

The VFI is an interferometric inspection system specifically designed for checking the surface quality and flatness of your cleaved or polished fibers. Users can view their fibers in a range of different views, both in 2D and 3D, allowing the users to get a full understanding of their cleaving or polishing process.

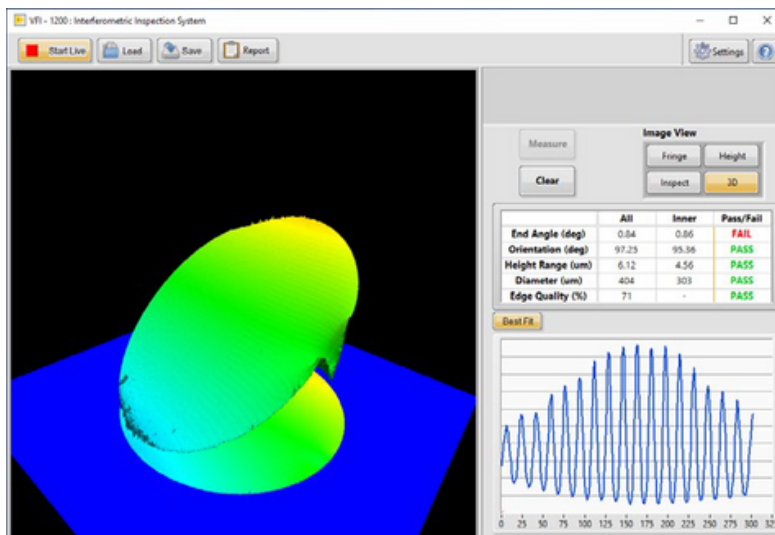
The VFI interferometer measure most standard and specialty fibers including PM fiber and hollow core fiber. It has proven itself in Research, Production and QA over and over and the feedback we get from users indicates that they value these features:

Features & Benefits

- 3 different Fields of View
- Flat and angled cleaves
- Inspect and fringe mode
- Automated or manual end angle measurement
- 2D or 3D measurement mode
- 3D end face height map
- 2D measurement - real time; 3D measurement in under 7 seconds
- Height data can be saved as a csv file
- Data output as Excel or HTML reports

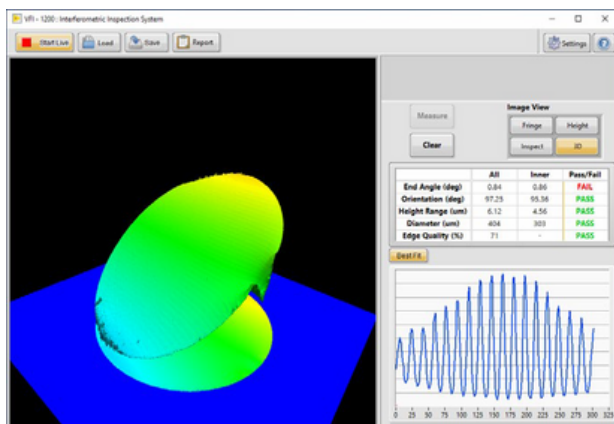
Applications

- Precision cleaver manufacture
- Cleaver maintenance
- Laser manufacture
- Medical device manufacture
- Fiber R&D
- Specialty fiber manufacture
- Development and testing of angled cleavers
- Device pig-tailing
- LDF cleaver manufacture/maintenance
- Fiber end cap manufacture
- Multifiber bundle manufacture

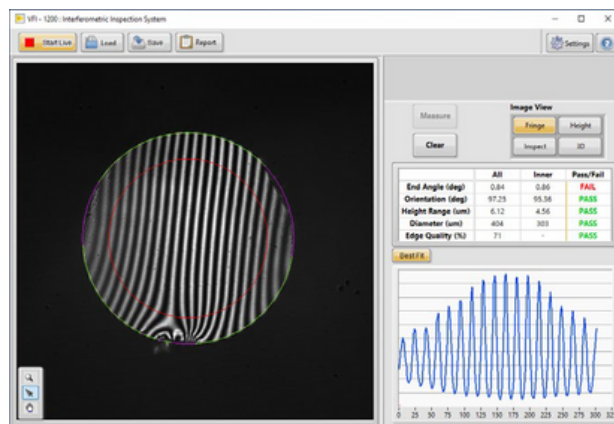


VFI software user interface main screen

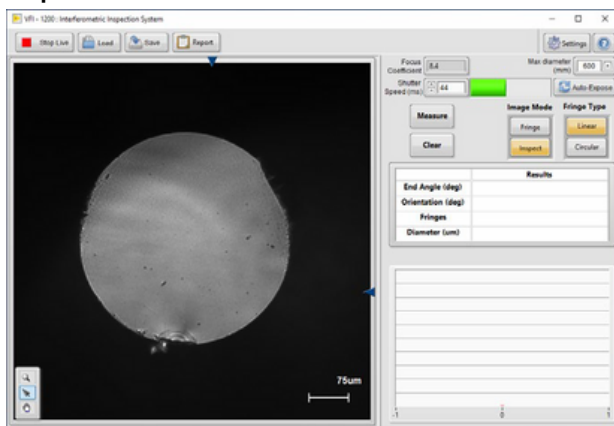
3D Map



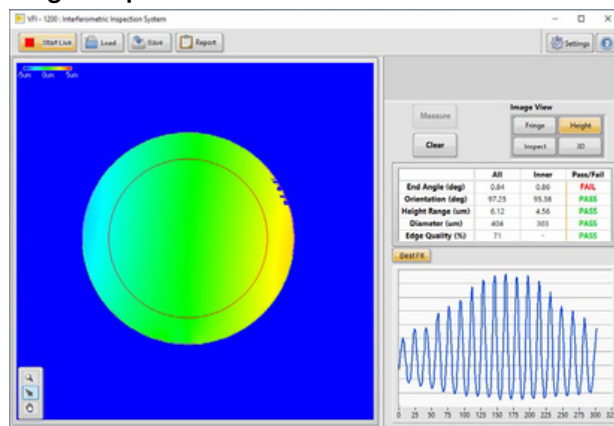
Fringe View



Inspect View

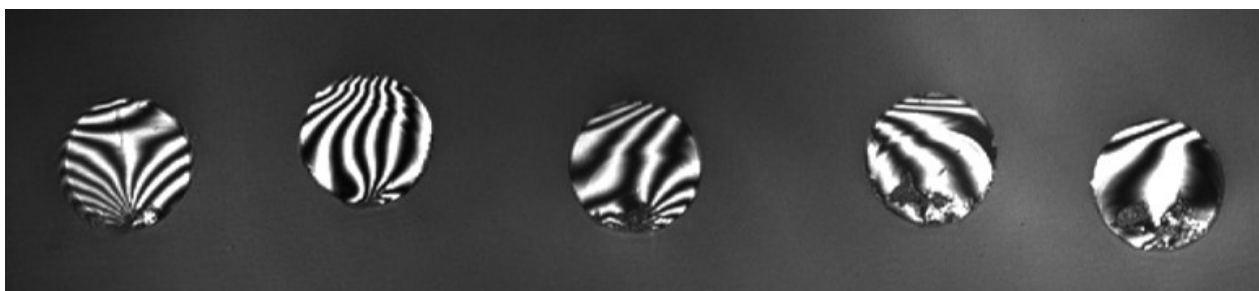


Height Map



Ribbon Fiber

The VFI can also be factory-fitted with an optional "ribbon stage". The ribbon stage is a laterally adjustable stage designed for the quick and efficient imaging of ribbon fibers.



**VFI**

Interferometric Inspection System

Technical Specifications

Optical	VFI-200	VFI-1200	VFI-2000
Field of View	200 μm maximum with x1.5, x2, x3 and x6 digital zoom	1,200 μm maximum with x1.5, x2, x3 and x6 digital zoom	2,000 μm maximum with x1.5, x2, x3 and x6 digital zoom
Image sensor	1/1.8 inch CMOS array, 12-bit, 6.4 MP		
Camera sensor size	3,088 x 2,076 px, 2.4 μm square pixels		
LED wavelength	525 nm		

Measurement Capabilities	VFI-200	VFI-1200	VFI-2000
Maximum measurable cleave angle (without using angled fiber holder) *	2D mode: 10° 3D mode: 9°	2D mode: 10° 3D mode: 8°	2D mode: 8° 3D mode: 6°
Measurement time	2D mode: real-time 3D mode: < 7 s		
Image Quality	Fully resolves USAF Target to Level 7 minimum		
Height Resolution	0.01 μm		

Measurement Capabilities	VFI-200	VFI-1200	VFI-2000
Dimensions	240(W) x 240(D) x 90(H) mm		
Weight	3 kg		
Connection to computer	USB 3.0 (USB Type B to USB A); 1 m cable supplied		
Power supply	Via USB		
Operating systems support	Windows 10/11 64 bit		
Computer requirements	4 GB RAM; USB 3.0 port; 64 bit		
Operating temperature	10 - 30°C		

* Maximum angle is stated for a fiber with 125 μm cladding diameter. Larger cleave angle can be measured using an angled fiber holder.

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Interferometric Inspection System

Ordering Information

Part number	Description
VFI-200	Interferometric inspection system for fibers with diameters from 80µm to 200 µm. Includes VFI-200 optical unit; fiber holder for 125 µm fibers either classic VF-H0-125 or dual VF-H0-125-D (requires VF-AP-3 or VF-AP-12.5); PC software; USB cable; carry case VF-CC-01. Computer not included.
VFI-1200	Interferometric inspection system for fibers with diameters from 80 to 1200 µm. Includes VFI-1200 optical unit; fiber holder for 400 µm fibers -either classic VF-H0-400 or dual VF-H0-400-D (requires VF-AP-3 or VF-AP-12.5), please specify version at time of order; fiber samples VFI-FTK400; PC software; USB cable; carry case VF-CC-01. Computer not included.
VFI-1200-RS	Interferometric inspection system for fibers with diameters from 80 to 1200 µm. Fitted with lateral stage for analysis of ribbons (2D only). Includes VFI-1200 optical unit; lateral adjustment stage; fiber holder for 400 µm fibers -either classic VF-H0-400 or dual VF-H0-400-D (requires VF-AP-3 or VF-AP-12.5), please specify version at time of order; fiber samples VFI-FTK400; PC software; USB cable; carry case VF-CC-01. Computer not included.
VFI-2000	Interferometric inspection system for fibers with diameters from 400 to 2000 µm. Includes VFI-2000 optical unit; fiber holder for 400 µm fibers -either classic VF-H0-400 or dual VF-H0-400-D (requires VF-AP-3 or VF-AP-12.5), please specify version at time of order; fiber samples VFI-FTK400; PC software; USB cable; carry case VF-CC-01. Computer not included.
VFI-2000-RS	Interferometric inspection system for fibers with diameters from 400 to 2000 µm. Fitted with lateral stage for analysis of ribbons (2D only). Includes VFI-2000 optical unit; lateral adjustment stage; fiber holder for 400 µm fibers -either classic VF-H0-400 or dual VF-H0-400-D (requires VF-AP-3 or VF-AP-12.5), please specify version at time of order; fiber samples VFI-FTK400; PC software; USB cable; carry case VF-CC-01. Computer not included.

Fiber Holders	Description
VF-H0-xxx	Arden fiber holder for xxx µm fiber, perpendicular cleave
VF-H0-xxx-D	Dual-style Arden VFI fiber holder for xxx µm fiber, perpendicular cleave (requires adapter plate)
VF-H8-xxx	Arden fiber holder for xxx µm fiber, 8 degree cleave
VF-Annulus	9-sided annulus used with fiber holder in order to present the fiber to the VFI at a range of integer angles (from 4 to 12 degrees)

Standard holder sizes include 125 µm , 200 µm , 250 µm , 400 µm , 800 µm and 1000 µm.
Custom diameters available with extra charge.

VF-F125	VFI holder for connector with 1.25 mm ferrule
VF-F250	VFI holder for connector with 2.50 mm ferrule
VF-F16	VFI holder for connector with # 16 style ferrule
VF-F320	VFI holder for connector with 3.2 mm ferrule (SMA)

Adapters	Description
VF-AP-3	Adapter plate for use with dual-style Arden holders and Fujikura holders. For use with fiber protrusion of 3mm from end of holder
VF-AP-12.5	Adapter plate for use with dual-style Arden holders and Fujikura holders. For use with fiber protrusion of 12.5mm from end of holder for direct use with FGC system or Fujikura cleavers and splicers (not suitable for fibers under 200µm in diameter)
VF-AP-C	Front-clamped adapter plate for use with dual-style Arden holders and Fujikura holders. For use with fiber protrusion of 12.5mm from end of holder for direct use with FGC system or Fujikura cleavers and splicers. Designed for use with 125µm fiber only.



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Other options	Description
VFI-CC-01	Rigid carrying case for VFI
VFI-UEW2	VFI extended warranty covering parts and labour for 2 years from purchase, return to base. Cover excludes camera.
VFI-UEW3	VFI extended warranty covering parts and labour for 3 years from purchase, return to base. Cover excludes camera.
VFI-UEW4	VFI extended warranty covering parts and labour for 4 years from purchase, return to base. Cover excludes camera.
VFI-UEW5	VFI extended warranty covering parts and labour for 5 years from purchase, return to base. Cover excludes camera.
VFI-FTK400	VFI fiber samples, 400 µm diameter, for checking VFI-1200 alignment and calibration

For North American sales enquiries, call +1 727 504 8748 or email us on sales@ardenphotonics.com

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