

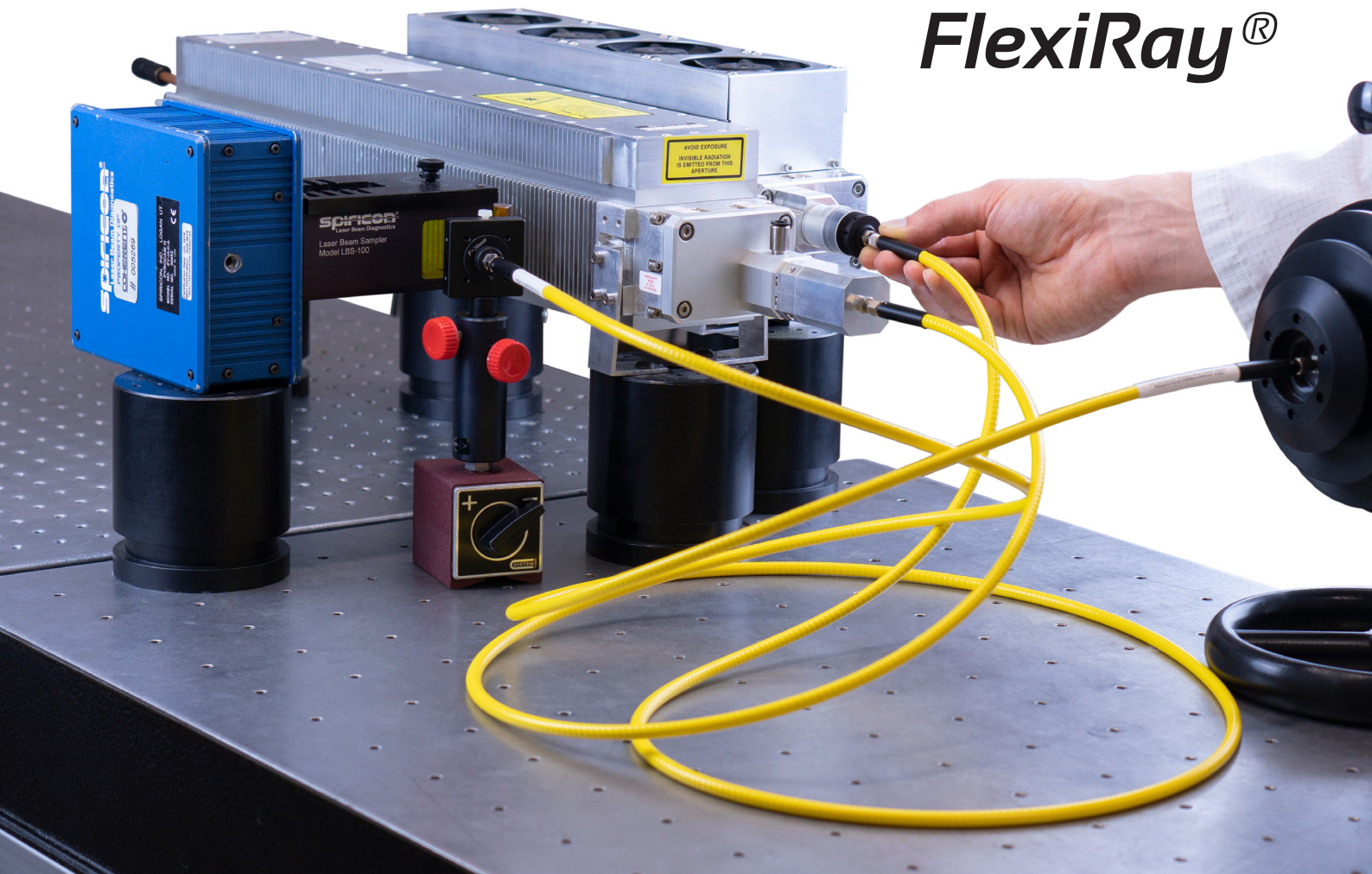


art photonics
broad spectra fiber solutions

PIR-Fiber Cables for CO- & CO₂-Lasers

- The most flexible cables for CO- & CO₂-laser power delivery
- Stable transmission under small bending radius
- SMART-technology to suppress Fresnel reflection losses

FlexiRay[®]

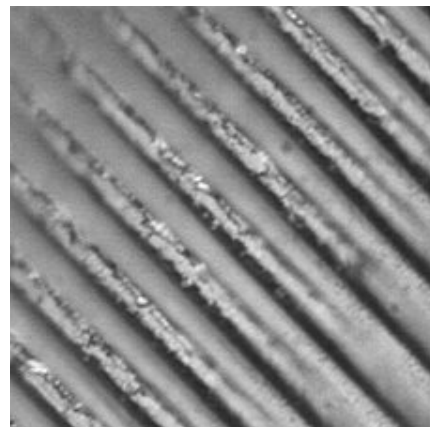
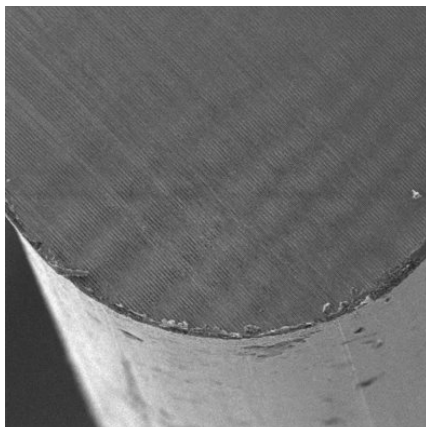
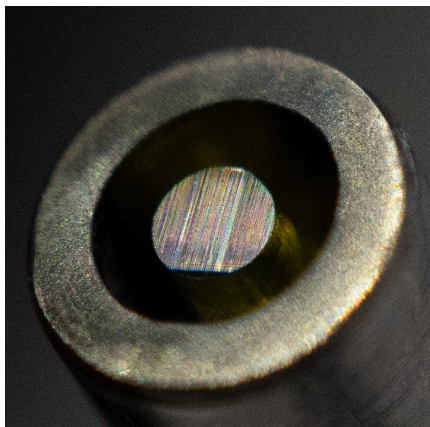


FlexiRay[®] product line from art photonics includes unique High Power PIR-Fiber Cables for flexible delivery of CO- & CO₂-laser radiation. Compared to hollow waveguides PIR-fibers provide stable power transmittance under small bending radius. Special SMART treatment of PIR-fiber ends suppresses Fresnel reflection losses to enhance power transmission.

Applications:

- ✓ Industrial
- ✓ Medical
- ✓ Scientific

SMART - Special Micro Anti-Reflection Treatment



CO₂ Laser Power Delivery Set (1.5m length) Specification

Standard fibers	PIR 400	PIR 630	PIR 900
Core diameter, μm	400	630	900
Cladding diameter, μm	500	700	1000
Total transmission at 10.6 μm	>75 %		
Output beam divergence	20° (full angle)		
Max. transmitted power (CW)	20W	30W	40W
Min. Bending Radius (multiple)	50 mm	70 mm	100 mm

Flexible Delivery Set for CO-laser or CO₂-laser includes:

Adjustable focusing coupler with AR-coated lens and cooling gas inlet – to be fixed on laser head with SMA-connector – for detachable SMA-connectorized PIR-fiber cable

Adjustable Focusing Coupler for PIR-fiber cable can be adapted to custom laser head

