

CT-104+



CT-105+



CT-106+

## CT-104+, CT-105+ and CT-106+ Fiber Cleavers

When exceptional cleave quality is required for fibers up to 1,250  $\mu\text{m}$ , the new large diameter CT-104+/CT-105+/CT-106+ cleaver family 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.

Excess clamping force may deform the coating or worsen the cleave angle due to rotational stress by the clamps. Therefore, to get good cleaving quality, the clamping force should be the minimum force that does not slip while the cleaver applies fiber tension. The optimum clamping force depends on the optical fibers structure and coating material. The CT105+/CT-106+ cleavers feature a new technology that finds the optimum clamping force automatically and accurately.

### Specifications

PARAMETER	CT-104+	CT-105+	CT-106+
Applicable optical fiber	Glass optical fibers, capillary		
Number of fibers	Single		
Cladding diameter	80 - 600 $\mu\text{m}$	80 - 1,250 $\mu\text{m}$	
Coating diameter	160 - 3,000 $\mu\text{m}$		
Fiber clamping	Manual clamping	Automatic clamping	
Cleaving length	5 - 40 mm		
Cleaving angle <sup>1</sup>	Average 0.2 degrees or less (Cladding diameter 125 $\mu\text{m}$ ) <sup>2</sup>		
	Average 0.3 degrees or less (Cladding diameter 400 $\mu\text{m}$ ) <sup>2</sup>		
	Average 0.4 degrees or less (Cladding diameter 600 $\mu\text{m}$ ) <sup>3</sup>	Average 1.0 degrees or less (Cladding diameter 1,000 $\mu\text{m}$ ) <sup>3</sup>	
Angled cleaving	–	–	0 - 15° (up to 800 $\mu\text{m}$ cladding fiber)
Blade life <sup>4</sup>	200,000 fibers (Cladding diameter 250 $\mu\text{m}$ )		
Dimensions (WxDxH)	240x134x155 mm		240x134x163mm
Weight	3.4 kg	3.5 kg	3.8 kg
Humidity	0 to 95% RH, non-condensing		
Temperature	0°C to +50°C (operation) -40°C to +80°C (storage)		
Number of cleaving modes	Maximum 100		
Cleave result	1,000 cleave data		
Power supply	AC adapter : ADC-19A Input : AC100 to 240 V (50 to 60 Hz) (max. 20 W)		
Monitor	TFT 4.7 inches color LCD		
PC interface	USB 2.0 (Mini-B type) for PC communication		

#### Notes:

1. A new blade was used to cleave the special fibers. The average cleave angle changes depending on the environmental conditions, blade condition, operating method, and cleanliness.
2. Measured with an interferometer at room temperature.
3. Measured with the splicer, FSM-100P+.
4. The blade life changes depending on the environmental conditions, operating method, and the fiber type cleaved.

## CT-104+, CT-105+ and CT-106+ Fiber Cleavers

### CT-104+ Features

- 80 - 600  $\mu\text{m}$  cladding diameter
- Manual clamping system
- Up to 100 stored program modes
- 200,000 cleaves per blade for 250  $\mu\text{m}$  fiber
- Optional adapter for use with FH-100 series fiber holders
- Communication to a PC via USB

### CT-105+ Features

- 80 - 1,250  $\mu\text{m}$  cladding diameter
- Automatic clamping system
- Up to 100 stored program modes
- 200,000 cleaves per blade for 250  $\mu\text{m}$  fiber
- Optional adapter for use with FH-100 series fiber holders
- Fiber backstop standard
- Communication to a PC via USB

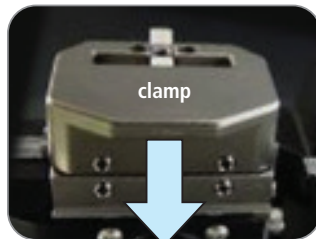
### CT-106+ Features

- 80 - 1,250  $\mu\text{m}$  cladding diameter
- Automatic clamping system
- Up to 100 stored program modes
- Angled cleaving function (up to 15° on fibers up to 800  $\mu\text{m}$  cladding diameter)
- 200,000 cleaves per blade for 250  $\mu\text{m}$  fiber
- Optional adapter for use with FH-100 series fiber holders
- Communication to a PC via USB



#### Angled Cleaving

Angled cleaving from up to 15° is possible for fibers up to 800  $\mu\text{m}$  (only for CT-106+)



#### Automatic Clamp Function

Clamp optical fiber with programmable force automatically (CT-105+ and CT-106+ only). No compressed air or torque wrenches required.



#### Backstop

Improves cleave quality especially for large-diameter fibers as well as lower tension fiber cleaving and is standard on CT-105+ cleavers.

## Ordering Information

DESCRIPTION	AFL NO.
<b>CT-104+ Large Diameter Optical Fiber Cleaver</b> includes: ADC-19A AC adapter, ACC-09 AC power cord, HEX-01 hex wrench, USB-01 USB Cable and M-CT104+ instruction manual	S016417
<b>CT-105+ Large Diameter Optical Fiber Cleaver</b> includes: ADC-19A AC adapter, ACC-09 AC power cord, HEX-01 hex wrench, USB-01 USB Cable and M-CT105+ instruction manual	S016076
<b>CT-106+ Angled Large Diameter Optical Fiber Cleaver</b> includes: ADC-19A AC adapter, ACC-09 AC power cord, HEX-01 hex wrench, USB-01 USB Cable and M-CT106+ instruction manual	S016077

## Accessories

DESCRIPTION	AFL NO.
CB-06A Replacement Blade	S016078
AC adapter ADC-19A	S015523
AC power cord ACC-09	S014390
<b>Fiber Holder Inserts</b>	
Master fiber holder insert kit (includes all available inserts listed below)	S016098
INSERT-L-80	S016085
INSERT-L-125	S016086
INSERT-L-160	S016087
INSERT-L-250	S016088
INSERT-L-400	S016089
INSERT-L-500-750	S016090

DESCRIPTION	AFL NO.
<b>Fiber Holder Inserts (continued)</b>	
INSERT-L-1000-1250	S016091
INSERT-L-1500-1750	S016092
INSERT-L-2000-2250	S016093
INSERT-L-2500-3000	S016094
INSERT-U-80-400	S016079
INSERT-U-500-750	S016080
INSERT-U-1000-1250	S016081
INSERT-U-1500-1750	S016082
INSERT-U-2000-2250	S016083
INSERT-U-2500-3000	S016084

DESCRIPTION	AFL NO.
<b>Height adjusting spacer (10 piece pack)</b>	
SPA-CT105-30-10SET (30 $\mu\text{m}$ )	S016095
SPA-CT105-50-10SET (50 $\mu\text{m}$ )	S016096
SPA-CT105-100-10SET (100 $\mu\text{m}$ )	S016097
<b>Optional Items</b>	
AD-CT105-FH100 Fiber Holder Adapter	S016450
TD-01 Torque Driver	S016738

## CT-104+, CT-105+ and CT-106+ Fiber Cleavers

### Insert Selection Guide

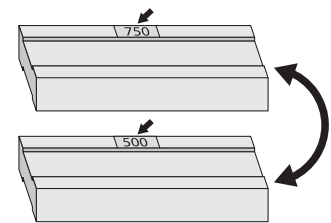
LOWER INSERT	UPPER INSERT											
	INSERT-U-80-400	INSERT-U-500-750 <sup>1</sup>		INSERT-U-1000-1250 <sup>1</sup>		INSERT-U-1500-1750 <sup>1</sup>		INSERT-U-2000-2250 <sup>1</sup>		INSERT-U-2500-3000 <sup>1</sup>		
		500	750	1000	1250	1500	1750	2000	2250	2500	3000	
INSERT-L-80	54-107											
INSERT-L-125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

**Note:**

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

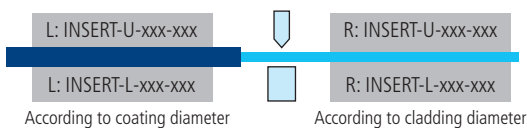
### Upper and lower inserts can be changed up or down depending on required fiber fit into the V-groove.

Inserts 500 μm and above are double-sided. Therefore, the visible label when inserted indicates the size of the insert you are using.



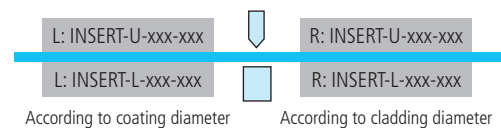
### Upper and lower inserts are necessary for both left and right side clamps.

Case 1: Cleaving coating-stripped fiber



Inserts according to both coating diameter and cladding diameter are necessary.

Case 2: Cleaving glass rod



Two insert pairs of the same size according to rod diameter are necessary.