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THORLABS

PTR206B - September 4, 2018

Item # PTR206B was discontinued on September 4, 2018. For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

VYTRAN® FIBER RECOATERS WITH PROOF TESTERS

- Recoat Fusion-Spliced Fibers to Restore Flexibility
- Linear or Rotary Proof Tester
- Manual and Automatic Options

PTR207
Manual Fiber Recoater with Rotary Proof Tester (Handset Controller Not Shown)

RM430
Mold Assembly for Manual Recoater (Sold Separately)

PTR208
Automatic Fiber Recoater with Linear Proof Tester

VHJ500
Bottom Fiber Block Insert (Sold Separately)

VHJT
Top Fiber Block Insert (Sold Separately)

vytran®

OVERVIEW

Features

- Recoat Spliced Fibers to Restore the Flexibility of the Fiber
- Integrated Linear or Rotary Proof Tester
- 50 mm Maximum Recoat Length
- Fully Programmable with Push Button Operation
- Manual and Automatic Recoater Options
- Durable Quartz Mold Plate Capable of >10,000 Recoats
- Replacement Components Sold Separately Below

Building a Complete Fiber Processing System?

To build a complete system, you will need to purchase a base unit plus additional components that are dependent upon the size of the fiber being processed. We recommend that you contact us prior to ordering for assistance with choosing a system and all the necessary components. This also allows us to install and factory-align all system components within the base unit prior to shipping, ensuring optimal performance out-of-the-box.

To take advantage of this assistance, please e-mail us directly at techsupport@thorlabs.com and a representative will contact you shortly.

Thorlabs' Vytran® Fiber Recoaters with Proof Testers offer easy, integrated solutions to recoat and test fusion-spliced fibers. The recoating process uses a volumetric dispensing pump to inject the recoat material into the mold cavity. This pump is available with an automatic injection system (Item #s PTR208, PTR206, and PTR207) or a manual injection system (Item #s PTR206B and PTR207B). The recoated fiber is then cured with an ultraviolet (UV) source. The manual injection system is required for applications using low-index recoat material. The fiber recoating process restores the buffer coating to a stripped fiber, giving it the same flexibility as when originally manufactured.

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Thorlabs' Fiber Recoater detailing the mold assembly, fiber block holders, and fiber block inserts.

The recoaters offered here feature either an integrated Linear Proof Tester (Item #s PTR206, PTR206B, and PTR208) or Rotary Proof Tester (Item #s PTR207 and PTR207B). A linear tester can proof test each fiber up to 20 N (4.5 lbs) to ensure that it meets strength requirements for the required service load. The rotary tester can perform both linear and tension tests up to 89 N (20 lbs). Tension testing takes a fiber up to its breaking strength (a destructive measurement) and then records the peak tension. Unlike standard heat shrink protection sleeves, a recoated fiber can be handled and coiled normally, without risking the fusion-spliced section of fiber.

Regardless of recoater type, the process starts with the fusion-spliced section of fiber being placed in the middle of the mold assembly (manual mold assemblies sold separately below). Once set in position, inserts (sold separately below) in the fiber blocks secure the spliced fiber in place. For the manual recoaters, the mold is closed by hand; automatic recoaters use a pneumatic mold assembly that automatically closes when the recoat process begins. Recoat material is pumped into the cavity (either manually or automatically, depending on the recoater in use) and then UV-cured. Due to their ability to restore a fusion-spliced fiber to near original condition, fiber recoaters are ideal for applications such as undersea optical fiber cables or submarine communication cabling. Additionally, they have research applications with devices such as fiber lasers or Distributed Bragg Reflector (DBR) lasers.

We offer two major types of recoaters, automatic and manual, with the major difference being the type of Injection Mold Assembly utilized in the device. Our manual recoaters use a hinged top that can be opened and closed by hand. Here, the recoat material is injected through a cross-channel in the top plate. Automatic recoaters, by contrast, utilize a pneumatic mold assembly, allowing for the direct injection of material into the mold cavity. Both the automatic and manual recoaters use a split-quartz mold, into which the recoat material is injected. The mold's surface is coated to prevent any recoat material that migrates between the plates from curing and forming imperfections on the finished recoat.

Mold Assemblies

The PTR208 automatic recoater comes standard with a mold assembly for Ø430 µm coated fibers; thus it is not necessary to choose a mold assembly for this recoater.

For our manual recoaters (Item #s PTR206, PTR206B, PTR207, and PTR207B), mold assemblies are available in three standard coating sizes: Ø280 µm, Ø430 µm, and Ø600 µm. When purchasing a Manual Fiber Recoater, choose the Mold Assembly that matches the desired fiber coating diameter; the assembly is then installed at the factory. Custom mold coating sizes are available up to Ø900 µm. Contact Tech Support for more information.

Inserts for Fiber Holding Blocks
In addition to the above, we offer a variety of inserts for use in the fiber holding blocks of the recoaters in order to support a wide range of fiber coating diameters. For recoaters with a rotary proof tester (Item #s PTR207 and PTR207B), the inserts are compatible with fiber coating diameters in a range from 125 µm to 900 µm. For recoaters with a linear proof tester (Item #s PTR206, PTR206B, and PTR208), the inserts cover a range for fiber coatings from Ø250 µm to Ø900 µm.

Recoat Materials
Thorlabs offers both high-index (Item # AB950200) and low-index (Item # PC373) recoat materials for use in these recoaters. Recoaters with manual injection pumps (Item #s PTR206B and PTR207B) are compatible with both types of recoat material; all other recoaters are compatible with the high-index material only. Our manual recoaters with an automatic injection system (Item #s PTR206 and PTR207) can be customized to work with both the low- and high-index recoat material; please contact Tech Support for more information.

SPECS

Item #	PTR208	PTR206	PTR206B	PTR207	PTR207B
Recoater Type	Automatic	Manual			
Recoater Mold	Pneumatic Split Quartz Plates[a]	Hinged Split Quartz Plates			
Recoat Diameter[b]	430 µm	280 µm, 430 µm, or 600 µm[c]			
Maximum Recoat Length	50 mm (2")				
Recoat Material	High-Index UV Curable Acrylate		High- or Low-Index UV Curable Acrylate	High-Index UV Curable Acrylate	High- or Low-Index UV Curable Acrylate
UV/Thermal Source	32 UV LEDs	Four 10 W Tungsten-Halogen Lamps (Replacement Item # UVRB, Available Below)			
Recoat Injection	Automatic		Manual[d]	Automatic	Manual[d]
Recoat Volume	Programmable (µL)		Manual	Programmable (µL)	Manual
Recoat Injection Rate	Programmable (≤1.8 µL/s)		Manual	Programmable (≤1.8 µL/s)	Manual
Lamp Delay Time[e]	5 s (Typical)				
Cure Time[e]	17 s (Typical)				
Mold Cleaning Requirement[f]	At Start Up And Shut Down[g]	After Every Recoat			
Total Cycle Time	45 s (Typical)	60 s (Typical)			
Dimensions (L × W × H)	10.25" × 5.0" × 5.0" (260 mm × 127 mm × 127 mm)			10.25" × 7.0" × 5.0" (260 mm × 178 mm × 127 mm)	
AC Power	110 - 120 V / 200 - 240 V, 47-63 Hz				
Proof Tester Specifications					
Proof Tester Type	Linear			Rotary	
Load Mechanism	1.5" (38 mm) Linear Fiber Clamp			Ø2" (50.8 mm) Rotating Mandrel[h]	
Fiber Spacing	2.9" (74 mm)			5" (127 mm)	
Minimum Fiber Length	6" (150 mm)			17" (432 mm)	
Maximum Load	20 N (4.5 lbs) 235 kpsi (1.6 GPa) for a Ø125 µm Fiber			89 N (20 lbs) >800 kpsi (5.5 GPa) for a Ø125 µm Fiber	
Accuracy	±2%				
Ramp Rate[i]	Programmable, ≤22.2 N/s (5 lbs/s)			Manual, ≤22.2 N/s (5 lbs/s)	
Hold Time	0.00 s - 60.00 s, Programmable[e]			N/A	
Display Units	lbs, kg, N, kpsi, and GPa				

- Requires an 80 - 120 psi Dry Compressed Air Source
- Custom sizes available; contact Tech Support.
- Depends on the Mold Assembly (See the Mold Assembly Presentation Below)
- Replacement Item # PTRRRM, Available Separately Below
- Programmable with the Handset Controller; Mold Size and Recoat Material Dependent
- The mold should be cleaned with either acetone or isopropyl alcohol, applied with a cotton swab. If the mold has an accumulation of cured material stuck on the plates, allow the cleaning solution (preferably acetone) about 60 - 90 seconds to soften and lift the material from the surface.
- The mold assembly of this recoater should be cleaned before the first recoating process of the day and then again after the last recoating process of the day.
- Check the minimum short-term bend radius of the fiber to be tested to ensure its compatibility with the Ø2" mandrel.
- The ramp rate is the rate at which the load is applied to the fiber.

PRODUCT DEMOS

vytran a division of THORLABS

Product Demonstrations

Thorlabs has demonstration facilitates for the Vytran® fiber glass processing systems offered on this page within our Morganville, New Jersey and Exeter, Devonshire offices. We invite you to schedule a visit to see these products in operation and to discuss the various options with a fiber processing specialist. Please schedule a demonstration at one of our locations below by contacting technical support. We welcome the opportunity for personal interaction during your visit!

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SELECTION GUIDE

The table below outlines the products and accessories necessary to purchase in order to construct a fully functioning fiber recoater system.

Vytran® Fiber Recoater and Proof Tester Selection Guide						
Component	**Item #**	**PTR205**	**PTR303**	**PTR303B**	**PTR304**	**PTR304B**
Mold Assembly	RM280	Mold Assembly for Ø430 µm Fibers Included	Choose One	Choose One	Not Compatible	Not Compatible
	RM430					
	RM600					
	RM280L		Not Compatible	Not Compatible	Choose One	Choose One
	RM430L					
	RM600L					
Inserts	VHH Series	Choose 2 Top Inserts and 2 Bottom Inserts				
Recoat Material	High Index (Item # AB950200)	Compatible	Compatible	Compatible	Compatible	Compatible
	Low Index (Item # PC373)	Not Compatible	Not Compatible	Compatible	Not Compatible	Compatible
Controller Type		Handset	Tablet	Tablet	Tablet	Tablet

The table below outlines the entire PTR series to directly compare the capabilities across the whole line.

Vytran® PTR Series Recoater and Proof Tester Selection Guide[a]													
Item #		**PTR205**	**PTR208**	**PTR303**	**PTR303B**	**PTR304**	**PTR304B**	**PTR206**	**PTR206B**	**PTR207**	**PTR207B**	**PTR201**	**PTR302**
Recoat Process	Automatic	✓	✓	-	-	-	-	-	-	-	-	-	-
	Manual	-	-	✓	✓	✓	✓	✓	✓	✓	✓	-	-
Proof Tester	Linear	-	✓	-	-	-	-	✓	✓	-	-	✓	-
	Rotary	-	-	-	-	-	-		-	✓	✓	-	✓
Recoat Injection Pump	Automatic	✓	✓	✓	-	✓	-	✓	-	✓	-	-	-
	Manual	-	-	-	✓	-	✓	-	✓	-	✓	-	-
Maximum Recoat Length	50 mm	✓	✓	✓	✓	-	-	✓	✓	✓	✓	-	-
	100 mm	-	-	-	-	✓	✓	-	-	-	-	-	-
Recoat Material	High Index (Item # AB950200)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-
	Low Index (Item # PC373)	-	-	-	✓	-	✓	-	✓	-	✓	-	-
Controller Type	Handset	✓	✓	-	-	-	-	✓	✓	✓	✓	✓	-
	Tablet	-	-	✓	✓	✓	✓	-	-	-	-	-	✓
Mold Cleaning Requirement		Daily[b]		After Every Recoat Process								N/A	

- These recoaters are designed to be used with high- or low-index recoater material. Thorlabs also offers the PRL201, which is designed for polyimide-coated fibers.
- The mold assembly of these recoaters should be cleaned before the first recoating process of the day and then again after the last recoating process of the day.

Automatic Fiber Recoater with Proof Tester

- Automatic Fiber Recoater with Linear Proof Tester
- Available Standard for Ø430 µm Coatings
- Recoats Fibers up to 50 mm in Length
- Compatible with High-Index Recoat Material
- Ideal for Medium- and High-Volume Manufacturing

Components Included

- Automatic Fiber Recoater with Integrated Proof Tester
- Pnuematic Mold Assembly for Ø430 µm Coatings
- Quick Snap-On Connectors for Compressed Air Source
- Location-Specific Power Cord
- Handset Controller

Must be Purchased Separately

- Fiber Holding Block Top Inserts (Two Required)
- Fiber Holding Block Bottom Inserts (Two Required)
- High-Index Recoat Material (One Bottle Required)
- 80 - 120 psi Compressed Air/Gas Source (Not Available from Thorlabs)

Optional

- Replacement UV Bulb

Thorlabs' Automatic Fiber Recoater completely automates the fiber recoat process and features an integrated linear proof tester. Fully programmable, it can be operated either through the handset controller (which gives full programming capabilities) or via buttons on the top of the machine.

Our PTR208 Automatic Fiber Recoater uses a pneumatic mold assembly to control the mold plates. This design allows the recoat material to be directly injected into the mold cavity, eliminating any excess material, which would require cleaning after every recoat. Additionally, once the fiber is secured in the fiber holding blocks, the entire recoat process is performed automatically. This clean, automated process makes the PTR208 ideal for high-volume manufacturing. This recoater is designed for fiber coatings of Ø430 µm and requires the purchase of fiber block inserts (sold below). Choose the inserts that match the coating diameter of the fiber being used. The PTR208 is compatible with high-index recoat material only (sold below). The pneumatic design of the mold assembly requires an external 80 - 120 psi compressed air source (not available from Thorlabs).

This recoater comes with an integrated linear proof tester. The proof tester takes the fiber up to a predetermined load (≤20 N) and then releases it. The testing process is fully programmable, allowing the user to select parameters such as the load, the rate at which the load is applied, and the hold time. To ensure the long-term reliability of the fiber, the proof test level should be about three times higher than the applied service load for the spliced fiber.

A handset controller, which comes standard with the PTR208, allows the user to control and program fully the unit; all recoat and proof test parameters can be set through this controller.

Customized mold sizes for recoat diameters up to 900 µm; please contact Tech Support for more information.

Part Number	Description	Price	Availability
PTR208	Automatic Fiber Recoater with Linear Proof Tester	$28,650.00	Today

Manual Fiber Recoaters with Proof Testers

- Manual Fiber Recoaters with Linear or Rotary Proof Tester
  - Linear: Proof Testing up to 20 N (4.5 lbs)
  - Rotary: Proof and Tension Testing up to 89 N (20 lbs)
- Compatible with Mold Assemblies with Coating Diameters of 280 µm, 430 µm, or 600 µm
- Recoats Fibers up to 50 mm in Length
- Compatible with High- and Low-Index Recoat Material
- Ideal for Low-Volume Manufacturing and R&D

Components Included

- Manual Fiber Recoater with Integrated Proof Tester
- Location-Specific Power Cord
- Handset Controller

Must be Purchased Separately

- Mold Assembly (One Required)
- Fiber Holder Top Inserts (Two Required)
- Fiber Holder Bottom Inserts (Two Required)
- High- or Low-Index Recoat Material (One Bottle Required)

Optional

- Replacement UV Bulb
- Replacement Manual Injector (PTR206B and PTR207B)
- Replacement Proof Test Grips (PTR207 and PTR207B)

Thorlabs' Manual Fiber Recoaters use a hinged mold assembly (sold below) to form the mold cavity for recoating. This design allows the recoat material to be injected through a cross-channel in the mold's top plate. Unlike the automatic version sold above, the manual recoaters require cleaning between each recoat process. However, the mold assemblies can be easily swapped out and the process parameters can be easily changed, providing a level of flexibility and adaptability that automatic recoaters cannot provide. Because of this, they are ideal for low-volume manufacturing and research & development applications.

Click to Enlarge
The PTR206B Manual Fiber Recoater shown with the included Handset Controller.

When selecting one of these recoaters, both a mold assembly and inserts for the fiber holding blocks (two top and two bottom, sold below) must be chosen. The mold assemblies are available for coating diameters of 280 µm, 430 µm, and 600 µm. Customized recoat diameters up to 900 µm are also available; please contact Tech Support for more information. The type of insert is dependent upon the type of integrated proof tester. The PTR206 and PTR206B are compatible with the VHJ series inserts, while the PTR207 and PTR207B are compatible with the VHH series inserts.

These manual recoaters have two options for the recoat material injection system: manual or automatic. For the manual injection system (Item #s PTR206B and PTR207B), the user is required to dispense the recoat material into the mold cavity. The manual injection system is compatible with both low- and high-index recoat material (sold below) and a replacement manual injector is also available below.. An automatic injection system (Item #s PTR206 and PTR207), which is only compatible with high-index recoat material, uses a pump to inject the recoat material. An add-on unit that can use both low- and high-index recoat materials is available; please contact Tech Support for more information. The amount of material dispensed by the automatic injector is controlled by hand via the top-mounted "Inject" button or programmed into the machine by the handset controller.

The PTR206 and PTR206B Manual Fiber Recoaters come with an integrated linear proof tester, which takes the fiber up to a predetermined load (≤20 N) and then releases it. The testing process is fully programmable, allowing the user to select parameters such as the load, the rate at which the load is applied, and the hold time. To ensure the long-term reliability of the fiber, the proof test level should be about three times higher than the applied service load for the spliced fiber.

The PTR207 and PTR207B Manual Fiber Recoaters come with an integrated rotary proof tester, which can perform both proof and tension tests (≤89 N). Tension testing takes the fiber up to its breaking point, and the peak tension is recorded in units of tension (pounds, kilograms, or Newtons) or in units of stress (kpsi or GPa). The testing processes of the rotary proof testers are also fully programmable. One set of proof test grips is included; replacement proof test grips are available below in packs of 10.

Each recoater comes with a handset controller (see image to the right) that allows the user to control and program fully the unit; all recoat and proof test parameters can be set through this controller.

Older models of the PTR206B and PTR207B (sold before 2015) used two different types of UV lamps (high or low power) for curing the recoat material, depending on whether low- or high-index material was being used. All current models use the high-power UV lamp (Item # UVRB, available below), which can be programmed for high- or low-powered output. For help with replacing the older, low-power lamp or to order systems that still use this lamp, please contact Tech Support.

Part Number	Description	Price	Availability
PTR206	Manual Fiber Recoater with Linear Proof Tester and Automated Pump	$12,850.00	Lead Time
PTR206B	Manual Fiber Recoater with Linear Proof Tester and Manual Pump	$11,575.00	Lead Time
PTR207	Manual Fiber Recoater with Rotary Proof Tester and Automated Pump	$13,225.00	Lead Time
PTR207B	Manual Fiber Recoater with Rotary Proof Tester and Manual Pump	$12,200.00	Lead Time

Mold Assemblies - One Required for Manual Fiber Recoaters

- Compatible with Manual Fiber Recoaters
- Three Available Mold Coating Sizes: Ø280 µm, Ø430 µm, and Ø600 µm
- Recoats Fibers up to 50 mm in Length
- Comes Installed from Factory when Purchased with Manual Recoater

Item #	Coating Size	Compatible Recoaters
RM280	Ø280 µm	PTR206, PTR206B PTR207, & PTR207B
RM430	Ø430 µm	
RM600	Ø600 µm	

The Mold Assemblies are composed of split quartz mold plates which, when closed, form the cylindrical mold cavity around the exposed section of the fiber being recoated. Recoat material (sold below) is injected into the mold assembly by either an automatic or manual injection system. Then, UV light cures the recoat material. Cure times are dependent on the mold size and recoat material, but they range from approximately 12 - 15 seconds for the RM280 mold assembly with high-index AB950200 recoat material to 30 - 60 seconds with the low-index PC373 recoat material. When choosing a manual recoater (sold directly above), a mold assembly must also be ordered. They are available for Ø280 µm, Ø430 µm, or Ø600 µm fiber coatings. Custom mold sizes up to Ø900 µm are available; please contact Tech Support for more information.

When purchasing a manual fiber recoater for the first time, it is necessary to choose a mold assembly that is appropriate for the desired fiber coating diameter. Additional mold assemblies may also be purchased and swapped out by the user. The assembly simply screws to the top of the device, making the removal and install simple and easy. Because of this, our manual recoaters are adaptable and flexible in the field and can be modified to accept varying diameters of fiber quickly.

It is also necessary to order the proper inserts (sold below) that best match the fiber diameter being used, whether purchasing a fiber recoater for the first time or updating a current recoater for a different fiber diameter.

Please note that these mold assemblies are only for the manual recoaters (Item #s PTR206, PTR206B, PTR207, and PTR207B); the automatic recoater (Item # PTR208) is sold with its own assembly already installed.

Part Number	Description	Price	Availability
RM280	Recoater Mold Assembly, Ø280 µm Coating, 50 mm Max Recoat Length	$4,039.00	Today
RM430	Recoater Mold Assembly, Ø430 µm Coating, 50 mm Max Recoat Length	$4,039.00	Today
RM600	Recoater Mold Assembly, Ø600 µm Coating, 50 mm Max Recoat Length	$4,039.00	Today

Inserts for Fiber Holding Blocks - Two Top and Two Bottom Required

- Fiber Block Inserts for Thorlabs' Fiber Recoaters
- Two Types:
  - VHJ Series for Recoaters with Linear Proof Testers
  - VHH Series for Recoaters with Rotary Proof Testers
- Choose Two Top Inserts and Two Bottom Inserts

For all the recoaters sold above, the proper set of inserts need to be selected. A total of four inserts (two top and two bottom) are required for a full unit. The inserts are seated in and secured to the fiber holding blocks. They can easily be swapped out for different sizes, allowing our recoaters to adapt quickly should different fiber coating sizes be desired.

We offer two types of inserts to meet the needs of the two styles of integrated proof testers featured in the recoaters sold on this page. The VHJ Series inserts are designed for recoaters with linear proof testers (Item #s PTR206, PTR206B, and PTR208). They are compatible with fiber coating sizes ranging from Ø80 µm to Ø1000 µm. The VHH Series inserts are designed for recoaters with a rotary proof tester (Item #s PTR207 and PTR207B) and offer a compatibility range from Ø90 µm to Ø990 µm.

Custom sizes are available; please contact Tech Support for additional information.

Compatible Fiber Buffer/Coating Diameters & Recoaters					
Item #	Top or Bottom	Nominal Diameter	Minimum Diameter	Maximum Diameter	Compatible Recoaters
VHJT	Top	-	80 µm	700 µm	PTR206, PTR206B, & PTR208
VHJT900[a]	Top	900 µm	700 µm	1000 µm	
VHJ250	Bottom	250 µm	80 µm	375 µm	
VHJ500	Bottom	500 µm	375 µm	700 µm	
VHJ900S[a]	Bottom	900 µm	700 µm	1000 µm	
VHH000	Top	-	90 µm	660 µm	PTR207 & PTR207B
VHH900[a]	Top	900 µm	810 µm	990 µm	
VHH100	Bottom	100 µm	90 µm	110 µm	
VHH125	Bottom	125 µm	113 µm	137 µm	
VHH160	Bottom	160 µm	144 µm	176 µm	
VHH250	Bottom	250 µm	225 µm	275 µm	
VHH300	Bottom	300 µm	250 µm	350 µm	
VHH400	Bottom	400 µm	350 µm	450 µm	
VHH500	Bottom	500 µm	450 µm	550 µm	
VHH600	Bottom	600 µm	540 µm	660 µm	
VHH900S[a]	Bottom	900 µm	810 µm	990 µm	

- Custom mold sizes are available for Ø900 µm fiber coatings for both our automatic and manual fiber recoaters. Please contact Tech Support for more information.

Part Number	Description	Price	Availability
VHJT	Top Insert for PTR201, PTR206, & PTR208, Flat	$102.00	Today

VHJT900	Top Insert for PTR201, PTR206, & PTR208, for Use with VHJ900S Only	$133.00	Today
VHJ250	Bottom Guide Insert for PTR201, PTR206, & PTR208, Ø80 µm - Ø375 µm Coating	$189.00	Today
VHJ500	Bottom Guide Insert for PTR201, PTR206, & PTR208, Ø375 µm - Ø700 µm Coating	$189.00	Today
VHJ900S	Bottom Guide Insert for PTR201, PTR206, & PTR208, Ø700 µm - Ø1000 µm Coating	$133.00	Today
VHH000	Top Insert for FHB1 and PTR Series, Flat	$50.00	Today
VHH900	Top Insert for Use with VHH900S	$159.00	Today
VHH100	Bottom V-Groove Insert for FHB1 and PTR Series, Ø90 µm - Ø110 µm Coating	$159.00	Today
VHH125	Bottom V-Groove Insert for FHB1 and PTR Series, Ø113 µm - Ø137 µm Coating	$159.00	Today
VHH160	Bottom V-Groove Insert for FHB1 and PTR Series, Ø144 µm - Ø176 µm Coating	$159.00	Today
VHH250	Bottom V-Groove Insert for FHB1 and PTR Series, Ø225 µm - Ø275 µm Coating	$159.00	Today
VHH300	NEW! Bottom V-Groove Insert for FHB1 and PTR Series, Ø250 µm - Ø350 µm Coating	$159.00	Today
VHH400	NEW! Bottom V-Groove Insert for FHB1 and PTR Series, Ø350 µm - Ø450 µm Coating	$159.00	Today
VHH500	Bottom V-Groove Insert for FHB1 and PTR Series, Ø450 µm - Ø550 µm Coating	$159.00	Today
VHH600	Bottom V-Groove Insert for FHB1 and PTR Series, Ø540 µm - Ø660 µm Coating	$159.00	Today
VHH900S	Bottom V-Groove Insert for FHB1 and PTR Series, Ø810 µm - Ø990 µm Coating	$159.00	Today

Recoat Materials - Choose Appropriate Material

- AB950200: High-Index Recoat Material
- PC373: Low-Index Recoat Material

Item #	Recoat Material	Compatible Recoaters
AB950200	High-Index	PTR206, PTR206B, PTR207, PTR207B, & PTR208
PC373	Low-Index	PTR206B & PTR207B

Thorlabs offers UV-curable acrylate recoat materials to be used in our PTR series fiber recoaters. We offer both high-index (Item # AB950200) and low-index (Item # PC373) material in 1 oz bottles. The high-index material can be used in all recoaters (except the PRL201), whereas the low-index material can only be used in recoaters with the manual injection pump option.

Part Number	Description	Price	Availability
AB950200	High-Index Recoat Material, 1 oz	$266.00	Today
PC373	Low-Index Recoat Material, 1 oz	$388.00	Today

Replacement UV Bulb for Manual Recoaters

- Replacement UV Bulbs for Manual Recoaters Listed to the Right
- 10 W Tungsten-Halogen Lamp
- Replacements Sold Individually
  - Four Bulbs Used in 50 mm Length Recoaters
  - Eight Bulbs Used in 100 mm Length Recoaters

The UVRB is a replacement bulb for the Vytran fiber recoaters listed to the right. Recoaters with a 50 mm recoat length are shipped with the four bulbs required for operation and recoaters with a 100 mm recoat length are shipped with eight bulbs.

Based on a schedule of 2000 recoats per month with 15 seconds per recoat, we recommend replacing the bulbs monthly. Instructions for bulb replacement are provided in the manual for each recoater or workstation (available from our website by clicking the red Docs icon next to each base unit Item #).

Please note that any fingerprints on the surface of the bulb will shorten the bulb's life; avoid handling the glass envelope of the bulb. If the envelope is touched, clean with a soft lens tissue wetted with acetone or alcohol.

Compatible Systems

- PTR303, PTR303B, PTR304, and PTR304B Manual Fiber Recoaters
- PTR206, PTR206B*, PTR207, and PTR207B* Manual Fiber Recoaters with Proof Testers
- FFS2000 and FFS2000PT Fiber Preparation and Splicing Workstations
- FFS2000PM and FFS2000WS Fiber Preparation, Splicing, and Proof Testing Workstations
- Discontinued PTR203, PTR203B*, PTR204, and PTR204B* Recoaters

*Older models of the PTR203B, PTR204B, PTR206B, and PTR207B (sold before 2015) used two different types of UV bulbs (high or low power) for curing the recoat material, depending on whether low- or high-index material was being used. All current models use the high-power UVRB, which can be programmed for high- or low-powered output. For help with replacing the older, low-power bulb, please contact Tech Support.

Part Number	Description	Price	Availability
UVRB	Replacement Recoat Bulb for Manual Fiber Recoaters, Qty. 1	$51.00	Today

Replacement Injector for Manual Recoaters

- Replacement Manual Injector for Dispensing Recoat Material into the Mold
- Compatible with Select Vytran Manual Recoaters and PC373 and AB950200 Recoat Materials

The PTRRRM is a replacement manual injector for the Vytran fiber recoaters listed to the right. Each of these systems is shipped with a manual injector required for operation.

Compatible Systems

- PTR303B Manual Fiber Recoater
- PTR206B and PTR207B Manual Fiber Recoaters with Proof Tester
- Discontinued PTR203B Recoater

The manual injector can be mounted to compatible fiber recoaters via the 4-40 screws on the recoater housing (see photo to the right). Use a 3/32" hex key to secure the injector prior to use. To connect the PTRRRM to the recoater mold, tighten the connector at the end of the green plastic tubing, then loosen by a 1/4 turn to allow for rotation.

Click to Enlarge
The PTRRRM is mounted to a recoater via two 4-40 mounting screws.

Click to Enlarge

The injector is equipped with a distribution valve and two-position selection lever for directing the flow of recoat material. A knurled dispensing screw with an internal plunger acts as a syringe for the recoat material. To fill the syringe, point the lever downward (i.e., toward the recoat bottle), then rotate the knurled dispensing screw counterclockwise until it spins freely to fill the syringe (shown in the photo to the right). Then, to inject the recoat material into the mold, point the lever horizontally (i.e., facing the knurled screw) and rotate the screw clockwise until near the end of the travel range is reached. Avoid bottoming out the dispenser as

this may damage the internal plunger; also take care when re-engaging the threads to avoid cross threading the dispensing screw. Several fill/inject steps may be needed until air is displaced within the system. Use lens tissue and an acetone or alcohol cleaning solution to collect any excess recoat material that flows from the mold.

Part Number	Description	Price	Availability
PTRRRM	Replacement Injector for Manual Fiber Recoaters	$1,227.00	Today

Replacement Proof Test Grips for Fiber Rotary Proof Testers

The PG200 Proof Test Grips are designed as replacements for the Vytran rotary proof testers listed to the right. Each system is sold with a set of these grips installed.

Proof test grips may need to be replaced when the fiber slips at high tension levels. After the proof test grips are replaced the system will need to be calibrated; please contact Tech Support for details. Instructions for replacing the proof test grips are provided in each system's manual.

Compatible Systems

- PTR302 Fiber Rotary Proof Tester
- PTR207 and PTR207B Manual Fiber Recoaters with Proof Testers
- FFS2000PT Fiber Preparation and Splicing Workstation
- FFS2000WS Fiber Preparation, Splicing, and Proof Testing Workstation

Part Number	Description	Price	Availability
PG200	Replacement Proof Test Grips for Rotary Proof Testers, Qty. 10	$51.00	Today

PTR206B Shown with Accessories