

Optical Fiber Recoater

FSR115 / FSR116 / FSR117

Faster, More Accurately,
More user-friendly.



FSR116

- Recoating
- Proof test function up to 2kgf



FSR117

- Recoating
- Proof test function up to 10kgf



FSR115

- Recoating
- without Proof test function

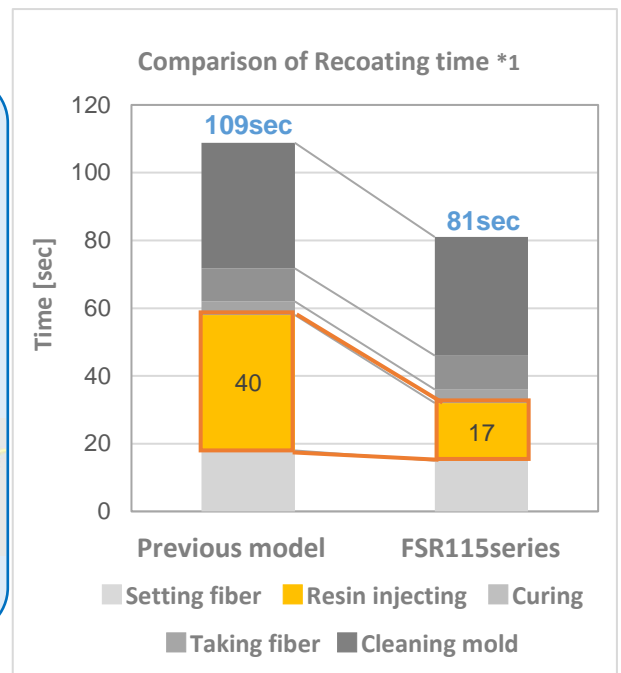
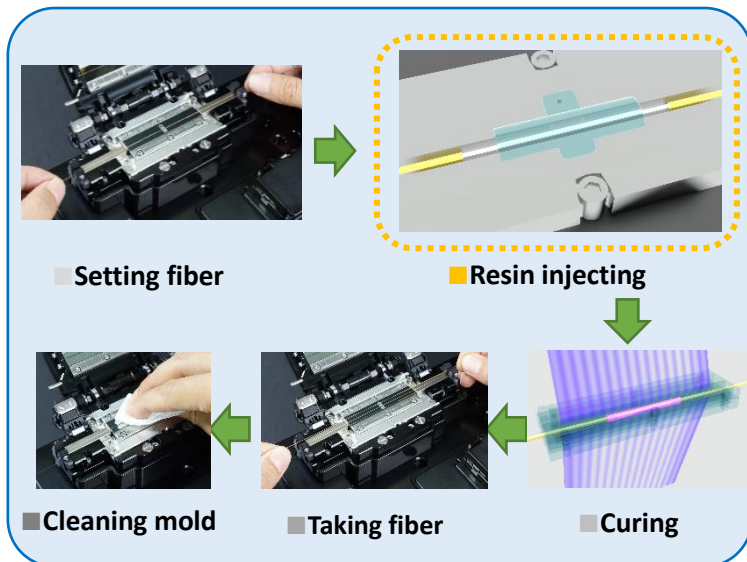
Features

Faster

Shortened UV curing resin injection time

New designed pump provides shorter UV resin injection time. It also provides 25% shorter total recoating time than previous model.

How to recoat



More accurate

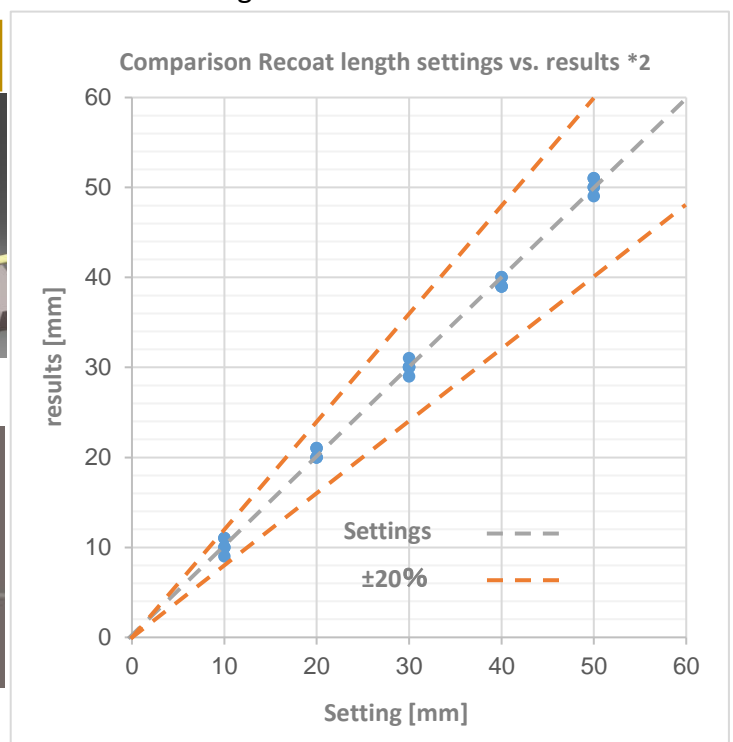
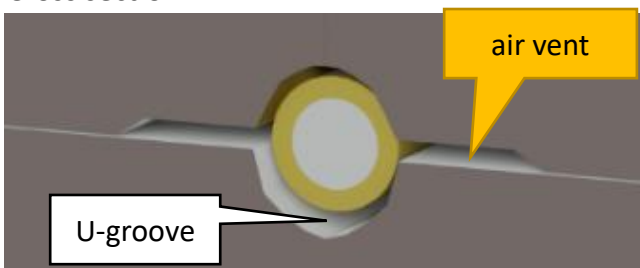
Improved recoating length repeatability

The recoat mold has slight steps on the U-groove to provide an air vent. It helps to improve the recoating length repeatability, as well as the ability to reach a max. 50mm length.

New design mold



Cross section



*1: Test condition: (1) UV recoat Resin : Japan Fine Coatings Co., Ltd. 950Y200 or Luvantix ADM Ltd. PC-373LD (2) Recoat diameter : 280μm (3) Recoat Length : 20mm (4) Fiber : Clad Diameter 125μm/Transparent UV 250μm Coating Diameter, Coating Stripping length 16mm (5) Environmental Condition : 25°C

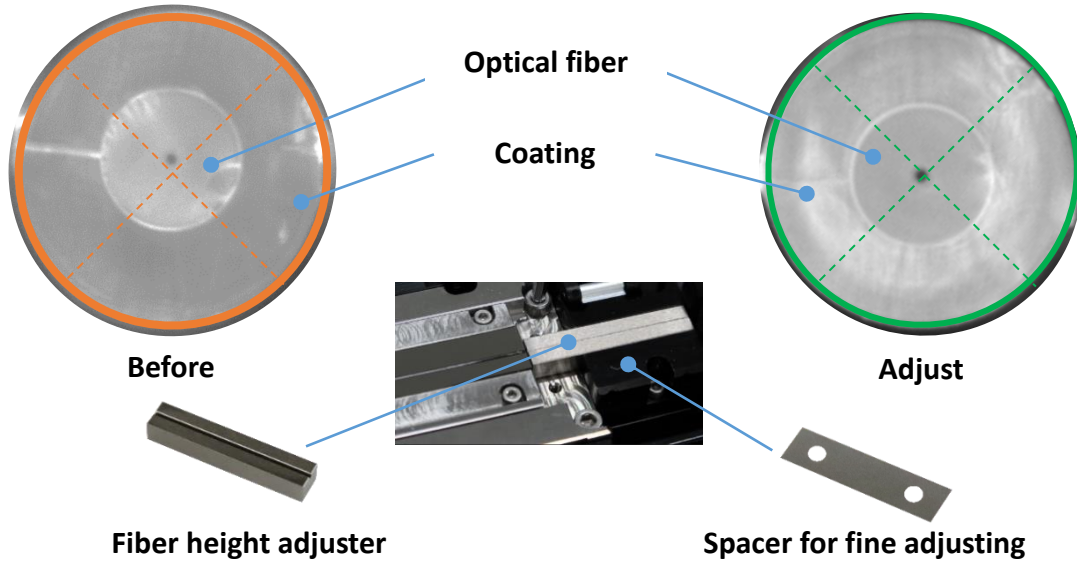
*2: The table does not guarantee the recoat length accuracy.
 Test condition: (1) UV recoat Resin : Japan Fine Coatings Co., Ltd. 950Y200 (2) Recoat diameter : 280μm (3) Recoat Length : 10-50mm (4) Fiber : Clad Diameter 125μm/Transparent UV 250μm Coating Diameter, Coating Stripping length 60mm (5) Environmental Condition : 25°C

More user friendly

Fiber and recoating centering adjustment is now possible by the user

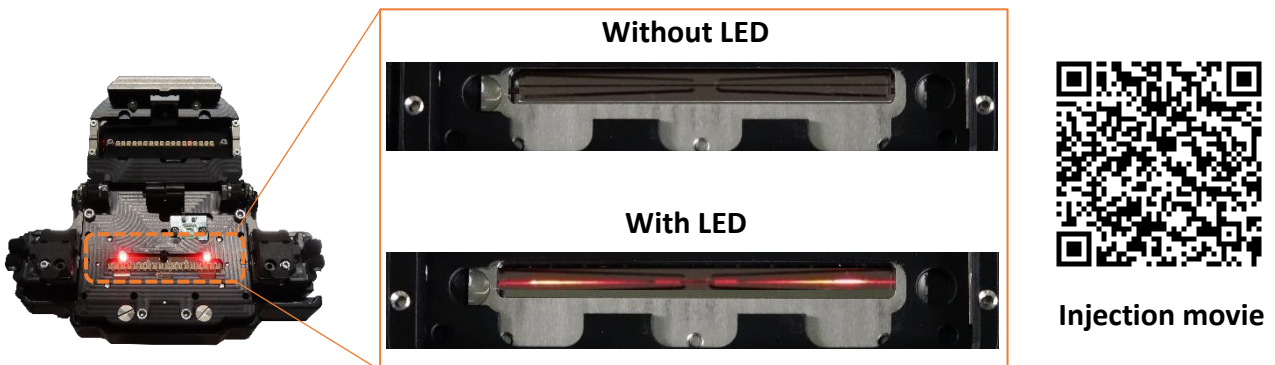
The Fiber height adjuster enables the adjustment of fiber diameter centering by setting the fiber to be centered in the mold.

The spacers allow for fine tuning based on original fiber coating variations.



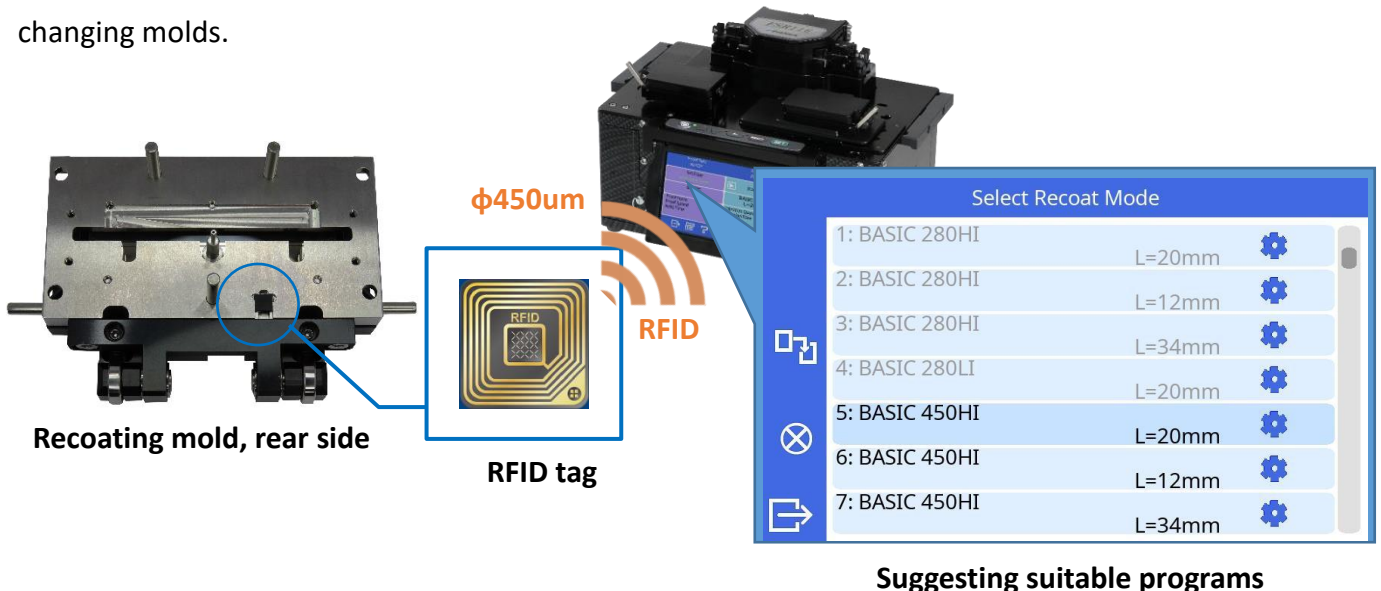
Clear observation of resin injection

LEDs under the mold shows the injected resin more clearly.



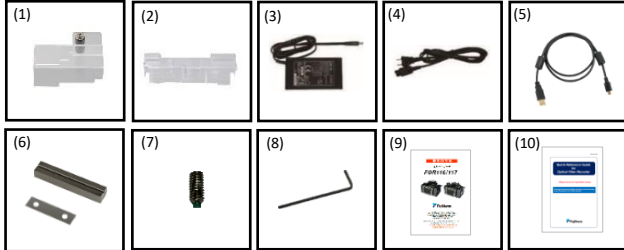
Recoat mode suggestion function

The new molds are equipped with RFID tags on the bottom of the mold. The FSR115 series scan the RFID and suggest suitable programs according to the RFID data. This improves our customers efficiency when changing molds.



Standard Package

| Description | Model No. | Qty |
|--|----------------------------|-----------------------------|
| Optical Fiber Recoater | FSR115 FSR116 FSR117 | 1 pc |
| (1) Fiber Protection Cover for FSR116 | PC-02 | 1 pc |
| (2) Fiber Protection Cover for FSR117 | PC-03 | 1 pc |
| (3) AC Adapter | ADC-21 | 1 pc |
| (4) AC Power Cord | ACC-08, 09, 10, 11 or 12 | 1 pc |
| (5) USB Cable | USB-01 | 1 pc |
| (6) Fiber Height adjust spacer set | SPA-FSR115-SET | 1 set |
| (7) Setscrew for Fiber Height Adjuster | — | 1 set (5 pcs) |
| (8) Hexagonal Wrench | HEX-04 | 1 pc |
| (9) Instruction Manual | — | PDF file stored in Recoater |
| (10) Quick Reference Guide | QRG-09-E | 1 pc |



Options

| Item | Model | Remark |
|------------------------------------|---------------------|--|
| Recoat Mold for 195µm | FSR115-MOLD-195 | Approx. φ195 µm, 50 mm *1 |
| Recoat Mold for 255µm | FSR115-MOLD-255 | Approx. φ255 µm, 50 mm *1 |
| Recoat Mold for 280µm | FSR115-MOLD-280 | Approx. φ280 µm, 50 mm *1 |
| Recoat Mold for 320µm | FSR115-MOLD-320 | Approx. φ320 µm, 50 mm *1 |
| Recoat Mold for 450µm | FSR115-MOLD-450 | Approx. φ450 µm, 50 mm *1 |
| Recoat Mold for 600µm | FSR115-MOLD-600 | Approx. φ600 µm, 50 mm *1 |
| Recoat Mold for 670µm | FSR115-MOLD-670 | Approx. φ670 µm, 50 mm *1 |
| Recoat Mold for 850µm | FSR115-MOLD-850 | Approx. φ850 µm, 50 mm *1 |
| Recoat Mold for 1000µm | FSR115-MOLD-1000 | Approx. φ1000 µm, 50 mm *1 |
| Fiber Height Adjuster | FSR115-HADJ-100 | φ90µm to φ110µm *2 |
| | FSR115-HADJ-125 | φ110µm to φ140µm *2 |
| | FSR115-HADJ-160 | φ140µm to φ180µm *2 |
| | FSR115-HADJ-200 | φ180µm to φ225µm *2 |
| | FSR115-HADJ-250 | φ225µm to φ275µm *2 |
| | FSR115-HADJ-300 | φ250µm to φ350µm *2 |
| | FSR115-HADJ-400 | φ350µm to φ450µm *2 |
| | FSR115-HADJ-500 | φ450µm to φ550µm *2 |
| | FSR115-HADJ-600 | φ540µm to φ660µm *2 |
| | FSR115-HADJ-750 | φ660µm to φ810µm *2 |
| FSR115-HADJ-900 | φ810µm to φ970µm *2 | |
| Force Gauge Adapter | FGA-02 | For proof force calibration. Please purchase the Force Gauge that manufactured by Nidec-Shimpo Ltd., FGP-20. |
| Bottle | FSR115-BTL-01 | Bottle for UV curing resin |
| Setscrew for Fiber Height Adjuster | SCREW-CT-01 | 1 set (15pcs) |
| Fiber Height adjust spacer set | SPA-FSR115-SET | 1 set |

Notes

- *1 Recoat diameter, maximum recoat length
- *2 Coating diameter

Specifications

| Item | FSR115 | FSR116 | FSR117 |
|-----------------------------------|--|---|----------------------------------|
| Applicable Optical fiber | Single fiber | | |
| Applicable Fiber Coating Diameter | 90µm to 970µm | | |
| Recoat Mold | Quartz glass mold | | |
| Recoat Diameter | Approx. 195µm, Approx. 255µm, Approx. 280µm, Approx. 320µm, Approx. 450µm, Approx. 600µm, Approx. 670µm, Approx. 850µm and Approx. 1,000µm | | |
| Recoat Length | 4mm to 50mm *1 Recoat Length accuracy±20% *2 | | |
| Applicable UV curing resin | Japan Fine Coatings Co., Ltd. 950Y200 and Luvantix AMD Ltd. PC-373LD *3 | | |
| UV curing resin supply system | A built-in pump supplies UV curing resin to the recoat mold from a replaceable built-in bottle. *4 | | |
| UV curing resin injection time | 950Y200 : Approx. 17seconds *2 PC-373LD : Approx. 20seconds *2 | | |
| Lamps for UV curing resin | UV light sources are placed on top and bottom. Individual control of light emitting position, intensity and time is possible. | | |
| UV Curing time | 950Y200 : Approx. 4seconds *2 PC-373LD: Approx. 10seconds *2 | | |
| Proof Test | Proof mechanism | None | Equipped |
| | Fiber Clamp method | — | Flat clamp type |
| | Settable Proof Force range | — | 0.2 to 2.0kgf |
| Physical description | Dimensions W | Approx. 252mm without projection | Approx. 252mm without projection |
| | Dimensions D | Approx. 135mm without projection | Approx. 175mm without projection |
| | Dimensions H | Approx. 169mm without projection | Approx. 169mm without projection |
| Environmental condition | Temperature | Operate : 10 to 30 °C, Storage : -40 to 80 °C | |
| | Humidity | Operate : 0 to 95%RH non-condensing, Storage : 0 to 95%RH non-condensing | |
| AC adapter | Input | AC100 to 240V, 50/60Hz, Max. 1.5A | |
| | Output | Approx. DC 19V, Max. 2.1A | |
| Display | LCD monitor | TFT 4.95 inches with touch screen | |
| Interface | PC | USB2.0 Mini B type | |
| | Earth Terminal | Applicable by M3 size truss screw. | |
| Wireless communication | RFID | Compliant with ISO 15693 | |
| Data storage | Recoat Mode | 100 Recoat modes | |
| | Proof Test Mode | — | 30 Proof modes |
| | Recoat Result | 5,000 Recoat | |
| | Proof Test Result | — | 5,000 Proof |
| Other features | Mold | Recoat length stabilizing mechanism | |
| | | Align able clamp position according to fiber eccentricity between coating center and clad center. | |
| | | Replaceable by user. | |
| | | Illuminates the flowing UV curing resin on the groove to advance resin visibility. | |
| | Software for PC | RFID tab identifies the type of Recoat mold | |
| Proof force Calibration | Recoater firmware update via internet | Parameter upload and download | |
| | Proof force Calibration | Enable *5 | |

Notes

- *1 The recoat length may not achieve to the setting value, depending on the combination of recoat diameter and fiber coating diameter, ambient temperature, etc.,
- *2 Test condition
 - (1) UV recoat Resin : Japan Fine Coatings Co., Ltd. 950Y200 or Luvantix ADM Ltd. PC-373LD
 - (2) Recoat diameter : 280µm
 - (3) Recoat Length : 20mm
 - (4) Fiber : Clad Diameter 125µm/Transparent UV 250µm Coating Diameter, Coating Stripping length 16mm
 - (5) Environmental Condition : 25 °C
- *3 Purchase the UV curing resin from UV curing resin local distributors. Fujikura doesn't sell UV curing resin.
- *4 Ask the distributor to replace the built-in pump.
- *5 FGA-02 and specified force gauge, FGP-20 that manufactured by Nidec-Shimpo Co., Ltd. are necessary



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Besuchen Sie die Website

www.opternus.de/lwl-produkte/spleistechnik/

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