

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

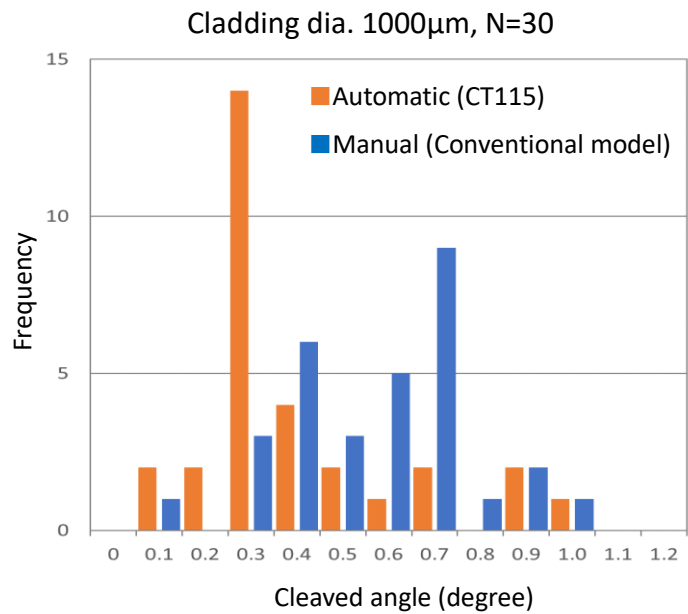
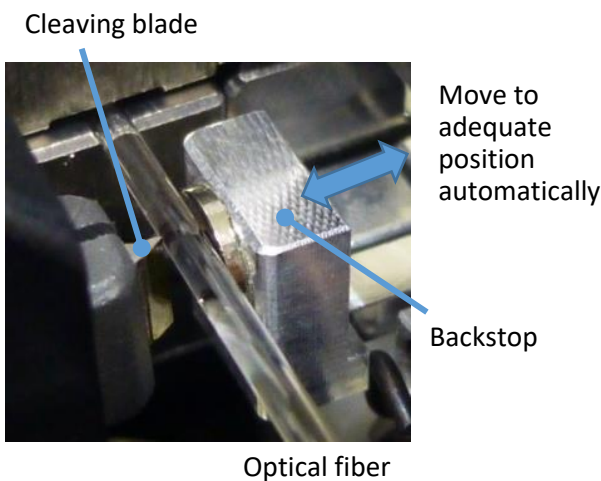
## Auto Backstop (for CT115/CT116)

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 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.

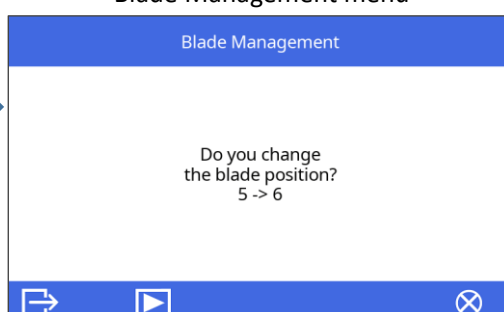
It's time to rotate blade

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					

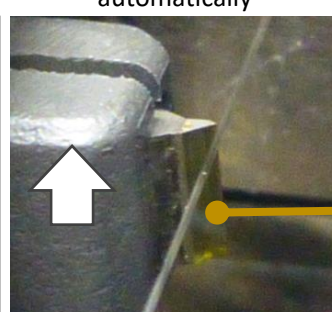
Next blade position

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



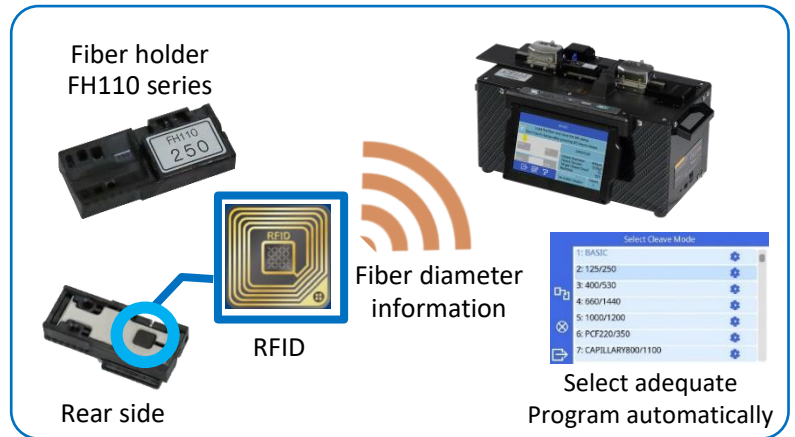
Change blade position automatically



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.



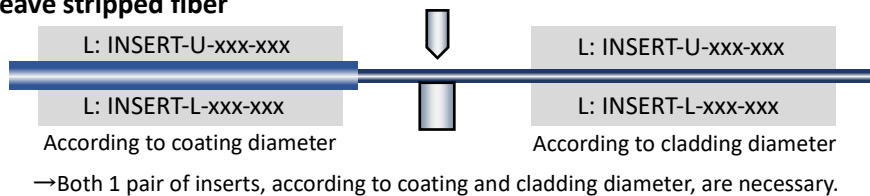
## INSERT

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.

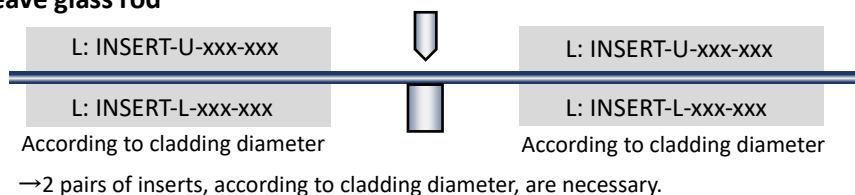
UPPER INSERT		INSERT-U-80-400	INSERT-U-500-750 *1		INSERT-U-1000-1250 *1		INSERT-U-1500-1750 *1		INSERT-U-2000-2250 *1		INSERT-U-2500-3000 *1	
			Size 500	Size 750	Size 1000	Size 1250	Size 1500	Size 1750	Size 2000	Size 2250	Size 2500	Size 3000
LOWER INSERT												
INSERT-L-80		54-107										
INSERT-L-125		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



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

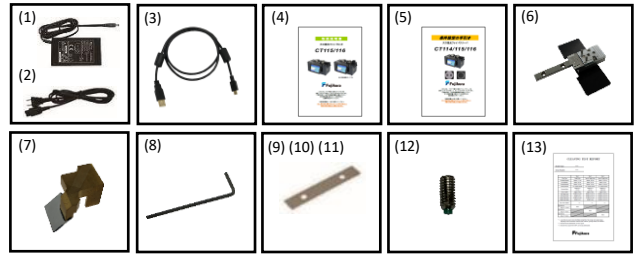
[https://www.fusionsplicer.fujikura.com/wp-content/uploads/2023/05/SP\\_CT115\\_E\\_0027.jpg](https://www.fusionsplicer.fujikura.com/wp-content/uploads/2023/05/SP_CT115_E_0027.jpg)





# 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	Auto adjustment with motor				
	cladding dia. 400µm to 660µm : Adjustment with magnet and screw *1					
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	—				
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	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				
	Ground point	Applicable by M3 size truss screw.				
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				
		Auto tension select				
Software for PC	Auto clamping force adjustment					
	Firmware update via internet					
Cleaveing 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.



Please visit our web site!

<https://www.fusionsplicer.fujikura.com>

## Options

Item	Model	Remark
Blade for Replacement	CB-06A	Blade for Replacement
Upper Insert*1	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	2250 side: 2030 to 2598µm
		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-500750	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	
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
Fiber Holder	SPA-CT-105-100-10SET	Height Adjusting 100µm
	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.

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