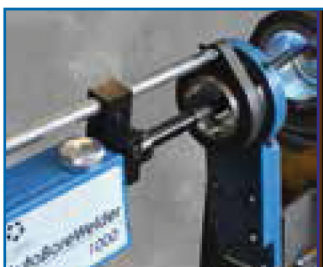


PRODUCT COMPARISON CHART

	Axial Travel	Wire Diameter Range	Step Range /Pitch	Rotational Direction	Auto-Skip	Standard Torch Range
BW1000	9 inches (228.6 mm)	0.030 - 0.045 inches (0.76 - 1.14 mm)	Pitch: 0.125 inches (3.2 mm) Helical	Clockwise rotation	No	0.88 - 24 inches (22.4 - 609.6 mm)
BW2600	9 inches (228.6 mm)	0.030 - 0.045 inches (0.76 - 1.14 mm)	Step Range: 0.050 - 0.200 inches (1.27 - 5.08 mm) per rev	Reversible	Skip / Fill	0.88 - 24 inches (22.4 - 609.6 mm)
BW3000	6 or 12 inches (152.4 or 304.8 mm)	0.023 - 0.045 inches (0.58 - 1.14 mm)	Step Range: 0.040 - 0.220 inches (1.0 - 5.6 mm)	Reversible	Auto Skip, Pie Mode & Carriage Return	0.50 - 54 inches (12.7 - 1371.6 mm)
BW5000	10, 20, 30, 40 & 50 inches (254, 508, 762, 1016 & 1270 mm)	0.045 - 0.062 inch (1.1 - 1.6 mm)	Step Range: 0.070 - 0.325 inches (1.78 - 8.26 mm)	Reversible	Auto Skip, Pie Mode & Carriage Return	12 - 120 inches (304.8 - 3048 mm)

AUTOBORE WELDERS

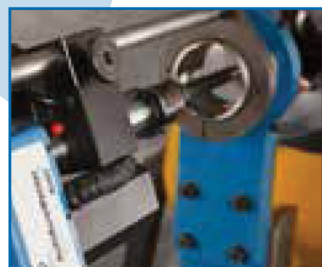
BW1000



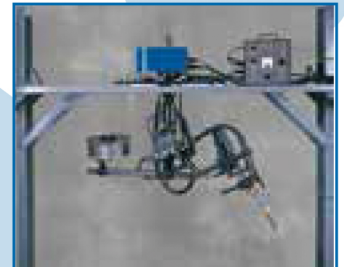
BW2600



BW3000



BW5000





FLANGE FACERS

With various models to reface, mill, bevel, square, counterbore, or cut end prep configurations for welding, Climax offers a wide variety of rugged and innovative portable flange facers, for 1 to 120 inch (25 to 3050 mm) diameters, for ID or OD mounting, and several of our machines can be configured for facing, milling, or both!



For easy setup, smaller units use an integral mandrel to quickly lock into place, while the larger units can be installed with a separate mount or chuck to which the facer body is installed.

Climax circular mills deliver fast, versatile machining to meet demanding wind tower specifications for connection flanges..

PRODUCT COMPARISON CHART

Flange Facers	Facing Diameters	ID Mounting Diameters	OD Mounting Diameters	Power Options
FF1000	0 - 12 inches (0 - 304.8 mm)	N/A	2-12 inches (50.8 - 304.8 mm)	Pneumatic
FF1200	0 - 12.5 inches (0 - 317.5 mm)	N/A	2-2.5 inches (50.8 - 317.5 mm)	Pneumatic
FF2400	0 - 24.5 inches (0 - 622.3 mm)	N/A	11.2 - 24.4 inches (284.5 - 619.8 mm)	Pneumatic
FF3600	0 - 36.5 inches (0 - 927.1 mm)	N/A	23.2 - 36.4 inches (589.3 - 924.6 mm)	Pneumatic
FF3000	1.5 - 12 inches (38.1 - 304.8 mm)	1.5 - 6.75 inches (38.1 - 171.5 mm)	N/A	Pneumatic
FF4000	3 - 19 inches (76.2 - 482.6 mm)	3 - 12.5 inches (76.2 - 317.5 mm)	N/A	Pneumatic
FF5000	5 - 24 inches (127 - 609.6 mm)	5 - 18 inches (88.9 - 457.2 mm)	N/A	Pneumatic
FF6300	11.8 - 60 inches (299.7 - 1524.0 mm)	11.8 - 57.5 inches (299.7 - 1460.5 mm)	38.1 - 63.8 inches (967.7 - 1620.5 mm)	Pneumatic Hydraulic
FF7200	30 - 72 inches (762 - 1828.8 mm)	30 - 72 inches (762 - 1828.8 mm)	N/A	Pneumatic Hydraulic
FF8200	45 - 120 inches (1143 - 3048 mm)	45 - 120 inches (1143 - 3048 mm)	89.8 - 136.4 inches (2280.9 - 3464.6 mm) Pneumatic	Pneumatic Hydraulic

FF1200



FF3600



FF5000



FF8200





MILLING MACHINES

Wherever equipment repair applications involve milling critical mounting surfaces, Climax has a precision machine that can be perfectly configured to fit. Our largest mill, the LM6200 features the ability to configure for linear and gantry milling, with up to 48 inches (2133.6mm) of x-axis travel and 34 inches (863.6mm) of y-axis travel.



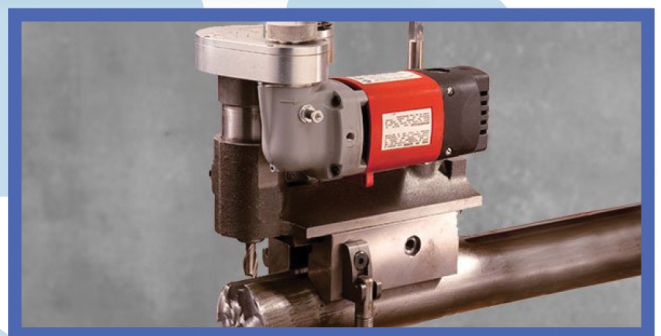
PRODUCT COMPARISON CHART

	Max. X-Axis Travel	Max. Y-Axis Travel	Max. Vertical Travel	Spindle Size	Power Options
PM4200	20, 49 or 78 inches (508.0, 1244.6 or 1981.2 mm)	8 inches (203.2 mm) w/ Weldon, 12 inches (304.8 mm) w/ HSK	3 inches (76.2 mm) w/ Weldon Spindle, 4 inches (101.6 mm) w/ HSK Spindle	0.75 inch (19.1 mm) Weldon, 40A (HSK)	Electric Pneumatic Hydraulic
LM5200	84 inches (2133.6 mm)	34 inches (863.6 mm)	4 inches (101.6 mm)	40 NMTB/CAT 40	Hydraulic
LM6200	176 inches (4470.4 mm)	106 inches (2692.4 mm)	8 inches (203.2 mm)	50 NMTB/CAT 50	Hydraulic



KEY MILLS

For about the same cost as machining a keyway off-site, you can purchase a Climax Key Mill. These two-axis and three-axis mills cut keyways, slots, pockets, or flats on shaft diameters of 1.5 to 24 inches (38 to 610 mm). They can be operated in any position, thanks to their sealed gear box lubrication.



PRODUCT COMPARISON CHART

	Keyway Length	Keyway Width	Shaft Diameters	Power Options
KM3000	6 inches (152.4 mm)	1.25 inches (31.8 mm)	0.75 - 10.5 inches (19.1 - 266.7 mm)	Electric Pneumatic Hydraulic
KM4000	8 inches (203.2 mm)	3.25 inches with 2 inch sideshift (82.6 mm with 50.8 mm sideshift)	4 - 24 inches (101.6 - 609.6 mm)	Electric Pneumatic Hydraulic