

ACER® E-MILL® Technology • Quality • Reliability

FACTORY FIT WITH **MILLPWR®** CNC CONTROL

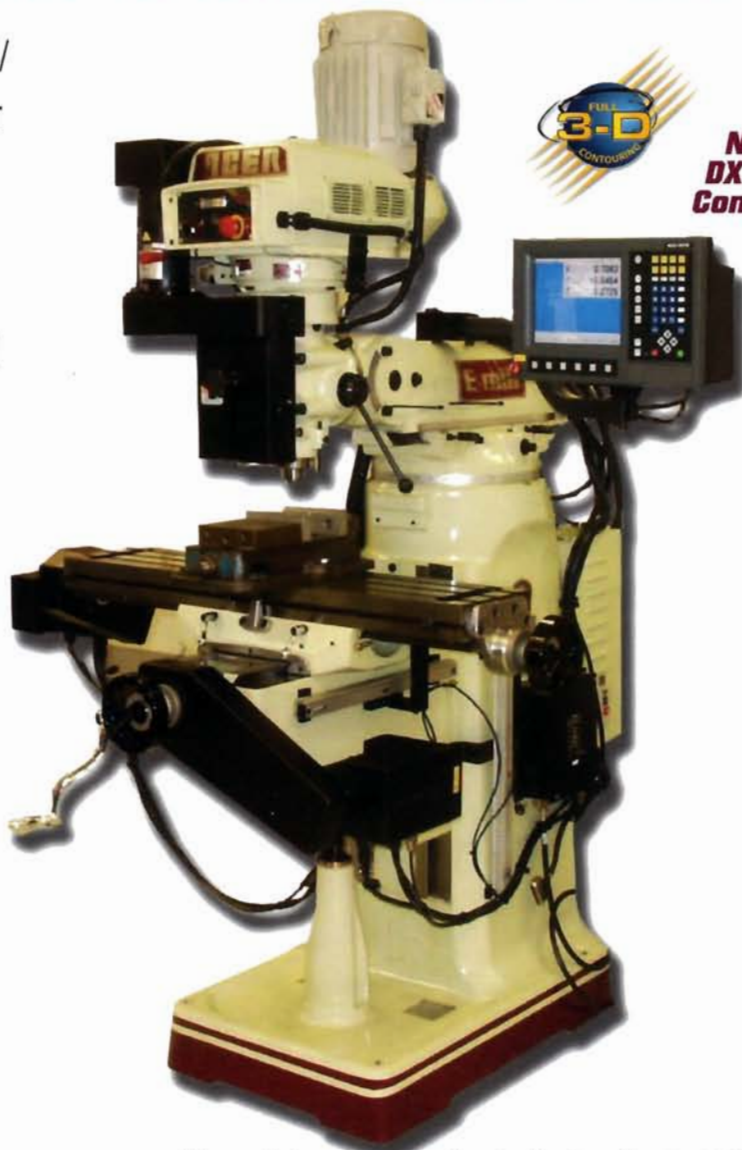
THE REAL SOLUTION.

MILLPWR is a versatile 2-axes or 3-axes control/3-axes readout system that satisfies the need for both manual and automated operations for milling machines. With **MILLPWR** and **ACER**, you can easily increase your efficiency, productivity and profitability at an affordable price. Add the quality sales and service support of our global distribution network, and it's clear.....

MILLPWR is THE REAL SOLUTION!

Standard Features Include:

- 2-axes or 3-axes Control
- 10" flat panel, color LCD display to view immediate graphic feedback
- ACU-RITE Precision Glass Scales (2µm/.0001" resolution) for closed feedback
- Precision ground and hardened ballscrews
- Powerful servo motor assemblies
- Remote stop/go switch
- Large internal part program storage plus floppy disk drive
- RS-232 Port
- Full 3-D Contouring - G-code files from CAD/CAM programs



**New!
DXF File
Converter**

- Powerful canned cycles including lines, arc's, hole patterns, rectangular and circular pocketing, ellipse and more
- Enhanced geometry calculator

ACER Group

ACER/Springwood Industrial, Inc.

1062 N. Kraemer Place
Anaheim, CA 92806
Tel: 714•632•9701
Fax: 714•632•9730

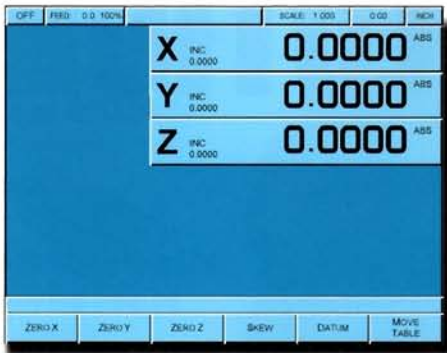
ACER/Klim Industrial, Inc.

244 N. Randolphville Rd.
Piscataway, NJ 08854
Tel: 732•752•9100
Fax: 732•752•9101

www.acergroup.com • e-mail: info@acergroup.com • e-mail: klim@acergroup.com

GREAT TOOL ROOM CNC

From the moment you power up your MILLPWR system, you'll know it was built with convenience in mind. From the exceptional clarity of a large, full-color LCD display screen to the added advantage of full 3-D contouring capabilities, essential functions are only a key stroke away. Let MILLPWR maximize your productivity and increase your profitability.



Increased Productivity

MILL MORE EFFICIENTLY AND EFFECTIVELY

■ Bolthole Calculations

Calculate bolthole patterns instantly.

- Full & Partial Circles
- Linear Row/Column
- Rectangular Frame
- Rectangular Array

■ Tool Offsets

Enter the tool's diameter and length, and MILLPWR will automatically compensate for the tool's dimensions while machining. This allows you to program the part instead of the tool path.

■ Tool Library

Create a list of frequently used tools to save time while programming a part.

■ DXF File Input

Reduce programming time by loading part geometry from a CAD file.

■ 3-D Contouring

Ability to import and run G-code files from CAD/CAM programs.

■ Multiple Scale Coupling

Couple the movement of two parallel axes (i.e. the quill and knee) and never lose track of your Z-axis part zero again.

■ Merge

Merge one program with another to significantly reduce programming time.

■ Mirror/Repeat/Rotate

Easily manipulate part programs to save time and reduce program steps.

■ Contour

Create a continuous contour and add finishing passes with approach and departure moves to avoid tool marks.

■ Centerline

Reduce setup time and math errors - let MILLPWR calculate the centerline between two or more points.

■ Custom Pocket

Program a continuous closed contour that has an irregular shape for multiple passes.

■ Island/bosses

Create raised features on any part.

■ Chamfer Capability

Program chamfers quickly - without calculating endpoints.

■ Ellipse

Easily programmed by height and widths.

■ Spiral

Program spirals with various sizes and sweep angles.

■ Comment Step

Add text message into any program.

■ Jog Control

Move quickly from one location to another - using one axis at a time or any two axes simultaneously.

■ Table Limits

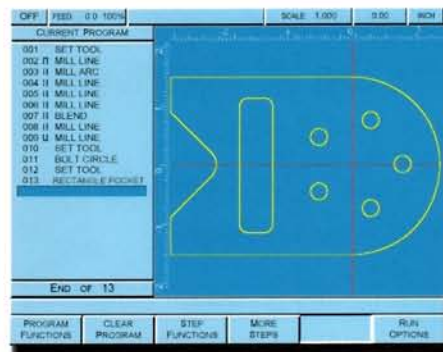
Easily programmable to suit your job requirements.

■ Remote Stop/Go Switch

Start and stop movement with a hand-held switch.

Ease of Use

CONVENIENT, USER-FRIENDLY AND MULTI-FACETED.



■ Display

Vivid, color, 10" flat panel, LCD display to view immediate graphic feedback.

■ Keypad

3-D, Tactile-feel, Color to locate specific functions, adjust feed rates on the fly and start and stop quickly and easily.

■ Menu-prompted Conversational programming

Easily create part programs, edit, reverse, change, delete and copy/move steps - follow the menu prompts and let MILLPWR do the rest.

■ Hard Key Milling Functions

Select routine milling functions (lines, arcs, rectangles, circles, etc.) with the press of a button.

■ Info Button

Built in help screens for content specific jobs.

INCREASED PRODUCTIVITY
EASE OF USE
VERSATILITY
FLEXIBILITY
REDUCED SET UP TIME

Flexibility/Reduced Setup Time

ELIMINATE REPETITIVE AND TEDIOUS SETUPS

- **Built-In Calculator**
Perform standard, trig, and geometry calculations and transfer them directly into part programs. Calculate RPM values simply by entering the tool diameter and the surface speed that you want to operate at.
- **Single-Step Milling Functions**
Quickly perform simple functions such as facing, framing (circular or rectangular), drilling (positions, hole patterns) and grooves without having to program.
- **Reference Tables**
Look up drill/tap sizes and surface speeds in seconds.
- **Part Program Storage**
Large internal part program storage capacity for convenient access anytime. Part programs can also be saved on a floppy disk or through remote storage on a computer.
- **Feed Rate Override**
Adjust the feed rate without exiting the milling function or program.
- **Engrave**
For engraving alphanumeric characters vertically, horizontally, diagonally or along an arc.
- **Blend**
Insert a radius between two lines, two arcs, or a line and an arc.
- **Spindle Control Message**
Displays a message to prompt operator to turn spindle on/off and set forward/reverse.

- **Immediate Part-View Graphics**
MILLPWR shows you the program as you create it. Seeing the program as it develops makes it easy to correct trouble spots before you machine.
- **Position-Trac™/Find Home**
Easily, quickly and accurately reestablish workpiece zero after power loss or next morning start-up.
- **Skew Feature**
MILLPWR compensates for the angle offset and helps reduce set up time if parts are clamped to table.
- **Explode**
"Explode" a program step into several, more detailed steps for easier editing.
- **Edit Capabilities**
Edit program steps in groups or one at a time.
- **Job Clock**
Keep track of run times, monitor throughput-even estimate how long a job will take.

Versatility

MILL AND PROGRAM SIMULTANEOUSLY

- **2- or 3-axes Control/3-axes Readout**
Significantly improves efficiency, productivity and profitability; may be used automatically or manually.
- **Disconnect Capability**
Switch between 2-axis and 3-axis machining on the fly. The Z-axis servo drive unit quickly disconnects from the quill.
- **AMI**
Control coolant pumps, oilers, misters and rotary index heads.
- **Teach Position**
Use a tool, electronic edge finder or indicator to create a program from an existing part.

ACCURACY and Workpiece Quality

THE REAL SOLUTION!

■ ACU-RITE PRECISION GLASS SCALES

Depend on precision glass scales for:

- Better Accuracy
- Repeatability
- High Resolution (2um/.0001")
- Fast Slew Speeds (40 inches per second)
- Closed Loop Feedback
- Elimination of Backlash Compensation
- Advanced Technology (Position-Trac™)
- Proven Reliability
- Certified Calibration



Built Shop Tough

Every MILLPWR system includes components that have been tested and manufactured to withstand the harshest machine shop elements.

- Ground hardened ball screws
- Heavy duty DC servo motors
- Sturdy operator features
- Die-cast metal enclosures
- Conformal coated reading heads
- Sealed keypad
- Recessed interlocking lipseals
- Vinyl coated cables



2-axes or 3-axes Control/ 3-axes Readout System

BALDOR SUPER E Motor with Fan Cooling System that Dissipates Heat Efficiently

U.S. Electronics

Extra Oilers to Lubricate the High-Low Moving Device and to Oil the Quill

One Piece Quill Pinion & Shaft

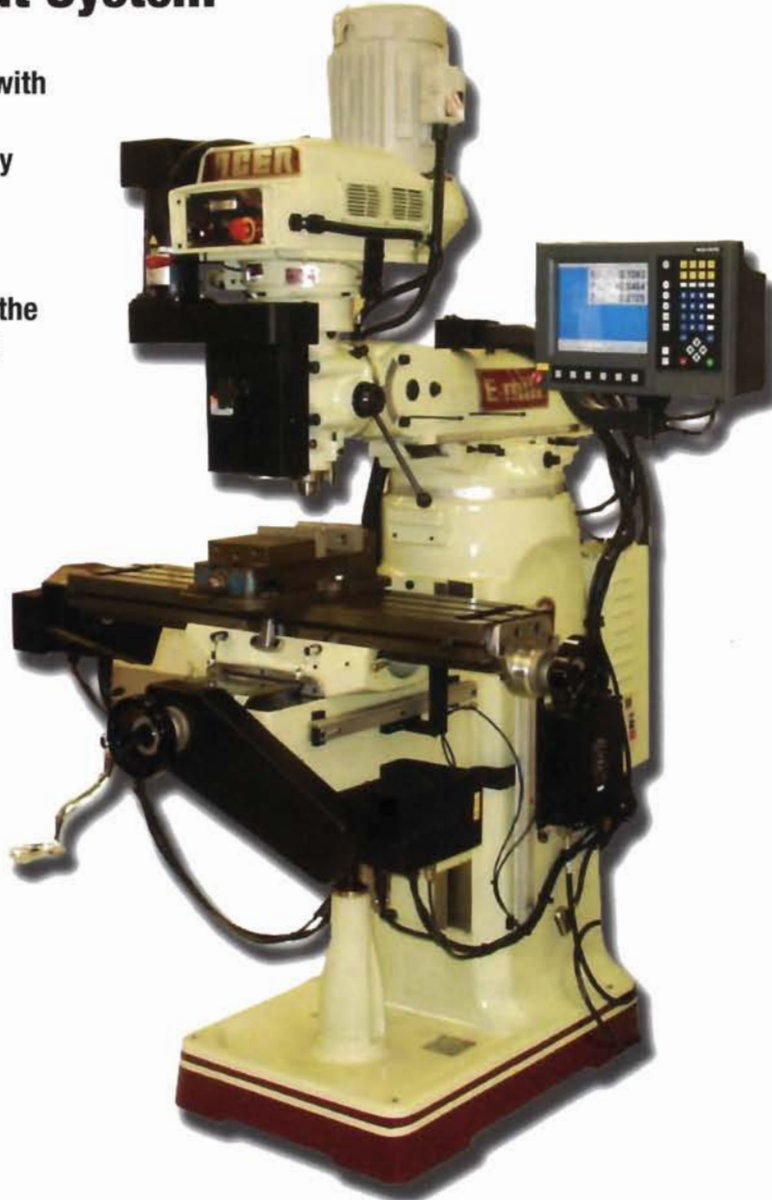
Precision Ground Ways

Precision Ground & Hardened Ballscrews

Motor & Drive System

Precision Ground Guide Line to .0002"

Turcite-B Coated Saddle Ways



Grease Fitting for Lubricating Bull Gear

MILLPWR Operator Console

Hand Scraped Turret-Column Ways

X, Y & Knee Axes are Hardened & Ground to HRC 52 degree

MILLPWR Controller Cabinet

Hardened & Ground Table Top to HRC 52 degree

ACU-RITE Precision Glass Scale Linear Encoders

Licensed Meehanite Casting

Dish-in Coolant Base

Specifications

Item	E-mill 3VS	E-mill 3VK	E-mill 3VKH	E-mill 5VK	Bed-mill 1454
Working Surface	9" x 42" 9" x 49"	10" x 50"	10" x 50" 10" x 54"	10" x 50" 10" x 54"	14" x 54"
Longitudinal Travel	24" 28"	28"	27" 31"	27" 31"	40"
Cross Travel	11 1/2"	14 1/2"	15"	15"	24"
Vertical Knee Travel	16"	16"	19"	19"	28"
Ram Travel	12"	20"	20"	20"	-
T-slot#, size	3, 5/8"	3, 5/8"	3, 5/8"	3, 5/8"	3, 5/8"
Main motor	3HP	3HP	3HP	5HP	5HP
Head moves rt. to left	90 degrees	90 degrees	90 degrees	90 degrees	90 degrees
Head tilts ft. to back	45 degrees	45 degrees	45 degrees	-	-
Spindle speed	60 - 4500	60 - 4500	60 - 4500	50 - 3750	50 - 3750
Spindle taper	R-8/N.T. 30	R-8/N.T. 30	R-8/N.T. 30	N.S.T. #40	N.S.T. #40
Power quill feeds	0.0015", 0.003", 0.006"	0.0015", 0.003", 0.006"	0.0015", 0.003", 0.006"	0.0015", 0.003", 0.006"	0.0015", 0.003"
Quill diameter(chromed)	3-3/8"	3-3/8"	3-3/8"	4"	4"
Quill travel	4 1/4"	4 1/4"	4 1/4"	4 1/4"	5"
Weight approximated	2630 lbs. 2680 lbs.	3300 lbs.	3550 lbs. 3700 lbs.	3750 lbs. 3900 lbs.	7800 lbs.
Floor space (LxWxH)	87"x62"x90"	96"x72"x92"	96"x72"x96"	96"x72"x96"	100"x74"x110"