

STF100 Series

The Auto Tray Feeder of Hanwha's a product that is made to supply tray components to a chip mounter, which is divided into four models, STF-100D/STF-100N and STF-100S/STF-100DL according to its function and purpose of use. It is designed based on productivity, safety and reliability.

Easy Job Change

The Auto Tray Feeder applies the rack type component supply method to allow easy job change. The STF-100D and STF-100DL model allows materials to be refilled from an unused magazine during Auto Run by operating the upper and lower magazines independently. The STF-100N and STF-100S models are designed to allow pallet change without stopping a chip mounter with one pallet of the component exhausted pallet being moved to the upper Change Rack.



View of a pallet which has moved up to the upper change rack from the STF-100N model after all the materials in it were exhausted



View of the upper magazine of the STF-100D model which is open to refill materials

Minimized Pallet Change

The STF-100D/STF-100DL and STF-100N models allow the use of maximum 40 trays (20 pallets) and 48 trays (24 pallets) based on the JEDEC standard tray, respectively. The STF-100S model supplies trays from a side of a chip mounter and can use a maximum of 20 trays (20 pallets) based on the JEDEC standard tray. In addition, they are widely applicable to component sizes from the JEDEC standard size to maximum 25.4mm in height.



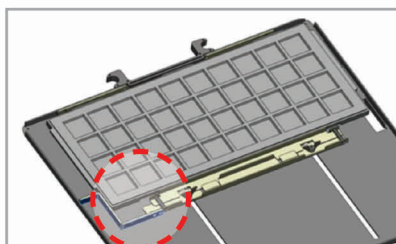
STF 100D / 100DL

STF 100N

STF 100S

User Safety and Convenience

Fool proof safely secures tray components while ensuring correct polarity of the tray. Component coplanarity sensor verifies components are properly positioned in their pockets.



Pallet aligning mechanism (Fool Proof)



Component coplanarity sensor

STF 100D



- STF-100D can supply loaded components to a chip mounter without stopping the operation of the machine by operating the upper and lower magazines separately.
- It has a magazine inserted into the upper and lower stage and the magazine has a total of 12 pallets.
- The structure of the mechanism was simplified to facilitate maintenance, realizing low vibration and noise (when closing the front and upper cover, the noise level is less than 75db).
- For safety, it is designed so that all movements will stop when opening the door knob while operating the machine since it is interlocked with the machine.
- Easy to operate Windows OS and prepare and edit data in the MMI using a touch screen type color LCD monitor.

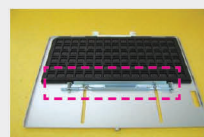
STF 100DL



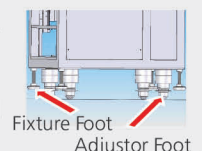
- Since the STF-100DL is manufactured based on the STF-100D, it can use a large pallet (W420 x L360).
- The available installation area is increased by minimizing the machine size (W600 X L1 528 x H1 445) while improving the component supply capacity.

- Possible to use a tray with a height of less than 45mm from the upper surface of a pallet to the upper surface of a component.
- Possible to perform precision control by using a high precision servo motor and to supply components quickly at an average of 3.5 seconds.

- Adjusting the fixed plate of a pallet will allow simultaneous supply of components of two types based on the JEDEC pallet.

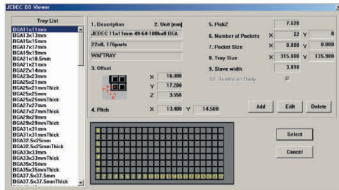


- Easy to perform level control by controlling the foot at the bottom of the machine and using the lever. This will reduce the installation and modification time significantly.

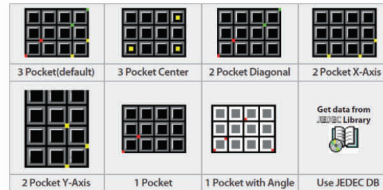


Provides JEDEC DataBase and Various Teaching Methods

In the case of standard JEDEC teaching, it is possible to use the database by using the JEDEC library. When performing teaching, various teaching methods are provided according to the pallet such as 3Pocket (Default), 3Pocket Center, 2 Pocket X-Axis and 2 Pocket Y-Axis methods.



Get data from JEDEC Library



Provides various teaching methods for tray components

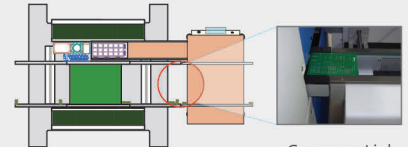
- STF-100S uses a built-in conveyor. This conveyor can transfer a PCB to a machine at the next stage of the process, and give and take an interface to/from the machines at the front and rear. (The Work - Table can be used.)
- The availability of the feeder base is improved by installing a tray at the right of the chip mounter.



STF 100S



Built-In Conveyor



Conveyor Link

Provides real-time Interface with Machine

Allows component change without stopping the machine by receiving information on the component through RS-232C communication with a chip mounter and generating a timely alarm against material shortage.



Notifies the user in a timely manner of a pallet which needs to be refilled when materials are exhausted by communicating with the chip mounter.

Applied Machine

Machine	STF - 100D	STF - 100DL	STF - 100N	STF - 100S
SM 471/481/482	△	×	△	△
SM PLUS	△	×	△	△
SM 485P	○	○	○	○
STM1	○	×	○	○
DECAN Series	△	×	△	△
HM520	×	×	×	×

△ : It may be partially restricted to use the machine according to the conveyor option of the machine.

SPECIFICATION

ITEM	STF - 100D	STF - 100DL	STF - 100N	STF - 100S
Outline Dimension (mm)	W500 x L1350 x H 2175 (Top of the signal light)	W600 x L1580 x H 1953 (Top of the signal light)	W500 x L1288 x H 1945 (Top of the signal light)	W1612 x L930 x H 1945 (Top of the signal light)
Weight	Max. 240kgf	Max. 290kgf	Max. 250kgf	
Available Tray Size (mm)	Max. 340 x 272 / min. 200 x 100	Max. 420 x 350 / min. 200 x 100	Max. 340 x 272 / min. 200 x 100	Standard : 322.6 x 135.9 min : 200 x 100
Magazine	2 Tray : Pallet / 12 Pallet : Magazine 2 Magazine : Tray Feeder		2 Tray : Pallet / 20 Pallet : Magazine 1 Magazine : Tray Feeder	1 Tray : Pallet / 20 Pallet : Magazine 1 Magazine : Tray Feeder
Volt	Single phase AC 220V±10%, AC 100V / 110V / 120V / 200V / 220V / 240V			
Power	1000VA(Max), 300VA(RMS)			
Max. Height of component supplied	9.5mm, 25.4mm (Option) : Load the trays on every other stage			
Noise	75 db			
UI	Monitor : 7" TFT LCD // Operation : Touch Pad, OS : Windows CE Embedded // MMI Language : English			
Safety	CE			

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• The dimensions, product specifications and values in this catalog are actual values measured under conditions designated by our company.
• The above items may differ depending on actual operating conditions. For the details related to options, please contact the person responsible for sales.

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