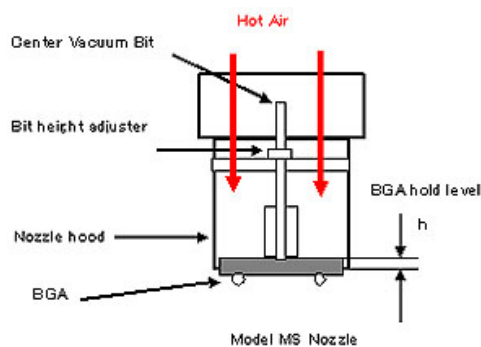


## Model MS Rework Nozzle

- | MS series Nozzle is compatible to the all MS series Rework Machine.
- | It is made possible of reworking for all most all SMD.
- | It can be reworking of the special SMD, such as a shield cover, BGA socket, and MCA etc.
- | A special center bit can also be manufactured.
- | So, It is possible of pick up for special surface SMD.
- | MS rework nozzle is strongly and easy handling.

### Outline of the MS Nozzle

The package is taken up horizontally by the center-bit with bit-ring. the bit ring is slid up and down and attracts the package certainly. The height of the center-bit is changeable, it should be adjusted to height of the package. And it will be possible if the lock-nut of the center-bit is loosened. So, MS rework nozzle will be made possible of reworking that all most all of the SMD. Furthermore, we can manufacture of special nozzle hood and also center-bit. It became possible to even rework the SMD of special form by that cause.



Standard Nozzle



Cross bit nozzle

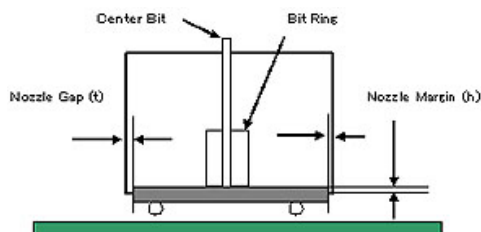


Parts Clip Nozzle



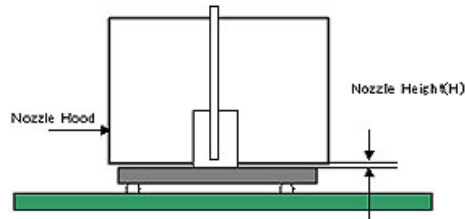
BGA socket nozzle

### Setting of the nozzle



We recommend of the position that the BGA holds (H) is about 0.5mm in the nozzle. It is because, when the BGA are mounted on the board, the vacuum of the center bit is off, therefore, the BGA is falls slightly on the board. And the BGA should be in the best position to heating then.

## Nozzle effect



The best position of the nozzle when heating is a position slightly higher than the surface of the BGA. Then, BGA has self- alignment in the soldering. probably, the position of the height of the nozzle at that time should always be the same, when repeating. It is because, the temperature profile will also change if the height was change. There is the stopper on the rework machine for it.

## Model of the nozzle has decided by the package size + Package type + Size data

4545:45.0x45.0mm of the package size

B: B is for BGA / Q is for QFP / S is for SOP etc.

00:the diameter of inner of the nozzle is + 0.5mm to the package size.

10:the diameter of inner of the nozzle is + 1.0mm to the package size.

## Specifications

The nozzle is manufactured by the size of the package. The table is the example:

Nozzle Type	Package size	Inner size of Nozzle
0505B00M	5.0x5.0mm	5.5x5.5mm
0507B00M	5.0x7.0mm	5.5x7.5mm
1010B00M	10.0x10.0mm	10.5x10.5mm
1111B00M	11.0x11.0mm	11.5x11.5mm
1212B00M	12.0x12.0mm	12.5x12.5mm
1515B00M	15.0x15.0mm	15.5x15.5mm
2020B10M	20.0x20.0mm	21.0x21.0mm
2525B10M	25.0x25.0mm	26.0x26.0mm
2727B10M	27.0x27.0mm	28.0x28.0mm
3030B10M	30.0x30.0mm	31.0x31.0mm
3535B10M	31.0x31.0mm	32.0x32.0mm
4040B10M	40.0x40.0mm	42.0x42.0mm
4545B10M	45.0x45.0mm	46.0x46.0mm

The specification are subject to change without notice.