

# Large Diameter Optical Fiber Cleaver CT114/115/116



## Large Diameter Optical Fiber Cleaver CT114/115/116

When exceptional cleave quality is required for fibers up to 1,250  $\mu\text{m}$ , the new large diameter CT114/CT115/CT116 cleaver series provides a variety of options depending on your needs. The color LCD shows Cleaving progress and recommended insert size depending on fiber coating and cladding diameter. Saving and storing cleaving programs to a PC or tablet is accomplished using a USB port. The LDF cleaver's extensive programming features allow for optimal results.



### Product Variation

Model	CT114	CT115	CT116
Appearance			
Cladding diameter	80 to 660 $\mu\text{m}$	80 to 1250 $\mu\text{m}$	
Cleave length	5 to 40mm		
Angle cleaving	—		✓
Fiber holder	Fiber holder adapter, FH-100, FH110		

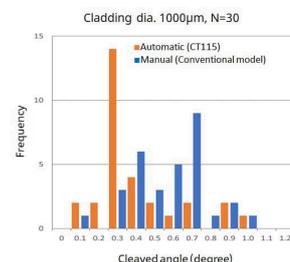
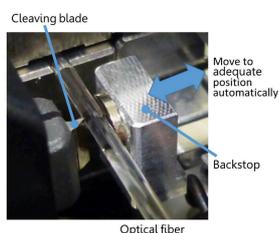
### Features

#### Auto Backstop (for CT115/CT116)

The Backstop helps to provides better cleave quality especially for large-diameter fibers and for sub-critical tension fibers.

Micron order positioning is necessary to obtain stable cleaving. The previous model positioned the micrometer by hand, usually with the aid of a microscope.

The CT115 and CT116 are equipped with the auto backstop function. It detects the backstop position and moves to the correct position automatically. It provides both stable cleaving and shortenes the cleaving operation time.



## Blade Management

The automatic cleaving blade position always keep using good quality blade and it provides stable cleaving quality. Since you do not need to worry about blade condition anymore.

**It's time to rotate blade**



Blade Management										
Blade Position										
No.1	No.2	No.3	No.4	No.5	No.6	No.7	No.8	No.9	No.10	
9723	11054	9480	9538	12376	0	0	0	0	0	
No.11	No.12	No.13	No.14	No.15	No.16	No.17	No.18	No.19	No.20	
0	0	0	0	0	0	0	0	0	0	

Cleave Count Of Blade : 52171    Cleave Count Of Machine : 52171

**Next blade position**



Blade Management										
Blade Position										
No.1	No.2	No.3	No.4	No.5	No.6	No.7	No.8	No.9	No.10	
9723	11054	9480	9538	12376	0	0	0	0	0	
No.11	No.12	No.13	No.14	No.15	No.16	No.17	No.18	No.19	No.20	
0	0	0	0	0	0	0	0	0	0	

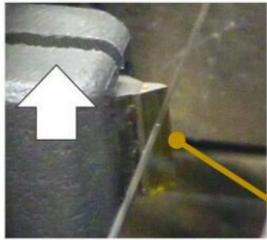
Cleave Count Of Blade : 52171    Cleave Count Of Machine : 52171

**Blade Management menu**



Do you change the blade position?  
5 -> 6

**Change blade position automatically**



Cleaving blade

## Wireless communication function

CT115 series is equipped with an RFID wireless communication function to newly designed FH110 series fiber holders. The FH110 RFID includes the holder size information. The CT115 series reads it and selects a pre-assigned program. It prevents selecting the wrong cleaving program.

Fiber holder  
FH110 series



Rear side



RFID



Fiber diameter  
information





Select adequate  
Program automatically

## Insert Option Guide

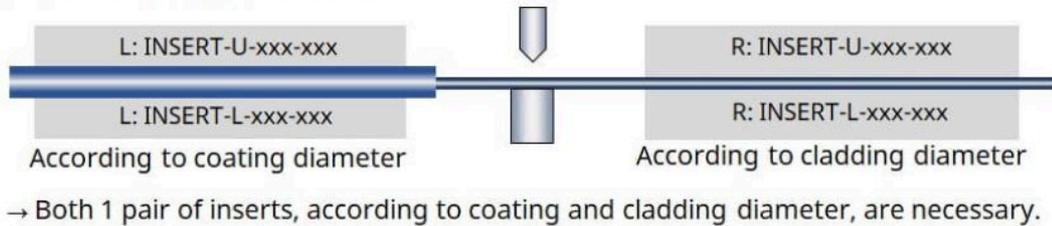
Inserts are selected according to fiber coating diameter and cladding diameter.

Therefore, the standard configuration does not include inserts. Please refer to the below table and purchase inserts separately.

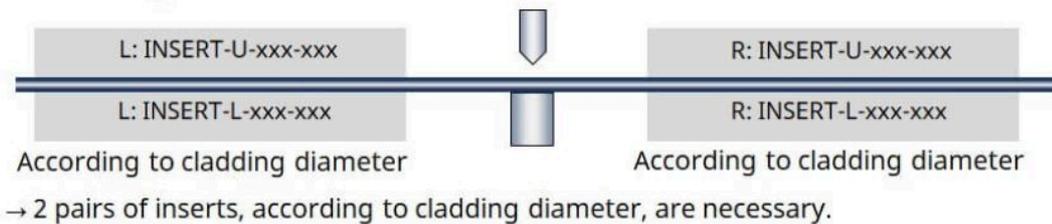
UPPER INSERT \ LOWER INSERT		INSERT-U-80-400	INSERT-U-500-750 *1		INSERT-U-1000-1250 *1		INSERT-U-1500-1750 *1		INSERT-U-2000-2250 *1		INSERT-U-2500-3000 *1	
			Size 500	Size 750	Size 1000	Size 1250	Size 1500	Size 1750	Size 2000	Size 2250	Size 2500	Size 3000
INSERT-L-80		54-107										
INSERT-L-125		84-167										
INSERT-L-160		105-213										
INSERT-L-250		167-333										
INSERT-L-400		267-533	400-533									
INSERT-L-500-750 *1	Size 500	334-667	467-667	550-667								
	Size 750		634-868	717-1000	787-1000							
INSERT-L-1000-1250 *1	Size 1000			884-1118	954-1188	1037-1272						
	Size 1250				1120-1355	1204-1438	1287-1522					
INSERT-L-1500-1750 *1	Size 1500					1370-1605	1454-1688	1537-1772				
	Size 1750						1620-1855	1704-1938	1780-2015			
INSERT-L-2000-2250 *1	Size 2000							1870-2105	1947-2288	2030-2265		
	Size 2250								2114-2348	2197-2432	2280-2515	
INSERT-L-2500-3000 *1	Size 2500									2364-2598	2447-2682	2614-2848
	Size 3000										2780-3015	2947-3182

\*1: Each side of this insert is equipped with a groove that is marked with the size of the fiber diameter on the table.

### Case 1: To cleave stripped fiber



### Case 2: To cleave glass rod

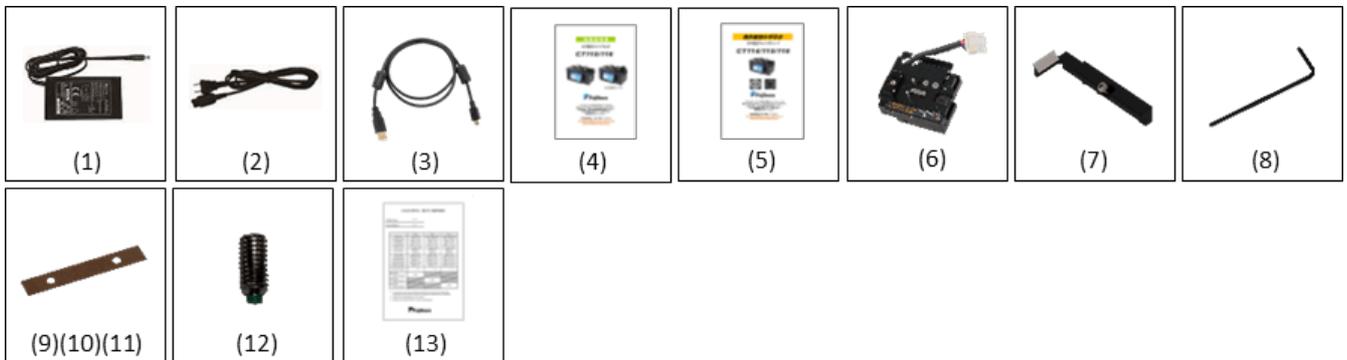


The detail how to select insert. please visit this link. [Learn more!](#)



# Standard Package

Item	Model	Qty
Large Diameter Optical Fiber Cleaver	CT114, CT115, CT116	1 pc
1 AC Adapter	ADC-21	1 pc
2 AC Power Cord	ACC-08, 09, 10, 11 or 12	1 pc
3 USB Cable	USB-01	1 pc
4 Instruction Manual	—	PDF file stored in Cleaver
5 Technical Reference	TR-CT115-E	1 pc
6 Fiber Holder Adapter	FHA-CT115	1 pc
7 Fiber Height Checking Mirror	CM-CT115	1 pc
8 Hexagonal Wrench	HEX-01	1 pc
9 Height Adjusting Spacer 30μm	SPA-CT105-30	3 pcs
10 Height Adjusting Spacer 50μm	SPA-CT105-50	3 pcs
11 Height Adjusting Spacer 100μm	SPA-CT105-100	3 pcs
12 Screw for Insert	SCREW-CT-01	1 set (15 pcs)
13 Cleave test report	CR-CT115	1 pc



# Specifications

Item		CT114	CT115	CT116
Applicable fiber	Fiber type	Silica fiber		
	Fiber count	Single fiber		
	Cladding dia.	80 to 660µm	80 to 1250µm	
	Coating dia.	81 to 3182µm		
Clamping force adjustment	Under cladding dia 400µm : Adjustment with magnet cladding dia. 400µm to 660µm : Adjustment with magnet and screw *1	Auto adjustment with motor		
Backstop adjustment	Manual	Auto adjustment with motor		
Capability of setting range for tension *2	0 to 3,000gf	0 to 10,000gf		
Capability of setting range for cleave length *3	30 to 75 mm			
Cleave angle *4	Cladding dia. 125µm	Avg. 0.2°		
	Cladding dia. 400µm	Avg. 0.3°		
Cleave angle *5	Cladding dia. 660µm	Avg. 0.4°		
	Cladding dia. 1000µm	—	Avg. 1.0°	
Fiber twister	None		Equipped	
Angled Cleave angle	None		Approx. 0° to 15°±%	
Capability of setting range for rotation angle	None		0° to 360°	
Blade life	Approx. 200,000 fiber cleaves at cladding dia. 250µm and 400µm *7			
Physical description	Dimensions W	Approx. 240mm without projection	Approx. 240mm without projection	Approx. 240mm without projection
	Dimensions D	Approx. 133mm without projection	Approx. 133mm without projection	Approx. 133mm without projection
	Dimensions H	Approx. 142mm without projection	Approx. 142mm without projection	Approx. 151mm without projection
	Weight	Approx. 3.6kg without inserts and with fiber holder adapter	Approx. 3.9kg without inserts and with fiber holder adapter	Approx. 4.2kg without inserts and with fiber holder adapter
Environmental condition	Temperature	Operate: 0 to 40 °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. DC19V, Max 2.1A		
Display	LCD monitor	TFT 4.95 inches with touch screen		
Interface	PC	USB2.0 Mini B type		
Wireless communication	Ground point	Applicable by M3 size truss screw.		
	RFID	Compliant with ISO 15693		
Data storage	Cleave mode	100 cleave modes		
	Cleave result	10000 cleaves		
Other features	Automatic functions	Auto cleave mode select by RFID tag		
		Auto backstop adjustment		
		Motorized blade position change		
	Software for PC	Auto tension select		
Auto clamping force adjustment				
		Firmware update via internet		
		Cleave parameter upload and download		

**Note**

- \*1. Clamp lid screw may be necessary depending on the fiber type when it cleaves < 400 µm.
- \*2. There are some cases that the set tension is different from the actual tension.
- \*3. Cleave length means distance between end surface of the left side clamp and end surface of the cleaved fiber.
- \*4. Measured with an interferometer at room temperature, not with a splicer. The average cleave angle changes depending on the environmental conditions, blade condition, operating method, and cleanliness.
- \*5. Measured with a splicer (FSM-100P+) at room temperature. The average cleave angle changes depending on the environmental conditions, blade condition, operating method, and cleanliness.
- \*6. Maximum cleaved angle changes depending on the fiber type cleaved and clamp position.
- \*7. Support 10,000 cleaves per position at cladding dia. 250µm and 400µm.  
20pos. X 10,000 cleaves = 200,000 cleaves  
The blade life changes depending on the environmental conditions, operating method, and the fiber type cleaved.

# Options

Item	Model	Remark	
Blade for Replacement	CB-06A	Blade for Replacement	
	INSERT-U-80-400	54 to 667µm	
Upper Insert *1	INSERT-U-500-750	500 side: 400 to 868µm 750 side: 550 to 1118µm	
	INSERT-U-1000-1250	1000 side: 787 to 1355µm 1250 side: 1037 to 1605µm	
	INSERT-U-1500-1750	1500 side: 1287 to 1855µm 1750 side: 1537 to 2105µm	
	INSERT-U-2000-2250	2000 side: 1780 to 2348µm 2250 side: 2030 to 2598µm	
	INSERT-U-2500-3000	2500 side: 2280 to 3015µm 3000 side: 2614 to 3182µm	
	Lower Insert *1	INSERT-L-80	54 to 107µm
		INSERT-L-125	84 to 167µm
INSERT-L-160		107 to 213µm	
INSERT-L-250		167 to 333µm	
INSERT-L-400		267 to 533µm	
INSERT-L-500-750		500 side: 334 to 667µm 750 side: 634 to 1000µm	
INSERT-L-1000-1250		1000 side: 884 to 1272µm 1250 side: 1120 to 1522µm	
INSERT-L-1500-1750		1500 side: 1370 to 1772µm 1750 side: 1620 to 2015µm	
INSERT-L-2000-2250		2000 side: 1870 to 2265µm 2250 side: 2114 to 2515µm	
INSERT-L-2500-3000		2500 side: 2364 to 2848µm 3000 side: 2780 to 3182µm	
Insert Set 80-1750 µm *1	INSERT-L-80: 2 pcs		
	INSERT-L-125: 2 pcs		
	INSERT-L-160: 2 pcs		
	INSERT-L-250: 2 pcs		
	INSERT-L-400: 2 pcs		
	INSERT-L-500-750: 2 pcs		
	INSERT-L-1000-1250: 2 pcs		
	INSERT-L-1500-1750: 2 pcs		
	INSERT-U-80-400: 2 pcs		
	INSERT-U-500-750: 2 pcs		
Height Adjusting Spacer, 10 pcs. Pack	SPA-CT-105-30-10SET	Height Adjusting 30µm	
	SPA-CT-105-50-10SET	Height Adjusting 50µm	
	SPA-CT-105-100-10SET	Height Adjusting 100µm	
Fiber Holder	FH110-60	60µm Coating Diameter	
	FH110-100	100µm Coating Diameter	
	FH110-125	125µm Coating Diameter	
	FH110-150	150µm Coating Diameter	
	FH110-180	180µm Coating Diameter	
	FH110-210	210µm Coating Diameter	
	FH110-250	250µm Coating Diameter	
	FH110-300	300µm Coating Diameter	
	FH110-350	350µm Coating Diameter	
	FH110-400	400µm Coating Diameter	
	FH110-500	500µm Coating Diameter	
	FH110-600	600µm Coating Diameter	
	FH110-700	700µm Coating Diameter	
	FH110-800	800µm Coating Diameter	
	FH110-900	900µm Coating Diameter	
	FH110-1000	1000µm Coating Diameter	
	FH110-1100	1100µm Coating Diameter	
	FH110-1200	1200µm Coating Diameter	
	FH110-1300	1300µm Coating Diameter	
	FH110-1400	1400µm Coating Diameter	
FH110-1500	1500µm Coating Diameter		
FH110-1600	1600µm Coating Diameter		
FH110-1700	1700µm Coating Diameter		
FH110-1800	1800µm Coating Diameter		
FH110-1900	1900µm Coating Diameter		
FH110-2000	2000µm Coating Diameter		

\*1. Depending on the coating material and coating structure, inserts other than the recommended inserts may be required.



Contact us

1-5-1, Kiba, Koto-ku, Tokyo 135-8512, Japan  
 ©2023-2026, Fujikura Ltd. All rights reserved. 2026 91310-2309-0130-04 2603  
 Specifications are subject to change without notice.