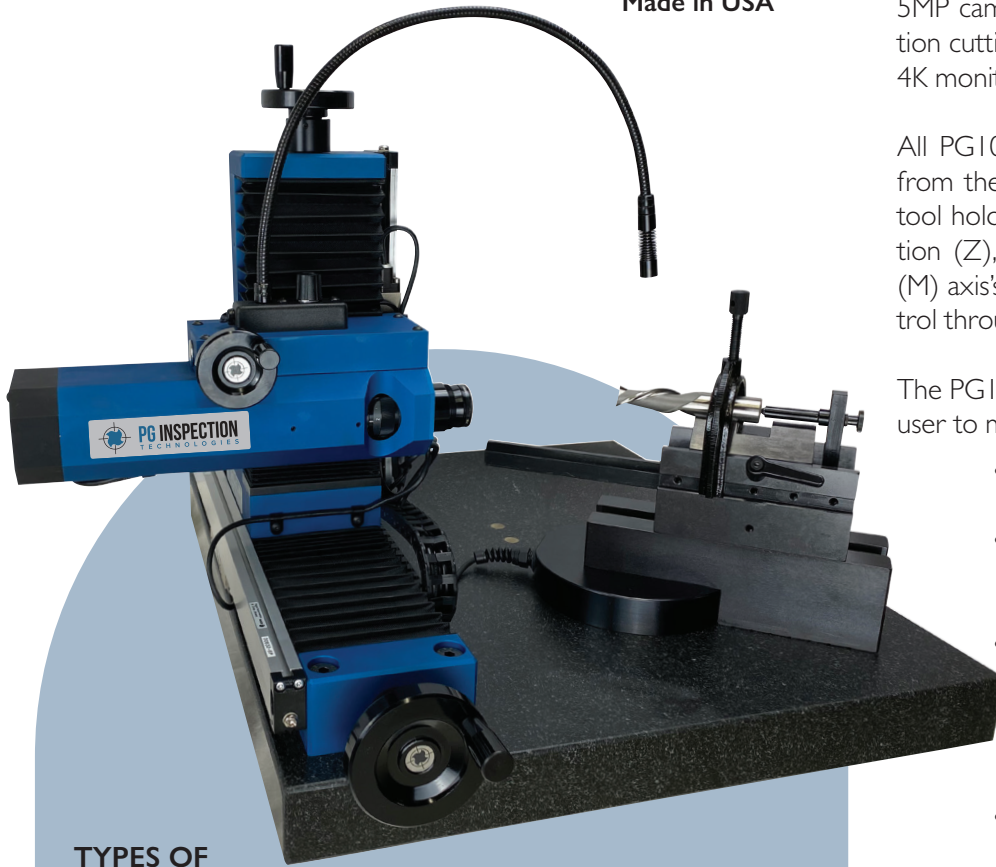


PG INSPECTION
TECHNOLOGIES

PG I 000-400

Made in USA



TYPES OF CUTTING TOOLS

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

TYPES OF MEASUREMENTS

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

APPLICATIONS

- 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

Optical Cutting Tool Inspection System with REACTION Software For tools up to 3.00" (75mm) in diameter

The PG I 000-400 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 145x on a 4K monitor.

All PG I 000-400 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 PG I 000-400 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 will create a PDF report which includes images and customer supplied details, as well as an optional PASS/FAIL notification. Optionally, measurement results can also be saved in a customer supplied Excel template, or in a blank Excel document.

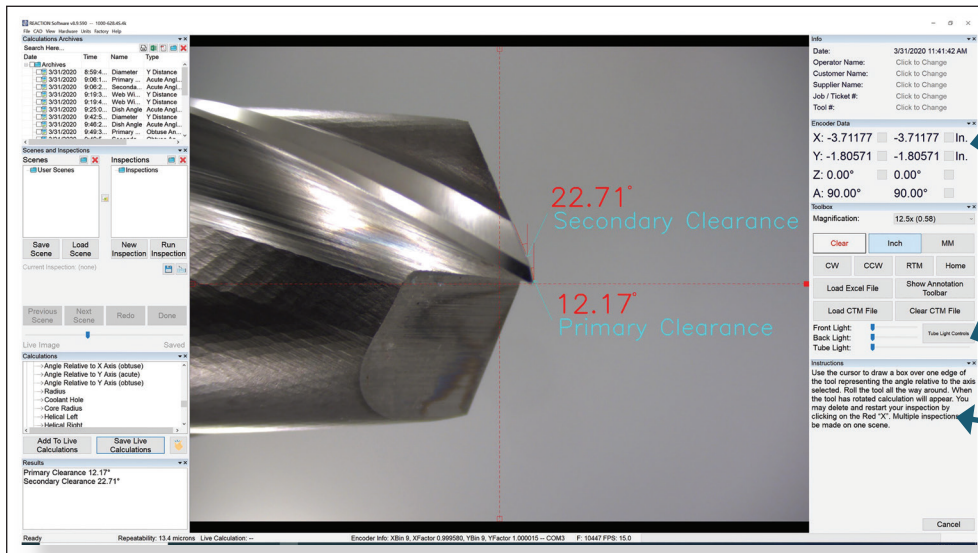
For more information visit: www.pg1000.com

PG I 000-400

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
- No pixel manipulation
- Edge detection
- 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
- Inspection reports in PDF or Excel
- Magnifications automatically synchronized to PC
- Focus indication
- 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



Data from all encoders/axis displayed

Light controls

On screen instructions

Primary and Secondary Clearance Angle at 12.5X zoom

.301" Drill



Inspection archives:
For report generation

Scenes & Inspections:
For saving inspection parameters

50+ Calculations/
Measurements to choose from

Chisel Angle at 30x zoom

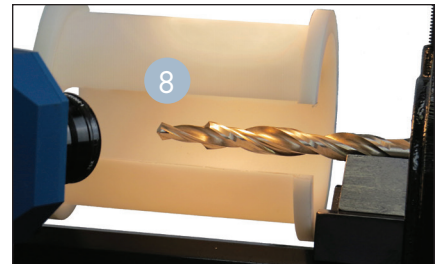
Specifications:

Scope Magnification:				Recommended Tool Size:	Camera:	Computer:	Monitor:	Operating System:
12.5x	50x	90x	130x	0.060 - 3.00" (1.524 - 75mm) flute up to 7.5"L	5MP color camera	High performance w/ REACTION software reinstalled	24" 4K Ultra HD	Windows 10 64 bit
20x	60x	110x	145x					
30x	70x	120x						
40x	80x	125x						

Scales:	Power:	Language:		Accuracy/ Repeatability:	Measuring Range:	Dimensions/ Weight:
Fagor 1μ	110Vac 60Hz (220Vac optional)	English	German	+/-0.0002" (5μ) at maximum magnification	Vertical: 3.35" (85mm) Horizontal: 7.87" (200mm)	24"×19"×18" 140lbs
		Spanish	Japanese			
		Chinese				

PG I000-400 System Includes:

- 1 PG I000-400 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 Variable intensity LED work light
- 8 Light diffuser tube
- 9 High performance PC
- 10 REACTION software
- 11 24" 4K Ultra HD monitor

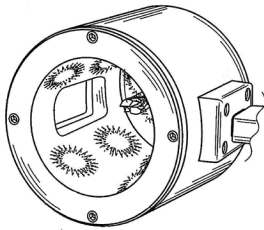


PG I 000-400 Accessories:



Lighting:

- I000-648** Eight quadrant LED illumination tube controlled by PC/software
- I000-661-1** LED ring light controlled by PC/software
- I000-662** LED back light controlled by PC/software



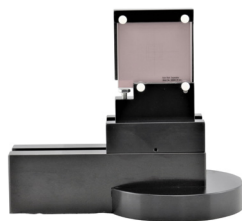
p/n I000-648



p/n I000-661-1

Calibration:

- I000-443** Standard calibration reticle
Supplied in mounting bracket and foam lined Pelican case. Tolerance, $\pm 1\mu$ absolute. Includes secondary NIST certification valid for a min of 4 year from date of shipment. For screen calibration and 50mm x 50mm area of scale calibration.
- I000-645-1** Linear segmented calibration reticle
Supplied in mounting bracket and foam lined Pelican case. Tolerance, $\pm 1\mu$ absolute. Includes secondary NIST certification valid for a min. of 9 years from date of shipment. For screen calibration and the full working area of the microscope: 85mm x 200mm.



p/n I000-443



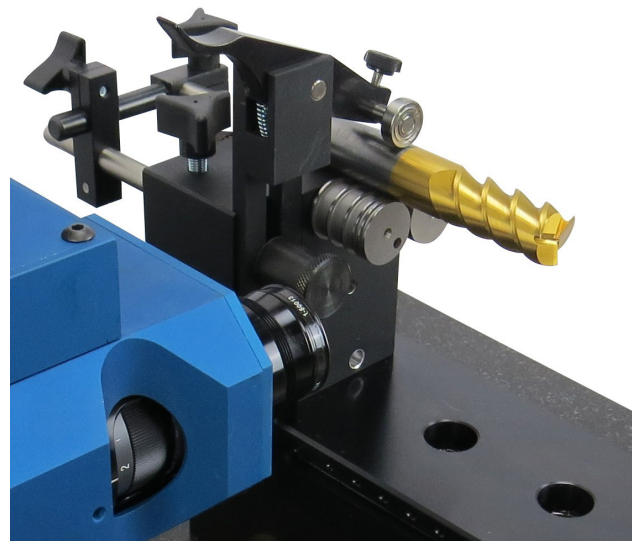
p/n I000-645-1

Other Options:

- 00087-3P** 35Watt UPS/Surge protection device
- 00087-8P** 27" 4K monitor upgrade (standard monitor is 24")

Hardware:

- I000-209-1** 10" V block for long tools
- 00030-2MA** Matched set of (2) notched V block inserts, 3.15" (80mm) L
- 00030-3MA** Short V block insert for small tools, 1.5" (38mm) L
- 00257-1MB** Mini V block insert for micro tools (1 - 3mm shank)
- I000-500-2** Center fixture assembly with male centers
Maximum tool length: 12"
- I000-501** Mini center fixture assembly with male centers
Maximum tool length: 6"
- I000-570** Concentricity fixture with precision custom rollers, top roller and backstop
Shank/tool size range: 0.125" - 1.0";
Certified accuracy of 2μ over the rollers
- I000-571** Concentricity fixture with precision rollers and top roller for small/micro tools
Shank/tool size range: 0.010" - 0.250";
Certified accuracy of 2μ over the rollers
- I000-572** Concentricity fixture with precision rollers, top roller and backstop for large tools
Shank/tool size range: 0.375" - 2.0";
Certified accuracy of 2μ over the rollers
- I000-650** Gun Drill Fixture use 1-3/8" O.D. gun drill bushings. Max gun drill length 24" (gun drill bushings not supplied)



p/n I000-570



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