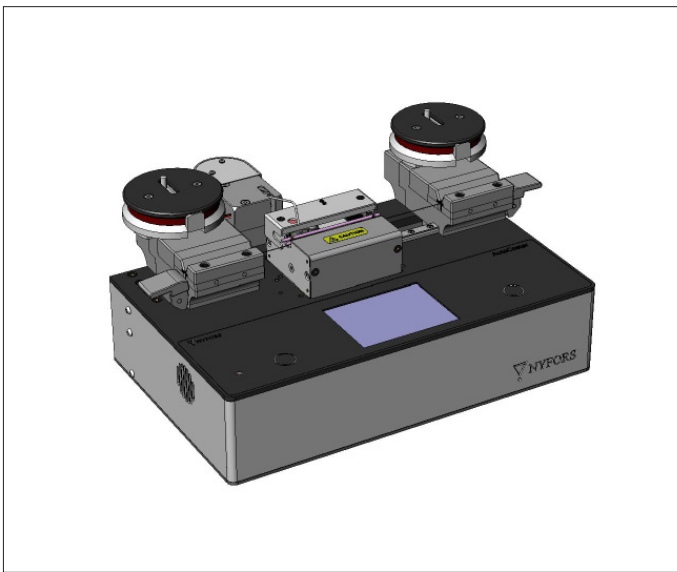


AutoCoater 2™ *NEW*

Automatic recoater for production applications



- Consistent, high quality recoating
- Automatic and operator skill independent
- Short cycle time
- Linear and rotary strength testing
- Uniform diameter, overcoating and undersize recoating capability
- Easy exchange of recoating resin type
- No need for compressed air or vacuum
- High and low-index recoating



Designed for high strength applications, the AutoCoater™ restores the protective coating on spliced acrylate-coated optical fibers. It is fully automatic, allowing for operator skill independence in factory environments with high productivity and cost advantages. Soft silicone moulds identical to those of NYFORS manual recoaters are used, but the recoating compound is injected automatically via the injection pump and needle.

The silicone moulds are easily exchangeable with no realignment required. With different sizes and custom moulds available, the operator can not only easily exchange moulds to meet requirements for different fiber and fiber coating diameters, but he can also choose whether to (a) recoat to uniform diameter that exactly matches the original fiber coating diameter, (b) recoat with a cross section slightly smaller in diameter than the original fiber coating (undersize), or (c) recoat with a larger diameter that overlaps the primary coating at each end of the recoat section (overcoating).

This provides a convenient way to swiftly change between different types of optical fiber and also makes the system easy to set up, optimize and rapidly reconfigure for different recoating applications and requirements.

The AutoCoater™ with silicone moulds is therefore the ideal choice for fully automatic skill-independent recoating operations where flexibility is required to meet many different recoating needs and specifications.

Rapid exchange of recoating resin type

The customer selected recoating compound is automatically injected from an easily attached 1 oz Nalgene bottle, functioning as the recoater reservoir tank. This greatly simplifies refilling in high volume production.

This bottle as well as the injection pump, supply lines, and injection needle may be removed and exchanged as a single unit. This completely eliminates the need to purge or cleanse the injection pump and supply lines when changing from one type of recoating resin to another. Another option when using several compounds in parallel is to operate the recoater in manual mode, using a syringe for manual resin injection into the mould.

The combination of mould sizes and mould types (for uniform and undersize recoating as well as overcoating) and the simplicity of exchanging recoating compounds underscores the flexibility of the soft mould AutoCoater™ as the most versatile and easily adaptable automatic recoater in the world.

Automatic recoater for production applications

Other features

Short curing times are achieved through an efficient UV LED array arranged along the length of the mould. 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 with total cycle times of 15 seconds or less – faster than any competing recoater on the market. Besides standard high-index materials, low-index recoating compounds can be cured.

Strength tests can be carried out with the linear clamps or rotary mandrels (optional). Linear proof tests can be performed up to 22 N, while the rotary mandrels allow for tensile tests with forces up to 100 N. Levels of force, pulling rate and hold times at maximum force are programmable.

The AutoCoater™ comes in an ergonomic, bench-top design for comfortable operation. The main operator interface is a user-friendly and easy-to-navigate 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.

TECHNICAL DATA	
Curing time	Programmable, 3 s typical
Cycle time	15 s typical
Light source	UV LED
Wavelength	380-385 nm
Injection	Automatic from 1 oz bottle
SOFT MOULD	
Mould mounting	Exchangeable
Mould length	34 mm and 55 mm
Recoating diameter	165, 250, 300, 400, 550 and 900 µm
Dimensions	270 mm (W) x 210 mm (D) x 100 mm (H)
Weight	4.5 kg
PROOF TESTING	
Linear proof test	Programmable, 0-22 N
Rotary tensile test (optional)	Programmable, 0-100 N
Resolution	0.01 N
Hold time & pulling speed	Programmable
Display units	lbs, kg, N, kpsi, GPa
INTERFACE	
PC connection	Ethernet & USB flash drive
Compressed air	Not needed
Power supply	External 12 V DC, 60 W

NYFORS part number: 10100035

Selection Guide Matrix

The recoater needs moulds that match the fiber coating to be restored. These moulds are made of soft silicone and are easily interchangeable by the operator to allow the system to be used with fibers of various coating diameters. Custom moulds are available upon request.

Moulds are consumables and should be replaced at regular intervals.

ARTICLE

Mould, 34 mm	Coating diameter	Mould length	Article number	Article Description
	165 µm	34 mm	10100036	Mould, Rec 2-series, 165 µm, 34 mm
	250 µm	34 mm	10100037	Mould, Rec 2-series, 250 µm, 34 mm
	300 µm	34 mm	10100038	Mould, Rec 2-series, 300 µm, 34 mm
	400 µm	34 mm	10100039	Mould, Rec 2-series, 400 µm, 34 mm
	550 µm	34 mm	10100040	Mould, Rec 2-series, 550 µm, 34 mm
	900 µm	34 mm	10100041	Mould, Rec 2-series, 900 µm, 34 mm
	Customer specified	34 mm	10100063	Mould, Rec 2-series, 34 mm, GENERIC

Mould, 55 mm	Coating diameter	Mould length	Article number	Article Description
	165 µm	55 mm	10100042	Mould, Rec 2-series, 165 µm, 55 mm
	250 µm	55 mm	10100043	Mould, Rec 2-series, 250 µm, 55 mm
	300 µm	55 mm	10100044	Mould, Rec 2-series, 300 µm, 55 mm
	400 µm	55 mm	10100045	Mould, Rec 2-series, 400 µm, 55 mm
	550 µm	55 mm	10100046	Mould, Rec 2-series, 550 µm, 55 mm
	900 µm	55 mm	10100047	Mould, Rec 2-series, 900 µm, 55 mm
	Customer specified	55 mm	10100064	Mould, Rec 2-series, 55 mm, GENERIC

Accessories	Article number	Article Description
	Included	Fiber tensioner, standard (left and right)
	10100061	Fiber tensioner, 900 µm (left and right)
	10100056	Rotary Mandrels
	90100198	Dispenser Robot

Power Supply	Article number	Article Description
	90100409	Power Supply Kit VEP36