

Clausing CNC Bed Mill

600 Group

Affordable, Extra Heavy-Duty, Large Capacity, CNC Bed Mills and Super CNC Bed Mills with Real Cutting Power



- Full Three Axes CNC Control with ACU-RITE MILLPWR CNC Control On Standard Models and ANILAM 5000M CNC On Super Models
- Up To 2,000 lbs Table Load Capacity

3-Axis CNC Bed Mills with ACU-RITE MILLPWR Control



Machine Standard Features

- Powerful 5 Hp spindle drive motor
- Mechanical variable speed drive with 2 speed ranges
- Hardened and ground spindle with NT40 taper
- Hardened and chromed quill with 5" travel
- CP4 ABEC7 angular contact spindle bearings
- C7 double nut X/Y/Z axes, 1.26" diameter ballscrew
- Hardened and ground table surface
- Ground T-slots to provide accurate reference edge
- Hardened and ground, square X/Y ways
- Turcite B coating on saddle X/Y axes ways
- Meehanite castings for superior rigidity and wear resistance
- Telescopic Z axis ballscrew cover
- Z axis accordion way cover
- Stainless steel front Y axis way cover
- Rubber rear Y/Z axes way covers
- Heavy-duty overhead square control arm
- X/Y axes handwheels
- Coolant system with pump
- Automatic lubrication with alarm
- Heavy-duty chip tray and rear splash guard
- Table guarding
- Transformer
- Long arm halogen work light
- Tools, toolbox and parts

Optional Equipment

- Air power drawbar

3-Axis Super CNC Bed Mills with Anilam 5000M Control



Machine Standard Features

- Powerful 5 Hp spindle motor on SUP4BVS & SUP6BVS
- 7.5 Hp spindle motor on SUP8BVS
- Inverter variable speed drive with 2 speed ranges
- Hardened and ground spindle with NT40 taper
- Hardened and chromed quill with 5" travel
- CP4 ABEC7 angular contact spindle bearings
- C7 double nut X/Y/Z axes 1.26" diameter ballscrew
- Hardened and ground table surface
- Ground T-slots to provide accurate reference edge
- Hardened and ground, square X/Y ways
- Turcite B coating on saddle X/Y axes ways
- Meehanite castings for superior rigidity and wear resistance
- Telescopic Z axis ballscrew cover
- Z axis accordion way cover
- Stainless steel front Y axis way cover
- Rubber rear Y/Z axes way covers
- Heavy-duty overhead control arm
- X/Y axes handwheels
- Coolant system with pump
- Automatic lubrication with alarm
- Heavy-duty chip tray, rear splash guard and table guarding
- Transformer
- Long arm halogen work light
- Tools, toolbox and parts

Optional Equipment

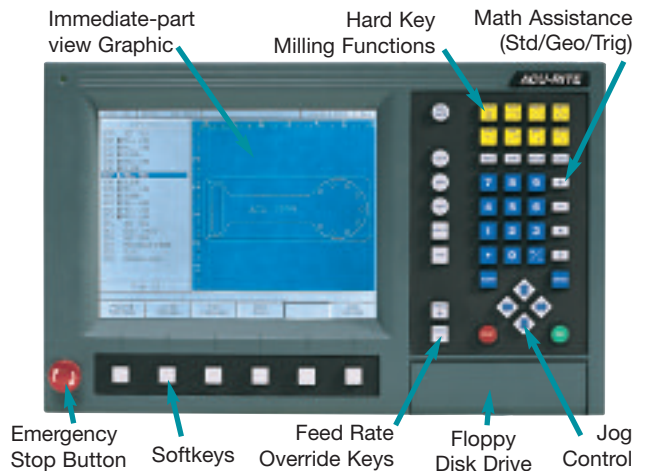
- X/Y/Z linear scale
- 4th axis package
- Air power drawbar
- Anilam remote MPG unit
- Anilam remote start/stop unit
- Laser calibration to program encoder motors

ACU-RITE® MILLPWR

Full Three axes* CNC Control *(in G Code only)

Features and Benefits

- 3 axes Control/4-axes Readout
- Conversational Menu-prompted Programming
- Position-Trac™/Find Home: Quickly find workpiece zero after power loss
- 3-D, Tactile-Feel, Color Keypad
- ACU-RITE Precision Glass Scales for better accuracy, repeatability, high resolution, closed loop feedback and proven reliability
- Jog Control: One axis or two axes simultaneously
- Remote Stop/Go Switch, with hand-held switch
- Travel Limits: With software
- Engrave: Alphanumeric references into parts
- Tool Offset Compensation • Tool Library
- Hard Key Milling Functions: Select routine functions (lines, arcs, rectangles, circles, etc.)
- Bolthole Calculations: Calculate full & partial circles
 - Linear row/column • Rectangle frame
 - Rectangle array • Mirror/Repeat/Rotate
- Custom Pocket • Skew: Save time aligning parts
- Bend • Explode • Feed Rate Override • DXF File Input
- Teach Position • Edit Capabilities • Reference Tables
- Math Functions: Standard • Trigonometry • Geometry • rpm



Hardware Features

- Precision Ground and Hardened Ball Screws
- Powerful AC Servo Motors Assemblies
- Closed Loop Feedback using ACU-RITE Precision Glass Scales with (2µm/.0001 Resolution)
- 10" Flat Panel, Color, LCD Display
- Large Internal Part Program Storage Capacity
- RS-232 Port for Downloading from an Offline Source
- Remote Stop/Go Switch • Floppy Disk Drive
- Maximum Table Feedrate of 100 IPM

ANILAM 5000M CNC Control



The Series 5000M is an user-friendly control, with integrated CAM programming or icon-based programming.

Automatic mode

During automatic operation, the 5000M will control everything from start to finish. The machinist has several options on how to generate the programs.

Single step mode

The single step mode allows the machinist to go through all or part of the manufacture by executing the program step by step.

Control Hardware

- 12.1" active matrix TFT flat panel display
- IBM compatible
- Communication ports • Parallel printer port • Network option
- 3-1/2" 1.44 MB Floppy Drive for transporting programs
- 8 GB Hard Drive for part program storage

Programming Tools

Teach-In Mode: The machinist can manufacture the part manually while the 5000 series records the corresponding program. Programming couldn't be easier. Additional parts can be manufactured in automatic mode

Draw graphics mode: Can be used to verify the part before machining it. At this point, the part program can easily be edited if needed.

Canned cycles: Are used to make the programming of routine machining jobs fast and easy. The questions are asked in plain language text and you are further assisted by graphical references.

Basic & Advanced Canned Cycles

Pocketing

- Frame milling
- Area clearance
- Circular pocket milling
- Hole milling
- Rectangular pocket milling
- Elbow milling
- Plunge circular pocket milling
- Mold rotation
- Plunge rectangular pocket milling
- Draft pocket milling

Drill/Tap

- Basic drilling
- Bore bi-directional
- Counter boring
- Peck drilling
- Bore uni-directional
- Chip breaking
- Flat bottom boring
- Bolt hole circle
- Tapping
- Hole pattern drilling

Paths

- Ellipse
- Circular profile
- Spiral
- Facing
- Rectangular profile

Machine Specifications

Model	4BVSCNC40	SUP4BVSCNC40	6BVSCNC40	SUP6BVSCNC40	SUP8BVSCNC40
Table Size	10" x 54" (254 X 1371mm)	10" x 54" (254 X 1371mm)	15" x 60" (380 X 1524mm)	15" x 60" (380 X 1524mm)	16.75" x 62" (425 X 1575mm)
Table Load Capacity	1,500 lbs. (680kg)	1,500 lbs. (680kg)	1,800 lbs. (817kg)	1,800 lbs. (817kg)	2,000 lbs. (907kg)
Number of T-Slots	3	3	3	3	4
T-Slot Width	.63" (16mm)	.63" (16mm)	.709" (18mm)	.709" (18mm)	.709" (18mm)
T-Slot Center Distance	2.48" (63mm)	2.48" (63mm)	3.15" (80mm)	3.15" (80mm)	3.15" (80mm)
Table Ways (X Axis)	Dovetail	Dovetail	Dovetail	Dovetail	Dovetail
Bed Ways (Y Axis)	Square	Square	Square	Square	Square
Column Ways (Z Axis)	Square	Square	Square	Square	Square
TRAVELS					
Longitudinal (X Axis)	30.51" (775mm)	30.51" (775mm)	41.3" (1050mm)	41.3" (1050mm)	47.24" (1200mm)
Cross (Y Axis)	17.5" (445mm)	17.52" (445mm)	19.6" (500mm)	19.6" (500mm)	22.83" (580mm)
Vertical (Z Axis)	19.69" (500mm)	19.69" (500mm)	23.62" (600mm)	23.62" (600mm)	23.62" (600mm)
Quill Diameter	4.13" (105mm)	4.13" (105mm)	4.13" (105mm)	4.13" (105mm)	4.33" (110mm)
Quill Travel	5" (127mm)	5" (127mm)	5" (127mm)	5" (127mm)	6" (152mm)
Head Tilt (left or right)	90°	90°	90°	90°	90°
Rapid Traverse Rate X & Y	100"/min (2540mm/min)				
Rapid Traverse Rate Z	75"/min (1905mm/min)				
Programmable Feedrate X & Y	0-100"/min (0-2540mm/min)				
Programmable Feedrate Z	0-75"/min (0-1905mm/min)				
Feedrate Override (5% increments)	5%-150%	5%-150%	5%-150%	5%-150%	5%-150%
SPINDLE					
Motor	5 Hp	5 Hp	5 Hp	5 Hp	7.5 Hp
Spindle Speeds (Infinitely Variable)	70-4300 rpm	65-5160 rpm	70-4300 rpm	65-5160 rpm	65-5160 rpm
No. of Speed Ranges	2	2	2	2	2
Low Gear Range	70-500 rpm	65-590 rpm	70-500 rpm	65-590 rpm	65-590 rpm
High Gear Range	570-4300 rpm	575-5160 rpm	570-4300 rpm	575-5160 rpm	575-5160 rpm
Spindle Taper	NT 40	NT 40	NT 40	NT 40	NT 40
Quill feed	.0016"/.003"/.006"/rev (0.04/0.08/0.15mm/rev)				
CONSTRUCTION					
Height	78.74" (2000mm)	78.74" (2000mm)	85.43" (2170mm)	85.43" (2170mm)	84.65" (2150mm)
Width	71.46" (1815mm)	71.46" (1815mm)	92.91" (2360mm)	92.91" (2360mm)	98.03" (2490mm)
Depth	66.14" (1680mm)	66.14" (1680mm)	76.77" (1950mm)	76.77" (1950mm)	80.71" (2050mm)
Working Width	100" (2540mm)	100" (2540mm)	131" (3327mm)	131" (3327mm)	140" (3556mm)
Working Depth	74" (1880mm)	74" (1880mm)	90" (2286mm)	90" (2286mm)	100" (2540mm)
Width Across Column Ways	11.73" (420mm)	11.73" (420mm)	11.73" (420mm)	11.73" (420mm)	11.73" (420mm)
Length of Saddle on Bed	25.98" (660mm)	25.98" (660mm)	47.24" (1200mm)	47.24" (1200mm)	53.15" (1350mm)
Width Across Bed Ways	16.53" (420mm)	16.53" (420mm)	20.47" (520mm)	20.47" (520mm)	22.83" (580mm)
Center of Spindle to Column ways	17.32" (440mm)	17.32" (440mm)	20.47" (520mm)	20.47" (520mm)	23.62" (600mm)
Floor to Table Surface	36.2" (920mm)	36.2" (920mm)	37" (940mm)	37" (940mm)	34.3" (871mm)
Table to Column Ways	3.15"-20.87" (80-530mm)	3.15"-20.87" (80-530mm)	2.05"-21.73" (52-552mm)	2.05"-21.73" (52-552mm)	.79"-23.62" (20-600mm)
Ball Screw Dia.	1.26"/.2 (32/5mm)	1.26"/.2 (32/5mm)	1.26"/.2 (32/5mm)	1.26"/.2 (32/5mm)	1.26"/.2 (32/5mm)
Ball Screw Class	C7	C7	C7	C7	C7
Spindle Nose to Table	3.15"-22.83" (80-580mm)	3.15"-22.83" (80-580mm)	3.93"-27.55" (100-700mm)	3.93"-27.55" (100-700mm)	3.93"-27.55" (100-700mm)
Gross Weight (approximately)	4,400 lbs (2000kg)	4,400 lbs (2000kg)	6,600 lbs (3000kg)	6,600 lbs (3000kg)	7,260 lbs (3300kg)

Machine Control, Design and Specification are subject to change without notice



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