



Multiple Re-Balling Tool Rebcom Model RBC-1 & RBC-100

Main Features:

- To CSP or BGA, a solder ball can be mounted easily, with mechanical- auto-centering unit. Even when it is square, a rectangle is also.
- Re-balling of the package from 3 to 50mm□(RBC-1) & 3 to 100mm□(RBC-100)
- Solder ball's mounting, and printing of solder are also possible.
- If an optional tool is added, the re-balling of micro ball such as 200μmΦ is also possible.
- Air is required even though the power supply of RBC-1 is unnecessary. The special air compressor can also be arranged.



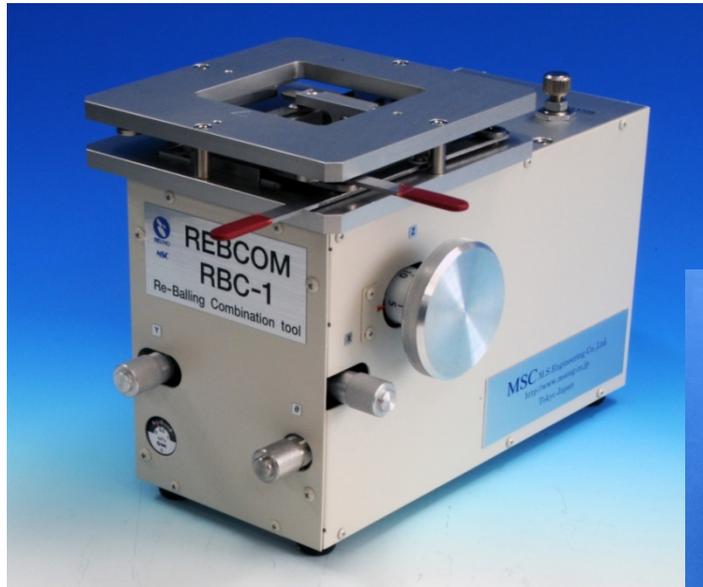
RBC-1



RBC-100

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RBC-1&RBC-100: Multiple Re-Balling Tools. Catalogue (Ver.4.00)



RBC-1



RBC-100

Overview

RBC-1 is a tool which mounts a solder ball in packages, such as almost all kinds of CSP, and BGA, easily and exactly.

The tool is power supply needlessness and the metal mask for mounting of a ball and the metal mask for printing of solder are arranged.

It is a special mechanically centering unit with a patent, and positioning of a package is quickly and correctly.

Tools are X, Y, θ and also Z(height) can tune finely with a micro gauge. For that reason, even a micro ball can be mounted exactly.

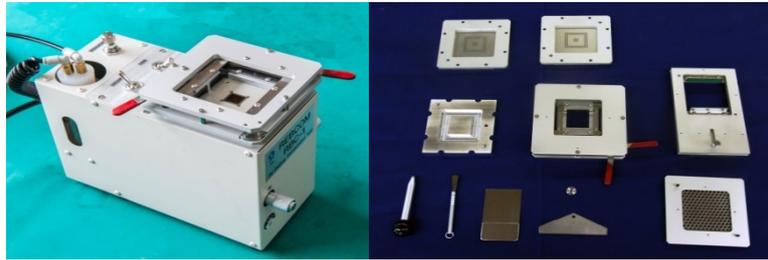
Main Features:

- Re-Balling of the package from 3 to 50mm \square is possible.
- Re Balling of the package from 3 to 100mm \square is also possible by RBC-100.
- Of course, it can use for printing of solder.
- It Attachment and detachment of a mask are easy for the frame of a special metal mask. For that reason, the re-balling of many kinds of BGA is possible.
- Anyone with easy operation can do work safely. Because all of it are manual mechanisms.

MSC M.S. Engineering Co.,Ltd.

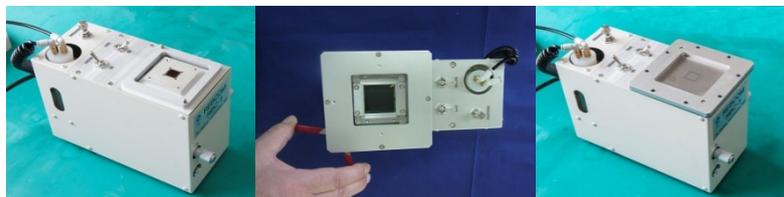
MSC 1-38-15 Okusawa Setagaya-Ku Tokyo Japan 〒158-0083 <http://www.mseng.co.jp>

Assembly:



The tool has 11 kinds of the parts as the picture of right-side. And a main body with a ball storage bottle and air tube in a left picture.

Out line of Operation:



Setup for BGA ⇒ Centering by the lever ⇒ Setup for metal mask

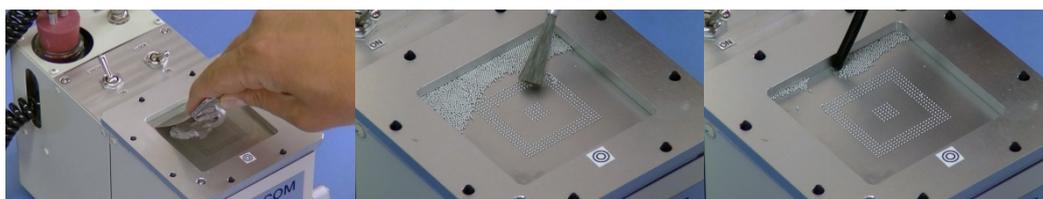
BGA is put on RBC-1, and then let's centering with the tool for positioning, the positioning of BGA and a metal mask is completed. BGA centering is completion exactly by only moves the lever of the unit. (A mechanically centering mechanism is our patent)



Fine-adjust by micro-adjustor of X,Y,Z and θ

Metal-mask Holder

If the check of positioning is necessary, it can check with a magnifying glass. Fine adjustment of X, Y, Z, and theta is possible. Exchange of a metal mask is easy for many kind of BGA.

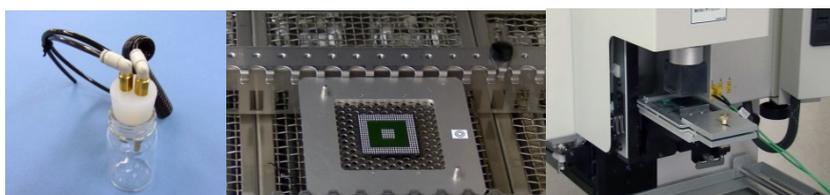


Printing

ball mounting

Surplus ball removal

It prints with the squeegee. The balls are mounted with the electrification prevention brush. And the surplus balls are attracted and are corrected to the bottle.



Ball-Bottle

Heating Unit

Movement-Unit

The package in which the ball was mounted heats and is completion.

Main Specification: (The specifications are subject to change without notice)

- Components:** BGA/CSP/LGA/QFN/LLP/POP □3 to □50mm Rectangle is possible.
- (RBC-100)** BGA/CSP/LGA/QFN/LLP/POP □3 to □100mm Rectangle is possible
- Ball Size:** 0.25 to 0.76Φmm or more (Micro BGA is possible with optional unit RBC-1B)
- Table Adjuster:** X,Y,Z = $\geq 0.01\text{mm}$ $\theta = \leq 3^\circ$
- Size:(weight):** 250D x 130Wx165Hm m (3Kgs approx.)
- (RBC-100)** 280D x 160W x 230Hm m (3.5Kg approx.)
- Air Required:** 0.15 to 0.8 Mpa



RBC-100

Optional Accessories:



RBC-1B

RBC-1P

RBC-100

RMC1000

RBC-100 All the performances are the same as RBC-1 except size & weight.

RBC-1B: For Micro-BGA Adaptor (200 to 230 μ mm Φ ball.)

RBC-1P Loupe (10X)

RBC-1V Air Compressor: (AC100V 200VA 30L/min 0.15 Mpa)

RMC1000 Metal Mask Cleaner by Ultrasonic. (AC100V 40VA 40KHz / Washing area 45Φmm)



RBC-1V