



Lathing & Milling

## MLCe

### Introducing the MLCe

The MLCe, with its lower machine height, touch-screen interface and accessibility, ensures compliance with the ergonomic requirements of the user and offers a good overview and easy access to all tools. The touch-screen technology enables the operator to work in an intuitive and efficient way. Superior lens surface quality, precision and productivity are the much valued and given features

of all types of DAC lathes.

Precision air bearing spindles and slides are the main pre-requisites for achieving superior surface quality for contact lenses and intra-ocular lenses.

The DAC compact tool holders and the latest in DAC software for managing multiple tool functions provide the best opportunity to make the most of the large tool plate on the ALMe, in order to produce highly individual intra-ocular lens designs.

### Benefits

- Where Premium lenses are required or space is limited
- Complex lens types can be made in a single machine set-up without the need for specialized part registration.
- Additional options can be added for diagnostic marking or product ID.
- Capacity increase easily achieved by adding tray-fed autoloader option.
- All air-bearing axes for superior surface finish quality
- Haptic Air-bearing milling spindle with chiller provides improved accuracy and repeatability
- IOL software includes traditional designs, additional software modules allow for customized designs



The various options let you redefine your processes: Whether you require high volume output or polish free capable surfaces at reduced speeds and feeds, the MLCe offers these possibilities.

The well known MLC with its higher granite is still available for those who want to have a matching look with their already existing machines in the lab.

## Options

- FT-3 Edge Fast Tool
- Oscillating Tool Technology (OTT)
- Axis Location System (XLS)
- Reference Mark Locator (RML)
- Height Measurement Gauge (HMG)
- Laser Engraving
- Multi-Tool Management
- Misting System
- Automation

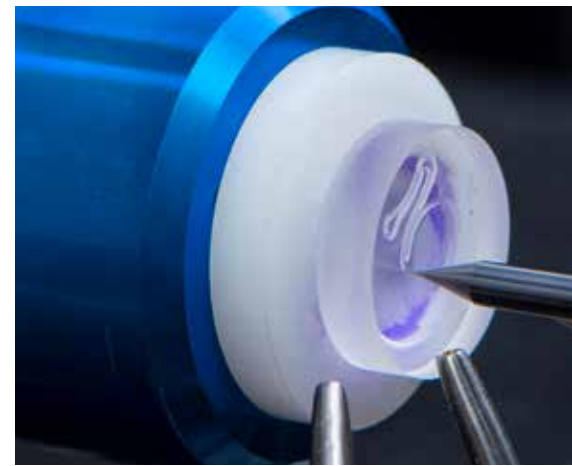


## On-Lathe Milling



The MLCe allows for on lathe haptic milling. This method reduces the registration errors associated with moving parts from one machine to another. Lathing and milling are performed in-situ. This is especially important when making toric lenses for example.

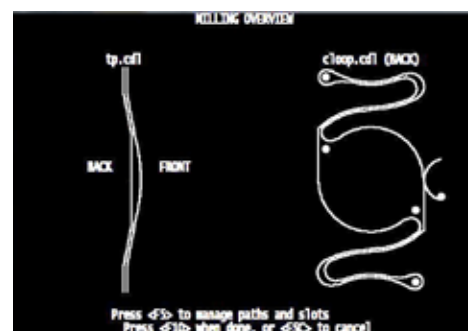
Whether the process involves using pre-blocked, semi-finished parts or wax blocked blanks the MLCe can be used as the primary optic and haptic generator.



## IOL PM Suite

Unique to DAC and written by our own software architects, the IOL Program Module (PM) Suite enables the user to program both optic and haptic parameters. Most haptic designs can be generated, whether the traditional C-loop or more advanced Quad-haptic designs. The Toric function controls the design and orientation of the toric zone within the lens. Refractive, multifocal and combined designs are available as standard.

Other design capabilities are feasible, including but not limited to: A-toric (A-Conic), Diffractive multifocal and LRTS file support.



From lens design to manufacture, the DAC IOL PM Suite automatically calculates all desired toolpaths and incorporates blending capability in a single step, further simplifying lens production

| Technical Data                 |  |  |
|--------------------------------|--|--|
| Slides                         | Air bearing slides. DC linear servo motor driven. Linear encoder feedback.   |  |
| <b>Axis</b>                    | <b>X</b>   | <b>Y</b>   |
| Travel                         | 305 mm (12 in)   | 203 mm (8 in)  |
| Feedback Resolution            | 2.021 nm   | 2.021 nm   |
| Maximum Traverse rates         | 0.3 m/s (1 ft/s)   | 0.3 m/s (1 ft/s)   |
| <b>Spindles</b>                | <b>Workholding Spindle (C Axis)</b>  | <b>Mill Spindle</b>  |
|                                | Precision air-bearing spindle  | Air-bearing AC induction motor spindle, with recirculating chiller for operational stability |
| Speed Range                    | 0-10 000 RPM   | 15 000 -130 000 RPM (software limited)   |
| Feedback Resolution of Spindle | 9.194 arcsec   | -  |
| Ramp up (to maximum speed)     | ≤ 2.2 s  | ≤ 8.5 s  |
| Workholding collets            | Standard collet supplied with lathe: 12.7 mm x 12.7 mm (dia x depth) (0.5 in x 0.5 in) with dead length stop.<br>Specials supplied upon request      | Choice of 3.175 mm (0.125 in) or 3mm (0.118 in) (diameter)                                   |
| Vibration control              | Passive pneumatic vibration isolation system:<br>Inflated: Isolates frequencies above 7 Hz<br>(Deflated: Naturally isolates frequencies above 14 Hz) |  |

| Installation Requirements |   |                                      |
|---------------------------|---|--------------------------------------|
| Electrical Power          | 208 - 240 VAC, single phase, 50/60 Hz, 15 A   |                                      |
| Compressed Air            | 200 l/min@7 bar (7 SCFM @ 100 PSIG)<br>Recommended air quality: Class 2 per ISO 8573-1:2010 |                                      |
| Vacuum                    | User supplied, 58 mm (2.25 in ) Outer Diameter Tube, anti-static tube                       |                                      |
| Operating Temperature     | Nominal range: 20 - 23°C (68 - 74°F) maintained at +/- 1°C (+/- 2°F)                        |                                      |
| Minimum floor space       | 1350 mm x 1020 mm x 1220 mm<br>(W x D x H)  | 53 in x 40 in x 48 in<br>(W x D x H) |
| Minimum weight            | Floor 1100 kg   | 2400 lb                              |
|                           | Shipping 1300 kg  | 2800 lb                              |

### Head Office

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### DAC Sales

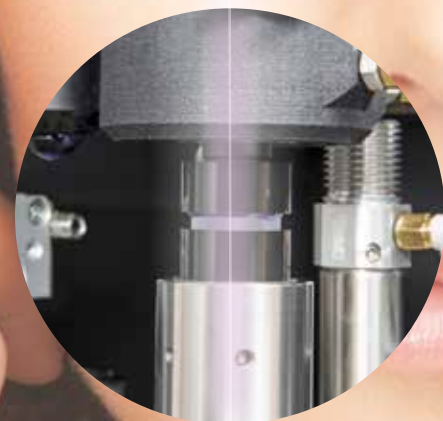
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# PRECISE VISION needs PRECISE BLOCKING

- Fast, reliable calibration
- Safe, consistent wax dosing
- Intuitive, color user interface
- Strong, stable construction



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