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SOLUTIONS, INC

AUTOMATION, SMT & LEAN MANUFACTURING

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BOARD HANDLING & AUTOMATION SYSTEM

High technology for the best PCB Assembly Equipment in the world



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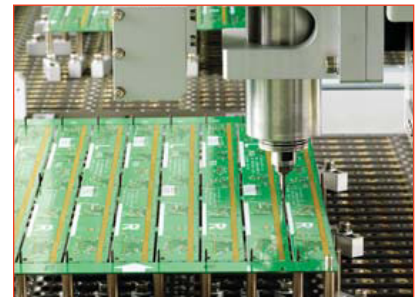
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ROUTER - OFF-LINE Type (2 Table 1 Head)

AMS

This unit is used to depanel PCB by high torque spindle and separate the arrayed PCBs as off-line.



✓ FEATURES

- Easy teaching by CCD Camera
- Successive working possible by 2 working tables
- Concentrated dust collection at bottom side - excellent effect of removing dust
- Easy operation by 4 axis servo and control by industrial PC
- Easy to change BIT of spindle by one-touch type
- Use of Universal type Jig

✓ OPTIONS

- Exclusive Jig

Model	Spindle Power	Spindle Max RPM	Robot Speed	Dust Collector	Power
KRUT-1750Y(L,X,XX)	500(Watt)	60,000(RPM)	X,Y1,Y2-1,000mm/s Z-500mm/s	2.2(Kw)	3Phase220V or 380V

ROUTER - OFF-LINE Type (1 Table 1 Head)

AMS

This unit is used to depanel PCB by high torque spindle and separate the arrayed PCBs as off-line.



Desktop Robot Type

✓ FEATURES

- Easy teaching by CCD Camera
- Equipped with Safety slide door
- Easy operation by 3 axis servo and control by industrial PC
- Easy to change BIT of spindle by knob type

✓ OPTIONS

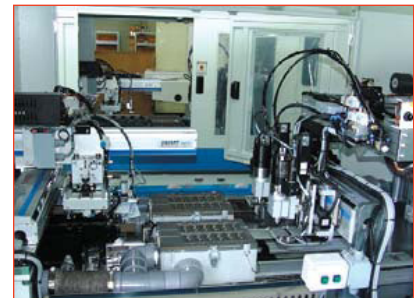
- Universal type Jig
- One-touch type BIT Change

Model	Spindle Power	Spindle Max RPM	Robot Speed	Dust Collector	Power
KRUT-900Y(L,X,XX)	150(Watt)	60,000(RPM)	X, Y-1,000mm/s Z-500mm/s	1.5(Kw)	3Phase220V or 380V

ROUTER - IN-LINE Type (2 Table 2 Head)

AMS

This unit is used to depanel PCB by high torque spindle and separate the arrayed PCBs as in-line.



✓ FEATURES

- 2 Tables & 2 Heads
- Auto supply and transfer
- Single conveyor → 2 Table Router → Out Conveyor
- PC + PLC control
- Easy to change BIT of spindle by one-touch type

Model	Spindle Power	Spindle Max RPM	Robot Speed	Dust Collector	Power
KIRUT-900S	150(Watt)	60,000(RPM)	X, Y-1,000mm/s Z-500mm/s	2.2(Kw)	3Phase220V or 380V

LABEL PLACEMENT MACHINE

AMS

This unit is used to mount a label to PCB or automatically.



✓ FEATURES

- SMEMA interface
- PC & PLC Control
- High precision robot control
- Auto PCB clamping
- 17" LCD monitor
- Auto width adjustment

✓ OPTIONS

- Label printer
- Label reading scanner
- TCP/IP protocol
- Line data control system

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KLBM-1100S	330 x 250	50 x 50	1450 x 1400 x 1650	1.6 kVA	4~6 kgf/cm ²	400
KLBM-1100Y	440 x 330	50 x 50	1800 x 1600 x 1650	1.6 kVA	4~6 kgf/cm ²	420
KLBM-1100L	530 x 380	50 x 50	2100 x 1650 x 1650	1.6 kVA	4~6 kgf/cm ²	440
KLBM-1100X	530 x 460	50 x 50	2100 x 1715 x 1650	1.6 kVA	4~6 kgf/cm ²	480
KLBM-1100XX	610 x 460	50 x 50	2100 x 1775 x 1650	1.6 kVA	4~6 kgf/cm ²	520

INKJET MARKING MACHINE

AMS

This unit is used to mark text, barcode, 2D code & graphic on PCBs by using Inkjet.



✓ FEATURES

- Able to mark on several points of PCB arrayed
- X-Y robot marking
- Reduced position fixing time by Laser beam
- No decolorization of in-printer letter in a high temperature
- Various font available-Bar code, Serial no, Model, QR code etc.
- SMEMA interface
- Available for various kinds of PCB, IC, parts, finished goods etc.

✓ OPTIONS

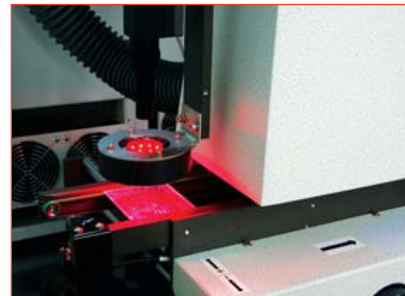
- Scanner
- Built-in Flip Station(Inverter)
- 3 colors marking available-black, red, blue

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KIJ-900S	330 x 250	50 x 50	1590 x 1300 x 1700	2.0 kVA	4~6 kgf/cm ²	500
KIJ-900Y	440 x 330	50 x 50	1920 x 1380 x 1700	2.0 kVA	4~6 kgf/cm ²	550
KIJ-900L	530 x 380	50 x 50	2190 x 1460 x 1700	2.0 kVA	4~6 kgf/cm ²	600
KIJ-900X	530 x 460	50 x 50	2190 x 1510 x 1700	2.0 kVA	4~6 kgf/cm ²	650
KIJ-900XX	610 x 460	50 x 50	2430 x 1510 x 1700	2.0 kVA	4~6 kgf/cm ²	680

LASER MARKING ROBOT

AMS

This unit is used to mark text, barcode, 2D code & graphic on PCBs by using CO2 Laser.



✓ FEATURES

- Able to mark on several points of PCB arrayed
- X-Y robot marking
- Easy operation by 17" color touch monitor
- Able to reduce a position fixing time by laser beam sights to a point marked
- Various font available - Bar code, Serial no, Model, QR code etc.
- SMEMA interface
- Available for various kinds of PCB, IC, parts, finished goods etc.

✓ OPTIONS

- YVO4 laser marking
- Fiber laser marking
- CLEANING UNIT&DUST COLLECTOR (Including FUME)
- SCANNER(1D, 2D), and Data check and transfer

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KCLM-900S	330 x 250	50 x 50	960 x 1270 x 1700	3.0 kVA	4~6 kgf/cm ²	700
KCLM-900Y	440 x 330	50 x 50	1090 x 1350 x 1700	3.0 kVA	4~6 kgf/cm ²	750
KCLM-900L	530 x 380	50 x 50	1170 x 1400 x 1700	3.0 kVA	4~6 kgf/cm ²	800
KCLM-900X	530 x 460	50 x 50	1170 x 1470 x 1700	3.0 kVA	4~6 kgf/cm ²	840
KCLM-900XX	610 x 460	50 x 50	1170 x 1530 x 1700	3.0 kVA	4~6 kgf/cm ²	900

MAGAZINE AUTO WIDTH ADJUSTER

AMS

This unit is used to adjust the Guide of movable rail by inserting the Magazine by OFF-line.



✓ FEATURES

- Magazine Adjustment range : 50mm ~ 250mm
- Perfect fixing with left/right 3 Magazines
- Precise control by 2 axis servo motor
- Possible to adjust the fixing Torque of blot for Magazine Guide
- Wrench exchange type for assembly/disassembly of blot
- Touch Panel

✓ OPTIONS

- Corresponding to AGV (communication)

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KMAWA-900S	330 x 250	50 x 50	3100 x 1020 x 1125	3.0 kVA	4~6 kgf/cm ²	250
KMAWA-900Y	440 x 330	50 x 65	3835 x 1100 x 1125	3.0 kVA	4~6 kgf/cm ²	270
KMAWA-900L	530 x 380	50 x 60	4360 x 1160 x 1125	3.0 kVA	4~6 kgf/cm ²	290
KMAWA-900X	530 x 460	50 x 100	4360 x 1230 x 1125	3.0 kVA	4~6 kgf/cm ²	310
KMAWA-900XX	610 x 460	50 x 100	4955 x 1230 x 1125	3.0 kVA	4~6 kgf/cm ²	350

This unit is used to automatically check impedance of all electronic parts on PCB



FEATURES

- Compact design
- Easy fixture exchange
- SMEMA interface

OPTIONS

- Touch screen
- Auto width adjustment

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KICT-900S	330 x 250	50 x 50	890 x 950 x 1280	600 kVA	4~6 kgf/cm ²	250
KICT-900Y	440 x 330	50 x 50	990 x 950 x 1280	600 kVA	4~6 kgf/cm ²	300



FEATURES

- Easy fixture exchange
- Applied slide type for fixture replace and insertion is processed in back side automatically.
- Relieved shock and increased speed using servo motor
- SMEMA interface

OPTIONS

- Touch screen
- Auto width adjustment

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KICT-920S	330 x 250	50 x 50	1800 x 810 x 1874	700 kVA	4~6 kgf/cm ²	600
KICT-900Y	440 x 330	50 x 50	2100 x 900 x 1847	700 kVA	4~6 kgf/cm ²	690

MAGAZINE LOADER (Standard Type)

AMS

This unit is used to load the PCB from Magazine to next equipment in the production line.



Cover Type

✓ FEATURES

- SMEMA Interface
- Stable design
- Perfect fixing with 4 Magazine fixture (upper 2 + lower 2 Magazines)
- Easy operation by user-friendly operation panel
- Decreased noise while Magazine moves up/down
- PCB pushing guide
- Buzzer, LED tower light

✓ OPTIONS

- Acceptance for 2 different sizes of Magazine
- Space save type(90 degree shape)
- Touch screen
- High speed magazine change-over time
- Aux. buffer Conveyor

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KL-900S	330 x 250	50 x 50	1340 x 725 x 1080	500 kVA	4~6 kgf/cm ²	210
KL-900Y	440 x 330	50 x 65	1665 x 805 x 1080	500 kVA	4~6 kgf/cm ²	235
KL-900L	530 x 380	50 x 60	1890 x 925 x 1180	500 kVA	4~6 kgf/cm ²	250
KL-900X	530 x 460	50 x 100	1890 x 995 x 1180	500 kVA	4~6 kgf/cm ²	270
KL-900XX	610 x 460	50 x 100	2145 x 995 x 1180	500 kVA	4~6 kgf/cm ²	280

MAGAZINE LOADER (90° Type)

AMS

This unit is used to load the PCB from Magazine to next equipment in 90 degree to save the space in the line.



✓ FEATURES

- SMEMA Interface
- Stable design
- Perfect fixing with 2 Magazine fixture (upper 1 + lower 1 Magazines)
- Easy operation by user-friendly operation panel
- Decreased noise while Magazine moves up/down
- PCB pushing guide
- Buzzer, LED tower light

✓ OPTIONS

- Acceptance for 2 different sizes of Magazine
- Touch screen
- High speed magazine change-over time
- Aux. buffer Conveyor

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KL90-900S	330 x 250	50 x 50	960 x 1660 x 1100	500 kVA	4~6 kgf/cm ²	210
KL90-900Y	440 x 330	50 x 65	1215 x 1830 x 1180	500 kVA	4~6 kgf/cm ²	235
KL90-900L	530 x 380	50 x 60	1455 x 1930 x 1180	500 kVA	4~6 kgf/cm ²	250
KL90-900X	530 x 460	50 x 100	1455 x 2225 x 1225	500 kVA	4~6 kgf/cm ²	270
KL90-900XX	610 x 460	50 x 100	1630 x 2225 x 1225	500 kVA	4~6 kgf/cm ²	280

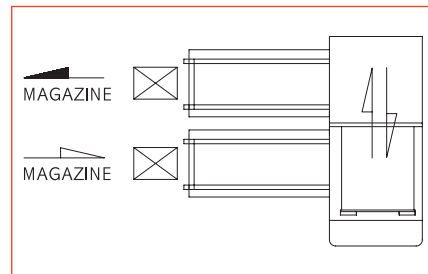
MAGAZINE LOADER (Ergonomic Type)

AMS

This is Magazine Loader to protect the operator from backache.



✓ PROCESS FLOW CHART



✓ FEATURES

- SMEMA Interface
- Stable design
- Perfect fixing with 4 Magazine fixture
- Easy operation by user-friendly operation panel
- Decreased noise while Magazine moves up/down
- PCB pushing guide
- Buzzer, LED tower light

✓ OPTIONS

- Acceptance for 2 different sizes of Magazine
- Touch screen
- High speed magazine change-over time
- Aux. buffer Conveyor

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KL-900S-AGV	330 x 250	50 x 50	1250 x 1230 x 1650	500 kVA	4~6 kgf/cm ²	300
KL-900Y-AGV	440 x 330	50 x 65	1565 x 1390 x 1650	500 kVA	4~6 kgf/cm ²	320
KL-900L-AGV	530 x 380	50 x 60	1790 x 1510 x 1650	500 kVA	4~6 kgf/cm ²	340
KL-900X-AGV	530 x 460	50 x 100	1790 x 1650 x 1650	500 kVA	4~6 kgf/cm ²	360
KL-900XX-AGV	610 x 460	50 x 100	2050 x 1650 x 1650	500 kVA	4~6 kgf/cm ²	380

This unit used to load the bare board to next process in the production line.



PCB Cleaner Combination Type



CE Type

✓ FEATURES

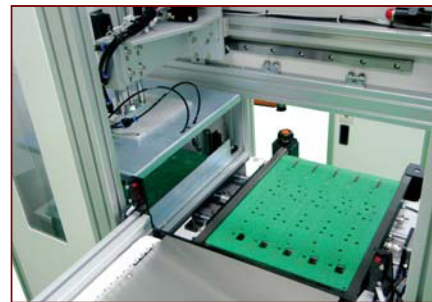
- SMEMA Interface
- Reduced operation time by up/down base
- PCB dropout prevention by reducing vacuum pick-up stroke.
- Small size PCB dropout prevention by PCB guide sticking
- Possible to load 200 pcs of PCB(when using 1.6t)
- Convenient digital vacuum pressure sensor
- Adopted magnet type and adjustable pick-up point of PCB
- Buzzer, LED tower light

✓ OPTIONS

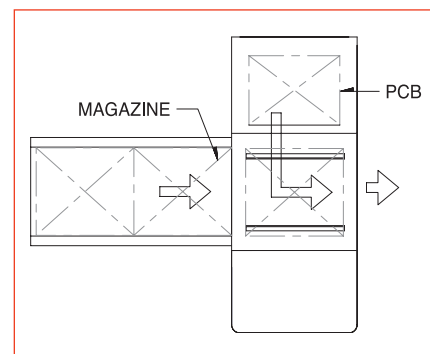
- Touch screen
- Auto width adjustment
- FIFO function(Patent pending)
- Combination with Magazine Loader

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KVL-520S	330 x 250	50 x 50	520 x 625 x 1230	300 kVA	4~6 kgf/cm ²	210
KVL-520Y	440 x 330	50 x 50	650 x 705 x 1230	300 kVA	4~6 kgf/cm ²	235
KVL-520L	530 x 380	50 x 50	730 x 755 x 1230	300 kVA	4~6 kgf/cm ²	250
KVL-520X	530 x 460	50 x 50	730 x 825 x 1230	300 kVA	4~6 kgf/cm ²	270
KVL-520XX	610 x 460	50 x 50	730 x 885 x 1230	300 kVA	4~6 kgf/cm ²	280

This unit used to load both bare board and the PCB from Magazine to next process in the production line.



✓ PROCESS FLOW CHART



✓ FEATURES

- Bare board loading at rear position : reduced length of production line
- SMEMA Interface
- Stable design
- Perfect fixing with 4 Magazine fixture
- Easy operation by user-friendly operation panel
- Decreased noise while Magazine moves up/down
- PCB pushing guide
- Buzzer, LED tower light

✓ OPTIONS

- Acceptance for 2 different sizes of Magazine
- Touch screen
- High speed magazine change-over time
- Aux. buffer Conveyor

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KVML-900S	330 x 250	50 x 50	1340 x 1075 x 1650	800 kVA	4~6 kgf/cm ²	350
KVML-900Y	440 x 330	50 x 65	1670 x 1235 x 1650	800 kVA	4~6 kgf/cm ²	370
KVML-900L	530 x 380	50 x 60	1940 x 1325 x 1650	800 kVA	4~6 kgf/cm ²	390
KVML-900X	530 x 460	50 x 100	1940 x 1495 x 1650	800 kVA	4~6 kgf/cm ²	410
KVML-900XX	610 x 460	50 x 100	2180 x 1495 x 1650	800 kVA	4~6 kgf/cm ²	420

SINGLE MAGAZINE LOADER (CE Type)

AMS

This unit is used to load the PCB from single Magazine to next equipment in the production line.



✓ FEATURES

- SMEMA Interface
- Able to use all different sizes of Magazine
- Easy operation by touch screen
- Magazine table with quick release clamping units, horizontally and vertically
- Magazine platform vertically aligned using a tension clamp
- Buzzer, LED tower light

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KL-100X	530 x 460	50 x 50	1335 x 870 x 1179	500 VA	4~6 kgf/cm ²	200

This unit is used to load/unload the PCB in the production line by using 2 or 3 magazines.



✓ FEATURES

- SMEMA Interface
- Able to use all different sizes of Magazine
- Perfect fixing with 2 Magazine Fixture
- Easy operation by touch screen
- Auto width adjustment
- Magazine table with quick release clamping units, horizontally and vertically
- Magazine platform vertically aligned using a tension clamp
- Buzzer, LED tower light

✓ OPTIONS

- Multiple output
- Good / Bad board sorting

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Weight(kg)
KL-200X	530 x 460	50 x 50	950 x 1875 x 1392	800 VA	320
KUP-200X	530 x 460	50 x 50	950 x 1875 x 1392	800 VA	320

This unit is used to unload the PCB into the Magazine.



Cover Type

✓ FEATURES

- SMEMA Interface
- Stable design
- Perfect fixing with 4 Magazine fixture (upper 2 + lower 2 Magazines)
- Easy operation by user-friendly operation panel
- Decreased noise while Magazine moves up/down
- Buzzer, LED tower light

✓ OPTIONS

- Acceptance for 2 different sizes of Magazine
- Space save type(90 degree shape)
- Touch screen
- High speed magazine change-over time
- Cooling Fan
- Auto width adjustment at pusher conveyor

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KUP-900S	330 x 250	50 x 50	1890 x 725 x 1080	500 kVA	4~6 kgf/cm ²	260
KUP-900Y	440 x 330	50 x 65	2345 x 805 x 1080	500 kVA	4~6 kgf/cm ²	285
KUP-900L	530 x 380	50 x 60	2650 x 925 x 1180	500 kVA	4~6 kgf/cm ²	300
KUP-900X	530 x 460	50 x 100	2650 x 995 x 1180	500 kVA	4~6 kgf/cm ²	320
KUP-900XX	610 x 460	50 x 100	2905 x 995 x 1180	500 kVA	4~6 kgf/cm ²	340

MAGAZINE UNLOADER (90° Type)

AMS

This unit is used to unload the PCB into the Magazine in 90 degree to save the space in the line.



✓ FEATURES

- SMEMA Interface
- Stable design
- Perfect fixing with 2 Magazine fixture (upper 1 + lower 1 Magazines)
- Easy operation by user-friendly operation panel
- Decreased noise while Magazine moves up/down
- PCB pushing guide
- Buzzer, LED tower light

✓ OPTIONS

- Acceptance for 2 different sizes of Magazine
- Touch screen
- High speed magazine change-over time
- Auto width adjustment at pusher conveyor

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KUP90-900S	330 x 250	50 x 50	1000 x 1660 x 1100	500 kVA	4~6 kgf/cm ²	210
KUP90-900Y	440 x 330	50 x 65	1190 x 1830 x 1180	500 kVA	4~6 kgf/cm ²	235
KUP90-900L	530 x 380	50 x 60	1410 x 1930 x 1180	500 kVA	4~6 kgf/cm ²	250
KUP90-900X	530 x 460	50 x 100	1410 x 2225 x 1225	500 kVA	4~6 kgf/cm ²	270
KUP90-900XX	610 x 460	50 x 100	1600 x 2225 x 1225	500 kVA	4~6 kgf/cm ²	280

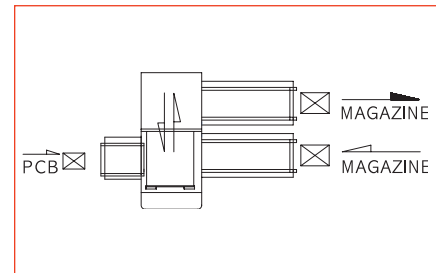
MAGAZINE UNLOADER (Ergonomic Type)

AMS

This is Magazine Unloader to protect the operator from backache.



✓ PROCESS FLOW CHART



✓ FEATURES

- SMEMA Interface
- Stable design
- Perfect fixing with 4 Magazine fixture
- Easy operation by user-friendly operation panel
- Decreased noise while Magazine moves up/down
- PCB pushing guide
- Buzzer, LED tower light

✓ OPTIONS

- Acceptance for 2 different sizes of Magazine
- Touch screen
- High speed magazine change-over time
- Auto width adjustment

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KUP-900S-AGV	330 x 250	50 x 50	1800 x 1230 x 1650	500 kVA	4~6 kgf/cm ²	350
KUP-900Y-AGV	440 x 330	50 x 65	2220 x 1400 x 1650	500 kVA	4~6 kgf/cm ²	370
KUP-900L-AGV	530 x 380	50 x 60	2520 x 1550 x 1650	500 kVA	4~6 kgf/cm ²	390
KUP-900X-AGV	530 x 460	50 x 100	2520 x 1650 x 1650	500 kVA	4~6 kgf/cm ²	410
KUP-900XX-AGV	610 x 460	50 x 100	2860 x 1650 x 1650	500 kVA	4~6 kgf/cm ²	430

SINGLE MAGAZINE UNLOADER (CE Type)

AMS

This unit is used to unload the PCB into two Magazines.



✓ FEATURES

- SMEMA Interface
- Able to use all different sizes of Magazine
- Easy operation by touch screen
- Magazine table with quick release clamping units, horizontally and vertically
- Magazine platform vertically aligned using a tension clamp
- Buzzer, LED tower light

✓ OPTIONS

- Auto width adjustment

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KUP-100X	530 x 460	50 x 50	1330 x 900 x 1180	300 VA	4~6 kgf/cm ²	200

This unit is used to connect previous/next machine effectively in the production line.



Cooling Conveyor

✓ FEATURES

- SMEMA Interface
- Stable design with double plate structure
- PLC control

✓ OPTIONS

- Touch screen
- Tower Light
- Auto width adjustment
- Speed Controller
- Cooling Fan - Cooling time adjustable
- ESD safety cover
- Added segment for holding lots of PCBs
- Chain Belt for heat-resistance

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Weight(kg)
KCC-900S	330 x 250	50 x 50	900 x 500 x 920	100 VA	70
KCC-900Y	440 x 330	50 x 50	900 x 580 x 920	100 VA	80
KCC-900L	530 x 380	50 x 50	900 x 630 x 920	100 VA	90
KCC-900X	530 x 460	50 x 50	900 x 700 x 920	100 VA	100
KCC-900XX	610 x 460	50 x 50	900 x 760 x 920	100 VA	110

This unit is used to inspect the PCBs manually in the production line.



3 Segment Type

✓ FEATURES

- SMEMA Interface
- Stable design with double plate structure
- PLC control
- Pass / Work mode available
- Adjustable PCB position
- Adjustable Conveyor speed
- Maximized ESD working space
- Eye-protectable high efficient fluorescent light
- Parts hanger is furnished

✓ OPTIONS

- Touch screen
- Buzzer, LED tower light
- Auto width adjustment
- Cooling Fan
- ESD safety cover
- Added segment for holding lots of PCBs
- Preset counter function
- Magnifying glass

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Weight(kg)
KIC-900S	330 x 250	50 x 50	900 x 510 x 1560	100 VA	80
KIC-900Y	440 x 330	50 x 50	900 x 590 x 1560	100 VA	90
KIC-900L	530 x 380	50 x 50	900 x 640 x 1560	100 VA	100
KIC-900X	530 x 460	50 x 50	900 x 710 x 1560	100 VA	110
KIC-900XX	610 x 460	50 x 50	900 x 770 x 1560	100 VA	120

This unit used to remove dusts and particles on the PCB in the production line.



✓ FEATURES

- Perfect removal of particle by Brush & Air + Vacuum cleaning
- SMEMA Interface
- Removes static of PCB by using Ionizer
- Easy Operation by Touch Screen
- Auto Width Adjustment

✓ OPTIONS

- Aux. buffer Conveyor
- Combination type with vacuum loader or magazine loader

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KIPC-900S	330 x 250	75 x 50	670 x 900 x 1415	300 VA	4~6 kgf/cm ²	150
KIPC-900Y	440 x 330	75 x 50	750 x 990 x 1415	300 VA	4~6 kgf/cm ²	160
KIPC-900L	530 x 380	75 x 50	750 x 1040 x 1415	300 VA	4~6 kgf/cm ²	170
KIPC-900X	530 x 460	75 x 50	750 x 1110 x 1415	300 VA	4~6 kgf/cm ²	180
KIPC-900XX	610 x 460	75 x 50	750 x 1170 x 1415	300 VA	4~6 kgf/cm ²	190

GATEWAY(TELESCOPIC) CONVEYOR

AMS

This unit is used to make passage for operator in the production line.



Space Saving Type

✓ FEATURES

- SMEMA Interface
- Stable design with double plate structure
- Improved safety with safety sensor and switch
- ESD Cover safe from dust
- Normally open type
- Buzzer, LED tower light

✓ OPTIONS

- Touch screen
- Auto width adjustment
- Space economized type by 2 platform sliding
- Speed Control
- Holding 2 PCBs
- Normally closed type(keeps in-line status always)

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KGC-500S	330 x 250	50 x 50	1400(800+600)x510x1000	450 VA	4~6 kgf/cm ²	130
KGC-500Y	440 x 330	50 x 50	1400(800+600)x590x1000	450 VA	4~6 kgf/cm ²	140
KGC-500L	530 x 380	50 x 50	1400(800+600)x640x1000	450 VA	4~6 kgf/cm ²	150
KGC-500X	530 x 460	50 x 50	1400(800+600)x710x1000	450 VA	4~6 kgf/cm ²	160
KGC-500XX	610 x 460	50 x 50	1400(800+600)x770x1000	450 VA	4~6 kgf/cm ²	170

This unit is used to connect Dual lane with Single lane equipment in the production line, and also can be used as a fixed rail changer.



✓ FEATURES

- SMEMA Interface
- Stable design with double plate structure
- ESD Cover safe from dust
- Customized rail length and sliding stroke available
- Auto/pass mode available
- Buzzer, LED tower light

✓ OPTIONS

- Touch screen
- Auto width adjustment
- Speed Control
- Aux. buffer conveyor

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KSC-500S	330 x 250	50 x 50	500 x 720 x 1050	100 VA	4~6 kgf/cm ²	125
KSC-500Y	440 x 330	50 x 50	630 x 880 x 1050	100 VA	4~6 kgf/cm ²	150
KSC-500L	530 x 380	50 x 50	710 x 980 x 1050	100 VA	4~6 kgf/cm ²	170
KSC-500X	530 x 460	50 x 50	710 x 1020 x 1050	100 VA	4~6 kgf/cm ²	190
KSC-500XX	610 x 460	50 x 50	710 x 1140 x 1050	100 VA	4~6 kgf/cm ²	210

This unit is located after SPI/AOI process to store NG PCB in the Rack while transferring Good PCB to the next machine in FIFO or LIFO way.



✓ FEATURES

- SMEMA Interface
- Touch Screen
- PCB Anti-touch operation - No Stress on PCB (Operated by Special Magnetic Roller)
- Output Conveyor Two-way(upper&lower conveyor) type : upper conveyor for NG PCB
- PCB loading Q'ty : 10 pcs (Pitch : 31mm)
- After inspection of NG PCB, the Operator can change it to Good PCB
- RS232C Communication with SPI/AOI
- PCB transfer in FIFO / LIFO available
- ESD Cover at Rack part
- Buzzer, LED tower light

✓ OPTIONS

- Auto width adjustment
- 15 or 20 PCB loading capacity
- ESD cover for buffer conveyor

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KGNB-700S	330 x 250	50 x 50	800 x 750 x 1500	700 VA	4~6 kgf/cm ²	220
KGNB-700Y	440 x 330	50 x 50	1060 x 830 x 1500	700 VA	4~6 kgf/cm ²	230
KGNB-700L	530 x 380	50 x 50	1220 x 880 x 1500	700 VA	4~6 kgf/cm ²	240
KGNB-700X	530 x 460	50 x 50	1220 x 950 x 1500	700 VA	4~6 kgf/cm ²	250
KGNB-700XX	610 x 460	50 x 50	1220 x 1100 x 1500	700 VA	4~6 kgf/cm ²	260

This unit is used to cool the PCB after Reflow Oven in FIFO way.



✓ FEATURES

- SMEMA Interface
- Touch Screen
- Excellent cooling by using total 8 cooling fans
- Individual Belt running to each loading section
- PCB loading Q'ty : 10 pcs (Pitch : 31mm)
- PCB transfer in FIFO / LIFO available
- Buzzer, LED tower light

✓ OPTIONS

- Auto width adjustment
- 15 or 20 PCB loading capacity

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KBBC-700S	330 x 250	50 x 50	800 x 750 x 1500	700 VA	4~6 kgf/cm ²	220
KBBC-700Y	440 x 330	50 x 50	1060 x 830 x 1500	700 VA	4~6 kgf/cm ²	230
KBBC-700L	530 x 380	50 x 50	1220 x 880 x 1500	700 VA	4~6 kgf/cm ²	240
KBBC-700X	530 x 460	50 x 50	1220 x 950 x 1500	700 VA	4~6 kgf/cm ²	250
KBBC-700XX	610 x 460	50 x 50	1220 x 1100 x 1500	700 VA	4~6 kgf/cm ²	260

This unit is used to store NG PCB into the rack while transferring Good PCB to the next process, and also has a function of buffer.



✓ FEATURES

- SMEMA Interface
- Able to use as LIFO NG Stacker,buffer stacker.
- LED tower light
- Total PCB storage : 32 PCBs (Pitch : 19.05mm)
- Special design to prevent PCB from getting jammed or dropping out.(Patent pending)
- Buzzer, LED tower light

✓ OPTIONS

- Touch screen
- Aux. buffer Conveyor
- Auto width adjustment

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KNB-700S	330 x 250	70 x 50	700 x 660 x 1675	200 VA	4~6 kgf/cm ²	220
KNB-700Y	440 x 330	70 x 50	700 x 740 x 1675	200 VA	4~6 kgf/cm ²	240
KNB-700L	530 x 380	70 x 50	800 x 790 x 1675	200 VA	4~6 kgf/cm ²	260
KNB-700X	530 x 460	70 x 50	800 x 860 x 1675	200 VA	4~6 kgf/cm ²	270
KNB-700XX	610 x 460	70 x 50	900 x 920 x 1675	200 VA	4~6 kgf/cm ²	280

This unit is used to store NG PCB into the Magazine while transferring Good PCB to the next process, and also has a function of buffer, Loader and Unloader.



✓ FEATURES

- SMEMA Interface
- Able to use as FIFO/LIFO NG Stacker, Loader, Unloader
- LED tower light

✓ OPTIONS

- Touch screen
- High speed magazine change-over time
- Aux. buffer Conveyor
- Auto width adjustment

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KMB-1235S	330 x 250	50 x 50	1070 x 1185 x 1080	400 VA	4~6 kgf/cm ²	220
KMB-1235Y	440 x 330	50 x 65	1305 x 1345 x 1080	400 VA	4~6 kgf/cm ²	240
KMB-1235L	530 x 380	50 x 60	1460 x 1525 x 1080	400 VA	4~6 kgf/cm ²	260
KMB-1235X	530 x 460	50 x 100	1460 x 1665 x 1080	400 VA	4~6 kgf/cm ²	270
KMB-1235XX	610 x 460	50 x 100	1460 x 1725 x 1080	400 VA	4~6 kgf/cm ²	280

This unit is used to store the PCBs inside the built-in Rack to buffer the tact time between previous and next process.



✓ FEATURES

- SMEMA Interface
- Able to use as Stacker for waiting and supply
- Total PCB storage : 50 PCBs
- Easy operation by user-friendly operation panel
- Decreased noise while Magazine moves up/down
- PCB pushing guide
- Buzzer, LED tower light

✓ OPTIONS

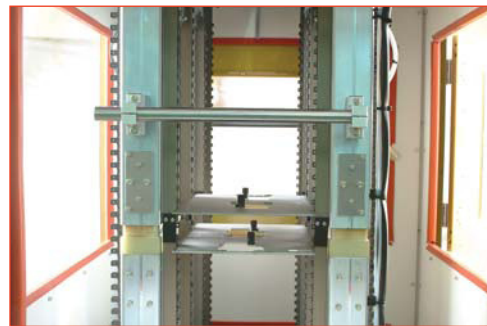
- Touch screen
- Auto width adjustment
- Cooling Fan
- The types of Magazine in/out are side way for for/rev

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KRB-900S	330 x 250	50 x 50	1030 x 800 x 1670	700 VA	4~6 kgf/cm ²	190
KRB-900Y	440 x 330	50 x 50	1290 x 880 x 1670	700 VA	4~6 kgf/cm ²	210
KRB-900L	530 x 380	50 x 50	1450 x 990 x 1670	700 VA	4~6 kgf/cm ²	230
KRB-900X	530 x 460	50 x 50	1450 x 1060 x 1670	700 VA	4~6 kgf/cm ²	240
KRB-900XX	610 x 460	50 x 50	1450 x 1120 x 1670	700 VA	4~6 kgf/cm ²	250

CURING CHAIN BUFFER

AMS

This unit is located after conformal process and used to cure the boards.



✓ FEATURES

- Adjustable temperature : ~ 100 °C
- Stock of pitch : 19.05 (38.1)mm - Adjustable
- Heating by Heat Pump
- Acceptance of Pallet Jig

✓ OPTIONS

- Auto width adjustment

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KCR-900S	360 x 250	250 x 250	1580 x 850 x 2300	2.3 kVA	4~6 kgf/cm ²	400

INVERTER(BOARD FLIPPER)

AMS

This unit is used to flip the PCB for double side assembly.



✓ FEATURES

- SMEMA Interface
- Easy operation
- Reduced tact time by removing backlash process after turning.
- Buzzer, LED tower light

✓ OPTIONS

- Touch screen
- Auto width adjustment
- Aux. buffer Conveyor
- Conveyor Speed Controller

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KIV-420S	330 x 250	50 x 50	420 x 615 x 1230	60 VA	4~6 kgf/cm ²	120
KIV-420Y	440 x 330	50 x 50	530 x 695 x 1230	60 VA	4~6 kgf/cm ²	130
KIV-420L	530 x 380	50 x 50	550 x 745 x 1250	60 VA	4~6 kgf/cm ²	140
KIV-420X	530 x 460	50 x 50	620 x 815 x 1250	60 VA	4~6 kgf/cm ²	150
KIV-420XX	610 x 460	50 x 50	720 x 875 x 1250	60 VA	4~6 kgf/cm ²	170

90° TURNING CONVEYOR

AMS

This unit is used to turn the PCB in 90° / 270° in the production line.



CE Type



Standard Type

✓ FEATURES

- SMEMA Interface
- Easy operation
- Buzzer, LED tower light

✓ OPTIONS

- Touch screen
- Auto width adjustment
- Aux. buffer Conveyor
- Conveyor Speed Controller
- Multi turning function-Pass / 90° / 180° / 270°

Model	Max. PCB (LxW)	Min. PCB (LxW)	Dimension (LxWxH)	Power	Air	Weight(kg)
KTC-500S	330 x 250	50 x 50	555 x 565 x 1140	60 VA	4~6 kgf/cm ²	150
KTC-500Y	440 x 330	50 x 50	695 x 695 x 1140	60 VA	4~6 kgf/cm ²	160
KTC-500L	530 x 380	50 x 50	775 x 775 x 1140	60 VA	4~6 kgf/cm ²	170
KTC-500X	530 x 460	50 x 50	775 x 775 x 1140	60 VA	4~6 kgf/cm ²	180
KTC-500XX	610 x 460	50 x 50	775 x 775 x 1140	60 VA	4~6 kgf/cm ²	200



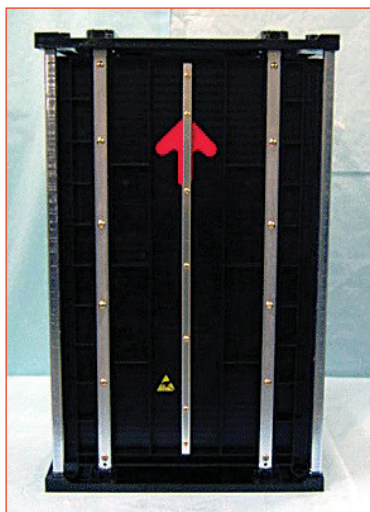
NG REJECT CONVEYOR



MANUAL INSERTION CONVEYOR

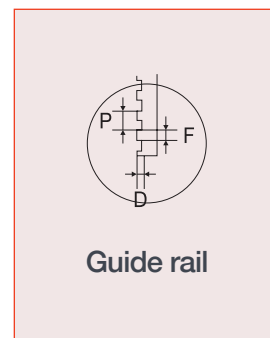
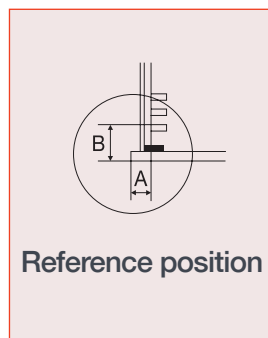
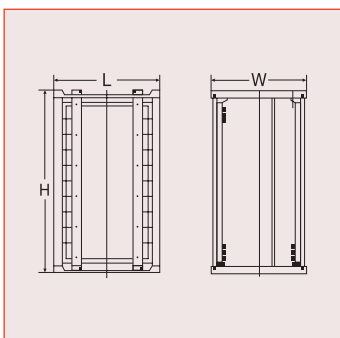
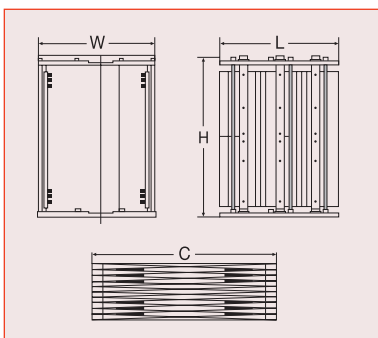


PASS THRU TYPE AUTO LOADER



✓ FEATURES

- A lot of PCB can be accumulated and stored into small space
- Convenient to use with same interval by guide fixing type
- Guarantees for a long use and storage
- Convenient for the transportation if rack cart is being used
- Perfectly precluded from a cause of static as using anti-static plastic. (By option)



Model	Temp Range		W	L	H	AJ	A	B	C	D	E	P	Weight (kg)
	Type1	Type2											
NTC-091	60°C	120°C	320	355	580	50~258	34	35	330	3	3	10	4.8
NTC-092	60°C	120°C	320	355	570	50~258	34	35	330	3	3	10	4.8
NTC-093	60°C	120°C	460	535	575	60~380	34	35	535	4	5	10	7
NTC-094	60°C	120°C	370	350	570	98~308	34	35	330	3/5	3/5	10	5
NTC-095	60°C	120°C	380	480	575	77~318	34	35	480	3	5	10	7
NTC-096	60°C	120°C	400	460	575	68~334	34	35	460	3	5	10	7
NTC-097	60°C	120°C	320	355	570	50~258	34	35	330	5	5	10	6
NTC-098	~250°C		320	355	570	50~250	34	35	335	3	3	10	6
NTC-099	60°C	120°C	320	620	575	60~236	34	35	600	4	5	10	8.5
NTC-100	60°C	120°C	530	535	575	150~460	34	35	535	4	5	10	8.5
NTC-101	60°C	120°C	530	620	575	150~460	34	35	600	4	5	10	8.5



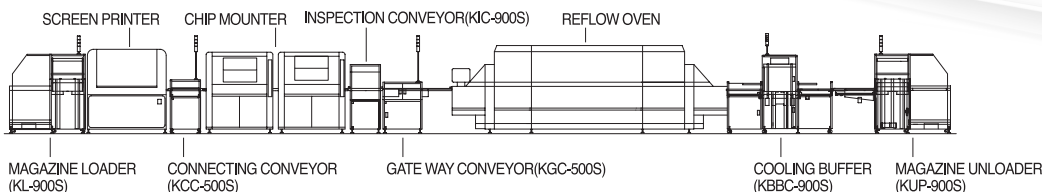
✓ FEATURES

- Quick Width Adjustment
- Always Remain Parallel
- Excellent Vertical Rigidity
- Utilization for Automated Lines
- Static Dissipative
- High Temperature Capability(R and SR Type)

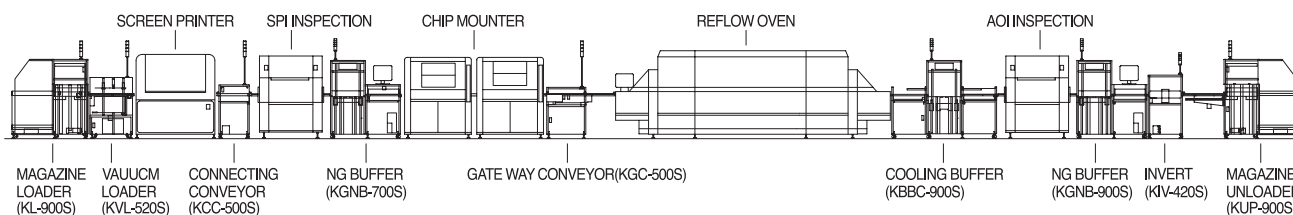
■ SPECIFICATIONS (mm-kg)

Model	Max Tolerant Temperature	Outer Dimensions			Adjustable Width	Base Material	Ref. Position		Pitch p	PCB Slots	Weight (kg)	Size
		L	W	H			A	B				
NKAJ-0211N-G	60°C	160	160	395	20~110	Metal	22.5	34	8	40	1.9	S
NKAJ-0211N-AL	135°C	260	165	270	20~110	Metal	20	34	4	50	1.6	
NKAJ-0218N-G	60°C	210	230	315	20~180	Metal	22	34	5	50	1.7	
NKAJ-0218R-G	135°C	210	230	315	20~180	Metal	22	34	5	50	1.7	
NKAJ-0525N-G	60°C	355	320	563	50~255	Metal	34	34	10	50	5.1	M
NKAJ-0525N2-G	60°C	355	320	563	50~255	Plastic	34	34	10	50	3.7	
NKAJ-0525R-G	135°C	355	320	563	50~255	Metal	34	34	10	50	5.2	
NKAJ-0525SR-G	165°C	355	320	563	50~255	Metal	34	34	10	50	5.2	
NKAJ-0525R2-G	135°C	355	320	563	50~255	Plastic	34	34	10	50	3.8	
NKAJ-0525SR2-G	165°C	355	320	563	50~255	Plastic	34	34	10	50	3.8	
NKAJ-0531R-G	135°C	535	380	570	50~310	Metal	34	41	10	50	9.4	L
NKAJ-0531SR-G	165°C	535	380	570	50~310	Metal	34	41	10	50	9.4	
NKAJ-0531RE-G	120°C	535	380	570	50~310	Metal	34	41	12.5	40	11.4	
NKAJ-0733N-G	60°C	460	400	565	70~330	Metal	35	35	10	50	8.8	YL
NKAJ-0733R-G	135°C	460	400	565	70~330	Metal	35	35	10	50	8.8	
NKAJ-0733SR-G	165°C	460	400	565	70~330	Metal	35	35	10	50	8.8	
NKAJ-0539R-G	135°C	535	460	570	50~390	Metal	34	41	10	50	10.5	LL
NKAJ-0539SR-G	165°C	535	460	570	50~390	Metal	34	41	10	50	10.5	
NKAJ-0546R-G	135°C	535	530	563	50~460	Metal	34	34	10	50	12.3	XL
NKAJ-0546SR-G	165°C	535	530	563	50~460	Metal	34	34	10	50	12.3	
NKAJ-0531R-G400	135°C	400	380	563	50~310	Metal	34	34	10	50	7.7	
NKAJ-0733R-G400	135°C	400	400	563	70~330	Metal	34	34	10	50	7.8	

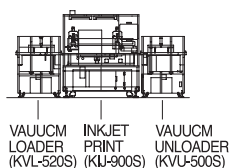
■ SMT LINE (1) : MANUAL INSPECTION, TOP SIDE



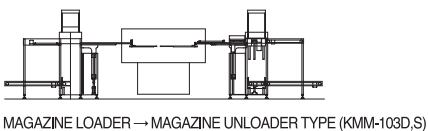
■ SMT LINE (2) : AUTO INSPECTION, TOP & BOTTOM SIDE



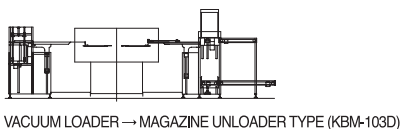
■ INKJET IN LINE (3) : INDIVIDUAL LINE



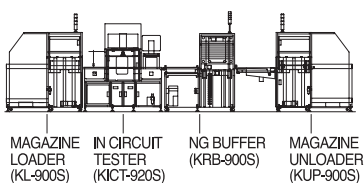
■ IMC LINE (4) : MAGAZINE LOADER → MAGAZINE UNLOADER TYPE



■ IMC LINE (5) : VACUUM LOADER → MAGAZINE UNLOADER TYPE



■ IN CIRCUIT TESTER LINE(6)



■ SOLDERING LINE (7)

