



Made in USA

An extra 6" of length & 2" of height for larger/longer tools

- Step drills
- Drills
- Reamers
- End mills
- Inserts
- Taps
- Custom tooling
- Screws/bolts

- 50+ Preset Calculations/Measurements
 - Distances
 - Radii
 - Angles
 - Diameter
 - Comparisons

- Quick checks on the shop floor – next to CNC grinding machines
- Advanced geometry and visual inspections in the metrology laboratory
- Creating reports for incoming/outgoing quality control
- Scenes and Inspections software feature for testing large quantity tool runs
 - Create inspection macro to control testing process ensuring accurate & repeatable tests

The PGI000-400LT is a tool geometry inspection system durable enough for everyday shop floor use and precise enough for a metrology laboratories incoming and outgoing quality inspections. The 5MP camera reproduces and displays high resolution cutting tool images magnified up to 100x on a 4K monitor.

All PGI000-400 systems collect and display data from the horizontal (X), vertical (Y), base block/tool holder rotational position (A), crosshair rotation (Z), focus (F) and microscope magnification (M) axis's as well as allow for optional lighting control through the software.

The PGI000-400 REACTION software allows the user to measure tool geometries in multiple ways.

- **Screen:** take measurements by picking points on the monitors screen
- **Scales:** use the X & Y axis handwheels to mark points and take measurements via the scales
- **Edge Detection:** this popular feature allows the software to detect the tools edges when taking measurements which helps to automate the process and virtually eliminates human error
- **Comparisons:** the software can create comparison geometries for quick referencing (Go/No-Go)
- **DXF/DWG file:** import overlay for tool size comparisons
- **CTM file:** Create and save tool image to use as an overlay for tool alignment and inspections

The PG REACTION software is very user friendly and incorporates on screen prompts, instructions and video demos for each tool calculation. Calculations can be repeated efficiently by recalling previous saved inspection scenes. Annotations/notes can be added alongside measurements.



With the click of an icon the software can export data to an Excel/CSV file or create a customized PDF report with results and user entered tolerances, images, customer details as well as an optional PASS/FAIL notification.

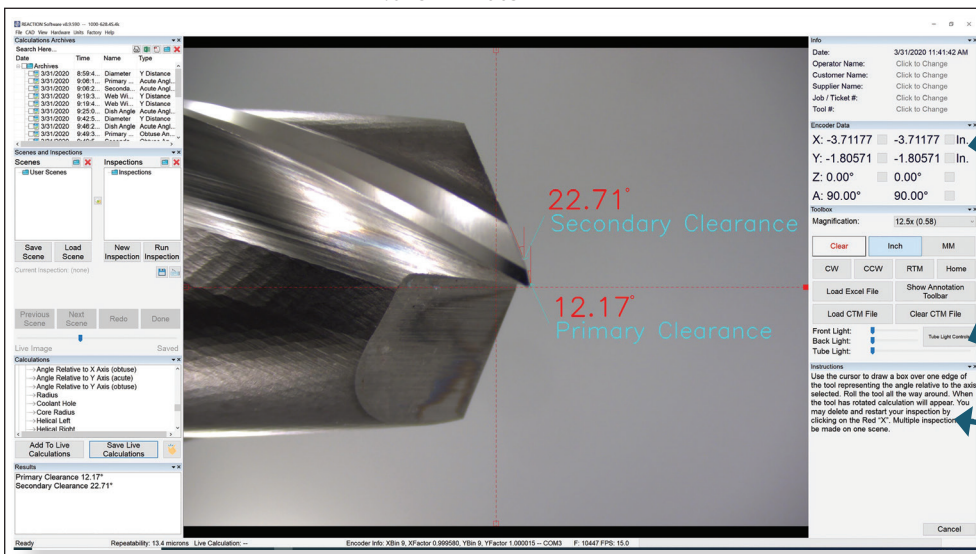
For more information visit: www.pg1000.com

PGI 000-400LT

Features:

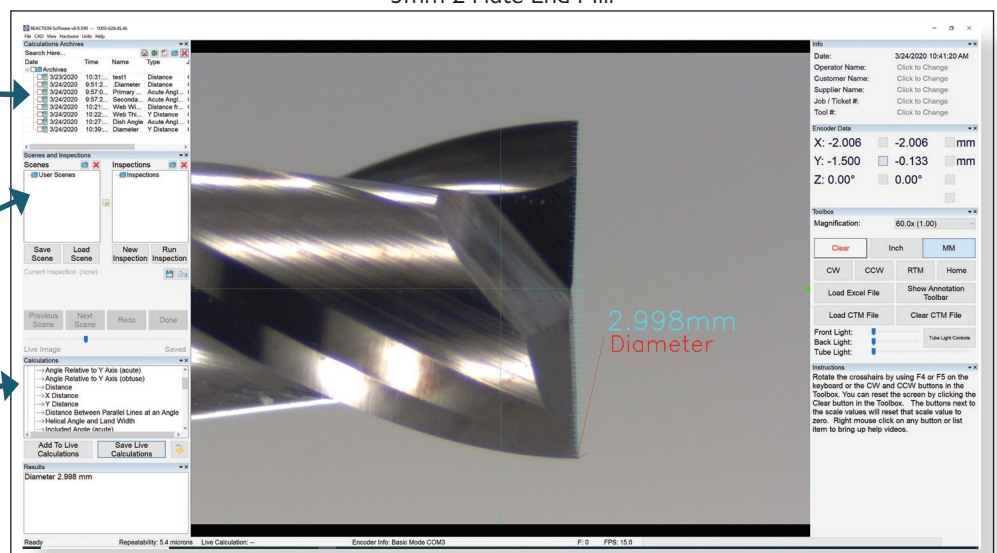
- Quick - measurements taken in less than 30 seconds
- Extremely accurate and repeatable
- User friendly software interface
- Flexibility during inspection – inspections done your way
- Live image calculations
- Snap to edges (auto edge detection)
- Edge detection (rotational w/concentricity fixture)
- 50+ calculations/measurements available in software
- Perform multiple calculations over a single image
- Create inspection macro templates
- DXF/DWG overlay software lockable to scale movement
- DXF/DWG data collection
- Tool comparisons
- Customizable PDF inspection reports
- Export results and data as Excel or CSV file
- Magnifications automatically synchronized to PC
- Center of tool focus indication
- Tool position in degrees displayed in software
- Certified granite base
- High precision linear bearings for all axis
- 270° pivoting base block for tool holding fixtures
- Free software upgrades (as hardware permits)
- All units delivered fully calibrated and ready for use
- 1 year warranty
- MADE IN USA

.625" 2 Flute End Mill



Primary and Secondary Clearance Angle at 14X zoom

3mm 2 Flute End Mill



Diameter at 65X zoom

Specifications:

Scope Magnification:				Recommended Tool Size:	Camera:	Computer:	Monitor:	Operating System:
8x	36x	65x	93x	0.075 - 5.00" (1.91 - 125mm) flute up to 13.4"L	5MP color camera	High performance w/ REACTION software reinstalled	27" 4K Ultra HD	Windows 10 64 bit
14x	43x	72x	100x					
20x	50x	80x						
30x	58x	86x						
Scales:	Power:	Language:		Accuracy/ Repeatability:		Measuring Range:		Dimensions: Weight:
Fagor 1μ	110Vac 60Hz (220Vac optional)	English	German	+/-0.0002" (5μ) at maximum magnification		Vertical: 5.30" (135mm) Horizontal: 13.87" (350mm)	30"x21"x20" 175lbs	
		Spanish	Japanese					
		Chinese						

PG1000-400LT System Includes:

- 1 PG1000-400LT gage
- 2 Pivoting base block for tool holding fixtures
- 3 V block, 5" (127mm)
- 4 V block insert with notch, 3.15" (80mm)
- 5 Carbide tipped backstop assembly
- 6 Top/tool clamp
- 7 Flexible LED light w/diffuser cap
- 8 Curved magnetic diffuser plate
- 9 High performance PC
- 10 REACTION software
- 11 27" 4K Ultra HD monitor



PGI 000-400LT Common Accessories:



Lighting:

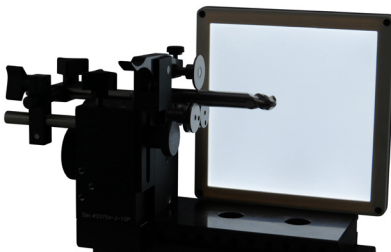
- I000-515** Light diffuser tube with adjustable articulating arm
- I000-661-1** LED ring light controlled by PC/software
- I000-662** LED back light controlled by PC/software



p/n I000-515



p/n I000-661-1



p/n I000-662

Calibration:

- I000-645-2** Linear segmented calibration reticle for 400LT. For screen calibration and the full working area of the microscope: 135mm x 350mm.



p/n I000-645-2

Hardware:

- I000-209-1** 10" V block for long tools
- I000-209-2** 15" V block for large tools
- I000-572** Concentricity fixture with precision rollers, top roller and backstop for large tools. Shank/tool size range: 0.375" - 2.0"
- I000-573** Concentricity fixture with quarter plain precision rollers, top roller and backstop. Shank/tool size range: 0.125" - 1.25"



p/n I000-209-1



p/n I000-209-2



p/n I000-572



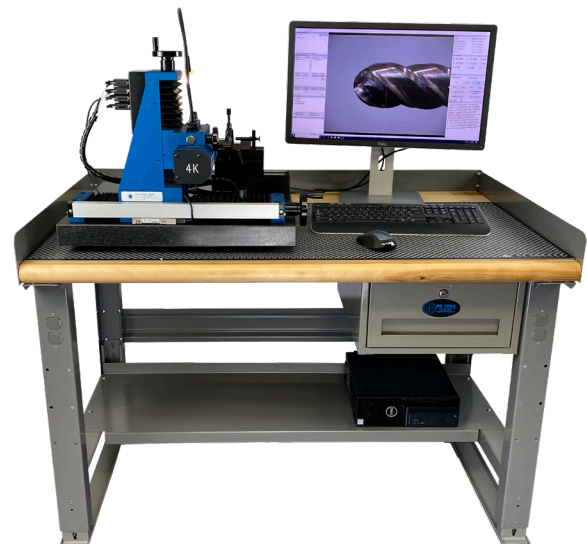
I000-572 rollers



I000-573 rollers

Other Options:

- 00087-3P** 35Watt UPS/ Surge protection device
- 03060-01** Custom 60"L x 30"D PGI000 workbench



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