DAC INTERNATIONAL
Your Lens Technology Partner
Bringing New Ideas to Lens Manufacturers

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DAC Exhibiting:

- ALM 3.0 – Defined by the User, for the User. CL and IOL manufacturing.

- DAC Precision Blocking. CL and IOL.

- HMG & XLS - accurate and reliable diamond tool calibration and toric axis positioning.
ALM 3.0 – Look familiar?

Well look again.....
ALM 3.0 – Addressing Customer demands...

Ergonomics play their part:
- Lower working height.
- Touch screen and detachable keyboard
- Multi-point monitor arm.
- Easier hardware controls access.
- 2 USB ports.
...while delivering greater capability.

- The **FT3** – Defining the next generation in Fast-Tool systems:
...with technology that makes a difference..

- The **FT3** – Ready to upgrade?
  - High stiffness, Air Bearing technology that requires no mechanical or flexure systems.
  - Greater tool excursion for extreme cylinders, etc.
  - High velocity oscillation - higher spindle speeds – improved surface quality of complex lens shapes.
  - 3-tool system for all non-rotationally symmetric geometries – including lens edges!
  - Compatible with HMG use for fast, accurate and repeatable diamond tool calibration.
...and the ability to adapt with you!

- Compact tooling – More room for more options...
Precision Blocking
Intuitive touch-screen interface
Pre-set wax thicknesses
Because alignments are a must!
Automated Tool Calibration

It’s as easy as

X

Y

Z
Automated Tool Calibration

X: Sphericity (Lateral)
Alignment of tool radius center to spindle centerline
Automated Tool Calibration

X: Sphericity (Lateral)

OLD METHOD
Automated Tool Calibration

X: Sphericity (Lateral)

NEW METHOD: Automatic Sphericity Calibration
The lathed rings are measured by the high precision probe. Accuracy is better than one micron.
Automated Tool Calibration

Y: *(technically, Z)* Y-offset Calibration
distance from tip of cutting tool to probe, a.k.a. “lvdt”
Automated Tool Calibration

Tool Height

OLD METHOD
- scribe a line
- evaluate under microscope, guesstimate how much to adjust
- repeat... repeat... repeat...
Automated Tool Calibration

Tool Height - AUTOMATIC method
Height calibration features are lathed, not scribed.
Automated Tool Calibration

Height Measurement Gauge (HMG) + software facilitates setting the tool height precisely to spindle center with one tenth of a micron (0.0001mm) resolution.
Automated Tool Calibration

X: Cut Cylinder

• (“cylinder” is diameter)

• perfect world: side of tool = tool center + radius

OLD METHOD
cut a cylinder (diameter) and measure
Automated Tool Calibration

X: Cut Cylinder

NEW METHOD
probe is used to automatically measure the diameter
AXIS LOCATION SYSTEM

old method: vision sensor
AXIS LOCATION SYSTEM

new method: XLS
AXIS LOCATION SYSTEM

new method: XLS

- mounted along X axis
- detects and resolves for run-out during sensing operation
- precision micro-sensor
You inspire us to bring you something new. So we welcome you to come and see us.

BOOTH #15

Thank You To All Our Loyal & Future Customers

From all of the team at DAC.