FTTX All in one fusion splicer

PCT/KR2006/001487

Swift-F1

The revolution of a splicer



- The Single All-in-one Device (strip, clean, cleave, splice, sleeve)
- Operation time: 60 sec (incl. connector assembly, 0.9mm fiber)
- No crack with heating stripping, more then 3.5kgf
- No matter who or when, even a beginner can use easily



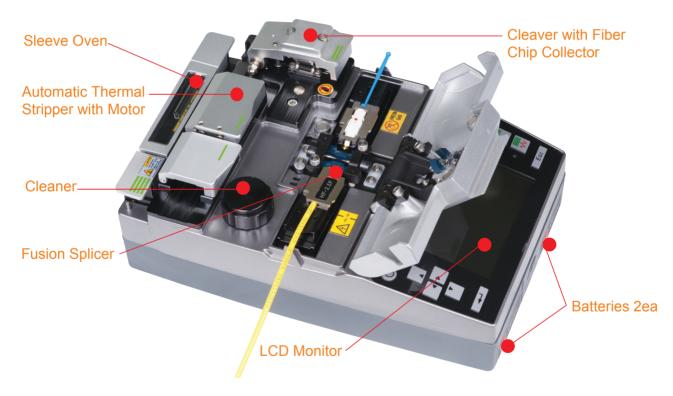
Swift-F1

Swift F1 is the highly sophisticated and integrated clad alignment fusion splicer, which has been designed to perform the major 5 multifunctional features systematically: heating, stripping, cleaning, cleaving, splicing and sleeving.

The Swift F1 has been designed for fusion splicing and splice-on connector (Swift Connector) of FTTH network applications.

The structural and complementary features of Swift F1 have been applied to the design of Swift Connectors to resolve the problems of mechanical connectors in past: low quality, weak durability and high maintenance cost. Swift F1 has turned around the way that the connector users, who were used to thinking previously, as from the installation and maintenance costs of splice-on connector, had been more expensive than a mechanical connector to more cost effective than mechanical connector purchasing cost of splice-on connector.

Swift F1 is a versatile fusion splicer which can perform all kinds of FTTH fusion splicing for the ordinary 0.25mm, 0.9mm, 2mm~3mm cable, indoor cable and others splicing connectors.



Swift-F1 Examples



Chest Harness Work Table



From Premise Enclosure



On a Telephone pole



On a Bucket Truck



Stripper- high tensile force by heating stripping-3.5kg/f

- · No crack by heating stripping
- Over 1 million stripping with an electric motor.
- Stripping time 1.5 sec



Cleaner

• The cleaning of V-Groove is the most Important, due to the V-Groove splicing method.



Cleaving

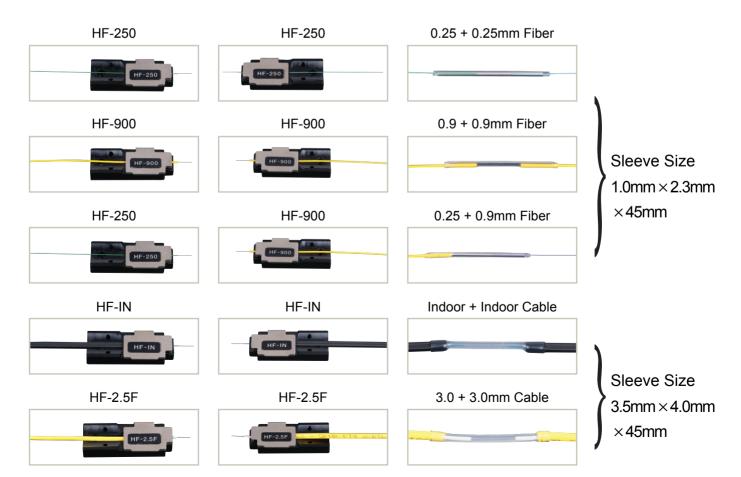
- · One-Action Cleaving
- Oil Damper System
- · Built-in Rubbish bin



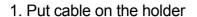
Sleeving

- Place the ferrule in the oven so mark face the front(user).
- Heating Time: 15sec(0.9mm Fiber)

Fiber to Fiber Splicing & Fiber Holder Types.



Splice-on Connector Assembly Order: 1kit / 60sec(0.9mm fiber)





3. Put ferrule on the holder



5. Splice



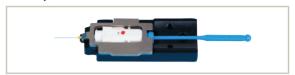
7. Assemble boot



2. Strip, Clean, Cleave



4. Strip, Clean, Cleave



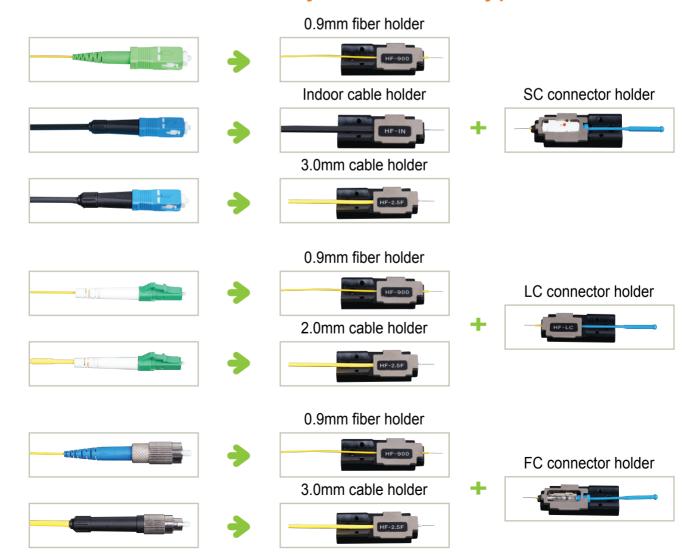
6. Sleeve



8. Completion

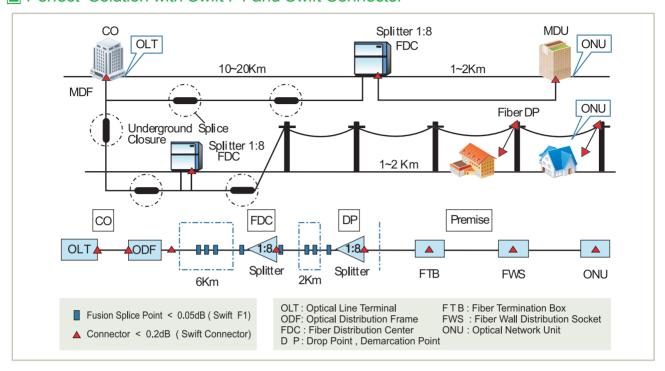


The Choice of Holder by Connector Type



Standard FTTx Network

■ Perfect Solution with Swift F1 and Swift Connector



Using Pigtail Connector



Using Swift Connector



Extra accessories like splice cassette (tray) and sleeve support are not necessary-keeping the space neat.

Using Mechanical Splicer

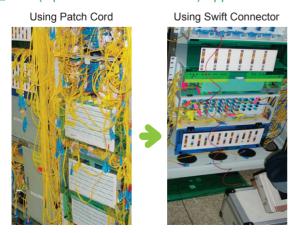


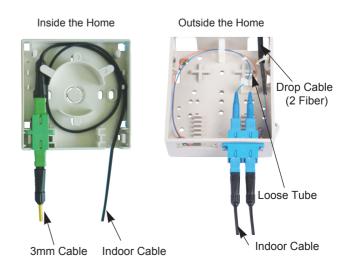
Using Swift Connector



No Connector cabinet is needed, so maintenance is not necessary

ODF(Optical Distribution Frame) Applied Case

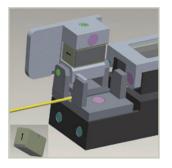




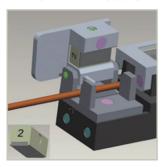
The Choice of a Lever Block by Cable & Connector Type

Choose a lever block on the left side of the oven. (1EA inclusive, 3EA optional) (Loosen set screw and then change a block)

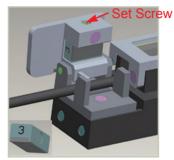
0.25/0.9mm fiber



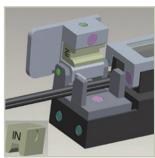
2.0/2.4mm cable



3.0mm cable



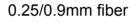
Indoor cable



Choose a lever block on the right side of the oven. (1EA inclusive, 3EA optional)

SC/FC connector

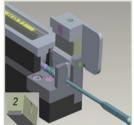
LC connector 2.0/2.4mm cable

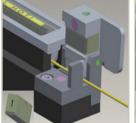


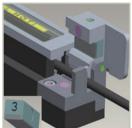
3.0mm cable

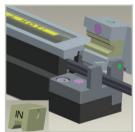
Indoor cable











Package



Swift F1 Fusion Splicer



Work Table



Battery Charger



Batteries (2EA)



Electrode



DC Adaptor









AC Adaptor

Sleeve for Connector

0.25mm, 0.9mm

Indoor, 2~3mm



Sleeve for fiber or cable

0.25mm, 0.9mm

Indoor, 2~3mm





Soft Case

SPECIFICATIONS		
Subject	Description	
Alignment	Fixed V - Groove (Clad to Clad)	
Cladding Diameter	125μm	
Coating Diameter	250 ~ 900μm	
Average Splice Loss	0.03dB(SM), 0.02dB(MM), 0.06dB(NZDS,DS)	
Splicing Time (Typical)	7sec	
Heating Time	15sec(0.9mm Fiber), 70sec(Indoor, 3.0mm Cable)	
Sleeve Length	45mm(For Fiber), 28mm or 32mm(For Connector)	
Tension Test	1.96N	
Splice Memory	2000	
Compatible Cable	0.25mm, 0.9mm, 2.0mm, 3.0mm, Indoor Cable	
Dimension	135(W)×200(L)×82(H) mm	
Weight	1.5Kg (Body 1.1kg, Battery 120g×2)	
Power	DC Li-Polymer Battery, 100~240V AC Adapter	
Battery Capacity	1400mAh×2	
No. of Splicing/Heating with battery	Typical 120cycles(0.9mm Fiber)	
Operating Temp	-10℃~ 50℃	
Storage Temp	-40℃~ 80℃	

STANDARD PACKAGE			
Description	Model	Q'ty	
Splicer	F1	1	
AC Adapter	F1-1	1	
Battery Charger	F1-2	1	
Battery Pack	F1-B	2	
Fiber Holder	HF-?	Option 1Set(2EA)	
Spare Electrode	EI-19	1pair	
Cooling tray	СТ	1	
Carrying Case	Soft Case	1	
User Guide CD		1	

OPTION			
Description		Model	
Working Table		WK	
Fiber Holder		HF-250, HF-900, HF-2.5, HF-IN	
		HF-SC, HF-FC, HF-LC, HF-LT	
Electrode		EI-19	
Blade		BI-05	
DC Adapter		F1-DA	
Battery Pack		F1-B	
Sleeve Heater lever Block		See page 5	
Sleeve	S09-C	0.9mm Connector, 1.0 × 2.3 × 28mm	
	S09	0.9mm Cable, 1.0 × 2.3 × 45mm	
	S30-C	3.0mm. Indoor Connector, $3.5 \times 4.0 \times 32$ mm	
	S30	3.0mm. Indoor Connector, $3.5 \times 4.0 \times 45$ mm	



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