

# Clausing **BED MILLS**

## **Large Capacity CNC Bed Mills**



***Affordable, Extra Heavy-Duty, CNC Bed Mills and Super CNC Bed Mills with an Unbeatable List of Standard Features***

**Simply the best**

## 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 3000M Control



### Machine Standard Features

- Powerful 5 Hp spindle motor SUP4BVS & SUP6BVS and 7.5 Hp spindle motor 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 square 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
- Air power drawbar
- Long arm halogen work light
- Tools, toolbox and parts

### Optional Equipment

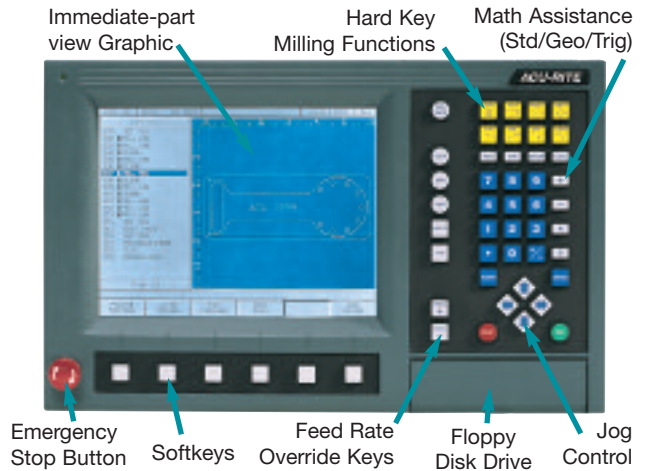
- X/Y/Z linear scale
- 4th axis 5000 package
- Anilam remote MPG unit
- Anilam remote start/stop unit
- Laser calibration to program encoder motors

# ACU-RITE® MILLPWR

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

### Features and Benefits

- 3 axis Control/4-axis Readout
- Menu-prompted, Conversational Programming
- Position-Trac™/Find Home: Quickly find workpiece zero after power loss
- 3-D, Tactile-Feel, Color Keypad
- ACU-RITE Precision Glass Scale:
  - Better accuracy
  - Repeatability
  - High resolution
  - Closed loop feedback
  - Proven reliability
- Jog Control: One axis or two axes simultaneously
- Remote Stop/Go Switch: With hand-held switch
- Travel Limits: With software not costly switches
- 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
- Modular Construction
- Floppy Disk Drive
- Maximum Table Feedrate of 100 IPM

# ANILAM 3000M CNC Control



The Series 3000M are user-friendly controls designed by ANILAM specifically for the milling industry. It utilizes Conversational Programming, there are no G-codes or other machine codes to learn. You don't have to have prior programming experience, you are prompted for data input by use of the F keys. The intuitive interaction makes it easy to set-up part programs. The many ANILAM 3000M features include on-screen editing and help graphics and DXF and G-code conversion, which converts DXF and G-code to Conversational Programming.

### 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
- 8.1 GB Hard Drive for part program storage

### Programming Tools

**Built-in Calculator:** Perform standard, trig, right angle and geometry calculations. All answers are stored and can be transferred directly into part programs via recall key.

**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"	10" x 54"	15" x 60"	15" x 60"	16.75" x 62"
Table Load Capacity	1,500 lbs.	1,500 lbs.	1,800 lbs.	1,800 lbs.	2,000 lbs.
Number of T-Slots	3	3	3	3	4
T-Slot Width	.63"	.63"	.709"	.709"	.709"
T-Slot Center Distance	2.48"	2.48"	3.15"	3.15"	3.15"
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
<b>TRAVELS</b>					
Longitudinal (X Axis)	30.51"	30.51"	41.3"	41.3"	47.24"
Cross (Y Axis)	17.5"	17.52"	19.6"	19.6"	22.83"
Vertical (Z Axis)	19.69"	19.69"	23.62"	23.62"	23.62"
Quill Diameter	4.13"	4.13"	4.13"	4.13"	4.33"
Quill Travel	5"	5"	5"	5"	6"
Head Tilt (left or right)	90°	90°	90°	90°	90°
Rapid Traverse Rate X & Y	100 (in/min)	100 (in/min)	100 (in/min)	100 (in/min)	100 (in/min)
Rapid Traverse Rate Z	75 (in/min)	75 (in/min)	75 (in/min)	75 (in/min)	75 (in/min)
Programmable Feedrate X & Y	0-100 (in/min)	0-100 (in/min)	0-100 (in/min)	0-100 (in/min)	0-100 (in/min)
Programmable Feedrate Z	0-75 (in/min)	0-75 (in/min)	0-75 (in/min)	0-75 (in/min)	0-75 (in/min)
Feedrate Override (5% increments)	5%-150%	5%-150%	5%-150%	5%-150%	5%-150%
<b>SPINDLE</b>					
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 in/revolution	.0016/.003/.006	.0016/.003/.006	.0016/.003/.006	.0016/.003/.006	.0016/.003/.006
Quill Travel/Dia.	5"/4.13"	5"/4.13"	5"/4.13"	5"/4.13"	6"/4.33"
<b>CONSTRUCTION</b>					
Height	89.76"	89.76"	99"	99"	98.43"
Width	71.46"	71.46"	92.91"	92.91"	98.03"
Depth	66.14"	66.14"	76.77"	76.77"	80.71"
Working Width	100"	100"	131"	131"	140"
Working Depth	74"	74"	90"	90"	100"
Width Across Column Ways	11.73"	11.73"	11.73"	11.73"	11.73"
Length of Saddle on Bed	25.98"	25.98"	47.24"	47.24"	53.15"
Width Across Bed Ways	16.53"	16.53"	20.47"	20.47"	22.83"
Center of Spindle to Column ways	17.32"	17.32"	20.47"	20.47"	23.62"
Floor to Table Surface	36.2"	36.2"	37"	37"	34.3"
Table to Column Ways (min/max.)	3.15"/20.87"	3.15"/20.87"	2.05"/21.73"	2.05"/21.73"	.79"/23.62"
Ball Screw Dia.	1.26"/.2	1.26"/.2"	1.26"/.2"	1.26"/.2"	1.26"/.2"
Ball Screw Class	C7	C7	C7	C7	C7
Spindle Nose to Table	3.15"-22.83"	3.15"-22.83"	3.93"-27.55"	3.93"-27.55"	3.93"-27.55"
Gross Weight (approximately)	4,400 lbs	4,400 lbs	6,600 lbs	6,600 lbs	7,260 lbs

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



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