

**LiNK** THE WORLD

**YJ LINK**

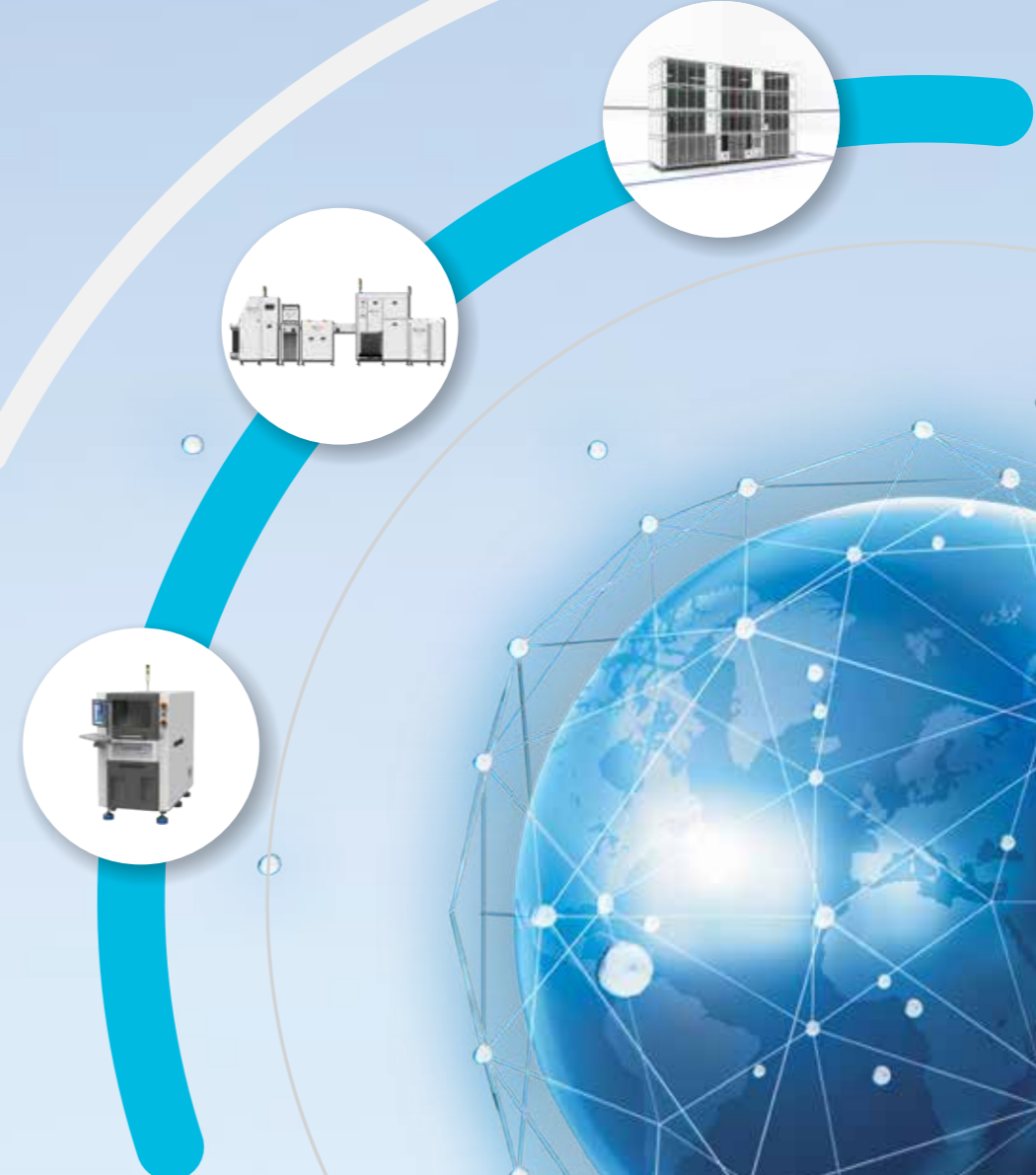
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Printed September, 2021

**YJ LINK**

Smart Conveyor  
Board Handling Equipment  
Laser Marking Machine  
Router



**CE**  
Y SERIES  
V.23.04



## Board Handling Equipment & Smart Factory



# HISTORY

|          |   |
|----------|---|
| 2009. 06 | Established YJ Link Co.,Ltd.  |
| 2009. 08 | Registered in global F company AVL  |
| 2009. 10 | Certificate of Venture Business   |
| 2010. 01 | Received certificate for Company-affiliated Research and Development Institute        |
| 2010. 03 | Established YJ Link Japan Co.,Ltd.  |
| 2010. 04 | Developed model 1.0(A series) Laser marking machine                                   |
| 2013. 01 | INNO-BIZ  |
| 2013. 12 | Selected as Promising Export Small and Medium Enterprise                              |
| 2014. 04 | Selected as Global Hidden Champion  |
| 2014. 06 | Selected as Star Company  |
| 2014. 06 | Established Suzhou YJ Link Co.,Ltd.   |
| 2014. 06 | Established YJ Link Inc.  |
| 2014. 11 | Awarded Citation from Ministry of Commerce Industry and Energy                        |
| 2014. 12 | Presidential Citation Award(Awarded USD 10 million Export Tower)                      |
| 2015. 02 | Registered in global C company SSL  |
| 2015. 07 | Opened Office/DEMO Room in Germany  |
| 2015. 07 | Established YJ Link Mexico S.A. De C.V.   |
| 2016. 10 | Small and Medium Enterprise Award   |
| 2016. 12 | Certified as Small and Medium Enterprises for Talent Development                      |
| 2017. 02 | Registered in global V company AVL  |
| 2017. 04 | Registered in global T company AVL  |
| 2017. 05 | Developed Smart Conveyor System(Embedded System Applied)                              |
| 2018. 02 | Developed AGV(Automated Guided Vehicle)   |
| 2018. 02 | Initiated Contribution to the Green Umbrella Children's Foundation                    |
| 2018. 05 | Reselected as Global Hidden Champion  |
| 2018. 09 | Registered in global C company AVL  |
| 2018. 12 | Awarded 'USD 20 million Export Tower'   |
| 2019. 01 | Registered in global J company AVL  |
| 2019. 05 | Reselected as Star Company  |
| 2019. 05 | Awarded 'The Leading Exporter' in Korea   |
| 2019. 05 | Established YJ Link VINA Co.,Ltd. (Manufacturing Corporation/20,594.2m <sup>2</sup> ) |
| 2020. 06 | Developed model 2.0(Y series) Board handling equipment and Laser marking machine      |
| 2021. 01 | Registered in global H company AVL  |
| 2021. 03 | Registered in global V company AVL  |
| 2021. 11 | Established YJ Link Europe GmbH   |
| 2022. 01 | Certificate of Daegu Local Innovation Leader  |
| 2022. 05 | Certificate of ISO 14001(Environmental Management System)                             |
| 2022. 09 | Certificate of AEO(Authorized Economic Operator)                                      |

## GREETING

YJ Link Co., Ltd. is a global supplier who is manufacturing and exporting board handling equipment, laser marking machine, router and smart conveyor for SMT automation process.

With continuous product development in the SMT field, as an AVL (Approval Vendor List) company that has been recognized for its product quality and responsiveness from customers around the world in automotive, electricity & electronics, defense industry and medical fields, we are becoming the leading manufacturer of SMT peripherals in Korea with continuous sales growth.

Especially in the center of the 4th industrial revolution, by providing Smart Conveyor System of SMT Automation Process, we are providing prompt and accurate solution such as Magazine Tower and AGV.

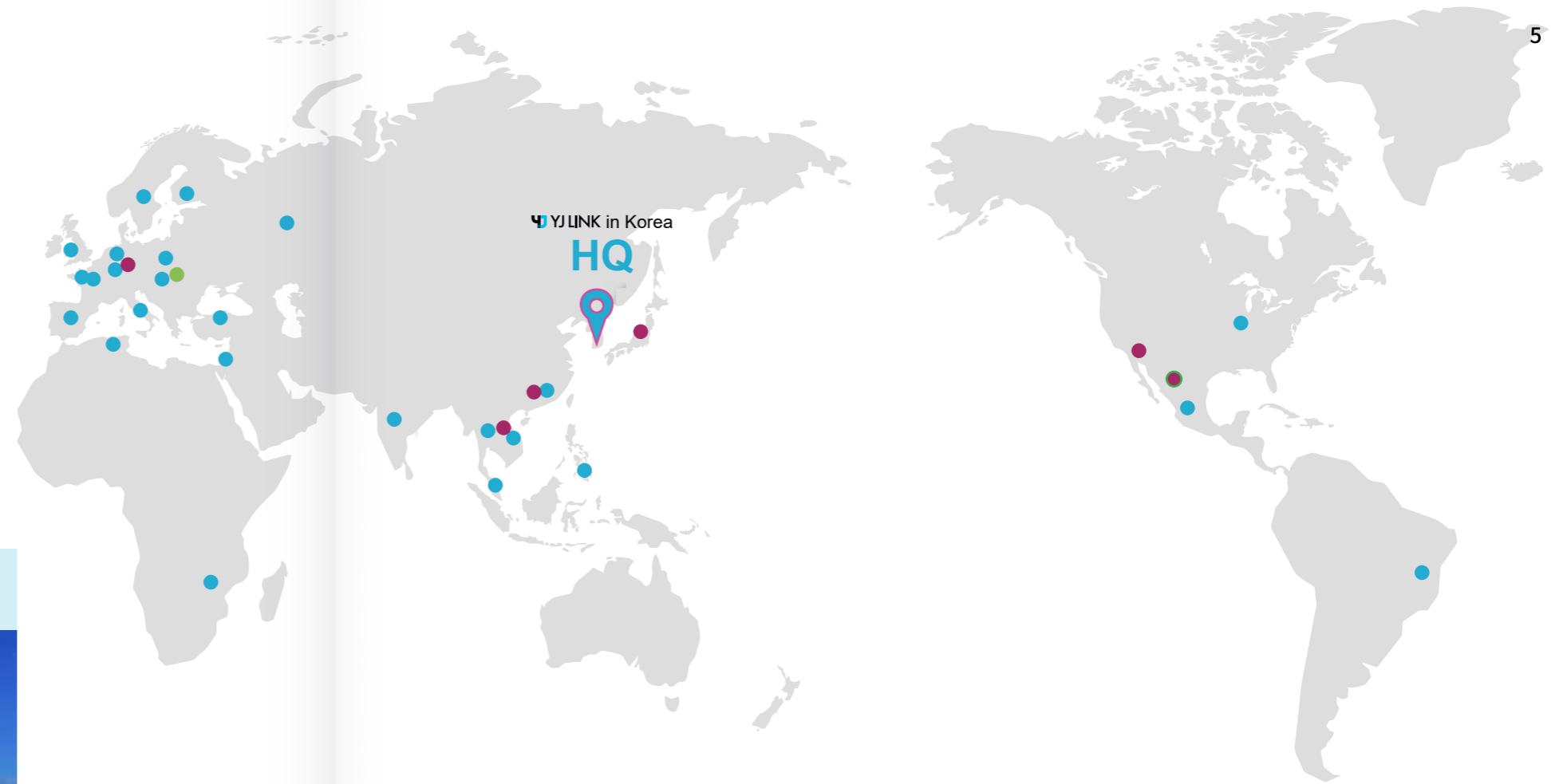
In the future, we will be a leader in linking the world to reflect the needs of our customers with steady technology development.

Thank you!



YJ LINK VIDEO

\*AVL : Approval Vendor List



## CONTACT WORLDWIDE



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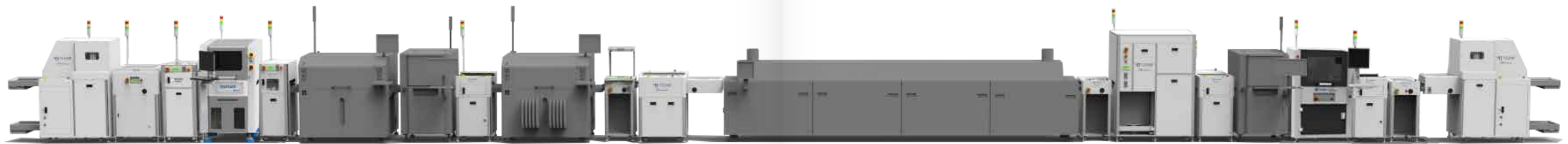
### YJ LINK JAPAN CO.,LTD. / Nagoya, Japan

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## LAY-OUT

## BOARD HANDLING EQUIPMENT

|                           |                    |                      |                                 |
|---------------------------|--------------------|----------------------|---------------------------------|
| 01_ MAGAZINE LOADER       | 06_ SCREEN PRINTER | 11_ GATE CONVEYOR    | 16_ AOI                         |
| 02_ DESTACKER             | 07_ SPI            | 12_ OVEN             | 17_ OPTICAL VERIFICATION BUFFER |
| 03_ VERTICAL TURN         | 08_ NG CONVEYOR    | 13_ COOLING CONVEYOR | 18_ NG CONVEYOR                 |
| 04_ LASER MARKING MACHINE | 09_ MOUNTER        | 14_ COMBI-MAGAZINE   | 19_ CONNECTION CONVEYOR         |
| 05_ PCB CLEANER           | 10_ WORK CONVEYOR  | 15_ SHUTTLE CONVEYOR | 20_ MAGAZINE UNLOADER           |



|   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|

**Loader / Unloader Series**

|                                      |                 | SMT | POST-PROCESS |
|--------------------------------------|-----------------|-----|--------------|
| Magazine Loader                      | YML-00          | 10P | -            |
| Magazine Loader - All type(Bar)      | YML-10          | 12P | -            |
| Magazine Loader - All type (Chain)   | YML-30          | 14P | -            |
| Shuttle Loader                       | YSL-00 / YSL-01 | 16P | -            |
| Shuttle Loader - AGV                 | YSL-10 / YSL-11 | 18P | -            |
| Magazine Unloader                    | YMU-00          | 20P | -            |
| Magazine Unloader - All type(Bar)    | YMU-10          | 22P | -            |
| Magazine Unloader - All type (Chain) | YMU-30          | 24P | -            |
| Shuttle Unloader                     | YSU-00 / YSU-01 | 26P | -            |
| Shuttle Unloader - AGV               | YSU-10 / YSU-11 | 28P | -            |
| Magazine Buffer                      | YMB-00          | 30P | -            |

**Buffer Series**

|                            |                 |     |     |
|----------------------------|-----------------|-----|-----|
| Combi - Magazine           | YCM-00          | 34P | -   |
| Combi - Rack               | YCR-00          | 36P | -   |
| Tower                      | YTR-00 / YTR-01 | 38P | -   |
| Tower - Cooling            | YTR-10 / YTR-11 | 40P | 40P |
| Tower + Conveyor - Cooling | YTC-00 / YTC-01 | 42P | 42P |
| Tower + NG Conveyor        | YTN-00          | 44P | -   |

**Link / Work Series**

|  |                          |     |     |
|--|--------------------------|-----|-----|
| Connection Conveyor  | YCC-00 / YCC-01          | 48P | 48P |
| Connection Conveyor - Cooling                              | YCC-20 / YCC-21          | 50P | 50P |
| Connection Conveyor - Barcode Manual Bracket(Single sided) | YCC-40 / YCC-41          | 52P | -   |
| Connection Conveyor - Barcode Manual Bracket(Double sided) | YCC-50 / YCC-51          | 54P | -   |
| Work Conveyor - Inspection                                 | YWC-00 / YWC-01 / YWC-02 | 56P | 56P |
| Work Conveyor - Work                                       | YWC-20 / YWC-21 / YWC-22 | 58P | 58P |
| NG Conveyor  | YNC-00                   | 60P | 60P |

|  |                 |     |     |
|--|-----------------|-----|-----|
| Connection Conveyor - Sky Line           | YCC-60 / YCC-62 | 62P | -   |
| Connection Conveyor - Pallet Return Line | YCC-70 / YCC-72 | -   | 64P |

**Conveyor Series**

|                                      |   |     |     |
|--------------------------------------|---|-----|-----|
| Destacker - Knife                    | YDL-00  | 68P | -   |
| Destacker - Clamp                    | YDL-10  | 70P | -   |
| Destacker - Clmap(Batch)             | YDL-11  | 72P | -   |
| Vacuum Loader - Edge                 | YVL-00  | 74P | -   |
| Stacker                              | YPU-00  | 76P | -   |
| PCB Cleaner - Vacuum                 | YPC-00  | 78P | -   |
| PCB Cleaner - Vacuum + Sticky roller | YPC-01  | 80P | -   |
| Gate Conveyor - Telescope            | YGC-00  | 82P | 82P |
| Gate Conveyor - Down/Up              | YGC-10  | 84P | 84P |
| Vertical Turn                        | YVT-00  | 86P | 86P |
| Horizontal Turn                      | YHT-00  | 88P | 88P |
| Shuttle Conveyor                     | YSC-00 / YSC-01 / YSC-02 / YSC-03 / YSC-04 / YSC-05 / YSC-06 / YSC-07 | 90P | 90P |
| Elevator Unit - Sky Line             | YEU-00 / YEU-01   | 92P | -   |
| Elevator Unit - Pallet Return Line   | YEU-10  | -   | 94P |

**PC Controlled**

|                                     |                 |      |   |
|-------------------------------------|-----------------|------|---|
| NOVLUX Laser Marking Machine - CO2  | YLM-00          | 98P  | - |
| NOVLUX Laser Marking Machine - YVO4 | YLM-10          | 100P | - |
| VISPLO Optical Verification Buffer  | YCI-10          | 102P | - |
| ARMAS Router - Bronze               | YRM-00          | 104P | - |
| ARMAS Router - Silver               | YRM-10          | 106P | - |
| ARMAS Router - Gold                 | YRM-20          | 108P | - |
| Barcode Scanning Conveyor           | YBS-00 / YBS-01 | 110P | - |

|   |  |      |      |
|---|--|------|------|
| <b>Index (Common Standard / Option Spec &amp; Standard Feature &amp; Magazine Rack)</b> |  | 112P | 112P |
|---|--|------|------|

# BOARD HANDLING

## LOADER / UNLOADER SERIES

[ M-10C-Y( )1 SERIES ]

|                                      |       |       |
|--------------------------------------|-------|-------|
| Magazine Loader                      | ..... | P. 10 |
| Magazine Loader - All type (Bar)     | ..... | P. 12 |
| Magazine Loader - All type (Chain)   | ..... | P. 14 |
| Shuttle Loader                       | ..... | P. 16 |
| Shuttle Loader - AGV                 | ..... | P. 18 |
| Magazine Unloader                    | ..... | P. 20 |
| Magazine Unloader - All type (Bar)   | ..... | P. 22 |
| Magazine Unloader - All type (Chain) | ..... | P. 24 |
| Shuttle Unloader                     | ..... | P. 26 |
| Shuttle Unloader - AGV               | ..... | P. 28 |
| Magazine Buffer                      | ..... | P. 30 |



➤ Magazine Loader P. 10



➤ Magazine Loader- All type (Bar) P. 12



➤ Magazine Loader- All type (Chain) P. 14



➤ Shuttle Loader P. 16



➤ Shuttle Loader - AGV P. 18



➤ Magazine Unloader P. 20



➤ Magazine Unloader - All type (Bar) P. 22



➤ Magazine Unloader - All type (Chain) P. 24



➤ Shuttle Unloader P. 26



➤ Shuttle Unloader - AGV P. 28

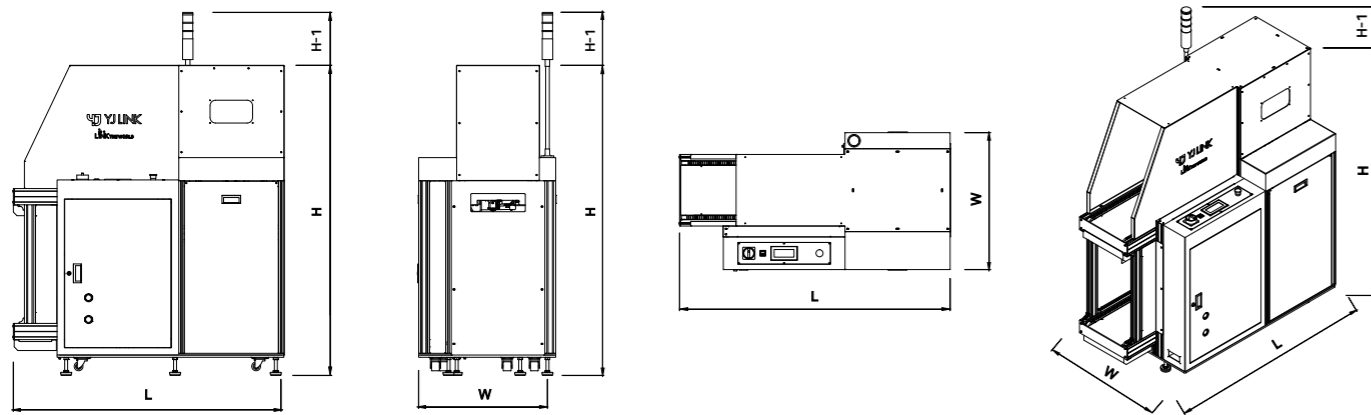
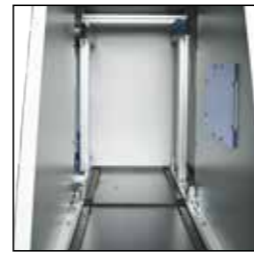


➤ Magazine Buffer P. 30

# Magazine Loader



Located at the first stage of SMT line, this unit transfers PCBs stacked in a magazine rack to the downstream machine using a pneumatic pusher one by one.



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |     |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|----------------|-----|------|------|-------------|
| SMT            | POST-PROCESS |           |      | L              | W   | H    | H-1  |             |
| M-10C-YM1-0100 |              | YML-1M 00 | M    | 1502           | 755 | 1700 | 2000 | 303         |
| M-10C-YL1-0100 |              | YML-1L 00 | L    | 1702           | 835 | 1700 | 2000 | 321         |
| M-10C-YX1-0100 |              | YML-1X 00 | XL   | 1763           | 965 | 1700 | 2000 | 349         |

| Standard Spec.                |   |                        |                 |
|-------------------------------|---|------------------------|-----------------|
| Item                          | Standard  |                        |                 |
| Line Flow                     | Left to Right                                     | Right to Left          |                 |
| Fixed Rail                    | Front   | Rear                   |                 |
| Pass Line (mm)                | 950±20  | 900±20                 |                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |                 |
| PCB Size                      | M   | L                      | XL              |
| Min.PCB (L X W) (mm)          | 70 X 50   |                        |                 |
| Max.PCB (L X W) (mm)          | 330 X 250   | 440 X 330              | 460 X 460       |
| Item                          | SMT   |                        |                 |
| PCB Top/Bottom Clearance (mm) | 30 / 25   |                        |                 |
| PCB Edge (mm)                 | 3   |                        |                 |
| PCB Loading Weight (kg)       | 3   |                        |                 |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                        |                 |
| PCB Color                     | Green   |                        |                 |
| Magazine Size (L X W X H)(mm) | M   | L                      | XL              |
|                               | 355 X 320 X 570                                   | 460 X 400 X 575        | 535 X 530 X 575 |
| Magazine Full Rack (kg)       | 20  | 30                     | 50              |
| Magazine Slot (ea)            | 50  |                        |                 |
| Magazine A size (mm)          | 34  |                        |                 |
| Magazine B size (mm)          | 35  |                        |                 |
| PCB Loading                   | Upper to Bottom (50 to 1)                         |                        |                 |
| Magazine Loading              | Bottom to Upper                                   |                        |                 |
| Pitch                         | 1~4 (10 ~ 40mm)                                   |                        |                 |
| Magazine Capacity (ea)        | Upper 2 / Lower 2                                 |                        |                 |
| Exit Guide                    | Fixed block in fixed rail side                    |                        |                 |
| Jam Detect Function *         | Pneumatic   |                        |                 |
| Safety Cover                  | Outer / Motor                                     |                        |                 |
| Width Adjustment *            | Manual  |                        |                 |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |                 |
| Smema Cable                   | 3m / 1 ea   |                        |                 |
| Alarm                         | Tower lamp (3 color)                              |                        |                 |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |                 |
| Air Supply                    | 0.5Mpa (5bar)                                     |                        |                 |
| Air Usage                     | 11.30 ℓ/min                                       |                        |                 |
| Electricity Consumption       | 320W  |                        |                 |

| Option Spec.               |                |                                   |
|----------------------------|----------------|-----------------------------------|
| Item                       | CODE No.       | Option                            |
| Width Adjustment *         | O-100-HW0-0205 | Auto                              |
| High Speed Magazine Change | O-100-HW1-0100 | -                                 |
| Jam Detect Function *      | O-100-HW1-0202 | Electric(Step motor)              |
| Width Synchronization      | O-100-SW0-0200 | via RS-485                        |
| Line Control               | O-200-LC0-0100 | Hermes                            |
|                            | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                    | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Magazine Loader

Magazine Loader - All type(Bar)

Magazine Loader - All type(Chain)

Shuttle Loader

Shuttle Loader - AGV

Magazine Unloader

Magazine Unloader - All type(Bar)

Magazine Unloader - All type(Chain)

Shuttle Unloader

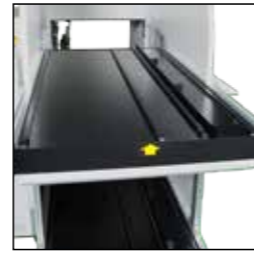
Shuttle Unloader - AGV

Magazine Buffer

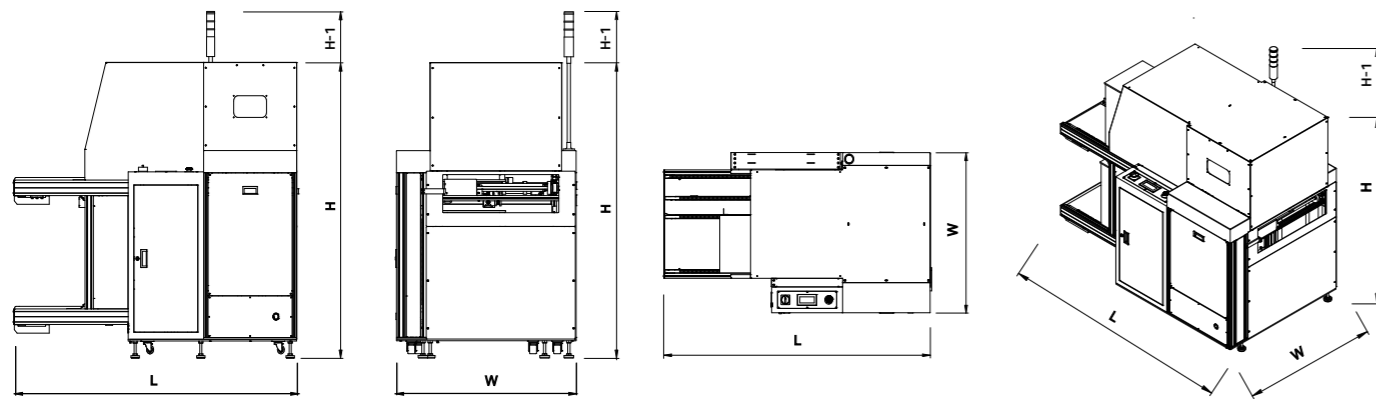
# Magazine Loader - All type(Bar)



Located at the first stage of SMT line, this unit transfers PCBs stacked in a magazine rack to the downstream machine using a pneumatic pusher one by one. The magazine conveyor part and the inside of the lifter are designed to accommodate racks of various sizes.



Magazine Guide Holder



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |     |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|----------------|-----|------|------|-------------|
| SMT            | POST-PROCESS |           |      | L              | W   | H    | H-1  |             |
| M-10C-YX1-0101 |              | YML-1X 10 | XL   | 1763           | 965 | 1706 | 2000 | 364         |

| Standard Spec.                |   |                        |
|-------------------------------|---|------------------------|
| Item                          | Standard  |                        |
| Line Flow                     | Left to Right                                     | Right to Left          |
| Fixed Rail                    | Front   | Rear                   |
| Pass Line (mm)                | 950±20  | 900±20                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                      | XL  |                        |
| Min.PCB (L X W) (mm)          | 70 X 50   |                        |
| Max.PCB (L X W) (mm)          | 460 X 460   |                        |
| Item                          | SMT   |                        |
| PCB Top/Bottom Clearance (mm) | 30 / 25   |                        |
| PCB Edge (mm)                 | 3   |                        |
| PCB Loading Weight (kg)       | 3   |                        |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                        |
| PCB Color                     | Green   |                        |
| Magazine Size (L X W X H)(mm) | XL<br>535 X 530 X 575                             |                        |
| Magazine Full Rack (kg)       | 50  |                        |
| Magazine Slot (ea)            | 50  |                        |
| Magazine A size (mm)          | 34  |                        |
| Magazine B size (mm)          | 35  |                        |
| PCB Loading                   | Upper to Bottom (50 to 1)                         |                        |
| Magazine Loading              | Bottom to Upper                                   |                        |
| Pitch                         | 1~4 (10 ~ 40mm)                                   |                        |
| Magazine Capacity (ea)        | Upper 2 / Lower 2                                 |                        |
| Exit Guide                    | Fixed block in fixed rail side                    |                        |
| Jam Detect Function *         | Pneumatic   |                        |
| Safety Cover                  | Outer / Motor                                     |                        |
| Width Adjustment *            | Manual  |                        |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |
| Smema Cable                   | 3m / 1 ea   |                        |
| Alarm                         | Tower lamp (3 color)                              |                        |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |
| Air Supply                    | 0.5Mpa (5bar)                                     |                        |
| Air Usage                     | 11.30 ℓ/min                                       |                        |
| Electricity Consumption       | 370W  |                        |

| Option Spec.               |                |                                   |
|----------------------------|----------------|-----------------------------------|
| Item                       | CODE No.       | Option                            |
| Width Adjustment *         | O-100-HW0-0205 | Auto                              |
| High Speed Magazine Change | O-100-HW1-0100 | -                                 |
| Jam Detect Function *      | O-100-HW1-0202 | Electric(Step motor)              |
| Width Synchronization      | O-100-SW0-0200 | via RS-485                        |
| Line Control               | O-200-LC0-0100 | Hermes                            |
|                            | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                    | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Magazine Loader

Magazine Loader - All type(Bar)

Magazine Loader - All type(Chain)

Shuttle Loader

Shuttle Loader - AGV

Magazine Unloader

Magazine Unloader - All type(Bar)

Magazine Unloader - All type(Chain)

Shuttle Unloader

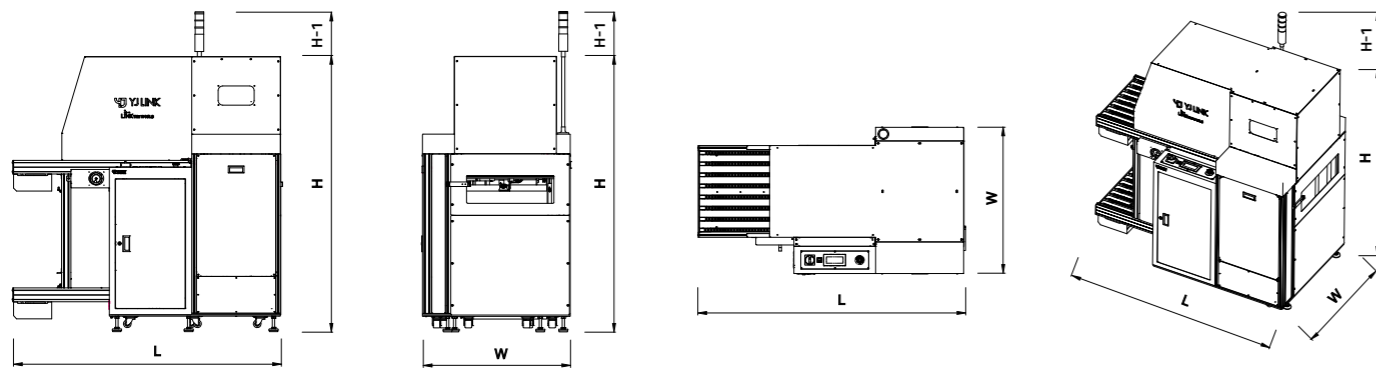
Shuttle Unloader - AGV

Magazine Buffer

# Magazine Loader - All type(Chain)



Located at the first stage of SMT line, this unit transfers PCBs stacked in a magazine rack to the downstream machine using a pneumatic pusher one by one. The magazine conveyor part and the inside of the lifter are designed to accommodate racks of various sizes.



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |     |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|----------------|-----|------|------|-------------|
| SMT            | POST-PROCESS |           |      | L              | W   | H    | H-1  |             |
| M-10C-YX1-0102 |              | YML-1X 30 | XL   | 1763           | 965 | 1800 | 2100 | 420         |

| Standard Spec.                |   |                        |
|-------------------------------|---|------------------------|
| Item                          | Standard  |                        |
| Line Flow                     | Left to Right                                     | Right to Left          |
| Fixed Rail                    | Front   | Rear                   |
| Pass Line (mm)                | 950±20  | 900±20                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                      | XL  |                        |
| Min.PCB (L X W) (mm)          | 70 X 50   |                        |
| Max.PCB (L X W) (mm)          | 460 X 460   |                        |
| Item                          | SMT   |                        |
| PCB Top/Bottom Clearance (mm) | 30 / 25   |                        |
| PCB Edge (mm)                 | 3   |                        |
| PCB Loading Weight (kg)       | 3   |                        |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                        |
| PCB Color                     | Green   |                        |
| Magazine Size (L X W X H)(mm) | XL<br>535 X 530 X 575                             |                        |
| Magazine Full Rack (kg)       | 50  |                        |
| Magazine Slot (ea)            | 50  |                        |
| Magazine A size (mm)          | 34  |                        |
| Magazine B size (mm)          | 35  |                        |
| PCB Loading                   | Upper to Bottom (50 to 1)                         |                        |
| Magazine Loading              | Bottom to Upper                                   |                        |
| Pitch                         | 1~4 (10 ~ 40mm)                                   |                        |
| Magazine Capacity (ea)        | Upper 2 / Lower 2                                 |                        |
| Exit Guide                    | Fixed block in fixed rail side                    |                        |
| Jam Detect Function *         | Pneumatic   |                        |
| Safety Cover                  | Outer   |                        |
| Width Adjustment *            | Manual  |                        |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |
| Smema Cable                   | 3m / 1 ea   |                        |
| Alarm                         | Tower lamp (3 color)                              |                        |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |
| Air Supply                    | 0.5Mpa (5bar)                                     |                        |
| Air Usage                     | 11.30 ℓ/min                                       |                        |
| Electricity Consumption       | 370W  |                        |

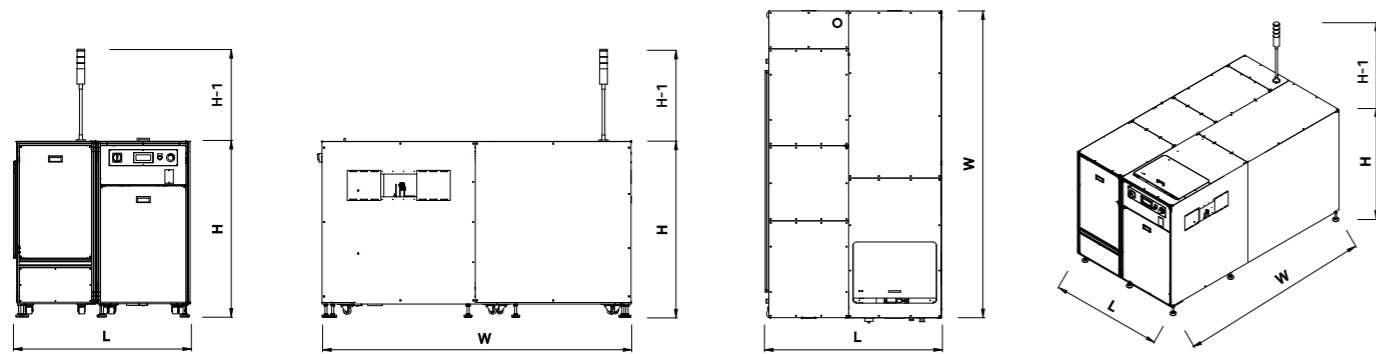
| Option Spec.               |                |                                   |
|----------------------------|----------------|-----------------------------------|
| Item                       | CODE No.       | Option                            |
| Width Adjustment *         | O-100-HW0-0205 | Auto                              |
| High Speed Magazine Change | O-100-HW1-0100 | -                                 |
| Jam Detect Function *      | O-100-HW1-0202 | Electric(Step motor)              |
| Width Synchronization      | O-100-SW0-0200 | via RS-485                        |
| Line Control               | O-200-LC0-0100 | Hermes                            |
|                            | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                    | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

# Shuttle Loader (2-racks / 3-racks)



Located at the first stage of SMT line, this unit consists of a coupling of a single shuttle and a rack part then transfers PCBs stacked in a magazine rack to the downstream machine using a puller mounted on the single shuttle one by one. The rack part is designed to accommodate racks of various sizes.



\*The image is based on 3-racks.

| CODE No.       |              | MODEL     | Magazine Capacity(ea) | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|-----------------------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS |           |                       |      | L              | W    | H    | H-1  |             |
| M-10C-YM1-0403 |              | YSL-1M 00 | 2-racks               | M    | 1230           | 1580 | 1314 | 2000 | 545         |
| M-10C-YL1-0403 |              | YSL-1L 00 | 2-racks               | L    | 1330           | 1740 | 1314 | 2000 | 620         |
| M-10C-YX1-0403 |              | YSL-1X 00 | 2-racks               | XL   | 1430           | 2000 | 1314 | 2000 | 710         |
| M-10C-YM1-0404 |              | YSL-1M 01 | 3-racks               | M    | 1230           | 2065 | 1314 | 2000 | 705         |
| M-10C-YL1-0404 |              | YSL-1L 01 | 3-racks               | L    | 1330           | 2305 | 1314 | 2000 | 780         |
| M-10C-YX1-0404 |              | YSL-1X 01 | 3-racks               | XL   | 1430           | 2695 | 1314 | 2000 | 870         |

| Standard Spec.                |   |                 |                        |
|-------------------------------|---|-----------------|------------------------|
| Item                          | Standard  |                 |                        |
| Line Flow                     | Left to Right   | Right to Left   |                        |
| Fixed Rail                    | Front   | Rear            |                        |
| Pass Line (mm)                | 950±20  | 900±20          |                        |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz  |                 | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                      | M   | L               | XL                     |
| Min.PCB (L X W) (mm)          | 100 X 70  |                 |                        |
| Max.PCB (L X W) (mm)          | 330 X 250   | 440 X 330       | 460 X 460              |
| Item                          | SMT   |                 |                        |
| PCB Top/Bottom Clearance (mm) | 30 / 25   |                 |                        |
| PCB Edge (mm)                 | 3   |                 |                        |
| PCB Loading Weight (kg)       | 3   |                 |                        |
| Conveyor Belt                 | Flat edge belt  |                 |                        |
| Conveyor Speed (mm/sec) *     | 200   |                 |                        |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                 |                        |
| PCB Color                     | Green   |                 |                        |
| PCB In/Out Sensor             | Single sensor   |                 |                        |
| Magazine Size (L X W X H)(mm) | M   | L               | XL                     |
|                               | 355 X 320 X 570   | 460 X 400 X 575 | 535 X 530 X 575        |
| Magazine Slot (ea)            | 45 (First 5 slots from the bottom may not be used)  |                 |                        |
| Magazine A size (mm)          | 34  |                 |                        |
| Magazine B size (mm)          | 35  |                 |                        |
| PCB Loading                   | Bottom to Upper (6 to 50)   |                 |                        |
| Magazine Clamping             | Cylinder  |                 |                        |
| Magazine Size                 | All size  |                 |                        |
| Pitch                         | 1~4 (10~40mm)   |                 |                        |
| Jam Detect Function *         | Pneumatic   |                 |                        |
| Safety Items                  | Inside : Auto sliding door(non-contact safety door sensor)<br>Outside : Manual sliding door(key type door sensor) |                 |                        |
| Width Adjustment              | Auto  |                 |                        |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6  |                 |                        |
| Smema Cable                   | 3m / 1 ea   |                 |                        |
| Alarm                         | Tower lamp (3 color)  |                 |                        |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints)   |                 |                        |
| Air Supply                    | 0.5Mpa (5bar)   |                 |                        |
| Air Usage                     | 4.0 ℓ/min   |                 |                        |
| Electricity Consumption       | 720W  |                 |                        |

| Option Spec.              |   |                                   |
|---------------------------|---|-----------------------------------|
| Item                      | CODE No.  | Option                            |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104  | 1~200 / Analog / 1ea              |
| Jam Detect Function *     | O-100-HW1-0202  | Electric(Step motor)              |
| Magazine Width Adjustment | O-100-HW1-0500  | -                                 |
|                           | When this option is selected, the voltage is changed to 220V. |                                   |
| Magazine Stopper Release  | O-100-HW1-0600  | -                                 |
| Width Synchronization     | O-100-SW0-0200  | via RS-485                        |
| Line Control              | O-200-LC0-0100  | Hermes                            |
|                           | O-200-LC0-0200  | Smart kit (LAN communication PLC) |
| Color *                   | O-400-CO0-0100  | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Magazine Loader

Magazine Loader - All type(Bar)

Magazine Loader - All type(Chain)

Shuttle Loader

Shuttle Loader - AGV

Magazine Unloader

Magazine Unloader - All type(Bar)

Magazine Unloader - All type(Chain)

Shuttle Unloader

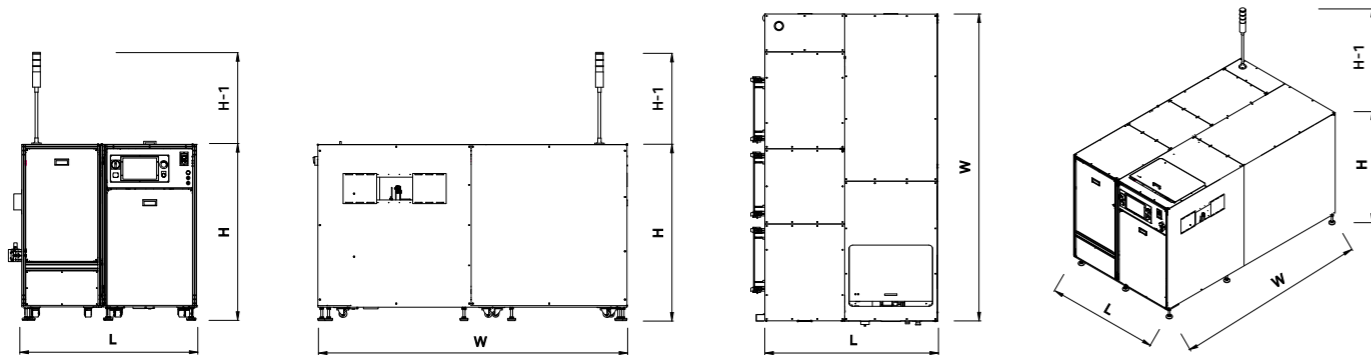
Shuttle Unloader - AGV

Magazine Buffer

# Shuttle Loader - AGV (2-racks / 3-racks)



Located at the first stage of SMT line, this unit consists of a coupling of a single shuttle and a rack part then transfers PCBs stacked in a magazine rack to the downstream machine using a puller mounted on the single shuttle one by one. The rack part interlocks with AGV to supply magazine racks.



\*The image is based on 3-racks.

| CODE No.       |              | MODEL     | Magazine Capacity(ea) | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|-----------------------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS |           |                       |      | L              | W    | H    | H-1  |             |
| M-10C-YM1-0603 |              | YSL-1M 10 | 2-racks               | M    | 1300           | 1580 | 1314 | 2000 | 565         |
| M-10C-YL1-0603 |              | YSL-1L 10 | 2-racks               | L    | 1400           | 1740 | 1314 | 2000 | 640         |
| M-10C-YX1-0603 |              | YSL-1X 10 | 2-racks               | XL   | 1600           | 2000 | 1314 | 2000 | 720         |
| M-10C-YM1-0604 |              | YSL-1M 11 | 3-racks               | M    | 1300           | 2065 | 1314 | 2000 | 695         |
| M-10C-YL1-0604 |              | YSL-1L 11 | 3-racks               | L    | 1400           | 2305 | 1314 | 2000 | 775         |
| M-10C-YX1-0604 |              | YSL-1X 11 | 3-racks               | XL   | 1600           | 2695 | 1314 | 2000 | 860         |

| Standard Spec.                |   |                 |                 |
|-------------------------------|---|-----------------|-----------------|
| Item                          | Standard  |                 |                 |
| Line Flow                     | Left to Right   | Right to Left   |                 |
| Fixed Rail                    | Front   | Rear            |                 |
| Pass Line (mm)                | 950±20  | 900±20          |                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz  |                 |                 |
| PCB Size                      | M   | L               | XL              |
| Min.PCB (L X W) (mm)          | 100 X 70  |                 |                 |
| Max.PCB (L X W) (mm)          | 330 X 250   | 440 X 330       | 460 X 460       |
| Item                          | SMT   |                 |                 |
| PCB Top/Bottom Clearance (mm) | 30 / 25   |                 |                 |
| PCB Edge (mm)                 | 3   |                 |                 |
| PCB Loading Weight (kg)       | 3   |                 |                 |
| Conveyor Belt                 | Flat edge belt  |                 |                 |
| Conveyor Speed (mm/sec) *     | 200   |                 |                 |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                 |                 |
| PCB Color                     | Green   |                 |                 |
| PCB In/Out Sensor             | Single sensor   |                 |                 |
| Magazine Size (L X W X H)(mm) | M   | L               | XL              |
|                               | 355 X 320 X 570   | 460 X 400 X 575 | 535 X 530 X 575 |
| Magazine Slot (ea)            | 45 (First 5 slots from the bottom may not be used)                                    |                 |                 |
| Magazine A size (mm)          | 34  |                 |                 |
| Magazine B size (mm)          | 35  |                 |                 |
| PCB Loading                   | Bottom to Upper (6 to 50)   |                 |                 |
| Magazine Clamping             | Cylinder  |                 |                 |
| Magazine Size                 | One kind  |                 |                 |
| Pitch                         | 1~4 (10~40mm)   |                 |                 |
| Jam Detect Function *         | Pneumatic   |                 |                 |
| Safety Item                   | Inside : Auto sliding door(non-contact safety door sensor)<br>Outside : Light curtain |                 |                 |
| Width Adjustment              | Auto  |                 |                 |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6  |                 |                 |
| Smema Cable                   | 3m / 1 ea   |                 |                 |
| Alarm                         | Tower lamp (3 color)  |                 |                 |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints)                                     |                 |                 |
| Air Supply                    | 0.5Mpa (5bar)   |                 |                 |
| Air Usage                     | 4.0 ℓ/min   |                 |                 |
| Electricity Consumption       | 720W  |                 |                 |

| Option Spec.              |                |                                   |
|---------------------------|----------------|-----------------------------------|
| Item                      | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104 | 1~200 / Analog / 1ea              |
| Jam Detect Function *     | O-100-HW1-0202 | Electric(Step motor)              |
| Magazine Width Adjustment | O-100-HW1-0500 | -                                 |
| Magazine Stopper Release  | O-100-HW1-0600 | -                                 |
| Width Synchronization     | O-100-SW0-0200 | via RS-485                        |
| Line Control              | O-200-LC0-0100 | Hermes                            |
|                           | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Magazine Loader

Magazine Loader - All type(Bar)

Magazine Loader - All type(Chain)

Shuttle Loader

Shuttle Loader - AGV

Magazine Unloader

Magazine Unloader - All type(Bar)

Magazine Unloader - All type(Chain)

Shuttle Unloader

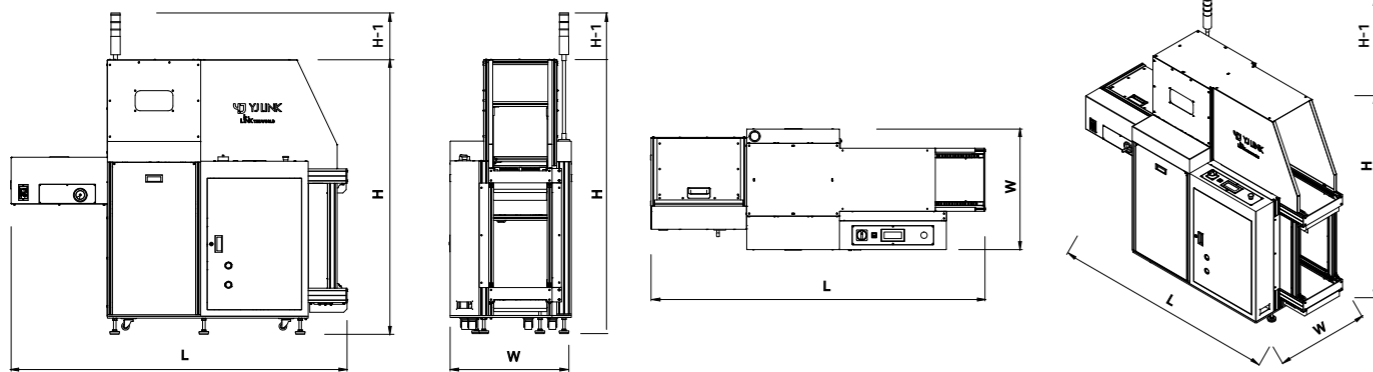
Shuttle Unloader - AGV

Magazine Buffer

# Magazine Unloader



Located at the final stage of SMT line, this unit stacks PCBs in an empty magazine rack using a pneumatic pusher one by one.



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |     |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|----------------|-----|------|------|-------------|
| SMT            | POST-PROCESS |           |      | L              | W   | H    | H-1  |             |
| M-10C-YM1-0200 |              | YMU-1M 00 | M    | 2090           | 755 | 1700 | 2000 | 344         |
| M-10C-YL1-0200 |              | YMU-1L 00 | L    | 2290           | 835 | 1700 | 2000 | 361         |
| M-10C-YX1-0200 |              | YMU-1X 00 | XL   | 2350           | 965 | 1700 | 2000 | 393         |

| Standard Spec.                |   |                        |                 |
|-------------------------------|---|------------------------|-----------------|
| Item                          | Standard  |                        |                 |
| Line Flow                     | Left to Right                                     | Right to Left          |                 |
| Fixed Rail                    | Front   | Rear                   |                 |
| Pass Line (mm)                | 950±20  | 900±20                 |                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |                 |
| PCB Size                      | M   | L                      | XL              |
| Min.PCB (L X W) (mm)          | 70 X 50   |                        |                 |
| Max.PCB (L X W) (mm)          | 330 X 250   | 440 X 330              | 460 X 460       |
| Item                          | SMT   |                        |                 |
| PCB Top/Bottom Clearance (mm) | 30 / 25   |                        |                 |
| PCB Edge (mm)                 | 3   |                        |                 |
| PCB Loading Weight (kg)       | 3   |                        |                 |
| Conveyor Belt                 | Flat edge belt                                    |                        |                 |
| Conveyor Speed (mm/sec) *     | 200   |                        |                 |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                        |                 |
| PCB Color                     | Green   |                        |                 |
| PCB In/Out Sensor             | Single sensor                                     |                        |                 |
| Magazine Size (L X W X H)(mm) | M   | L                      | XL              |
|                               | 355 X 320 X 570                                   | 460 X 400 X 575        | 535 X 530 X 575 |
| Magazine Full Rack (kg)       | 20  | 30                     | 50              |
| Magazine Slot (ea)            | 50  |                        |                 |
| Magazine A size (mm)          | 34  |                        |                 |
| Magazine B size (mm)          | 35  |                        |                 |
| PCB Stacking                  | Bottom to Upper (1 to 50)                         |                        |                 |
| Magazine Loading              | Upper to Bottom                                   |                        |                 |
| Pitch                         | 1~4 (10 ~ 40mm)                                   |                        |                 |
| Magazine Capacity (ea)        | Upper 2 / Lower 2                                 |                        |                 |
| Jam Detect Function *         | Pneumatic   |                        |                 |
| Safety Cover                  | Outer / Motor                                     |                        |                 |
| Width Adjustment *            | Manual  |                        |                 |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |                 |
| Smema Cable                   | 3m / 1 ea   |                        |                 |
| Alarm                         | Tower lamp (3 color)                              |                        |                 |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |                 |
| Air Supply                    | 0.5Mpa (5bar)                                     |                        |                 |
| Air Usage                     | 11.30 ℓ/min                                       |                        |                 |
| Electricity Consumption       | 335W  |                        |                 |

| Option Spec.               |                |                                   |
|----------------------------|----------------|-----------------------------------|
| Item                       | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) *  | O-100-HW0-0104 | 1~200 / Analog / 1ea              |
| Width Adjustment *         | O-100-HW0-0205 | Auto                              |
| High Speed Magazine Change | O-100-HW1-0100 | -                                 |
| Jam Detect Function *      | O-100-HW1-0202 | Electric(Step motor)              |
| Width Synchronization      | O-100-SW0-0200 | via RS-485                        |
| Line Control               | O-200-LC0-0100 | Hermes                            |
|                            | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                    | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Magazine Loader

Magazine Loader - All type(Bar)

Magazine Loader - All type(Chain)

Shuttle Loader

Shuttle Loader - AGV

Magazine Unloader

Magazine Unloader - All type(Bar)

Magazine Unloader - All type(Chain)

Shuttle Unloader

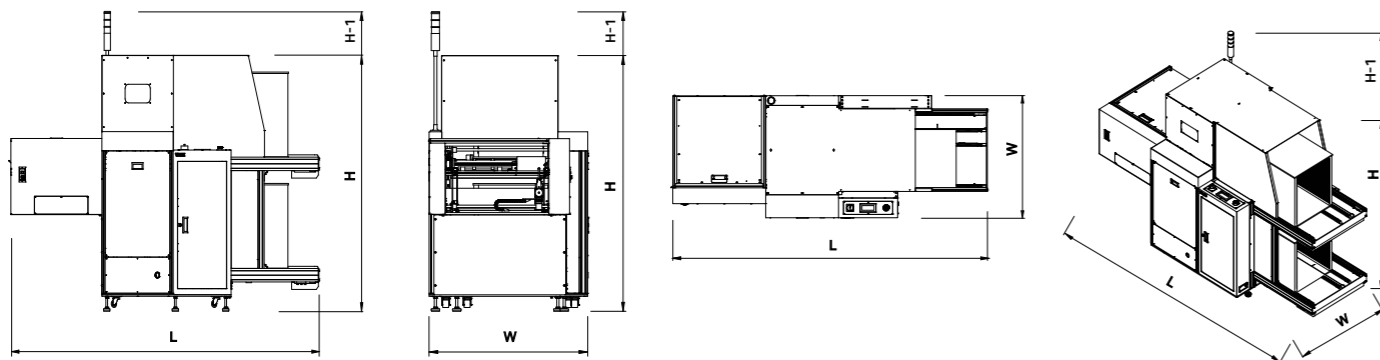
Shuttle Unloader - AGV

Magazine Buffer

# Magazine Unloader - All type(Bar)



Located at the final stage of the SMT line, this unit stacks PCBs in an empty magazine rack using a pneumatic pusher one by one. The conveyor part and the inside of the lifter are designed to accommodate racks of various sizes.



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |     |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|----------------|-----|------|------|-------------|
| SMT            | POST-PROCESS |           |      | L              | W   | H    | H-1  |             |
| M-10C-YX1-0201 |              | YMU-1X 10 | XL   | 2350           | 965 | 1706 | 2000 | 398         |

| Standard Spec.                |   |                        |
|-------------------------------|---|------------------------|
| Item                          | Standard  |                        |
| Line Flow                     | Left to Right                                     | Right to Left          |
| Fixed Rail                    | Front   | Rear                   |
| Pass Line (mm)                | 950±20  | 900±20                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                      | XL  |                        |
| Min.PCB (L X W) (mm)          | 70 X 50   |                        |
| Max.PCB (L X W) (mm)          | 460 X 460   |                        |
| Item                          | SMT   |                        |
| PCB Top/Bottom Clearance (mm) | 30 / 25   |                        |
| PCB Edge (mm)                 | 3   |                        |
| PCB Loading Weight (kg)       | 3   |                        |
| Conveyor Belt                 | Flat edge belt                                    |                        |
| Conveyor Speed (mm/sec) *     | 200   |                        |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                        |
| PCB Color                     | Green   |                        |
| PCB In/Out Sensor             | Single sensor                                     |                        |
| Magazine Size (L X W X H)(mm) | XL<br>535 X 530 X 575                             |                        |
| Magazine Full Rack (kg)       | 50  |                        |
| Magazine Slot (ea)            | 50  |                        |
| Magazine A size (mm)          | 34  |                        |
| Magazine B size (mm)          | 35  |                        |
| PCB Stacking                  | Bottom to Upper (1 to 50)                         |                        |
| Magazine Loading              | Upper to Bottom                                   |                        |
| Pitch                         | 1~4 (10 ~ 40mm)                                   |                        |
| Magazine Capacity (ea)        | Upper 2 / Lower 2                                 |                        |
| Jam Detect Function *         | Pneumatic   |                        |
| Safety Cover                  | Outer / Motor                                     |                        |
| Width Adjustment *            | Manual  |                        |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |
| Smema Cable                   | 3m / 1 ea   |                        |
| Alarm                         | Tower lamp (3 color)                              |                        |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |
| Air Supply                    | 0.5Mpa (5bar)                                     |                        |
| Air Usage                     | 11.30 ℓ/min                                       |                        |
| Electricity Consumption       | 385W  |                        |

| Option Spec.               |                |                                   |
|----------------------------|----------------|-----------------------------------|
| Item                       | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) *  | O-100-HW0-0104 | 1~200 / Analog / 1ea              |
| Width Adjustment *         | O-100-HW0-0205 | Auto                              |
| High Speed Magazine Change | O-100-HW1-0100 | -                                 |
| Jam Detect Function *      | O-100-HW1-0202 | Electric(Step motor)              |
| Width Synchronization      | O-100-SW0-0200 | via RS-485                        |
| Line Control               | O-200-LC0-0100 | Hermes                            |
|                            | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                    | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Magazine Loader

Magazine Loader - All type(Bar)

Magazine Loader - All type(Chain)

Shuttle Loader

Shuttle Loader - AGV

Magazine Unloader

Magazine Unloader - All type(Bar)

Magazine Unloader - All type(Chain)

Shuttle Unloader

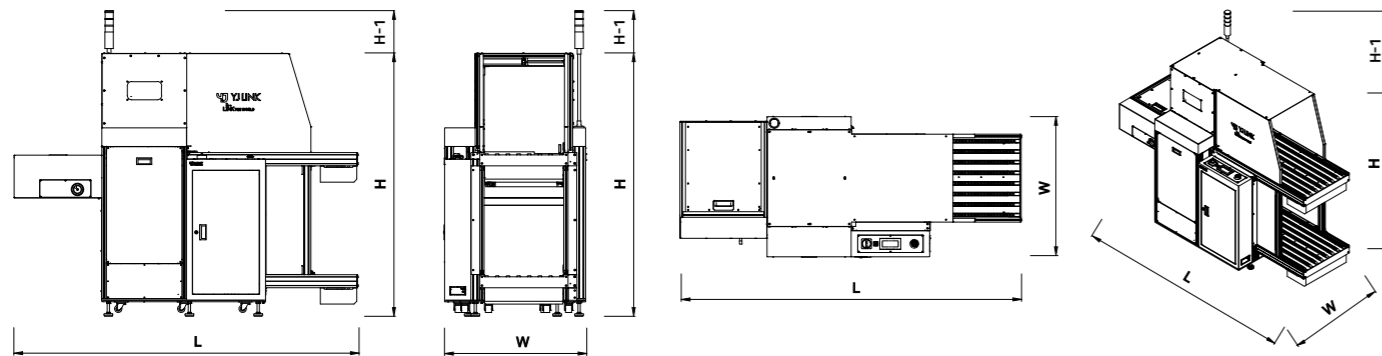
Shuttle Unloader - AGV

Magazine Buffer

# Magazine Unloader - All type(Chain)



Located at the final stage of the SMT line, this unit stacks PCBs in an empty magazine rack using a pneumatic pusher one by one. The conveyor part and the inside of the lifter are designed to accommodate racks of various sizes.



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |     |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|----------------|-----|------|------|-------------|
| SMT            | POST-PROCESS |           |      | L              | W   | H    | H-1  |             |
| M-10C-YX1-0202 |              | YMU-1X 30 | XL   | 2350           | 965 | 1800 | 2100 | 455         |

| Standard Spec.                |   |                        |
|-------------------------------|---|------------------------|
| Item                          | Standard  |                        |
| Line Flow                     | Left to Right                                     | Right to Left          |
| Fixed Rail                    | Front   | Rear                   |
| Pass Line (mm)                | 950±20  | 900±20                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                      | XL  |                        |
| Min.PCB (L X W) (mm)          | 70 X 50   |                        |
| Max.PCB (L X W) (mm)          | 460 X 460   |                        |
| Item                          | SMT   |                        |
| PCB Top/Bottom Clearance (mm) | 30 / 25   |                        |
| PCB Edge (mm)                 | 3   |                        |
| PCB Loading Weight (kg)       | 3   |                        |
| Conveyor Belt                 | Flat edge belt                                    |                        |
| Conveyor Speed (mm/sec) *     | 200   |                        |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                        |
| PCB Color                     | Green   |                        |
| PCB In/Out Sensor             | Single sensor                                     |                        |
| Magazine Size (L X W X H)(mm) | XL<br>535 X 530 X 575                             |                        |
| Magazine Full Rack (kg)       | 50  |                        |
| Magazine Slot (ea)            | 50  |                        |
| Magazine A size (mm)          | 34  |                        |
| Magazine B size (mm)          | 35  |                        |
| PCB Stacking                  | Bottom to Upper (1 to 50)                         |                        |
| Magazine Loading              | Upper to Bottom                                   |                        |
| Pitch                         | 1~4 (10 ~ 40mm)                                   |                        |
| Magazine Capacity (ea)        | Upper 2 / Lower 2                                 |                        |
| Jam Detect Function *         | Pneumatic   |                        |
| Safety Cover                  | Outer   |                        |
| Width Adjustment *            | Manual  |                        |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |
| Smema Cable                   | 3m / 1 ea   |                        |
| Alarm                         | Tower lamp (3 color)                              |                        |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |
| Air Supply                    | 0.5Mpa (5bar)                                     |                        |
| Air Usage                     | 11.30 ℓ/min                                       |                        |
| Electricity Consumption       | 385W  |                        |

| Option Spec.               |                |                                   |
|----------------------------|----------------|-----------------------------------|
| Item                       | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) *  | O-100-HW0-0104 | 1~200 / Analog / 1ea              |
| Width Adjustment *         | O-100-HW0-0205 | Auto                              |
| High Speed Magazine Change | O-100-HW1-0100 | -                                 |
| Jam Detect Function *      | O-100-HW1-0202 | Electric(Step motor)              |
| Width Synchronization      | O-100-SW0-0200 | via RS-485                        |
| Line Control               | O-200-LC0-0100 | Hermes                            |
|                            | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                    | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Magazine Loader

Magazine Loader - All type(Bar)

Magazine Loader - All type(Chain)

Shuttle Loader

Shuttle Loader - AGV

Magazine Unloader

Magazine Unloader - All type(Bar)

Magazine Unloader - All type(Chain)

Shuttle Unloader

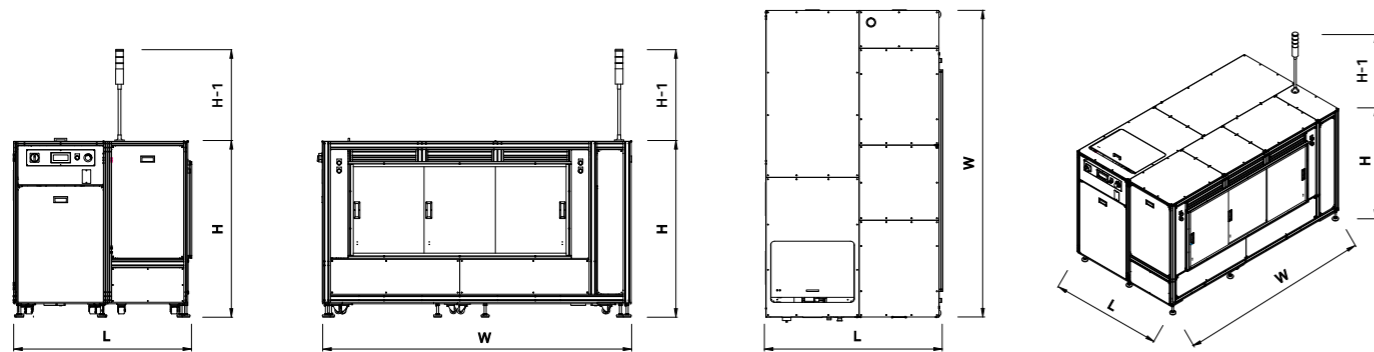
Shuttle Unloader - AGV

Magazine Buffer

# Shuttle Unloader (2-racks / 3-racks)



Located at the final stage of SMT line, this unit consists of a coupling of a single shuttle and a rack part and stacks PCBs in an empty magazine rack using a pneumatic pusher mounted on the single shuttle one by one. The rack part is designed to accommodate racks of various sizes.



\*The image is based on 3-racks.

| CODE No.       |              | MODEL     | Magazine Capacity(ea) | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|-----------------------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS |           |                       |      | L              | W    | H    | H-1  |             |
| M-10C-YM1-0503 |              | YSU-1M 00 | 2-racks               | M    | 1230           | 1580 | 1314 | 2000 | 545         |
| M-10C-YL1-0503 |              | YSU-1L 00 | 2-racks               | L    | 1330           | 1740 | 1314 | 2000 | 620         |
| M-10C-YX1-0503 |              | YSU-1X 00 | 2-racks               | XL   | 1430           | 2000 | 1314 | 2000 | 710         |
| M-10C-YM1-0504 |              | YSU-1M 01 | 3-racks               | M    | 1230           | 2065 | 1314 | 2000 | 705         |
| M-10C-YL1-0504 |              | YSU-1L 01 | 3-racks               | L    | 1330           | 2305 | 1314 | 2000 | 780         |
| M-10C-YX1-0504 |              | YSU-1X 01 | 3-racks               | XL   | 1430           | 2695 | 1314 | 2000 | 870         |

| Standard Spec.                |   |                 |                        |
|-------------------------------|---|-----------------|------------------------|
| Item                          | Standard  |                 |                        |
| Line Flow                     | Left to Right   | Right to Left   |                        |
| Fixed Rail                    | Front   | Rear            |                        |
| Pass Line (mm)                | 950±20  | 900±20          |                        |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz  |                 | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                      | M   | L               | XL                     |
| Min.PCB (L X W) (mm)          | 100 X 70  |                 |                        |
| Max.PCB (L X W) (mm)          | 330 X 250   | 440 X 330       | 460 X 460              |
| Item                          | SMT   |                 |                        |
| PCB Top/Bottom Clearance (mm) | 30 / 25   |                 |                        |
| PCB Edge (mm)                 | 3   |                 |                        |
| PCB Loading Weight (kg)       | 3   |                 |                        |
| Conveyor Belt                 | Flat edge belt  |                 |                        |
| Conveyor Speed (mm/sec) *     | 200   |                 |                        |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                 |                        |
| PCB Color                     | Green   |                 |                        |
| PCB In/Out Sensor             | Single sensor   |                 |                        |
| Magazine Size (L X W X H)(mm) | M   | L               | XL                     |
|                               | 355 X 320 X 570   | 460 X 400 X 575 | 535 X 530 X 575        |
| Magazine Slot (ea)            | 50  |                 |                        |
| Magazine A size (mm)          | 34  |                 |                        |
| Magazine B size (mm)          | 35  |                 |                        |
| PCB Stacking                  | Upper to Bottom (50 to 1)   |                 |                        |
| Magazine Clamping             | Cylinder  |                 |                        |
| Magazine Size                 | All size  |                 |                        |
| Pitch                         | 1~4 (10 ~ 40mm)   |                 |                        |
| Jam Detect Function *         | Pneumatic   |                 |                        |
| Safety Items                  | Inside : Auto sliding door(non-contact safety door sensor)<br>Outside : Manual sliding door(key type door sensor) |                 |                        |
| Width Adjustment              | Auto  |                 |                        |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6  |                 |                        |
| Smema Cable                   | 3m / 1 ea   |                 |                        |
| Alarm                         | Tower lamp (3 color)  |                 |                        |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints)   |                 |                        |
| Air Supply                    | 0.5Mpa (5bar)   |                 |                        |
| Air Usage                     | 4.0 ℓ/min   |                 |                        |
| Electricity Consumption       | 720W  |                 |                        |

| Option Spec.              |   |                                   |
|---------------------------|---|-----------------------------------|
| Item                      | CODE No.  | Option                            |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104  | 1~200 / Analog / 1ea              |
| Jam Detect Function *     | O-100-HW1-0202  | Electric(Step motor)              |
| Magazine Width Adjustment | O-100-HW1-0500  | -                                 |
|                           | When this option is selected, the voltage is changed to 220V. |                                   |
| Magazine Stopper Release  | O-100-HW1-0600  | -                                 |
| Width Synchronization     | O-100-SW0-0200  | via RS-485                        |
| Line Control              | O-200-LC0-0100  | Hermes                            |
|                           | O-200-LC0-0200  | Smart kit (LAN communication PLC) |
| Color *                   | O-400-CO0-0100  | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Magazine Loader

Magazine Loader - All type(Bar)

Magazine Loader - All type(Chain)

Shuttle Loader

Shuttle Loader - AGV

Magazine Unloader

Magazine Unloader - All type(Bar)

Magazine Unloader - All type(Chain)

Shuttle Unloader

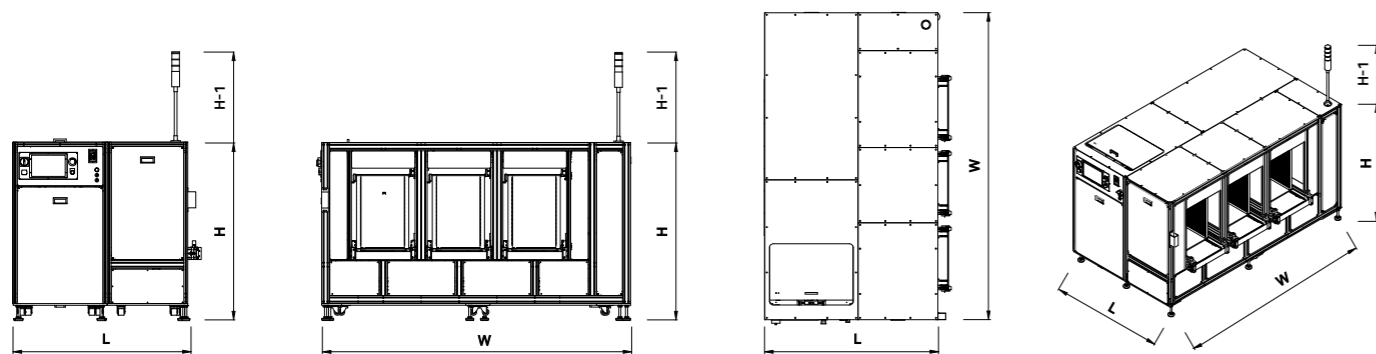
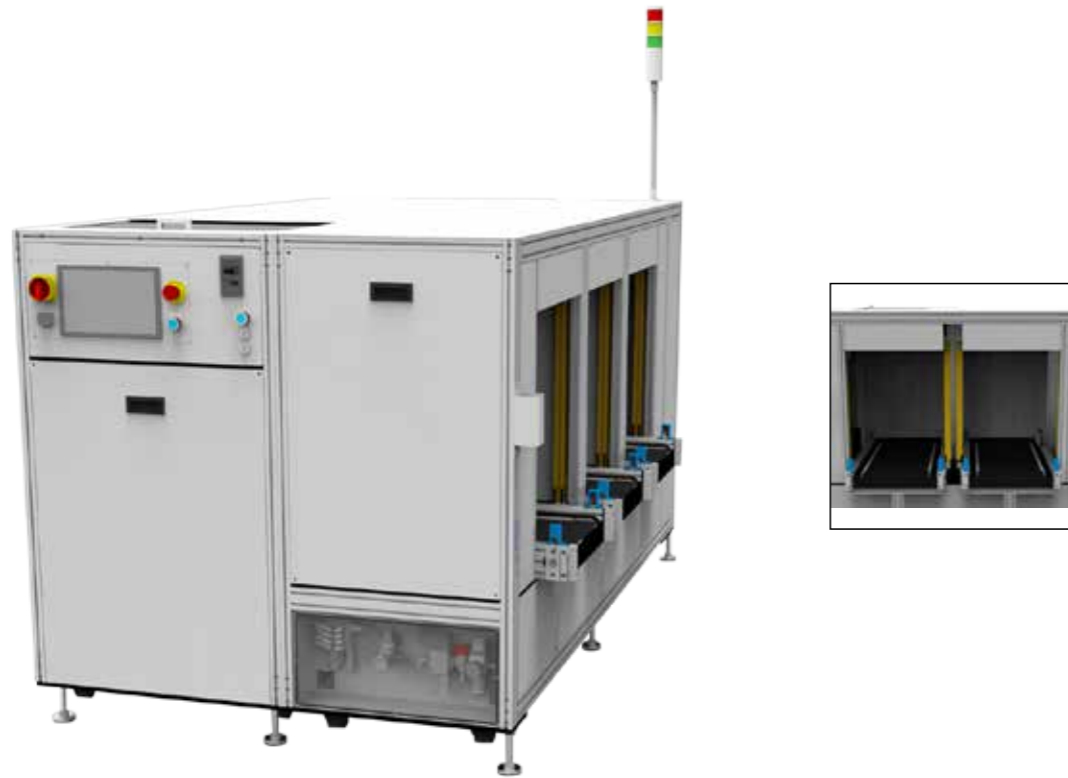
Shuttle Unloader - AGV

Magazine Buffer

# Shuttle Unloader - AGV (2-racks / 3-racks)



Located at the final stage of SMT line, this unit consists of a coupling of a single shuttle and a rack part and stacks PCBs in an empty magazine rack using a pneumatic pusher mounted on the single shuttle one by one. The open rack part interlocks with AGV to supply magazine racks.



\*The image is based on 3-racks.

| CODE No.       |              | MODEL     | Magazine Capacity(ea) | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|-----------------------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS |           |                       |      | L              | W    | H    | H-1  |             |
| M-10C-YM1-0703 |              | YSU-1M 10 | 2-racks               | M    | 1300           | 1580 | 1314 | 2000 | 565         |
| M-10C-YL1-0703 |              | YSU-1L 10 | 2-racks               | L    | 1400           | 1740 | 1314 | 2000 | 640         |
| M-10C-YX1-0703 |              | YSU-1X 10 | 2-racks               | XL   | 1600           | 2000 | 1314 | 2000 | 720         |
| M-10C-YM1-0704 |              | YSU-1M 11 | 3-racks               | M    | 1300           | 2065 | 1314 | 2000 | 695         |
| M-10C-YL1-0704 |              | YSU-1L 11 | 3-racks               | L    | 1400           | 2305 | 1314 | 2000 | 775         |
| M-10C-YX1-0704 |              | YSU-1X 11 | 3-racks               | XL   | 1600           | 2695 | 1314 | 2000 | 860         |

| Standard Spec.                |   |                 |                 |
|-------------------------------|---|-----------------|-----------------|
| Item                          | Standard  |                 |                 |
| Line Flow                     | Left to Right   | Right to Left   |                 |
| Fixed Rail                    | Front   | Rear            |                 |
| Pass Line (mm)                | 950±20  | 900±20          |                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz  |                 |                 |
| PCB Size                      | M   | L               | XL              |
| Min.PCB (L X W) (mm)          | 100 X 70  |                 |                 |
| Max.PCB (L X W) (mm)          | 330 X 250   | 440 X 330       | 460 X 460       |
| Item                          | SMT   |                 |                 |
| PCB Top/Bottom Clearance (mm) | 30 / 25   |                 |                 |
| PCB Edge (mm)                 | 3   |                 |                 |
| PCB Loading Weight (kg)       | 3   |                 |                 |
| Conveyor Belt                 | Flat edge belt  |                 |                 |
| Conveyor Speed (mm/sec) *     | 200   |                 |                 |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                 |                 |
| PCB Color                     | Green   |                 |                 |
| PCB In/Out Sensor             | Single sensor   |                 |                 |
| Magazine Size (L X W X H)(mm) | M   | L               | XL              |
|                               | 355 X 320 X 570   | 460 X 400 X 575 | 535 X 530 X 575 |
| Magazine Slot (ea)            | 50  |                 |                 |
| Magazine A size (mm)          | 34  |                 |                 |
| Magazine B size (mm)          | 35  |                 |                 |
| PCB Stacking                  | Upper to Bottom (50 to 1)   |                 |                 |
| Magazine Clamping             | Cylinder  |                 |                 |
| Magazine Size                 | One Kind  |                 |                 |
| Pitch                         | 1~4 (10 ~ 40mm)   |                 |                 |
| Jam Detect Function *         | Pneumatic   |                 |                 |
| Safety Item                   | Inside : Auto sliding door(non-contact safety door sensor)<br>Outside : Light curtain |                 |                 |
| Width Adjustment              | Auto  |                 |                 |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6  |                 |                 |
| Smema Cable                   | 3m / 1 ea   |                 |                 |
| Alarm                         | Tower lamp (3 color)  |                 |                 |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints)                                     |                 |                 |
| Air Supply                    | 0.5Mpa (5bar)   |                 |                 |
| Air Usage                     | 4.0 ℓ/min   |                 |                 |
| Electricity Consumption       | 720W  |                 |                 |

| Option Spec.              |                |                                   |
|---------------------------|----------------|-----------------------------------|
| Item                      | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104 | 1~200 / Analog / 1ea              |
| Jam Detect Function *     | O-100-HW1-0202 | Electric(Step motor)              |
| Magazine Width Adjustment | O-100-HW1-0500 | -                                 |
| Magazine Stopper Release  | O-100-HW1-0600 | -                                 |
| Width Synchronization     | O-100-SW0-0200 | via RS-485                        |
| Line Control              | O-200-LC0-0100 | Hermes                            |
|                           | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Magazine Loader

Magazine Loader - All type(Bar)

Magazine Loader - All type(Chain)

Shuttle Loader

Shuttle Loader - AGV

Magazine Unloader

Magazine Unloader - All type(Bar)

Magazine Unloader - All type(Chain)

Shuttle Unloader

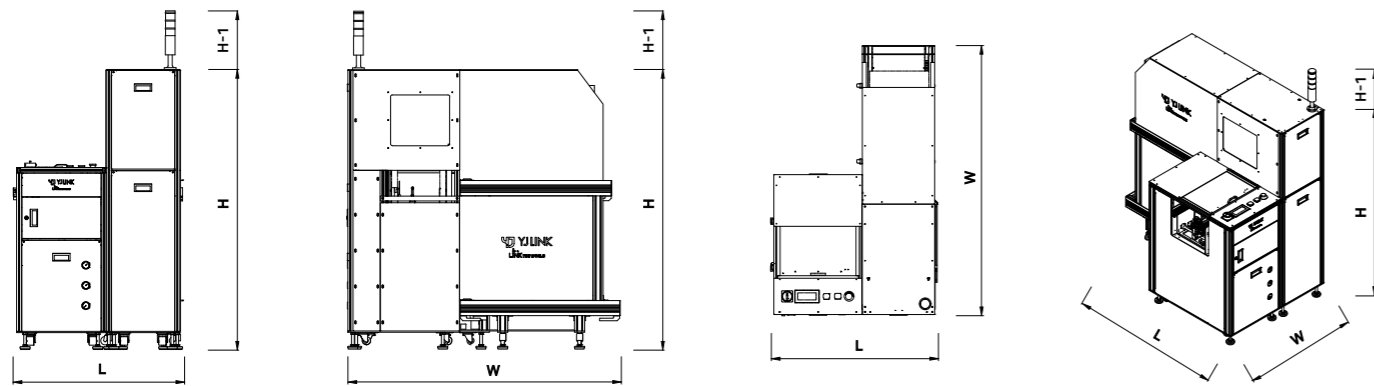
Shuttle Unloader - AGV

Magazine Buffer

# Magazine Buffer



This unit handles PCBs in variable operation modes in line.



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS |           |      | L              | W    | H    | H-1  |             |
| M-10C-YM1-0300 |              | YMB-1M 00 | M    | 1000           | 1615 | 1655 | 2000 | 360         |
| M-10C-YL1-0300 |              | YMB-1L 00 | L    | 1220           | 1730 | 1655 | 2000 | 420         |
| M-10C-YX1-0300 |              | YMB-1X 00 | XL   | 1370           | 2110 | 1655 | 2000 | 485         |

| Standard Spec.                |   |                        |                       |
|-------------------------------|---|------------------------|-----------------------|
| Item                          | Standard  |                        |                       |
| Line Flow                     | Left to Right   | Right to Left          |                       |
| Fixed Rail                    | Front   | Rear                   |                       |
| Pass Line (mm)                | 950±20  | 900±20                 |                       |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz  | 110V±(10%) & 50 ~ 60Hz |                       |
| PCB Size                      | M   | L                      | XL                    |
| Min.PCB (L X W) (mm)          | 70 X 100  |                        |                       |
| Max.PCB (L X W) (mm)          | 330 X 250   | 440 X 330              | 460 X 460             |
| Item                          | SMT   |                        |                       |
| PCB Top/Bottom Clearance (mm) | 30 / 25   |                        |                       |
| PCB Edge (mm)                 | 3   |                        |                       |
| PCB Loading Weight (kg)       | 3   |                        |                       |
| Conveyor Belt                 | Flat edge belt  |                        |                       |
| Conveyor Speed (mm/sec) *     | 200   |                        |                       |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                        |                       |
| PCB Color                     | Green   |                        |                       |
| PCB In/Out Sensor             | Single sensor   |                        |                       |
| Magazine Size (L X W X H)(mm) | M<br>355 X 320 X 570  | L<br>460 X 400 X 575   | XL<br>535 X 530 X 575 |
| Magazine Full Rack (kg)       | 20  | 30                     | 50                    |
| Magazine Slot (ea)            | 50  |                        |                       |
| Magazine A size (mm)          | 34  |                        |                       |
| Magazine B size (mm)          | 35  |                        |                       |
| Magazine Loading              | Front / Rear  |                        |                       |
| Pitch                         | 1~4 (10~40mm)   |                        |                       |
| Mode                          | By pass / Buffering(FIFO, LIFO) / Loading / Unloading / NG Stacking |                        |                       |
| Magazine Capacity (ea)        | Upper 2 / Lower 2   |                        |                       |
| Exit Guide                    | Fixed block in fixed rail side                                      |                        |                       |
| Jam Detect Function *         | Pneumatic   |                        |                       |
| Safety Cover                  | Outer   |                        |                       |
| Width Adjustment *            | Manual  |                        |                       |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6                                      |                        |                       |
| Smema Cable                   | 3m / 1 ea   |                        |                       |
| Alarm                         | Tower lamp (3 color)  |                        |                       |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints)                   |                        |                       |
| Air Supply                    | 0.5Mpa (5bar)   |                        |                       |
| Air Usage                     | 11.30 l/min   |                        |                       |
| Electricity Consumption       | 260W  |                        |                       |

| Option Spec.               |                |                                   |
|----------------------------|----------------|-----------------------------------|
| Item                       | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) *  | O-100-HW0-0104 | 1~200 / Analog / 2ea              |
| Width Adjustment *         | O-100-HW0-0205 | Auto                              |
| High Speed Magazine Change | O-100-HW1-0100 | -                                 |
| Jam Detect Function *      | O-100-HW1-0202 | Electric(Step motor) / 2ea        |
| Width Synchronization      | O-100-SW0-0200 | via RS-485                        |
| Line Control               | O-200-LC0-0100 | Hermes                            |
|                            | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                    | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Magazine Loader

Magazine Loader - All type(Bar)

Magazine Loader - All type(Chain)

Shuttle Loader

Shuttle Loader - AGV

Magazine Unloader

Magazine Unloader - All type(Bar)

Magazine Unloader - All type(Chain)

Shuttle Unloader

Shuttle Unloader - AGV

Magazine Buffer

# BUFFER SERIES

[ M-10C-Y( )2 SERIES & M-50C-Y( )2 SERIES ]

|                            |       |       |
|----------------------------|-------|-------|
| Combi - Magazine           | ..... | P. 34 |
| Combi - Rack               | ..... | P. 36 |
| Tower                      | ..... | P. 38 |
| Tower - Cooling            | ..... | P. 40 |
| Tower + Conveyor - Cooling | ..... | P. 42 |
| Tower + NG Conveyor        | ..... | P. 44 |



> Combi - Magazine



> Combi - Rack



> Tower



> Tower - Cooling



> Tower + Conveyor - Cooling

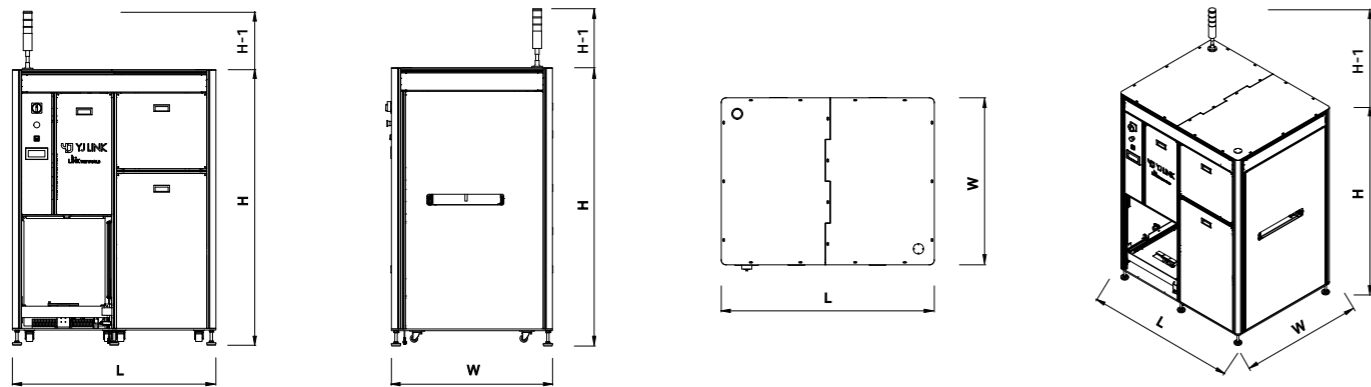
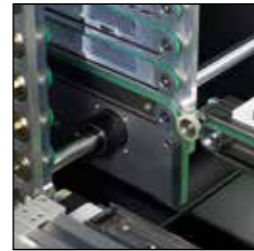


> Tower + NG Conveyor

# Combi - Magazine



The equipment is located after the SPI/AOI, which allows simultaneous PCB buffering and NG PCB loading.



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS |           |      | L              | W    | H    | H-1  |             |
| M-10C-YM2-0101 |              | YCM-1M 00 | M    | 1200           | 840  | 1800 | 2200 | 370         |
| M-10C-YL2-0101 |              | YCM-1L 00 | L    | 1200           | 970  | 1800 | 2200 | 420         |
| M-10C-YX2-0101 |              | YCM-1X 00 | XL   | 1340           | 1050 | 1800 | 2200 | 470         |

| Standard Spec.                |                                       |                        |                 |
|-------------------------------|---------------------------------------|------------------------|-----------------|
| Item                          | Standard                              |                        |                 |
| Line Flow                     | Left to Right                         | Right to Left          |                 |
| Fixed Rail                    | Front                                 | Rear                   |                 |
| Pass Line (mm)                | 950±20                                | 900±20                 |                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                | 110V±(10%) & 50 ~ 60Hz |                 |
| PCB Size                      | M                                     | L                      | XL              |
| Min.PCB (L X W) (mm)          | 120 X 50                              |                        |                 |
| Max.PCB (L X W) (mm)          | 330 X 250                             | 440 X 330              | 460 X 460       |
| Item                          | SMT                                   |                        |                 |
| PCB Top/Bottom Clearance (mm) | 30 / 25                               |                        |                 |
| PCB Edge (mm)                 | 3                                     |                        |                 |
| PCB Loading Weight (kg)       | 3                                     |                        |                 |
| Slot of Rack (ea)             | 20 (±15mm)                            |                        |                 |
| Pitch                         | Rack                                  | 1~4 (30~120mm)         |                 |
|                               | Magazine                              | 1~4 (10 ~ 40mm)        |                 |
| Conveyor Belt                 | Flat edge belt                        |                        |                 |
| Conveyor Speed (mm/sec) *     | 200                                   |                        |                 |
| PCB Thickness (mm)            | 0.6 ~ 4.0                             |                        |                 |
| PCB Color                     | Green                                 |                        |                 |
| PCB In/Out Sensor             | Single sensor                         |                        |                 |
| Magazine Size (L X W X H)mm   | M                                     | L                      | XL              |
|                               | 355 X 320 X 570                       | 460 X 400 X 575        | 535 X 530 X 575 |
| Magazine Full Rack (kg)       | 20                                    | 30                     | 50              |
| Magazine Slot (ea)            | 50                                    |                        |                 |
| Magazine A size (mm)          | 34                                    |                        |                 |
| Magazine B size (mm)          | 35                                    |                        |                 |
| Magazine Capacity (ea)        | 1                                     |                        |                 |
| NG PCB Stacking               | Upper to Bottom (50 to 1)             |                        |                 |
| Jam detect Function           | Pneumatic                             |                        |                 |
| Mode                          | FIFO, LIFO / By pass / NG Stacking    |                        |                 |
| Width Adjustment *            | Manual                                |                        |                 |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6        |                        |                 |
| Smema Cable                   | 3m / 1 ea                             |                        |                 |
| Alarm                         | Tower lamp (3 color)                  |                        |                 |
| Color *                       | SR RAL 7035 : NON ESD (Samhwa Paints) |                        |                 |
| Air Supply                    | 0.5Mpa(5bar)                          |                        |                 |
| Air Usage                     | 8.0 ℓ/min                             |                        |                 |
| Electricity Consumption       | 600W                                  |                        |                 |

| Option Spec.              |                |                                   |                      |
|---------------------------|----------------|-----------------------------------|----------------------|
| Item                      | CODE No.       | Option                            |                      |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104 | Rack Part                         | 1~200 / Analog / 3ea |
|                           |                | Conveyor Part                     | 1~200 / Analog / 1ea |
| Width Adjustment *        | O-100-HW0-0205 | Rack Part                         | Auto / 1ea           |
|                           |                | Conveyor Part                     | Auto / 1ea           |
| Width Synchronization     | O-100-SW0-0200 | via RS-485                        |                      |
| Line Control              | O-200-LC0-0100 | Hermes                            |                      |
|                           | O-200-LC0-0200 | Smart kit (LAN communication PLC) |                      |
| Color *                   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |                      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Combi - Magazine

Combi - Rack

Tower

Tower - Cooling

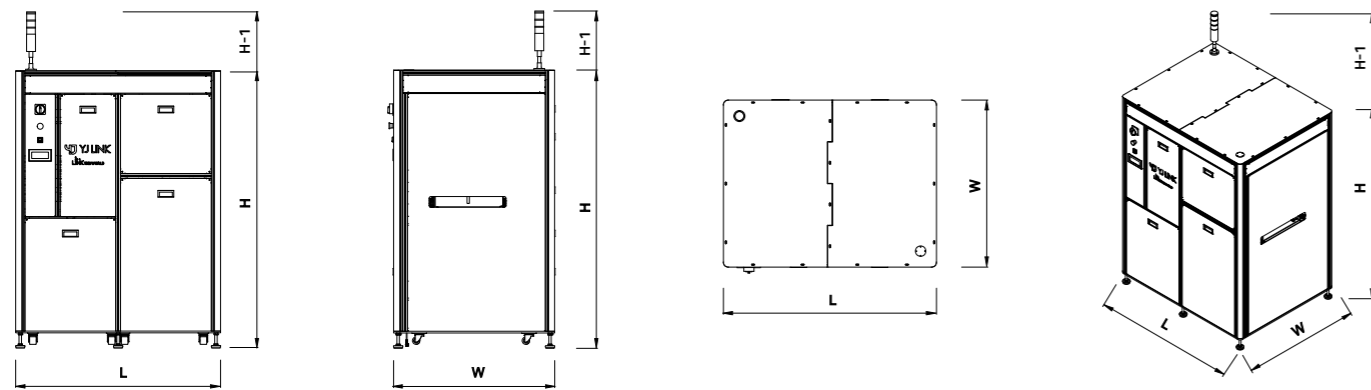
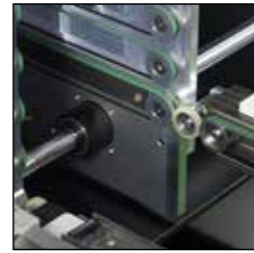
Tower + Conveyor - Cooling

Tower + NG Conveyor

# Combi - Rack



This equipment is located between SMT machines to improve working efficiency by buffering PCB.



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (kg) |
|----------------|--------------|-----------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS |           |      | L              | W    | H    | H-1  |             |
| M-10C-YM2-0102 |              | YCR-1M 00 | M    | 1200           | 840  | 1800 | 2200 | 360         |
| M-10C-YX2-0102 |              | YCR-1X 00 | XL   | 1340           | 1050 | 1800 | 2200 | 460         |

| Standard Spec.                |                                       |                        |
|-------------------------------|---------------------------------------|------------------------|
| Item                          | Standard                              |                        |
| Line Flow                     | Left to Right                         | Right to Left          |
| Fixed Rail                    | Front                                 | Rear                   |
| Pass Line (mm)                | 950±20                                | 900±20                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                      | M                                     | XL                     |
| Min.PCB (L X W) (mm)          | 120 X 50                              |                        |
| Max.PCB (L X W) (mm)          | 330 X 250                             | 460 X 460              |
| Item                          | SMT                                   |                        |
| PCB Top/Bottom Clearance (mm) | 30 / 25                               |                        |
| PCB Edge (mm)                 | 3                                     |                        |
| PCB Loading Weight (kg)       | 3                                     |                        |
| Slot of Rack (ea)             | 35 (±15mm)                            |                        |
| Pitch                         | 1~4 (30~120mm)                        |                        |
| Conveyor Belt                 | Flat edge belt                        |                        |
| Conveyor Speed (mm/sec) *     | 200                                   |                        |
| PCB Thickness (mm)            | 0.6 ~ 4.0                             |                        |
| PCB Color                     | Green                                 |                        |
| PCB In/Out Sensor             | Single sensor                         |                        |
| Mode                          | FIFO, LIFO / By pass                  |                        |
| Width Adjustment *            | Manual                                |                        |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6        |                        |
| Smema Cable                   | 3m / 1 ea                             |                        |
| Alarm                         | Tower lamp (3 color)                  |                        |
| Color *                       | SR RAL 7035 : NON ESD (Samhwa Paints) |                        |
| Air Supply                    | 0.5Mpa(5bar)                          |                        |
| Air Usage                     | 2.0 ℓ/min                             |                        |
| Electricity Consumption       | 600W                                  |                        |

| Option Spec.              |                |                                   |                      |
|---------------------------|----------------|-----------------------------------|----------------------|
| Item                      | CODE No.       | Option                            |                      |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104 | Rack Part                         | 1~200 / Analog / 3ea |
|                           |                | Conveyor Part                     | 1~200 / Analog / 1ea |
| Width Adjustment *        | O-100-HW0-0205 | Rack Part                         | Auto / 2ea           |
|                           |                | Conveyor Part                     | Auto / 1ea           |
| Width Synchronization     | O-100-SW0-0200 | via RS-485                        |                      |
| Line Control              | O-200-LC0-0100 | Hermes                            |                      |
|                           | O-200-LC0-0200 | Smart kit (LAN communication PLC) |                      |
| Color *                   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |                      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Combi - Magazine

Combi - Rack

Tower

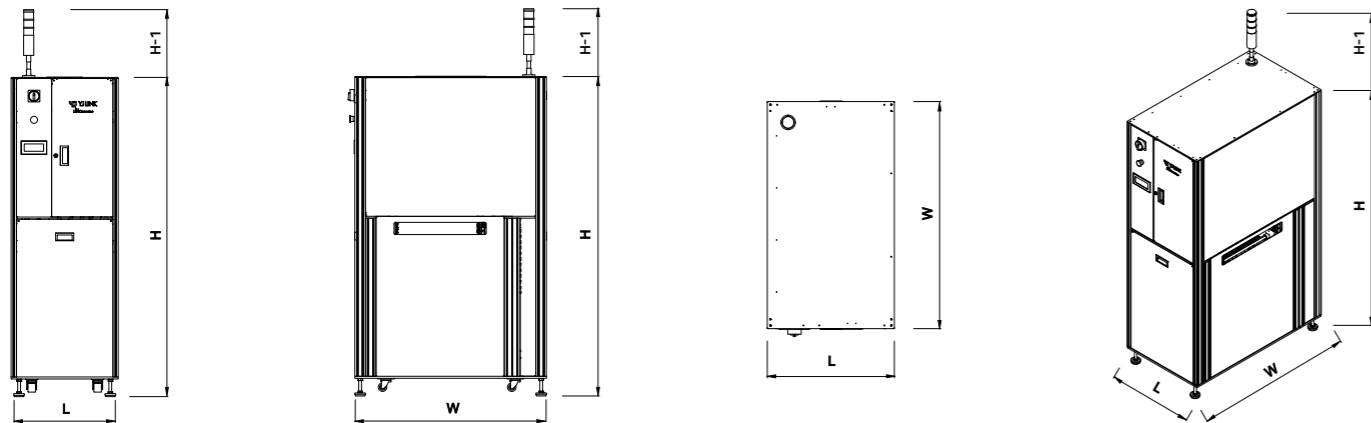
Tower - Cooling

Tower + Conveyor - Cooling

Tower + NG Conveyor



This unit is located between SMT machines to improve working efficiency by buffering.



| CODE No.       |              | MODEL     | SLOT OF RACK | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|--------------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS |           |              |      | L              | W    | H    | H-1  |             |
| M-10C-YM2-0200 |              | YTR-1M 00 | 20 slots     | M    | 481            | 880  | 1815 | 2200 | 181         |
| M-10C-YX2-0200 |              | YTR-1X 00 | 20 slots     | XL   | 621            | 1100 | 1815 | 2200 | 229         |
| M-10C-YM2-0202 |              | YTR-1M 01 | 30 slots     | M    | 481            | 880  | 1815 | 2200 | 181         |
| M-10C-YX2-0202 |              | YTR-1X 01 | 30 slots     | XL   | 621            | 1100 | 1815 | 2200 | 229         |

| Standard Spec.                |                                       |                        |
|-------------------------------|---------------------------------------|------------------------|
| Item                          | Standard                              |                        |
| Line Flow                     | Left to Right                         | Right to Left          |
| Fixed Rail                    | Front                                 | Rear                   |
| Pass Line (mm)                | 950±20                                | 900±20                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                      | M                                     | XL                     |
| Min.PCB (L X W) (mm)          | 70 X 50                               |                        |
| Max.PCB (L X W) (mm)          | 330 X 250                             | 460 X 460              |
| Item                          | SMT                                   |                        |
| PCB Top/Bottom Clearance (mm) | 30 / 25                               |                        |
| PCB Edge (mm)                 | 3                                     |                        |
| PCB Loading Weight (kg)       | 3                                     |                        |
| PCB Stacking Weight (kg)      | 50                                    |                        |
| Slot of Rack (ea)             | 20 (±15mm)                            | 30 (±10mm)             |
| Pitch                         | 1~4 (30~120mm)                        | 1~4 (20~80mm)          |
| Conveyor Belt                 | Flat edge belt                        |                        |
| Conveyor Speed (mm/sec) *     | 200                                   |                        |
| PCB Thickness (mm)            | 0.6 ~ 4.0                             |                        |
| PCB Color                     | Green                                 |                        |
| PCB In/Out Sensor             | Single sensor                         |                        |
| Mode                          | FIFO, LIFO / By pass                  |                        |
| Width Adjustment *            | Manual                                |                        |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6        |                        |
| Smema Cable                   | 3m / 1 ea                             |                        |
| Alarm                         | Tower lamp (3 color)                  |                        |
| Color *                       | SR RAL 7035 : NON ESD (Samhwa Paints) |                        |
| Electricity Consumption       | 245W                                  |                        |

| Option Spec.              |                |                                   |
|---------------------------|----------------|-----------------------------------|
| Item                      | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104 | 1~200 / Analog / 1ea              |
| Width Adjustment *        | O-100-HW0-0205 | Auto / 1ea                        |
| Intelligent Function      | O-100-SW0-0100 | -                                 |
| Width Synchronization     | O-100-SW0-0200 | via RS-485                        |
| Line Control              | O-200-LC0-0100 | Hermes                            |
|                           | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Combi - Magazine

Combi - Rack

Tower

Tower - Cooling

Tower + Conveyor - Cooling

Tower + NG Conveyor

# Tower - Cooling



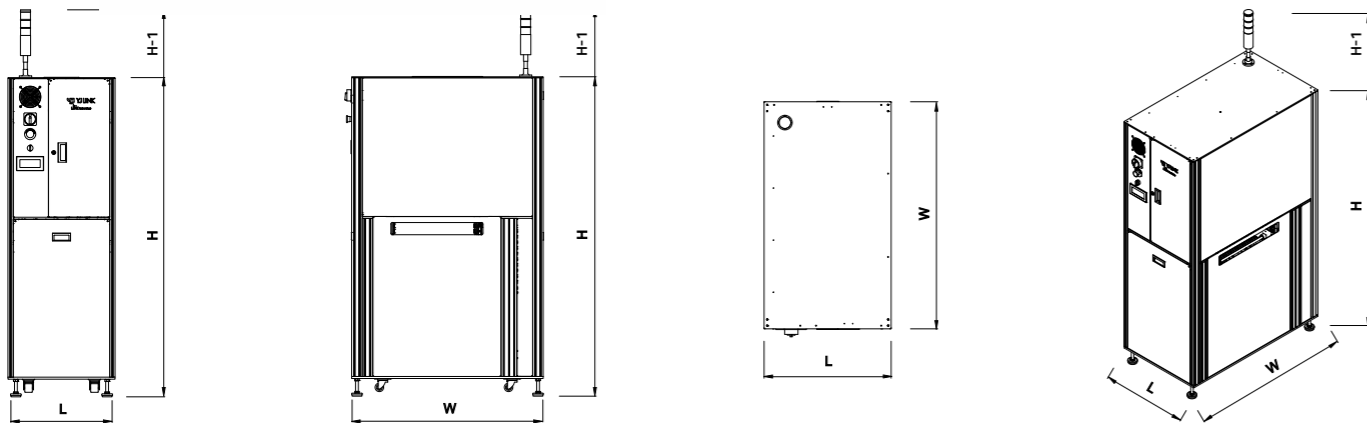
This unit is located after oven to be down the temperature of PCB and buffering.



SMT



POST-PROCESS



| CODE No.       |                | MODEL     | SLOT OF RACK | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|----------------|-----------|--------------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS   |           |              |      | L              | W    | H    | H-1  |             |
| M-10C-YM2-0300 |                | YTR-1M 10 | 20 slots     | M    | 481            | 880  | 1815 | 2200 | 187         |
| M-10C-YX2-0300 |                | YTR-1X 10 | 20 slots     | XL   | 621            | 1100 | 1815 | 2200 | 235         |
| M-10C-YM2-0302 |                | YTR-1M 11 | 30 slots     | M    | 481            | 880  | 1815 | 2200 | 187         |
| M-10C-YX2-0302 |                | YTR-1X 11 | 30 slots     | XL   | 621            | 1100 | 1815 | 2200 | 235         |
|                | M-50C-YM2-0203 | YTR-1M 10 | 10 slots     | M    | 481            | 880  | 1815 | 2200 | 187         |
|                | M-50C-YX2-0203 | YTR-1X 10 | 10 slots     | XL   | 621            | 1100 | 1815 | 2200 | 235         |
|                | M-50C-YU2-0203 | YTR-1U 10 | 10 slots     | UX   | 761            | 1250 | 1815 | 2200 | 288         |

| Standard Spec.                |                                       |                        |                |
|-------------------------------|---------------------------------------|------------------------|----------------|
| Item                          | Standard                              |                        |                |
| Line Flow                     | Left to Right                         | Right to Left          |                |
| Fixed Rail                    | Front                                 | Rear                   |                |
| Pass Line (mm)                | 950±20                                | 900±20                 |                |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                | 110V±(10%) & 50 ~ 60Hz |                |
| PCB Size                      | M                                     | XL                     | UX             |
| Min.PCB (L X W) (mm)          | 70 X 50                               |                        |                |
| Max.PCB (L X W) (mm)          | 330 X 250                             | 460 X 460              | 610 X 610      |
| Item                          | SMT                                   | POST-PROCESS           |                |
| PCB Top/Bottom Clearance (mm) | 30 / 25                               | 60 / 60                |                |
| PCB Edge (mm)                 | 3                                     | 5                      |                |
| PCB Loading Weight (kg)       | 3                                     | 8                      |                |
| PCB Stacking Weight (kg)      | 50                                    |                        |                |
| Slot of Rack (ea)             | 20 (±15mm)                            | 30 (±10mm)             | 10 (±20mm)     |
| Pitch                         | 1~4 (30~120mm)                        | 1~4 (20~80mm)          | 1~4 (40~160mm) |
| Conveyor Belt                 | Flat edge belt                        |                        | Pin chain      |
| Conveyor Speed (mm/sec) *     | 200                                   | 100                    |                |
| PCB Thickness (mm)            | 0.6 ~ 4.0                             |                        |                |
| PCB Color                     | Green                                 |                        |                |
| PCB In/Out Sensor             | Single sensor                         |                        |                |
| 120pi Cooling Fans            | 12ea at Front & Rear, Ventilation 2ea |                        |                |
| Mode                          | FIFO, LIFO / By pass                  |                        |                |
| Width Adjustment *            | Manual                                |                        |                |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6        |                        |                |
| Smema Cable                   | 3m / 1 ea                             |                        |                |
| Alarm                         | Tower lamp (3 color)                  |                        |                |
| Color *                       | SR RAL 7035 : NON ESD (Samhwa Paints) |                        |                |
| Electricity Consumption       | 510W                                  |                        |                |

| Option Spec.              |                |                                   |                      |
|---------------------------|----------------|-----------------------------------|----------------------|
| Item                      | CODE No.       | Option                            |                      |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104 | SMT                               | 1~200 / Analog / 1ea |
|                           |                | POST-PROCESS                      | 1~100 / Analog / 1ea |
| Width Adjustment *        | O-100-HW0-0205 | Auto / 1ea                        |                      |
| Intelligent Function      | O-100-SW0-0100 | -                                 |                      |
| Width Synchronization     | O-100-SW0-0200 | via RS-485                        |                      |
| Line Control              | O-200-LC0-0100 | Hermes                            |                      |
|                           | O-200-LC0-0200 | Smart kit (LAN communication PLC) |                      |
| Color *                   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |                      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Combi - Magazine

Combi - Rack

Tower

Tower - Cooling

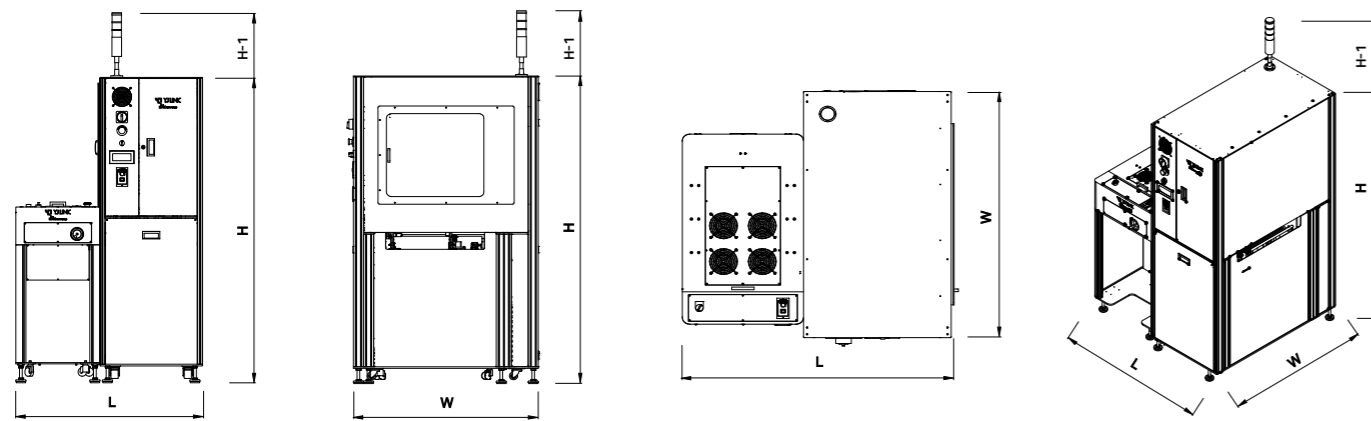
Tower + Conveyor - Cooling

Tower + NG Conveyor

# Tower + Conveyor - Cooling



This unit is located after oven to be down the temperature of PCB and buffering.



| CODE No.       |                | MODEL     | SLOT OF RACK | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|----------------|-----------|--------------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS   |           |              |      | L              | W    | H    | H-1  |             |
| M-10C-YM2-0500 |                | YTC-1M 00 | 20 slots     | M    | 970            | 880  | 1815 | 2200 | 348         |
| M-10C-YX2-0500 |                | YTC-1X 00 | 20 slots     | XL   | 1210           | 1100 | 1815 | 2200 | 416         |
| M-10C-YM2-0502 |                | YTC-1M 01 | 30 slots     | M    | 970            | 880  | 1815 | 2200 | 348         |
| M-10C-YX2-0502 |                | YTC-1X 01 | 30 slots     | XL   | 1210           | 1100 | 1815 | 2200 | 416         |
|                | M-50C-YM2-0303 | YTC-1M 00 | 10 slots     | M    | 970            | 880  | 1815 | 2200 | 348         |
|                | M-50C-YX2-0303 | YTC-1X 00 | 10 slots     | XL   | 1210           | 1100 | 1815 | 2200 | 416         |
|                | M-50C-YU2-0303 | YTC-1U 00 | 10 slots     | UX   | 1510           | 1250 | 1815 | 2200 | 491         |

| Standard Spec.                |  |                        |                |
|-------------------------------|--|------------------------|----------------|
| Item                          | Standard   |                        |                |
| Line Flow                     | Left to Right  | Right to Left          |                |
| Fixed Rail                    | Front  | Rear                   |                |
| Pass Line (mm)                | 950±20   | 900±20                 |                |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz   | 110V±(10%) & 50 ~ 60Hz |                |
| PCB Size                      | M  | XL                     | UX             |
| Min.PCB (L X W) (mm)          | 70 X 50  |                        |                |
| Max.PCB (L X W) (mm)          | 330 X 250  | 460 X 460              | 610 X 610      |
| Item                          | SMT  |                        | POST-PROCESS   |
| PCB Top/Bottom Clearance (mm) | 30 / 25  |                        | 60 / 60        |
| PCB Edge (mm)                 | 3  |                        | 5              |
| PCB Loading Weight (kg)       | 3  |                        | 8              |
| PCB Stacking Weight (kg)      | 50   |                        |                |
| Slot of Rack (ea)             | 20 (±15mm)   | 30 (±10mm)             | 10 (±20mm)     |
| Pitch                         | 1~4 (30~120mm)   | 1~4 (20~80mm)          | 1~4 (40~160mm) |
| Conveyor Belt                 | Flat edge belt   |                        | Pin chain      |
| Conveyor Speed (mm/sec) *     | 200  |                        | 100            |
| PCB Thickness (mm)            | 0.6 ~ 4.0  |                        |                |
| PCB Color                     | Green  |                        |                |
| PCB In/Out Sensor             | Single sensor  |                        |                |
| 120pi Cooling Fans            | Conveyor Part - 4ea<br>Rack Part - 12ea at Front & Rear, Ventilation 2ea |                        |                |
| Mode                          | FIFO, LIFO / By pass   |                        |                |
| Width Adjustment *            | Manual   |                        |                |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6   |                        |                |
| Smema Cable                   | 3m / 1 ea  |                        |                |
| Alarm                         | Tower lamp (3 color)   |                        |                |
| Color *                       | SR RAL 7035 : NON ESD (Samhwa Paints)                                    |                        |                |
| Electricity Consumption       | 640W   |                        |                |

| Option Spec.              |              |                |                                    |
|---------------------------|--------------|----------------|------------------------------------|
| Item                      |              | CODE No.       | Option                             |
| Conveyor Speed (mm/sec) * | SMT          | O-100-HW0-0104 | Rack Part 1~200 / Analog / 1ea     |
|                           | POST-PROCESS |                | Conveyor Part 1~200 / Analog / 1ea |
| Width Adjustment *        |              | O-100-HW0-0205 | Rack Part Auto / 1ea               |
|                           |              |                | Conveyor Part Auto / 1ea           |
| Intelligent Function      |              | O-100-SW0-0100 | -                                  |
| Width Synchronization     |              | O-100-SW0-0200 | via RS-485                         |
| Line Control              |              | O-200-LC0-0100 | Hermes                             |
|                           |              | O-200-LC0-0200 | Smart kit (LAN communication PLC)  |
| Color *                   |              | O-400-CO0-0100 | ESD powder coating(RAL 7035)       |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Combi - Magazine

Combi - Rack

Tower

Tower - Cooling

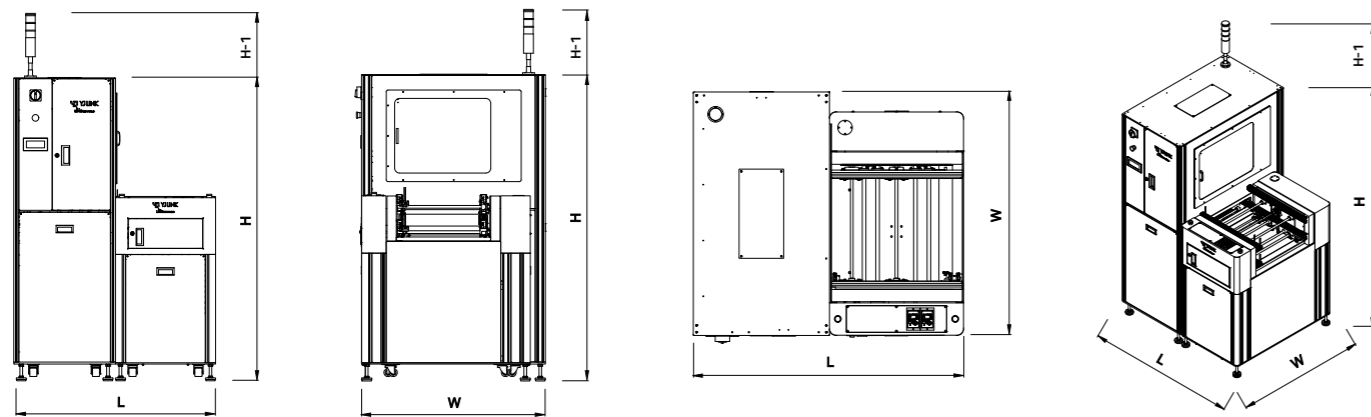
Tower + Conveyor - Cooling

Tower + NG Conveyor

# Tower + NG Conveyor



This unit is located after SPI/AOI Machine to inspect NG boards in the line. The operator can CALL NG boards in the rack onto the 2nd layer of the conveyor part to inspect them visually while the GOOD boards are being passed through to the next machine without any interruptions.



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS |           |      | L              | W    | H    | H-1  |             |
| M-10C-YM2-0400 |              | YTN-1M 00 | M    | 981            | 880  | 1815 | 2200 | 315         |
| M-10C-YX2-0400 |              | YTN-1X 00 | XL   | 1210           | 1100 | 1815 | 2200 | 396         |

| Standard Spec.                |                                       |                        |
|-------------------------------|---------------------------------------|------------------------|
| Item                          | Standard                              |                        |
| Line Flow                     | Left to Right                         | Right to Left          |
| Fixed Rail                    | Front                                 | Rear                   |
| Pass Line (mm)                | 950±20                                | 900±20                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                      | M                                     | XL                     |
| Min.PCB (L X W) (mm)          | 70 X 50                               |                        |
| Max.PCB (L X W) (mm)          | 330 X 250                             | 460 X 460              |
| Item                          | SMT                                   |                        |
| PCB Top/Bottom Clearance (mm) | 30 / 25                               |                        |
| PCB Edge (mm)                 | 3                                     |                        |
| PCB Loading Weight (kg)       | 3                                     |                        |
| PCB Stacking Weight (kg)      | 50                                    |                        |
| Slot of Rack (ea)             | 20 (±15mm)                            |                        |
| Pitch                         | 1                                     |                        |
| Conveyor Belt                 | Flat edge belt                        |                        |
| Conveyor Speed (mm/sec) *     | 200                                   |                        |
| PCB Thickness (mm)            | 0.6 ~ 4.0                             |                        |
| PCB Color                     | Green                                 |                        |
| PCB In/Out Sensor             | Single sensor                         |                        |
| Mode                          | FIFO, LIFO / By pass / NG Stacking    |                        |
| Width Adjustment *            | Manual                                |                        |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6        |                        |
| Smema Cable                   | 3m / 1 ea                             |                        |
| Alarm                         | Tower lamp (3 color)                  |                        |
| Color *                       | SR RAL 7035 : NON ESD (Samhwa Paints) |                        |
| Air Supply                    | 0.5Mpa(5bar)                          |                        |
| Air Usage                     | 11.30 ℓ/min                           |                        |
| Electricity Consumption       | 375W                                  |                        |

| Option Spec.              |                |                                    |
|---------------------------|----------------|------------------------------------|
| Item                      | CODE No.       | Option                             |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104 | Rack Part 1~200 / Analog / 1ea     |
|                           |                | Conveyor Part 1~200 / Analog / 2ea |
| Width Adjustment *        | O-100-HW0-0205 | Rack Part Auto / 1ea               |
|                           |                | Conveyor Part Auto / 1ea           |
| Width Synchronization     | O-100-SW0-0200 | via RS-485                         |
| NG Communication          | O-100-SW0-0300 | via RS-232                         |
| Line Control              | O-200-LC0-0100 | Hermes                             |
|                           | O-200-LC0-0200 | Smart kit (LAN communication PLC)  |
| Color *                   | O-400-CO0-0100 | ESD powder coating(RAL 7035)       |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Combi - Magazine

Combi - Rack

Tower

Tower - Cooling

Tower + Conveyor - Cooling

Tower + NG Conveyor

# BOARD HANDLING

## LINK / WORK SERIES

[ M-10C-Y( )3 SERIES & M-50C-Y( )3 SERIES ]

|   |       |       |
|---|-------|-------|
| Connection Conveyor   | ..... | P. 48 |
| Connection Conveyor - Cooling                               | ..... | P. 50 |
| Connection Conveyor - Barcode Manual Bracket (Single sided) | ..... | P. 52 |
| Connection Conveyor - Barcode Manual Bracket (Double sided) | ..... | P. 54 |
| Work Conveyor - Inspection                                  | ..... | P. 56 |
| Work Conveyor - Work  | ..... | P. 58 |
| NG Conveyor   | ..... | P. 60 |
| Connection Conveyor - Sky Line                              | ..... | P. 62 |
| Connection Conveyor - Pallet Return Line                    | ..... | P. 64 |



➤ Connection Conveyor P. 48



➤ Connection Conveyor - Cooling P. 50



➤ Connection Conveyor - Barcode Manual Bracket (Single sided) P. 52



➤ Connection Conveyor - Barcode Manual Bracket (Double sided) P. 54



➤ Work Conveyor - Inspection P. 56



➤ Work Conveyor - Work P. 58



➤ NG Conveyor P. 60



➤ Connection Conveyor - Sky Line P. 62

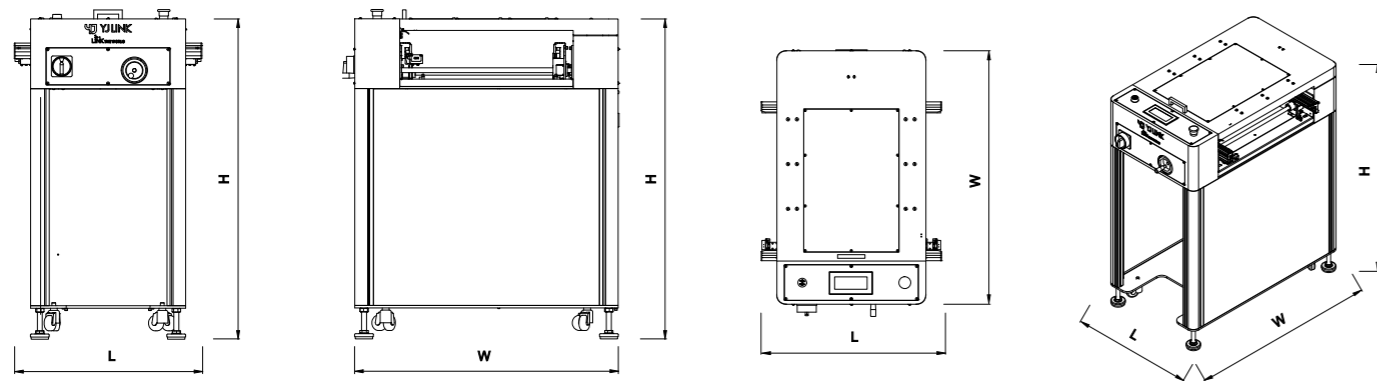
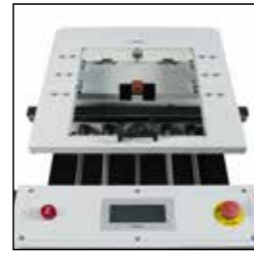


➤ Connection Conveyor - Pallet Return Line P. 64

# Connection Conveyor



Using SMEMA interface, this unit is able to create links between any SMT machines.



| CODE No.       |                | MODEL     | SIZE | DIMENSION (mm) |      |      | WEIGHT (Kg) |
|----------------|----------------|-----------|------|----------------|------|------|-------------|
| SMT            | POST-PROCESS   |           |      | L              | W    | H    |             |
| M-10C-YM3-0101 | M-50C-YM3-0101 | YCC-1M 00 | M    | 500            | 640  | 1030 | 90          |
| M-10C-YX3-0101 | M-50C-YX3-0101 | YCC-1X 00 | XL   | 500            | 850  | 1030 | 110         |
|                | M-50C-YU3-0106 | YCC-1U 00 | UX   | 700            | 1000 | 1030 | 145         |
| M-10C-YM3-0102 | M-50C-YM3-0102 | YCC-1M 01 | M    | 1000           | 640  | 1030 | 140         |
| M-10C-YX3-0102 | M-50C-YX3-0102 | YCC-1X 01 | XL   | 1000           | 850  | 1030 | 165         |
|                | M-50C-YU3-0102 | YCC-1U 01 | UX   | 1000           | 1000 | 1030 | 190         |

| Standard Spec.                                     |   |                        |           |
|--|---|------------------------|-----------|
| Item   | Standard  |                        |           |
| Line Flow  | Left to Right                                     | Right to Left          |           |
| Fixed Rail   | Front   | Rear                   |           |
| Pass Line (mm)                                     | 950±20  | 900±20                 |           |
| Voltage & Frequency                                | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |           |
| PCB Size   | M   | XL                     | UX        |
| Min.PCB (L X W) (mm)                               | 70 X 50   |                        |           |
| Max.PCB (L X W) (mm)                               | 330 X 250   | 460 X 460              | 610 X 610 |
| Item   | SMT   | POST-PROCESS           |           |
| PCB Top/Bottom Clearance (mm)                      | 30 / 25   | 60 / 60                |           |
| PCB Edge (mm)                                      | 3   | 5                      |           |
| PCB Loading Weight (kg)                            | 3   | 8                      |           |
| Conveyor Belt                                      | Flat edge belt                                    | Pin chain              |           |
| Conveyor Speed (mm/sec) *                          | 200   | 100                    |           |
| PCB Thickness (mm)                                 | 0.6 ~ 4.0   |                        |           |
| PCB Color  | Green   |                        |           |
| PCB In/Out Sensor                                  | Single sensor                                     |                        |           |
| Mode   | By pass   |                        |           |
| Length (mm) / Segment (ea)                         | 500 / 1   | 700 / 1                | 1000 / 2  |
| Programmatically, it is standard to use 1 segment. |   |                        |           |
| Top Cover Type                                     | Sliding   |                        |           |
| Width Adjustment *                                 | Manual  |                        |           |
| Interface  | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |           |
| Smema Cable  | 3m / 1 ea   |                        |           |
| Alarm  | Buzzer  |                        |           |
| Color *  | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |           |
| Electricity Consumption                            | 80W   |                        |           |

| Option Spec.  |                |                                   |                                  |
|---|----------------|-----------------------------------|----------------------------------|
| Item  | CODE No.       | Option                            |                                  |
| Conveyor Speed (mm/sec) *   | O-100-HW0-0104 | SMT                               | 500(L)mm : 1~200 / Analog / 1ea  |
|   |                |                                   | 1000(L)mm : 1~200 / Analog / 2ea |
|   |                | POST-PROCESS                      | 500(L)mm : 1~100 / Analog / 1ea  |
|   |                |                                   | 700(L)mm : 1~100 / Analog / 1ea  |
|   |                | 1000(L)mm : 1~100 / Analog / 2ea  |                                  |
| Width Adjustment *  | O-100-HW0-0205 | Auto                              |                                  |
| Width Synchronization   | O-100-SW0-0200 | via RS-485                        |                                  |
| Line Control  | O-200-LC0-0100 | Hermes                            |                                  |
|   | O-200-LC0-0200 | Smart kit (LAN communication PLC) |                                  |
| Color *   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |                                  |
| Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.). |                |                                   |                                  |

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Connection Conveyor

Connection Conveyor - Cooling

Connection Conveyor-Barcode Manual Bracket (Single sided)

Connection Conveyor-Barcode Manual Bracket (Double sided)

Work Conveyor - Inspection

Work Conveyor - Work

NG Conveyor

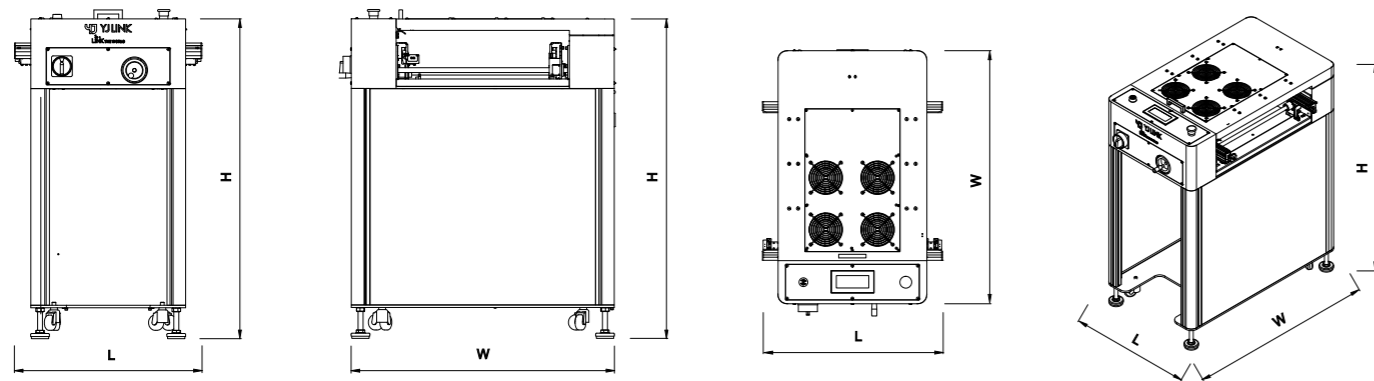
Connection Conveyor - Sky Line

Connection Conveyor - Pallet Return Line

# Connection Conveyor - Cooling



This unit links between SMT machines and cools down PCBs behind Oven in SMT line.



| CODE No.       |                | MODEL     | SIZE | DIMENSION (mm) |      |      | WEIGHT (Kg) |
|----------------|----------------|-----------|------|----------------|------|------|-------------|
| SMT            | POST-PROCESS   |           |      | L              | W    | H    |             |
| M-10C-YM3-0201 | M-50C-YM3-0201 | YCC-1M 20 | M    | 500            | 640  | 1030 | 95          |
| M-10C-YX3-0201 | M-50C-YX3-0201 | YCC-1X 20 | XL   | 500            | 850  | 1030 | 115         |
|                | M-50C-YU3-0206 | YCC-1U 20 | UX   | 700            | 1000 | 1030 | 150         |
| M-10C-YM3-0202 | M-50C-YM3-0202 | YCC-1M 21 | M    | 1000           | 640  | 1030 | 145         |
| M-10C-YX3-0202 | M-50C-YX3-0202 | YCC-1X 21 | XL   | 1000           | 850  | 1030 | 175         |
|                | M-50C-YU3-0202 | YCC-1U 21 | UX   | 1000           | 1000 | 1030 | 200         |

| Standard Spec.                |  |                        |           |
|-------------------------------|--|------------------------|-----------|
| Item                          | Standard   |                        |           |
| Line Flow                     | Left to Right                                      | Right to Left          |           |
| Fixed Rail                    | Front  | Rear                   |           |
| Pass Line (mm)                | 950±20   | 900±20                 |           |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                             | 110V±(10%) & 50 ~ 60Hz |           |
| PCB Size                      | M  | XL                     | UX        |
| Min.PCB (L X W) (mm)          | 70 X 50  |                        |           |
| Max.PCB (L X W) (mm)          | 330 X 250  | 460 X 460              | 610 X 610 |
| Item                          | SMT  | POST-PROCESS           |           |
| PCB Top/Bottom Clearance (mm) | 30 / 25  | 60 / 60                |           |
| PCB Edge (mm)                 | 3  | 5                      |           |
| PCB Loading Weight (kg)       | 3  | 8                      |           |
| Conveyor Belt                 | Flat edge belt                                     | Pin chain              |           |
| Conveyor Speed (mm/sec) *     | 200  | 100                    |           |
| PCB Thickness (mm)            | 0.6 ~ 4.0  |                        |           |
| PCB Color                     | Green  |                        |           |
| PCB In/Out Sensor             | Single sensor                                      |                        |           |
| Mode                          | By pass  |                        |           |
| Length (mm) / Segment (ea)    | 500 / 1  | 700 / 1                | 1000 / 2  |
|                               | Programmatically, it is standard to use 1 segment. |                        |           |
| 120pi Cooling Fans (ea)       | 4  | 4                      | 8         |
| Top Cover Type                | Sliding  |                        |           |
| Width Adjustment *            | Manual   |                        |           |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6                     |                        |           |
| Smema Cable                   | 3m / 1 ea  |                        |           |
| Alarm                         | Buzzer   |                        |           |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints)  |                        |           |
| Electricity Consumption       | 256W   |                        |           |

| Option Spec.  |                |                                   |                                  |
|---|----------------|-----------------------------------|----------------------------------|
| Item  | CODE No.       | Option                            |                                  |
| Conveyor Speed (mm/sec) *   | O-100-HW0-0104 | SMT                               | 500(L)mm : 1~200 / Analog / 1ea  |
|   |                |                                   | 1000(L)mm : 1~200 / Analog / 2ea |
|   |                | POST-PROCESS                      | 500(L)mm : 1~100 / Analog / 1ea  |
|   |                |                                   | 700(L)mm : 1~100 / Analog / 1ea  |
|   |                |                                   | 1000(L)mm : 1~100 / Analog / 2ea |
| Width Adjustment *  | O-100-HW0-0205 | Auto                              |                                  |
| Width Synchronization   | O-100-SW0-0200 | via RS-485                        |                                  |
| Line Control  | O-200-LC0-0100 | Hermes                            |                                  |
|   | O-200-LC0-0200 | Smart kit (LAN communication PLC) |                                  |
| Color *   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |                                  |
| Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.). |                |                                   |                                  |

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Connection Conveyor

Connection Conveyor - Cooling

Connection Conveyor-Barcode Manual Bracket (Single sided)

Connection Conveyor-Barcode Manual Bracket (Double sided)

Work Conveyor - Inspection

Work Conveyor - Work

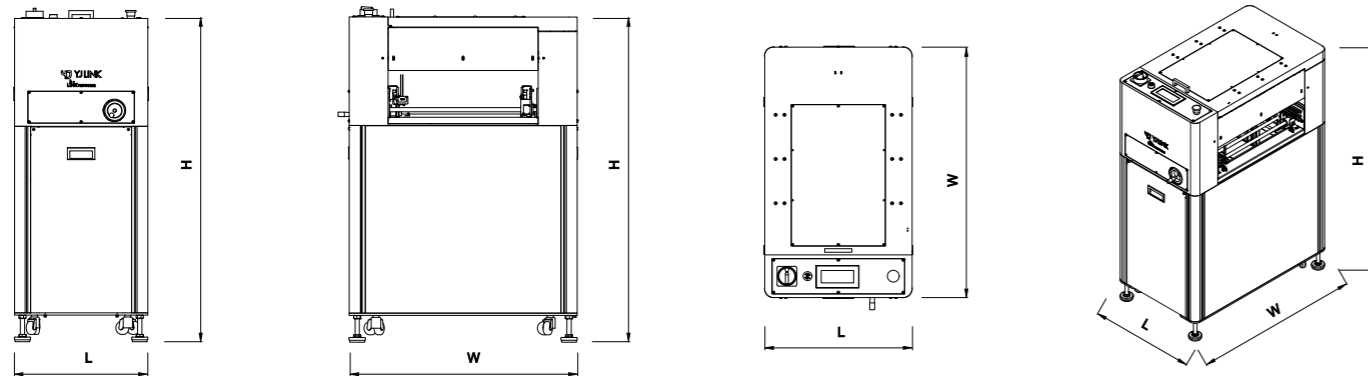
NG Conveyor

Connection Conveyor - Sky Line

Connection Conveyor - Pallet Return Line

# Barcode Manual Bracket Connection Conveyor - (Single sided)

This unit has manual scanner bracket inside, which is necessary for reading 1D/2D codes of labelling or marking.



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |     |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|----------------|-----|------|-------------|
| SMT            | POST-PROCESS |           |      | L              | W   | H    |             |
| M-10C-YM3-0301 |              | YCC-1M 40 | M    | 500            | 640 | 1213 | 100         |
| M-10C-YX3-0301 |              | YCC-1X 40 | XL   | 500            | 850 | 1213 | 120         |
| M-10C-YM3-0302 |              | YCC-1M 41 | M    | 1000           | 640 | 1213 | 130         |
| M-10C-YX3-0302 |              | YCC-1X 41 | XL   | 1000           | 850 | 1213 | 150         |

| Standard Spec.                                     |   |                        |
|--|---|------------------------|
| Item   | Standard  |                        |
| Line Flow  | Left to Right                                     | Right to Left          |
| Fixed Rail   | Front   | Rear                   |
| Pass Line (mm)                                     | 950±20  | 900±20                 |
| Voltage & Frequency                                | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |
| PCB Size   | M   | XL                     |
| Min.PCB (L X W) (mm)                               | 70 X 50   |                        |
| Max.PCB (L X W) (mm)                               | 330 X 250   | 460 X 460              |
| Item   | SMT   |                        |
| PCB Top/Bottom Clearance (mm)                      | 30 / 25   |                        |
| PCB Edge (mm)                                      | 3   |                        |
| PCB Loading Weight (kg)                            | 3   |                        |
| Conveyor Belt                                      | Flat edge belt                                    |                        |
| Conveyor Speed (mm/sec) *                          | 200   |                        |
| PCB Thickness (mm)                                 | 0.6 ~ 4.0   |                        |
| PCB Color  | Green   |                        |
| PCB In/Out Sensor                                  | Single sensor                                     |                        |
| Mode   | By pass   |                        |
| Length (mm) / Segment (ea)                         | 500 / 1   | 1000 / 2               |
| Programmatically, it is standard to use 1 segment. |   |                        |
| Top Cover Type                                     | Sliding   |                        |
| Scanner Bracket Position                           | Top   | Bottom                 |
| Width Adjustment *                                 | Manual  |                        |
| Interface  | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |
| Smema Cable  | 3m / 1 ea   |                        |
| Alarm  | Buzzer  |                        |
| Color *  | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |
| Electricity Consumption                            | 80W   |                        |

| Option Spec.  |                |                                   |
|---|----------------|-----------------------------------|
| Item  | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) *   | O-100-HW0-0104 | 500(L)mm : 1~200 / Analog / 1ea   |
|   |                | 1000(L)mm : 1~200 / Analog / 2ea  |
| Width Adjustment *  | O-100-HW0-0205 | Auto                              |
| Width Synchronization   | O-100-SW0-0200 | via RS-485                        |
| Scanner Connection  | O-100-SW0-0400 | via RS-232                        |
| Trigger   | O-100-SW0-0500 | -                                 |
| Trigger+Read / No read  | O-100-SW0-0600 | -                                 |
| Line Control  | O-200-LC0-0100 | Hermes                            |
|   | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |
| Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.). |                |                                   |

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Connection Conveyor

Connection Conveyor - Cooling

Connection Conveyor-Barcode Manual Bracket (Single sided)

Connection Conveyor-Barcode Manual Bracket (Double sided)

Work Conveyor - Inspection

Work Conveyor - Work

NG Conveyor

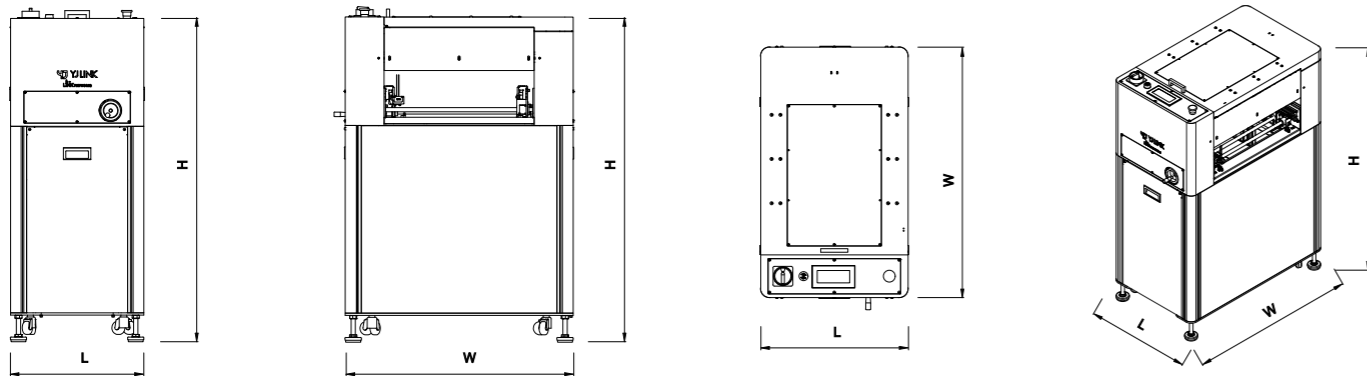
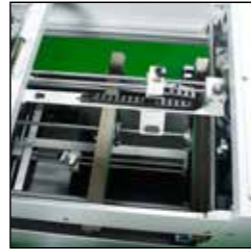
Connection Conveyor - Sky Line

Connection Conveyor - Pallet Return Line

# Barcode Manual Bracket Connection Conveyor - (Double sided)



This unit has manual scanner bracket inside, which is necessary for reading 1D/2D codes of labelling or marking.



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |     |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|----------------|-----|------|-------------|
| SMT            | POST-PROCESS |           |      | L              | W   | H    |             |
| M-10C-YM3-0401 |              | YCC-1M 50 | M    | 500            | 640 | 1213 | 105         |
| M-10C-YX3-0401 |              | YCC-1X 50 | XL   | 500            | 850 | 1213 | 125         |
| M-10C-YM3-0402 |              | YCC-1M 51 | M    | 1000           | 640 | 1213 | 135         |
| M-10C-YX3-0402 |              | YCC-1X 51 | XL   | 1000           | 850 | 1213 | 155         |

| Standard Spec.                                     |   |                        |
|--|---|------------------------|
| Item   | Standard  |                        |
| Line Flow  | Left to Right                                     | Right to Left          |
| Fixed Rail   | Front   | Rear                   |
| Pass Line (mm)                                     | 950±20  | 900±20                 |
| Voltage & Frequency                                | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |
| PCB Size   | M   | XL                     |
| Min.PCB (L X W) (mm)                               | 70 X 50   |                        |
| Max.PCB (L X W) (mm)                               | 330 X 250   | 460 X 460              |
| Item   | SMT   |                        |
| PCB Top/Bottom Clearance (mm)                      | 30 / 25   |                        |
| PCB Edge (mm)                                      | 3   |                        |
| PCB Loading Weight (kg)                            | 3   |                        |
| Conveyor Belt                                      | Flat edge belt                                    |                        |
| Conveyor Speed (mm/sec) *                          | 200   |                        |
| PCB Thickness (mm)                                 | 0.6 ~ 4.0   |                        |
| PCB Color  | Green   |                        |
| PCB In/Out Sensor                                  | Single sensor                                     |                        |
| Mode   | By pass   |                        |
| Length (mm) / Segment (ea)                         | 500 / 1   | 1000 / 2               |
| Programmatically, it is standard to use 1 segment. |   |                        |
| Top Cover Type                                     | Sliding   |                        |
| Scanner Bracket Position                           | Both  |                        |
| Width Adjustment *                                 | Manual  |                        |
| Interface  | SMEGA Pin No. 1, 2, 3, 4, 5, 6                    |                        |
| Smema Cable  | 3m / 1 ea   |                        |
| Alarm  | Buzzer  |                        |
| Color *  | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |
| Electricity Consumption                            | 80W   |                        |

| Option Spec.  |                |                                   |
|---|----------------|-----------------------------------|
| Item  | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) *   | O-100-HW0-0104 | 500(L)mm : 1~200 / Analog / 1ea   |
|   |                | 1000(L)mm : 1~200 / Analog / 2ea  |
| Width Adjustment *  | O-100-HW0-0205 | Auto                              |
| Width Synchronization   | O-100-SW0-0200 | via RS-485                        |
| Scanner Connection  | O-100-SW0-0400 | via RS-232                        |
| Trigger   | O-100-SW0-0500 | -                                 |
| Trigger+Read / No read  | O-100-SW0-0600 | -                                 |
| Line Control  | O-200-LC0-0100 | Hermes                            |
|   | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |
| Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.). |                |                                   |

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Connection Conveyor

Connection Conveyor - Cooling

Connection Conveyor-Barcode Manual Bracket (Single sided)

Connection Conveyor-Barcode Manual Bracket (Double sided)

Work Conveyor - Inspection

Work Conveyor - Work

NG Conveyor

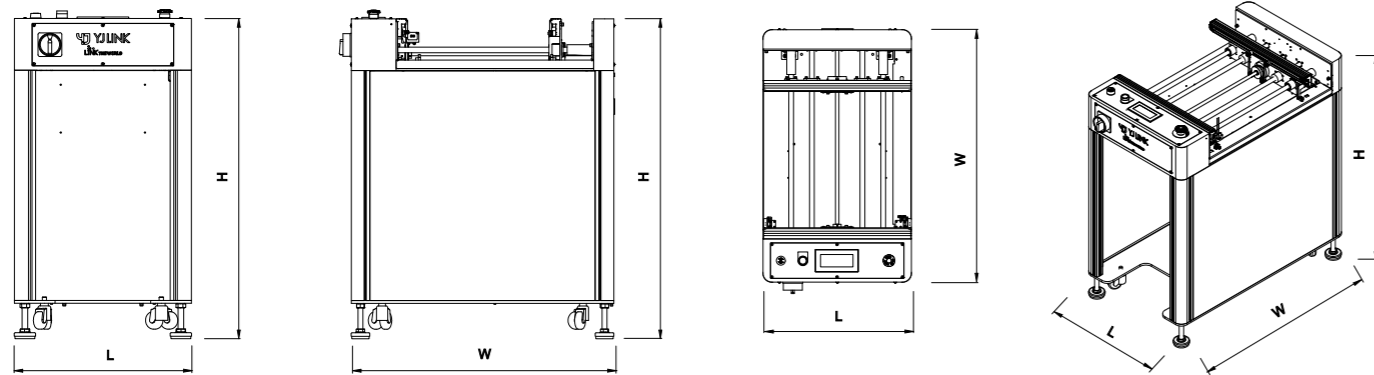
Connection Conveyor - Sky Line

Connection Conveyor - Pallet Return Line

# Work Conveyor - Inspection



This unit links SMT machine and allows inspection on PCBs.



| CODE No.       |                | MODEL     | SIZE | DIMENSION (mm) |      |     | WEIGHT (Kg) |
|----------------|----------------|-----------|------|----------------|------|-----|-------------|
| SMT            | POST-PROCESS   |           |      | L              | W    | H   |             |
| M-10C-YM3-0701 | M-50C-YM3-0701 | YWC-1M 00 | M    | 500            | 640  | 950 | 85          |
| M-10C-YX3-0701 | M-50C-YX3-0701 | YWC-1X 00 | XL   | 500            | 850  | 950 | 97          |
|                | M-50C-YU3-0706 | YWC-1U 00 | UX   | 700            | 1000 | 950 | 130         |
| M-10C-YM3-0702 | M-50C-YM3-0702 | YWC-1M 01 | M    | 1000           | 640  | 950 | 125         |
| M-10C-YX3-0702 | M-50C-YX3-0702 | YWC-1X 01 | XL   | 1000           | 850  | 950 | 150         |
|                | M-50C-YU3-0702 | YWC-1U 01 | UX   | 1000           | 1000 | 950 | 175         |
| M-10C-YM3-0703 | M-50C-YM3-0703 | YWC-1M 02 | M    | 1500           | 640  | 950 | 200         |
| M-10C-YX3-0703 | M-50C-YX3-0703 | YWC-1X 02 | XL   | 1500           | 850  | 950 | 215         |
|                | M-50C-YU3-0703 | YWC-1U 02 | UX   | 1500           | 1000 | 950 | 235         |

| Standard Spec.                                     |              |   |                        |              |          |
|--|--------------|---|------------------------|--------------|----------|
| Item   |              | Standard  |                        |              |          |
| Line Flow  |              | Left to Right                                     | Right to Left          |              |          |
| Fixed Rail   |              | Front   | Rear                   |              |          |
| Pass Line (mm)                                     |              | 950±20  | 900±20                 |              |          |
| Voltage & Frequency                                |              | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |              |          |
| PCB Size   |              | M   | XL                     | UX           |          |
| Min.PCB (L X W) (mm)                               |              | 70 X 50   |                        |              |          |
| Max.PCB (L X W) (mm)                               |              | 330 X 250   | 460 X 460              | 610 X 610    |          |
| Item   |              | SMT   |                        | POST-PROCESS |          |
| PCB Top/Bottom Clearance (mm)                      |              | 30 / 25   |                        | 60 / 60      |          |
| PCB Edge (mm)                                      |              | 3   |                        | 5            |          |
| PCB Loading Weight (kg)                            |              | 3   |                        | 8            |          |
| Conveyor Belt                                      |              | Flat edge belt                                    |                        | Pin chain    |          |
| Conveyor Speed (mm/sec) *                          |              | 200   |                        | 100          |          |
| PCB Thickness (mm)                                 |              | 0.6 ~ 4.0   |                        |              |          |
| PCB Color  |              | Green   |                        |              |          |
| PCB In/Out Sensor                                  |              | Single sensor                                     |                        |              |          |
| Mode   |              | By pass / Inspection                              |                        |              |          |
| Length (mm) / Segment (ea)                         | SMT          | 500 / 1   | 1000 / 2               | 1500 / 3     |          |
|  | POST-PROCESS | M, XL   | 500 / 1                | 1000 / 2     | 1500 / 3 |
|  |              | UX  | 700 / 1                | 1000 / 2     | 1500 / 2 |
| Programmatically, it is standard to use 1 segment. |              |   |                        |              |          |
| Inspection Segment                                 |              | In  | Center                 | Out          |          |
| Completion Switch                                  |              | Button Type                                       |                        |              |          |
| Width Adjustment *                                 |              | Manual  |                        |              |          |
| Interface  |              | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |              |          |
| Smema Cable  |              | 3m / 1 ea   |                        |              |          |
| Alarm  |              | Buzzer  |                        |              |          |
| Color *  |              | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |              |          |
| Electricity Consumption                            |              | 80W   |                        |              |          |

| Option Spec.  |              |                |                                   |                      |
|---|--------------|----------------|-----------------------------------|----------------------|
| Item  |              | CODE No.       | Option                            |                      |
| Conveyor Speed (mm/sec) *   | SMT          | O-100-HW0-0104 | 500(L)mm                          | 1~200 / Analog / 1ea |
|   |              |                | 1000(L)mm                         | 1~200 / Analog / 2ea |
|   |              |                | 1500(L)mm                         | 1~200 / Analog / 3ea |
|   | POST-PROCESS |                | 500(L)mm                          | 1~100 / Analog / 1ea |
|   |              |                | 700(L)mm                          | 1~100 / Analog / 1ea |
|   |              |                | 1000(L)mm                         | 1~100 / Analog / 2ea |
| Width Adjustment *  |              | O-100-HW0-0205 | Auto                              |                      |
| Width Synchronization   |              | O-100-SW0-0200 | via RS-485                        |                      |
| Line Control  |              | O-200-LC0-0100 | Hermes                            |                      |
|   |              | O-200-LC0-0200 | Smart kit (LAN communication PLC) |                      |
| Color *   |              | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |                      |
| Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.). |              |                |                                   |                      |

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Connection Conveyor

Connection Conveyor - Cooling

Connection Conveyor-Barcode Manual Bracket (Single sided)

Connection Conveyor-Barcode Manual Bracket (Double sided)

Work Conveyor - Inspection

Work Conveyor - Work

NG Conveyor

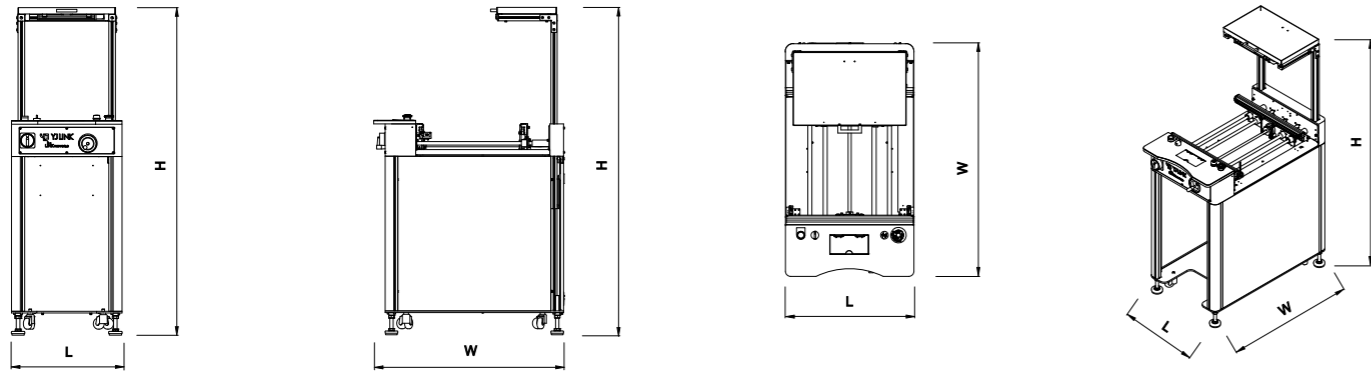
Connection Conveyor - Sky Line

Connection Conveyor - Pallet Return Line

# Work Conveyor - Work



This unit links SMT machine and allows inspection on PCBs.



| CODE No.       |                | MODEL     | SIZE | DIMENSION (mm) |      |      | WEIGHT (Kg) |
|----------------|----------------|-----------|------|----------------|------|------|-------------|
| SMT            | POST-PROCESS   |           |      | L              | W    | H    |             |
| M-10C-YM3-0801 | M-50C-YM3-0801 | YWC-1M 20 | M    | 500            | 695  | 1665 | 95          |
| M-10C-YX3-0801 | M-50C-YX3-0801 | YWC-1X 20 | XL   | 500            | 905  | 1665 | 107         |
|                | M-50C-YU3-0806 | YWC-1U 20 | UX   | 700            | 1055 | 1665 | 140         |
| M-10C-YM3-0802 | M-50C-YM3-0802 | YWC-1M 21 | M    | 1000           | 695  | 1665 | 135         |
| M-10C-YX3-0802 | M-50C-YX3-0802 | YWC-1X 21 | XL   | 1000           | 905  | 1665 | 160         |
|                | M-50C-YU3-0802 | YWC-1U 21 | UX   | 1000           | 1055 | 1665 | 185         |
| M-10C-YM3-0803 | M-50C-YM3-0803 | YWC-1M 22 | M    | 1500           | 695  | 1665 | 210         |
| M-10C-YX3-0803 | M-50C-YX3-0803 | YWC-1X 22 | XL   | 1500           | 905  | 1665 | 225         |
|                | M-50C-YU3-0803 | YWC-1U 22 | UX   | 1500           | 1055 | 1665 | 245         |

| Standard Spec.                                     |              |   |                           |
|--|--------------|---|---------------------------|
| Item   |              | Standard  |                           |
| Line Flow  |              | Left to Right                                     | Right to Left             |
| Fixed Rail   |              | Front   | Rear                      |
| Pass Line (mm)                                     |              | 950±20  | 900±20                    |
| Voltage & Frequency                                |              | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz    |
| PCB Size   |              | M   | XL UX                     |
| Min.PCB (L X W) (mm)                               |              | 70 X 50   |                           |
| Max.PCB (L X W) (mm)                               |              | 330 X 250   | 460 X 460 610 X 610       |
| Item   |              | SMT   | POST-PROCESS              |
| PCB Top/Bottom Clearance (mm)                      |              | 30 / 25   | 60 / 60                   |
| PCB Edge (mm)                                      |              | 3   | 5                         |
| PCB Loading Weight (kg)                            |              | 3   | 8                         |
| Conveyor Belt                                      |              | Flat edge belt                                    | Pin chain                 |
| Conveyor Speed (mm/sec) *                          |              | 200   | 100                       |
| PCB Thickness (mm)                                 |              | 0.6 ~ 4.0   |                           |
| PCB Color  |              | Green   |                           |
| PCB In/Out Sensor                                  |              | Single sensor                                     |                           |
| Mode   |              | By pass / Inspection                              |                           |
| Length (mm) / Segment (ea)                         | SMT          | 500 / 1   | 1000 / 2 1500 / 2         |
|  | POST-PROCESS | M, XL   | 500 / 1 1000 / 2 1500 / 3 |
|  |              | UX  | 700 / 1 1000 / 2 1500 / 2 |
| Programmatically, it is standard to use 1 segment. |              |   |                           |
| Inspection Segment                                 |              | In  | Center Out                |
| Completion Switch                                  |              | Button Type                                       |                           |
| Working Accessory                                  |              | Illumination + Shelf                              |                           |
| Working Table (mm)                                 |              | 200   |                           |
| Width Adjustment *                                 |              | Manual  |                           |
| Interface  |              | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                           |
| Smema Cable  |              | 3m / 1 ea   |                           |
| Alarm  |              | Buzzer  |                           |
| Color *  |              | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                           |
| Electricity Consumption                            |              | 90W   |                           |

| Option Spec.  |              |                |                                   |
|---|--------------|----------------|-----------------------------------|
| Item  |              | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) *   | SMT          | O-100-HW0-0104 | 500(L)mm : 1~200 / Analog / 1ea   |
|   |              |                | 1000(L)mm : 1~200 / Analog / 2ea  |
|   |              |                | 1500(L)mm : 1~200 / Analog / 3ea  |
|   | POST-PROCESS |                | 500(L)mm : 1~100 / Analog / 1ea   |
|   |              |                | 700(L)mm : 1~100 / Analog / 1ea   |
|   |              |                | 1000(L)mm : 1~100 / Analog / 2ea  |
| Width Adjustment *  |              | O-100-HW0-0205 | Auto                              |
| Width Synchronization   |              | O-100-SW0-0200 | via RS-485                        |
| Line Control  |              | O-200-LC0-0100 | Hermes                            |
|   |              | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *   |              | O-400-CO0-0100 | ESD powder coating(RAL7035)       |
| Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.). |              |                |                                   |

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Connection Conveyor

Connection Conveyor - Cooling

Connection Conveyor-Barcode Manual Bracket (Single sided)

Connection Conveyor-Barcode Manual Bracket (Double sided)

Work Conveyor - Inspection

Work Conveyor - Work

NG Conveyor

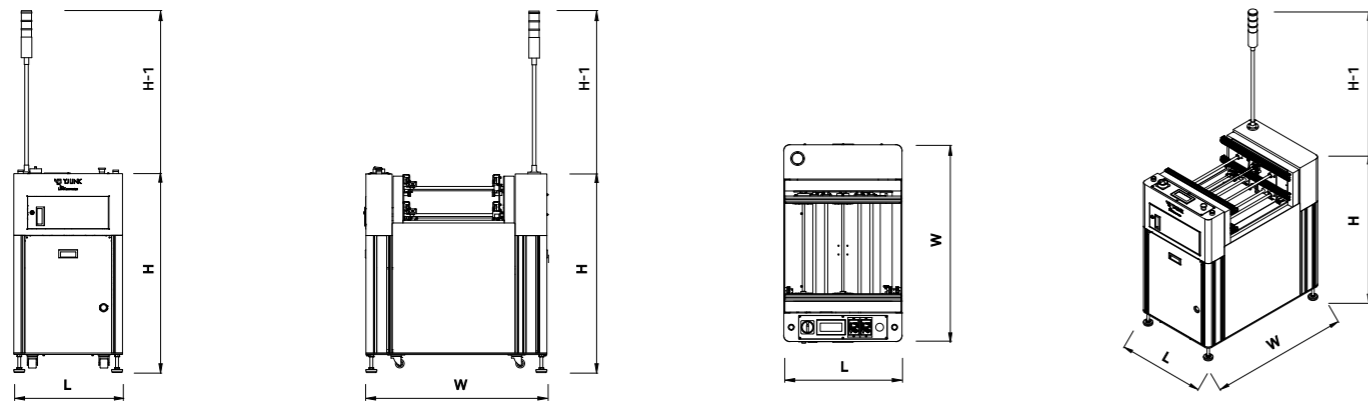
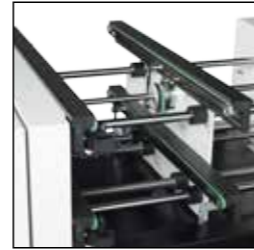
Connection Conveyor - Sky Line

Connection Conveyor - Pallet Return Line

# NG Conveyor



This unit automatically separates GOOD boards and NG boards while allowing visual inspection for NG PCBs without any interruption on GOOD board flow.



| CODE No.       |                | MODEL     | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|----------------|-----------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS   |           |      | L              | W    | H    | H-1  |             |
| M-10C-YM3-0901 | M-50C-YM3-0901 | YNC-1M 00 | M    | 500            | 870  | 1098 | 2000 | 137         |
| M-10C-YX3-0901 | M-50C-YX3-0901 | YNC-1X 00 | XL   | 600            | 1000 | 1098 | 2000 | 179         |
|                | M-50C-YU3-0901 | YNC-1U 00 | UX   | 700            | 1150 | 1098 | 2000 | 221         |

| Standard Spec.                |   |                        |           |
|-------------------------------|---|------------------------|-----------|
| Item                          | Standard  |                        |           |
| Line Flow                     | Left to Right                                     | Right to Left          |           |
| Fixed Rail                    | Front   | Rear                   |           |
| Pass Line (mm)                | 950±20  | 900±20                 |           |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |           |
| PCB Size                      | M   | XL                     | UX        |
| Min.PCB (L X W) (mm)          | 70 X 50   |                        |           |
| Max.PCB (L X W) (mm)          | 330 X 250   | 460 X 460              | 610 X 610 |
| Item                          | SMT   | POST-PROCESS           |           |
| PCB Top/Bottom Clearance (mm) | 30 / 25   | 60 / 60                |           |
| PCB Edge (mm)                 | 3   | 5                      |           |
| PCB Loading Weight (kg)       | 3   | 8                      |           |
| Conveyor Belt                 | Flat edge belt                                    | Pin chain              |           |
| Conveyor Speed (mm/sec) *     | 200   | 100                    |           |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                        |           |
| PCB Color                     | Green   |                        |           |
| PCB In/Out Sensor             | Single sensor                                     |                        |           |
| Mode                          | By pass / Inspection                              |                        |           |
| Length (mm) / Segment (ea)    | 500 / 1   | 600 / 1                | 700 / 1   |
| Completion Switch             | Button Type                                       |                        |           |
| Width Adjustment *            | Manual  |                        |           |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |           |
| Smema Cable                   | 3m / 1 ea   |                        |           |
| Alarm                         | Tower lamp (3 colors)                             |                        |           |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |           |
| Air Supply                    | 0.5Mpa(5bar)                                      |                        |           |
| Air Usage                     | 5.30 ℓ/min  |                        |           |
| Electricity Consumption       | 120W  |                        |           |

| Option Spec.              |                |                |                                   |
|---------------------------|----------------|----------------|-----------------------------------|
| Item                      | CODE No.       |                | Option                            |
| Conveyor Speed (mm/sec) * | SMT            | O-100-HW0-0104 | 1~200 / Analog / 2ea              |
|                           | POST-PROCESS   |                | 1~100 / Analog / 2ea              |
| Width Adjustment *        | O-100-HW0-0205 |                | Auto                              |
| Width Synchronization     | O-100-SW0-0200 |                | via RS-485                        |
| Line Control              | O-200-LC0-0100 |                | Hermes                            |
|                           | O-200-LC0-0200 |                | Smart kit (LAN communication PLC) |
| Color *                   | O-400-CO0-0100 |                | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Connection Conveyor

Connection Conveyor - Cooling

Connection Conveyor-Barcode Manual Bracket (Single sided)

Connection Conveyor-Barcode Manual Bracket (Double sided)

Work Conveyor - Inspection

Work Conveyor - Work

NG Conveyor

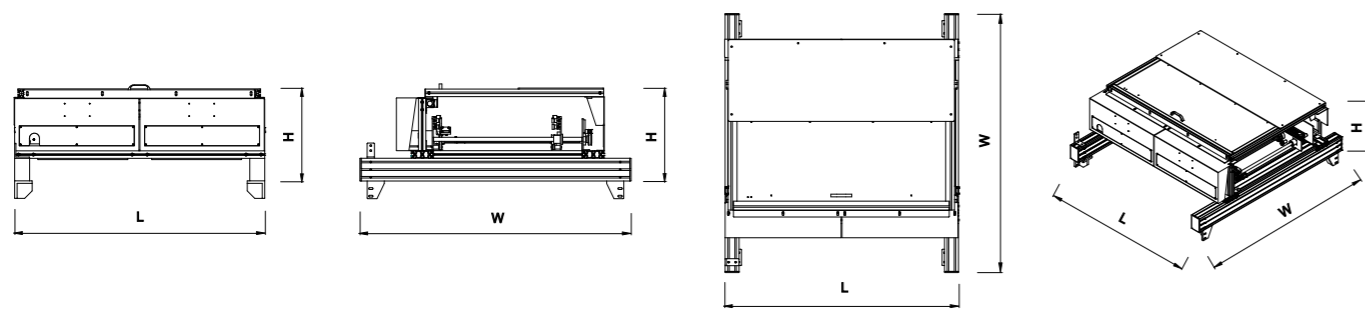
Connection Conveyor - Sky Line

Connection Conveyor - Pallet Return Line

# Connection Conveyor - Sky Line



The sky line can be used for operators' passage in SMT lines.



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |     |     | WEIGHT (Kg) |
|----------------|--------------|-----------|------|----------------|-----|-----|-------------|
| SMT            | POST-PROCESS |           |      | L              | W   | H   |             |
| M-10C-YM3-0504 |              | YCC-1M 60 | M    | ~ 2000         | 750 | 250 | 150         |
| M-10C-YX3-0504 |              | YCC-1X 60 | XL   | ~ 2000         | 950 | 250 | 180         |
| M-10C-YM3-0505 |              | YCC-1M 62 | M    | ~ 3000         | 750 | 250 | 250         |
| M-10C-YX3-0505 |              | YCC-1X 62 | XL   | ~ 3000         | 950 | 250 | 280         |

| Standard Spec.             |                        |                        |
|----------------------------|------------------------|------------------------|
| Item                       | Standard               |                        |
| Line Flow                  | Left to Right          | Right to Left          |
| Fixed Rail                 | Front                  | Rear                   |
| Voltage & Frequency        | 220V±(10%) & 50 ~ 60Hz | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                   | M                      | XL                     |
| Min.PCB (L X W) (mm)       | 70 X 50                |                        |
| Max.PCB (L X W) (mm)       | 330 X 250              | 460 X 460              |
| Item                       | SMT                    |                        |
| PCB Top / Bottom Clearance | 30 / 25                |                        |
| PCB Edge (mm)              | 3                      |                        |
| PCB Loading Weight (kg)    | 8                      |                        |
| Conveyor Belt              | Flat edge belt         |                        |
| Conveyor Speed (mm/sec) *  | 200                    |                        |
| PCB Thickness (mm)         | 0.6 ~ 4.0              |                        |
| PCB Color                  | Green                  |                        |
| PCB In/Out Sensor          | Single sensor          |                        |
| Mode                       | By Pass                |                        |
| Length (mm) / Segment (ea) | 2000 / 2               | 3000 / 3               |
| Width Adjustment *         | Manual                 |                        |
| Electricity Consumption    | 180W                   |                        |

| Option Spec.              |                |                      |
|---------------------------|----------------|----------------------|
| Item                      | CODE No.       | Option               |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104 | 1~200 / Analog / 1ea |
| Width Adjustment *        | O-100-HW0-0205 | Auto                 |
| Add Segment               | O-100-HW3-1000 | -                    |

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Connection Conveyor

Connection Conveyor - Cooling

Connection Conveyor-Barcode Manual Bracket (Single sided)

Connection Conveyor-Barcode Manual Bracket (Double sided)

Work Conveyor - Inspection

Work Conveyor - Work

NG Conveyor

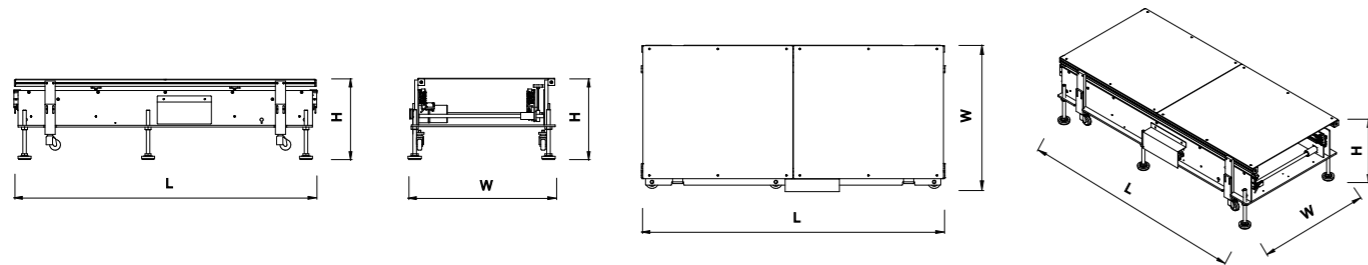
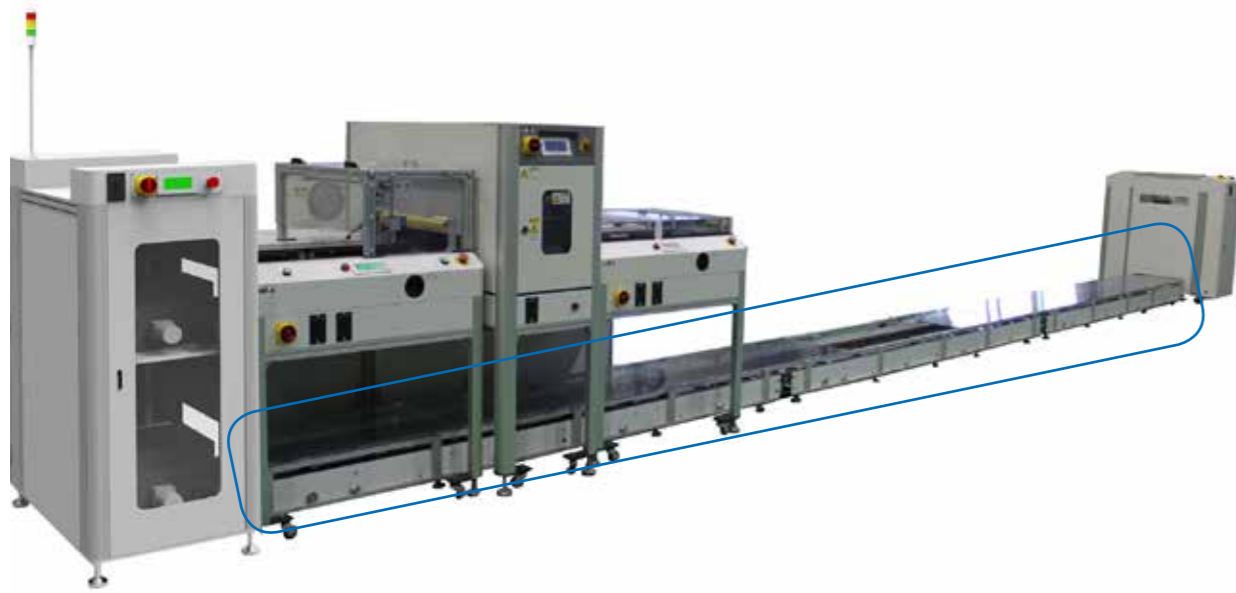
Connection Conveyor - Sky Line

Connection Conveyor - Pallet Return Line

# Connection Conveyor - Pallet Return Line



The pallet return line provides automated return of empty pallets. It is completely automated with PLC control and can convey pallets efficiently and fast.



| CODE No. |                | MODEL     | SIZE | DIMENSION (mm) |      |     | WEIGHT (Kg) |
|----------|----------------|-----------|------|----------------|------|-----|-------------|
| SMT      | POST-PROCESS   |           |      | L              | W    | H   |             |
|          | M-50C-YM3-0604 | YCC-1M 70 | M    | ~ 2000         | 650  | 250 | 150         |
|          | M-50C-YX3-0604 | YCC-1X 70 | XL   | ~2000          | 850  | 250 | 180         |
|          | M-50C-YU3-0604 | YCC-1U 70 | UX   | ~ 2000         | 1000 | 250 | 220         |
|          | M-50C-YM3-0605 | YCC-1M 72 | M    | ~ 3000         | 650  | 250 | 250         |
|          | M-50C-YX3-0605 | YCC-1X 72 | XL   | ~3000          | 850  | 250 | 280         |
|          | M-50C-YU3-0605 | YCC-1U 72 | UX   | ~ 3000         | 1000 | 250 | 320         |

| Standard Spec.             |                        |               |                        |
|----------------------------|------------------------|---------------|------------------------|
| Item                       | Standard               |               |                        |
| Line Flow                  | Left to Right          | Right to Left |                        |
| Fixed Rail                 | Front                  |               | Rear                   |
| Voltage & Frequency        | 220V±(10%) & 50 ~ 60Hz |               | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                   | M                      | XL            | UX                     |
| Min.PCB (L X W) (mm)       | 70 X 50                |               |                        |
| Max.PCB (L X W) (mm)       | 330 X 250              | 460 X 460     | 610 X 610              |
| Item                       | POST-PROCESS           |               |                        |
| PCB Top / Bottom Clearance | 60 / 60                |               |                        |
| PCB Edge (mm)              | 5                      |               |                        |
| PCB Loading Weight (kg)    | 8                      |               |                        |
| Conveyor Belt              | Pin Chain              |               |                        |
| Conveyor Speed (mm/sec) *  | 100                    |               |                        |
| PCB Thickness (mm)         | 0.6 ~ 4.0              |               |                        |
| PCB Color                  | Green                  |               |                        |
| PCB In/Out Sensor          | Single sensor          |               |                        |
| Mode                       | By Pass                |               |                        |
| Length (mm) / Segment (ea) | 2000 / 2               | 3000 / 3      |                        |
| Width Adjustment *         | Manual                 |               |                        |
| Electricity Consumption    | 180W                   |               |                        |

| Option Spec.              |                |                      |
|---------------------------|----------------|----------------------|
| Item                      | CODE No.       | Option               |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104 | 1~100 / Analog / 1ea |
| Width Adjustment *        | O-100-HW0-0205 | Auto                 |
| Add Segment               | O-100-HW3-1000 | -                    |

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Connection Conveyor

Connection Conveyor - Cooling

Connection Conveyor-Barcode Manual Bracket (Single sided)

Connection Conveyor-Barcode Manual Bracket (Double sided)

Work Conveyor - Inspection

Work Conveyor - Work

NG Conveyor

Connection Conveyor - Sky Line

Connection Conveyor - Pallet Return Line

# BOARD HANDLING

## CONVEYOR SERIES

[ M-10C-Y( )4 SERIES & M-50C-Y( )4 SERIES ]

|                                      |       |       |
|--------------------------------------|-------|-------|
| Destacker - Knife                    | ..... | P. 68 |
| Destacker - Clamp                    | ..... | P. 70 |
| Destacker - Clamp(Batch)             | ..... | P. 72 |
| Vacuum Loader - Edge                 | ..... | P. 74 |
| Stacker                              | ..... | P. 76 |
| PCB Cleaner - Vacuum                 | ..... | P. 78 |
| PCB Cleaner - Vacuum + Sticky roller | ..... | P. 80 |
| Gate Conveyor - Telescope            | ..... | P. 82 |
| Gate Conveyor - Down/Up              | ..... | P. 84 |
| Vertical Turn                        | ..... | P. 86 |
| Horizontal Turn                      | ..... | P. 88 |
| Shuttle Conveyor                     | ..... | P. 90 |
| Elevator Unit - Sky Line             | ..... | P. 92 |
| Elevator Unit - Pallet Return Line   | ..... | P. 94 |



➤ Destacker - Knife



➤ Stacker



➤ Gate Conveyor - Down/Up



➤ Elevator Unit - Sky Line



➤ Destacker - Clamp



➤ PCB Cleaner - Vacuum



➤ Vertical Turn



➤ Elevator Unit - Pallet Return Line



➤ Destacker - Clamp(Batch)



➤ PCB Cleaner - Vacuum + Sticky roller



➤ Horizontal Turn



➤ Vacuum Loader - Edge



➤ Gate Conveyor - Telescope

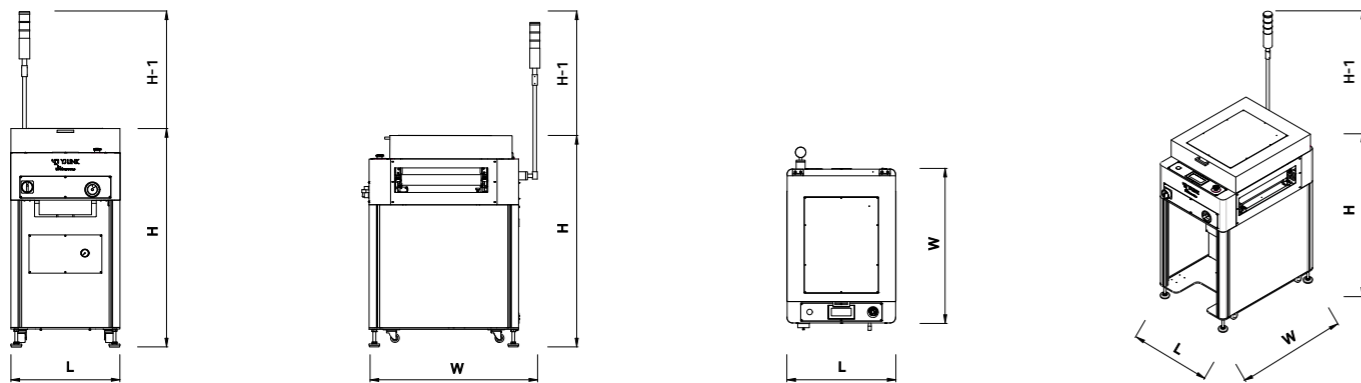
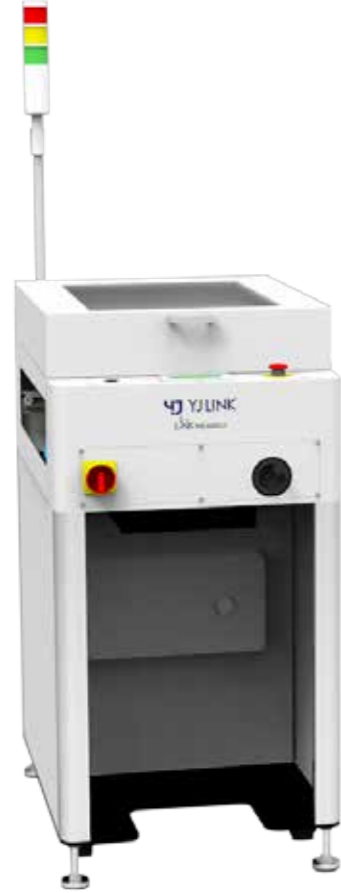


➤ Shuttle Conveyor

# Destacker - Knife



Using “Knife Cylinder”, this unit unstacks bare boards one by one



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |     |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|----------------|-----|------|------|-------------|
| SMT            | POST-PROCESS |           |      | L              | W   | H    | H-1  |             |
| M-10C-YX4-0100 |              | YDL-1X 00 | XL   | 600            | 970 | 1200 | 2000 | 193         |

| Standard Spec.                |   |                        |
|-------------------------------|---|------------------------|
| Item                          | Standard  |                        |
| Line Flow                     | Left to Right                                     | Right to Left          |
| Fixed Rail                    | Front   | Rear                   |
| Pass Line (mm)                | 950±20  | 900±20                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                      | XL  |                        |
| Min.PCB (L X W) (mm)          | 70 X 70   |                        |
| Max.PCB (L X W) (mm)          | 460 X 460   |                        |
| Item                          | SMT   |                        |
| PCB Top/Bottom Clearance (mm) | 00 / 00   |                        |
| PCB Edge (mm)                 | 3   |                        |
| PCB Loading Weight (kg)       | 3   |                        |
| PCB Stacking Weight (kg)      | 20  |                        |
| Conveyor Belt                 | Flat edge belt                                    |                        |
| Conveyor Speed (mm/sec) *     | 200   |                        |
| PCB Thickness (mm)            | 1.0~ 2.0  |                        |
| PCB Color                     | Green   |                        |
| PCB In/Out Sensor             | Single sensor                                     |                        |
| Mode                          | By pass / Bare board loading                      |                        |
| Width Adjustment *            | Manual  |                        |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |
| Smema Cable                   | 3m / 1 ea   |                        |
| Alarm                         | Tower lamp (3 color)                              |                        |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |
| Air Supply                    | 0.5Mpa (5bar)                                     |                        |
| Air Usage                     | 0.74 ℓ/min  |                        |
| Electricity Consumption       | 120W  |                        |

| Option Spec.              |                |                                   |
|---------------------------|----------------|-----------------------------------|
| Item                      | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104 | 1~200 / Analog / 2ea              |
| Width Synchronization     | O-100-SW0-0200 | via RS-485                        |
| Line Control              | O-200-LC0-0100 | Hermes                            |
|                           | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Destacker - Knife

Destacker - Clamp

Destacker - Clamp(Batch)

Vacuum Loader - Edge

Stacker

PCB Cleaner - Vacuum

PCB Cleaner - Vacuum + Sticky roller

Gate Conveyor - Telescope

Gate Conveyor - Down/Up

Vertical Turn

Horizontal Turn

Shuttle Conveyor

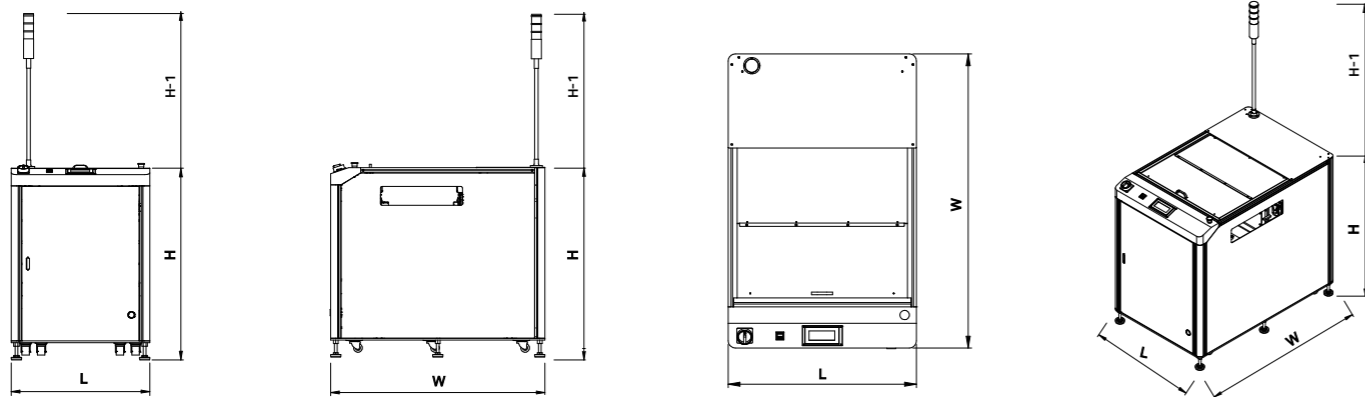
Elevator Unit - Sky Line

Elevator Unit - Pallet Return Line

# Destacker - Clamp



Using "Side Clamp", this unit unstacks bare boards one by one



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS |           |      | L              | W    | H    | H-1  |             |
| M-10C-YL4-0200 |              | YDL-1L 10 | L    | 600            | 1040 | 1105 | 2000 | 360         |
| M-10C-YX4-0200 |              | YDL-1X 10 | XL   | 800            | 1250 | 1105 | 2000 | 400         |

| Standard Spec.                |   |                        |
|-------------------------------|---|------------------------|
| Item                          | Standard  |                        |
| Line Flow                     | Left to Right                                     | Right to Left          |
| Fixed Rail                    | Front   | Rear                   |
| Pass Line (mm)                | 950±20  | 900±20                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                      | L   | XL                     |
| Min.PCB (L X W) (mm)          | 70 X 70   |                        |
| Max.PCB (L X W) (mm)          | 440 X 330   | 530 X 460              |
| Item                          | SMT   |                        |
| PCB Top/Bottom Clearance (mm) | 00 / 00   |                        |
| PCB Edge (mm)                 | 3   |                        |
| PCB Loading Weight (kg)       | 3   |                        |
| PCB Stacking Weight (kg)      | 50  |                        |
| Conveyor Belt                 | Flat edge belt                                    |                        |
| Conveyor Speed (mm/sec) *     | 200   |                        |
| PCB Thickness (mm)            | 1.0 ~ 2.0   |                        |
| PCB Color                     | Green   |                        |
| PCB In/Out Sensor             | Single sensor                                     |                        |
| Mode                          | By pass / Bare board loading                      |                        |
| Top Cover Type                | Sliding   |                        |
| Width Adjustment              | Auto  |                        |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |
| Smema Cable                   | 3m / 1 ea   |                        |
| Alarm                         | Tower lamp (3 color)                              |                        |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |
| Air Supply                    | 0.5Mpa (5bar)                                     |                        |
| Air Usage                     | 10.0 l/min  |                        |
| Electricity Consumption       | 400W  |                        |

| Option Spec.              |                |                                   |
|---------------------------|----------------|-----------------------------------|
| Item                      | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104 | 1~200 / Analog / 2ea              |
| Vacuum Unit               | O-100-HW4-0300 | -                                 |
| Width Synchronization     | O-100-SW0-0200 | via RS-485                        |
| Line Control              | O-200-LC0-0100 | Hermes                            |
|                           | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Destacker - Knife

Destacker - Clamp

Destacker - Clamp(Batch)

Vacuum Loader - Edge

Stacker

PCB Cleaner - Vacuum

PCB Cleaner - Vacuum + Sticky roller

Gate Conveyor - Telescope

Gate Conveyor - Down/Up

Vertical Turn

Horizontal Turn

Shuttle Conveyor

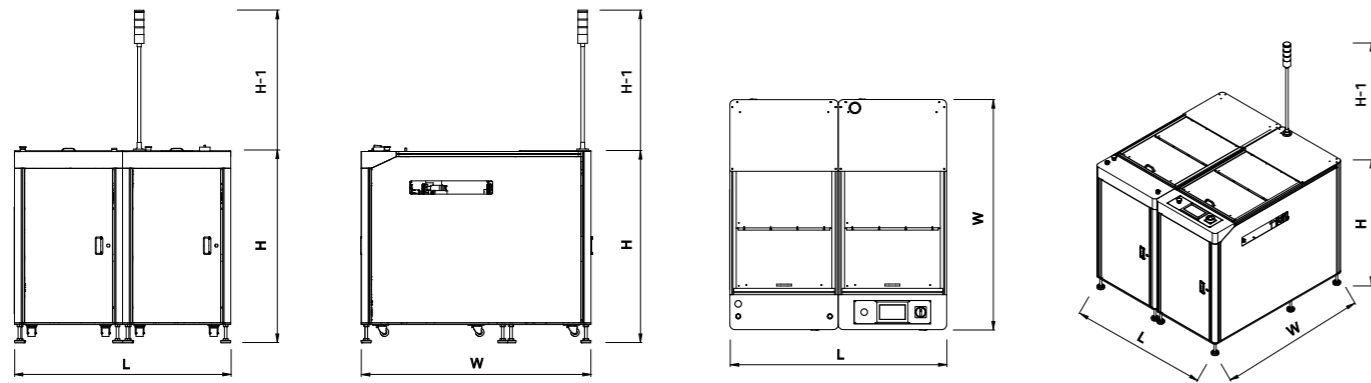
Elevator Unit - Sky Line

Elevator Unit - Pallet Return Line

# Destacker - Clamp(Batch)



With the buffer station designed to accommodate more PCB batches, operators may utilize time more efficiently.



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS |           |      | L              | W    | H    | H-1  |             |
| M-10C-YL4-0201 |              | YDL-1L 11 | L    | 1200           | 1250 | 1145 | 2000 | 440         |
| M-10C-YX4-0201 |              | YDL-1X 11 | XL   | 1300           | 1380 | 1145 | 2000 | 490         |

| Standard Spec.                |   |                        |
|-------------------------------|---|------------------------|
| Item                          | Standard  |                        |
| Line Flow                     | Left to Right                                     | Right to Left          |
| Fixed Rail                    | Front   | Rear                   |
| Pass Line (mm)                | 950±20  | 900±20                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                      | L   | XL                     |
| Min.PCB (L X W) (mm)          | 70 X 70   |                        |
| Max.PCB (L X W) (mm)          | 440 X 330   | 530 X 460              |
| Item                          | SMT   |                        |
| PCB Top/Bottom Clearance (mm) | 00 / 00   |                        |
| PCB Edge (mm)                 | 3   |                        |
| PCB Loading Weight (kg)       | 3   |                        |
| PCB Stacking Weight (kg)      | 21  |                        |
| Batch Slot (ea)               | 7   |                        |
| Conveyor Belt                 | Flat edge belt                                    |                        |
| Conveyor Speed (mm/sec) *     | 200   |                        |
| PCB Thickness (mm)            | 1.0 ~ 2.0   |                        |
| PCB Color                     | Green   |                        |
| PCB In/Out Sensor             | Single sensor                                     |                        |
| Mode                          | By pass / Bare board loading                      |                        |
| Top Cover Type                | Sliding   |                        |
| Width Adjustment              | Auto  |                        |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |
| Smema Cable                   | 3m / 1 ea   |                        |
| Alarm                         | Tower lamp (3 color)                              |                        |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |
| Air Supply                    | 0.5Mpa (5bar)                                     |                        |
| Air Usage                     | 10.0 t/min  |                        |
| Electricity Consumption       | 260W  |                        |

| Option Spec.              |                |                                   |                      |
|---------------------------|----------------|-----------------------------------|----------------------|
| Item                      | CODE No.       | Option                            |                      |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104 | Batch                             | 1~200 / Analog / 2ea |
|                           |                | Destacker                         | 1~200 / Analog / 2ea |
| Vacuum Unit               | O-100-HW4-0300 | -                                 |                      |
| Width Synchronization     | O-100-SW0-0200 | via RS-485                        |                      |
| Line Control              | O-200-LC0-0100 | Hermes                            |                      |
|                           | O-200-LC0-0200 | Smart kit (LAN communication PLC) |                      |
| Color *                   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |                      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Destacker - Knife

Destacker - Clamp

Destacker - Clamp(Batch)

Vacuum Loader - Edge

Stacker

PCB Cleaner - Vacuum

PCB Cleaner - Vacuum + Sticky roller

Gate Conveyor - Telescope

Gate Conveyor - Down/Up

Vertical Turn

Horizontal Turn

Shuttle Conveyor

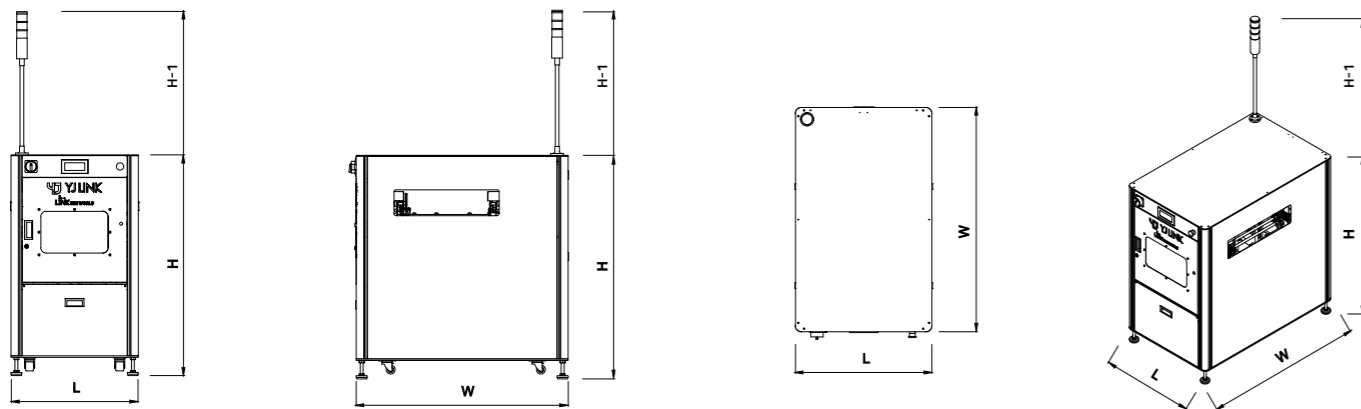
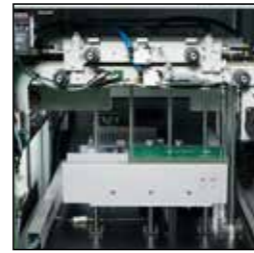
Elevator Unit - Sky Line

Elevator Unit - Pallet Return Line

# Vacuum Loader - Edge



Using "Edge vacuum pad", this unit unstacks bare boards one by one



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS |           |      | L              | W    | H    | H-1  |             |
| M-10C-YM4-0300 |              | YVL-1M 00 | M    | 600            | 940  | 1413 | 2000 | 285         |
| M-10C-YX4-0300 |              | YVL-1X 00 | XL   | 700            | 1150 | 1413 | 2000 | 315         |

| Standard Spec.                |   |                        |
|-------------------------------|---|------------------------|
| Item                          | Standard  |                        |
| Line Flow                     | Left to Right                                     | Right to Left          |
| Fixed Rail                    | Front   | Rear                   |
| Pass Line (mm)                | 950±20  | 900±20                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                      | M   | XL                     |
| Min.PCB (L X W) (mm)          | 70 X 50   |                        |
| Max.PCB (L X W) (mm)          | 330 X 250   | 460 X 460              |
| Item                          | SMT   |                        |
| PCB Top/Bottom Clearance (mm) | 00 / 00   |                        |
| PCB Edge (mm)                 | 6   |                        |
| PCB Loading Weight (kg)       | 3   |                        |
| Conveyor Belt                 | Flat edge belt                                    |                        |
| Conveyor Speed (mm/sec) *     | 200   |                        |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                        |
| PCB Color                     | Green   |                        |
| PCB In/Out Sensor             | Single sensor                                     |                        |
| Mode                          | By pass / Bare board loading                      |                        |
| Vacuum Pad                    | Auto Blocked                                      |                        |
| Width Adjustment *            | Manual  |                        |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |
| Smema Cable                   | 3m / 1 ea   |                        |
| Alarm                         | Tower lamp (3 color)                              |                        |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |
| Air Supply                    | 0.5Mpa (5bar)                                     |                        |
| Air Usage                     | 7.0 ℓ/min   |                        |
| Electricity Consumption       | 540W  |                        |

| Option Spec.              |                |                                   |
|---------------------------|----------------|-----------------------------------|
| Item                      | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104 | 1~200 / Analog / 2ea              |
| Width Adjustment *        | O-100-HW0-0205 | Auto                              |
| Width Synchronization     | O-100-SW0-0200 | via RS-485                        |
| Line Control              | O-200-LC0-0100 | Hermes                            |
|                           | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Destacker - Knife

Destacker - Clamp

Destacker - Clamp(Batch)

Vacuum Loader - Edge

Stacker

PCB Cleaner - Vacuum

PCB Cleaner - Vacuum + Sticky roller

Gate Conveyor - Telescope

Gate Conveyor - Down/Up

Vertical Turn

Horizontal Turn

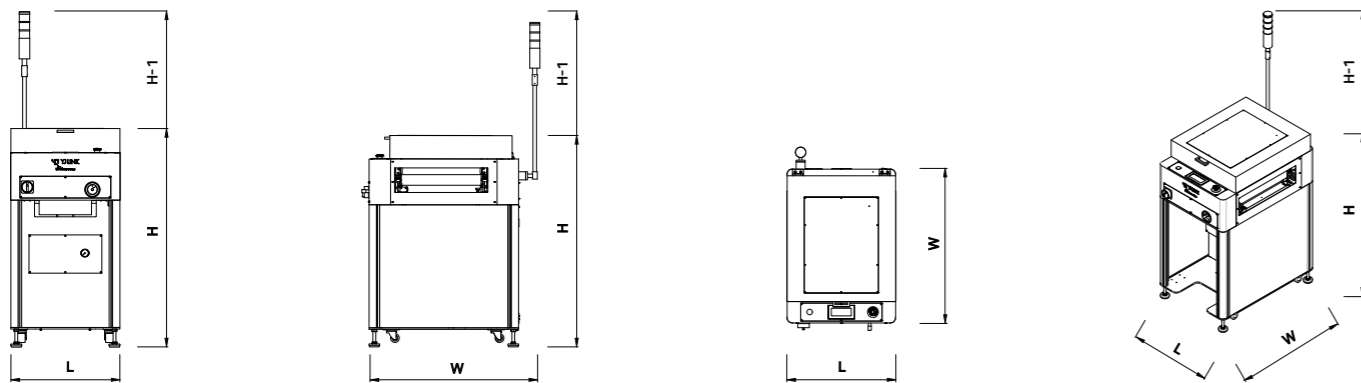
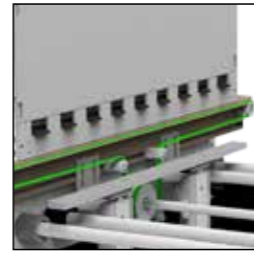
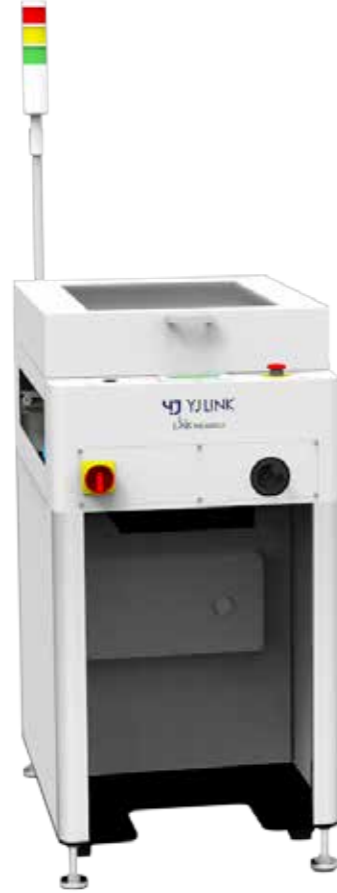
Shuttle Conveyor

Elevator Unit - Sky Line

Elevator Unit - Pallet Return Line



Using cylinder, it lifts up a bare board for stacking up as an unloader of offline laser marking machine.



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |     |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|----------------|-----|------|------|-------------|
| SMT            | POST-PROCESS |           |      | L              | W   | H    | H-1  |             |
| M-10C-YX4-0400 |              | YPU-1X 00 | XL   | 600            | 970 | 1200 | 2000 | 176         |

| Standard Spec.                |   |                        |
|-------------------------------|---|------------------------|
| Item                          | Standard  |                        |
| Line Flow                     | Left to Right                                     | Right to Left          |
| Fixed Rail                    | Front   | Rear                   |
| Pass Line (mm)                | 950±20  | 900±20                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                      | XL  |                        |
| Min.PCB (L X W) (mm)          | 70 X 70   |                        |
| Max.PCB (L X W) (mm)          | 460 X 460   |                        |
| Item                          | SMT   |                        |
| PCB Top/Bottom Clearance (mm) | 00 / 00   |                        |
| PCB Edge (mm)                 | 3   |                        |
| PCB Loading Weight (kg)       | 3   |                        |
| PCB Stacking Weight (kg)      | 20  |                        |
| Conveyor Belt                 | Flat edge belt                                    |                        |
| Conveyor Speed (mm/sec) *     | 200   |                        |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                        |
| PCB Color                     | Green   |                        |
| PCB In/Out Sensor             | Single sensor                                     |                        |
| Mode                          | Bare board stacking                               |                        |
| Width Adjustment *            | Manual  |                        |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |
| Smema Cable                   | 3m / 1 ea   |                        |
| Alarm                         | Tower lamp (3 color)                              |                        |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |
| Air Supply                    | 0.5Mpa (5bar)                                     |                        |
| Air Usage                     | 0.74 ℓ/min  |                        |
| Electricity Consumption       | 120W  |                        |

| Option Spec.              |                |                                   |
|---------------------------|----------------|-----------------------------------|
| Item                      | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104 | 1~200 / Analog / 2ea              |
| Width Adjustment *        | O-100-HW0-0205 | Auto                              |
| Width Synchronization     | O-100-SW0-0200 | via RS-485                        |
| Line Control              | O-200-LC0-0100 | Hermes                            |
|                           | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Destacker - Knife

Destacker - Clamp

Destacker - Clamp(Batch)

Vacuum Loader - Edge

Stacker

PCB Cleaner - Vacuum

PCB Cleaner - Vacuum + Sticky roller

Gate Conveyor - Telescope

Gate Conveyor - Down/Up

Vertical Turn

Horizontal Turn

Shuttle Conveyor

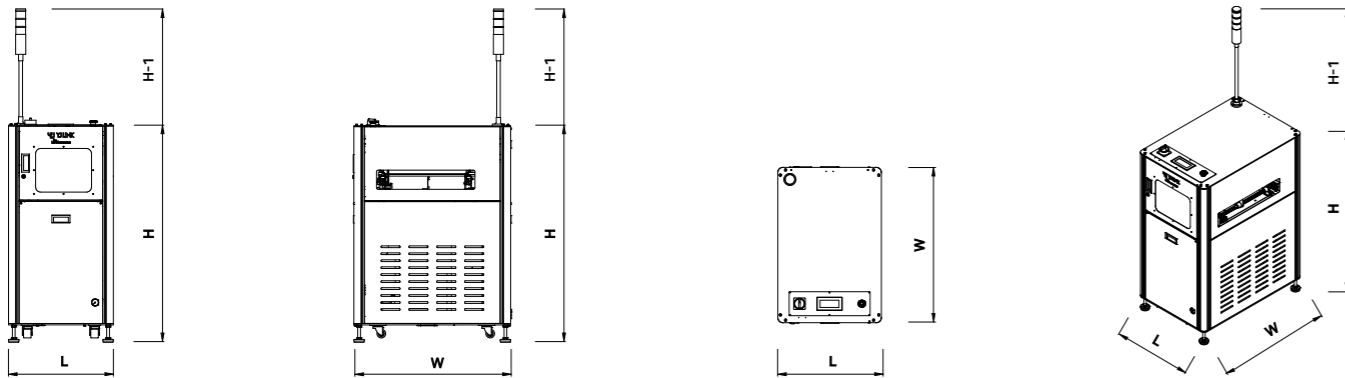
Elevator Unit - Sky Line

Elevator Unit - Pallet Return Line

# PCB Cleaner - Vacuum



Removes dust and particle on a PCB by vacuum and ionizer while being transferred to next process.



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |     |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|----------------|-----|------|------|-------------|
| SMT            | POST-PROCESS |           |      | L              | W   | H    | H-1  |             |
| M-10C-YX4-0501 |              | YPC-1X 00 | XL   | 600            | 900 | 1243 | 2000 | 212         |

| Standard Spec.                |   |                        |
|-------------------------------|---|------------------------|
| Item                          | Standard  |                        |
| Line Flow                     | Left to Right                                     | Right to Left          |
| Fixed Rail                    | Front   | Rear                   |
| Pass Line (mm)                | 950±20  | 900±20                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                      | XL  |                        |
| Min.PCB (L X W) (mm)          | 70 X 50   |                        |
| Max.PCB (L X W) (mm)          | 460 X 460   |                        |
| Item                          | SMT   |                        |
| PCB Top/Bottom Clearance (mm) | 00 / 25   |                        |
| PCB Edge (mm)                 | 3   |                        |
| PCB Loading Weight (kg)       | 3   |                        |
| Conveyor Belt                 | Flat edge belt                                    |                        |
| Conveyor Speed (mm/sec) *     | 200   |                        |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                        |
| PCB Color                     | Green   |                        |
| PCB In/Out Sensor             | Single sensor                                     |                        |
| Mode                          | By pass / Cleaning                                |                        |
| Ionizer Brand                 | PANASONIC   |                        |
| Ionizer Position              | Output  |                        |
| Dust Collector                | Inner Ring Blower                                 |                        |
| Width Adjustment *            | Manual  |                        |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |
| Smema Cable                   | 3m / 1 ea   |                        |
| Alarm                         | Tower Lamp (3 Colors)                             |                        |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |
| Air Supply                    | 0.5Mpa(5bar)                                      |                        |
| Air Usage                     | 6.0 ℓ/min   |                        |
| Electricity Consumption       | 1350 W  |                        |

| Option Spec.              |                |                                   |
|---------------------------|----------------|-----------------------------------|
| Item                      | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104 | 1~200 / Analog / 1ea              |
| Width Adjustment *        | O-100-HW0-0205 | Auto                              |
| Width Synchronization     | O-100-SW0-0200 | via RS-485                        |
| Line Control              | O-200-LC0-0100 | Hermes                            |
|                           | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Destacker - Knife

Destacker - Clamp

Destacker - Clamp(Batch)

Vacuum Loader - Edge

Stacker

PCB Cleaner - Vacuum

PCB Cleaner - Vacuum + Sticky roller

Gate Conveyor - Telescope

Gate Conveyor - Down/Up

Vertical Turn

Horizontal Turn

Shuttle Conveyor

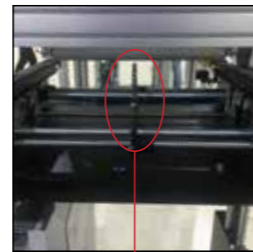
Elevator Unit - Sky Line

Elevator Unit - Pallet Return Line

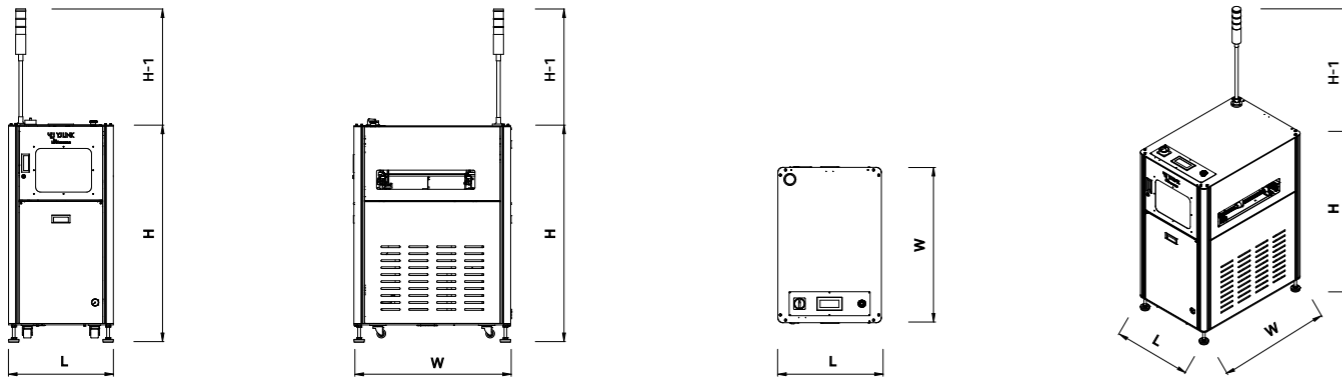
# PCB Cleaner - Vacuum + Sticky roller



Removes dust and particle on a PCB by vacuum, sticky roller and ionizer while being transferred to next process.



Support Roller



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |     |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|----------------|-----|------|------|-------------|
| SMT            | POST-PROCESS |           |      | L              | W   | H    | H-1  |             |
| M-10C-YX4-0503 |              | YPC-1X 01 | XL   | 600            | 900 | 1243 | 2000 | 162         |

| Standard Spec.                |   |                        |
|-------------------------------|---|------------------------|
| Item                          | Standard  |                        |
| Line Flow                     | Left to Right                                     | Right to Left          |
| Fixed Rail                    | Front   | Rear                   |
| Pass Line (mm)                | 950±20  | 900±20                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                      | XL  |                        |
| Min.PCB (L X W) (mm)          | 70 X 80   |                        |
| Max.PCB (L X W) (mm)          | 460 X 460   |                        |
| Item                          | SMT   |                        |
| PCB Top/Bottom Clearance (mm) | 00 / 00   |                        |
| PCB Edge (mm)                 | 3   |                        |
| PCB Loading Weight (kg)       | 3   |                        |
| Conveyor Belt                 | Flat edge belt                                    |                        |
| Conveyor Speed (mm/sec) *     | 200   |                        |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                        |
| PCB Color                     | Green   |                        |
| PCB In/Out Sensor             | Single sensor                                     |                        |
| Mode                          | By pass / Cleaning                                |                        |
| Ionizer Brand                 | PANASONIC   |                        |
| Ionizer Position              | Output  |                        |
| Support Roller Position       | Bottom  |                        |
| Dust Collector                | Inner Ring Blower + Sticky Roller                 |                        |
| Width Adjustment *            | Manual  |                        |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |
| Smema Cable                   | 3m / 1 ea   |                        |
| Alarm                         | Tower Lamp (3 Colors)                             |                        |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |
| Air Supply                    | 0.5Mpa(5bar)                                      |                        |
| Air Usage                     | 6.0 ℓ/min   |                        |
| Electricity Consumption       | 1350 W  |                        |

| Option Spec.              |                |                                   |
|---------------------------|----------------|-----------------------------------|
| Item                      | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104 | 1~200 / Analog / 1ea              |
| Width Adjustment *        | O-100-HW0-0205 | Auto                              |
| Width Synchronization     | O-100-SW0-0200 | via RS-485                        |
| Line Control              | O-200-LC0-0100 | Hermes                            |
|                           | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Destacker - Knife

Destacker - Clamp

Destacker - Clamp(Batch)

Vacuum Loader - Edge

Stacker

PCB Cleaner - Vacuum

PCB Cleaner - Vacuum + Sticky roller

Gate Conveyor - Telescope

Gate Conveyor - Down/Up

Vertical Turn

Horizontal Turn

Shuttle Conveyor

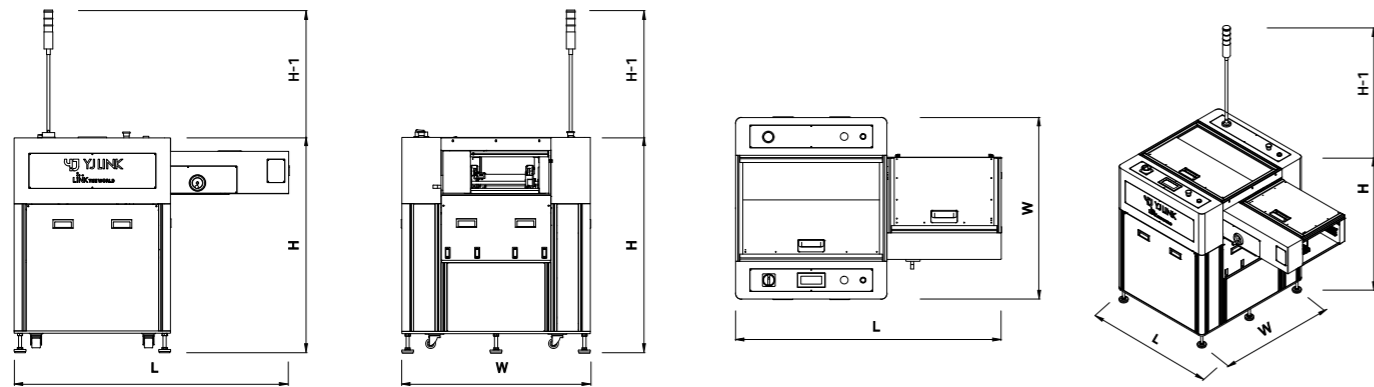
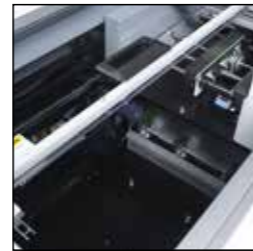
Elevator Unit - Sky Line

Elevator Unit - Pallet Return Line

# Gate Conveyor - Telescope



In middle of SMT line, this unit allows operators to pass through the line, without interrupting PCB flow.



| CODE No.       |                | MODEL     | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|----------------|-----------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS   |           |      | L              | W    | H    | H-1  |             |
| M-10C-YX4-0601 | M-50C-YX4-0601 | YGC-1X 00 | XL   | 1405(805+600)  | 1170 | 1100 | 2000 | 315         |
|                | M-50C-YU4-0601 | YGC-1U 00 | UX   | 1405(805+600)  | 1320 | 1100 | 2000 | 350         |

| Standard Spec.                |   |                        |
|-------------------------------|---|------------------------|
| Item                          | Standard  |                        |
| Line Flow                     | Left to Right                                     | Right to Left          |
| Fixed Rail                    | Front   | Rear                   |
| Pass Line (mm)                | 950±20  | 900±20                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                      | XL  | UX                     |
| Min.PCB (L X W) (mm)          | 70 X 50   |                        |
| Max.PCB (L X W) (mm)          | 460 X 460   | 610 X 610              |
| Item                          | SMT   | POST-PROCESS           |
| PCB Top/Bottom Clearance (mm) | 30 / 25   | 60 / 60                |
| PCB Edge (mm)                 | 3   | 5                      |
| PCB Loading Weight (kg)       | 3   | 8                      |
| Conveyor Belt                 | Flat edge belt                                    | Pin chain              |
| Conveyor Speed (mm/sec) *     | 200   | 100                    |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                        |
| PCB Color                     | Green   |                        |
| PCB In/Out Sensor             | Single sensor                                     |                        |
| Standard Length (mm)          | 805(Body) + 600(Passing Rail)                     |                        |
| Safety Sensor                 | Photo Sensors on Body Part                        |                        |
| Passing Rail Cover            | Sliding Cover                                     |                        |
| Width Adjustment *            | Manual  |                        |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |
| Smema Cable                   | 3m / 1 ea   |                        |
| Alarm                         | Tower Lamp (3 Colors)                             |                        |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |
| Electricity Consumption       | 275W  |                        |

| Option Spec.              |              |                |                                   |
|---------------------------|--------------|----------------|-----------------------------------|
| Item                      |              | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) * | SMT          | O-100-HW0-0104 | 1~200 / Analog / 1ea              |
|                           | POST-PROCESS |                | 1~100 / Analog / 1ea              |
| Width Adjustment *        |              | O-100-HW0-0205 | Auto                              |
| Width Synchronization     |              | O-100-SW0-0200 | via RS-485                        |
| Line Control              |              | O-200-LC0-0100 | Hermes                            |
|                           |              | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                   |              | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Destacker - Knife

Destacker - Clamp

Destacker - Clamp(Batch)

Vacuum Loader - Edge

Stacker

PCB Cleaner - Vacuum

PCB Cleaner - Vacuum + Sticky roller

Gate Conveyor - Telescope

Gate Conveyor - Down/Up

Vertical Turn

Horizontal Turn

Shuttle Conveyor

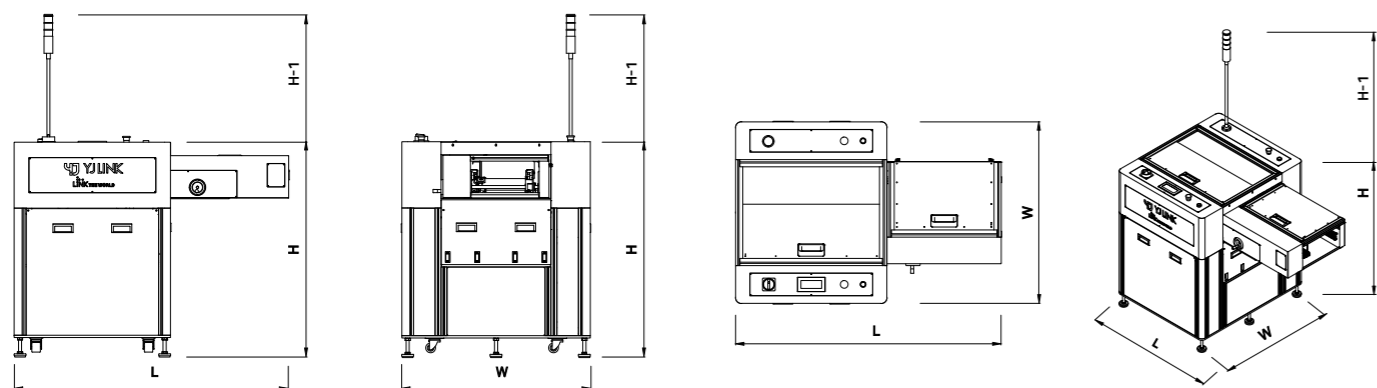
Elevator Unit - Sky Line

Elevator Unit - Pallet Return Line

# Gate Conveyor - Down/Up



In middle of SMT line, this unit allows operators to pass through the line, without interrupting PCB flow.



| CODE No.       |                | MODEL     | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|----------------|-----------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS   |           |      | L              | W    | H    | H-1  |             |
| M-10C-YX4-0602 | M-50C-YX4-0602 | YGC-1X 10 | XL   | 1405(805+600)  | 1170 | 1100 | 2000 | 360         |
|                | M-50C-YU4-0602 | YGC-1U 10 | UX   | 1405(805+600)  | 1320 | 1100 | 2000 | 395         |

| Standard Spec.                |   |                        |
|-------------------------------|---|------------------------|
| Item                          | Standard  |                        |
| Line Flow                     | Left to Right                                     | Right to Left          |
| Fixed Rail                    | Front   | Rear                   |
| Pass Line (mm)                | 950±20  | 900±20                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                      | XL  | UX                     |
| Min.PCB (L X W) (mm)          | 70 X 50   |                        |
| Max.PCB (L X W) (mm)          | 460 X 460   | 610 X 610              |
| Item                          | SMT   | POST-PROCESS           |
| PCB Top/Bottom Clearance (mm) | 30 / 25   | 60 / 60                |
| PCB Edge (mm)                 | 3   | 5                      |
| PCB Loading Weight (kg)       | 3   | 8                      |
| Conveyor Belt                 | Flat edge belt                                    | Pin chain              |
| Conveyor Speed (mm/sec) *     | 200   | 100                    |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                        |
| PCB Color                     | Green   |                        |
| PCB In/Out Sensor             | Single sensor                                     |                        |
| Standard Length (mm)          | 805(Body) + 600(Passing Rail)                     |                        |
| Safety Sensor                 | Photo Sensors on Body Part                        |                        |
| Passing Rail Cover            | Sliding Cover                                     |                        |
| Width Adjustment *            | Manual  |                        |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |
| Smema Cable                   | 3m / 1 ea   |                        |
| Alarm                         | Tower Lamp (3 Colors)                             |                        |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |
| Air Supply                    | 0.5Mpa(5bar)                                      |                        |
| Air Usage                     | 9.4 ℓ/min   |                        |
| Electricity Consumption       | 355W  |                        |

| Option Spec.              |                |                                   |
|---------------------------|----------------|-----------------------------------|
| Item                      | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104 | 1~200 / Analog / 2ea              |
|                           |                | 1~100 / Analog / 2ea              |
| Width Adjustment *        | O-100-HW0-0205 | Auto / 2ea                        |
| Width Synchronization     | O-100-SW0-0200 | via RS-485                        |
| Line Control              | O-200-LC0-0100 | Hermes                            |
|                           | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Destacker - Knife

Destacker - Clamp

Destacker - Clamp(Batch)

Vacuum Loader - Edge

Stacker

PCB Cleaner - Vacuum

PCB Cleaner - Vacuum + Sticky roller

Gate Conveyor - Telescope

Gate Conveyor - Down/Up

Vertical Turn

Horizontal Turn

Shuttle Conveyor

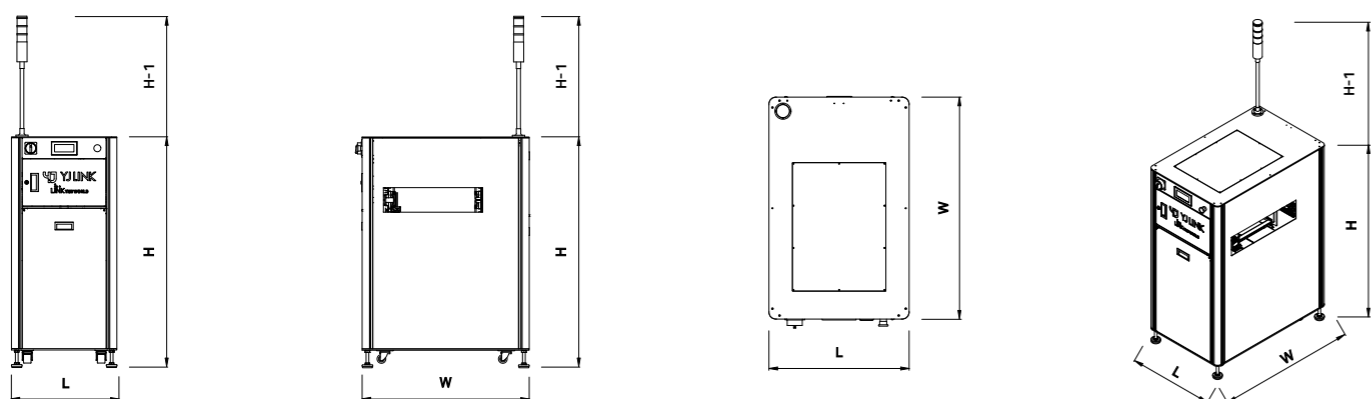
Elevator Unit - Sky Line

Elevator Unit - Pallet Return Line

# Vertical Turn



This unit flips the PCBs for double sided assembly.



| CODE No.       |                | MODEL     | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|----------------|-----------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS   |           |      | L              | W    | H    | H-1  |             |
| M-10C-YX4-0700 | M-50C-YX4-0700 | YVT-1X 00 | XL   | 535            | 950  | 1313 | 2000 | 145         |
|                | M-50C-YU4-0700 | YVT-1U 00 | UX   | 680            | 1125 | 1313 | 2000 | 180         |

| Standard Spec.                |   |                        |
|-------------------------------|---|------------------------|
| Item                          | Standard  |                        |
| Line Flow                     | Left to Right                                     | Right to Left          |
| Fixed Rail                    | Front   | Rear                   |
| Pass Line (mm)                | 950±20  | 900±20                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                      | XL  | UX                     |
| Min.PCB (L X W) (mm)          | 70 X 50   |                        |
| Max.PCB (L X W) (mm)          | 460 X 460   | 610 X 610              |
| Item                          | SMT   | POST-PROCESS           |
| PCB Top/Bottom Clearance (mm) | 30 / 25   | 60 / 60                |
| PCB Edge (mm)                 | 3   | 5                      |
| PCB Loading Weight (kg)       | 3   | 8                      |
| Conveyor Belt                 | Flat edge belt                                    | Pin chain              |
| Conveyor Speed (mm/sec) *     | 200   | 100                    |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                        |
| PCB Color                     | Green   |                        |
| PCB In/Out Sensor             | Single sensor                                     |                        |
| Mode                          | By pass / Flip and Pass PCB                       |                        |
| Width Adjustment *            | Manual  |                        |
| Interface                     | SMT Pin No. 1, 2, 3, 4, 5, 6                      |                        |
| Smema Cable                   | 3m / 1 ea   |                        |
| Alarm                         | Tower Lamp (3 Colors)                             |                        |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |
| Air Supply                    | 0.5Mpa(5bar)                                      |                        |
| Air Usage                     | 0.8 ℓ/min   |                        |
| Electricity Consumption       | 265W  |                        |

| Option Spec.              |              |                |                                   |
|---------------------------|--------------|----------------|-----------------------------------|
| Item                      |              | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) * | SMT          | O-100-HW0-0104 | 1~200 / Analog / 1ea              |
|                           | POST-PROCESS |                | 1~100 / Analog / 1ea              |
| Width Adjustment *        |              | O-100-HW0-0205 | Auto                              |
| Width Synchronization     |              | O-100-SW0-0200 | via RS-485                        |
| Line Control              |              | O-200-LC0-0100 | Hermes                            |
|                           |              | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                   |              | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Destacker - Knife

Destacker - Clamp

Destacker - Clamp(Batch)

Vacuum Loader - Edge

Stacker

PCB Cleaner - Vacuum

PCB Cleaner - Vacuum + Sticky roller

Gate Conveyor - Telescope

Gate Conveyor - Down/Up

Vertical Turn

Horizontal Turn

Shuttle Conveyor

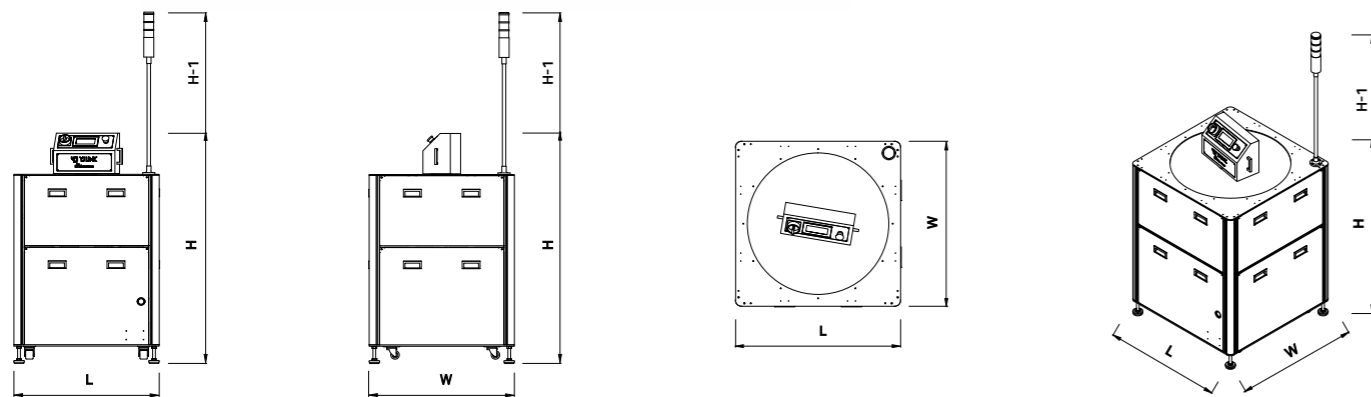
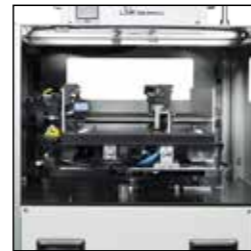
Elevator Unit - Sky Line

Elevator Unit - Pallet Return Line

# Horizontal Turn



This unit turns PCBs' flow direction clockwise and counter clockwise



| CODE No.       |                | MODEL     | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|----------------|-----------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS   |           |      | L              | W    | H    | H-1  |             |
| M-10C-YM4-0800 | M-50C-YM4-0800 | YHT-1M 00 | M    | 640            | 640  | 1100 | 2000 | 155         |
| M-10C-YX4-0800 | M-50C-YX4-0800 | YHT-1X 00 | XL   | 840            | 840  | 1100 | 2000 | 205         |
|                | M-50C-YU4-0800 | YHT-1U 00 | UX   | 1000           | 1000 | 1100 | 2000 | 255         |

| Standard Spec.                |   |                        |
|-------------------------------|---|------------------------|
| Item                          | Standard  |                        |
| Line Flow                     | Left to Right                                     | Right to Left          |
| Fixed Rail                    | Front   | Rear                   |
| Pass Line (mm)                | 950±20  | 900±20                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                      | M   | XL UX                  |
| Min.PCB (L X W) (mm)          | 70 X 50   |                        |
| Max.PCB (L X W) (mm)          | 330 X 250   | 460 X 460 610 X 610    |
| Item                          | SMT   | POST-PROCESS           |
| PCB Top/Bottom Clearance (mm) | 30 / 25   | 60 / 60                |
| PCB Edge (mm)                 | 3   | 5                      |
| PCB Loading Weight (kg)       | 3   | 8                      |
| Conveyor Belt                 | Flat edge belt                                    | Pin chain              |
| Conveyor Speed (mm/sec) *     | 200   | 100                    |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                        |
| PCB Color                     | Green   |                        |
| PCB In/Out Sensor             | Single sensor                                     |                        |
| Mode                          | By pass / Horizontal Turn                         |                        |
| Turning Direction             | Clockwise / Counter Clockwise                     |                        |
| Width Adjustment *            | Manual  |                        |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |
| Smema Cable                   | 3m / 1 ea   |                        |
| Alarm                         | Tower Lamp (3 Colors)                             |                        |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |
| Air Supply                    | 0.5Mpa(5bar)                                      |                        |
| Air Usage                     | 6.20 ℓ/min  |                        |
| Electricity Consumption       | 465W  |                        |

| Option Spec.              |                |                                   |
|---------------------------|----------------|-----------------------------------|
| Item                      | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104 | 1~200 / Analog / 1ea              |
|                           |                | 1~100 / Analog / 1ea              |
| Width Adjustment *        | O-100-HW0-0205 | Auto                              |
| Width Synchronization     | O-100-SW0-0200 | via RS-485                        |
| Line Control              | O-200-LC0-0100 | Hermes                            |
|                           | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Destacker - Knife

Destacker - Clamp

Destacker - Clamp(Batch)

Vacuum Loader - Edge

Stacker

PCB Cleaner - Vacuum

PCB Cleaner - Vacuum + Sticky roller

Gate Conveyor - Telescope

Gate Conveyor - Down/Up

Vertical Turn

Horizontal Turn

Shuttle Conveyor

Elevator Unit - Sky Line

Elevator Unit - Pallet Return Line

# Shuttle Conveyor



This unit can merge a few production lines into a single one or separate one a single line into few multiple ones.

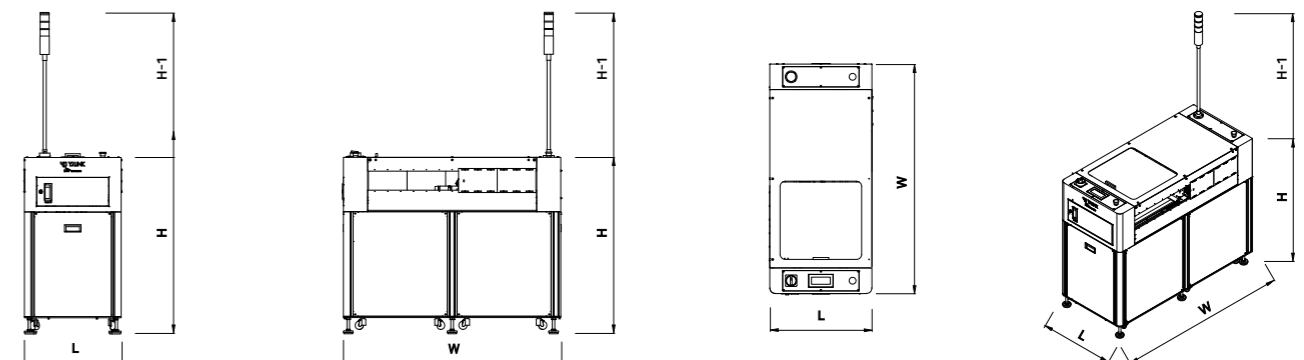


| CODE No.       |                | MODEL     | SIZE | DIMENSION (mm) |      |      |      |        | WEIGHT (Kg) |
|----------------|----------------|-----------|------|----------------|------|------|------|--------|-------------|
| SMT            | POST-PROCESS   |           |      | L              | W    | H    | H-1  | Stroke |             |
| M-10C-YM4-0901 | M-50C-YM4-0901 | YSC-1M 00 | M    | 500            | 1140 | 1086 | 2000 | 500    | 156         |
| M-10C-YX4-0901 | M-50C-YX4-0901 | YSC-1X 00 | XL   | 600            | 1350 | 1086 | 2000 | 500    | 205         |
|                | M-50C-YU4-0901 | YSC-1U 00 | UX   | 700            | 1500 | 1086 | 2000 | 500    | 255         |
| M-10C-YM4-0902 | M-50C-YM4-0902 | YSC-1M 01 | M    | 500            | 1640 | 1086 | 2000 | 1000   | 207         |
| M-10C-YX4-0902 | M-50C-YX4-0902 | YSC-1X 01 | XL   | 600            | 1850 | 1086 | 2000 | 1000   | 257         |
|                | M-50C-YU4-0902 | YSC-1U 01 | UX   | 700            | 2000 | 1086 | 2000 | 1000   | 307         |
| M-10C-YM4-0903 | M-50C-YM4-0903 | YSC-1M 02 | M    | 500            | 2140 | 1086 | 2000 | 1500   | 274         |
| M-10C-YX4-0903 | M-50C-YX4-0903 | YSC-1X 02 | XL   | 600            | 2500 | 1086 | 2000 | 1500   | 324         |
|                | M-50C-YU4-0903 | YSC-1U 02 | UX   | 700            | 2650 | 1086 | 2000 | 1500   | 374         |
| M-10C-YM4-0904 | M-50C-YM4-0904 | YSC-1M 03 | M    | 500            | 2640 | 1086 | 2000 | 2000   | 331         |
| M-10C-YX4-0904 | M-50C-YX4-0904 | YSC-1X 03 | XL   | 600            | 3000 | 1086 | 2000 | 2000   | 381         |
|                | M-50C-YU4-0904 | YSC-1U 03 | UX   | 700            | 3150 | 1086 | 2000 | 2000   | 431         |
| M-10C-YM4-0905 | M-50C-YM4-0905 | YSC-1M 04 | M    | 500            | 3140 | 1086 | 2000 | 2500   | 425         |
| M-10C-YX4-0905 | M-50C-YX4-0905 | YSC-1X 04 | XL   | 600            | 3500 | 1086 | 2000 | 2500   | 475         |
|                | M-50C-YU4-0905 | YSC-1U 04 | UX   | 700            | 3650 | 1086 | 2000 | 2500   | 525         |
| M-10C-YM4-0906 | M-50C-YM4-0906 | YSC-1M 05 | M    | 500            | 3640 | 1086 | 2000 | 3000   | 447         |
| M-10C-YX4-0906 | M-50C-YX4-0906 | YSC-1X 05 | XL   | 600            | 4000 | 1086 | 2000 | 3000   | 493         |
|                | M-50C-YU4-0906 | YSC-1U 05 | UX   | 700            | 4150 | 1086 | 2000 | 3000   | 539         |
| M-10C-YM4-0907 | M-50C-YM4-0907 | YSC-1M 06 | M    | 500            | 4140 | 1086 | 2000 | 3500   | 497         |
| M-10C-YX4-0907 | M-50C-YX4-0907 | YSC-1X 06 | XL   | 600            | 4500 | 1086 | 2000 | 3500   | 547         |
|                | M-50C-YU4-0907 | YSC-1U 06 | UX   | 700            | 4650 | 1086 | 2000 | 3500   | 597         |
| M-10C-YM4-0908 | M-50C-YM4-0908 | YSC-1M 07 | M    | 500            | 4640 | 1086 | 2000 | 4000   | 555         |
| M-10C-YX4-0908 | M-50C-YX4-0908 | YSC-1X 07 | XL   | 600            | 5000 | 1086 | 2000 | 4000   | 605         |
|                | M-50C-YU4-0908 | YSC-1U 07 | UX   | 700            | 5150 | 1086 | 2000 | 4000   | 655         |

| Standard Spec.                |   |                        |              |
|-------------------------------|---|------------------------|--------------|
| Item                          | Standard  |                        |              |
| Line Flow                     | Left to Right                                     | Right to Left          |              |
| Fixed Rail                    | Front   | Rear                   |              |
| Pass Line (mm)                | 950±20  | 900±20                 |              |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |              |
| PCB Size                      | M   | XL                     | UX           |
| Min.PCB (L X W) (mm)          | 70 X 50   |                        |              |
| Max.PCB (L X W) (mm)          | 330 X 250   | 460 X 460              | 610 X 610    |
| Item                          | SMT   | POST-PROCESS           |              |
| PCB Top/Bottom Clearance (mm) | 30 / 25   | 60 / 60                |              |
| PCB Edge (mm)                 | 3   | 5                      |              |
| PCB Loading Weight (kg)       | 3   | 8                      |              |
| Conveyor Belt                 | Flat edge belt                                    | Pin chain              |              |
| Conveyor Speed (mm/sec) *     | 200   | 100                    |              |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                        |              |
| PCB Color                     | Green   |                        |              |
| PCB In/Out Sensor             | Single sensor                                     |                        |              |
| Mode                          | 1 in / 1 out                                      | 1 in / 2 out           | 2 in / 1 out |
| Width Adjustment *            | Manual  |                        |              |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |              |
| Smema Cable                   | 3m / 1 ea   |                        |              |
| Alarm                         | Tower Lamp (3 Colors)                             |                        |              |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |              |
| Sliding Speed                 | Max. 500 mm/sec                                   |                        |              |
| Electricity Consumption       | 515W  |                        |              |

| Option Spec.              |                |                                   |
|---------------------------|----------------|-----------------------------------|
| Item                      | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104 | 1~200 / Analog / 1ea              |
|                           |                | 1~100 / Analog / 1ea              |
| Width Adjustment *        | O-100-HW0-0205 | Auto                              |
| Add Touch Screen          | O-100-HW4-0400 | Rear Side                         |
| Width Synchronization     | O-100-SW0-0200 | via RS-485                        |
| Line Control              | O-200-LC0-0100 | Hermes                            |
|                           | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).



Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Destacker - Knife

Destacker - Clamp

Destacker - Clamp(Batch)

Vacuum Loader - Edge

Stacker

PCB Cleaner - Vacuum

PCB Cleaner - Vacuum + Sticky roller

Gate Conveyor - Telescope

Gate Conveyor - Down/Up

Vertical Turn

Horizontal Turn

Shuttle Conveyor

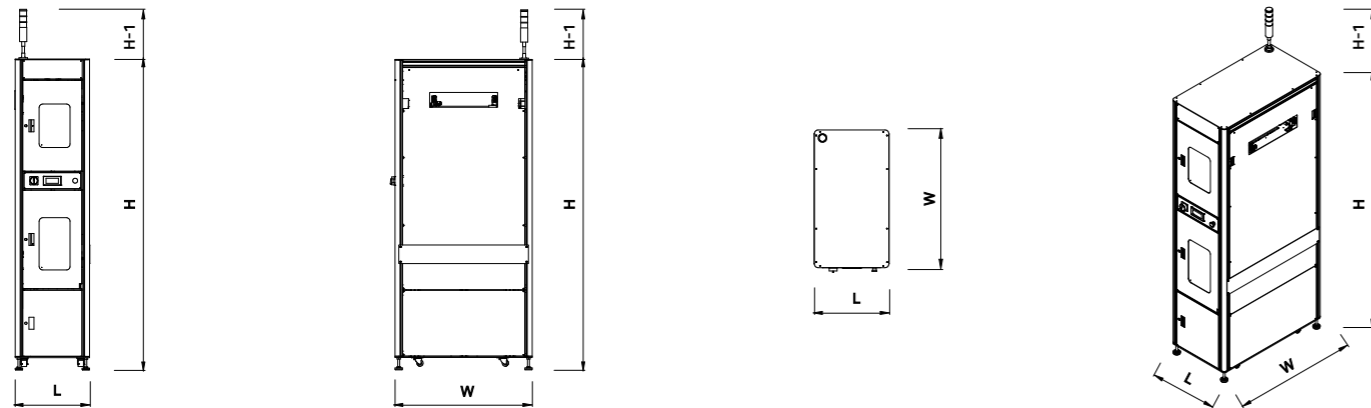
Elevator Unit - Sky Line

Elevator Unit - Pallet Return Line

# Elevator Unit - Sky Line



The sky line can be used for operators' passage in SMT lines.



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |     |       | H-1   | WEIGHT (kg) |
|----------------|--------------|-----------|------|----------------|-----|-------|-------|-------------|
| SMT            | POST-PROCESS |           |      | L              | W   | H     |       |             |
| M-10C-YM4-1001 |              | YEU-1M 00 | M    | 600            | 750 | ~2000 | ~2400 | 220         |
| M-10C-YX4-1001 |              | YEU-1X 00 | XL   | 800            | 950 | ~2000 | ~2400 | 240         |
| M-10C-YM4-1002 |              | YEU-1M 01 | M    | 600            | 750 | ~2500 | ~2900 | 250         |
| M-10C-YX4-1002 |              | YEU-1X 01 | XL   | 800            | 950 | ~2500 | ~2900 | 270         |

| Standard Spec.                |   |                        |
|-------------------------------|---|------------------------|
| Item                          | Standard  |                        |
| Line Flow                     | Left to Right                                     | Right to Left          |
| Fixed Rail                    | Front   | Rear                   |
| Pass Line (mm)                | 950±20  | 900±20                 |
| Voltage & Frequency           | 220V±(10%) & 50 ~ 60Hz                            | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                      | M   | XL                     |
| Min.PCB (L X W) (mm)          | 70 X 50   |                        |
| Max.PCB (L X W) (mm)          | 330 X 250   | 460 X 460              |
| Item                          | SMT   |                        |
| PCB Top/Bottom Clearance (mm) | 30 / 25   |                        |
| PCB Edge (mm)                 | 3   |                        |
| PCB Loading Weight (kg)       | 3   |                        |
| Conveyor Belt                 | Flat edge belt                                    |                        |
| Conveyor Speed (mm/sec) *     | 200   |                        |
| PCB Thickness (mm)            | 0.6 ~ 4.0   |                        |
| PCB Color                     | Green   |                        |
| PCB In/Out Sensor             | Single sensor                                     |                        |
| Width Adjustment *            | Manual  |                        |
| Interface                     | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |                        |
| Smema Cable                   | 3m / 1 ea   |                        |
| Alarm                         | Tower Lamp (3 Colors)                             |                        |
| Color *                       | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |                        |
| Electricity Consumption       | 300W  |                        |

| Option Spec.              |                |                                   |
|---------------------------|----------------|-----------------------------------|
| Item                      | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104 | 1~200 / Analog / 1ea              |
| Width Adjustment *        | O-100-HW0-0205 | Auto                              |
| High Speed Lifter         | O-100-HW4-0200 | Servo Motor Driven                |
| Width Synchronization     | O-100-SW0-0200 | via RS-485                        |
| Line Control              | O-200-LC0-0100 | Hermes                            |
|                           | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Destacker - Knife

Destacker - Clamp

Destacker - Clamp(Batch)

Vacuum Loader - Edge

Stacker

PCB Cleaner - Vacuum

PCB Cleaner - Vacuum + Sticky roller

Gate Conveyor - Telescope

Gate Conveyor - Down/Up

Vertical Turn

Horizontal Turn

Shuttle Conveyor

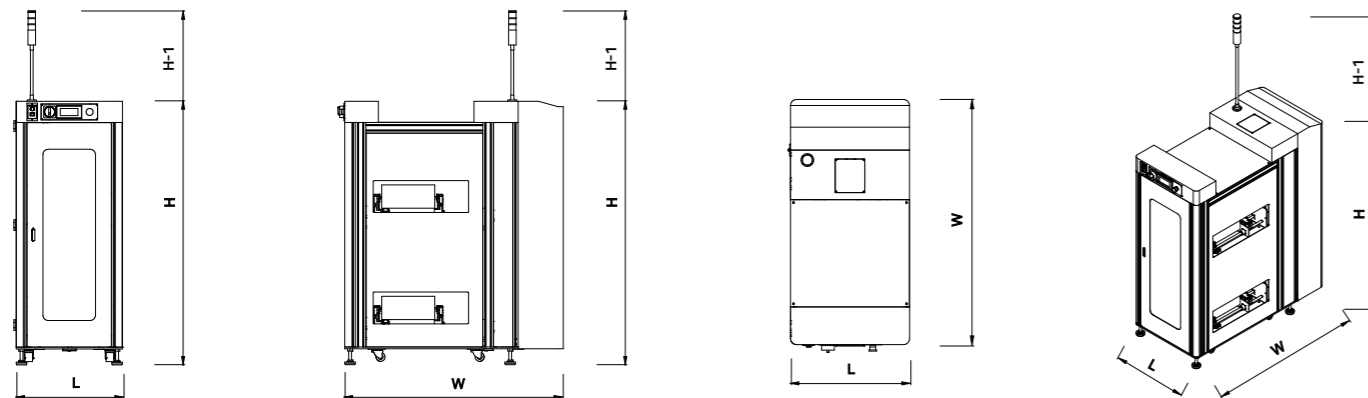
Elevator Unit - Sky Line

Elevator Unit - Pallet Return Line

# Elevator Unit - Pallet Return Line



The pallet return line provides automated return of empty pallets. It is completely automated with PLC control and can convey pallets efficiently and fast.



| CODE No. |                | MODEL     | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (kg) |
|----------|----------------|-----------|------|----------------|------|------|------|-------------|
| SMT      | POST-PROCESS   |           |      | L              | W    | H    | H-1  |             |
|          | M-50C-YM4-1100 | YEU-1M 10 | M    | 600            | 750  | 1300 | 2000 | 140         |
|          | M-50C-YX4-1100 | YEU-1X 10 | XL   | 800            | 950  | 1300 | 2000 | 160         |
|          | M-50C-YU4-1100 | YEU-1U 10 | UX   | 1000           | 1100 | 1300 | 2000 | 200         |

| Standard Spec.             |   |               |                        |
|----------------------------|---|---------------|------------------------|
| Item                       | Standard  |               |                        |
| Line Flow                  | Left to Right                                     | Right to Left |                        |
| Fixed Rail                 | Front   |               | Rear                   |
| Voltage & Frequency        | 220V±(10%) & 50 ~ 60Hz                            |               | 110V±(10%) & 50 ~ 60Hz |
| PCB Size                   | M   | XL            | UX                     |
| Min.PCB (L X W) (mm)       | 70 X 50   |               |                        |
| Max.PCB (L X W) (mm)       | 330 X 250   | 460 X 460     | 610 X 610              |
| Item                       | POST-PROCESS                                      |               |                        |
| PCB Top / Bottom Clearance | 60 / 60   |               |                        |
| PCB Edge (mm)              | 5   |               |                        |
| PCB Loading Weight (kg)    | 8   |               |                        |
| Conveyor Belt              | Pin Chain   |               |                        |
| Conveyor Speed (mm/sec) *  | 100   |               |                        |
| PCB Thickness (mm)         | 0.6 ~ 4.0   |               |                        |
| PCB Color                  | Green   |               |                        |
| PCB In/Out Sensor          | Single sensor                                     |               |                        |
| Width Adjustment *         | Manual  |               |                        |
| Interface                  | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |               |                        |
| Smema Cable                | 3m / 1 ea   |               |                        |
| Alarm                      | Tower Lamp (3 Colors)                             |               |                        |
| Color *                    | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |               |                        |
| Electricity Consumption    | 200W  |               |                        |

| Option Spec.              |                |                                   |
|---------------------------|----------------|-----------------------------------|
| Item                      | CODE No.       | Option                            |
| Conveyor Speed (mm/sec) * | O-100-HW0-0104 | 1~100 / Analog / 1ea              |
| Width Adjustment *        | O-100-HW0-0205 | Auto                              |
| Width Synchronization     | O-100-SW0-0200 | via RS-485                        |
| Line Control              | O-200-LC0-0100 | Hermes                            |
|                           | O-200-LC0-0200 | Smart kit (LAN communication PLC) |
| Color *                   | O-400-CO0-0100 | ESD powder coating(RAL 7035)      |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

Destacker - Knife

Destacker - Clamp

Destacker - Clamp(Batch)

Vacuum Loader - Edge

Stacker

PCB Cleaner - Vacuum

PCB Cleaner - Vacuum + Sticky roller

Gate Conveyor - Telescope

Gate Conveyor - Down/Up

Vertical Turn

Horizontal Turn

Shuttle Conveyor

Elevator Unit - Sky Line

Elevator Unit - Pallet Return Line

TRACEABILITY

# PC CONTROLLED SERIES

[ M-30C-Y( )5 SERIES ]

|                                     |       |        |
|-------------------------------------|-------|--------|
| NOVLUX Laser Marking Machine - CO2  | ..... | P. 98  |
| NOVLUX Laser Marking Machine - YVO4 | ..... | P. 100 |
| VISPLO Optical Verification Buffer  | ..... | P. 102 |
| ARMAS Router- Bronze                | ..... | P. 104 |
| ARMAS Router - Silver               | ..... | P. 106 |
| ARMAS Router - Gold                 | ..... | P. 108 |
| Barcode Scanning Conveyor           | ..... | P. 110 |



➤ NOVLUX Laser Marking Machine(CO2 / YVO4) P. 98



➤ VISPLO Optical Verification Buffer P. 102



➤ ARMAS Router (Bronze / Silver / Gold) P. 104

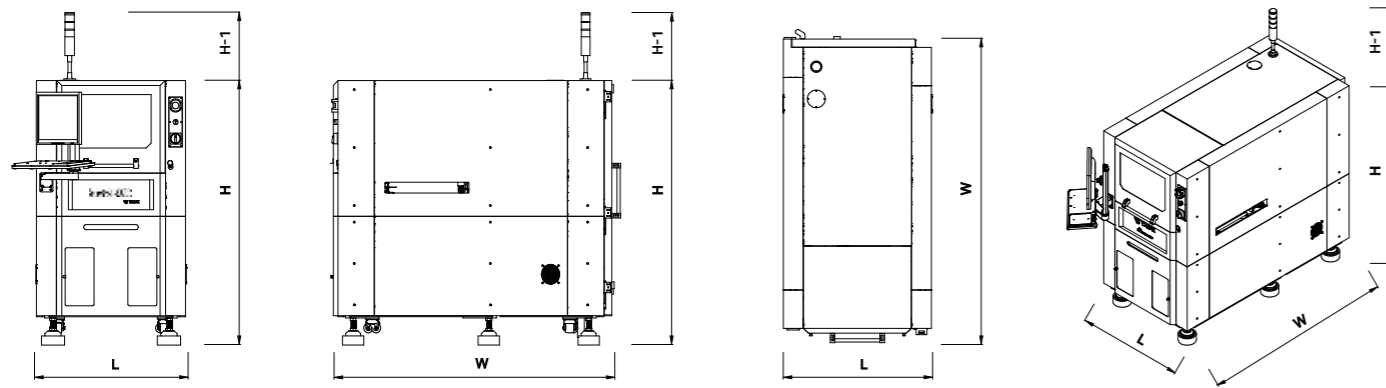
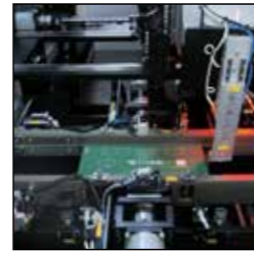


➤ Barcode Scanning Conveyor P. 110

# NOVLUX Laser Marking Machine - CO2



Laser Marking Machine engraves 1D/2D barcodes, logos, and characters on the surface of a PCB or an object without physical or chemical damage. The laser head performs its marking by adjusting its own height in the Z axis according to the height of the object.



| CODE No.       |              | MODEL     | TYPE | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS |           |      |      | L              | W    | H    | H-1  |             |
| M-30C-YX5-4003 |              | YLM-1X 00 | CO2  | XL   | 900            | 1927 | 1600 | 2000 | 580         |
| M-30C-Y25-4003 |              | YLM-12 00 | CO2  | 2XL  | 1050           | 1927 | 1600 | 2000 | 640         |

| Standard Spec.                         |  |               |
|--|--|---------------|
| Item                                   | Standard   |               |
| Line Flow                              | Left to Right  | Right to Left |
| Fixed Rail                             | Front  | Rear          |
| Pass Line (mm)                         | 950±20   | 900±20        |
| Voltage & Frequency                    | 220V±(10%) & 50 ~ 60Hz   |               |
| PCB Size                               | XL   | 2XL           |
| Min.PCB (L X W) (mm)                   | 70 X 50  |               |
| Max.PCB (L X W) (mm)                   | 460 X 460  | 610 X 460     |
| Item                                   | SMT  |               |
| PCB Top / Bottom Clearance             | 30 / 30  |               |
| PCB Edge (mm)                          | 3  |               |
| PCB Loading Weight (kg)                | 3  |               |
| Conveyor Belt                          | Flat edge belt   |               |
| Conveyor Speed (mm/sec)                | 500  |               |
| PCB Thickness (mm)                     | 0.6 ~ 4.0  |               |
| PCB Color                              | Green  |               |
| PCB In/Out Sensor                      | Single sensor  |               |
| Laser Head                             | KEYENCE 30W  |               |
| Moving System                          | X, Y-axes Head Moving  |               |
| Marking                                | Double Sided Marking   |               |
| Scanner                                | Cognex DM60X   |               |
| Fume Collector                         | DOMINO / External type   |               |
| Program                                | DOT NET  |               |
| Position Correction                    | Fiducial Recognition   |               |
| Width Adjustment                       | Auto   |               |
| Interface                              | SMEMA Pin No. 1, 2, 3, 4, 5, 6   |               |
| Smema Cable                            | 3m / 1ea   |               |
| Alarm                                  | Tower Lamp (3 Colors)  |               |
| Color *                                | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) + EX8816(S)-SR-N.4.0 |               |
| Air Supply                             | 0.5Mpa (5bar)  |               |
| Air Usage                              | 30 l/min   |               |
| Laser Electricity Consumption (kw)     | 1.5  |               |
| Extractor Electricity Consumption (kw) | 1.1  |               |

| Option Spec.              |                |                                      |
|---------------------------|----------------|--------------------------------------|
| Item                      | CODE No.       | Option                               |
| Ionizer                   | O-100-HW5-0101 | PANASONIC                            |
| Marking Grade             | O-100-HW5-0200 | -                                    |
| Marking Power Detector    | O-100-HW5-0300 | -                                    |
| Multi LED                 | O-100-HW5-0400 | -                                    |
| HASL Fiducial Recognition | O-100-HW5-2200 | Added camera                         |
| Width Synchronization     | O-100-SW0-0200 | via RS-232                           |
| Color *                   | O-400-CO0-0100 | ESD powder coating (RAL 7035 / Gray) |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

NOVLUX Laser Marking Machine - CO2

NOVLUX Laser Marking Machine - YVO4

VISPLO Optical Verification Buffer

ARMAS Router - Bronze

ARMAS Router - Silver

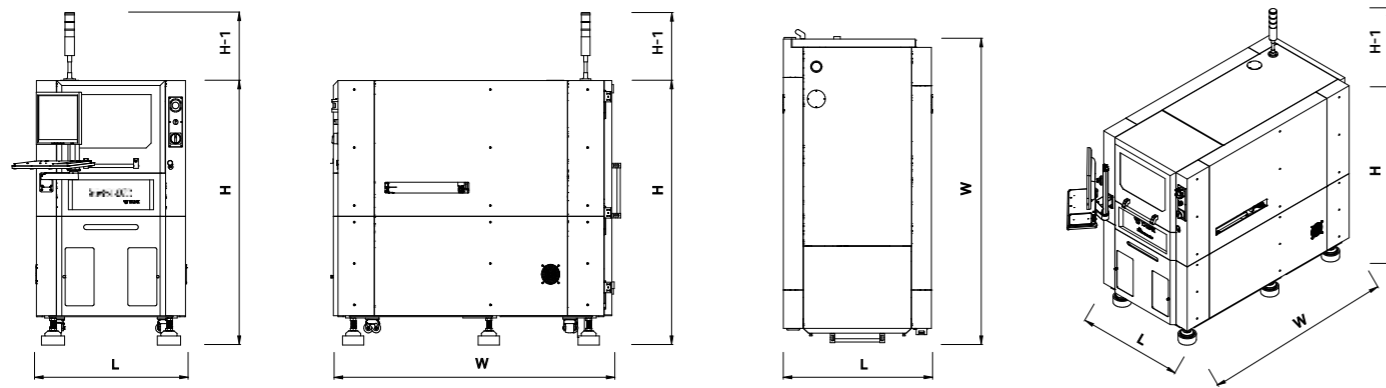
ARMAS Router - Gold

Barcode Scanning Conveyor

# NOVLUX Laser Marking Machine - YV04



Laser Marking Machine engraves 1D/2D barcodes, logos, and characters on the surface of a PCB or an object without physical or chemical damage. The laser head performs it's marking by adjusting its own height in the Z axis according to the height of the object.



| CODE No.       |              | MODEL     | TYPE | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS |           |      |      | L              | W    | H    | H-1  |             |
| M-30C-YX5-4004 |              | YLM-1X 10 | YV04 | XL   | 1050           | 1977 | 1600 | 2000 | 700         |
| M-30C-Y25-4004 |              | YLM-12 10 | YV04 | 2XL  | 1400           | 1977 | 1600 | 2000 | 850         |

| Standard Spec.                         |  |               |
|--|--|---------------|
| Item                                   | Standard   |               |
| Line Flow                              | Left to Right  | Right to Left |
| Fixed Rail                             | Front  | Rear          |
| Pass Line (mm)                         | 950±20   | 900±20        |
| Voltage & Frequency                    | 220V±(10%) & 50 ~ 60Hz   |               |
| PCB Size                               | XL   | 2XL           |
| Min.PCB (L X W) (mm)                   | 70 X 50  |               |
| Max.PCB (L X W) (mm)                   | 460 X 460  | 610 X 460     |
| Item                                   | SMT  |               |
| PCB Top / Bottom Clearance             | 30 / 30  |               |
| PCB Edge (mm)                          | 3  |               |
| PCB Loading Weight (kg)                | 3  |               |
| Conveyor Belt                          | Flat edge belt   |               |
| Conveyor Speed (mm/sec)                | 500  |               |
| PCB Thickness (mm)                     | 0.6 ~ 4.0  |               |
| PCB Color                              | Green  |               |
| PCB In/Out Sensor                      | Single sensor  |               |
| Laser Head                             | KEYENCE  |               |
| Moving System                          | X, Y-axes Stage Moving   |               |
| Marking                                | Double Sided Marking   |               |
| Scanner                                | Cognex DM60X   |               |
| Fume Collector                         | DOMINO / External type   |               |
| Program                                | DOT NET  |               |
| Position Correction                    | Fiducial Recognition   |               |
| Width Adjustment                       | Auto   |               |
| Interface                              | SMEMA Pin No. 1, 2, 3, 4, 5, 6   |               |
| Smema Cable                            | 3m / 1ea   |               |
| Alarm                                  | Tower Lamp (3 Colors)  |               |
| Color *                                | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) + EX8816(S)-SR-N.4.0 |               |
| Air Supply                             | 0.5Mpa (5bar)  |               |
| Air Usage                              | 30 l/min   |               |
| Laser Electricity Consumption (kw)     | 1.5  |               |
| Extractor Electricity Consumption (kw) | 1.1  |               |

| Option Spec.              |                |                                      |
|---------------------------|----------------|--------------------------------------|
| Item                      | CODE No.       | Option                               |
| Ionizer                   | O-100-HW5-0101 | PANASONIC                            |
| Marking Grade             | O-100-HW5-0200 | -                                    |
| Marking Power Detector    | O-100-HW5-0300 | -                                    |
| Multi LED                 | O-100-HW5-0400 | -                                    |
| HASL Fiducial Recognition | O-100-HW5-2200 | Added camera                         |
| Width Synchronization     | O-100-SW0-0200 | via RS-232                           |
| Color *                   | O-400-CO0-0100 | ESD powder coating (RAL 7035 / Gray) |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

NOVLUX Laser Marking Machine - CO2

NOVLUX Laser Marking Machine - YV04

VISPLO Optical Verification Buffer

ARMAS Router - Bronze

ARMAS Router - Silver

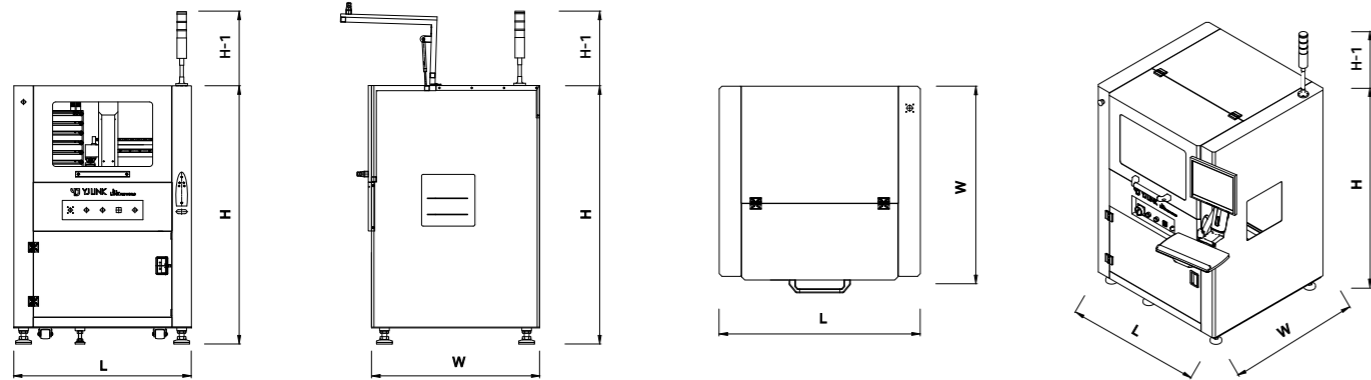
ARMAS Router - Gold

Barcode Scanning Conveyor

# VISPLO Optical Verification Buffer



Optical Verification Buffer is a machine located downstream of AOI that receives NG information from AOI, with a camera moving to the respective location on the PCB, and sends the actual image to the screen, allowing the operator to determine whether it is NG/OK and accurately detect false defects.



| CODE No.       |              | MODEL     | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS |           |      | L              | W    | H    | H-1  |             |
| M-30C-YM5-7000 |              | YCI-1M 10 | M    | 1100           | 1060 | 1600 | 2060 | 700         |
| M-30C-YX5-7000 |              | YCI-1X 10 | XL   | 1340           | 1250 | 1650 | 2110 | 800         |

| Standard Spec.                         |   |   |
|--|---|---|
| Item                                   | Standard  |   |
| Line Flow                              | Left to Right                                     | Right to Left   |
| Fixed Rail                             | Front   | Rear  |
| Pass Line (mm)                         | 950±20  | 900±20  |
| Voltage & Frequency                    | 220V±(10%) & 50 ~ 60Hz                            |   |
| PCB Size                               | M   | XL  |
| Min.PCB (L X W) (mm)                   | 70 X 70   |   |
| Max.PCB (L X W) (mm)                   | 330 X 250   | 460 X 460   |
| Item                                   | SMT   |   |
| PCB Top/Bottom Clearance (mm)          | 30 / 30   |   |
| PCB Edge (mm)                          | 3   |   |
| Conveyor Belt                          | Flat edge belt                                    |   |
| Conveyor Speed (mm/sec) *              | 200   |   |
| PCB Thickness (mm)                     | 0.3 ~ 4.0   |   |
| Slot (ea)                              | 10 (60mm/pitch)                                   |   |
| Camera Location Accuracy (mm)          | -0.05 ~ 0.05                                      |   |
| Camera X/Y-axis Speed(mm/sec)          | Max 500   |   |
| Interface                              | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |   |
| Smema Cable                            | 3m / 1ea  |   |
| Alarm                                  | Tower Lamp (3 Colors)                             |   |
| Color *                                | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |   |
| Air Supply                             | 0.5Mpa (5bar)                                     |   |
| Air Usage                              | 60 l/min  |   |
| Extractor Electricity Consumption (kw) | 2.0   |   |
| Camera Module                          | Specification : 5m pixel                          | Resolution : 2.2um                                    |
|  | Zoom : 80~120 fix                                 | Rotation : 360 degree full                            |
| Main PC Controlled                     | OS : window 10                                    | CPU : Intel 6th Gen Quad Core i5-6500/7500 3.2GHz/6MB |
|  | Memory : Samsung DDR4 32GB                        | Storage-Rack : ISGAN-F110-32P                         |
|  | HDD : 1TB   | PCI : Ajinextek Motion board N-804                    |
|  | PCI-e SLOT : GTX-1050 DDR5-2GB                    | PCI : Ajinextek I/O Carrier board BPHD                |
|  | Monitor : 24 inch LED                             |   |

| Option Spec.  |                |                                      |
|---|----------------|--------------------------------------|
| Item  | CODE No.       | Option                               |
| Conveyor Speed (mm/sec) *   | O-100-HW0-0104 | 1~200 / Analog / 4ea                 |
| Width Synchronization   | O-100-SW0-0200 | via RS-232                           |
| Color *   | O-400-CO0-0100 | ESD powder coating (RAL 7035 / Gray) |
| Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.). |                |                                      |

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

NOVLUX Laser Marking Machine - CO2

NOVLUX Laser Marking Machine - YVO4

VISPLO Optical Verification Buffer

ARMAS Router - Bronze

ARMAS Router - Silver

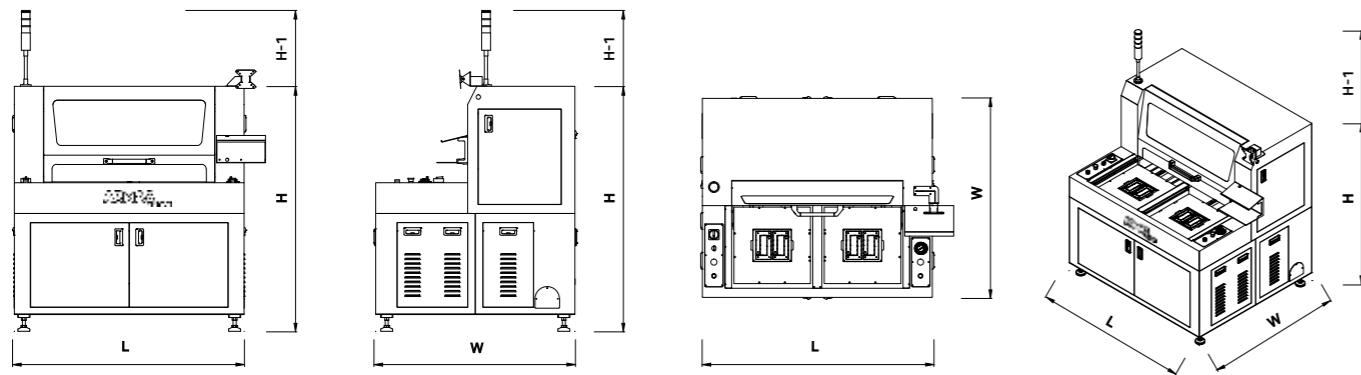
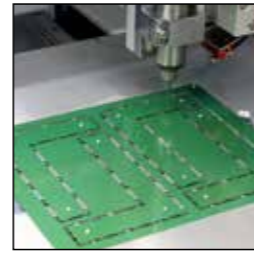
ARMAS Router - Gold

Barcode Scanning Conveyor

# ARMAS Router - Bronze



A machine for depaneling PCBs, the ARMAS Router rotates the drill bit at a high speed routing through the contour of the PCB freely.



| CODE No.       |              | MODEL     | TYPE   | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|--------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS |           |        |      | L              | W    | H    | H-1  |             |
| M-30C-YX5-8001 |              | YRM-1X 00 | Bronze | XL   | 1500           | 1300 | 1600 | 2000 | 860         |

| Standard Spec.               |                                       | Standard   |  |
|------------------------------|---------------------------------------|--|--|
| Item                         | Standard                              |  |  |
| Pass Line (mm)               | 950±20                                | 900±20   |  |
| Voltage & Frequency          | 220V±(10%) & 50 ~ 60Hz                |  |  |
| Size                         | XL                                    |  |  |
| JIG (L X W) (mm)             | 500 X 500                             |  |  |
| Max. PCB (L X W) (mm)        | 460 X 460                             |  |  |
| Item                         | SMT                                   |  |  |
| PCB Top / Bottom Clearance   | 35 / 35                               |  |  |
| PCB Thickness (mm)           | 0.6 ~ 4.0                             |  |  |
| Spindle Motor *              | Nakanishi EM30-S6000                  |  |  |
| Spindle (ea)                 | 1                                     |  |  |
| JIG table (ea)               | 2                                     |  |  |
| Bit                          | Multi stage control, Damage detection |  |  |
| Gantry                       | Servo Motors                          | X, Y, Z pitch axes   |  |
|                              | Repeatability                         | ±0.03mm  |  |
|                              | Configuration                         | X1, Y1, Y2, Z1<br>(X : X-axis Spindle / Y : Y-axis JIG / Z : Z-axis Spindle) |  |
| Controller                   | PC based                              |  |  |
| Safety Sensor                | Light Curtain                         |  |  |
| Ionizer                      | IZN10E-1106                           |  |  |
| Vision camera                | MV-CE013-50GM                         |  |  |
| Dust Collector *             | Drawer type (MS-200)                  |  |  |
| Auxiliary Power              | UPS (Uninterruptible power supply)    |  |  |
| Alarm                        | Tower Lamp (3 Colors)                 |  |  |
| Color                        | SR RAL 7035 + Doosan Dark Gray        |  |  |
| Air Supply                   | 0.5 Mpa                               |  |  |
| Air Usage                    | 150 ℓ/min                             |  |  |
| Electricity Consumption (kw) | 4                                     |  |  |

| Option Spec.              |                |                                      |
|---------------------------|----------------|--------------------------------------|
| Item                      | CODE No.       | Option                               |
| Spindle Motor *           | O-100-HW5-1600 | SycoTec 4025                         |
| Barcode Reading           | O-100-HW5-1700 | -                                    |
| Fiducial Recognition      | O-110-HW5-1800 | -                                    |
| Interlock with Robot-Arm  | O-120-HW5-1901 | I/O                                  |
|                           | O-120-HW5-1902 | RS-232                               |
|                           | O-120-HW5-1903 | Ethernet                             |
| Spindle Monitoring System | O-130-HW5-2000 | -                                    |
| Additional JIG            | O-140-HW5-2100 | 2pcs=1set                            |
| Dust Collector *          | O-190-HW5-2601 | Dust bag type (ECM-2PB)              |
| Color                     | O-400-CO0-0100 | ESD powder coating (RAL 7035 / Gray) |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

NOVLUX Laser Marking Machine - CO2

NOVLUX Laser Marking Machine - YVO4

VISPLO Optical Verification Buffer

ARMAS Router - Bronze

ARMAS Router - Silver

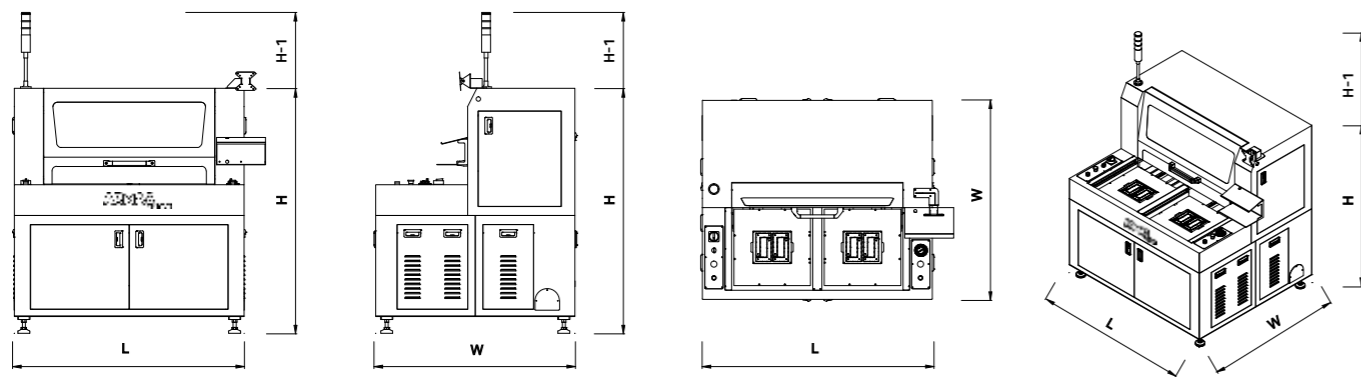
ARMAS Router - Gold

Barcode Scanning Conveyor

# ARMAS Router - Silver



A machine for depaneling PCBs, the ARMAS Router rotates the drill bit at a high speed routing through the contour of the PCB freely.



| CODE No.       |              | MODEL     | TYPE   | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|--------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS |           |        |      | L              | W    | H    | H-1  |             |
| M-30C-YX5-8002 |              | YRM-1X 10 | Silver | XL   | 1700           | 1300 | 1600 | 2000 | 930         |

| Standard Spec.               |               | Standard   |        |
|------------------------------|---------------|--|--------|
| Pass Line (mm)               |               | 950±20   | 900±20 |
| Voltage & Frequency          |               | 220V±(10%) & 50 ~ 60Hz   |        |
| Size                         |               | XL   |        |
| JIG (L X W) (mm)             |               | 500 X 500  |        |
| Max. PCB (L X W) (mm)        |               | 460 X 460  |        |
| Item                         |               | SMT  |        |
| PCB Top / Bottom Clearance   |               | 35 / 35  |        |
| PCB Thickness (mm)           |               | 0.6 ~ 4.0  |        |
| Spindle Motor                |               | SycoTec 4025   |        |
| Spindle (ea)                 |               | 2  |        |
| JIG table (ea)               |               | 2  |        |
| Bit                          |               | Multi stage control, Damage detection  |        |
| Gantry                       | Servo Motors  | X, Y, Z pitch axes   |        |
|                              | Repeatability | ±0.03mm  |        |
|                              | Configuration | X1, X2, Y1, Y2, Z1<br>(X : X-axis Spindle / Y : Y-axis JIG / Z : Z-axis Spindle) |        |
| Controller                   |               | PC based   |        |
| Safety Sensor                |               | Light Curtain  |        |
| Ionizer                      |               | IZN10E-1106  |        |
| Vision camera                |               | MV-CE013-50GM  |        |
| Dust Collector *             |               | Drawer type (MS-200)   |        |
| Auxiliary Power              |               | UPS (Uninterruptible power supply)   |        |
| Alarm                        |               | Tower Lamp (3 Colors)  |        |
| Color                        |               | SR RAL 7035 + Doosan Dark Gray   |        |
| Air Supply                   |               | 0.5 Mpa  |        |
| Air Usage                    |               | 150 ℓ/min  |        |
| Electricity Consumption (kw) |               | 5  |        |

| Option Spec.              |                |                                     |
|---------------------------|----------------|-------------------------------------|
| Item                      | CODE No.       | Option                              |
| Barcode Reading           | O-100-HW5-1700 | -                                   |
| Fiducial Recognition      | O-110-HW5-1800 | -                                   |
| Interlock with Robot-Arm  | O-120-HW5-1901 | I/O                                 |
|                           | O-120-HW5-1902 | RS-232                              |
|                           | O-120-HW5-1903 | Ethernet                            |
| Spindle Monitoring System | O-130-HW5-2000 | -                                   |
| Additional JIG            | O-140-HW5-2100 | 2pcs=1set                           |
| Dust Collector *          | O-190-HW5-2601 | Dust bag type (ECM-2PB)             |
| Color                     | O-400-CO0-0100 | ESD powder coating (RAL 7035/ Gray) |

Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.).

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

NOVLUX Laser Marking Machine - CO2

NOVLUX Laser Marking Machine - YVO4

VISPLO Optical Verification Buffer

ARMAS Router - Bronze

ARMAS Router - Silver

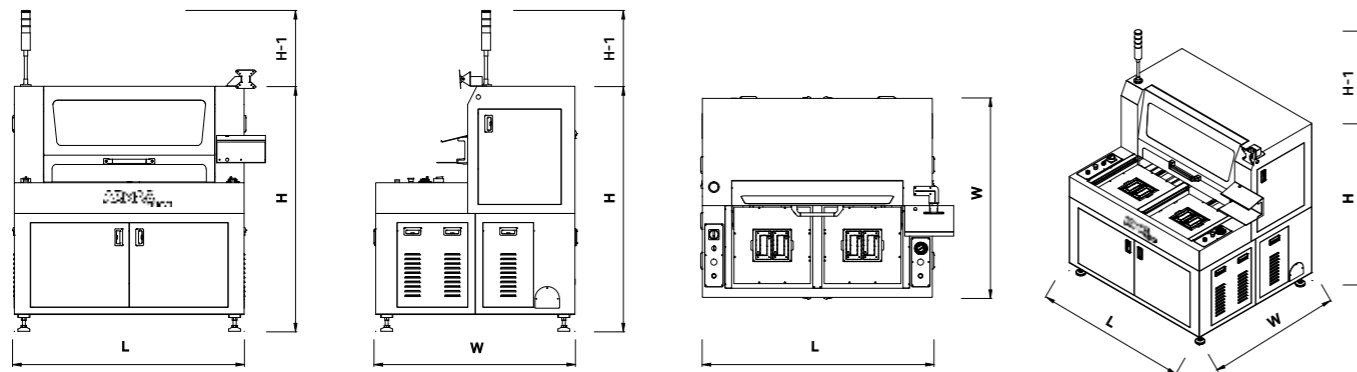
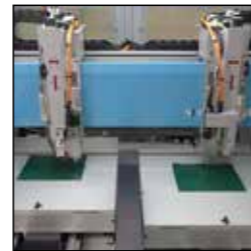
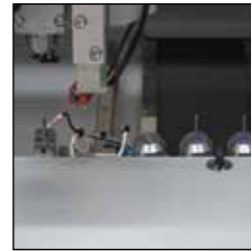
ARMAS Router - Gold

Barcode Scanning Conveyor

# ARMAS Router - Gold



A machine for depaneling PCBs, the ARMAS Router rotates the drill bit at a high speed routing through the contour of the PCB freely.



| CODE No.       |              | MODEL     | TYPE | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS |           |      |      | L              | W    | H    | H-1  |             |
| M-30C-YX5-8003 |              | YRM-1X 20 | Gold | XL   | 1500           | 1340 | 1600 | 2000 | 980         |

| Standard Spec.               |  | Standard   |  |
|------------------------------|--|--|--|
| Item                         |  |  |  |
| Pass Line (mm)               | 950±20   | 900±20   |  |
| Voltage & Frequency          | 220V±(10%) & 50 ~ 60Hz   |  |  |
| Size                         | XL   |  |  |
| JIG (L X W) (mm)             | 500 X 500  |  |  |
| Max. PCB (L X W) (mm)        | 460 X 460  |  |  |
| Item                         | SMT  |  |  |
| PCB Top / Bottom Clearance   | 35 / 35  |  |  |
| PCB Thickness (mm)           | 0.6 ~ 4.0  |  |  |
| Spindle Motor                | Sycotec 4033AC<br>(Automatic Bit replacement type, bit station included) |  |  |
| Spindle (ea)                 | 2  |  |  |
| JIG table (ea)               | 2  |  |  |
| Bit                          | Multi stage control, Damage detection                                    |  |  |
| X-axis, Z-axis control       | Independent spindle control  |  |  |
| Gantry                       | Servo Motors   | X, Y, Z pitch axes   |  |
|                              | Repeatability  | ±0.03mm  |  |
|                              | Configuration  | X1, X2, Y1, Y2, Z1, Z2<br>(X : X-axis Spindle / Y : Y-axis JIG / Z : Z-axis Spindle) |  |
| Controller                   | PC based   |  |  |
| Safety Sensor                | Light curtain  |  |  |
| Ionizer                      | IZN10E-1106  |  |  |
| Vision camera                | MV-CE013-50GM  |  |  |
| Dust Collector               | Dust bag type (ECM-5PB)  |  |  |
| Auxiliary Power              | UPS (Uninterruptible power supply)                                       |  |  |
| Alarm                        | Tower Lamp (3 Colors)  |  |  |
| Color                        | SR RAL 7035 + Doosan Dark Gray   |  |  |
| Air Supply                   | 0.5 Mpa  |  |  |
| Air Usage                    | 150 l/min  |  |  |
| Electricity Consumption (kw) | 6  |  |  |

| Option Spec.  |                |                                      |
|---|----------------|--------------------------------------|
| Item  | CODE No.       | Option                               |
| Barcode Reading   | O-100-HW5-1700 | -                                    |
| Fiducial Check  | O-110-HW5-1800 | -                                    |
| Interlock with Robot-Arm  | O-120-HW5-1901 | I/O                                  |
|   | O-120-HW5-1902 | RS-232                               |
|   | O-120-HW5-1903 | Ethernet                             |
| Spindle Monitoring System   | O-130-HW5-2000 | -                                    |
| Additional JIG  | O-140-HW5-2100 | 2pcs=1set                            |
| Color   | O-400-CO0-0100 | ESD powder coating (RAL 7035 / Gray) |
| Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.). |                |                                      |

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

NOVLUX Laser Marking Machine - CO2

NOVLUX Laser Marking Machine - YVO4

VISPLO Optical Verification Buffer

ARMAS Router - Bronze

ARMAS Router - Silver

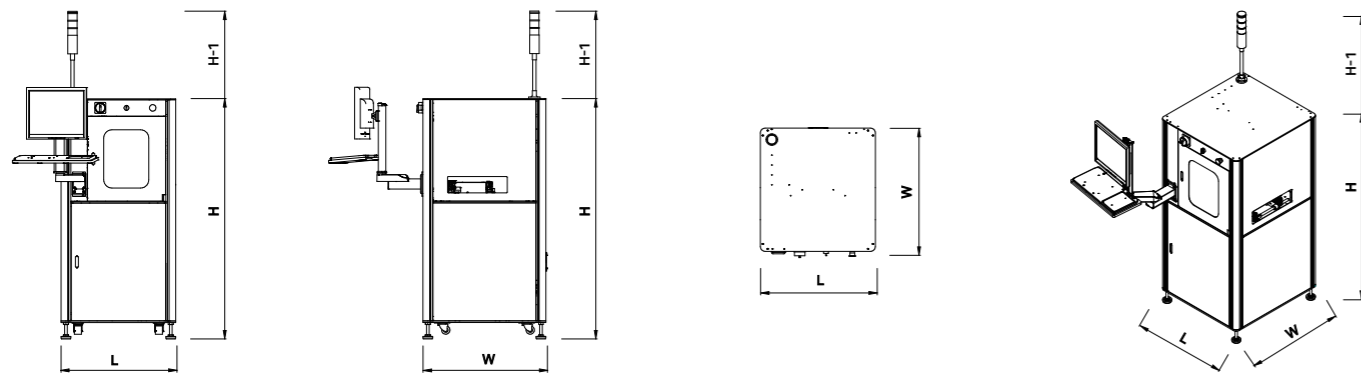
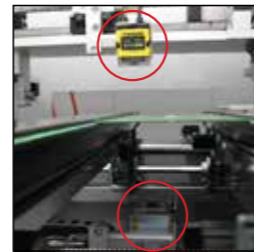
ARMAS Router - Gold

Barcode Scanning Conveyor

# Barcode Scanning Conveyor



Positioned at the rear end of the laser or the labeller, the Scanning Conveyor is designed to scan barcodes(1D/2D).



| CODE No.       |              | MODEL     | TYPE        | SIZE | DIMENSION (mm) |      |      |      | WEIGHT (Kg) |
|----------------|--------------|-----------|-------------|------|----------------|------|------|------|-------------|
| SMT            | POST-PROCESS |           |             |      | L              | W    | H    | H-1  |             |
| M-30C-YX5-9001 |              | YBS-1X 00 | Single side | XL   | 1000           | 1000 | 1665 | 2000 | 400         |
| M-30C-YX5-9002 |              | YBS-1X 01 | Both side   | XL   | 1000           | 1000 | 1665 | 2000 | 450         |

| Standard Spec.               |   |               |           |
|------------------------------|---|---------------|-----------|
| Item                         | Standard  |               |           |
| Line Flow                    | Left to Right                                     | Right to Left |           |
| Fixed Rail                   | Front   | Rear          |           |
| Pass Line (mm)               | 950±20  | 900±20        |           |
| Voltage & Frequency          | 220V±(10%) & 50 ~ 60Hz                            |               |           |
| PCB Size                     | XL  |               |           |
| Min.PCB (L X W) (mm)         | 70 X 50   |               |           |
| Max.PCB (L X W) (mm)         | 460 X 460   |               |           |
| Item                         | SMT   |               |           |
| PCB Top / Bottom Clearance   | 30 / 25   |               |           |
| PCB Edge (mm)                | 3   |               |           |
| PCB Loading Weight (kg)      | 3   |               |           |
| Conveyor Belt                | Flat edge belt                                    |               |           |
| Conveyor Speed (mm/sec) *    | 200   |               |           |
| PCB Thickness (mm)           | 0.6 ~ 4.0   |               |           |
| PCB Color                    | Green   |               |           |
| PCB In/Out Sensor            | Single sensor                                     |               |           |
| Scanner                      | Cognex DM60X                                      |               |           |
| Scanner Auto Position        | Top   | Bottom        | Both side |
| Width Adjustment             | Auto  |               |           |
| Interface                    | SMEMA Pin No. 1, 2, 3, 4, 5, 6                    |               |           |
| Smema Cable                  | 3m / 1ea  |               |           |
| Alarm                        | Tower Lamp (3 Colors)                             |               |           |
| Color *                      | SR RAL 7035 : NON ESD (H-GY2912-T3-Samhwa Paints) |               |           |
| Air Supply                   | 0.5Mpa (5bar)                                     |               |           |
| Air Usage                    | 0.5 ℓ/min   |               |           |
| Electricity Consumption (kw) | 0.5   |               |           |

| Option Spec.  |                |                                      |
|---|----------------|--------------------------------------|
| Item  | CODE No.       | Option                               |
| Conveyor Speed (mm/sec) *   | O-100-HW0-0104 | 1~200 / Analog / 1ea                 |
| Width Synchronization   | O-100-SW0-0200 | via RS-232                           |
| Color *   | O-400-CO0-0100 | ESD powder coating (RAL 7035 / Gray) |
| Line Control System for Smart Line / MES / Color-NON ESD ▶ Refer to P.113(Common Option Spec.). |                |                                      |

Loader/Unloader Series

Buffer Series

Link / Work Series

Conveyor Series

PC Controlled Series

NOVLUX Laser Marking Machine - CO2

NOVLUX Laser Marking Machine - YVO4

VISPLO Optical Verification Buffer

ARMAS Router - Bronze

ARMAS Router - Silver

ARMAS Router - Gold

Barcode Scanning Conveyor



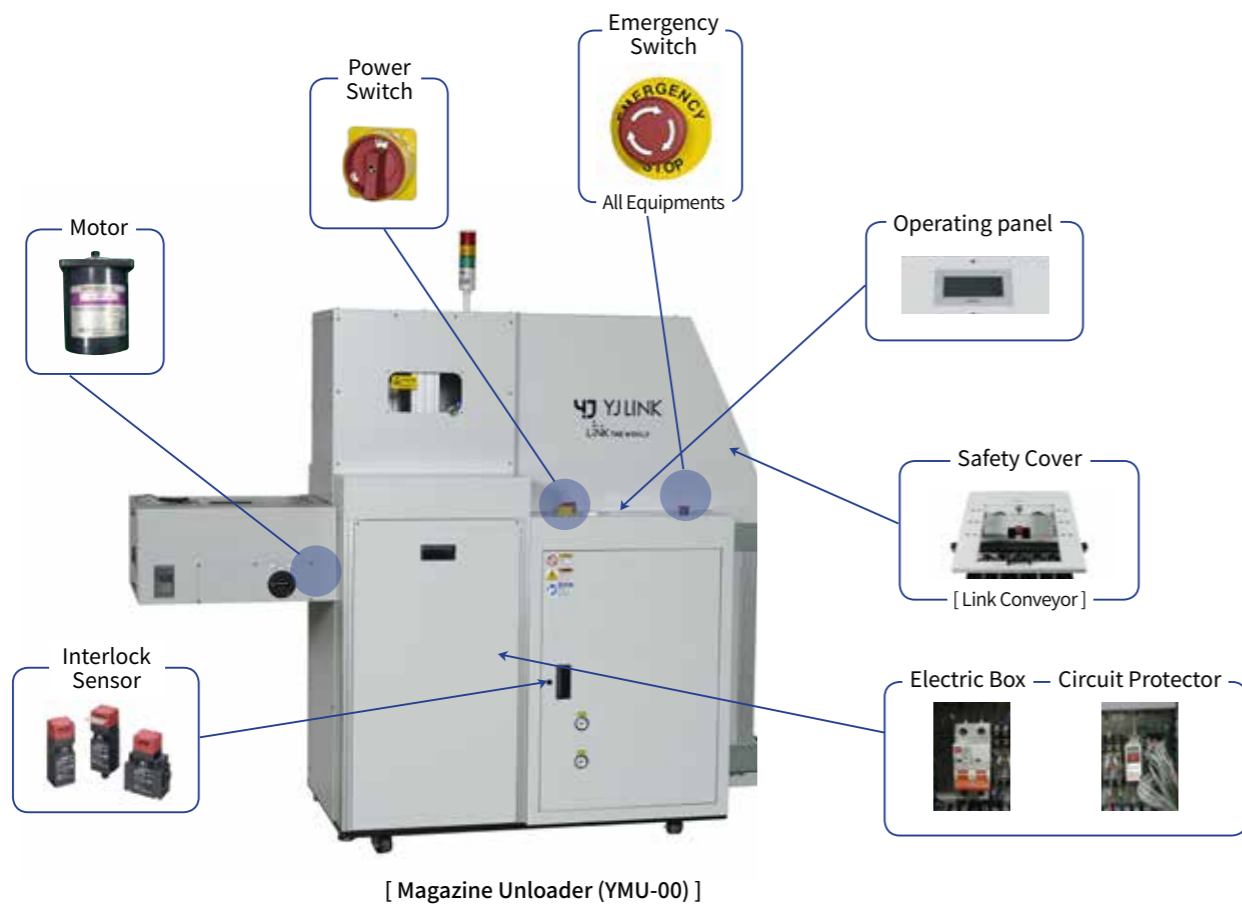
## 01 Common Standard Spec.

| Item                  | CODE No. | Standard         |
|-----------------------|----------|------------------|
| Motor                 | -        | SPG              |
| Sensor_PCB            | -        | SICK / PANASONIC |
| Screw Type *          | -        | TM Screw         |
| Pneumatic             | -        | TPC / SMC        |
| PLC                   | -        | PANASONIC        |
| OP Panel_Touch Screen | -        | PANASONIC        |
| Switch_Main           | -        | HANYOUNG         |
| Switch_Emergency      | -        | HANYOUNG         |
| Sensor_Door           | -        | KOINO            |

| Conveyor Belt type    | T      | Static Range      |
|-----------------------|--------|-------------------|
| HAM(YJ Link Standard) | 1.00 T | 10 <sup>3-6</sup> |
| ENI                   | 1.00 T | 10 <sup>3-4</sup> |

## 03 Standard Features



## 02 Common Option Spec.

| Item                               | CODE No.       | Option                               |
|------------------------------------|----------------|--------------------------------------|
| Line Control System for Smart Line | O-200-LC0-0300 | PC + Program                         |
|                                    | O-200-LC0-0500 | PC + iLNB                            |
| MES                                | O-200-ME0-0501 | Complexity - middle / low            |
|                                    | O-200-ME0-0502 | Complexity - high                    |
| Color - NON ESD Powder Coating     | O-400-CO0-0201 | NON ESD - EX8816(S)-SR-WH020 (White) |
|                                    | O-400-CO0-0202 | NON ESD - RAL 7035 : Glossy          |
|                                    | O-400-CO0-0203 | NON ESD - RAL 7035 : Matt            |

## 04 Magazine Rack



| MAGAZINE TYPE | L   | W   | H   | Max. PCB Size |     | Min. PCB Size |    |
|---------------|-----|-----|-----|---------------|-----|---------------|----|
|               |     |     |     | L             | W   | L             | W  |
| M (097)       | 355 | 320 | 570 | 330           | 250 | 70            | 50 |
| L (096)       | 460 | 400 | 575 | 440           | 330 | 70            | 50 |
| XL (100)      | 535 | 530 | 575 | 530           | 460 | 70            | 50 |
| 2XL (101)     | 620 | 530 | 575 | 610           | 460 | 70            | 50 |

\* Racks of any size and any type are available for orders.