

13. Auto Assembler



AIB-210



<Strip Cut & Place System>



<Robot Arm>



<Device Presser>

1) Description

For quality controlled manufacturing process of rapid test products, auto assembling system occupy a position with grand importance.

Zeta introduces AIB-210 as a full automatic assembler which is composed of several sub-systems. Those are device feeder, cut and place module, strip insertion, 3 inspection cameras, and presser.

This reliable system assures users to become the leaders in rapid test industry.

2) Specification

2-1) AIB-210 : Auto Assembler with Auto Bowl Feeder (In-line type)

- (1) Device Type : Rectangle shape device for Rapid test
- (2) Capacity : about 2,000 devices /hour
- (3) Strip cutting : Guillotine type
- (4) Strip insertion by robot arm, Pick and place module
(Robot arm correct the position automatically after vision inspection)
- (5) Feeding Top & Bottom device :
 - Devices are being directed and fed by Auto Bowl Feeder
 - Feeding capacity : 50~60 pcs/minute
- (6) Inspection : Vision inspections are being conducted by 3 vision cameras at 3 key positions to completely prevent defectives mixing with good products.
 - Cut & Place part (No.1 vision camera) : Identify defect marked strips and incorrectly placed strips and ejects defectives
 - Strip inserting part (No.2 vision camera) : Identify and memorize empty bottom devices and bottom devices with incorrectly inserted strips. Defectives are being ejected at next step.
 - Before pressing part (No.3 vision camera) : After assemble top devices, check and eject empty and defect marked strips together with defectives memorized in the 2nd vision inspection.
- (7) Device assembling : Using 2 press rollers
- (8) Control : PLC (Touch Screen is applied)
- (9) Required manpower : 1 person