
US-X

The WINNER 2018 Global Technology Award



Full Automatic Changeover printer US-XF

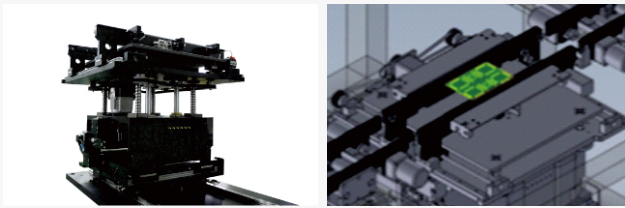
US-2000XF is made with ESE strong R&D and the fruit of ESE's passion integrated a state of the art and advanced technology.

As the leading and first printer for industry 4.0, it has been upgraded from US-2000FA which had been developed by a closed cooperation between Samsung Electronics & ESE in 2012.

*US-2000XF is the unique functional printer and should facilitate Mask stencil automatic change (10 product model), fully integrated Backup tools and Paperless cleaner, Auto solder paste supply, Enclosed squeegee tool, traceable ESE standard format of printer parameter data (MES. *Individual customize network Option), SPI closed loop, software managed by barcode etc the built in various and innovated options included.*

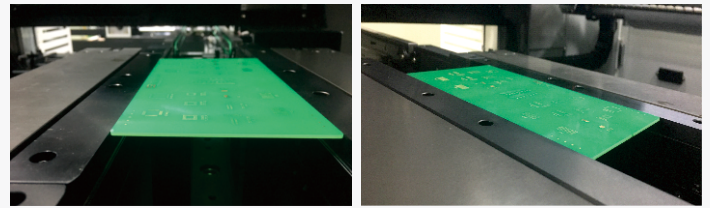
	US-XF10 S	US-XF10 M
PCB size	70mm x 70mm – 350mm x 250mm	70mm x 70mm – 350mm x 250mm
Stencil size	23" x 23"	29" x 29"
Cycle time	15sec	15sec
Alignment accuracy	± 12.5 um @ 6 sigma	± 12.5 um @ 6 sigma
Printing repeatability	± 25 um @ 6 sigma	± 25 um @ 6 sigma

Most stable mechanism table with 3 stages



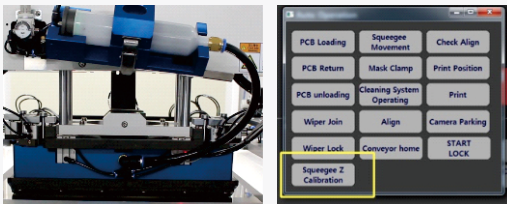
4 ball screws with high precision & stiffness and additional 3 shafts.
Servo control for table axis (X, Y and Theta) and Z1 & Z2
Equal printing pressure break up to guarantee high accurate printing quality and long run use without a trouble

Perfect Clamp and Programmable Clamp pressure



Z(Top) clamp guides a stable PCB loading and Y clamp(Side clamp) securely holds board for production
Z & Y clamp working sequence and pressure can be adjustable as per PCB condition.
Y (Side) clamp pressure programmable as option

Enclosed Print Head Squeegee



Cylinder and Motor driven printing head makes an uniform printing result.
Enclosed print head squeegee applied.
Solder automatic rechargeable
Squeegee Z center position auto calibration equipped with software

Camera Automatic Calibration Equipped



Camera X and Y axis driven & controlled by ball screw and Servo
Camera recognizes any mark on PCB and Stencil at a time
Camera 4 LED lights applied for much perfect 2D inspection and recognition as per mark color, PCB color
Field of View 11mm x 8mm

Paperless Cleaning or Hybrid Cleaner



Paperless cleaning kit applied
As optional, Paper cleaning system can be applied

New Cleaning as option – Hybrid cleaner having Paperless tool with paper for much perfect cleaning and to save Paper (30% over)

Fully automatic changeover stencil (10 pcs). Barcode managing. Auto PCB support tooling

