

## MS6000 Nano-Rework Station

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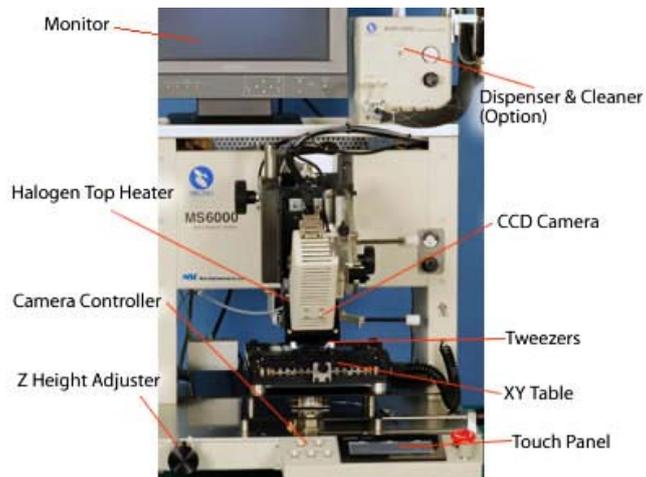
MS6000 is rework system for the tip parts from 0402(EIA 01005). The dispenser for tip parts and the cleaner of solder is prepared as the option.



- | Tweezers head of original development can be rework of 0402 chip parts exactly.
- | Halogen IR top heater heats chip parts quickly.
- | Exactly solder supplying is possible by the optional dispenser.
- | Solder cleaning for 0402 is possible by the optional cleaner.
- | High magnification CCD camera system provided of high accuracy positioning.
- | Supply of the tip parts by vacuum bit from the parts feeder.

### Outline of Operation

MS6000 is manual rework system for chip size parts as 0402. The parts is supplied from the from the taping parts feeder and or individual parts feeder. The parts can be picked up by a vacuum bit which our original developed. And the parts can be positioning by the high magnification CCD camera system. The tweezers can be rework of a high density mount board. It is possible of 0.1 mm or less of the gap between the parts. The solder paste supply is also by the optional dispenser which our original developed of the pen-cylinder type. It will be supply the solder paste of very small quantity and exactly. Furthermore, cleaning of the solder paste on the board is also possible, it is in the minute area as 0402.



MS6000 has high magnification CCD camera system. The camera system is for positioning of the parts and pick-up of the chip size parts. And it can be check of the solder printing, cleaning and out side view of the parts. They are 20--72 magnification maximum with zooming. and also with auto-focus. Top heating system is by halogen IR, and bottom heater is by hot air, They are our original developed high efficiency heating system. Thus, heat damage to the surrounding parts will be minimum.

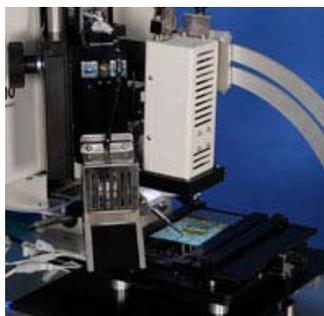


## Chip Parts Nozzle

The glass palette is the supply table of chip parts as 0402.

Chip parts are supplied at random on the circular glass palette. And chip parts can be check on the monitor, It is because, the CCD camera system is checking the image clearly.. The circular glass palette can be moves as left and right, and also rotation. The position of the chip parts should be adjusted so that the vacuum bit can be pickup correctly.

The CCD camera system can be magnification of maximum 72 on the monitor. It can be check even as 0402 chip parts.



## Chip Parts Tweezers



Tweezersbit is able to be supplied to each of the size of the chip. The tweezers bit can be taken up exactly, if there are 100 microns or more of gaps between the chip parts.

## Cleaning and Dispense

Cleaning of solder for very narrow area such as 0402 is used of the cleaning head changed of the heating unit. And also NVD2400 Cleaning & Dispenser unit must be prepared.

It is the system which sucks up the solder which has melted by the vacuum. This unit is supplied as an option.



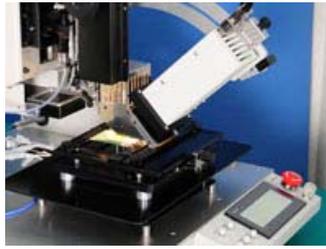
NVD2400 Cleaning & Dispenser  
(Option)

MS6000 also can dispense, it is our original developed system. It can dispense the solder paste even to very narrow areas, such as 0402.

Dispenser has 5cc syringe, normally attached needle is 0.25mm diameter. It is for 0402 chip parts. This is our original development cylinder type dispense system. It can supply the solder paste of small quantity such as to the 0402 land.

It is the system of sending out the solder paste of required quantity by the linear cylinder. The operation is by pedal switch.

## External CCD Camera



The external ccd camera is uses at dispense of the solder to a narrow area, and the time of cleaning. The camera can be expanded of 72 maximum magnifications, therefore, it can be check 0402 chip size parts clearly. Of course, appearance check of the parts after rework is also possible. It moves freely and the position of the camera is fixable.

## Accessories

1. Power Cable x 1
2. Air tube 6.0mmD x 1
3. Under Board support Pin system ( 2 rail with 4 pins)
4. Tweezers Head (for 0402) x 1
5. Board Hold Jig x 4

## Options

1. Tweezers Head (for required size)
2. Center Vacuum Bit for Nozzle
3. NVD2400 Cleaning & Dispenser (for Tip parts Land)
4. Solder Paste with 5cc syringe (for Tip Parts Land)
5. MS6000-FDR 8mm Tape Feeder (for Tip Parts)



NVD2400 Cleaning & Dispenser



MS6000-FDR Tape Feeder Jig for Tip Parts.

## Specifications

Item	Specifications
Board size	50x50---100x150mm
Thickness	0.5--1.5mm
Weight	0.5Kg max.
Top Space	up to 10mm max.
Bottom Space	up to 10mm max.
XY Table Fine Adjust	+&- 5.0mm max.
Moving Range	Free with Air lock
Board Holder	Z Slot or Holder Jig
Board Support	Under side 4 pins by 2 rails
Nozzle	Tweezers
Tip Parts Feeder	Palette and Tape
Adjustable Angle	within plus minus 5 degree
Vision System	CCD Camera
Magnification	20--72 Zooming
Focus	Auto/Manual selectable
Monitor	14inch LCD
Heater System	Top by Halogen IR 100W
	Bottom by Hot Air 400W 8x8mm
Controller	Touched Panel System
Control System	PID control
Manual Mode	2 zoon
Data Setting	Top: Level 0 -12
	Bottom: 0--500 degree
Time Range	Heating: 000----999 sec.
	Cooling: 000----999 sec. (Manual/Auto)
Dispenser	5cc+0.25mm needle(option)
Solder Cleaner	Vacuum (option)
Power	220-240V AC 2 phase 1.0KVA
Air	0.5Mpa
Dimension	470Wx650Dx520Hmm
Weight	20Kg approximate.

The specification are subject to change without notice.