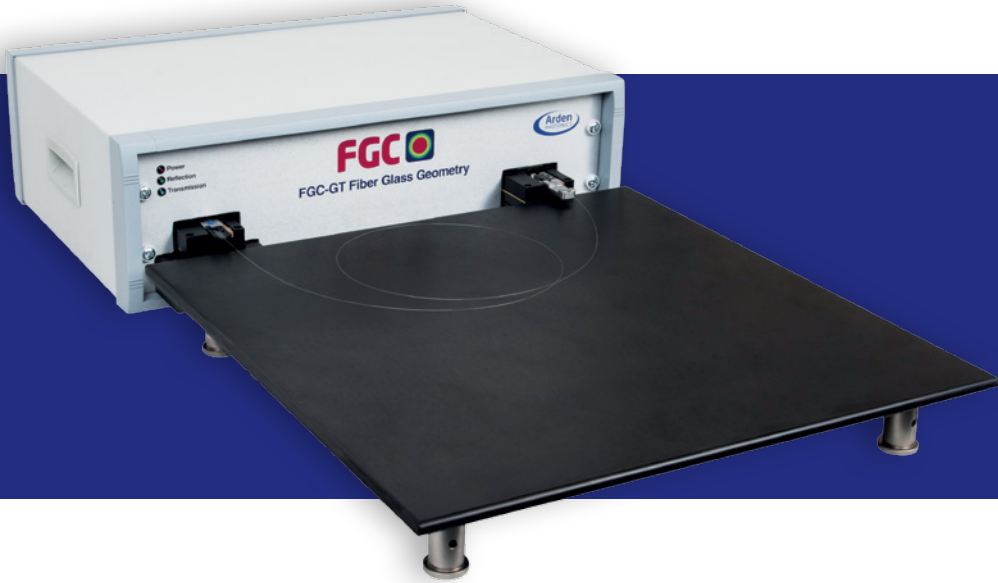




FGC-G

Fiber Glass Geometry Measurement System

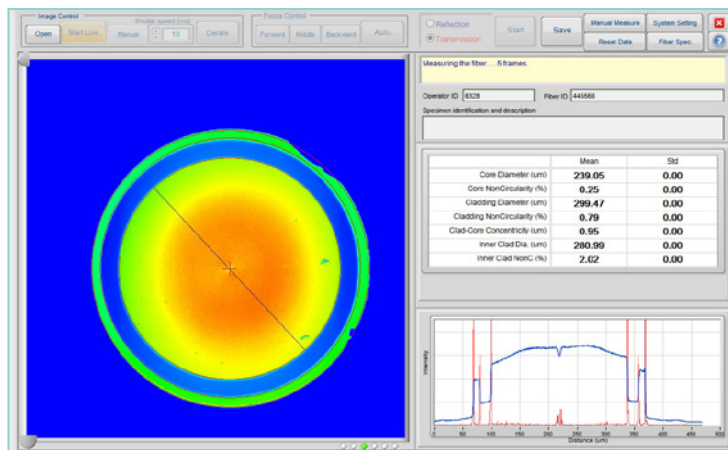


The FGC range is the complete solution for measuring the dimensions of standard and specialty fiber in both production and R&D environments. The FGC-G comes in 2 different models:

- FGC-GT – fiber glass geometry for fibers up to 400 µm diameter
- FGC-GS – fiber glass geometry for fibers up to 1000 µm diameter

Features & Benefits

- Measures the widest range of fiber sizes and types
 - single unit solution means less bench space, reduced training
- Standards compliant
 - calibrated to international standards, ensuring confidence in its accuracy
- Production ready
 - reliable, repeatable, operator-independent results in seconds



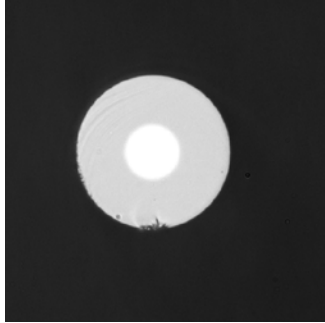
FGC-G software user interface main screen



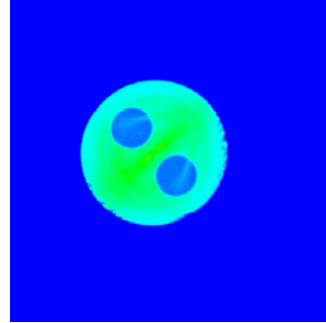
FGC-G

Fiber Glass Geometry Measurement System

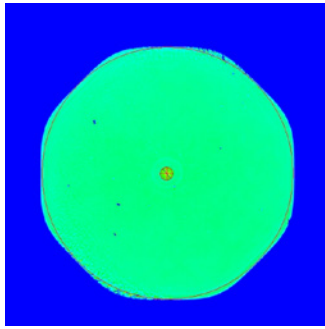
Fiber Gallery



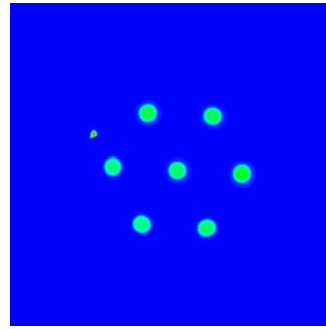
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Standard



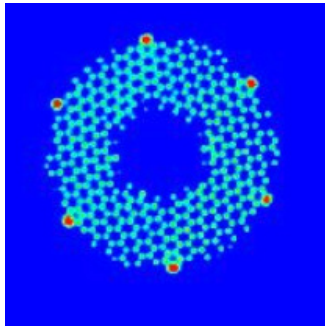
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PM



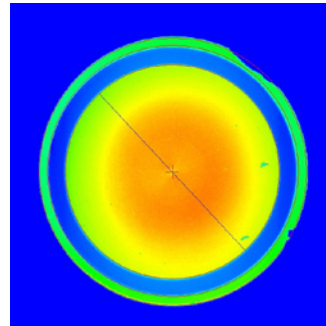
<<
Octagonal



<<
Multicore



<<
Micro-Structured



<<
Dual Clad



FGC-G

Fiber Glass Geometry Measurement System

Technical Specification

| Optical | FGC-GT* | FGC-GS** |
|-----------------------------------|-----------------------------------|-----------------------------------|
| Max Field of View | 600 μm | 1200 μm |
| Fiber Illumination – Reflection | Darkfield illumination, 850nm LED | Darkfield illumination, 850nm LED |
| Fiber Illumination – Transmission | Multiple LED array, 850nm | Multiple LED array, 850nm |

| Repeatability | Singlemode | Multimode | Multimode |
|--------------------------------|----------------------|----------------------|----------------------|
| Core Diameter | < 0.05 μm | < 0.08 μm | < 0.1 μm |
| Cladding Diameter | < 0.05 μm | < 0.05 μm | < 0.25 μm |
| Core Non-Circularity | < 1.0% | < 0.5% | < 0.05% |
| Cladding Non-Circularity | < 0.1% | < 0.1% | < 0.1% |
| Core-To-Cladding Concentricity | < 0.06 μm | < 0.05 μm | < 0.15 μm |

| Measurement Capability | | |
|------------------------|--|--|
| Measurement Time | < 10 seconds (excluding fiber prep) | < 10 seconds (excluding fiber prep) |
| Fiber Diameter | up to 400 μm | up to 1000 μm |
| Special Fibers | Dual clad, Octagonal, PM, Multicore, PCF, etc. | Dual clad, Octagonal, PM, Multicore, PCF, etc. |

| Physical | | |
|-----------------------|---|----------------------------------|
| Weight | 11kg (with carry case 33kg) | 11kg (with carry case 33kg) |
| Size | 0.5 x 0.5 x 0.2 | 0.5 x 0.5 x 0.2 |
| Operating Temp | 0 – 50° C | 0 – 50° C |
| Humidity | 5%-95%, relative, non-condensing | 5%-95%, relative, non-condensing |
| Computer Requirements | All FGC systems are supplied with a desktop computer running up-to-date Windows operating system. | |
| Data Interface | 2 X USB 3.0 (USB B to USB A: 2m cable supplied) | |

* Repeatability is measured on the FGC-GT using a single 125 μm fiber without removing it from the unit, the repeatability specifications are only applicable to OM1, OM2 and singlemode fibers.

** Repeatability is measured on the FGC-GS using a single 540/600 μm fiber without removing it from the unit.



FGC-G

Fiber Glass Geometry Measurement System

Ordering Information

| Part number | Description |
|-------------|---|
| FGC-GT | Fiber Glass Geometry System for measurement of optical fibers with diameters up to 400 μm . Including optical unit, fiber handling bench, cables, software package; desktop computer; pair of Arden holders suitable for 250 μm diameter coated fiber. |
| FGC-GS | Fiber Glass Geometry System for measurement of optical fibers with diameters up to 1000 μm . Including optical unit, fiber handling bench, cables, software package; desktop computer; pair of Arden holders suitable for 400 μm diameter coated fiber. |
| FG-H-250 | Pair of Arden FGC fiber holders with 250 μm V-groove, suitable for 250 μm diameter coated fiber |
| FG-H-400 | Pair of Arden FGC fiber holders with 400 μm V-groove, suitable for 400 μm diameter coated fiber |
| FG-H-600 | Pair of Arden FGC fiber holders with 600 μm V-groove, suitable for 600 μm diameter coated fiber |
| FG-H-800 | Pair of Arden FGC fiber holders with 800 μm V-groove, suitable for 800 μm diameter coated fiber |
| FG-H-1000 | Pair of Arden FGC fiber holders with 1000 μm V-groove, suitable for 1000 μm diameter coated fiber |
| FG-H-CUST | Pair of Arden FGC fiber holders with customer defined V-groove diameter |
| FGC-GUEW3 | FGC-Glass geometry system, extended warranty covering parts and labour for 3 years from purchase, return to base. Cover excludes camera. |
| FGC-GUEW5 | FGC-Glass geometry system, extended warranty covering parts and labour for 5 years from purchase, return to base. Cover excludes camera. |
| FGC-PMI | PM illuminator designed for use with the FGC |

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