

## Instruction Manual of Fiber Cleaver

1. Please read this manual carefully before use:

- (1). The optical fiber cleaver is a precision device, cannot bear strong impact, in case the performance of the device would be affected:
- (2). Optical fiber and optical fiber fragments are very fine, and the tip is sharp. Require to adopt a special container for collection of optical fiber fragments to prevent optical fiber fragments from pricking the skin or entering into eyes during use. ;
- (3). Do not touch the blade directly with your hands, and also do not touch the blade during maintenance;
- (4). Please do not disassemble or oil the device, please contact the manufacturer's after-sales service personnel for repairs.

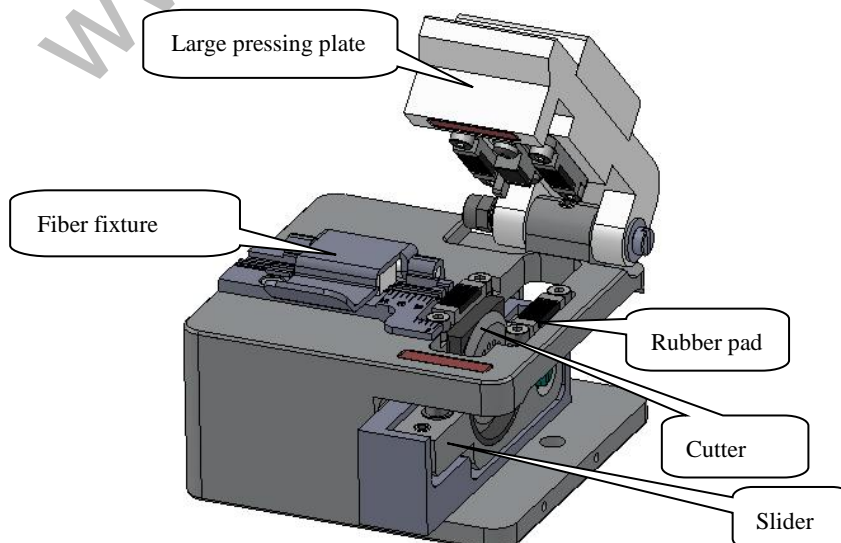
### 2. Basic parameters

Applicable fiber	Silica optical fiber
Applicable fiber coating diameter	φ0.25、φ0.9、2.0、3.0、3×2
Applicable bare fiber diameter	125μm
Cut fiber length	5~16mm(φ0.25); 10~16mm(φ0.9)
Dimension	58mm(W)×57mm(D)×52mm(H)
Weight	270g
Cutting angle	≤0.5°
Cutter height	0.005-0.01MM
Rotary surface	16
Cutter life	48000 times

### Environmental requirements

Operating environment	Altitude:0~5000m;RH%:0~95% (no cold condensation);
Working temperature	Temperature:-25°C~55°C
Storage condition	Temperature:-40°C~80°C

### 3. Structure



#### 4. Operation methods

(1). Open the large pressing plate and cover of the fixture, and push the slider installed with the cutter to a side;

(2). Use a fiber stripper to peel off the coating layer of the optical fiber, reserve a bare fiber length of 30-40mm, wrap the optical fiber with absorbent cotton or tissue paper dipped in ethanol

alcohol, and then wipe the optical fiber clean. The same absorbent cotton or tissue paper could not be used for the 2nd time. (Note: highly recommend the adoption of ethanol alcohol with a purity above 99%);

(3). After visually aligning the edge of the optical fiber coating layer with the appropriate scale on the cutting scale (10-16cm), put the optical fiber into the guide groove with the left hand, and require the bare optical fiber to be placed straight on the rubber pad;

(4). Close the fixture cover and large pressing plate, then push the slider installed with the cutter to make the cutter cut the lower surface of the optical fiber and slide freely to the other side to cut off the optical fiber;

(5). Hold the cutter with your left hand, open the large pressing plate with your right hand

(6). Take the optical fiber with the left hand and open the fixture cover with the right hand, carefully remove the optical fiber of the fiber end. Note: the clean optical fiber end should not be touched with other objects.

(7). Troubleshooting, the reasons for poor cutting may be caused by:

A The optical fiber is not placed straight on the rubber pad;

B. The cutter height is too high;

C. Foreign matters such as dust on the cutter and the rubber pad.

#### 5. Maintenance

(1) For daily cleaning, adopt a cotton swab moistened with the ethanol alcohol to clean the rubber surface of the upper and lower pressing pads of the optical fiber and the blade of the cutter, especially, when the cutting effect is poor, the cleaning must be done in time, and the groove of the optical fiber fixture also often needs to be cleaned;

(2) Method for adjusting the blade, after cutting several times, the edge of the knife is abraded, and phenomena such as, fiber inseverable, section broken occur.

At this time, the position of the blade needs to be adjusted:

A. Adopt a wrench to loosen (not need to remove) the cutter locking screw;

B. With a cotton swab against the blade, rotate the cutter, and turn the blade to the next new edge;

C. Adopt a wrench to lock the screw for tightening the cutter, and the locking must be confirmed;

D. Try to cut the fiber 1 or 2 times, and observe the fiber end of the fiber on the screen of the fusion splicer. If the fiber end is not good, please adjust the height of the blade.



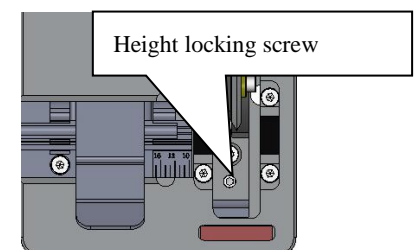
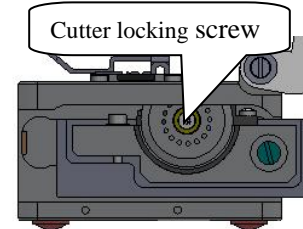
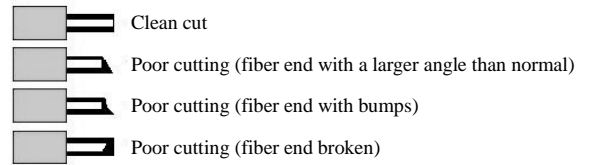
When adjusting the position of the blade, do not turn the blade directly with your hand to avoid injury; do not use tweezers or other metals to turn the blade to avoid damage to the blade.

#### 3. Adjustment of the blade height

A. Push the slider to the position where the cutting is done, and loosen the height locking screw;

B. Turn the height adjustment screw a little to the required direction and re-tighten it as required, clockwise for increase the height, and counterclockwise for decrease the height. After adjustment, tighten the height locking screw.

#### 4. Prone to appeared problems and adjustment methods



- A. The optical fiber is unable to be cut off, phenomena, such as bumps and bevels, etc. exist; If such problems occur after the cutter has been fully adjusted according to the method above, the problems may be caused by the blade being too low. Please adjust the blade height according to the above method.
- B. Fiber cracked, shadow with cutting section of the fiber, and the fiber angle is large;  
Those problems may be caused by the high blade, please adjust the blade height according to the above method.
- C. When the blade is low or high, large bevel angle is prone to exist;  
Mainly caused by cracks on the fiber end, observe if any shadow near the fiber end, the problem may be due to the surface where the crack occurs accidentally is not aligned with the direction of the microscope.

#### 5. Recycling of cutter

The cutter is a regular circle. In theory, any point on the circle can be used for cutting for more than 3000 times. Therefore, the area between 1-16 can also be selected for cutting. After the blade positions 1-16 are all used, refer to the method for blade height adjustment, and adjust the 1-16 blade height to a higher position. Repeated use of another cycle therefore, is possible.

#### 6. Cutter replacement

- A. Loosen the cutter locking screw with a wrench, and take out the locking screw and gasket;
- B. Open the large pressing plate, carefully clamp both sides of the cutter with tweezers, and gently remove the cutter and put it aside;
- C. Clamp a new cutter with tweezers, hold the cutter flat, put it in from a position slightly higher than the cutter shaft, make the hole on the cutter just fall on the shaft, then adopt a cotton swab against the blade, rotate the cutter, and make the blade rotate to point 1;
- D. Put the gasket of cutter onto the corresponding position of the cutter, screw and tighten the locking screw;
- ⚠ While adopting the tweezers, do not touch the blade, in case the blade would be damaged resulting in poor cutting performance.**