



OPTICAL FIBER FUSION SPLICER

# INTELLIGENT OPTICAL FIBER FUSION SPLICER PRODUCT MANUAL

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[www.signalfiresplicer.com](http://www.signalfiresplicer.com)

SIGNAL FIRE TECHNOLOGY CO., LTD.





OPTICAL FIBER FUSION SPLICER

# OPTICAL FIBER FUSION SPLICER



AI-8



AI-7

# NEW PRODUCT LAUNCH

## CLASSIC MASTERPIECE



OPTICAL FIBER FUSION SPLICER

Signal Fire AI-8 use the latest core alignment technology with auto focus and six motors, it is a new generation of fiber fusion splicer. It is fully qualified with 100 km trunk construction, FTTH project, security monitoring and other fiber cable splicing projects. The machine uses industrial quad-core CPU, fast response, is currently one of the fastest fiber splicing machine in the market; with 5-inch 800X480 high-resolution screen, the operation is simple and intuitively; and up to 300 times focus magnifications, making it is very easy to observe the fiber with naked eyes. 6 seconds speed core alignment splicing, 15 seconds heating, the working efficiency increased by 50% compared to ordinary splicing machines. Under the conditions of rigorous testing, the performance is still outstanding; toolbox is small, exquisite, durable, and with unique bench design. The design of operating platform reflects the humanistic care; unique lighting design, it is convenient for night construction or repair. Screen brightness is adjustable and it is convenient for outdoor sunshine environment operation. The core parts are using imported brands, aviation metal body material with exquisite details. With the combination of advanced technology and design, the new generation of optical fiber fusion splicer will bring you a reliable and comfortable user experience.

# MASTERPIECE HIGH-END LUXURY



OPTICAL FIBER FUSION SPLICER



Six motors  
Core alignment

Disassembly free three-in-one fiber holder

6 seconds fast splicing

300 times magnification auto focus

15 seconds fast heating

7800mAh large capacity battery

● Once splicing reaches to 50,000 times free replacement a new machine

# METAL BODY AESTHETIC DETAILS



OPTICAL FIBER FUSION SPLICER

- 18 patent results
- Lifetime free warranty

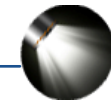
Automatic heating

5 inch display

Simultaneously align fibers

Loss display

Protective case

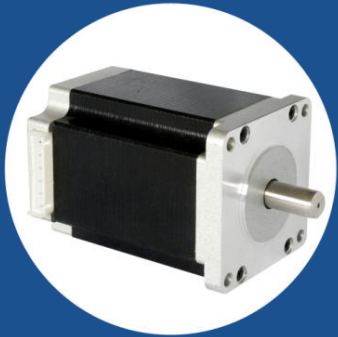


LED light

Convenient for night operation

Battery press & remove

# CORE PARTS QUALITY ASSURANCE



Siemens stepper motor



Roth ROUST linear guide



Sanyo lithium battery



Aviation metal material

# THE TOOLBOX COMES WITH A STOOL TO FACILITATE THE CONSTRUCTION WORKERS.



OPTICAL FIBER FUSION SPLICER



Remove  
the stool



Do not need to take out the  
splicer machine from the  
toolbox while working.

Fiber cleave operator station



Two  
layers

Stool can bear  
**100kg**



# Lighting for splicer Convenient for night operation

W e a r e s o h a r d o n l y f o r y o u





# INDUSTRIAL QUAD-CORE CHIP CPU



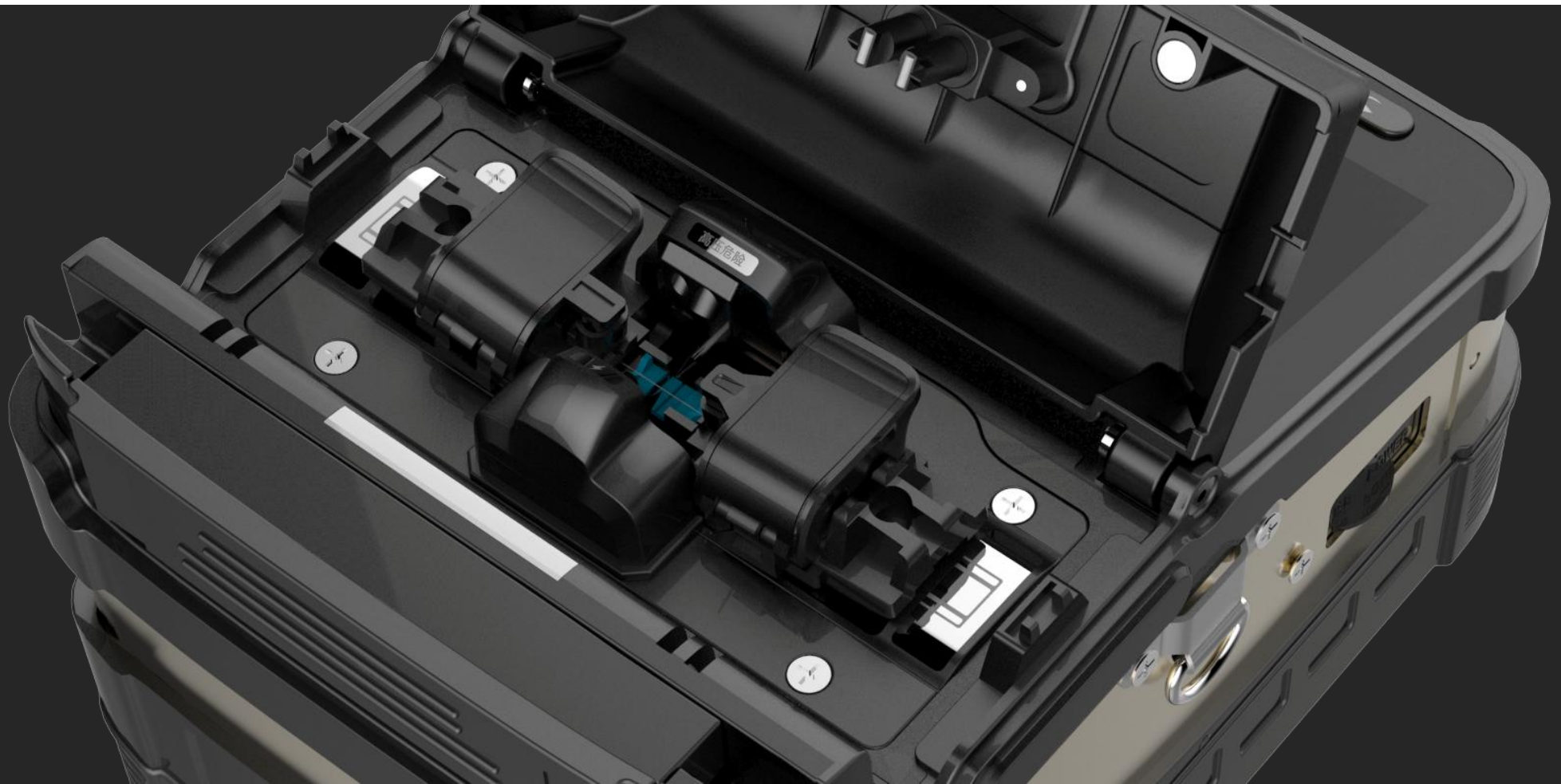


OPTICAL FIBER FUSION SPLICER

# 3 IN 1 FIBER HOLDER



SM, MM, bare fiber, pigtail, rubber-insulated, multi fiber cable



# THE BATTERY POPUP AUTOMATICALLY



**7800 mA high-capacity  
lithium battery**

- charging time  $\leq$  3.5 hours
- continuous splicing and heating  
about 200 times



Press to popup  
the battery

# Show good performance in plateau, desert, and extreme cold environment



# BASIC PARAMETER

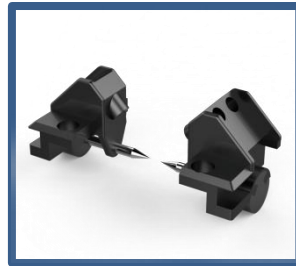


|                            |   |                                |   |
|----------------------------|---|--------------------------------|---|
| <b>Fiber alignment</b>     | Core/cladding alignment / Manual alignment                            | <b>Built-in lighting</b>       | easy for night operation  |
| <b>Splicing time</b>       | 6S ( AI-8 ) / 8S ( AI-7 )   | <b>Tension Test</b>            | Standard 2N   |
| <b>Heating time</b>        | 15S ( AI-8 ) / 18S ( AI-7 )   | <b>Fiber holders</b>           | 3 in 1 fiber holder, SM, MM, bare fiber, pigtail, rubber-insulated, multi fiber cable   |
| <b>Heating mode</b>        | Automatic heating ( Preheating )                                      | <b>Magnification</b>           | 300 for X or Y view, 150 for X or Y view  |
| <b>Focus mode</b>          | Six motors Auto focus   | <b>Screen</b>                  | 5 inch TFT color display  |
| <b>Applicable Fibers</b>   | SM(G.652&G.657)、MM ( G.651 ) 、DS(G.657)、NZDS ( G.655 )                | <b>Splicing Mode</b>           | Normal / high precision splicing  |
| <b>Splice Loss</b>         | 0.025dB ( SM ) 、0.01dB ( MM )<br>0.04dB ( DS/NZDS )                   | <b>Splicing record storage</b> | Synchronize to the phone, the server to cloud storage unlimited   |
| <b>Control technology</b>  | Real-time control and calibration of fusion ARC                       | <b>Built-in battery</b>        | 7800 mA high-capacity lithium battery, charging time ≤ 3.5 hours, continuous splicing and heating about 200 times               |
| <b>Return loss</b>         | Better than 60DB  | <b>Power supply</b>            | Input AC100-240V 50 / 60HZ, output DC13.5V / 4A, the current power mode can be identified, real-time detection of battery power |
| <b>Fiber diameter</b>      | Cladding Diameter : 80-150μm<br>Coating Diameter : 100-1000μm         | <b>Operating Conditions</b>    | Temperature -15 ~ +50 °C, humidity: <95% RH (no condensation)<br>Working altitude: 0 ~ 5000m. Resist max. wind speed: ≤ 15m / s |
| <b>Fiber Cleave Length</b> | Coating less than 250μm : 8-16mm<br>Coating less than 250-1000μm:16mm | <b>Shrinkable tube</b>         | 60mm、40mm   |

# Accessories in the tool box



Fiber Cleaver



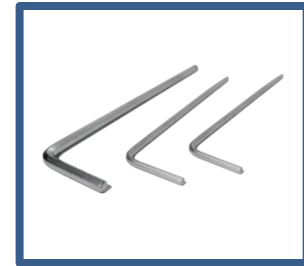
Spare electrode



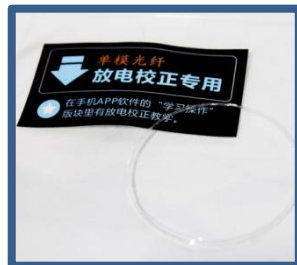
Wire stripping pliers



Miller stripper



Hex key



Fiber for  
ARC calibration



Strap for carrying  
case



Strap for fusion  
splicer



Power Adapter

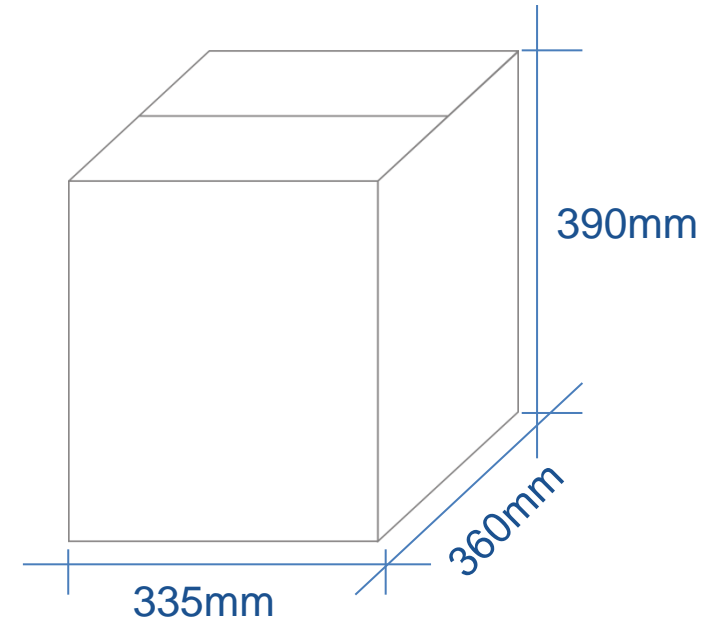
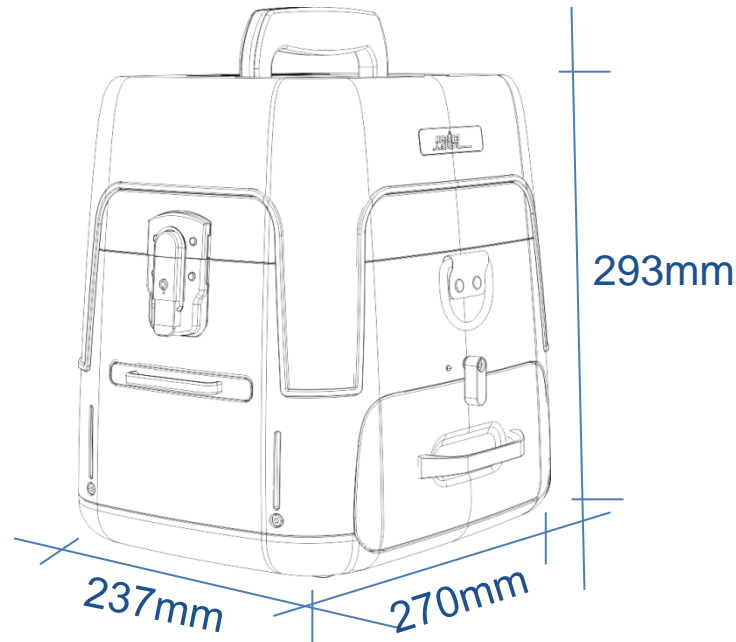
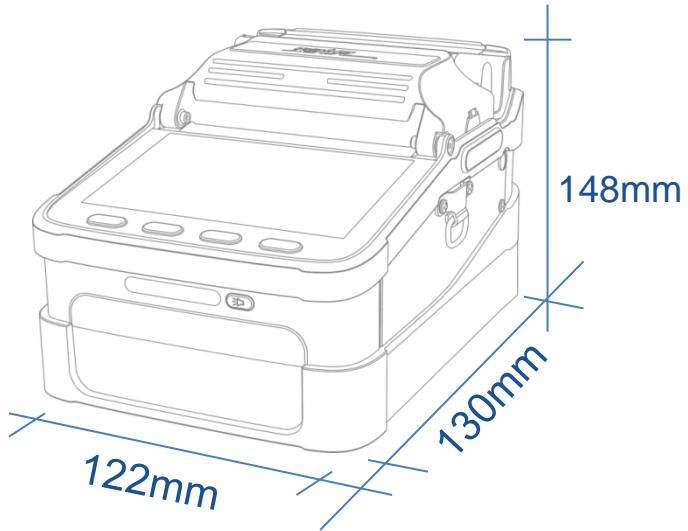


Alcohol Bottle



Brush

# SIZE





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# ABOUT US



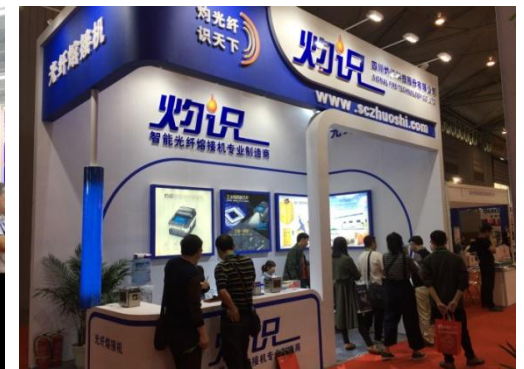
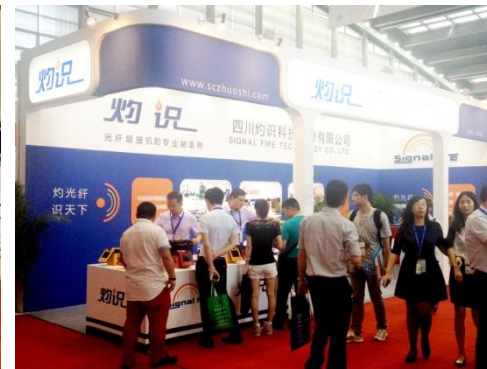
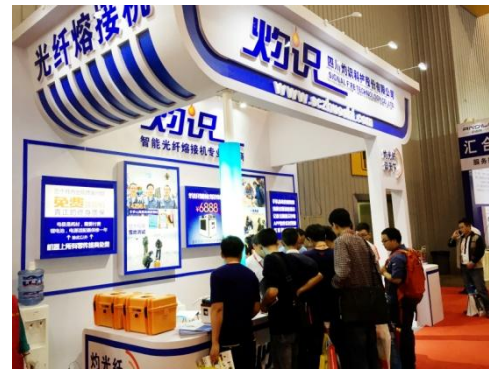
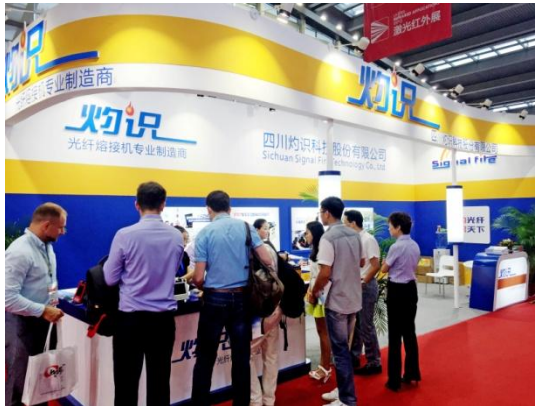
Signal Fire Technology Co.,Ltd. Is A High-Tech Enterprise Which Is Specialized In Research And Development, Production And Sales Of Communications Products. The Main Products Are Automatic Intelligent Optical Fiber Fusion Splicer, Optical Time Domain Reflectometer (OTDR), Light Power Meter, Optical Cable Construction Tools Equipment, Fiber Fusion And Taper Equipment, Optical Cable Blowing Machine Etc. Our Products Are Widely Used In China Telecom, China Mobile, China Unicom, Broadcasting, Electricity, Railways, Petrochemical, Military, Coal Industry, Research Institutions And Other Fields.



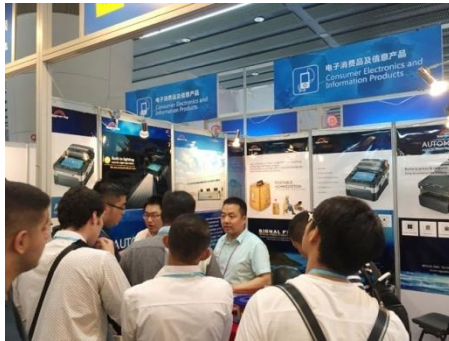
Our Company Has A Modern Production Plant And Standardized Office Buildings, With A Total Area Of Nearly 6,000 Square Meters, About 200 Employees, Including 10 Senior Engineers, 12 Master's Degree Or Above, Bachelor Degree Or Above Accounted For 45%. Our Company Owns Independent Intellectual Property Rights For Signal Fire Automatic Intelligent Optical Fiber Fusion Splicer And Its Related Products. Our Products Have Been Sold To Many Countries And Regions, Including North America, South America, Europe And Southeast Asia Etc, Our Products Have Gained Highly Praise From Customers.



# EXHIBITION PHOTOS



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# INTELLECTUAL PROPERTY



EMC(CE)



FCC



ROHS

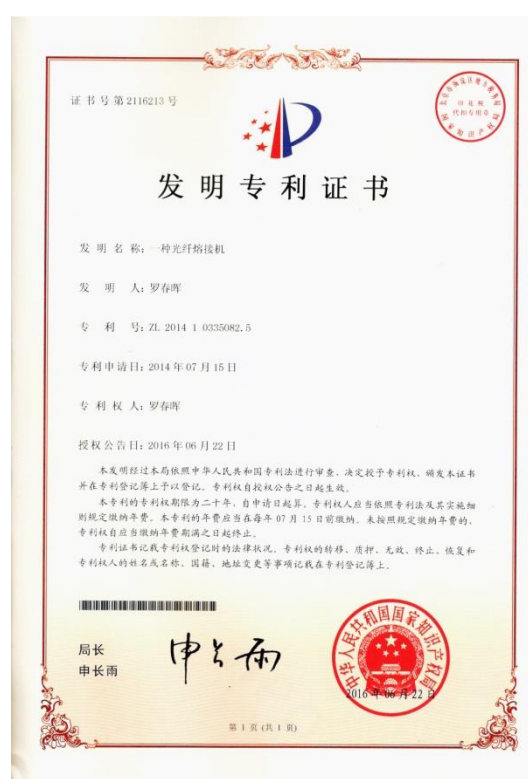
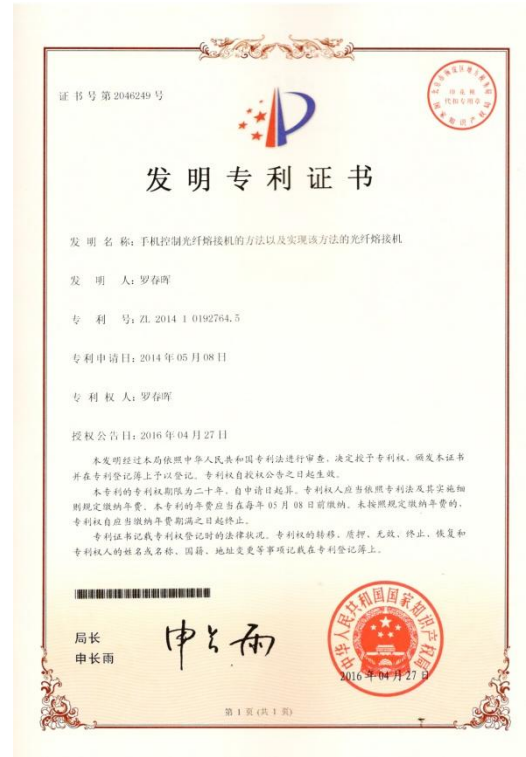
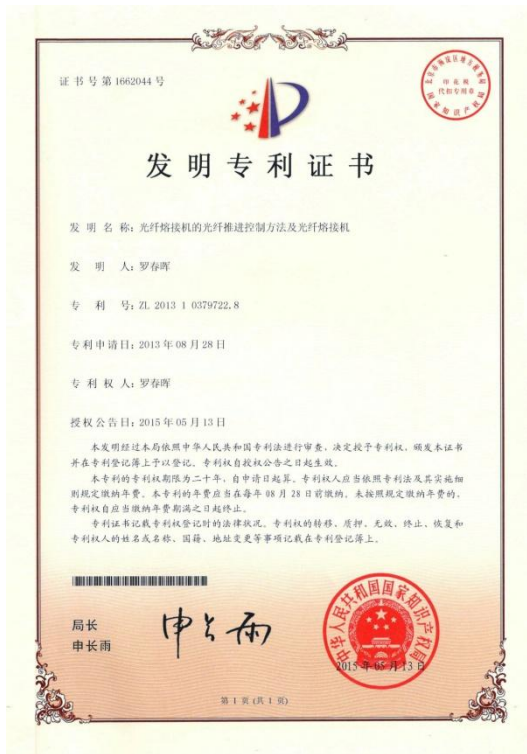


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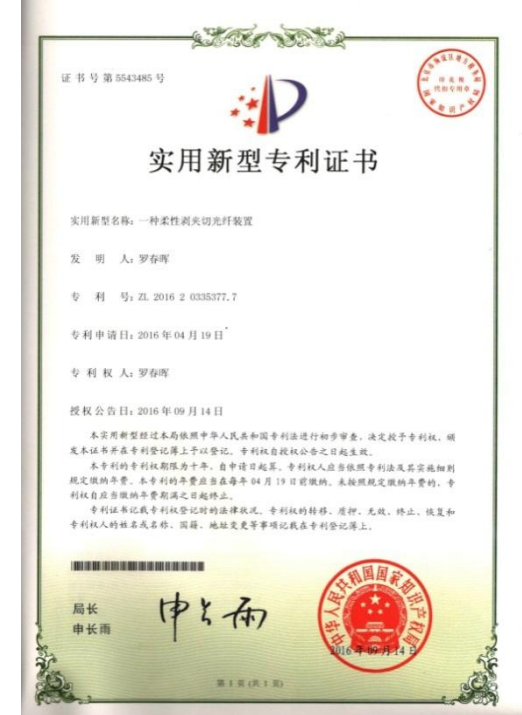
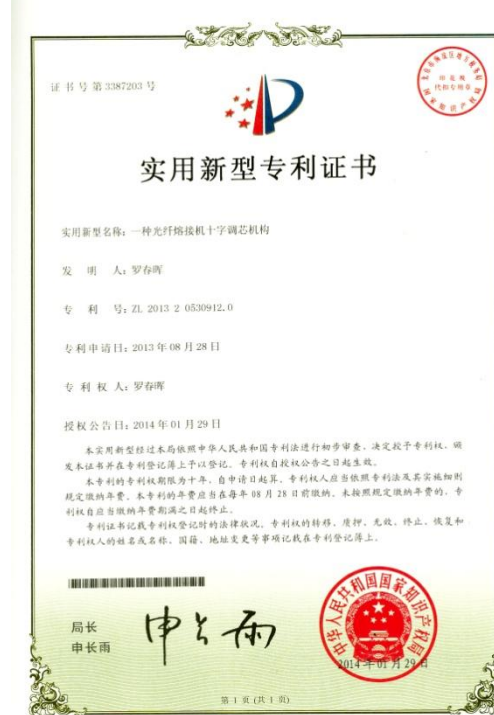
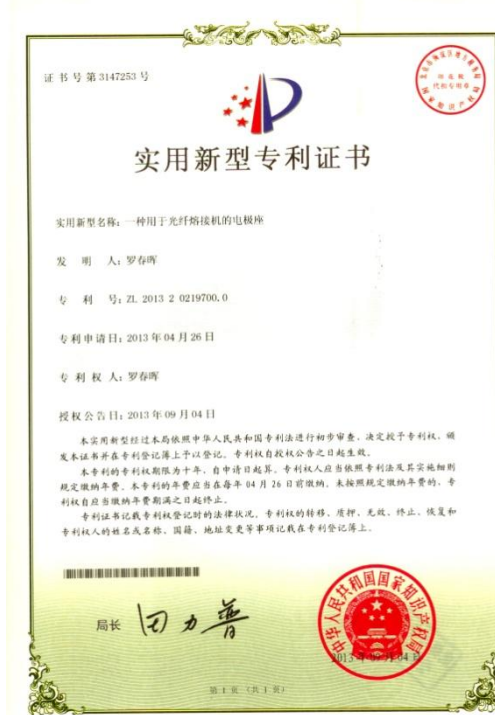
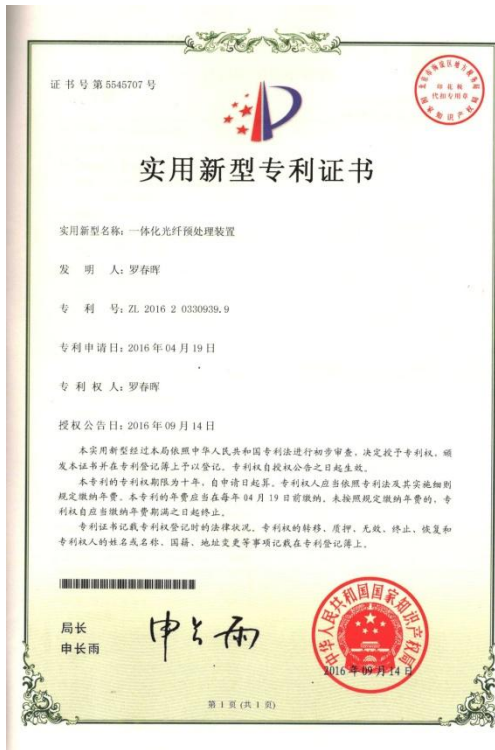
# PATENTS FOR INVENTIONS





OPTICAL FIBER FUSION SPLICER

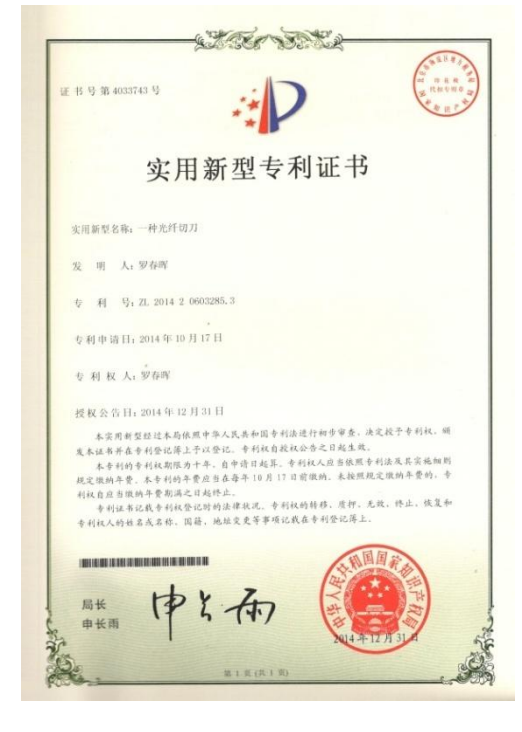
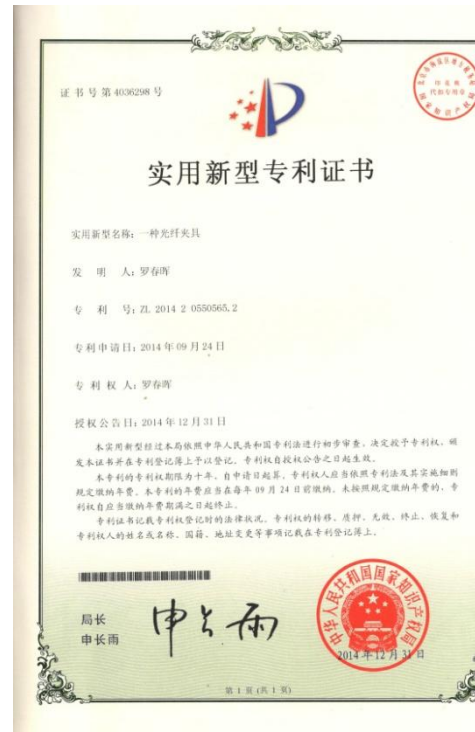
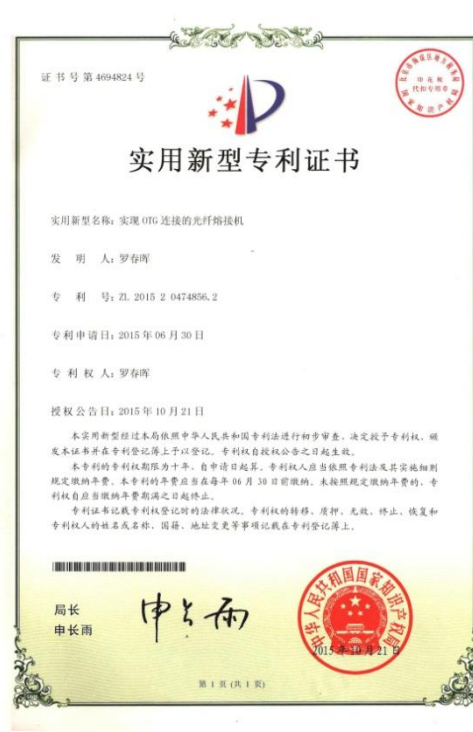
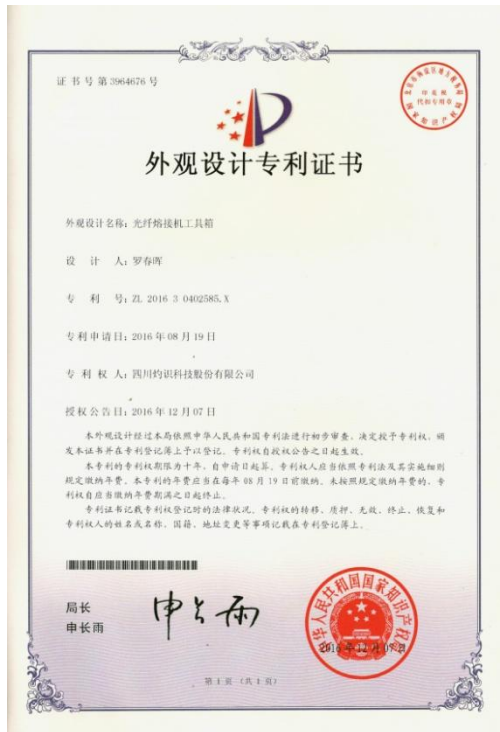
# PATENTS OF UTILITY MODEL





OPTICAL FIBER FUSION SPLICER

# PATENTS OF UTILITY MODEL



# SERVICE COMMITMENT

1

If there is quality problem from the date of purchase within three months, **we offer free replacement machine.**

The customer bear the out and home shipping cost.

2

Lifetime warranty, lifetime free parts, but these circumstances are not within the scope of this provision.

- Except for the cleaver, Miller clamp, stripping pliers, fiber holders and other tools whose life depends on the frequency of use and the use of the environment.
- Electrodes are consumables, it is termination after the electrodes splicing 3,000 times.
- Battery warranty for one year, it is in free warranty where it is damaged or can not be charged in one year.

3

When the splicing reaches **50,000** times, **our company will replace a brand new machine** for customer free of charge.