

# JBC

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

## INSTRUCTION MANUAL



### SF

Automatic Solder-Wire Feeder Station

This manual corresponds to the following references:

**SF-110VB** (110-120V) with Guide Kit  $\varnothing$ 1mm

**SF-210VB** (230V) with Guide Kit  $\varnothing$ 1mm

## Packing List

The following items are included:



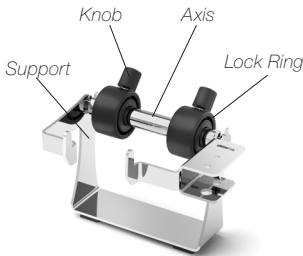
**Automatic Solder-Wire Feeder Control Unit** .... 1 unit  
Ref. 0018624



**Auto Solder-Wire Handle** ..... 1 unit  
Ref. SF280



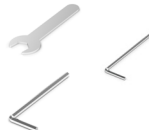
**Guide Kit** ..... 1 unit  
Ref. GSF10V-B  
*already assembled*



**Reel Support** ..... 1 unit  
Ref. 0018624

includes:

- Ref. 0019301 (x1) - Support
- 0018033 (x1) - Axis
- 0003412 (x2) - Lock Ring
- 0014427 (x2) - Knob



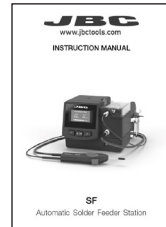
**Key Set for SF** ..... 1 unit  
Ref. 0019341

includes:

- Ref. 0012574 (x1) - Allen key  $\varnothing$  2,5
- 0017631 (x1) - Spanner
- 0741610 (x1) - Allen key  $\varnothing$  1,5



**Power cable** ..... 1 unit  
Ref. 0023715 (100V/120V)  
0023714 (230V)



**Manual** ..... 1 unit  
Ref. 0028008

## Features and Connections

### Automatic Solder-Wire Feeder Control Unit

### SF280 Automatic Solder-Wire Handle

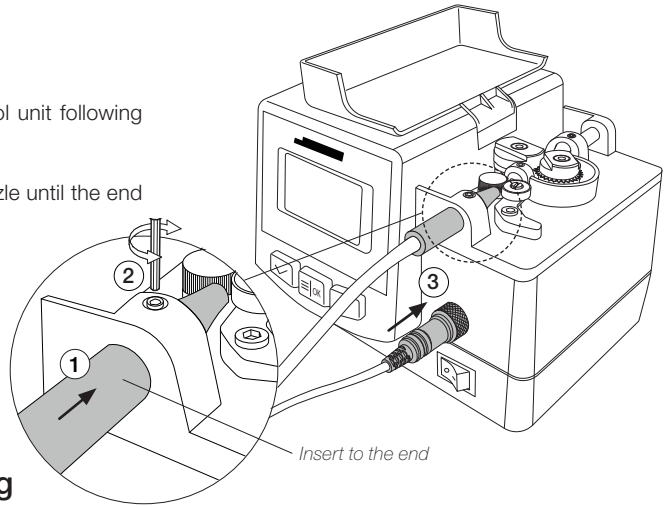


## Tool Assembly

Connect the tool to the control unit following this steps:

Insert and push the guide nozzle until the end (1) and tighten the screw (2).

Connect the jack (3).

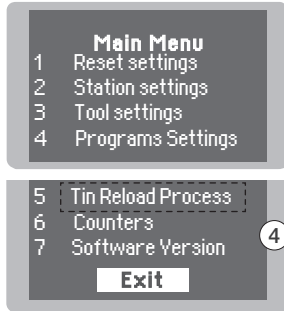



## Solder-Wire Loading

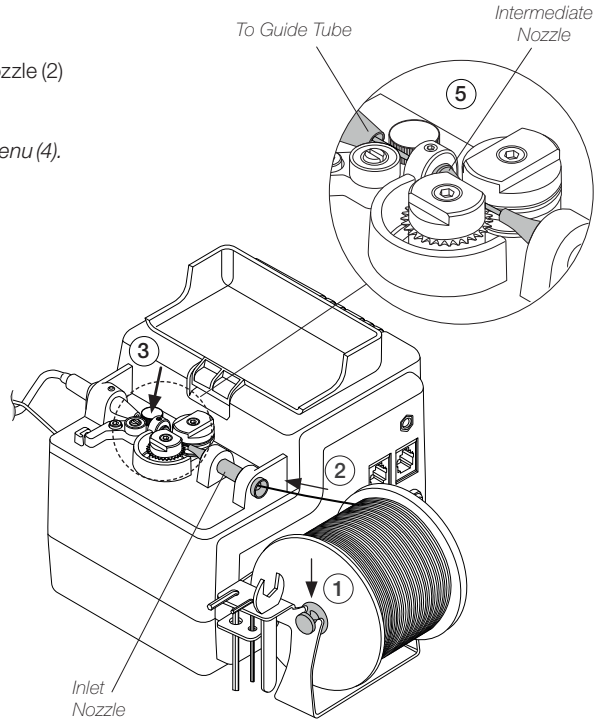
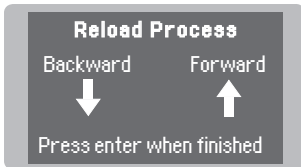
Put the solder reel into its support (1).

Introduce the solder wire into the inlet nozzle (2) until it reaches the wheels (3).

Use the *Tin Reload Process* in the *Main Menu* (4).



The Reload Process screen opens. Press  to start the process.



Make sure the wire passes through the Intermediate Nozzle and enters into the Guide Tube (5).

## Changing Guide Kits

### Changing Wheels and Blade

For this operation, disconnect the device from the mains. Disconnect the tool from the control unit and open its cover.

Use the Allen key and the spanner, provided with the station. First disassemble the guide tube (6), the support and traction wheels, or the guide wheel, the blade and its clamp (4)+(5). Then, disassemble the nozzles (2)+(3). Disassemble the counter wheel (1).

#### Assembly with Solder Wire Perforation:

Assemble the counter wheel (1).

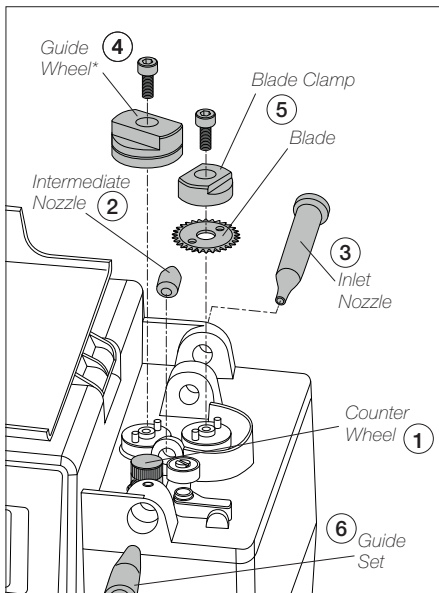
Insert the intermediate nozzle (2) until its collar rests against the housing and tighten the screw.

Assemble the inlet nozzle (3).

Assemble the guide wheel\* (4) and tighten the screw.

Assemble the blade first, then mount the blade clamp (5) onto the same axis and tighten the screw. **Caution:** handle the blade carefully to avoid injury.

Insert the guide set (6).



#### Assembly without Solder Wire Perforation:

Assemble the counter wheel (1).

Insert the intermediate nozzle (2) until its collar rests against the housing and tighten the screw.

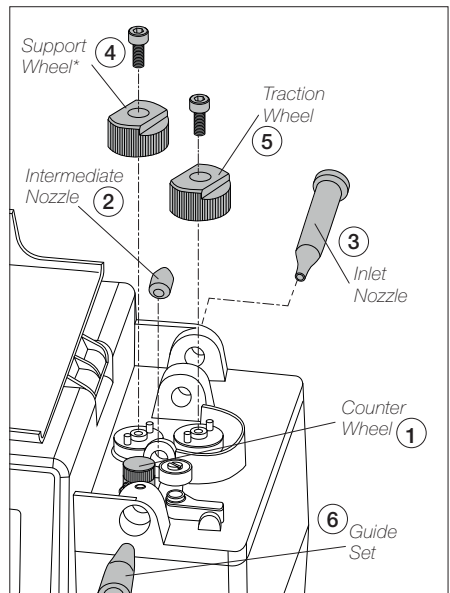
Assemble the inlet nozzle (3).

Assemble the support wheel\* (4) onto the axis and tighten the screw.

Assemble the traction wheel (5) and tighten the screw.

Insert the guide set (6).

\* wheel bears diameter marking



## Replacing the Guide Tube

Once the tool is disconnected from the control unit follow the instructions below:

Disassemble the outlet nozzle (1) from the guide tube.

Open the guide clamp (2), take off the guide tube (3) and insert the new one.

**Note:** The guide tube length can be easily adjusted (4) when the guide clamp knob (2) is open.

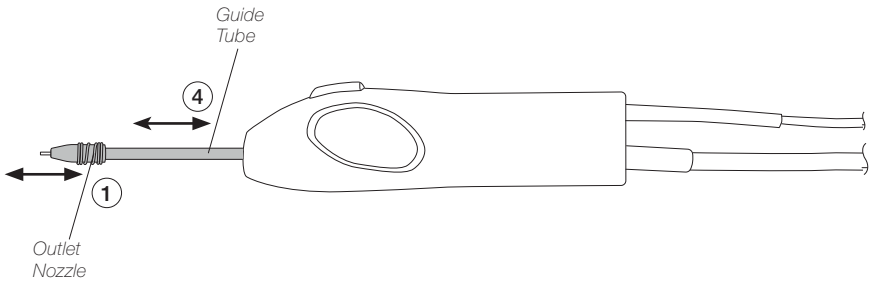
Once the guide tube length is adjusted close the guide clamp knob (2).

Assemble the outlet nozzle (1) onto the guide tube tip.

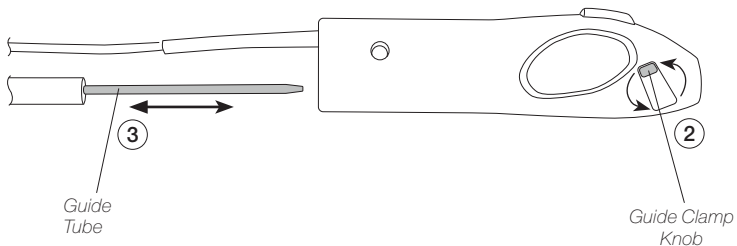
Enter en "Tool Settings" at the SF control unit main menu and select the proper wire diameter.



## SF with Guide Tube assembled



## SF without Guide Tube assembled



## Control Process

### Work Screen

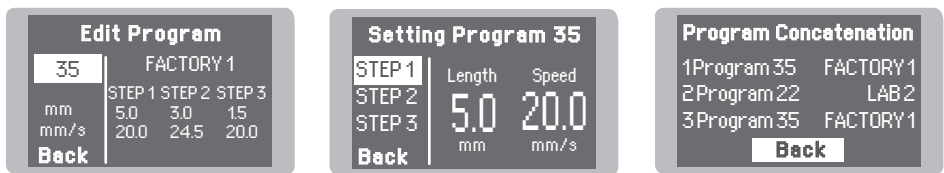
Choose between continuous, discontinuous and program mode:



### Program Mode

With the SF you can define up to 35 dynamic programs. In each one you can configure up to 3 steps with different length wire and dispensing speed.

Execute them sequentially and cyclically with the 'Edit Concatenation List' option.



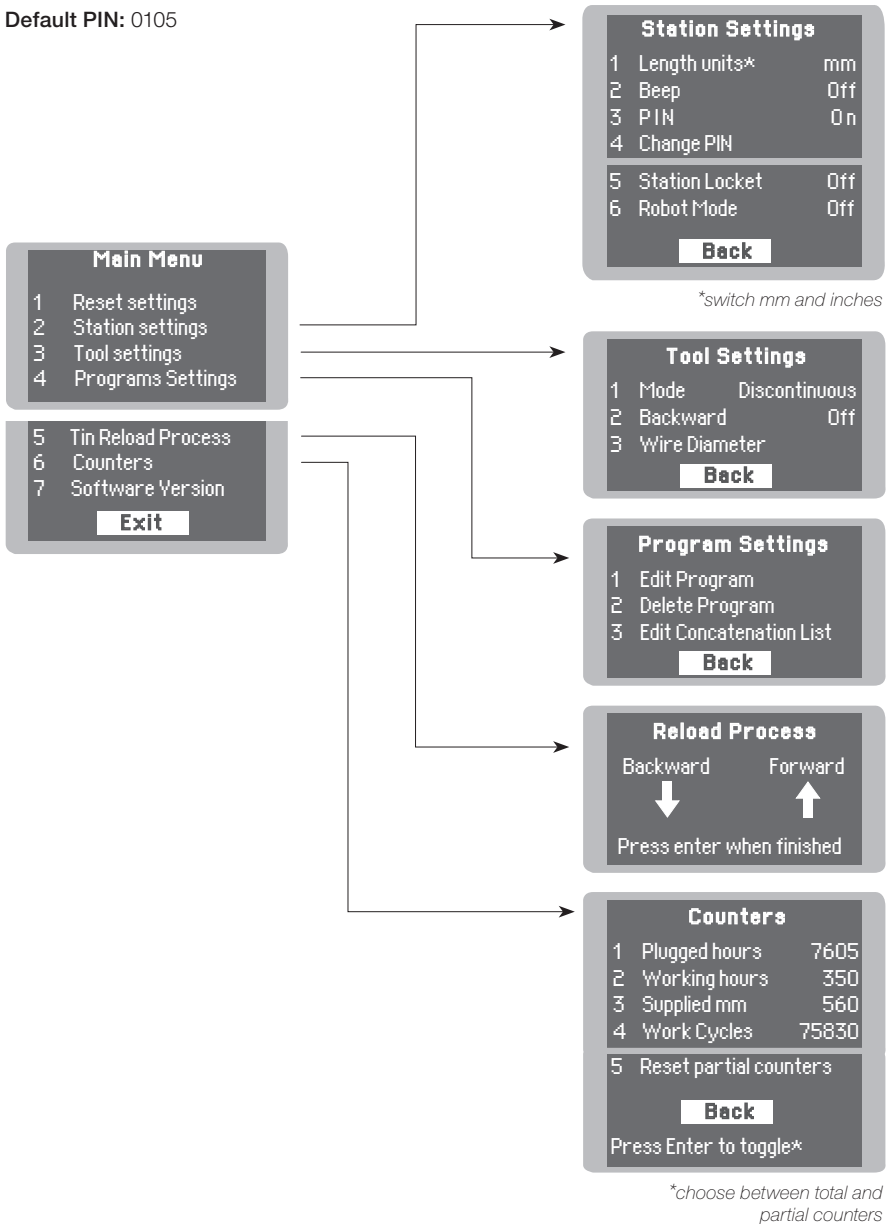
### Troubleshooting

Station troubleshooting available on the product page at [www.jbctools.com](http://www.jbctools.com)

# Control Process

## Menu Screen

Default PIN: 0105





## Accessories

### Guide Kits

Various guide kits are available to choose from depending on the diameter of the welding wire used.



Solder Wire Ø	Ref. <b>with</b> Solder Wire Perforation	Solder Wire Ø	Ref. <b>without</b> Solder Wire Perforation
-	-	0.38 - 0.40 mm / 0.015 - 0.016 in	GSF04D-B
-	-	0.46 - 0.56 mm / 0.018 - 0.022 in	GSF05D-B
-	-	0.60 - 0.64 mm / 0.023 - 0.025 in	GSF06D-B
-	-	0.70 - 0.78 mm / 0.028 - 0.031 in	GSF07D-B
0.8 mm / 0.032 in	GSF08V-B	0.80 - 0.82 mm / 0.032 - 0.033 in	GSF08D-B
1.0 mm / 0.040 in	GSF10V-B	0.90 - 1.10 mm / 0.036 - 0.044 in	GSF10D-B
1.2 mm / 0.047 in	GSF12V-B	1.14 - 1.27 mm / 0.045 - 0.051 in	GSF12D-B
1.5 mm / 0.059 in	GSF15V-B	1.50 - 1.57 mm / 0.060 - 0.063 in	GSF15D-B
1.6 mm / 0.063 in	GSF16V-B	1.60 - 1.63 mm / 0.063 - 0.065 in	GSF16D-B
-	-	1.80 mm / 0.073 in	GSF18D-B

### Tool Stand

#### Stand for SF280 Auto Solder-Wire Handle

Ref. SF-SE

It prevents SF280 from rolling away while working.



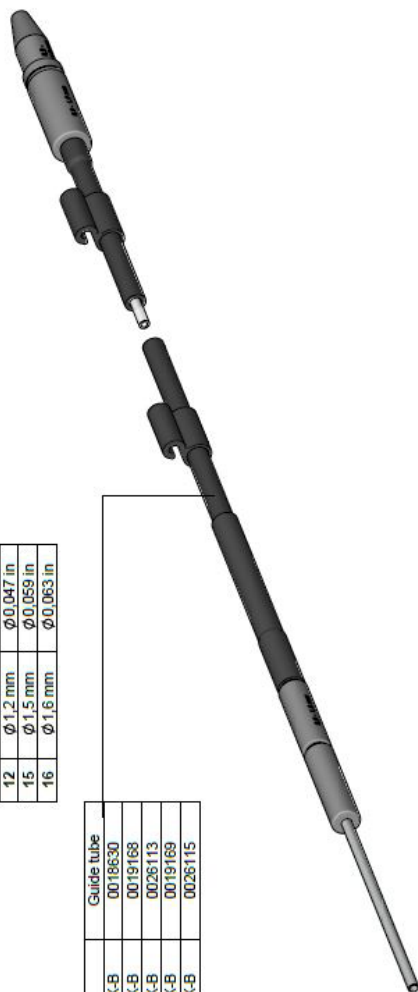
## Accessories

### GSF Guide Kit for SF280 with Solder-Wire Perforation

#### GSFXXV-B WITH SOLDER WIRE PERFORATION

XX	Wire diameter
08	Ø0.8 mm    Ø0.032 in
10	Ø1.0 mm    Ø0.040 in
12	Ø1.2 mm    Ø0.047 in
15	Ø1.5 mm    Ø0.059 in
16	Ø1.6 mm    Ø0.063 in

Guide tube
GSF08X-B    0018630
GSF10X-B    0019168
GSF12X-B    0026113
GSF15X-B    0019169
GSF16X-B    0026115

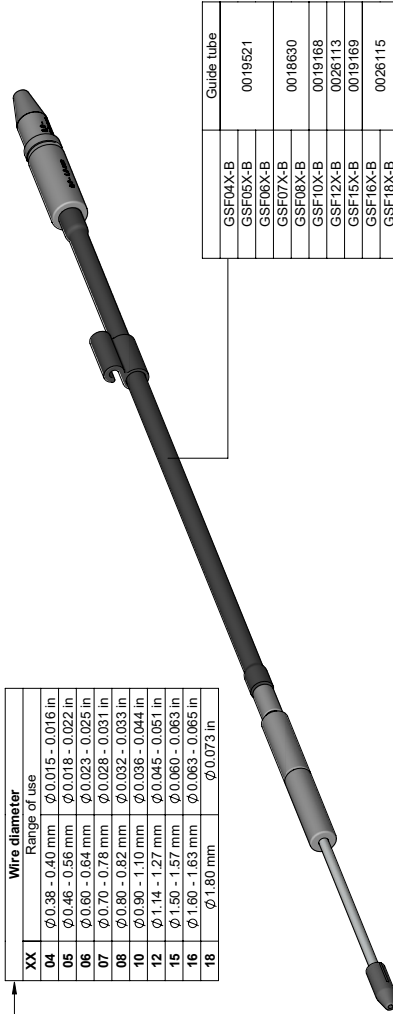


	Outlet nozzle	Guide wheel	Blade	Blade clamp	Inlet nozzle	Intern. nozzle	Counter wheel	Screws	Threaded stud
Wire-Ø	GSF08V-B	0025270	0021555	0018638	0018632	0024955	00286839 (Supplier with SF)	00286895 (x2)	00286896 (x3)
	GSF10V-B	0021560			0019170	0024956			
	GSF12V-B	0025272			0019171	0024957			
	GSF15V-B	0025274			0024958	00286894			
	GSF16V-B	0025276			0024233	0024959			

Accessories

**GSF Guide Kit for SF280**  
without Solder-Wire Perforation

**GSFXXD-B** WITHOUT SOLDER WIRE PERFORATION



XX	Wire diameter
	Range of use
04	Ø 0.38 - 0.40 mm Ø 0.015 - 0.016 in
05	Ø 0.46 - 0.56 mm Ø 0.018 - 0.022 in
06	Ø 0.60 - 0.64 mm Ø 0.023 - 0.025 in
07	Ø 0.70 - 0.78 mm Ø 0.028 - 0.031 in
08	Ø 0.80 - 0.82 mm Ø 0.032 - 0.033 in
10	Ø 0.90 - 1.10 mm Ø 0.036 - 0.044 in
12	Ø 1.14 - 1.27 mm Ø 0.045 - 0.051 in
15	Ø 1.50 - 1.57 mm Ø 0.060 - 0.063 in
16	Ø 1.60 - 1.63 mm Ø 0.063 - 0.065 in
18	Ø 1.80 mm Ø 0.073 in

	Guide tube
GSF04X-B	0019521
GSF05X-B	
GSF06X-B	
GSF07X-B	0018630
GSF08X-B	
GSF10X-B	0019168
GSF12X-B	0026113
GSF15X-B	0019169
GSF16X-B	
GSF18X-B	0026115

SPARE PARTS	Outlet nozzle	Nozzle	Traction wheel	Support wheel	Inlet nozzle	Interm. nozzle	Counter wheel	Screws	Threaded stud
Wire Ø									
GSF04D-B	0025268			0020345	0019520	0024954	0026693	0026695	0026696
GSF05D-B			0019519				(Supplied with SF)	(1x2)	(x3)
GSF06D-B	0022994								
GSF07D-B	0025289			0019480	0018632	0025291			
GSF08D-B	0025270	0021158	0019479		0019170	0024956			
GSF10D-B	0021560			0019481	0019171	0024957			
GSF12D-B	0025272				0024958	0024958	0026694		
GSF15D-B	0025276			0028367	0024233	0024959			
GSF16D-B					0024234	0024960			
GSF18D-B	0021559								

# Maintenance

Before carrying out maintenance, always allow the equipment to cool down.

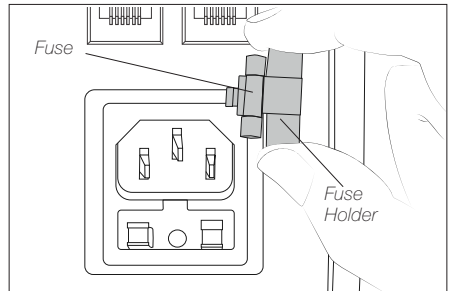
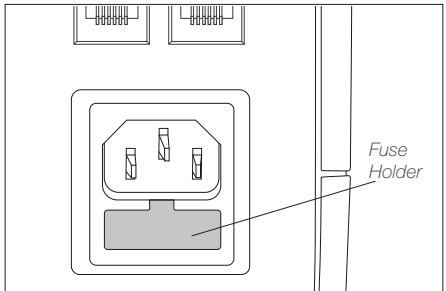
- Clean the station screen with a glass cleaner or a damp cloth.
- Use a damp cloth to clean the casing and the tool. Alcohol can only be used to clean the metal parts.
- Periodically check all cables and tubes.



- Replace a blown fuse as follows:

**1.** Pull off the fuse holder out and remove the worn fuse. If necessary use a tool to lever it off.

**2.** Insert the new fuse into the fuse holder and assemble it to the station.



- Replace any defective or damaged parts. Use original JBC spare parts only.
- Repairs should only be performed by a JBC authorized technical service.

## Safety



**It is imperative to follow safety guidelines to prevent electric shock, injury, fire or explosion.**

- Do not use the units for any purpose other than soldering or rework. Incorrect use may cause a fire.
- The power cord must be plugged into approved bases. Be sure that it is properly grounded before use. When unplugging it, hold the plug, not the wire.
- Do not work on electrically live parts.
- The tool should be placed in the stand when not in use in order to activate the sleep mode. The soldering tip or nozzle, the metal part of the tool and the stand may still be hot even when the station is turned off. Handle with care, including when adjusting the stand position.
- Do not leave the appliance unattended when it is on.
- Do not cover the ventilation grills. Heat can cause inflammable products to ignite.
- Avoid flux coming into contact with skin or eyes to prevent irritation.
- Be careful with the fumes produced when soldering.
- Keep your workplace clean and tidy. Wear appropriate protection glasses and gloves when working to avoid personal harm.
- Utmost care must be taken with liquid tin waste which can cause burns.
- This appliance can be used by children over the age of eight and also people with reduced physical, sensory or mental capabilities or lack of experience provided that they have been given adequate supervision or instruction concerning the use of the appliance and understand the hazards involved. Children must not play with the appliance.
- Maintenance must not be carried out by children unless supervised.



## Specifications

**SF****Automatic Solder-Wire Feeder Station**

Ref.: **SF-110VB** 100-120V 50/60Hz. Input fuse: T0.2A.

Ref.: **SF-210VB** 230V 50/60Hz. Input fuse: T0.125A.

- Compatible Solder Reel: Weight up to 1 kg / 2.2 lb  
Diameter Max. 80 mm / 3.15 in  
Height Max. 75mm / 2.95 in  
Stand Axis ø 10 mm / 0.4 in
- Solder Wire Diameter ø 1.0 mm / ø 0.040 in
- Max. Wire Length 250 mm / 9.84 in
- Max. Forward Speed 120 mm/s / 4.72 in/s
- Max. Reverse Speed 120 mm/s / 4.72 in/s
- Ambient Operating Temp: 10 - 50 °C / 50 - 122 °F
- USB Connector Station-PC
- Robot Connector
- Dimensions / Net Weight: 140 x 150 x 120 mm / 2.32 kg  
(L x W x H) 5.5 x 5.9 x 4.72 in / 5.11 lb
- Total package Dimensions / Weight: 368 x 368 x 195 mm / 3.23 kg  
(L X W X H) 14.5 x 14.5 x 7.68 in / 7.12 lb

Complies with CE standards.  
ESD safe.

# JBC

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## Warranty

JBC's 2 year warranty covers this equipment against all manufacturing defects, including the replacement of defective parts and labour.

Warranty does not cover product wear or misuse.

In order for the warranty to be valid, equipment must be returned, postage paid, to the dealer where it was purchased.

**Get 1 extra year JBC warranty by registering here:**  
<https://www.jbctools.com/productregistration/>  
**within 30 days of purchase.**

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This product should not be thrown in the garbage.

In accordance with the European directive 2012/19/EU, electronic equipment at the end of its life must be collected and returned to an authorized recycling facility.

CE EAC UK  
CA

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

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