MS7600 Micro Device Rework System





Overview

MS7600 is a reworking system for the micro devices such as from 0402 to CSP. And all the processes of reworking are included in the function of the system. That is, all of removal of parts, cleaning of solder, the printing of solder, positioning of parts, and soldering of parts are made.

Feature

- Reworking can be completed by only this machine.
- It can rework from 0402 to CSP.
- The work of every process each is automatic.
- The Thermal Profile is created automatically.
- The generator of N2 gas is attached.
- The situation of work can always monitor with a CCD camera.
- Since it is interactive operation on the touch panel, it is easy and exact.

Abstract

MS7600 has six kinds of units. And the unit is located in order of the process of reworking. The process unit station of the machine has stored those units.



There is a unit of No.1 in order to remove chip components, such as 0402. The unit of No.2 is for solder cleaning of the land on the board, No.3 of the unit is for solder dispenser, and No.4 is positioning unit, it is for the new parts.



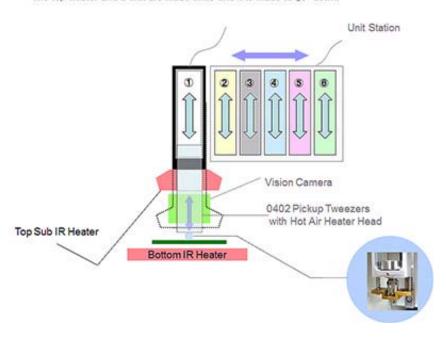
MS7600

6 head in the station unit

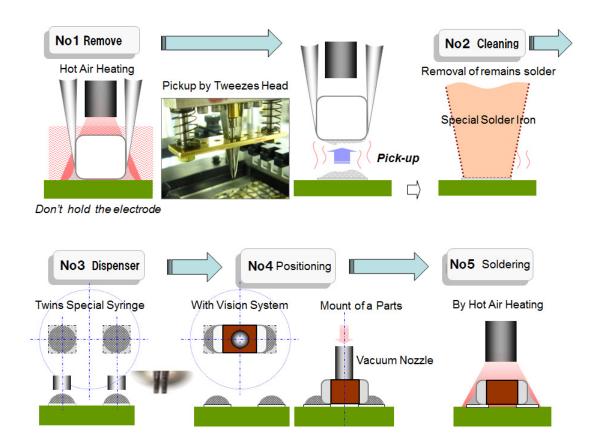
No.5 unit is for soldering of the new parts, such as 0402. And No.6 of unit is for CSP reworking.

Process Unit Station

The top heater and a unit are made unite and it is made to go-down.



• 0402 Rework with No.1 to No.5 unit.

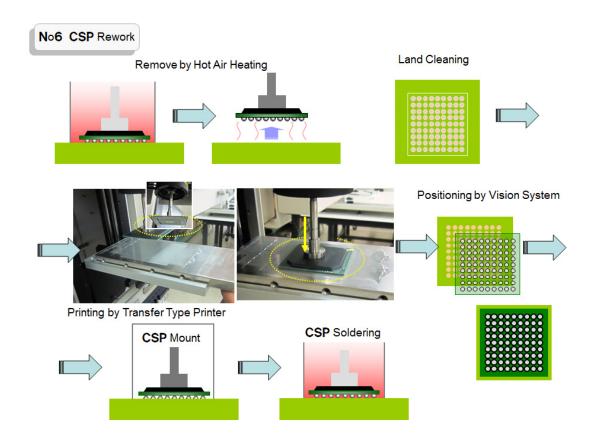


0402 is taken up with the tweezers in a heating head. Then the land after parts were removed is leveled with the solder iron head. Next is solder printing, a twin type dispenser is useful at 0402 etc. No.4 is mounting process, New 0402 etc. is picked-up by vacuum type nozzle. Then it is mounted on the land with monitoring by the external camera. It heats after mounting and solders by No.5 of the head.

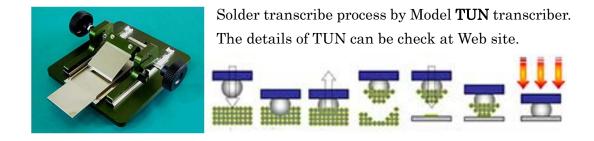
The unit change is manual although movement of each unit is automatic.

• CSP Rework with No.6 and No.3, 4.

The unit of No.6 is common to both removal and a re-mounting. (In reworking of CSP, only cleaning process is an external operation)



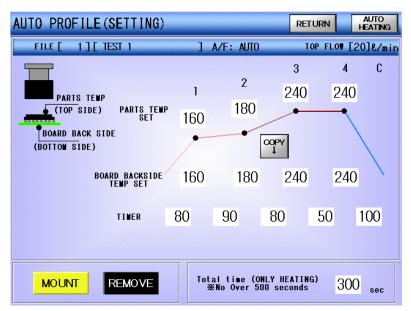
In the case of CSP Reworking, No.3 uses a transcribe-type printing tool instead of a dispenser.



The TUN is unnecessary of a metal mask, and it can be printing for almost all of CSP.

Auto-Profile

There is an ITTS Intelligence Thermal Trace System when reworking of CSP. The optimal temperature profile is automatically created by ITTS. Therefore, reworking is quickly exact in comfort.



If temperature conditions required for four windows are inputted, ITTS will reproduce the optimal temperature conditions automatically.



The manual system also contained in the machine, therefore, it will be omnipotent.

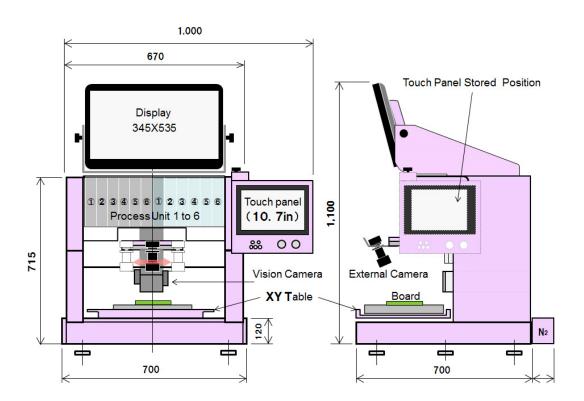
• N2 operation is possible.

N2 gas is effective in order to solder the parts of a fine pitch. MS7600 has N2 gas generator. However, removing is also possible if it is unnecessary.



MS7600

• External Size.



• Specifications:

Item	Description
Board Size	Up to 200 x 250mm
Components Size	0402 to $25x25$ mm CSP
Gap of Components	130μ mm or more
Top Space	up to 25mm
Bottom Space	Up to 25mm
XY Table	± 5.0 mm of fine adjuster
Unit Station(6 units)	1: Remove 0402 / 2: Cleaner / 3:Dispensor
	4:mount / 5:0402 soldering / 6:CSP Rework
Top Heater of 0402	230VA x 1 Hot Air
Top Heater for CSP	130VA x 2 Hot Air
Top Pre-Heater	$800 \mathrm{VA}\mathrm{IR}$ / with 8Φ non-contact control sensor
Bottom Heater	1000VA IR $150 \text{x} 320 \text{mm}$ w/8 Φ non-contact control sensor
Temperature Controller	TFT Color 10.4 inch Touched Panel
Control System	Auto by ITTS w/PID Manual 6 zoons.
Vision System	AF Auto zoom 72X CCD
External Camera	MF Auto Zoom 80X CCD
Monitor	LCD 22 inch
Data File(CSV)	0402:50files / CSP: A-100 / M-100 files
Air	0402: 0~10L/min / CSP: 20~40L/min
N2	0~10L/min
Power	AC200 ~ 240V 2P 3KVA
Weight	90Kg approx.
Dimension	670W x 700D x 770Hmm

The specifications are subject to change without notice.

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