## **CNC Precision Teach Lathe** CSM-1640 w/ ACU-RITE TURNPWR Control



ACU-RITE



## CSM-1640 CNC Teach Lathe

## Why Kent USA CSM-1640 Lathe?

- 7.5 HP Peak Fagor Servo Spindle motor
- Manual and CNC mode conversational control
- Rigid Meehanite castings with extra ribbing
- Induction hardened and ground ways
- Gearbox with alloy steel gears that are hardened and ground
- Extra large precision ground ballscrews
- 50-2,000 RPM range; electronic handwheels
- Auto Lube system with metered check valves
- Optional Automatic 4 position electric turret available

Model	CSM-1640
Swing Over Bed	16"
Swing Over Cross Slide	8.48"
Distance Between Centers	40"
Width of Bed	ון
Spindle Nose	Camlock D1-4 (Opt. ASA A1-4)
Spindle Bore	1.5"
Spindle Taper	M.T. #6
Spindle Speeds	50-2000 rpm
Longitudinal Travel (Z-Axis)	33"
Cross Slide Travel (X-Axis)	8"
Z-Axis Ballscrew Diameter	1.259", 5 mm pitch
X-Axis Ballscrew Diameter	0.98", 5 mm pitch
Z-Axis Rapid Traverse Speed	236"/min
X-Axis Rapid Traverse Speed	236"/min
Tailstock Quill Diameter	2.12"
Tailstock Quill Travel	5.1"
Tailstock Taper	M.T. #4
Spindle Motor	7.5 hp
AC Servo Motor (Z-Axis)	1.2 hp
AC Servo Motor (X-Axis)	1.7 hp
Net Weight	3740 lbs

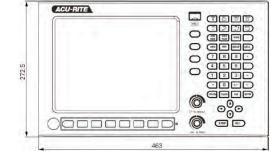
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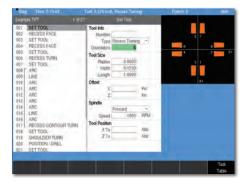
# ACU-RITE® TURNPWR control Systems



The TURNPWR is a contouring control that enables you to program conventional machining operations right at the machine in an easy-touse conversational language.







#### **Tool Step**

All programs begin with the tool. Parameters are entered in the middle column and are graphically supported in the right column for each field



#### More Part Toole, Part Tool

#### Cycle Select

Select a cycle to be created. In this case, a shoulder turn cycle. Once the data has been entered into the form press the USE hard key.

#### **3D Graphics**

Tool paths are also displayed in 3D graphics that can be rotated and manipulated. The program is ready to run. Simply press "GO."

	TURNPWR Technical Data	
DRO Mode	<ul> <li>Multiple Datums (Fixture Offset): 99</li> <li>Zero Reset</li> <li>Near Zero Warning</li> </ul>	
PGM Mode	<ul> <li>Thread Cycles, Recess Cycles, Turning Cycles</li> <li>Position / Drill, LINE, ARC, BLEND (Blend / Chamfer)</li> <li>Estimated Machining Time</li> <li>View Graphics: 2D Line / 3D Line / 3D Solid</li> <li>Block Form w/ User Override</li> <li>Replication (Repeat)</li> <li>Comment Step - Event comments</li> <li>Program Manager Navigation Tree w/ Program Type Filter</li> <li>Long Program Names</li> <li>Program Preview: Listing &amp; Graphic w/ Estimated Machining Time</li> <li>Explode Step: Repeat</li> </ul>	<ul> <li>Reverse (Step / Path)</li> <li>Shift Steps</li> <li>Auto Save (Program)</li> <li>Program Size Limit (TPT only): 9999 Steps</li> <li>DXF File Import</li> <li>G-code Program: w/Graphics Support / Simple Edit</li> <li>On-Screen Help: User Manual Viewer (Text &amp; Graphics)</li> <li>Parts Counter &amp; Clock</li> <li>Optional Stop (G-code Only)</li> <li>Feed Override: Potentiometer</li> <li>Error Compensation: Linear &amp; Bidirectional Non-linear</li> </ul>
Processor	1.4 GHz Dual Core Celeron® Processor	
Display	12.1-inch 1024 x 768 Color LED	
Internal Storage	2.5 GB CFAST (SATA) User	
Remote Handwheel	Standard with AC kits	
Housing	Die Cast Metal Bezel & Enclosure (Back Sheet Metal, Kit Style Console)	
Connections	Ethernet, USB (x2)	
Accessories	<ul> <li>Linear Feedback</li> <li>Electronic Edgefinder</li> <li>Offline Software</li> </ul>	
Weight	~7.7 kg	
Electrical Requirements	AC 100 V to 240 V (±10 %), 50 Hz to 60 Hz (±2 %)	
Operating Temperature	0° to 45° C (32° to 113° F)	
Storage Temperature	-20° to 70° C (-4° to 158° F)	
Protection	IP 54 (Front) / IP 40 (Back) (Kit Style Console)	

#### With more than one million in use today,

ACU-RITE® Precision Glass Scales withstand the elements of even the harshest machine shop environments. Built to resist changes in size, shape, or density due to temperature and humidity variations, this stability provides exceptional accuracy, resulting in tighter workpiece tolerances.

ACU-RITE<sup>®</sup> scales are available in travel lengths from 1"–120" and in resolutions from 0.5µm (.00002") to 5µm (.0002").





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