

# Sumitomo Electric Fusion Splicer T-55

**SUMITOMO ELECTRIC INDUSTRIES, LTD.** 2015 /00/00



**Automatic Adaptive Core Fusion Splicer** 

**T-55** 



**Excellent Performance** 



**User Friendly** 

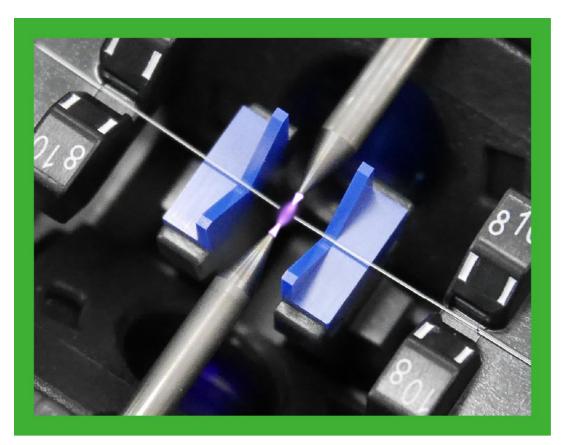


**High Environment Durability** 

#### **Splicing Speed**

3/23

# Rapid sec. splice time "SM G652 Quick" Mode





**Comparison** T-55 vs T-71C+

Model	Splice time	
T-55	7 sec	
T-71C+	6 sec	



#### **Heater Performance**

4/23

# 20 sec. heating time





**Comparison** T-55 vs T-71C+

Model	#of heater	Heating time	
T-55	Single	20 sec	
T-71C+	Dual	14 sec	



#### **Splicing Loss**

5/23

Splice Loss 0.02dB(Typical)





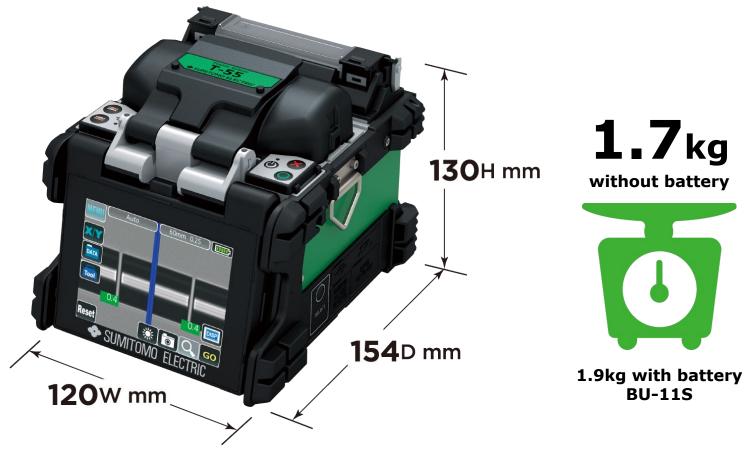
Comparison T-55 vs T-71C+

Model	SMF G652D loss	G655 NZDSF loss	
T-55	0.02dB	0.04dB	
T-71C+	0.01dB	0.03dB	



Size/Weight

### **Compact and lightweight**



Note: The size above does not include rubber protection parts.



#### **Touch Panel**

# Touch optimised user interface for intuitive and easy operation

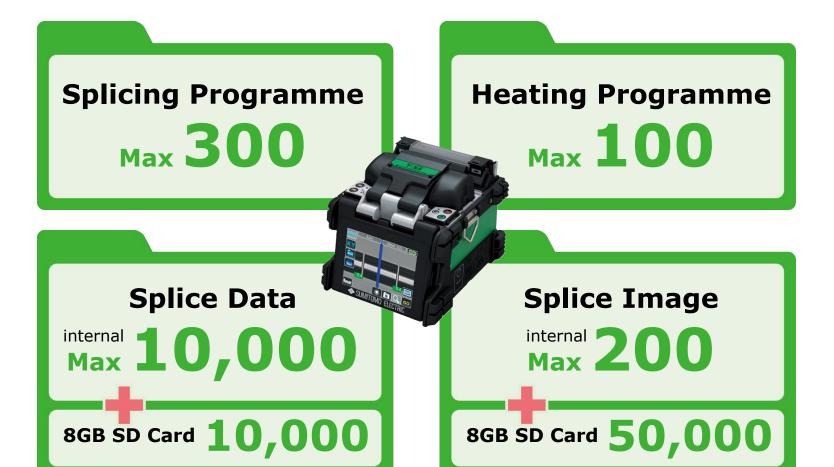






#### **Splice & Heating Programme and Data Storage**

#### Select and customise





**Durability** 

#### **Water Proof**

### **High Environmental Durability**



#### **Passes IPx2 test**

#### IPx2

Vertically dripping water shall have no harmful effect when the enclosure is tilted at an angle up to 15° from its normal position. Test duration: 10 min, Water equivalent to 3 mm rainfall per minute.





# T-55 vs T-71C+ Comparison



### T-55 vs T-71C+ Comparison



#### T-71C+

- x8 microscopes
- High Definition Core Monitoring
- Most precise fibre alignment including core alignment on all commercially available G657 fibres
- Most accurate loss estimates, reducing rework and cost of cable installations



#### **T-55**

- x4 microscopes
- Innovative Automatic Adaptive Core Alignment
- Splice loss performance broadly equivalent to other machines
- Loss estimate accuracy better than other machines



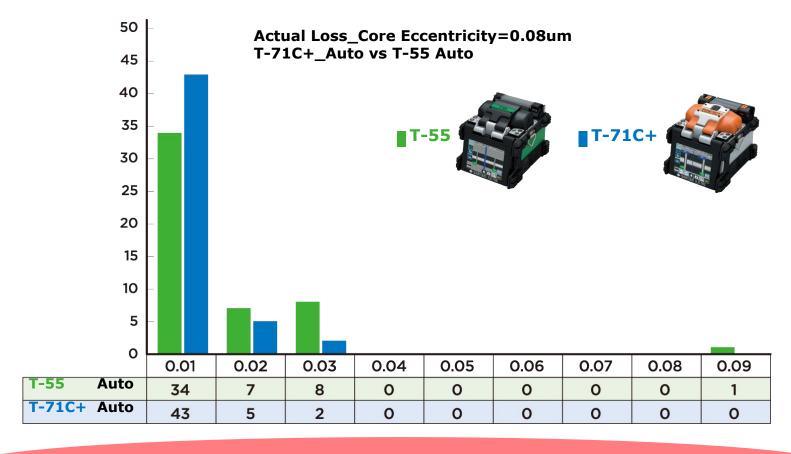
#### T-55 vs T-71C+ Comparison Overview

		T-55	T-71C+	
Fibre type	Common	SMF(G.652), MMF(G.651), DSF(G.653), NZDSF(G.655), BIF (G.657)		
	Specialty	_	EDF etc	
Splice loss (typ.)		SMF: 0.02 dB MMF: 0.01 dB DSF/NZDSF: 0.04 dB	SMF: 0.01 dB MMF: 0.01 dB DSF/NZDSF: 0.03 dB	
Splice time (typ.)		7 sec.(SM Quick Mode) 9 sec.(Auto Mode)	6 sec.(SM Quick Mode) 8 sec.(Auto Mode)	
Heating time (typ.)		20 sec.	14 sec.	
Dual independent heaters		Not Available (Single)	Available	
Splice & Heat cycles per battery		Approx. 230 (BU-11)	Approx. 230 (BU-11)	
Automatic fibre identification		SMF / MMF / Other	SMF / MMF / DSF & NZDSF / BIF / Other	
Fibre magnification		200X X and / or Y view 88X XY dual view (Digital Zoom : 525X)	320X X and / or Y view 88X XY dual view (Digital Zoom: 700X)	
Data storage		200 image captures / 10,000 splice data (+SD card slot)		
Wireless LAN connectivity		Not Available	Available	
Remote maint	enance	Not Available Available		
Touch screen	monitor	4.1" touch screen LCD		
Environmenta	l durability	Shock : Drop from 76cm on 5 faces Water : IPx2 Dust : IP5x		
Carrying case		CC-Z1	CC-71+	



#### T-55 vs T-71C+ Splice loss Comparison

#### **Splice loss with High Quality Fibre (good core eccentricity)**



#### T-55 splice loss mostly equivalent to T-71C+



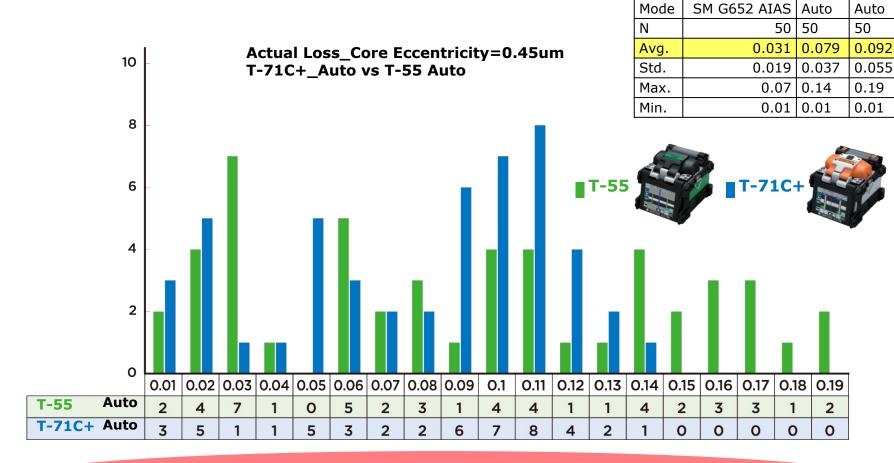
T-55

T-71C+

#### **Excellent Performance**

#### T-55 vs T-71C+ Splice loss Comparison

#### **Splice loss with Low Quality Fibre (bad core eccentricity)**



#### T-71C+ achieves better loss than T-55

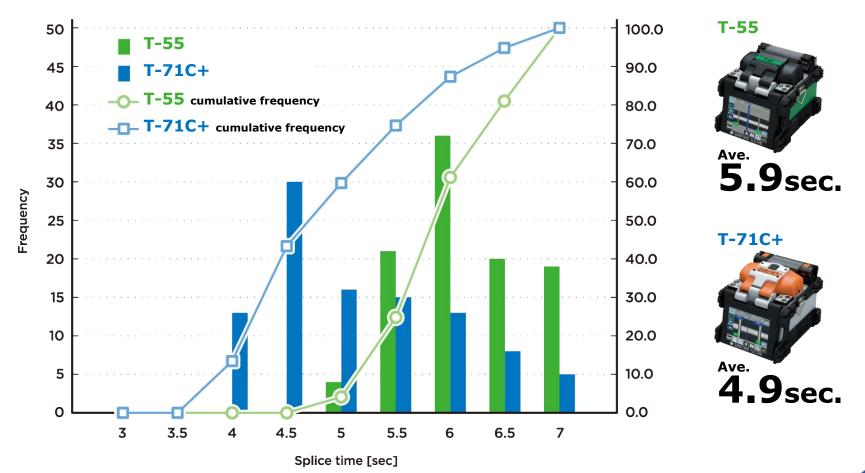


#### T-55 vs T-71C+ Splice loss Comparison

**Test condition** -Fibre: SMF

-Splice program: SM G652 Quick mode

-Number of splices: 100







## T-55 vs Cladding Aligner

(Fujikura 225 & Inno View3)



# Comparison with "Active V-groove" T-55 can see the core, cladding aligner=22S and View3 cannot

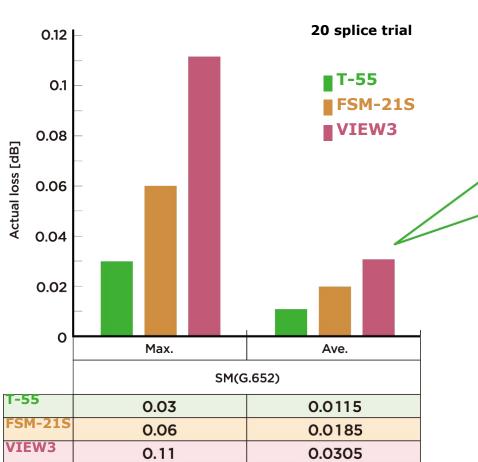
		T-55	Fujikura 22S	INNO View3	
Eibro tymo	Common	SMF(G.652), MMF(G.651), DSF(G.653), NZDSF(G.655)			
Fibre type Specialty		BIF (G.657)	_		
Alignment method		Automatic Adaptive Core Alignment	Active V-groove (Cladding) Alignment		
Can see cor	e image	Yes	No	No	
Splice loss (typ.)*		SMF: 0.02 dB MMF: 0.01 dB DSF/NZDSF: 0.04 dB	ESMF: 0.03 dB MMF: 0.01 dB DSF/NZDSF: 0.05 dB	SMF: 0.03 dB MMF: 0.02 dB DSF/NZDSF: 0.05 dB	
Splice time	(typ.)	7 sec.(SM Quick Mode) 9 sec.(Auto Mode)	9 sec. (SM FAST) 11 sec. (SM AUTO)	7 sec.(Quick Mode) 9 sec.(SM Mode)	
Fibre identification		Available (SM / MM / Other) Internally=Not displayed	Not Available	Not Available	
Heating time (typ.)		20 sec.	30 sec.	30 sec.	
Splice & Heper battery	at cycles	115 (BU-11S) 230 (BU-11)	200 (BTR-11)	170 (LBT-40 4200mAh)	
Data storage		200 image captures (+50,000 with 8GB SD Card) 10,000 splice data (+10,000 with 8GB SD card)	8 image captures Last 10,000 splice data	0 image captures 2,000 splice data	
Touch screen monitor		Available 4.1" touch screen LCD	Not Available 4.73 LCD	Available 5.0" touch screen LCD	
Fibre magnification		200X X and/or Y view 88X XY dual view (Digital Zoom : 525X)	132X magnification 200X after splice	520X magnification	
Size and we	eight	120x154x130mm, 1.9kg	120x189x72mm, 1.14kg	177x147x149mm, 2.31kg	

<sup>\*)</sup> Actual splice Loss must be lower even if poor core concentration fibre. To be conducted benchmark test with 21S and View3



#### **Splicing Loss Comparison**

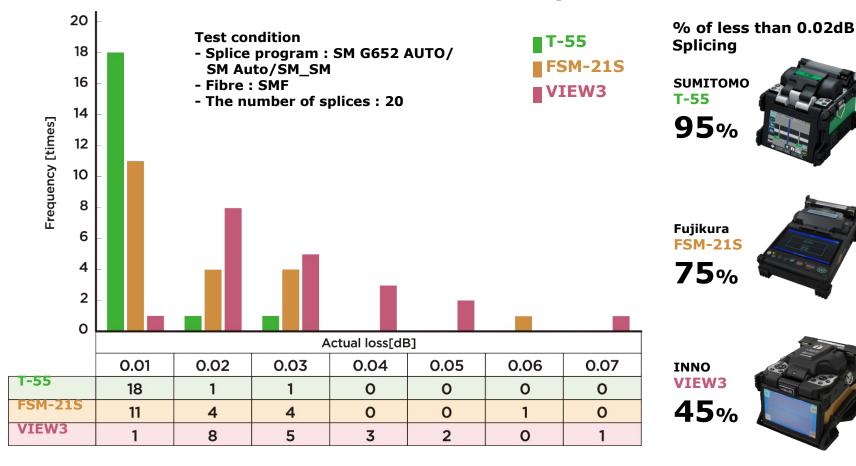
As the T-55 can view and process the core image it consistently achieves lower splice loss than simple cladding alignment splicers.







#### **Percentage of splice success** with less than or equal to 0.02dB



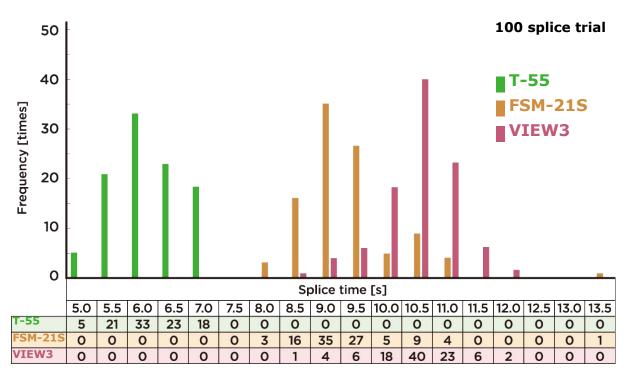
Automatic adaptive core alignment beats simple cladding alignment



#### **Splicing Speed Comparison**

#### **G.652 Quick Mode**

Why use slow cladding alignment when T-55 uses faster Automatic **Adaptive Core Alignment.** 



**SUMITOMO** T-55

Ave.

**5.9**sec.



**Fujikura FSM-21S** 

Ave.

9.1<sub>sec.</sub>



**INNO** VIEW3

10.2sec.

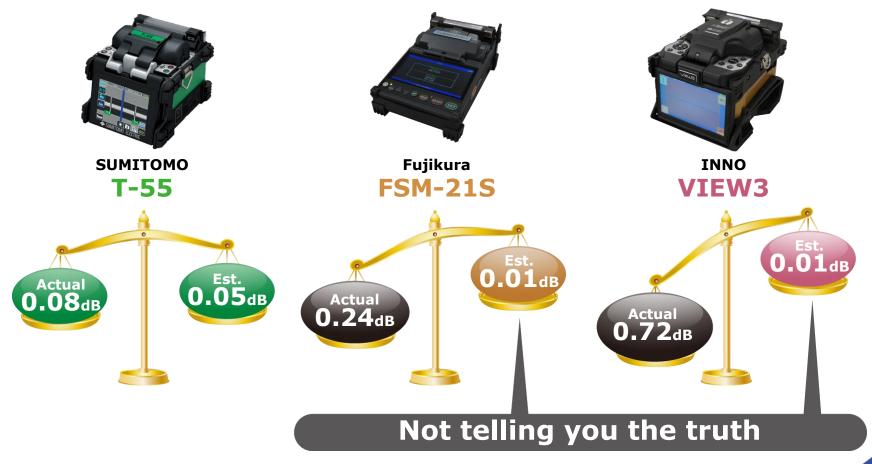


T-55, the fastest and with core image processing



#### **Accurate Loss Estimate Comparison**

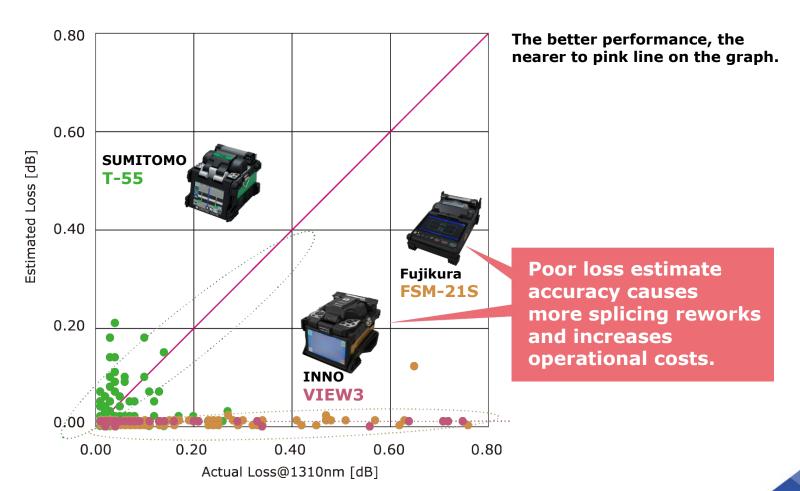
Sumitomo Splicers guide you in RIGHT direction. Other Splicer brands guide you NOWHERE.





#### **Accurate Loss Estimate Comparison**

Thanks to its ability to process the core image, the Sumitomo T-55 beats the cladding aligners on loss estimate accuracy.



#### **Splicing / Heating Programme & Data Storage**

Sumitomo T-55 provides the highest number of splicing programme, data & image.

