



PHOENIX® CB: Build, measure and true all types of PENTAC®, TRI-AC®, CYCLOCUT™ and RSR® cutters in a single operation

The Phoenix® Cutter Build Machine is an advanced computer-controlled bevel gear cutter set-up and measuring unit. The machine can be used to build face mill and face hob cutters to a high degree of accuracy.

An on-board computer supports the setup and cutter build operation. This five axis machine utilizes three manual setup axes and two servo; controlled axes and incorporates two high-resolution linear probes. The measuring cycle is fully automatic. The Phoenix CB can be used to build a variety of stick blade cutters to extremely high accuracy in the shortest amount of time.

The special technique used to measure the cutting edges enables the CB machine to achieve a high degree of accuracy. Measurements results are displayed in graphical form showing radial and tip run-out on the integrated monitor. It can also be printed out and stored for archiving.

Standard features

- Machine furnished with mounted electrical enclosure.
- Operator's control located at front of machine.
- Open Architect Computer control (PC).
- Control of axes: Cutter spindle (C) and blade stop (Z1) and manual adjustment of 3 axes: horizontal (X), vertical (Y), sliding base (Z2).

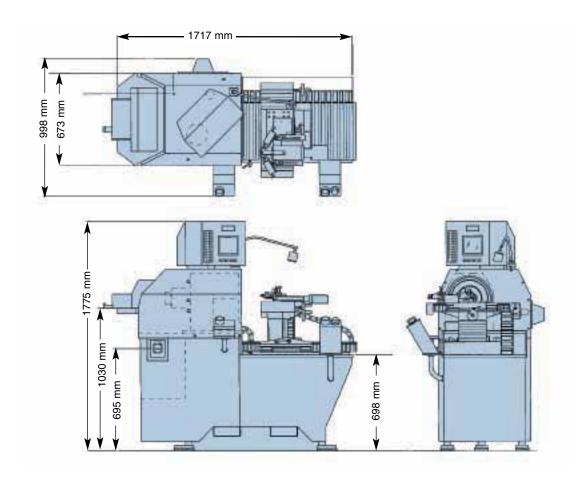
- USB Port (front access).
- Dual control palm buttons.
- Summary storage capacity for over 200 cutters.
- Security key for control of set-up.
- · Work area lighting.
- Standard set of machine and cutter wrenches.
- Electrical equipment for 460 volt, 60 Hertz, 2 phase or 380 volt, 50 Hertz. 2-phase installation.
- Electrics to comply with NFPA 790-1997 technical specifications.
- · Inkjet Printer.
- · Smooth paint finish.

Optional equipment

- Electrical Controls to EC Specifications.
- Machine preparation for air shipment (includes Tropical Storage Protection).
- · Replacement parts kits.
- · Extended warranty.



Specifications



Workpiece Capacity		
Face Millling - Cutter Diameter	Metric	English
RSR® Completing ED*	82 mm to 457 mm	3.25" to 18.00"
RSR® Completing SD*	127 mm to 457 mm	5.00" to 18.00"
RSR® Alternate SD*	127 mm to 457 mm	5.00" to 18.00"
RSR® Alternate ED*	228 mm	9.00"
Face Hobbing – Cutter Radius	Metric	English
PENTAC® and TRI-AC® Fine Pitch	51 mm to 105 mm	2.00" to 4.13"
PENTAC® and TRI-AC® Coarse Pitch	76 mm to 175 mm	2.99" to 6.88"
CYCLOCUT®	100 mm to 210 mm	3.93" to 8.26"
Cutter Spindle Metric English		
Spindle Nose Taper	58.22 mm	2.29"
Axes Control		
C-Axis Cutter Spindle	Servodrive with Heidenhain Rotary Encoder	
Z1-Axis — Blade Stop	Servodrive with Heidenhain Linear Scale	
Miscellaneous	Metric	English
Floor Space	1841mm x 999 mm	72" x 39"
Height	1775 mm	69"
Weight	1180 Kg	2,601 lbs

 $PHOENIX^{\circ}$, RSR° , $TRI-AC^{\circ}$, $CYCLOCUT^{TM}$ and $PENTAC^{\circ}$ are trademarks of The Gleason Works. In Japan, PENTAC-style cutting blades are marketed and sold under the registered trademark SUPER I-AC. The information and specifications in this publication are subject to change without notice.

Worldwide



Providing customized solutions for all major gear manufacturing processes on a global basis with an industry-leading array of machines, tools, workholding, inspection and service products:



BEVEL GEAR SOLUTIONS up to 2,500 mm

- ✓ Cutting (Spiral and Straight)
- ✓ Cutter Build
- **✓** Grinding
- ✓ Quenching
- **✓ Cutting Tools, All Processes**
 - **✓ Global Services**

- ✓ Blade Grinding
- √ Lapping
- ✓ Roll Testing
- √ Design Software
- √ Workholding

CYLINDRICAL GEAR SOLUTIONS up to 10,000 mm



- √ Hobbing, Gashing
- √ Power Skiving
- √ Shaping
- √ Shaving
- ✓ Threaded Wheel and Combined Grinding
- **✓ Cutting Tools, All Processes**

- **✓ Combined Processes**
- √ Chamfering/Deburring
- ✓ Profile Grinding
- √ Honing
- √ Workholding
- √ Global Services

METROLOGY SOLUTIONS all types of gears and gear tools

- ✓ Analytical Inspection
- √ Functional Gages
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