

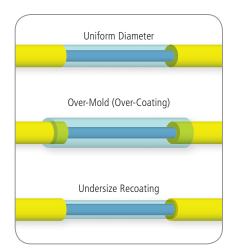
Fusion Splicing Systems





Features

- 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[™]

The ReCoater 2 is used to restore the protective coating on acrylate coated optical fibers in high strength applications. Molds are available in different sizes to cover a range of coating diameters and can easily be exchanged by the operator with no realignment required. Custom molds are available upon request.

With standard molds the recoated segment of the fiber is round with a diameter that perfectly and uniformly matches that of the original fiber coating, but the operator can also choose to perform recoatings with a cross section slightly smaller than the original fiber coating (undersize), or recoatings with a larger diameter that overlaps the original fiber coating at each end of the recoat area (overcoating).

This makes the system easy to set up and optimize for such different applications as undersea optical fiber cable assembly and fiber laser manufacturing.

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.

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 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.

The Recoater 2 may easily be upgraded to the AutoCoater 2 configuration by the simple addition of the AutoCoater 2 Dispensing Robot. The dispensing Robot is easily attached to the ReCoater 2, detached, or exchanged in the same was as in the case of the AutoCoater 2.





ReCoater 2[™]

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 and 55 mm
Recoating diameter (µm)	165, 250, 300, 400, 550 & 900 μm
Linear proof test	Programmable, 0-22 N
Mandrel tensile test (optional item)	Programmable, 0-100 N
Hold time	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 (34 mm length),	10100034
Mold Guide Pins, Manual and Tools	

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
Custom molds are available upon request	

DESCRIPTION	AFL NO.
Miscellaneous	
Dispenser Robot	10100069
Mold Guide Pins	10100070
Fiber Tensioner, 900 µm (left and right)	10100061
Mandrels	10100056
Power Supply (incl. US, UK and EU Adapter)	90100409

