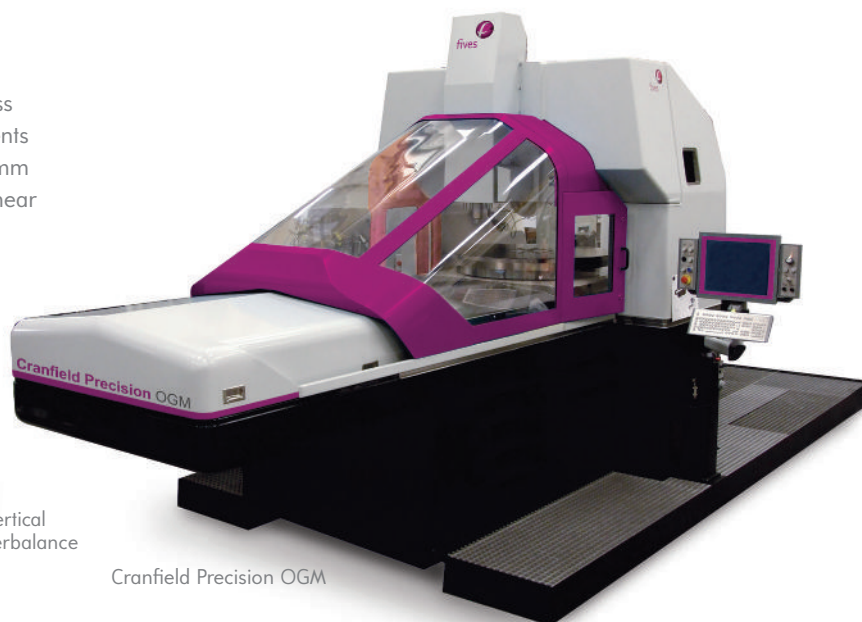


## Cranfield Precision OGM

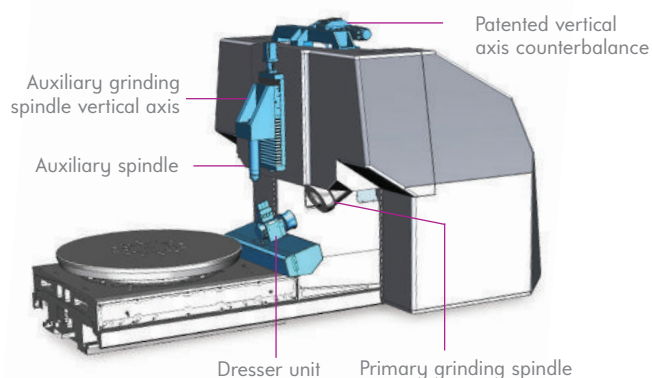
### High precision glass grinding machine

The Cranfield Precision OGM range of high precision glass grinding machines has the capacity to produce components up to Ø1600mm x 600mm, with options for up to 2000mm diameter components. It features hydrostatic bearings, linear motors, FEA optimised base and bridge assembly.

- 1µm RMS form accuracy
- 100nm linear resolution encoder system
- Optional in-situ metrology
- Auxiliary ID/OD grinding spindle



Cranfield Precision OGM



In-situ metrology of 1200 mm optic

| Model  | OGM 1200          | OGM 1600            |
|--|-------------------|---------------------|
| <b>Machining capacity</b>                      |                   |                     |
| Max. diameter                                  | 1200 mm           | 1600 mm             |
| Max. workpiece height capacity (incl. tooling) | 200 mm            | 600 mm              |
| Max. workpiece mass (including tooling)        | 1200 kg           | 1600 kg             |
| <b>Y axis (horizontal workpiece travel)</b>    |                   |                     |
| Axis stroke                                    | 1430 mm           | 2000 mm             |
| Min. command resolution                        | 0.05 µm           | 0.05 µm             |
| Max. linear motor force (continuous)           | 1640 N            | 1640 N              |
| Max. working feed rate velocity                | 3000 mm/min       | 3000 mm/min         |
| <b>Z axis (vertical grinding wheel infeed)</b> |                   |                     |
| Axis stroke                                    | 275 mm            | 455 mm              |
| Min. command resolution                        | 0.05 µm           | 0.05 µm             |
| Max. working feed rate velocity                | 3000 mm/min       | 3000 mm/min         |
| <b>C Axis (component work table)</b>           |                   |                     |
| Axis rotation (continuous)                     | +/- 360°          | +/- 360°            |
| Max. axis velocity                             | 60 rpm            | 60 rpm              |
| Encoder resolution                             | 0.0001°           | 0.0001°             |
| <b>S1 grinding spindle</b>                     |                   |                     |
| Spindle speed (standard spindle)               | 100 - 3055 rpm    | 100 - 3055 rpm      |
| Theoretical stiffness (radius and axial)       | 950 N/µm          | 950 N/µm            |
| Rated spindle power (continuous)               | 20 kW             | 20 kW               |
| <b>Dimensions</b>                              |                   |                     |
| Dimensions (W x D x H)                         | 2.18 x 6 x 3.05 m | 2.6 x 7.55 x 3.85 m |
| Mass   | 30,000 kg         | 40,000 kg           |