

*Large Diameter Optical Fiber Cleaver*

# CT114 / CT115 / CT116

**Better Cleaving Quality  
And Better Usability**



**CT115**

Automated clamp force optimization



**CT116**

Angled cleaving capability

Automated clamp force optimization



**CT114**

Manual clamping system

# Features

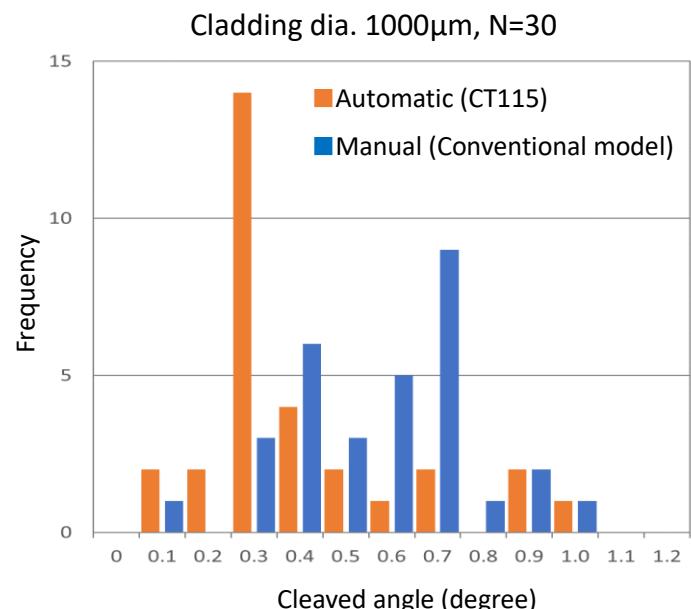
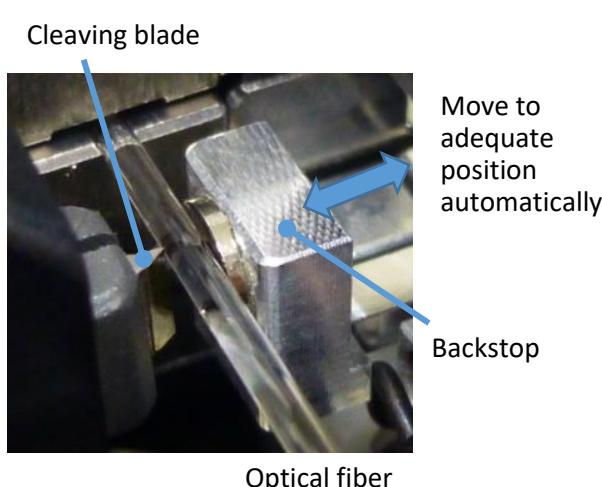
## Auto Backstop (for CT115/CT116)

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.

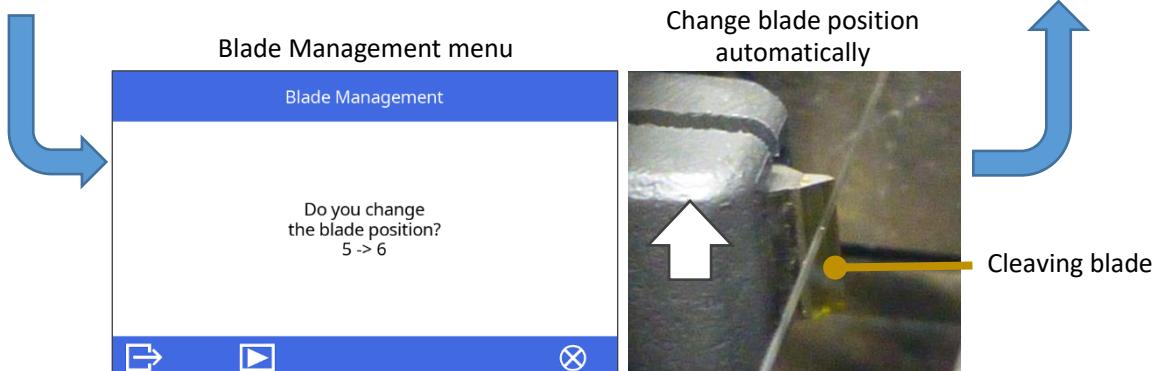
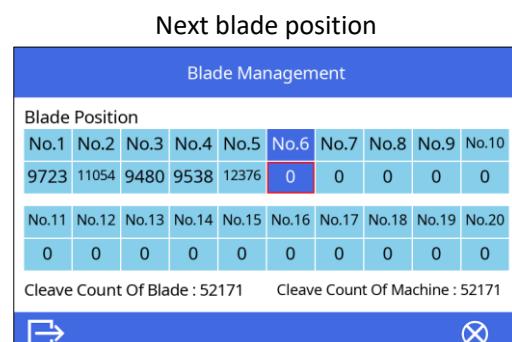
The CT115 and CT116 are equipped with the auto backstop function. It detects the backstop position and moves to the correct position automatically.

It provides both stable cleaving and shortened 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.

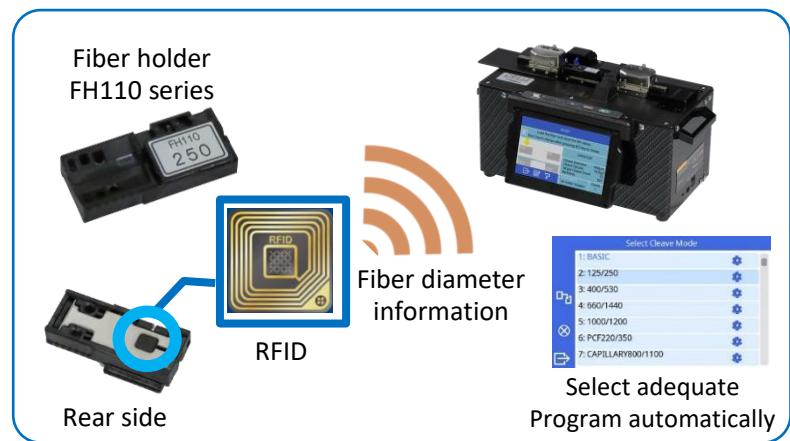


# Wireless communication function

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.



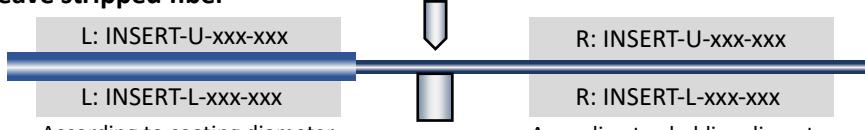
## INSERT

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
	Size 1750				1620-1855	1704-1938
INSERT-L-2000-2250 *1	Size 2000				1870-2105	1947-2288
	Size 2250				2114-2348	2197-2432
INSERT-L-2500-3000 *1	Size 2500					2280-2515
	Size 3000					2364-2598
						2447-2682
						2614-2848
						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

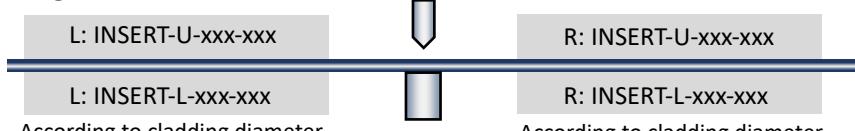


According to coating diameter

According to cladding diameter

→Both 1 pair of inserts, according to coating and cladding diameter, are necessary.

### Case 2: To cleave glass rod



According to cladding diameter

According to cladding diameter

→2 pairs of inserts, according to cladding diameter, are necessary.

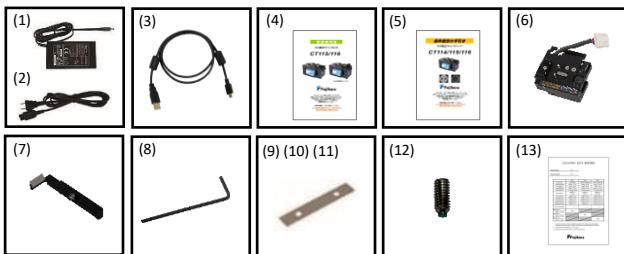
Below URL and right QR shows the detail how to select insert.

[https://www.fusionsplicer.fujikura.com/wp-content/uploads/2023/05/SP\\_CT115\\_E\\_0027.jpg](https://www.fusionsplicer.fujikura.com/wp-content/uploads/2023/05/SP_CT115_E_0027.jpg)



# 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° *6
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
	Dimensions D	Approx. 133mm without projection	Approx. 133mm without projection
	Dimensions H	Approx. 142mm without projection	Approx. 142mm without projection
	Weight	Approx. 3.6kg without inserts and with fiber holder adapter	Approx. 3.9kg 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	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	
		Cleaving 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.



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## Options

Item	Model	Remark
Blade for Replacement	CB-06A	Blade for Replacement
	INSERT-U-80-400	54 to 667μm
	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
	INSERT-L-80	54 to 107μm
	INSERT-L-125	84 to 167μm
	INSERT-L-160	107 to 213μm
Upper Insert*1	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-80 : 2 pcs INSERT-125 : 2 pcs INSERT-160 : 2 pcs INSERT-250 : 2 pcs INSERT-400 : 2 pcs INSERT-500-750 : 2 pcs INSERT-1000-1250 : 2 pcs INSERT-1500-1750 : 2 pcs INSERT-80-400 : 2 pcs INSERT-U-500-750 : 2 pcs INSERT-U-1000-1250 : 2 pcs INSERT-U-1500-1750 : 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

Note

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