

Large Capacity CNC Bed Mills



Clausing **BED MILLS**

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

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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

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Optional Equipment:

- Air power drawbar

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Specifications:

Model	4BVSCNC40	6BVSCNC40
Table Size	10" x 54"	15" x 60"
Table Load Capacity	1,500 lbs.	1,800 lbs.
Number of T-Slots	3	3
T-Slot Width	.63"	.709"
T-Slot Center Distance	2.48"	3.15"
Table Ways (X Axis)	Dovetail	Dovetail
Bed Ways (Y Axis)	Square	Square
Column Ways (Z Axis)	Square	Square
TRAVELS		
Longitudinal (X Axis)	30.51"	41.3"
Cross (Y Axis)	17.5"	19.6"
Vertical (Z Axis)	19.69"	23.62"
Quill Diameter	4.13"	4.13"
Quill Travel	5"	5"
Head Tilt (left or right)	90°	90°
Rapid Traverse Rate X & Y	100 (in/min)	100 (in/min)
Rapid Traverse Rate Z	75 (in/min)	75 (in/min)
Programmable Feedrate X & Y	0-100 (in/min)	0-100 (in/min)
Programmable Feedrate Z	0-75 (in/min)	0-75 (in/min)
Feedrate Override (5% increments)	5%-150%	5%-150%
SPINDLE		
Motor	5 Hp	5 Hp
Spindle Speeds (Infinitely Variable)	70-4300 rpm	70-4300 rpm
No. of Speed Ranges	2	2
Low Gear Range	70-500 rpm	70-500 rpm
High Gear Range	570-4300 rpm	570-4300 rpm
Spindle Taper	NT 40	NT 40
Quill feed in/revolution	.0016/.003/.006	.0016/.003/.006
Quill Travel/Dia.	5"/4.13"	5"/4.13"
CONSTRUCTION		
Height	89.76"	99"
Width	71.46"	92.91"
Depth	66.14"	76.77"
Working Width	100"	131"
Working Depth	74"	90"
Width Across Column Ways	11.73"	11.73"
Length of Saddle on Bed	25.98"	47.24"
Width Across Bed Ways	16.53"	20.47"
Center of Spindle to Column ways	17.32"	20.47"
Floor to Table Surface	36.2"	37"
Table to Column Ways (min/max.)	3.15"/20.87"	2.05"/21.73"
Ball Screw Dia.	1.26"/.2	1.26"/.2"
Ball Screw Class	C7	C7
Spindle Nose to Table	3.15"-22.83"	3.93"-27.55"
Gross Weight (approximately)	4,400 lbs	6,600 lbs

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

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Control:

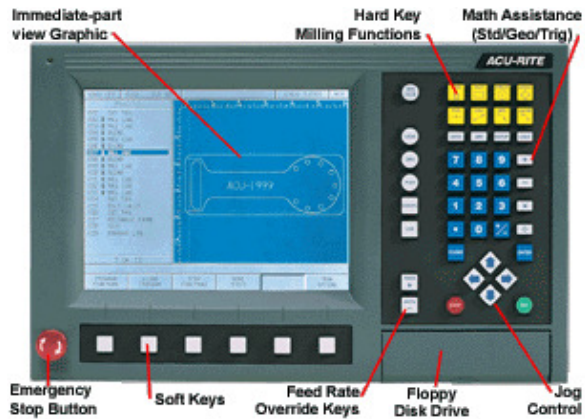
ACU-RITE® MILLPWR Full Three axes* CNC Control *(in G Code only)

Features and Benefits

- 3 axis Control/4-axis Readout
- Menu-prompted, Conversational Programming
- Position-Trac™/Find Home: Quickly find workpiece zero after power loss
- Reference Tables
- Math Functions:
 - Standard
 - Trigonometry

- 3-D, Tactile-Feel, Color Keypad
- ACU-RITE Precision Glass Scale:
 - Better accuracy
 - Repeatability
 - High resolution
 - Fast slew speed
 - 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

- Geometry
- rpm



Hardware Features

- Precision Ground and Hardened Ball Screws
- Powerful DC Servo Motors Assemblies
- Closed Loop Feedback using ACU-RITE Precision Glass Scales with (2 μ m/.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

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