

## **FITEL- The launch of 2 new Fusion Splicers - S178A & S153A**

In January 2010 Furukawa Electric Co. LTD. (FEC) will introduce the latest FITEL Core Alignment Fusion Splicer.

### **The S178A.**

The S178A is the successor to the best selling S177A. The S178A has a more rugged, compact and lighter body compared to the previous model with vastly improved splicing & heating time.

Using the same rugged metal body of S178A, FEC will also launch another new Fusion Splicer in February 2010.

### **The S153A.**

The S153A is a new concept machine which uses an 'Active clad alignment' function, which achieves lower splicing loss with less user skills required compared to a conventional Fixed V-groove Clad Alignment Fusion Splicer.

These two machines are both designed to endure harsh operating conditions by improving shock / impact resistance with rubber pads embedded on 4 corners of the splicer body. Both fusion splicers also achieve water resistance compliant to IPX2 and dust resistance compliant to IP5X.

Another key feature of the S178A and the S153A is the significantly reduced operation time. Protection sleeve shrink time is mere 25 seconds, while splicing requires only 7 seconds with S178A. Power saving technology used in these machines allows up to 200 splicing cycles (splicing and heating) with 2 built in rechargeable batteries.

By combining improved speed, precision, durability and portability in one body, the S178A and S153A ushers in entirely new possibilities for fusion splicing applications.

#### ■ Background of development

Currently, Core Alignment fusion splicers are widely used in FTTx, LAN, Long-haul installation, data center and/or OEM applications across the world and traditionally FITEL is well known for its hand-held fusion splicer series. With this even more compact S178A, FEC applied new design ideas to meet our customer's requirements for more rugged splicers resulting in increased drop/water/dust resistance. The S178A also enables shorter splicing/heating time by using a redeveloped electronic circuit and design. In using this new design, FEC also achieved 30% less power consumption when the unit is in stand-by mode compared with the previous model (S177A).



The S178A is capable of splicing common telecommunication fibers such as SM / MM / DS and EDF/ High-delta fibers which is also widely used for optical components. In addition, the S178A also boasts splice programs for BIF / UBIF (Bend Insensitive Fiber / Ultra Bend Insensitive Fiber) which has been in more common use for FTTH applications.

The S153A (Active Clad Alignment Splicer) is developed based on the concept of 'Easy and precise splicing by anybody'. The S153A can perform hassle free splicing compared with conventional Clad Alignment Splicers, with an apparent cost benefit compared to Core Alignment Splicers. S153A, users can enjoy almost the same benefit as S178A users, in speed, precision, durability and portability.

■ Features

- Shock resistant design

4 rubber pads on the corners of the machine boosts the shock resistance significantly compared with the previous models. The S178 is capable of producing precise splicing after 76cm drops from 5 different angles. \*1

- Dust / Water resistant design

New design achieved IPX2 water resistance and IP5X dust resistance.\*2 \*3

- Compatible with Splice on Connector (SOC)

Both S178A and S153A are SOC compatible with Seikoh Giken and Diamond SA connectors.

■ Specification

	S178A	S153A
<b>Applicable fibers</b>	<b>SM, MM, DSF,EDF,BIF/UBIF</b>	<b>SM, MM, DSF, BIF/UBIF</b>
<b>Cladding Diameter</b>	<b>80μm ~ 150μm</b>	
<b>Splice Time</b>	<b>7 sec *4</b>	<b>9 sec *4</b>
<b>Heating Time</b>	<b>25 sec *5</b>	
<b>Battery Capacity</b>	<b>200 cycles *6</b>	
<b>Dimension (mm): Excluding Rubber Pads</b>	<b>127W x 199D x 105H</b>	
<b>Weight ((kg): Excluding Batteries</b>	<b>1.9</b>	<b>1.7</b>

\*1These test were performed at Furukawa Electric Co. LTD. Laboratories, and do not guarantee that the machine will be undamaged under these conditions. Impact angles are Front, Rear, Bottom, Left & Right hand side. \*2: IPX2 rating drip proof means that the machine can be exposed to 3mm/min drip for 10 min with 15° tilt and still function. \*3: IP5X rating dust proof means that the machine can be exposed to dust particles with a diameter of 0.1 μm to 25μm for 8 hours and still function. \*4: Using Semi auto mode. \*5: Using S921 (60mm) or S922 (40mm) protection sleeves, using Pre-heating mode. \*6: The number of the splice and heat cycles the machine can produce using 2 fully charged brand new batteries at room temperature of 20 degree Celsius. Depending on the condition of the battery and the operational environment, this number may vary.