



CT-104+

CT-105+



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

When exceptional cleave quality is required for fibers up to 1,250 μ 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 μm 80 - 1,250 μm | | | | | | |
| Coating diameter | 160 - 3,000 μm | | | | | | |
| Fiber clamping | Manual clamping | Automatio | clamping | | | | |
| Cleaving length | | 5 - 40 mm | | | | | |
| | Average 0.2° or less (Cladding diameter 125 μm) ² | | | | | | |
| Cleaving angle ¹ | Average 0.3° or less (Cladding diameter 400 μm) ² | | | | | | |
| cicaving angle | Average 0.4° or less | | .0° or less | | | | |
| | (Cladding diameter 600 µm) ³ | (Cladding diam | eter 1,000 µm)³ | | | | |
| Angled cleaving | _ | _ | 0 - 15° (up to 800 μm cladding fiber) | | | | |
| Blade life ⁴ | 200,000 fibers (10,000 fibers x 20 positions for 250 μm cladding fiber) | | | | | | |
| Dimensions (WxDxH) | 240 x 134 | 240 x 134 x 163 mm | | | | | |
| Weight | 3.4 kg | 3.5 kg | 3.8 kg | | | | |
| Humidity | 0 to 95% RH, non-condensing | | | | | | |
| Temperature | 0°C to +50°C (operation) | | | | | | |
| <u> </u> | -40°C to +80°C (storage) | | | | | | |
| Number of | Maximum 100 | | | | | | |
| cleaving modes Cleave result | 1 000 cleave data | | | | | | |
| 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 µm cladding diameter
- Manual clamping system
- Up to 100 stored program modes
- 200,000 cleaves per blade for 250 μm fiber
- Optional adapter for use with FH-100 series fiber holders
- Communication to a PC via USB

CT-105+ Features

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

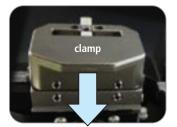
CT-106+ Features

- 80 1,250 μm cladding diameter
- Automatic clamping system
- Up to 100 stored program modes
- Angled cleaving function (up to 15° on fibers up to 800 μm cladding diameter)
- 200,000 cleaves per blade for 250 μm 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 µm (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. |
|---|---------|
| CT-104+ Large Diameter Optical Fiber Cleaver includes: ADC-19A AC adapter, ACC-09 AC power cord, HEX-01 hex wrench, USB-01 USB Cable and M-CT104+ instruction manual | S016417 |
| CT-105+ Large Diameter Optical Fiber Cleaver includes: ADC-19A AC adapter, ACC-09 AC power cord, HEX-01 hex wrench, USB-01 USB Cable and M-CT105+ instruction manual | S016076 |
| CT-106+ Angled Large Diameter Optical Fiber Cleaver 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

| DE: | SCRIPTION | AFL NO. |
|------|-------------------------------|---------|
| CB- | 06A Replacement Blade | S016078 |
| AC | adapter ADC-19A | S017104 |
| AC | power cord ACC-09 | S014390 |
| Fib | er Holder Inserts | |
| 1 | ster fiber holder insert kit | S016098 |
| , | ludes upper and lower inserts | |
| tror | n 80 – 1750) | |
| INS | ERT-L-80 | S016085 |
| INS | ERT-L-125 | S016086 |
| INS | ERT-L-160 | S016087 |
| INS | ERT-L-250 | S016088 |
| INS | ERT-L-400 | S016089 |
| INS | ERT-L-500-750 | S016090 |

| DESCRIPTION | AFL NO. | | | | | |
|----------------------------------|---------|--|--|--|--|--|
| Fiber Holder Inserts (continued) | | | | | | |
| 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. | | | | | |
|---|---------|--|--|--|--|--|
| Height adjusting spacer (10 piece pack) | | | | | | |
| SPA-CT105-30-10SET (30 μm) | S016095 | | | | | |
| SPA-CT105-50-10SET (50 μm) | S016096 | | | | | |
| SPA-CT105-100-10SET (100 μm) | S016097 | | | | | |
| Optional Items | | | | | | |
| AD-CT105-FH100 | S016450 | | | | | |
| Fiber Holder Adapter | 3010430 | | | | | |
| TD-01 Torque Driver | S016738 | | | | | |



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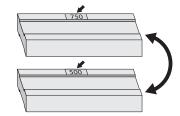
Insert Selection Guide

| 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-2000-22501 | | INSERT-U-2500-30001 | |
| | | | 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 ¹ | 500 | 334-667 | 467-667 | 550-667 | | | | | | | | |
| III/2EVI-F-200-730 | 750 | | 634-868 | 717-1000 | 787-1000 | | | | | | | |
| INSERT-L-1000-1250 ¹ | 1000 | | | 884-1118 | 954-1188 | 1037-1272 | | | | | | |
| III/2EVI-F-1000-1530. | 1250 | | | | 1120-1355 | 1204-1438 | 1287-1522 | | | | | |
| INSERT-L-1500-1750 ¹ | 1500 | | | | | 1370-1605 | 1454-1688 | 1537-1772 | | | | |
| | 1750 | | | | | | 1620-1855 | 1704-1938 | | | | |
| INSERT-L-2000-22501 | 2000 | | | | | | | 1870-2105 | 1947-2288 | 2030-2265 | | |
| | 2250 | | | | | | | | 2114-2348 | 2197-2432 | 2280-2515 | |
| INSERT-L-2500-3000 ¹ | 2500 | | | | | | | | | | 2447-2682 | |
| | 3000 | | | | | | | | | | 2780-3015 | 2947-3182 |

Note

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.



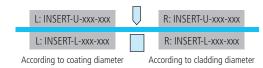
Upper and lower inserts are necessary for both left and right side clamps.

Case 1: Cleaving coating-stripped fiber

| L: INSERT-U-xxx-xxx | | R: INSERT-U-xxx-xxx | |
|-------------------------------|---|------------------------------|-----|
| L: INSERT-L-xxx-xxx | | R: INSERT-L-xxx-xxx | |
| According to coating diameter | Δ | according to cladding diamet | ter |

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.

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