

ALLIED

HIGH TECH PRODUCTS, INC

THE OPTIPREP™ SYSTEM

The OptiPrep™ System is designed for production polishing of a wide variety of optical components, including:

- ❖ Ferrules: Ceramic, glass, stainless, plastic
- ❖ Connectors: MT/MT-RJ, ST, SC/FC (APC)
- ❖ Waveguides
- ❖ Silicon V-groove (fiber arrays)
- ❖ Optical Chips
- ❖ Capillary/Glass Lenses
- ❖ Fiber Bundles
- ❖ Ribbon Fiber
- ❖ Bare Fiber

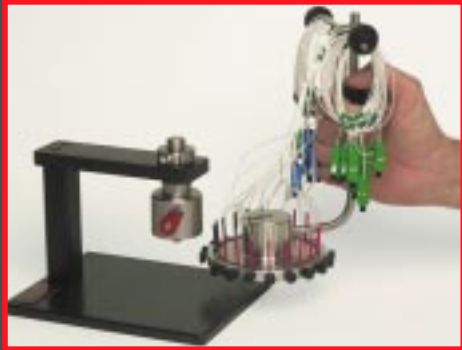


Features Include:

- ❖ Micrometer controlled positioning of the fixture in 1-micron increments ensures components are polished to exact, repeatable lengths
- ❖ Precision spindle indexes vertically without angular variance, maintaining component orientation to the plane of polish
- ❖ Fixture oscillation and rotation provide variable directional polishing, exceeding figure-8 requirements
- ❖ Adjustable load
- ❖ Cam-locking system allows quick, easy fixture attachment and removal during the polishing procedure
- ❖ Bi-directional platen rotation with variable speed control from 5 to 350 RPM
- ❖ Digital Timer allows unattended, programmed operation
- ❖ Water flow may be used during polishing to flush debris, extend abrasive life and improve surface finish/yield

TURN-KEY SOLUTION!

Allied offers a variety of standard fixtures as well as in-house capabilities for fixture design and manufacturing, and the development of polishing procedures in our applications laboratory



An integrated handle offers quick and easy transfer and provides support for pigtails, eliminating tangling



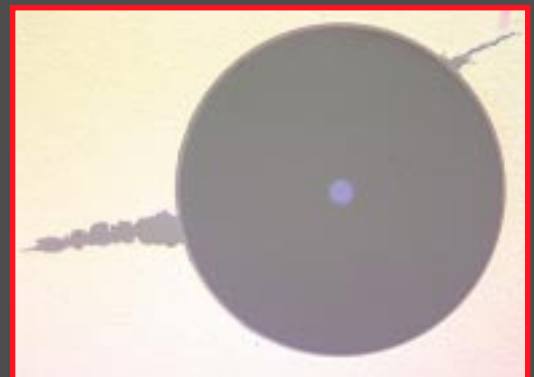
The loading/unloading station secures the fixture via cam-lock, allowing easy operator access and stability



Ferrules may be inspected without removing them from the fixture (shown on Zeiss AxioVert 100 available from Allied)



Ceramic Ferrule, APC/Flat



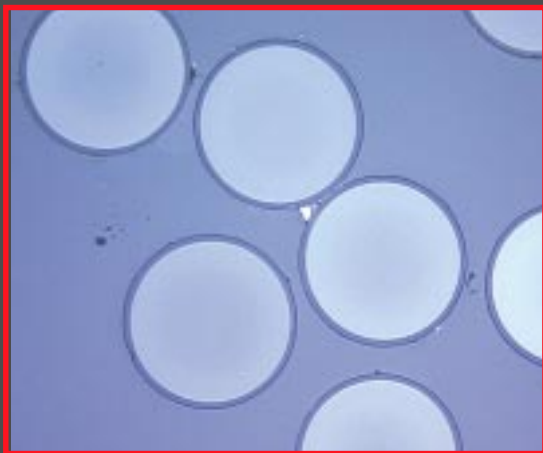
Defective Ceramic Ferrule, APC/Flat



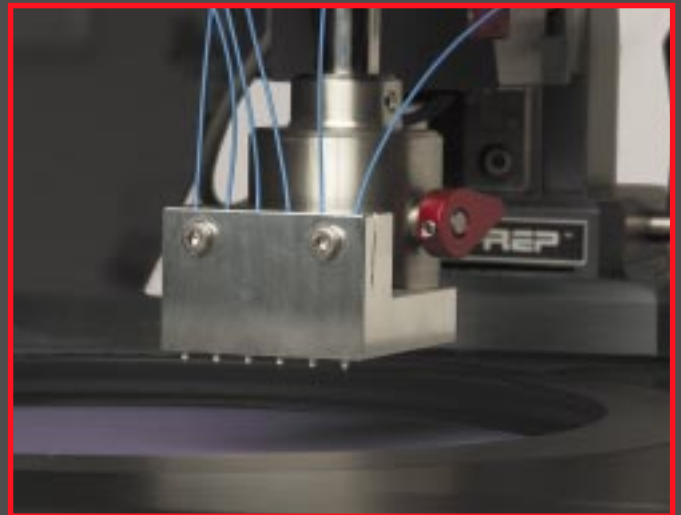
V-Groove/Fiber Array



Capillary/Glass Lens Fixture and Final Polish



Fiber Bundle Polishing



Bare Fiber Fixture, 8°



4-Position Connector Fixture

Loading Stand with
Optical Chip Fixture



Ferrule measurement
system verifies
compliance to length
specifications



ALLIED Offers a Full Range of Polishing Supplies for Fiber Optic & Optical Component Applications



Allied's Suspensions and Slurries are specially formulated to ensure a precise, clean finish for all fiber optic polishing applications



Bonded Diamond Discs



Diamond Lapping Film Sheets



Diamond Lapping Film Discs

All Abrasive Films are Available in a Wide Variety of Disc and Sheet Sizes

MICRON	DIAMOND LAPPING FILM	A/O LAPPING FILM	SiC LAPPING FILM	CHROMIUM OXIDE LAPPING FILM	CERIUM OXIDE LAPPING FILM	SiO ₂ POLISHING FILM	METAL BONDED DIAMOND DISCS
30	X	X	X				X
20	X	X					
15	X		X				X
12		X					
9	X	X	X				
6	X						X
5		X	X				
3	X	X	X				
2		X					
1.5	X						
1	X	X	X				
0.5	X		X	X	X		
0.3		X					
0.1	X						
0.05		X					
0.02						X	