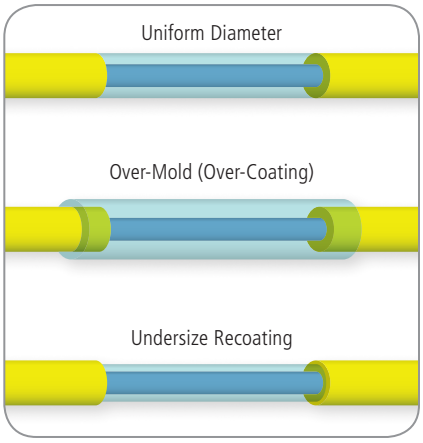
ReCoater 2 XL™ with optional Mandrels attached

Features

- Extended length recoating up to more than 100 mm
- Easy mold exchange and replacement
- Handles most fiber dimensions, with custom molds available
- Uniform diameter, overcoating and undersize recoating capability
- Short curing times
- High and low-index recoating
- Linear or mandrel strength testing



ReCoater 2 XL™

The extended length ReCoater 2 XL is used to restore the protective coating on acrylate-coated optical fibers in high strength applications. Designed to process long sections of stripped fiber, it accepts silicone molds of up to 110 mm length.

Molds are available in different sizes to cover a range of fiber coating diameters and can easily be exchanged with no realignment required. With standard molds the recoated part of the fiber is round with a cross section that perfectly and uniformly matches that of the original coating, but molds can also be selected for both overcoating and undersize recoating of optical fibers. These features as well as the ability to recoat very long stripped fiber sections makes the ReCoater 2 XL ideal for research and development operations and small scale production where the fiber type and length need to be changed frequently.

Injection of the recoating compound is performed manually. While this does require a manual user operation, it also ensures flexibility because the user can immediately switch from one type of recoating compound to another (e.g. from a high-index recoating material to a low-index material) without any need to flush out a recoater reservoir and injection pumping system.

This, in addition to the rapidly exchangeable mold sizes and shapes (for uniform diameter and undersize recoating as well as overcoating), ensures the flexibility and adaptability of the extended length ReCoater 2 XL.

Short curing times are achieved through an efficient UV LED array, arranged along the length of the mold. Curing times depend on the fiber and fiber coating diameter as well as the properties of the customer-selected recoating resin, but are typically as short as 3 seconds which allows for very fast recoating operations. The highly efficient light source also makes it possible to cure low-index recoating compounds used in fiber laser manufacturing.

Strength tests can be carried out with linear clamps or mandrels (optional). Linear proof tests can be performed up to 22 N, with programmable levels of force, pulling rates and hold time at maximum force. With the mandrels, tensile tests can be performed with forces up to 100 N. Linear clamps are carefully designed so that the primary coating is not damaged.

The ReCoater 2 XL comes in an ergonomic, bench-top design for comfortable operation. The main operator interface is an easy-to-navigate and user-friendly GUI on the touch screen control panel. System software supports storable and user-defined programs for easy process change. Remote monitoring and supervision can be carried out through an Ethernet interface.

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ReCoater 2 XL™

Specifications

PARAMETER	VALUE
Curing time	Programmable, 3 seconds typical
Light source	UV LED
Wavelength	380-385 nm
Mold material	Silicone
Mold mounting	Exchangeable
Mold length	34 mm, 55 mm and 110 mm
Recoating diameter (µm)	165, 250, 300, 400, 550 & 900 µm
Linear proof test	Programmable, 0-22 N
Rotary tensile test (optional item)	Programmable, 0-100 N
Resolution	0.01 N
Hold time	Programmable
Pulling speed	Programmable
Pulling rate	0.5-20 N/s
Display units	lbs, kg, N, kpsi, GPa
PC connection	Ethernet and USB flash drive connection
Power supply	External 12 V DC, 60 W
Compressed air	Not needed
Dimensions	270 mm (W) x 170 mm (D) x 98 mm (H)
Weight	3.9 kg

Ordering Information

DESCRIPTION	AFL NO.
ReCoater 2 XL w/ Power Supply (incl. US, UK and EU Adapter), Fiber Tensioners, Standard, Packet of 250 µm Molds (110 mm length), Mold Guide Pins (Extended length), Manual and Tools	10100068

Accessories

DESCRIPTION	AFL NO.
Mold Options	
Mold, ReC 2-series, 165 µm, 34 mm (10 pieces)	10100036
Mold, ReC 2-series, 250 µm, 34 mm (10 pieces)	10100037
Mold, ReC 2-series, 300 µm, 34 mm (10 pieces)	10100038
Mold, ReC 2-series, 400 µm, 34 mm (10 pieces)	10100039
Mold, ReC 2-series, 550 µm, 34 mm (10 pieces)	10100040
Mold, Rec 2-series, 730 um, 34 mm (10 pieces)	10100078
Mold, ReC 2-series, 900 µm, 34 mm (10 pieces)	10100041
Mold, ReC 2-series, 165 µm, 55 mm (10 pieces)	10100042
Mold, ReC 2-series, 250 µm, 55 mm (10 pieces)	10100043
Mold, ReC 2-series, 300 µm, 55 mm (10 pieces)	10100044
Mold, ReC 2-series, 400 µm, 55 mm (10 pieces)	10100045
Mold, ReC 2-series, 550 µm, 55 mm (10 pieces)	10100046
Mold, Rec 2-series, 730 um, 55 mm (10 pieces)	10100079
Mold, ReC 2-series, 900 µm, 55 mm (10 pieces)	10100047

DESCRIPTION	AFL NO.
Mold Options (continued)	
Mold, ReC 2-series, 165 µm, 110 mm (5 pieces)	10100048
Mold, ReC 2-series, 250 µm, 110 mm (5 pieces)	10100049
Mold, ReC 2-series, 300 µm, 110 mm (5 pieces)	10100050
Mold, ReC 2-series, 400 µm, 110 mm (5 pieces)	10100051
Mold, ReC 2-series, 550 µm, 110 mm (5 pieces)	10100052
Mold, Rec 2-series, 730 um, 110 mm (5 pieces)	10100080
Mold, ReC 2-series, 900 µm, 110 mm (5 pieces)	10100053
Custom molds are available upon request	
Miscellaneous	
Mold Guide Pins (Extended)	10100071
Fiber Tensioner, 900 µm (left and right)	10100061
Mandrels	10100056
Power Supply (incl. US, UK and EU Adapter)	90100409

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