IN-TRAY
LASER MARK HANDLER
MK609

Overview
This laser marker sequentially prints a pattern on the surface of the IC package mounted in a plastic hard tray as they are mounted in place. Orientation of each device can be checked before the marking process, and after marking, marking can be checked for quality, and those trays including faulty devices can be ejected.

Features
1. High throughput and smallest Laser Marker available for many size of package.
2. Laser mark with no picking out devices from tray.
3. Changing of device type is accomplished without replacing parts.
4. Any tray size may be available by tray changeover kit
5. Accept any Laser generators
6. Equipped with mark inspection unit
7. Before marking, confirms the presence & orientation of devices.
8. It is possible to interface with external computer.
9. Device positioner (option)

Specification
1. Throughput (Including Mark time 0.2sec/dev)
   8500UPH (0.42sec/dev): Tray matrix 6x10 (60dev)
   12000UPH (0.3sec/dev): Tray matrix 9x15 (135dev)
2. Mark position accuracy
   Handler repetition accuracy : +/-0.05mm
3. Applicable Device
   Devices in the tray
   QFP / BGA / TSSOP / CSP etc.
   The system also accommodates devices with different thickness.
4. Applicable tray size
   JEDEC standard size : 76.2mmx135.9mmx322.6mm
   Any tray size may be used by replacing Changeover Kit.
5. Supply and loading of trays
   Tray stacking height : 260mm (40 JEDEC trays)
   Store : Tray stacking
6. Check devices for orientation
   1-pin mark or notch of a device mounted in the tray is detected by image processor, and the presence and orientation of the device is confirmed.
7. Checking marking quality
   The devices in the trays on the unloading table are checked for marking quality.
   These devices are confirmed by image processor, and the tray including the fail devices is stopped at the exit position.
8. Smoke removal and Brushing feature
   The system is furnished with a brushing feature which removes dust on the device mold before marking and removes soot after marking.
   Smoke, dust and soot are exhausted into the dust collector through a suction duct.
   A brush equipped with a static eliminator is used, and the unit can also be equipped with an anti-static ionizer.
   The unit can also be equipped with a fine-tuning feature for adjusting brush height.
9. Mark setting
   Mark changes are is made by entering th model label via keyboard or ber-cord reader, so that the Handler, laser generator and image processor setting are modified in a single process.
10. External Computer I / F
    It is possible to interface the unit with various external computer. (standard mode is RS232C)
11. Utility
    Power supply : 200V less than 1.5kVA
    Compressed air : 0.5Mpa (5.1kgf / cm²) or more clean dry air
12. Dimension
    1200mm(W) x 1600mm(D) x 1590mm(H)