Fujikura

45S

ACTIVE CLADDING ALIGNMENT SPLICER



fiberarc.com

QUALITY, PERFORMANCE & RELIABILITY

SIMULTANEOUS FIBRE PREPARATION

30% FASTER OPERATIONAL CYCLE TIME







The 45S is the essential tool for FTTx engineers.

This splicer is small, light, accurate, portable and packed with inventive features that enable you to work faster without compromising on the quality of the splice.

The 45S is a physically compact machine but its ability is anything but small: this is a high-performance fusion splicer that delivers a 30% reduction in operational cycle time compared to its predecessor.

With its ground-breaking simultaneous fibre preparation features, improved operation, and exceptional reliability, the 45S raises the bar for cladding alignment splicers. From fibre preparation through to completion of heating, the 45S simplifies and speeds-up the complete splice process compared to our previous model, without compromising on the quality of splice.

This accelerated performance is achieved through faster preparation and heating times. Simultaneous fibre preparation streamlines the procedure and an improved heater ensures the final stage of the splice process is quicker than ever before.

As the fusion splicer specialist, it is our job to raise the bar for fusion splicers and the 45S is our latest machine to do exactly that. This is a breakthrough splicer that exemplifies our commitment to engineers who need high-quality results, superior performance and flawless operation.



Dual fibre preparation

Dual stripping
The SS05 fibre stripper is equipped with four blades: one for 2.3mm fibres, one for 900µm fibres, and two for 250µm fibres. The SS05 lets you strip two 250µm fibres at the same time.



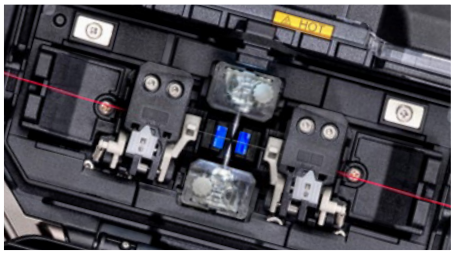
Dual cleaving
The AD16 fibre adapter for the CT50 cleaver is equipped with two grooves: place one fibre in each groove and cleave both at the same time.



Dual setting
Thanks to a clever new clamp mechanism, the 45S closes the fibre clamp automatically when it detects the fibre setting operation. It provides one-hand and simultaneous fibre setting.



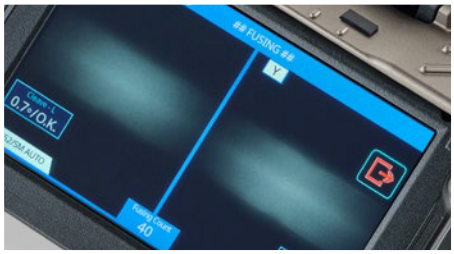
User-centric design



Faster fibre transportation time
The 45S's wind protector and fibre clamps are linked: when the wind protector opens, the fibre clamps open. The fibre retention clamps gently hold the spliced fibres in position to prevent risk of breakage. These mechanisms provide easy fibre handling and faster transfer to the heater.



Faster heating time
The average heating time for a 60mm sleeve is 22 seconds, a figure which drops to 17 seconds for a slim 60mm sleeve (times depend on environmental conditions).



30% faster than our previous model
From fibre preparation through to completion of heating, the 45S has a 30% faster operational cycle time compared to our previous model, without compromising on the quality of splice.

Every splice optimised

ACTIVE FUSION
CONTROL TECHNOLOGY

The 45S analyses both cleave end faces and applies optimal fusion control to deliver a significant reduction in splice loss and less chance of having to rework splices. It also uses real-time fusion parameter control by analysing the fibre brightness intensity during splicing - contributing to stable, low-loss splice results.

ACTIVE BLADE
MANAGEMENT TECHNOLOGY

The 45S and CT50 fibre cleaver are equipped with wireless data connectivity. This provides automatic cleaver blade rotation when the 45S judges that the blade is worn. The 45S displays the remaining blade life and informs the user when a blade height change, blade position change, or new blade is required. The 45S can simultaneously connect with up to two CT50 cleavers.

SPECIFICATION

FIBRE ALIGNMENT METHOD	Active clad alignment
SPLICEABLE FIBRE COUNT	Single-fibre
FIBRE TYPE	Single-mode and multi-mode optical fibre
CLADDING DIAMETER	Approx.125µm
SHEATH CLAMP COATING DIAMETER	Max. 3000µm
SHEATH CLAMP CLEAVE LENGTH[1]	5 to 16mm
ITU-T G.652 SPLICE LOSS[2]	Avg. 0.03dB
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SM FAST MODE SPLICE TIME[3]	Avg. 6 to 7 seconds
PROTECTION SLEEVE TYPE	Heat-shrinkable sleeve
SLEEVE LENGTH	Max. 66mm
SLEEVE DIAMETER	Max. 6mm before shrinking
60MM MODE HEAT TIME[4]	Avg. 15 to 22 seconds
60MM MODE SLIM HEAT TIME[4]	Avg. 15 to 17 seconds
FIBRE TENSILE TEST FORCE	Approx. 2.0N
ELECTRODE LIFE[5]	Approx. 6,000 splices
WIDTH	131mm without projection
DEPTH	123mm without projection
HEIGHT	121mm without projection
WEIGHT	1.4kg including battery
OPERATING TEMPERATURE	-10°C to 50°C
STORAGE TEMPERATURE	-40°C to 80°C
OPERATING HUMIDITY	0 to 95% RH non-condensing
STORAGE HUMIDITY	0 to 95% RH non-condensing
OPERATING ALTITUDE	Max. 5000m
AC ADAPTOR INPUT	AC100 to 240V, 50/60Hz, Max. 1A
BATTERY TYPE	Rechargeable lithium-ion
BATTERY OUTPUT	Approx. DC14.4V, 3190mAh
BATTERY CAPACITY[6]	Up to 230 splice/heat cycles (60mm slim mode)
BATTERY RECHARGE TEMPERATURE	0°C to 40°C
BATTERY STORAGE TEMPERATURE	-20°C to 30°C
BATTERY LIFE[7]	Approx. 500 recharge cycles
LCD DISPLAY	Adjustable 4.95-inch colour TFT touch screen
DISPLAY MAGNIFICATION	Approx. 132 to 300x
V-GROOVE ILLUMINATION	LED lamp
PC INTERFACE	USB 2.0 Mini B type
EXTERNAL LED LAMP INTERFACE	USB 2.0 A type, approx. DC5V, 500mA
WIRELESS CONNECTIVITY[8]	Bluetooth® 5.2
SPLICE MODE DATA STORAGE	100 modes
HEAT MODE DATA STORAGE	30 modes
SPLICE RESULT STORAGE	20,000 splices
SPLICE IMAGE DATA STORAGE	100 images
TRIPOD SCREW HOLE	1/4-20UNC

[1] Cleave length range depending on fibre type. 5 to 16mm: 125µm cladding diameter and 250µm coating diameter. 10 to 16mm: 125µm cladding diameter and 400 or 900µm coating dia.

[2] Measured with a cut-back method after splicing the same type of fibre. The average splice loss changes depending on the environmental condition and fibre characteristics.

[3] Measured at room temperature. The definition of splice time is from the fibre image appeared in LCD monitor to the estimated loss displayed. The average splice time changes depending on the environmental conditions, fibre type, and fibre characteristics.

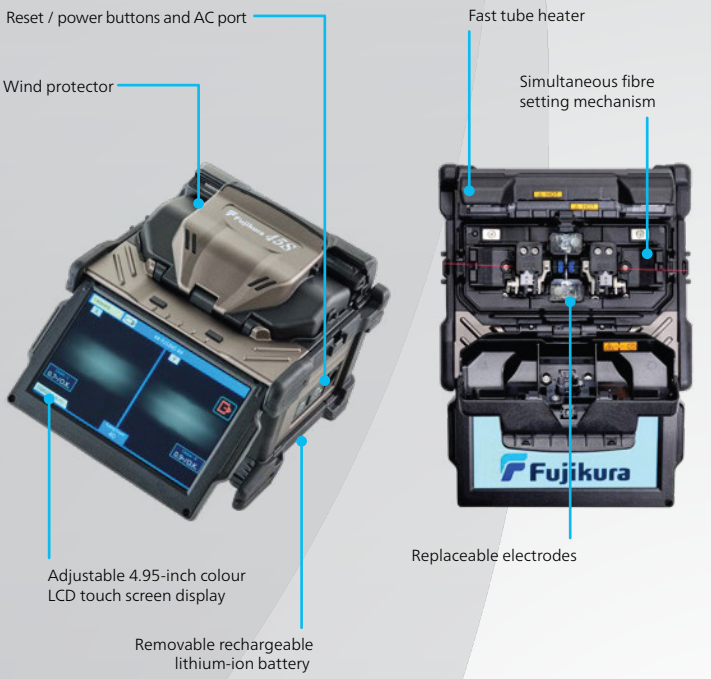
[4] Measured at room temperature with the AC adapter. The heat time is defined from the start beep sound to the finish beep sound. The average heat time changes depending on the environmental conditions, sleeve type and battery pack condition. In addition, since the heating operation is constantly optimised, the average heating time changes depending on the usage conditions of the fusion splicer.

[5] The electrode life changes depending on the environmental conditions, fibre type and splice modes.

[6] Test condition [1] Splice and heat time: 1 minute cycle. [2] Using the splicer power save settings, subject to our testing condition. [3] Using a non-degraded battery. [4] At room temperature. The battery capacity changes when testing with different conditions from the above.

[7] The battery capacity decreases to a half after approx. 500 discharge and recharge cycles. The battery life is shortened further when using outside of the storage temperature range, operating temperature range, if completely discharged by storing for a long time without recharging.

[8] Bluetooth® mark and logos are the registered trademarks of Bluetooth SIG, Inc.



Splice+ app

Splice+ allows you to edit device settings, access tutorials, record splice locations via GPS and automatically upload splice results to Google Drive.

IN THE BOX

ITEM	PART NUMBER
CLAD ALIGNMENT FUSION SPLICER	45S
BATTERY	BTR-17
AC ADAPTOR	ADC-21
AC POWER CABLE	ACC-08, 09, 10, 11 or 12
USB CABLE	USB-01
SPARE ELECTRODES	ELCT2-16B
CARRY CASE	CC-45
WORK TRAY	WT-10
TRIPOD SCREW	TS-03
CARRY CASE STRAP	ST-03
ALCOHOL DISPENSER	AP-02
QUICK REFERENCE GUIDE	QRG-08-E, C OR J
FIBRE STRIPPER	SS05
FIBRE CLEAVER	CT50

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