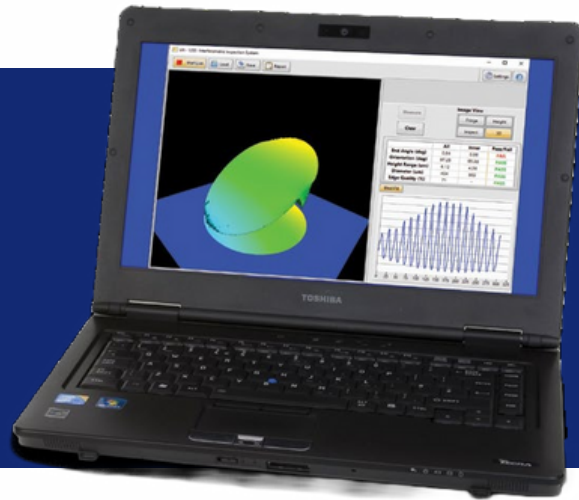




VFI

Interferometric Inspection System



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.

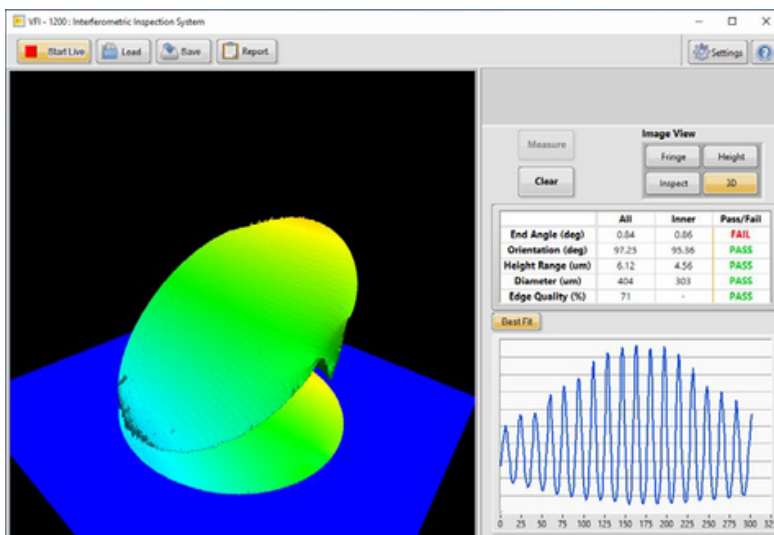
The VFI interferometer has proven itself in Research, Production and QA over and over and the feedback we get from users indicates that they value these features:

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

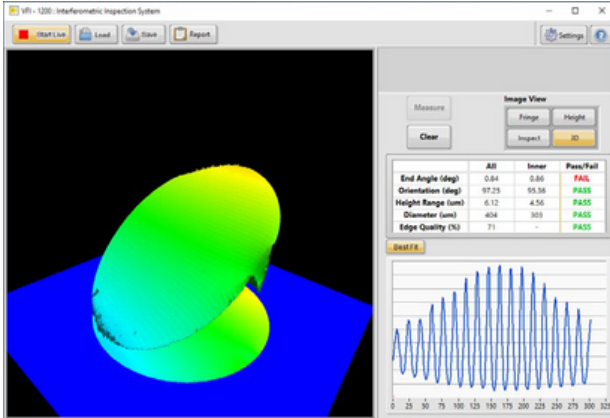
Applications

- 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

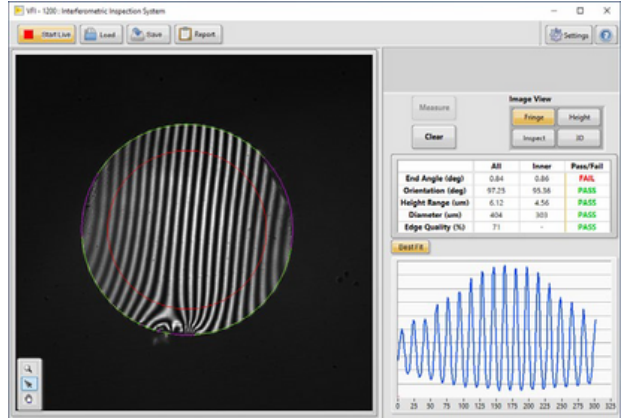


VFI software user interface main screen

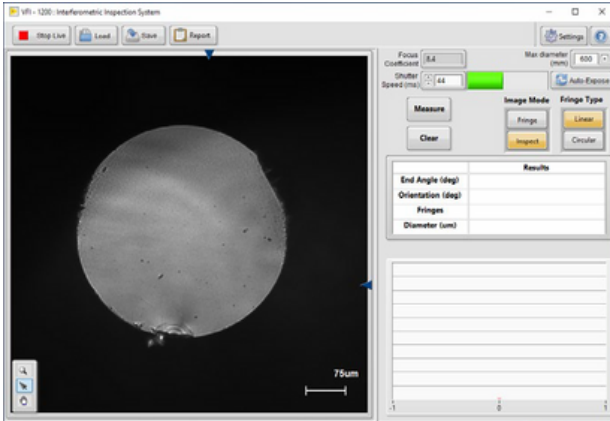
3D Map



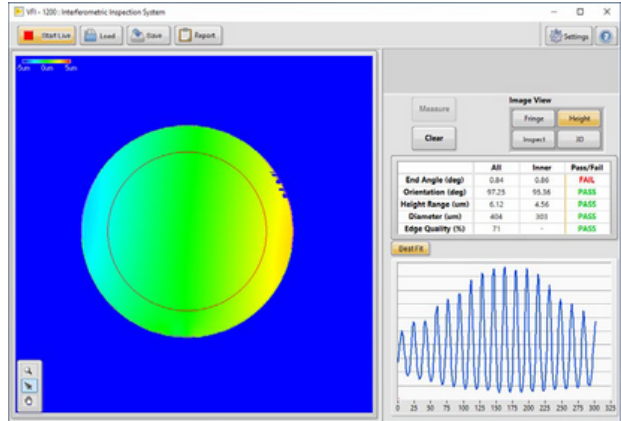
Fringe View



Inspect View

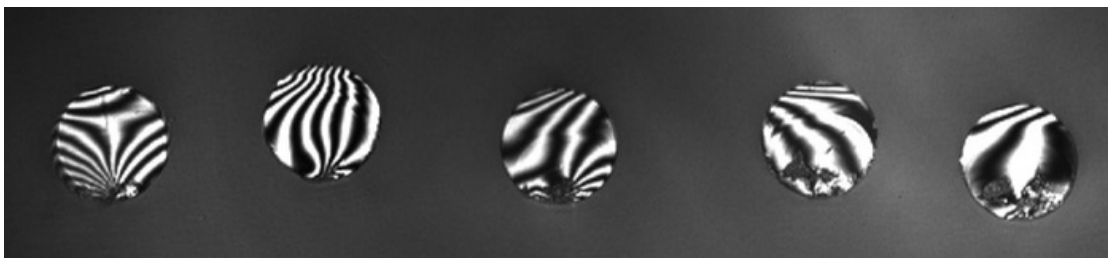


Height Map



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 7/8/10 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.



VFI

Interferometric Inspection System

Ordering Information

Part number	Description
VFI-200	Interferometric inspection system for fibers with diameters of 125 µm. Includes VFI-200 optical unit; VF-H0 fiber holder for 125 µm fibers; PC software; USB cable; power supply. Computer not included.
VFI-1200	Interferometric inspection system for fibers with diameters from 125 to 1200 µm. Includes VFI-1200 optical unit; VF-H0/0400 fiber holder for 400 µm fibers; VFI-FTK400 fiber samples; PC software; USB cable; power supply. Computer not included.
VFI-2000	Interferometric inspection system for fibers with diameters from 400 to 2000 µm. Includes VFI-2000 optical unit; VF-H0/0400 fiber holder for 400 µm fibers; VFI-FTK400 fiber samples; PC software; USB cable; power supply. Computer not included.

Holders	Description
VFI-H0	Arden VFI fiber holder for 125 µm fiber, perpendicular cleave
VFI-H0-200	Arden VFI fiber holder for 200 µm fiber, perpendicular cleave
VFI-H0-400	Arden VFI fiber holder for 400 µm fiber, perpendicular cleave
VFI-H0-600	Arden VFI fiber holder for 600 µm fiber, perpendicular cleave
VFI-H0-800	Arden VFI fiber holder for 800 µm fiber, perpendicular cleave
VFI-H0-1000	Arden VFI fiber holder for 1,000 µm fiber, perpendicular cleave
VFI-H0-1250	Arden VFI fiber holder for 1,250 µm fiber, perpendicular cleave
VFI-H0-1500	Arden VFI fiber holder for 1,500 µm fiber, perpendicular cleave
VFI-H0-2000	Arden VFI fiber holder for 2,000 µm fiber, perpendicular cleave
VFI-H0-1250F	Arden VFI fiber holder for 1.25 mm ferrules
VFI-H0-2500F	Arden VFI fiber holder for 2.5 mm ferrules
VFI-H0-3200F	Arden VFI fiber holder for 3.2 mm ferrules
VFI-H-Angle	VFI angle inducing anulus for measuring cleave angles from 4° - 12°

Adapters	Description
VF-MPS	VFI mounting plate for standard Arden Photonics VFI holders
VF-MPF	VFI mounting plate for 125 µm Fujikura style fiber holders (also works with FGC holders)
VF-MPFL	VFI mounting plate for 200 µm+ Fujikura style fiber holders (also works with FGC holders)

Other options	Description
VF-CC-01	Rigid carrying case for VFI-200, VFI-1200 or VFI-2000
VFI-UEW3	VFI extended warranty covering parts and labour for 3 years from purchase, return to base. Cover excludes camera.
VFI-FTK400	VFI fiber samples, 400 µm diameter, for checking VFI-1200 alignment and calibration.

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Issued 1 March 2023

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