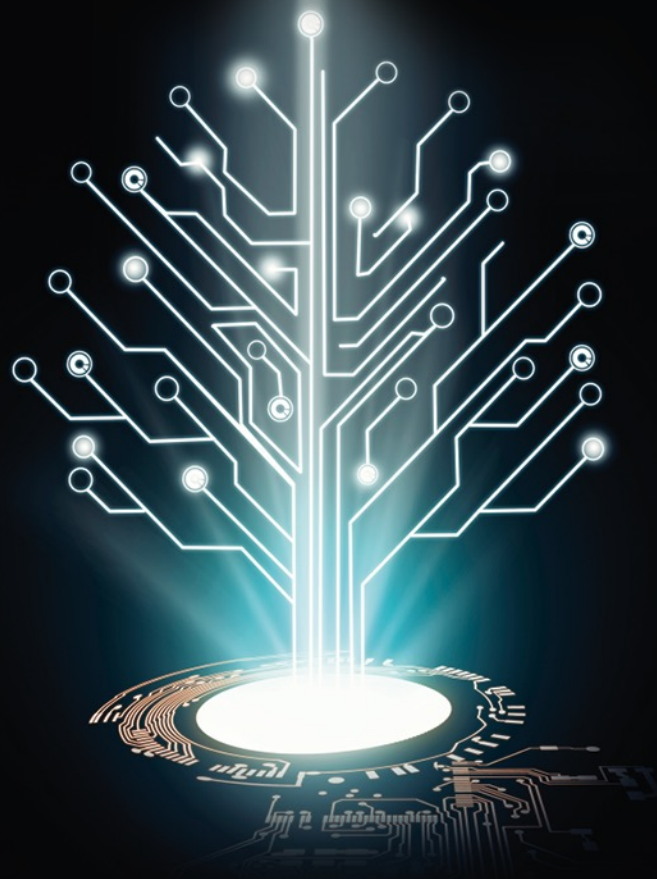




PRODUCT BOOK

**COMPLETE SOLUTIONS
FOR THE AUTOMATED BUSINESS**

FENIX
AUTOMATION
INDUSTRIAL PROCESSING SOLUTIONS

www.fenixautomation.com



WHAT WE DO

Electronics, mechanics and IT: we give movement to your ideas.

Customization is one of our greatest strengths, with the design and implementation of “tailor-made” processes to automate any functionality and any process. Modules, services and accessories are tailored to the specific needs of customers engaged in sectors such as, for example, electronics, automotive, agricultural, telecommunications, mechanical and health-medical: our challenge is to give movement to every idea and every need, proposing solutions electronics, mechanics and logic to optimize and make the different work phases more efficient. All this, with the aim of facilitating the production and production processes increase the same productivity.



Complex and integrated systems for the production of electronic boards

We offer a complete and versatile catalog with solutions for each phase of the production cycle of an electronic board, ranging from modules, systems and cells that allow you to automate all processes. We study the most functional solutions for each company to facilitate and improve the production of a circuit printed through the customization of individual components or the provision of fully customized systems. From cells for assembly to tests of functionality, from inspection to handling of circuits, from cutting to storage, up to moving with automatic mobile robots: we are able to take care of the entire production cycle online, or to provide you with machinery to be used individually or to be integrated into already operational processes. Our lines, automatic or semi-automatic, they are made with quality components and with careful attention to every detail, ensuring reliability for small, medium or large volumes.

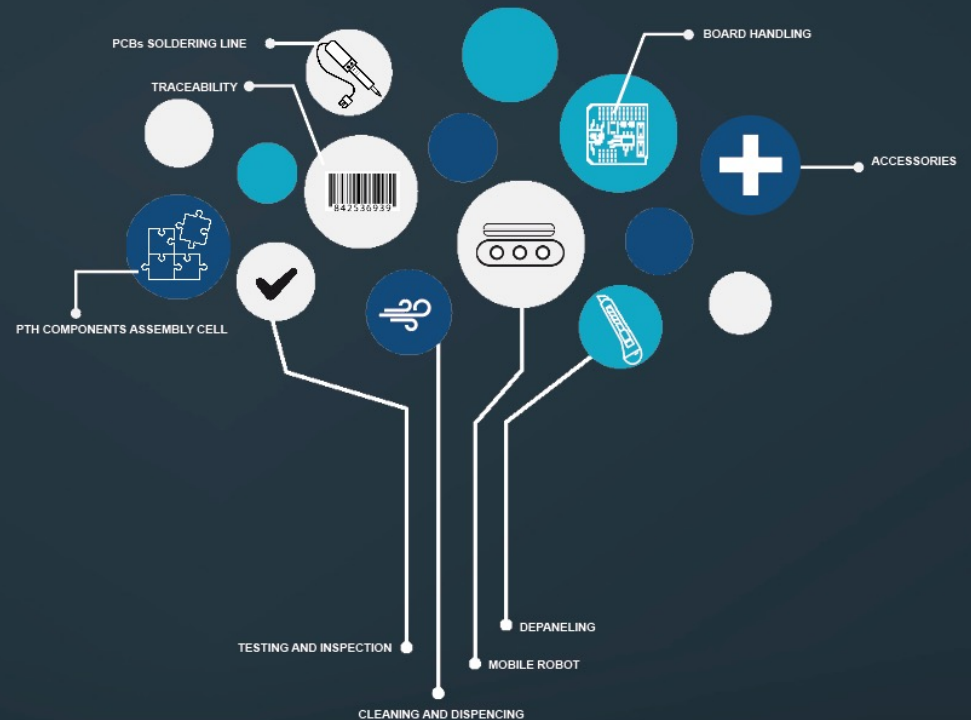


https://bit.ly/FENIX_AUTOMATION



OUR PRODUCTION FOR YOUR BUSINESS

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PTH COMPONENTS ASSEMBLY CELL	<u>5</u>
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PTH COMPONENTS ASSEMBLY CELL

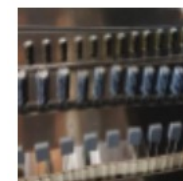




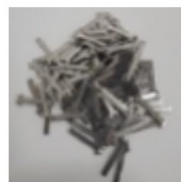
Robotic cell for a wide range of exotic component assemblies on PCBs



Loose components



Radial components



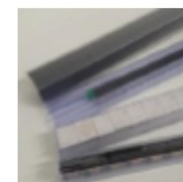
Metallic pins



Axial components



Metallic tape



Components in tube packaging

Pth Assembly Cell FX-AO00

Technical Features

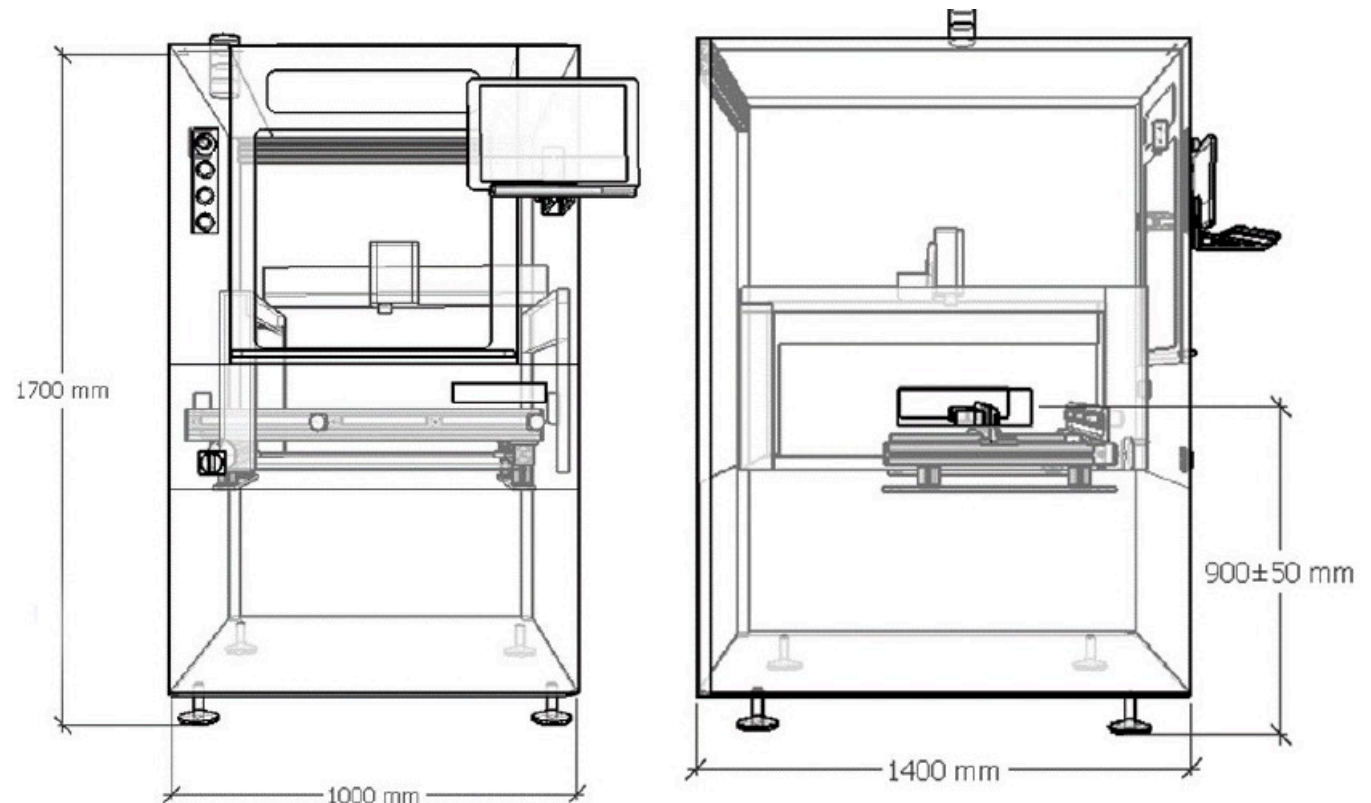
- Line length 1.000 mm
- In – Out SMEMA Interface
- Feeding capacity – up to 6 feeders
- Components -up to 9 different components codes
- Automatic tools change system
- Tools capacity – 3 pcs
- Mechanical board alignment
- Down force 160 N
- Insertion test routine
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 16A
- Std conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Weight 1 kg

PCB specification

- Max/Min PCB width 400 mm/100 mm
- Max /Min PCB length 460 mm/100 mm
- Max PCB weight 2 Kg

Options

- Passive clinching system
- Programmable Active Clinching
- Pin in paste technology
- Vision system for board alignment
- Down force 400 NZ
- Pins calibration station
- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)
- Customization upon request



CLEANING AND **D**ISPENCING





Plasma cleaning

Inline XYZ programmable robotic cell for plasma cleaning.
Suitable for PCBs, plastic housings and metal surfaces.
Plasma gun selected according to the applications.



Plasma Cleaning FX-PC00

Technical Features

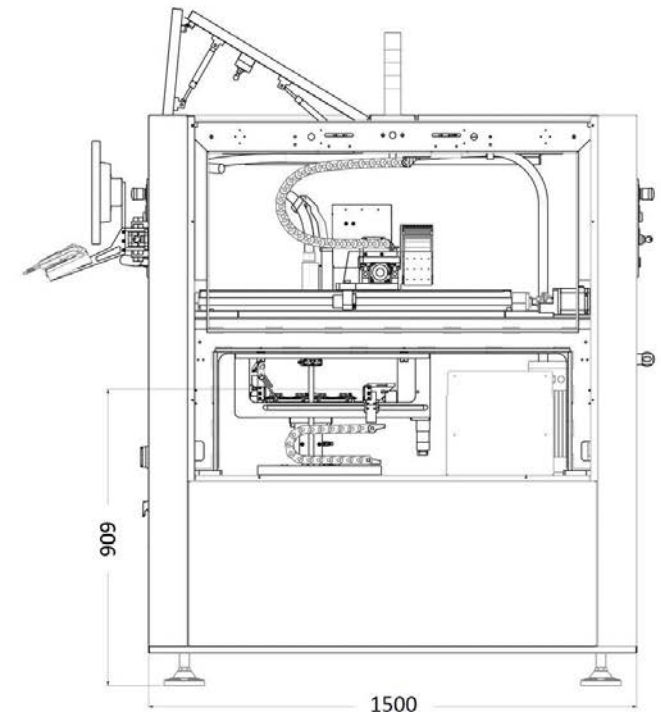
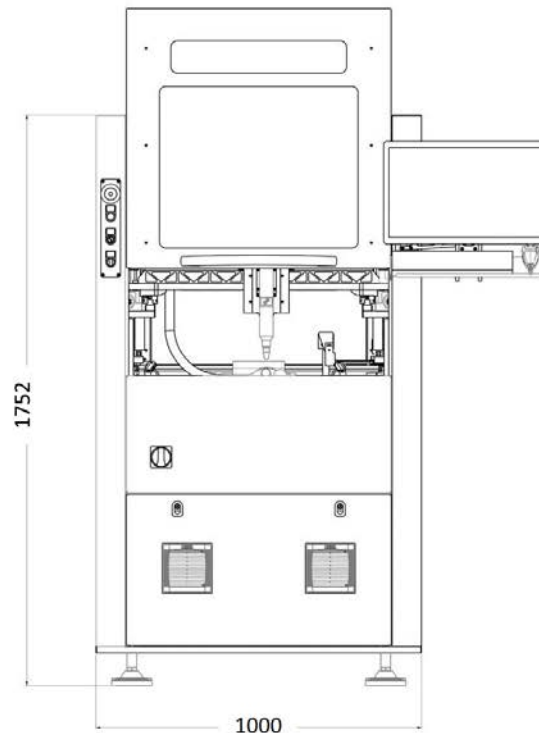
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 16A
- Std conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Weight 800 Kg

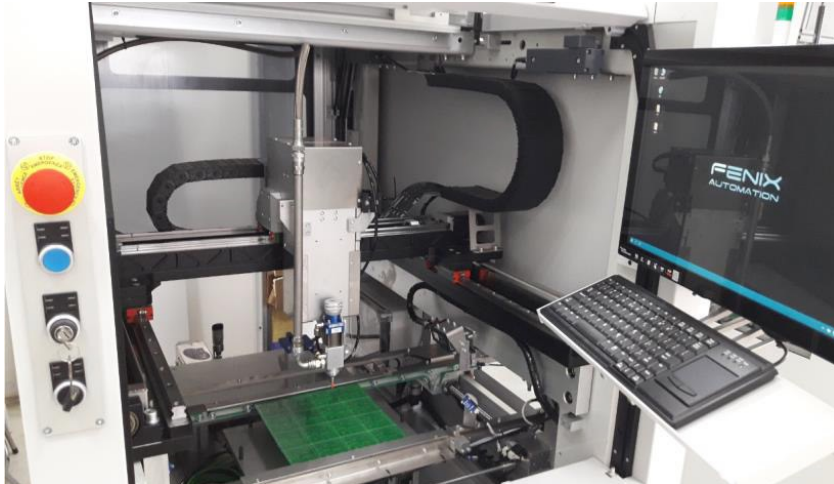
PCB specification

- PCB specification
- Max/Min PCB width 500 mm/100 mm
- Max /Min PCB length 400 mm/100 mm
- Max PCB weight 2 Kg

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)
- Barcode reader





Glue dispenser

Inline XYZ programmable robotic cell for mono & two components glue dispensing.
Suitable for gluing and sealing.

- Nozzle alignment sensor
- Weight scale for amount dispensing control
- Purge container with overflow sensor
- Dispensing valve selected according to the application



Glue dispenser FX-PD01 / PD03 / PD04

Technical Features

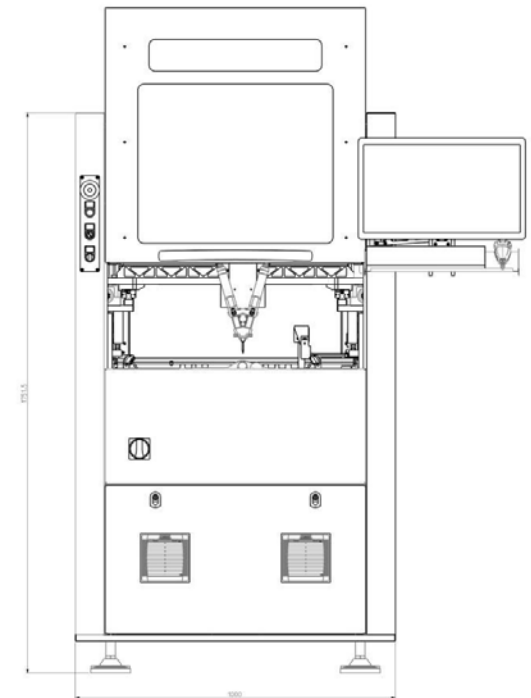
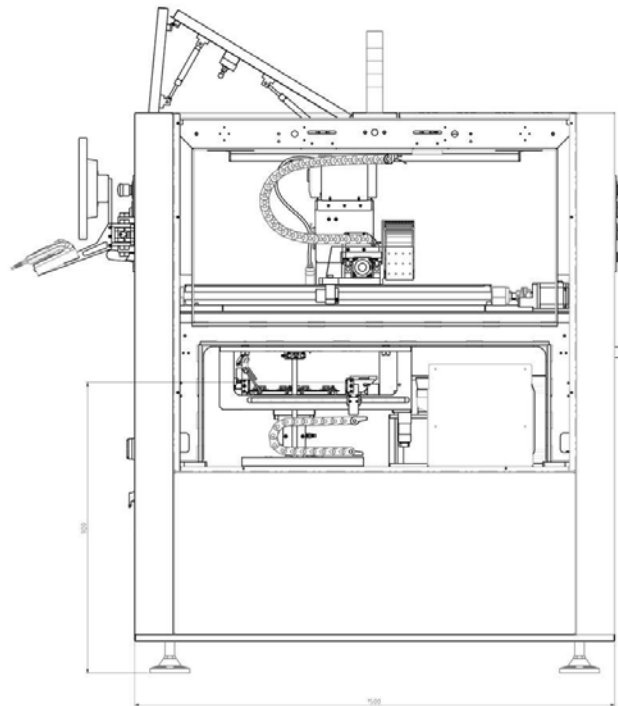
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 16A
- Std conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Weight 800 Kg
- Suitable conveyor for pallet and PCB

PCB specification

- Max/Min PCB width 500 mm/100 mm
- Max /Min PCB length 400 mm/100 mm
- Max PCB weight 2 Kg

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)
- Barcode reader





Solder paste dispenser

In line XYZ programmable robotic cell for Solder paste dispensing.

Suitable for overdosing on reflow soldering processes.

- Nozzle cleaning station
- Nozzle alignment sensor
- Camera for board alignment

Solder paste dispenser FX-PD02

Technical Features

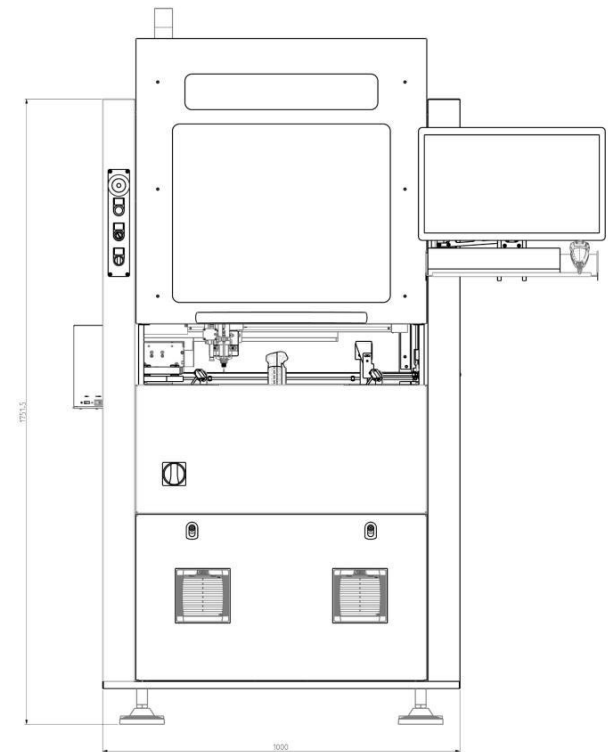
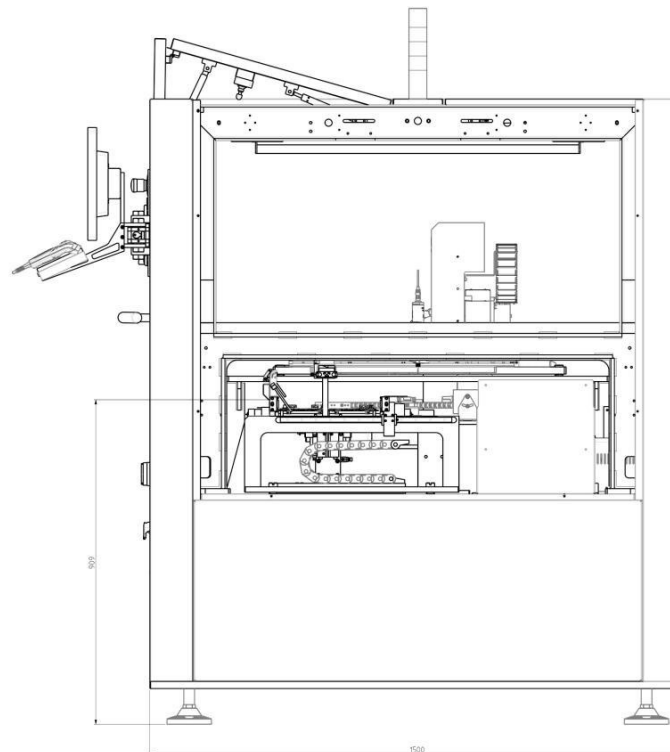
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 16A
- Std conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Weight 800 kg
- Suitable conveyor for pallet and PCB

PCB specification

- Max/Min PCB width 500 mm/100 mm
- Max /Min PCB length 400 mm/100 mm
- Max PCB weight 2 Kg

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)
- Barcode reader



TESTING AND INSPECTION





Test handler

Inline functional test with automatic loading and unloading of specific products or PCB

- R to L or L to R flow direction
- Pass through function
- User interface by touch screen
- In out safety shutters
- Interchangeable upper and lower fixture
- Space for test system / instrument integration
- In Line Capability
- Returning Conveyor
- Servo Driven Press
- Camera Inspection
- LED Verification
- Trimmer Adjustment and Switching
- Code Reading
- Traceability Environment Compliant

Test handler FX-NH00

Technical Features

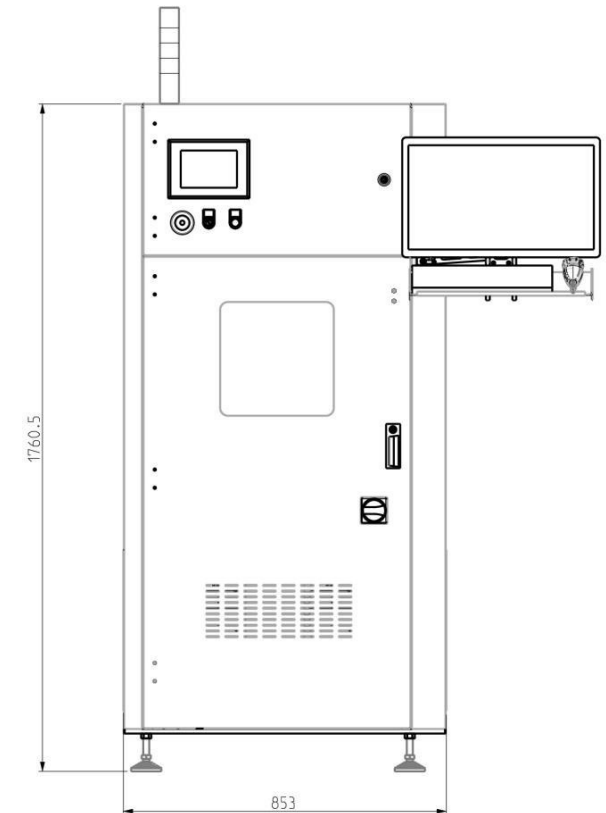
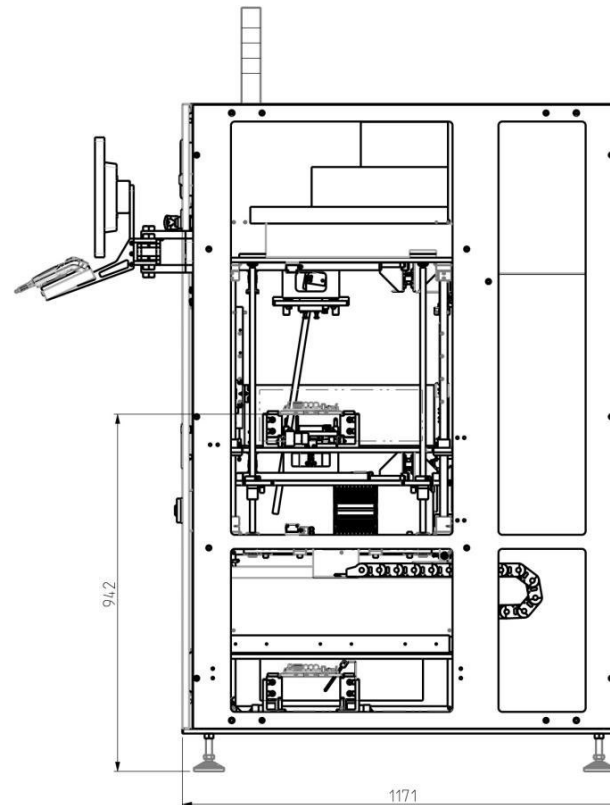
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 16A
- Std. conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Press force up to 2500N
- Weight 400 kg

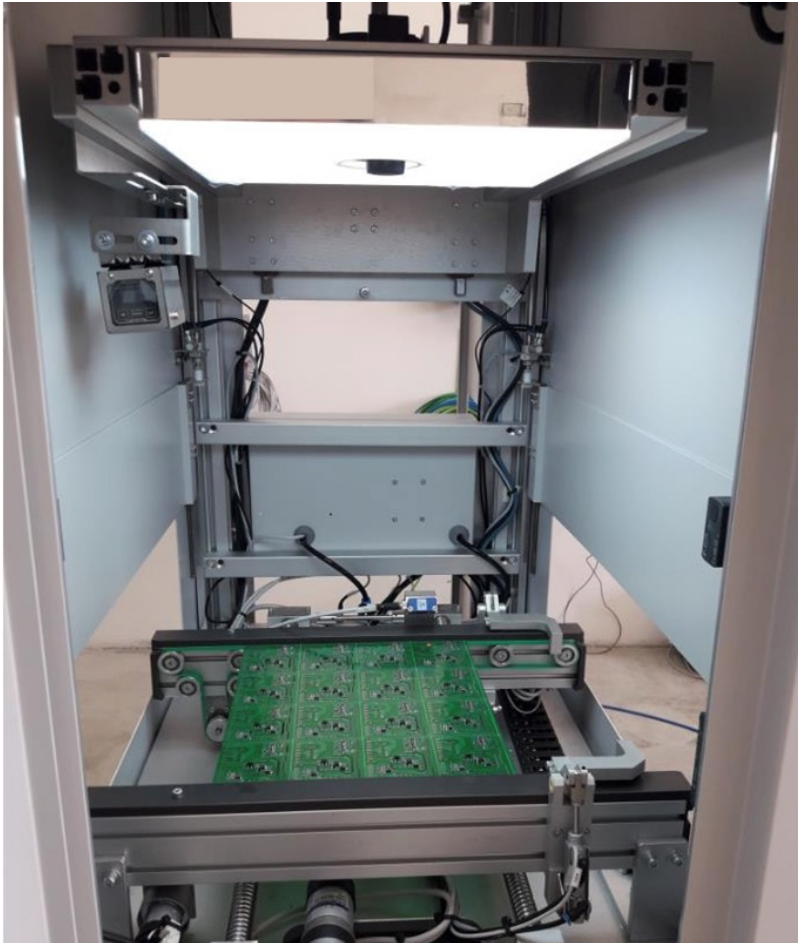
PCB specification

- PCB specification
- Max/min PCB width 500 mm/100 mm
- Max /min PCB length 400 mm/100 mm
- Max PCB weight 2 Kg

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)
- Customized upper and lower fixture
- Bypass conveyor
- Returning conveyor





Inspection unit

Automatic, in line, inspection system.
Suitable for:

- Post-dispensing verification
- Post-manual assembly verification

Inspection unit FX-PI00 / PI01 / PI02

Technical Features

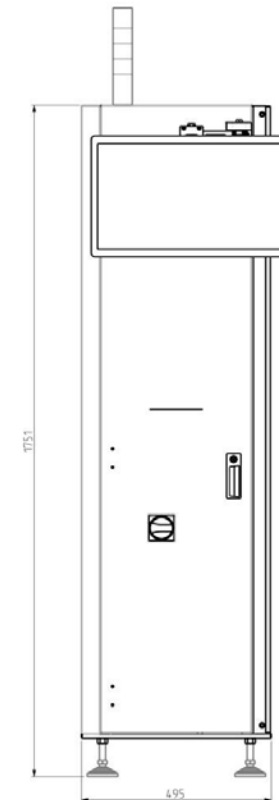
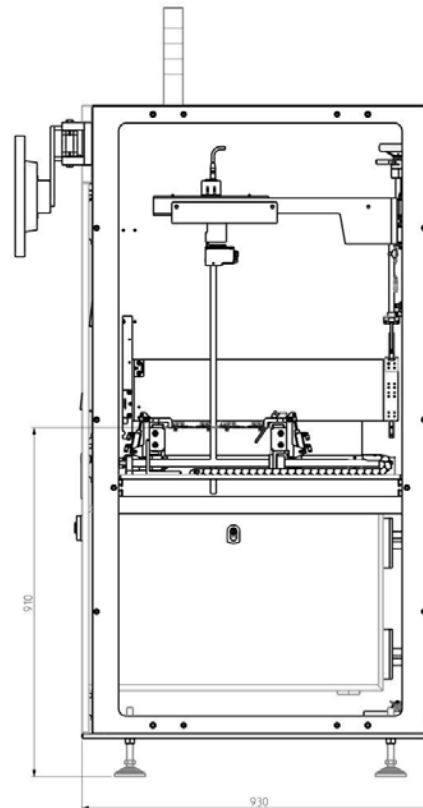
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 2 A
- Std conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Weight 150 kg
- Suitable conveyor for pallet and PCB

PCB specification

- Max/Min PCB width 500 mm/100 mm
- Max /Min PCB length 400 mm/100 mm
- Max PCB weight 2 Kg

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)
- Barcode reader

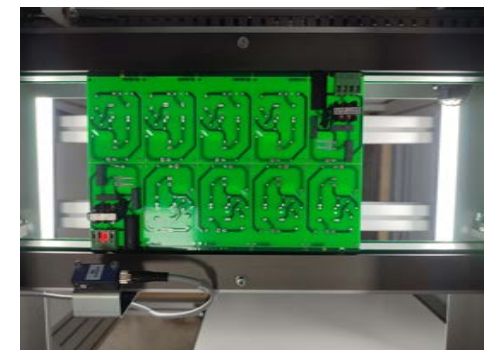
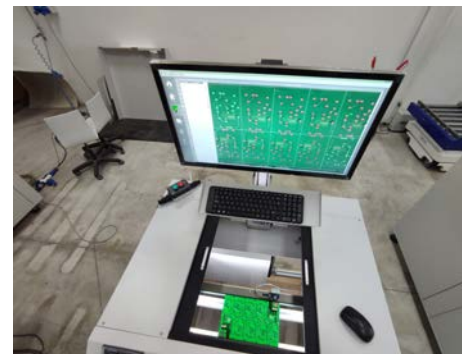




AOI unit HORUS

Automatic, in line, inspection system.

- Verification of pin through hole presents before soldering process
- Single or multiple PCB inspection verification
- Easily programmable procedure
- Avoid repair and touch-up after soldering process



AOI unit HORUS FX-PI09

Technical Features

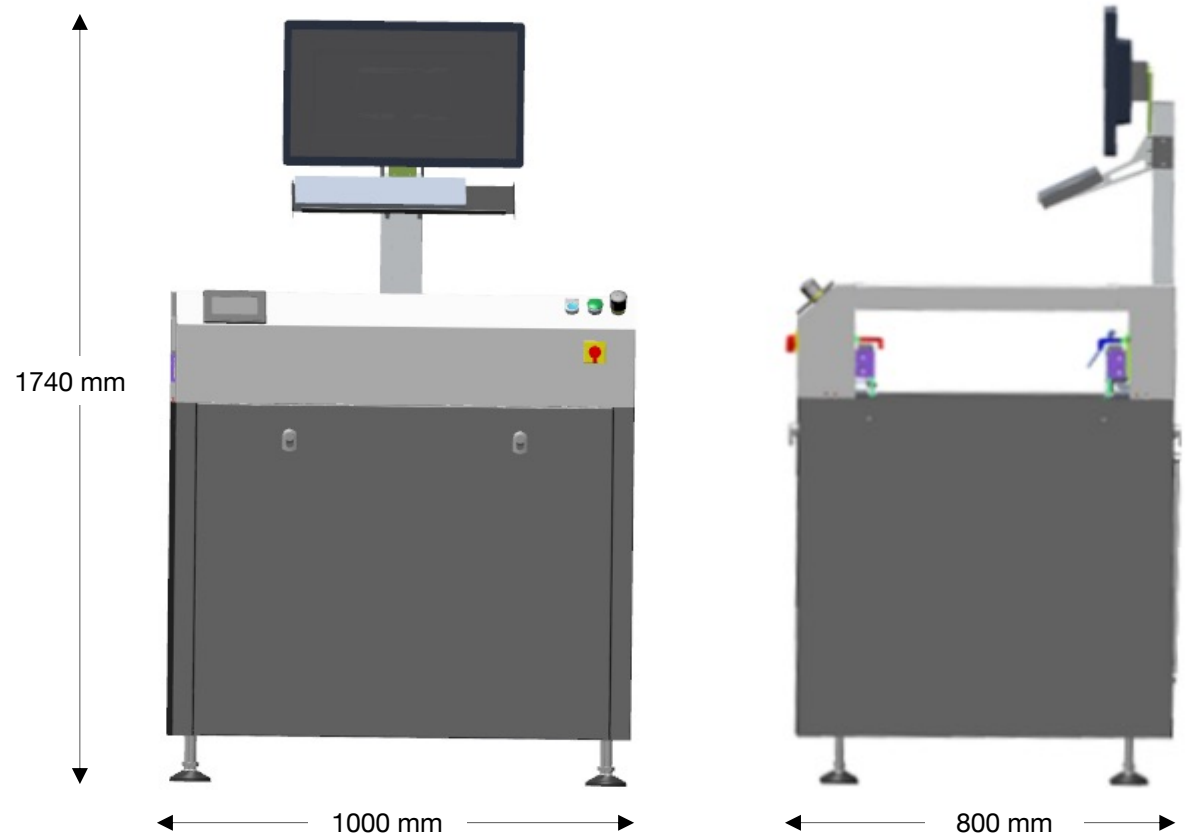
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 2 A
- Std conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Unit Weight 150 kg

PCB specification

- Max/Min PCB width 500 mm/100 mm
- Max /Min PCB length 400 mm/100 mm
- Max PCB weight 2 Kg

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)
- Barcode reader
- Conveyor for pallet handling
- Fail interceptor functionality





AOI unit Mek Marantz

Automatic, in line, inspection system.

- Verification of PTH soldering joints.
- Suitable for PCBs end soldering frame.
- Easily programmable procedure.



AOI unit Mek Marantz FX-PI07

Technical Features

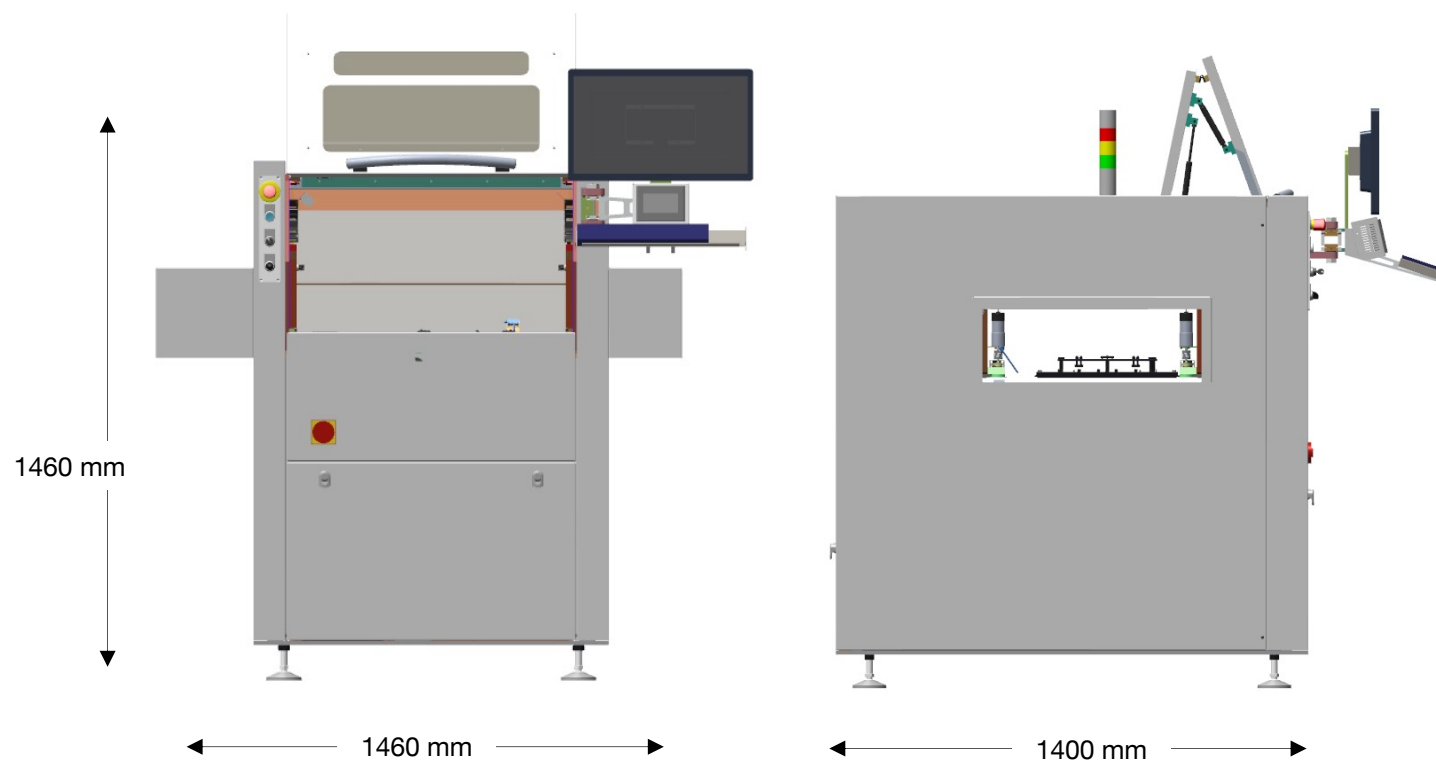
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Dynamic Conveyor (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 2 A
- Std conveyor speed 12 m/min
- Manual Width Adjustment (TWA)
- Unit Weight 250 kg

PCB specification

- Max/Min PCB width 500 mm/100 mm
- Max /Min PCB length 400 mm/100 mm
- Max PCB or pallet weight 4 Kg

Options

- Automatic Width Adjustment (AWA)
- Barcode reader



DEPANELING





In-line depaneling cell

- Suitable for medium and high volume production
- New product setup < 3 minutes
- Camera for manual teaching
- Cutting route importable from DXF files
- Compact foot print
- Upper robot suitable for pallet loading



In-line depaneling cell FX-RA00

Technical Features

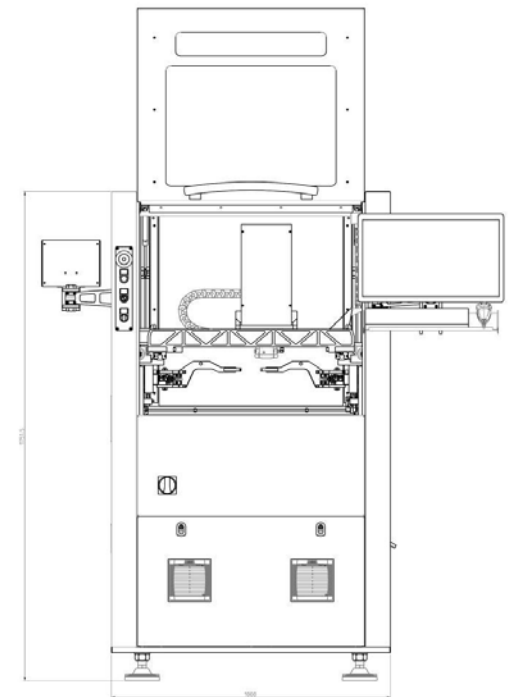
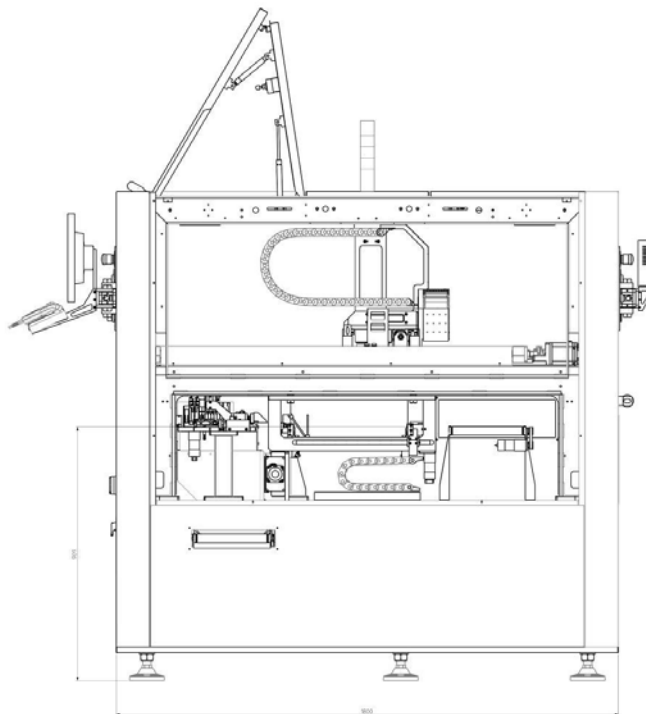
- Line length 1.000 mm
- In – Out SMEMA Interface
- Semi-automatic specific product gripper change system
- Continuous bit inspection
- Automatic bit changing system
- ESD Safety Design
- Ionized working environment
- Direct import of routing programs from .dxf files
- CE Certification
- PCB Conveyor:
 - a. Flat belt (3 mm carrying edge)
 - b. Std speed 12 m/min
 - c. Electric Width Adjustment (EWA)
- Flat belt outfeed conveyor for de-paneled boards
- Embedded dust suction pipe (PCB bottom side)
- Automatic scrap material evacuation
- Power Supply - 230Vac 50/Hz 16A
- Weight 1.300 kg

PCB specification

- Max/Min PCB width 400 mm/100 mm
- Max /Min PCB length 450 mm/100 mm
- Max PCB weight 2 Kg

Options

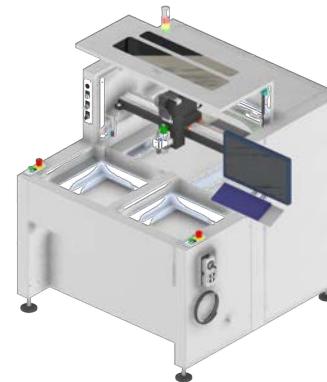
- Specific product gripper
- External dust extractor





Standalone depaneling cell RA-50

- Suitable for high mix production
- New product setup < 3 minutes
- Cutting route importable from DXF files
- Hand pendant for manual teaching
- Compact foot print
- Double fixture shuttle for loading time optimization
- Loading/Unloading area protected by optical barrier



Standalone depaneling cell FX-RA50

Technical Features

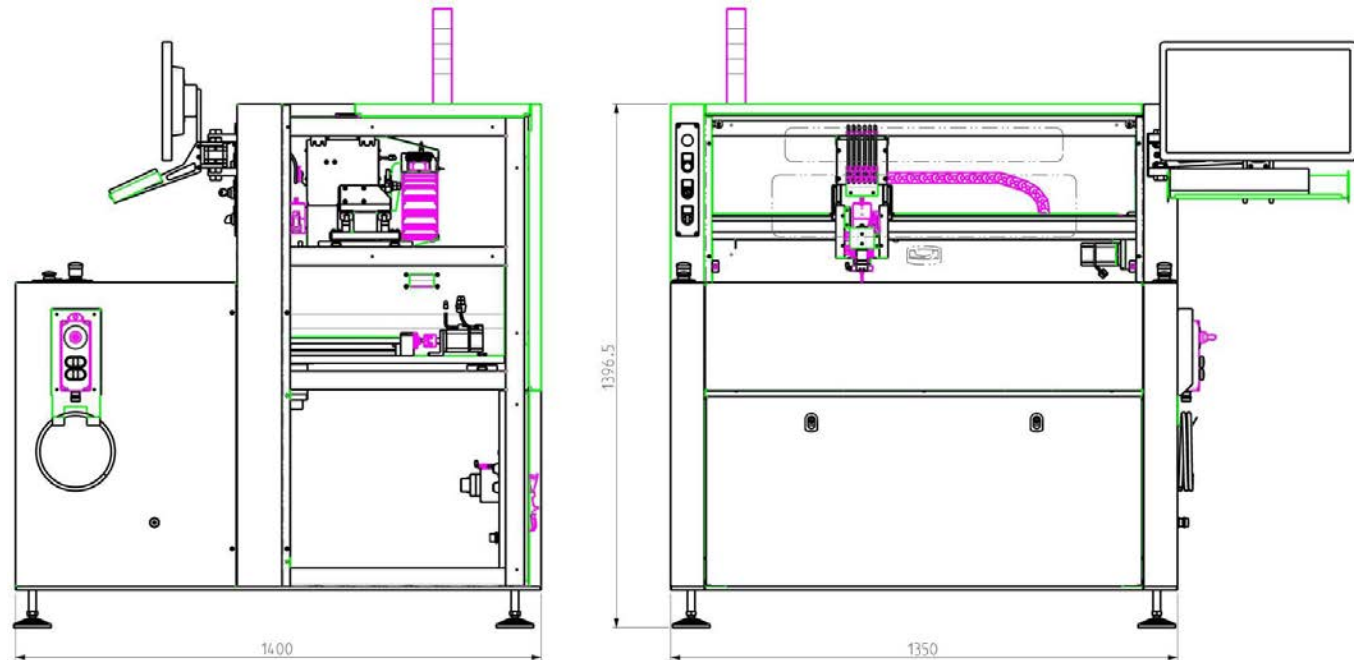
- Standalone configuration
- Double shuttle
- Continuous bit inspection
- Manual bit changing system
- Embedded dust suction pipe (PCB bottom side)
- Easy product fixture replacement
- ESD Safety Design
- Ionized working environment
- Direct import of routing programs from .dxf files
- CE Certification
- Power Supply - 230Vac 50/Hz 16A
- Weight 400 kg

PCB specification

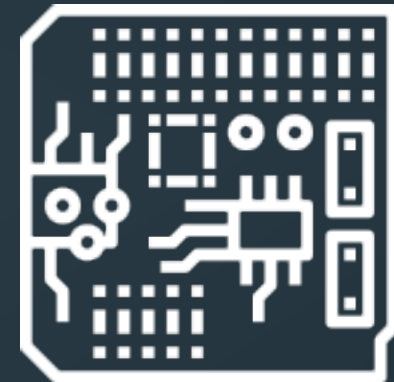
- Max/Min PCB width 400 mm/100 mm
- Max /Min PCB length 450 mm/100 mm
- Max PCB weight 2 Kg

Options

- Specific product fixtures
- External dust extractor
- Automatic bit change system



BOARD HANDLING





PCB Conveyors

Transports boards between different processing machines

- R to L or L to R flow direction
- Pass through function
- User interface by touch screen
- Safety cover with safety sensors
- Standard length 500, 1000, 1500 mm
- Standard motorized segment 500 mm

Conveyors FX-HC00

Technical Features

- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 1A
- Std conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Weight 60 kg

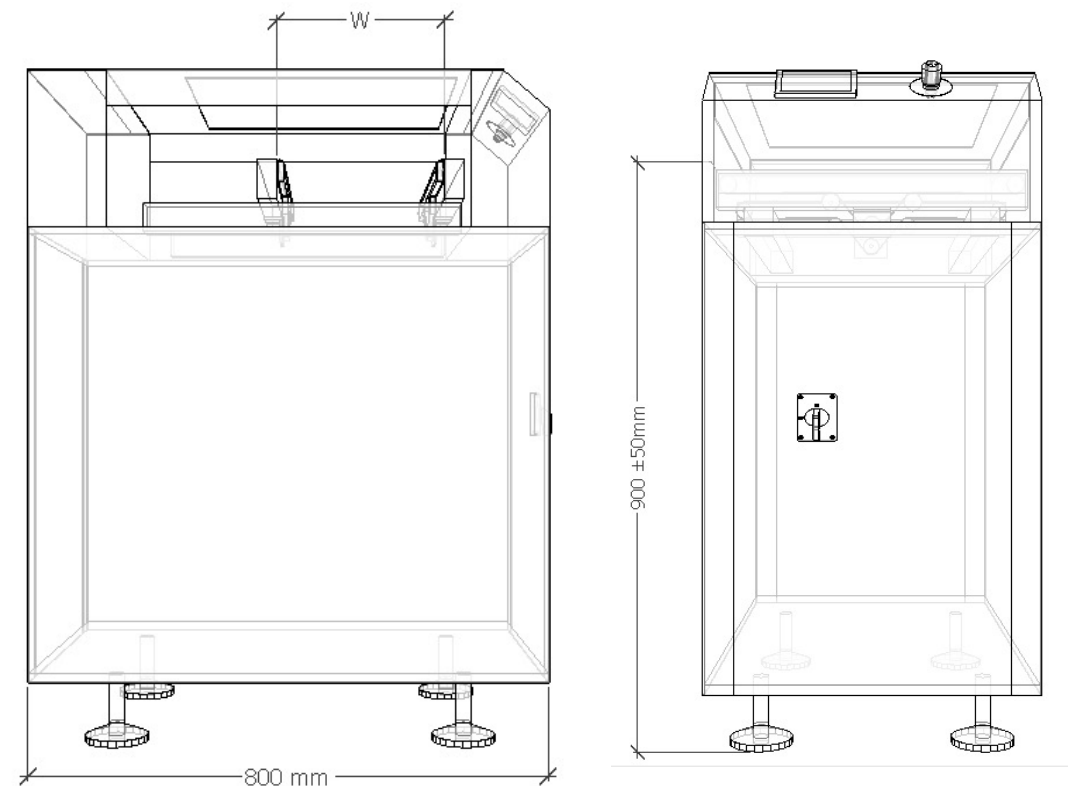
PCB specification

- Max/Min PCB width 500 mm/60 mm
- Max PCB length 457 mm
- Max PCB weight 2 Kg

Options

- Fumes extractor
- Fail interceptor
- 6 or 18 m/min conveyor speed
- Cooling fans
- Automatic Width Adjustment (AWA)
- Dual speed (oven infeed)
- 8 mm carrying edge

Standard Modules			
L	500 mm	1.000 mm	1.500 mm
W	800 mm	800 mm	800 mm
Special Length Upon Request			





PCB Conveyors

Transports boards between different processing machines

- R to L or L to R flow direction
- Pass through function
- User interface by touch screen
- Safety cover with safety sensors
- Standard length 500, 1000, 1500 mm
- Standard motorized segment 500 mm

Conveyors FX-HC51 / HC53 Basic Line

Technical Features

- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 1A
- Std conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Weight 60 kg

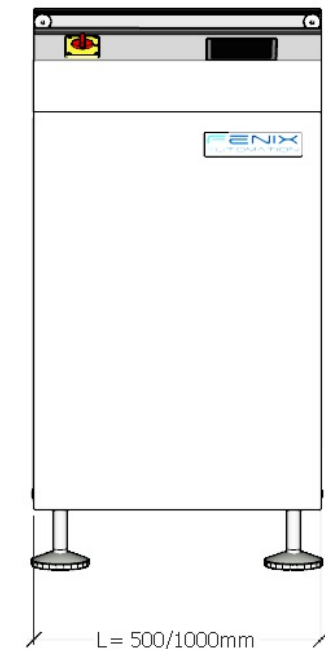
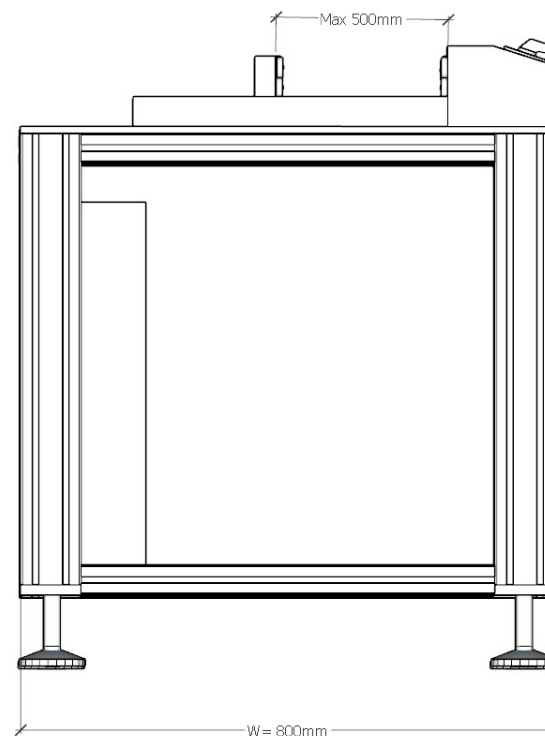
PCB specification

- Max/Min PCB width 500 mm/60 mm
- Max PCB length 457 mm
- Max PCB weight 2 Kg

Options

- Top cover
- 6 or 18 m/min conveyor speed
- Cooling fans
- Automatic Width Adjustment (AWA)
- Dual speed (oven infeed)
- 8 mm carrying edge

Standard Modules			
L	500 mm	1.000 mm	1.500 mm
W	800 mm	800 mm	800 mm
Special Length Upon Request			





Shuttle conveyor

Transports boards between parallel lines

- R to L or L to R flow direction
- Pass through function
- User interface by touch screen
- Safety cover with safety sensors
- Standard length 500 mm
- Standard motorized segment 500 mm

Shuttle conveyor FX-HS25

Technical Features

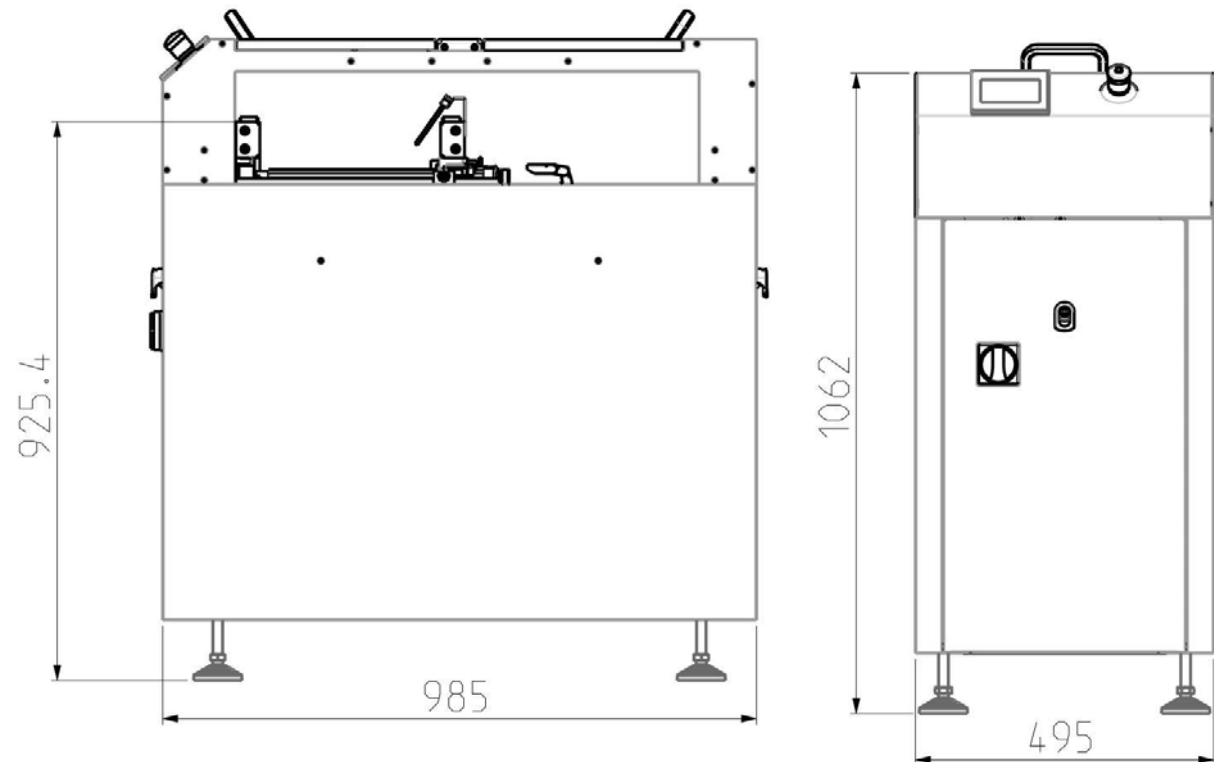
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (std carrying edge 3 mm)
- Stroke 320 mm
- Power Supply - 230Vac 50/Hz 1A
- Std conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Weight 60 kg

PCB specification

- Max/Min PCB width 500 mm/60 mm
- Max PCB length 457 mm
- Max PCB weight 2 Kg

Options

- Fumes extractor
- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)
- 8 mm carrying edge





Dual rail conveyor

Transports boards in two rows between different processing Machines

- R to L or L to R flow direction
- Pass through function
- User interface by touch screen
- Safety cover with safety sensors
- Standard length 500
- Standard motorized segment 500 mm

Dual lane conveyor FX-HD00

Technical Features

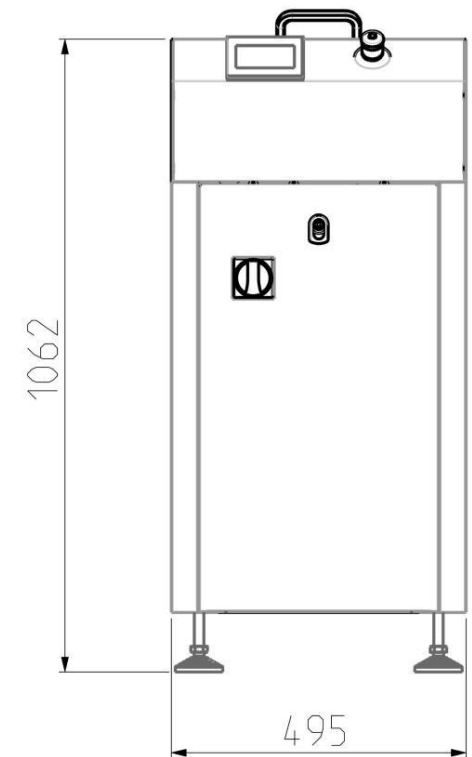
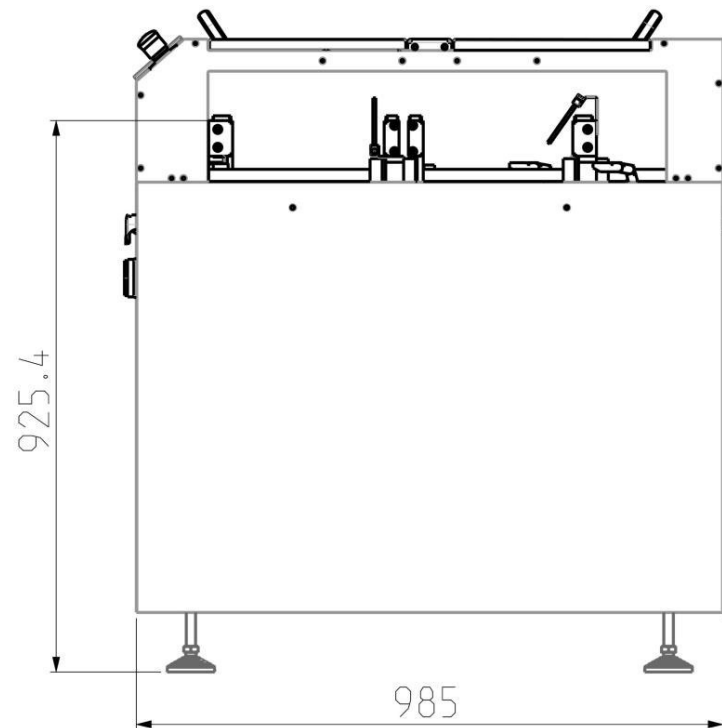
- In – Out SMEA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (std carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 1A
- Std conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Weight 60 kg

PCB specification

- Max/Min PCB width 257 mm/60 mm
- Max PCB length 457 mm
- Max PCB weight 2 Kg

Options

- Fumes extractor
- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)
- Dual speed (oven infeed)
- 8 mm carrying edge





Dual level conveyors

On the upper level, dual level conveyors transport boards between different processing machines while underneath they send selected boards backflow

- R to L or L to R flow direction
- Pass through function
- User interface by touch screen
- Safety cover with safety sensors
- Standard length 500, 1000, 1500 mm
- Standard motorized segment 500 mm

Dual lane conveyor FX-HD10 / HD11

Technical Features

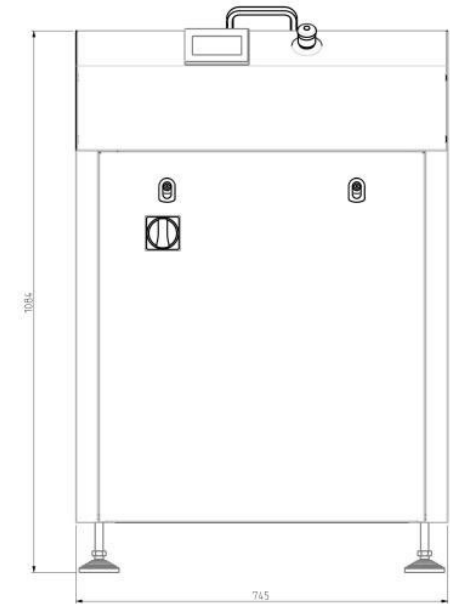
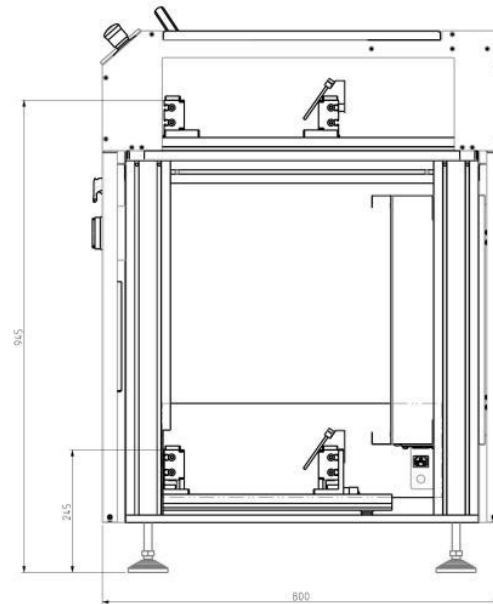
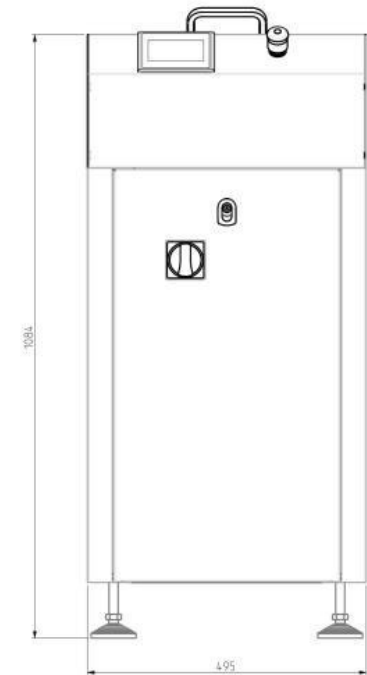
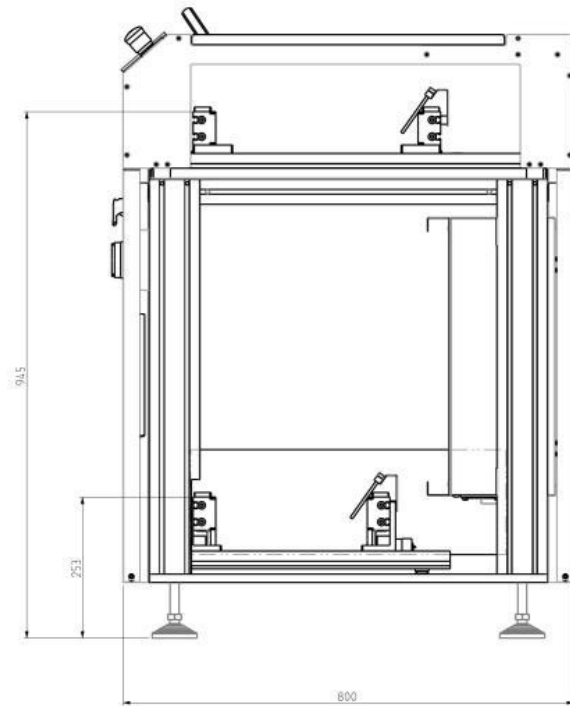
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (Carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 1A
- Std conveyor Speed 12 m/min
- Electric Width Adjustment (EWA)
- Lower conveyors height 245 mm
- Weight 150 kg

PCB specification

- Max/Min PCB width 500 mm / 60 mm
- Max PCB length 457 mm
- Max PCB weight 2 Kg

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)





Flat belt conveyor

Suitable for the transportation of various materials
Used as an outfeed of processing machines or as a link
between manual work stations.
Length and width are configurable upon request.

Flat belt conveyor FX-HE00

Technical Features

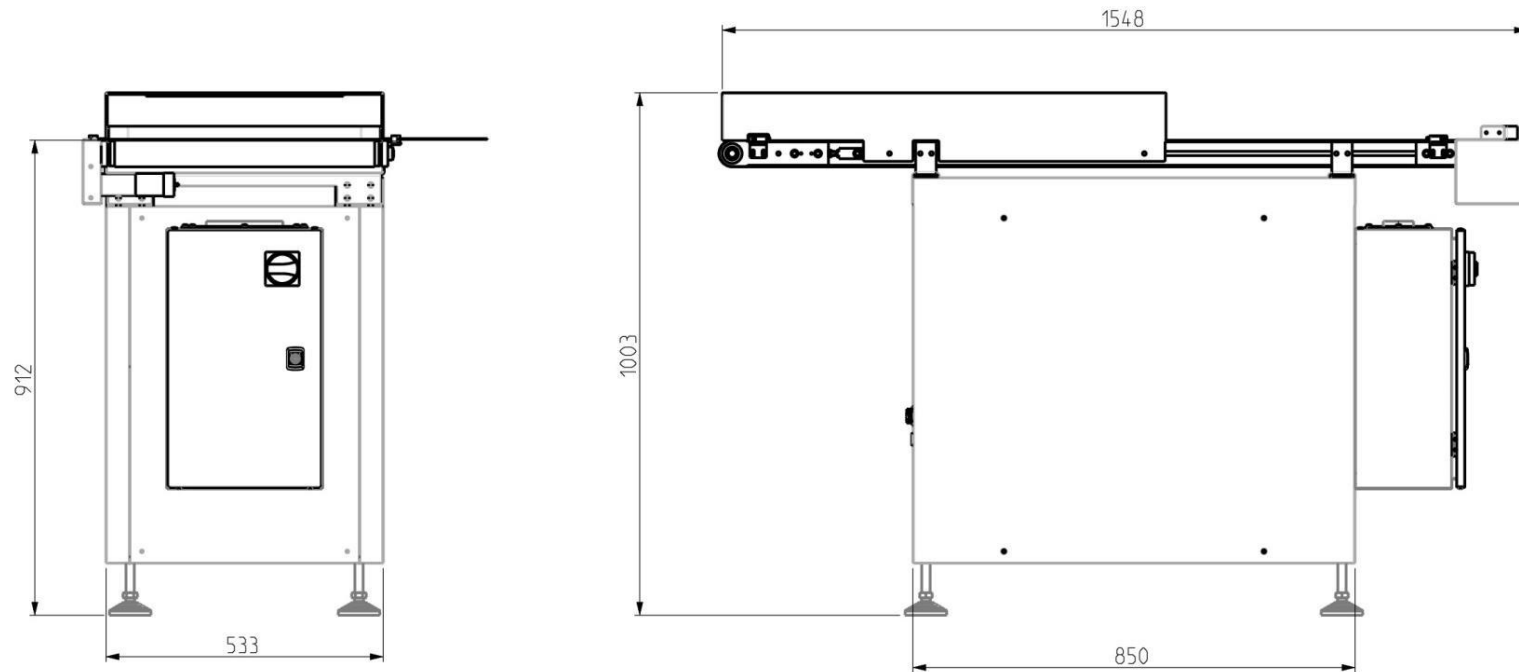
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Power Supply - 230Vac 50/Hz 16
- Std Conveyor Speed 12 m/min
- Weight average 150 kg

Dimensions

- Upon request

Options

- 6 or 18 m/min conveyor speed
- Further options upon request





PCB Unstacker and line loader

Loads naked boards, supplied in a stack, onto a production line

- R to L or L to R flow direction
- Pass through function
- User interface by touch screen
- Safety barriers

PCB Unstacker FX-HB00

Technical Features

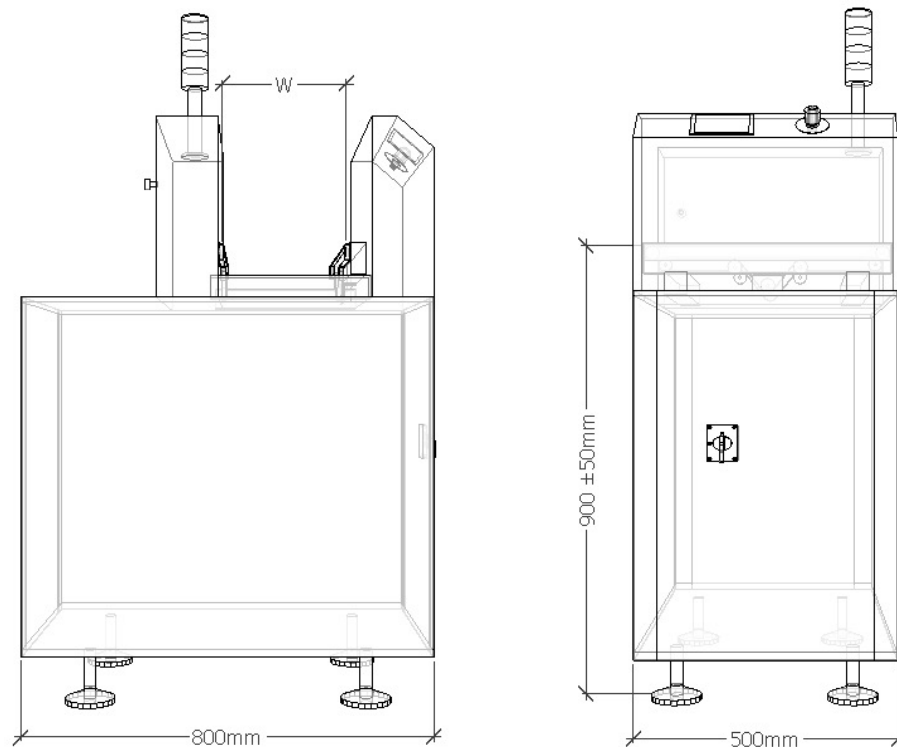
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Electric Width Adjustment (EWA)
- Std conveyor speed 12 m/min
- Power Supply - 230Vac 50/Hz 1A
- Air pressure 6 bar
- Weight 150 kg

PCB specification

- Max/Min PCB width 500 mm/60 mm
- Max PCB length 457 mm
- Max PCB weight 2 Kg

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)





Line loaders 3-5 racks

Unloads PCBs from a rack and loads them onto a production line

- R to L or L to R flow direction
- User interface by touch screen
- Programmable unloading pitch
- Automatic rack handlers
- Full racks in lower conveyor level
- Empty racks in the upper conveyor level

Line loaders 3-5 racks FX-HL00

Technical Features

- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Power Supply - 230Vac 50/Hz 1A
- Air pressure 6 bar
- Weight 250 kg

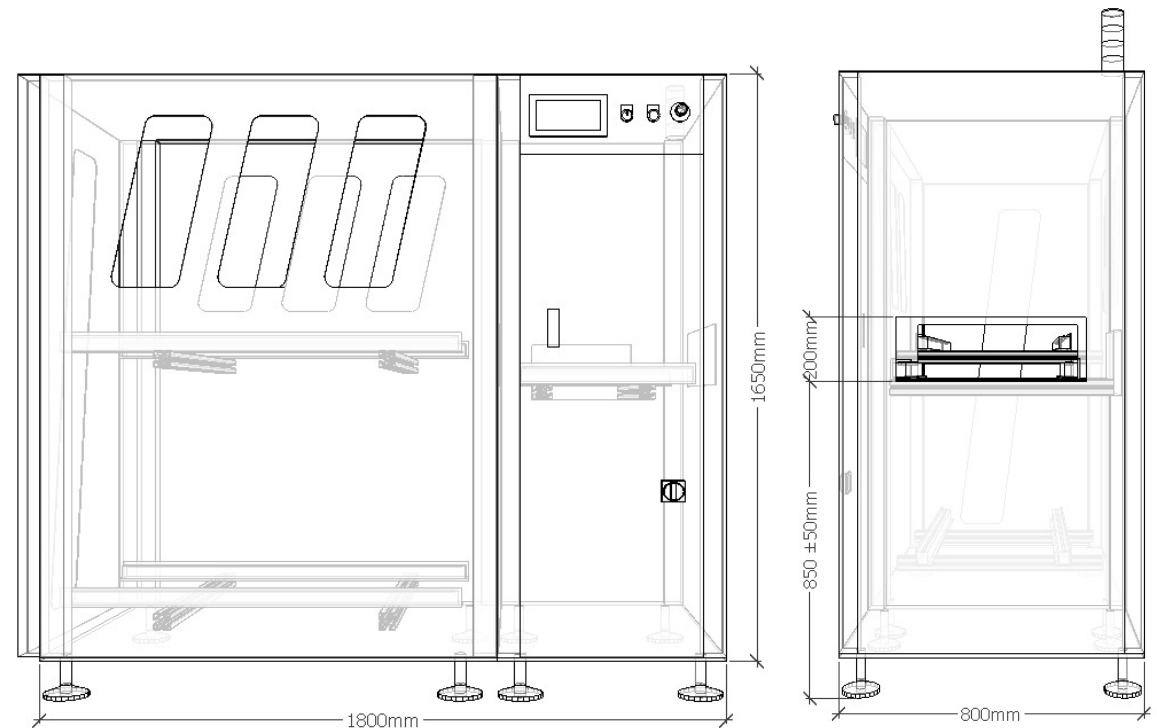
PCB & rack specification

- Max/Min PCB width 500 mm/100 mm
- Max PCB length 457 mm
- Max PCB weight 2 kg
- Max rack dimensions (L: 535 mm W: 530 mm H: 575 mm)

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)

Standard Modules		
Rack capacity	3 Racks	5 Racks
L	1.250 mm	1.800 mm
Special Length Upon Request		





Line loaders 3-5 racks

Unloads PCBs from a rack and loads them into a production line

- R to L or L to R flow direction
- User interface by touch screen
- Programmable unloading pitch
- Automatic rack handlers
- Full racks in lower conveyor level
- Empty racks in the upper conveyor level

Line loaders 3-5 racks FX-HL20 / HL25

Technical Features

- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Power Supply - 230Vac 50/Hz 1A
- Air pressure 6 bar
- Weight 250 kg

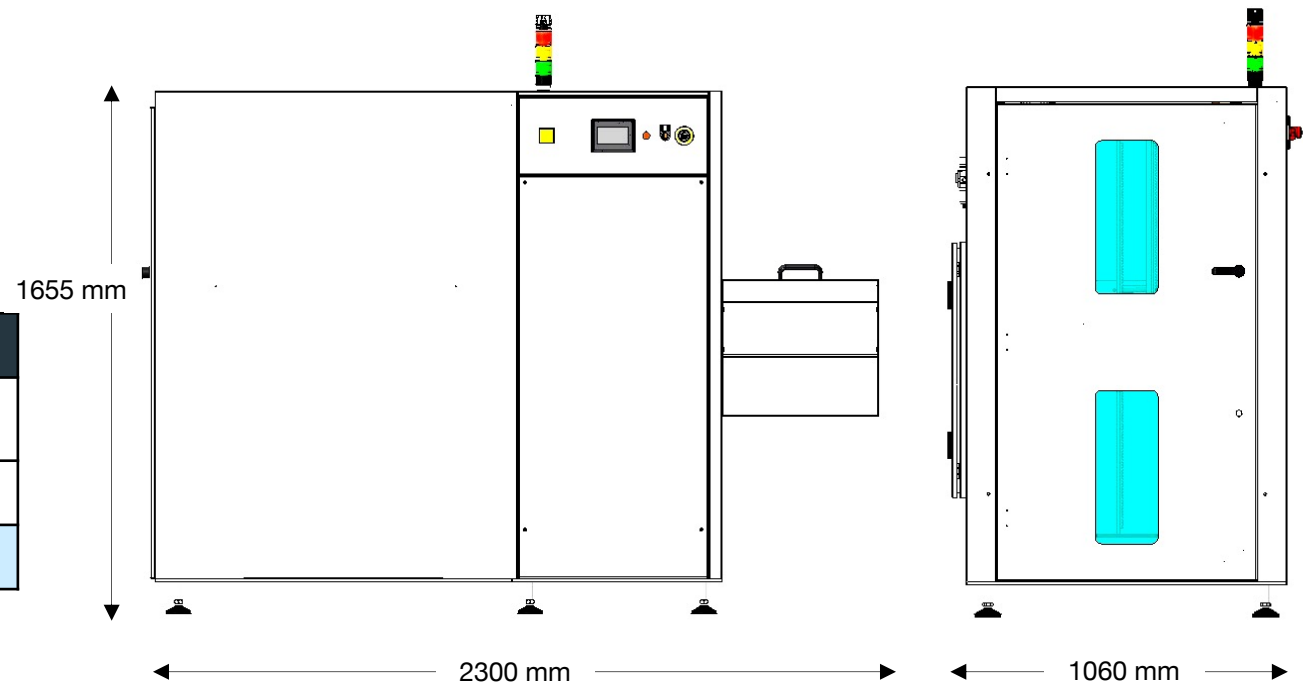
PCB & rack specification

- Max/Min PCB width 500 mm/100 mm
- Max PCB length 457 mm
- Max PCB weight 2 kg
- Max rack dimensions (L: 535 mm W: 530 mm H: 575 mm)

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)

Standard Modules		
Rack capacity	3 Racks (HL25)	5 Racks (HL20)
L	1.750 mm	2.350 mm
Special Length Upon Request		





Line loaders 2-3 racks

Loads PCBs into a production line and unloading racks

- R to L or L to R flow direction
- User interface by touch screen
- Programmable unloading pitch
- Managing three racks in parallel

Line loaders 2-3 racks FX-HL30 / HL31

Technical Features

- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 1A
- Std infeed conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Weight 290 kg

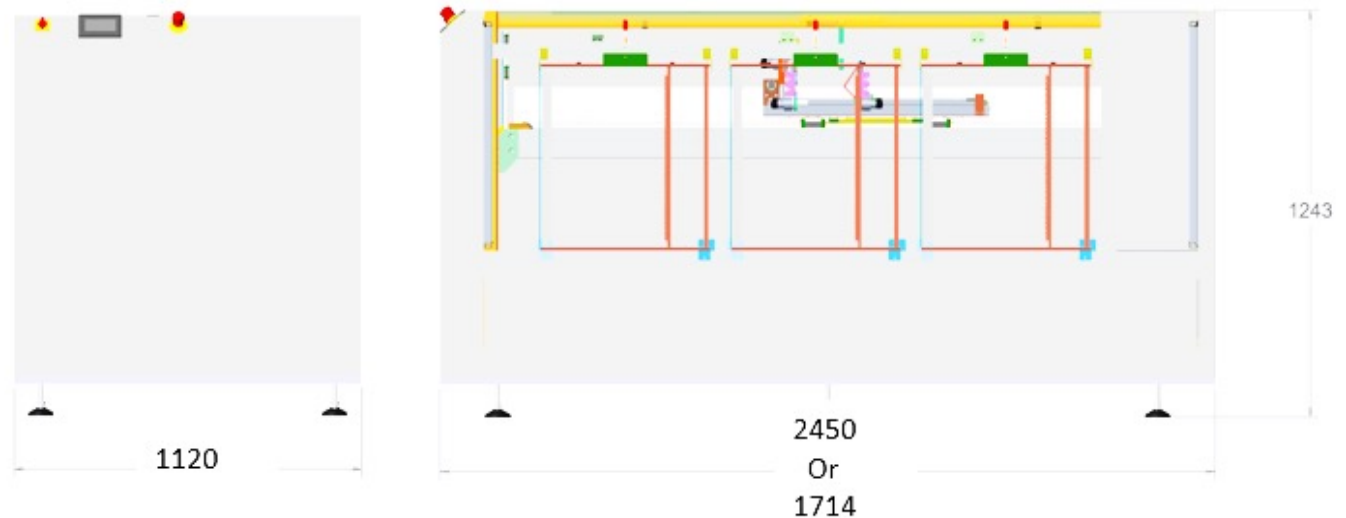
PCB specification

- Max/min PCB width 500 mm/60 mm
- Max PCB length 450 mm
- Max PCB weight 2 Kg
- Max rack dimensions
(L: 535 mm W: 530 mm H: 575 mm)
- HU-31 Max rack dimensions
3 pcs (L535mm W320mm H575mm)
2 pcs (L535mm W530mm H575mm)

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)

Standard Modules		
Rack capacity	2 Racks	3 Racks
L	1.714 mm	2.450 mm
Special Length Upon Request		





Long Board Loader

Pickup long PCBs (up to 1500mm length) from a stack and loads them into a production line

- R to L or L to R flow direction
- User interface by touch screen
- Easy loading of PCBs stack by a movable drawer

Long Board Loader FX-HB10

Technical Features

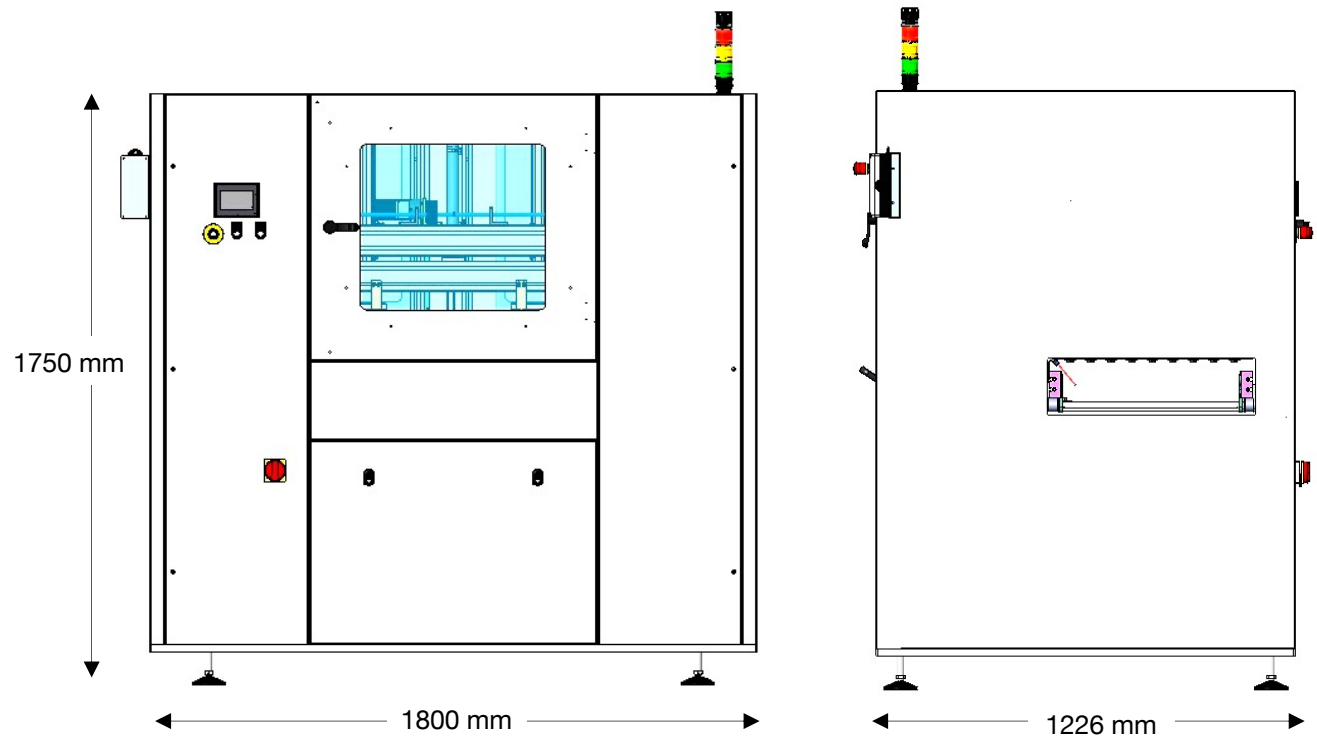
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Power Supply - 230Vac 50/Hz 1A
- Air pressure 6 bar
- Weight 250 kg

PCB & rack specification

- Max/Min PCB width 500 mm/100 mm
- Max PCB length 1500 mm
- Max PCB weight 2 kg

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)





Single rack handler

Line loader (Rack-unloader) as version HR-00

Line unloader (Rack loader) as version HR-25

- R to L or L to R flow direction
- User interface by touch screen
- Programmable magazine loading pitch

Single rack handler FX-HR00 / HR25

Technical Features

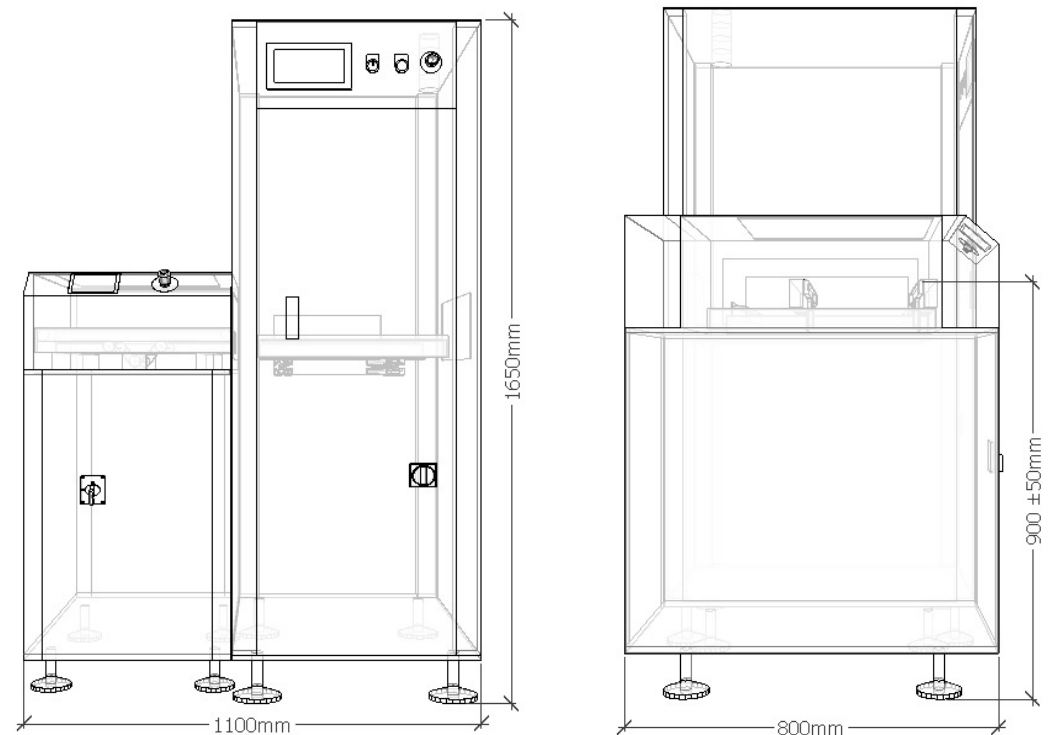
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)- only in HR-25
- Power Supply - 230Vac 50/Hz 1A
- Std conveyor speed 12 m/min- only in HR-25
- Electric Width Adjustment (EWA) only in HR-25
- Weight 150 kg

PCB & rack specification

- Max/Min PCB width 500 mm/60 mm
- Max PCB length 457 mm
- Max PCB weight 2 Kg
- Max rack dimensions (L: 535 mm W: 530 mm H: 575 mm)

Options

- 6 or 18 m/min conveyor speed- only in HR-25
- Automatic Width Adjustment (AWA)- only in HR-25





Single rack handler

Line loader (Rack-unloader) as version HR-05

Line unloader (Rack loader) as version HR-31

- R to L or L to R flow direction
- User interface by touch screen
- Programmable magazine loading pitch

Single rack handler FX-HR05 / HR-31

Technical Features

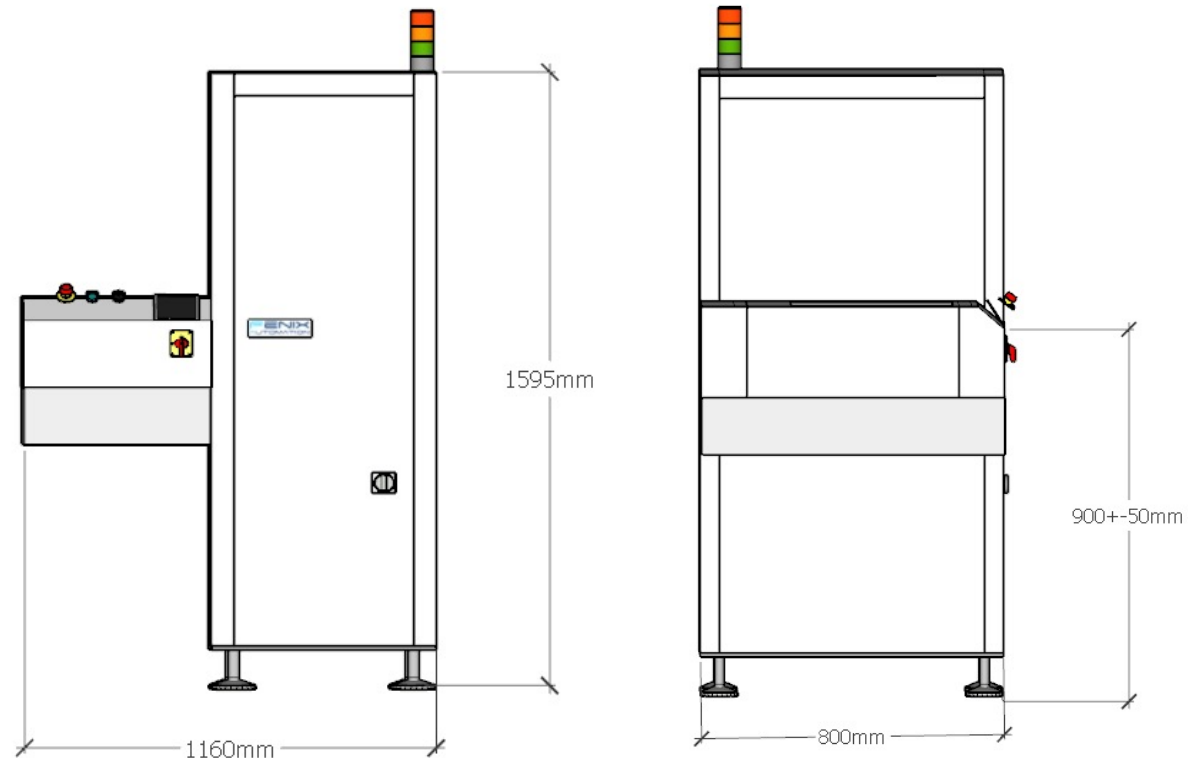
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)- only in HR-25
- Power Supply - 230Vac 50/Hz 1A
- Std conveyor speed 12 m/min- only in HR-25
- Electric Width Adjustment (EWA) only in HR-25
- Weight 150 kg

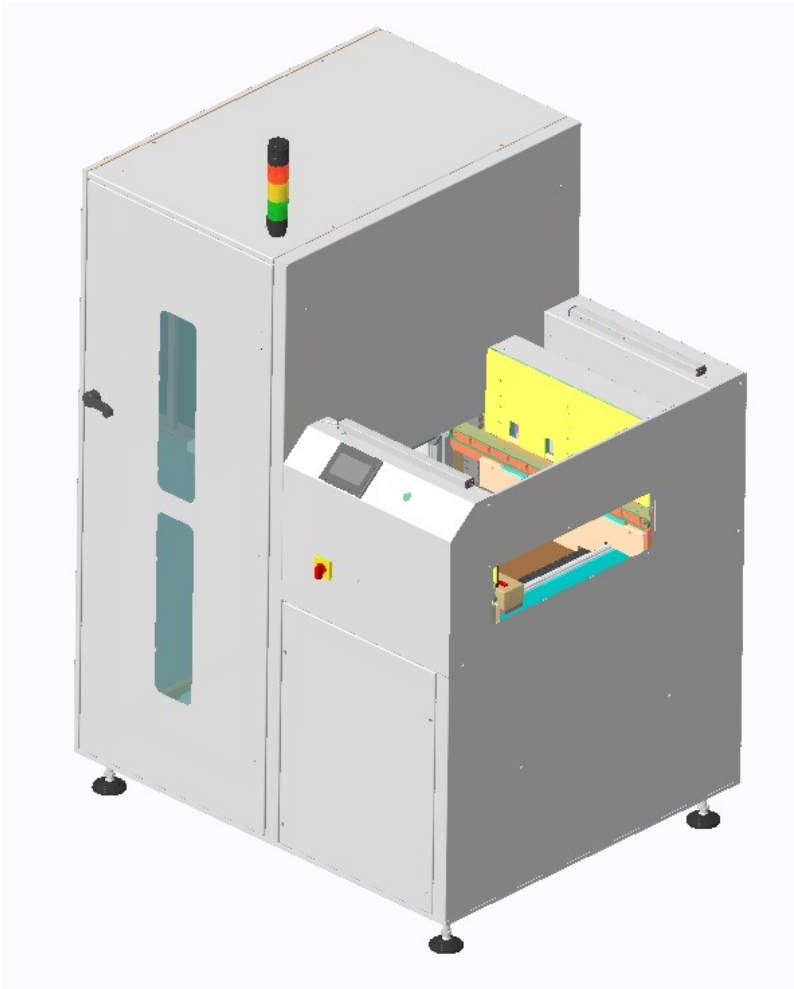
PCB & rack specification

- Max/Min PCB width 500 mm/60 mm
- Max PCB length 457 mm
- Max PCB weight 2 Kg
- Max rack dimensions (L: 535 mm W: 530 mm H: 575 mm)

Options

- 6 or 18 m/min conveyor speed- only in HR-25
- Automatic Width Adjustment (AWA)- only in HR-25





Single rack handler with bare board unstacker

Line loader (Rack-unloader) as version HR-00

Line unloader (Rack loader) as version HR-25

- R to L or L to R flow direction
- User interface by touch screen
- Programmable magazine loading pitch

Single rack handler combo FX-HB20

Technical Features

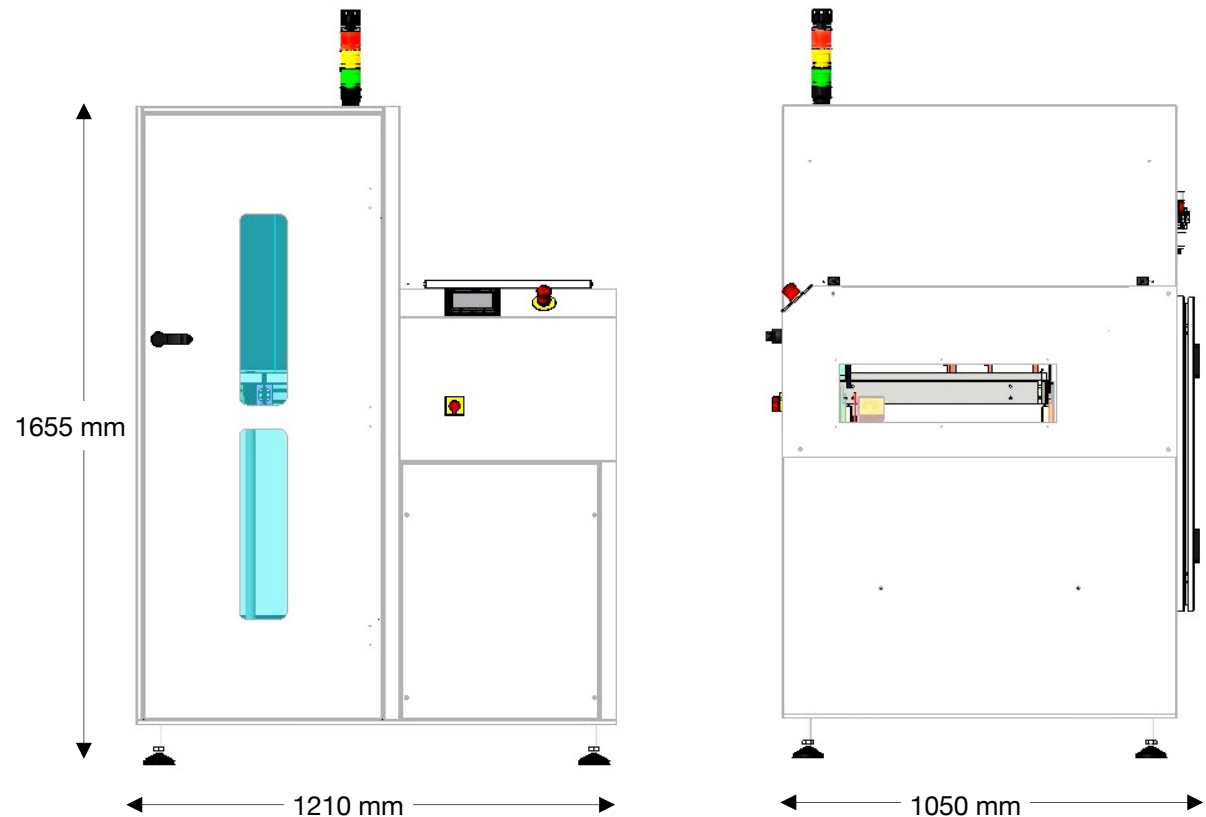
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)- only in HR-25
- Power Supply - 230Vac 50/Hz 1A
- Std conveyor speed 12 m/min- only in HR-25
- Electric Width Adjustment (EWA) only in HR-25
- Weight 180 kg

PCB & rack specification

- Max/Min PCB width 500 mm/60 mm
- Max PCB length 457 mm
- Max PCB weight 2 Kg
- Max rack dimensions (L: 535 mm W: 530 mm H: 575 mm)

Options

- 6 or 18 m/min conveyor speed- only in HR-25
- Automatic Width Adjustment (AWA)- only in HR-25





PCB Stacker and line unloader

Unloads naked boards from a production line and piles them in a stack

- R to L or L to R flow direction
- Pass through function
- User interface by touch screen
- Safety barriers

PCB Stacker FX-HB01

Technical Features

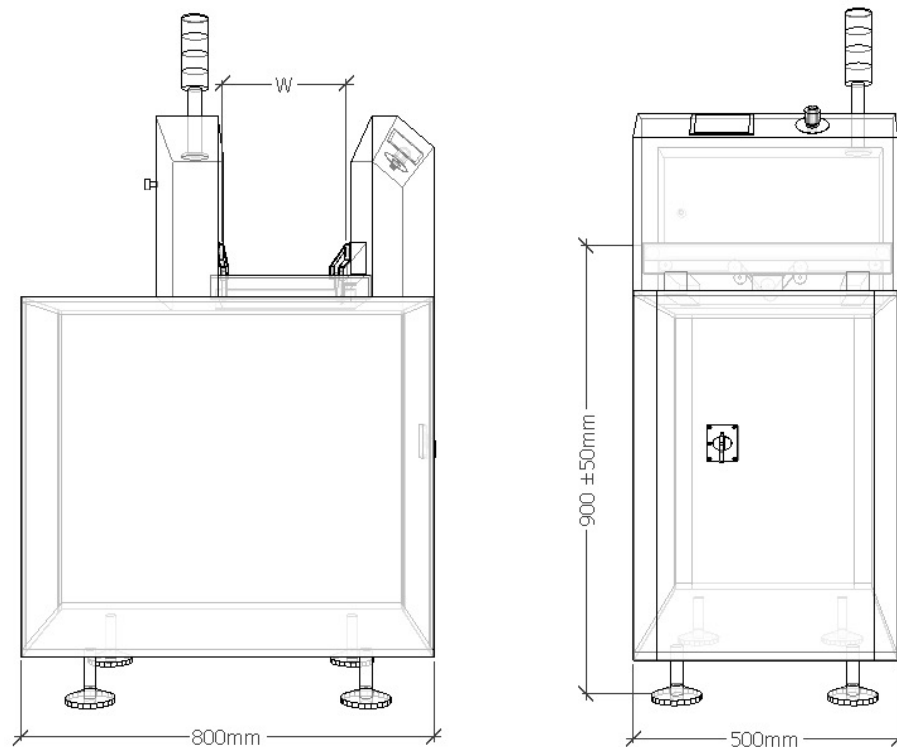
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 1A
- Std conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Air pressure 6 bar
- Weight 150 kg

PCB specification

- Max/Min PCB width 500 mm/60 mm
- Max PCB length 457 mm
- Max PCB weight 2 Kg

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)





Line unloaders 3-5 racks

Unloads PCBs from a production line for loading into a rack

- R to L or L to R flow direction
- User interface by touch screen
- Programmable unloading pitch
- Automatic rack handlers
- 500 mm infeed conveyor
- Full racks in the lower conveyor level
- Empty racks in the upper conveyor level



Line unloaders 3-5 racks FX-HU00

Technical Features

- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 1A
- Std infeed conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Air pressure 6 bar
- Weight 280 kg

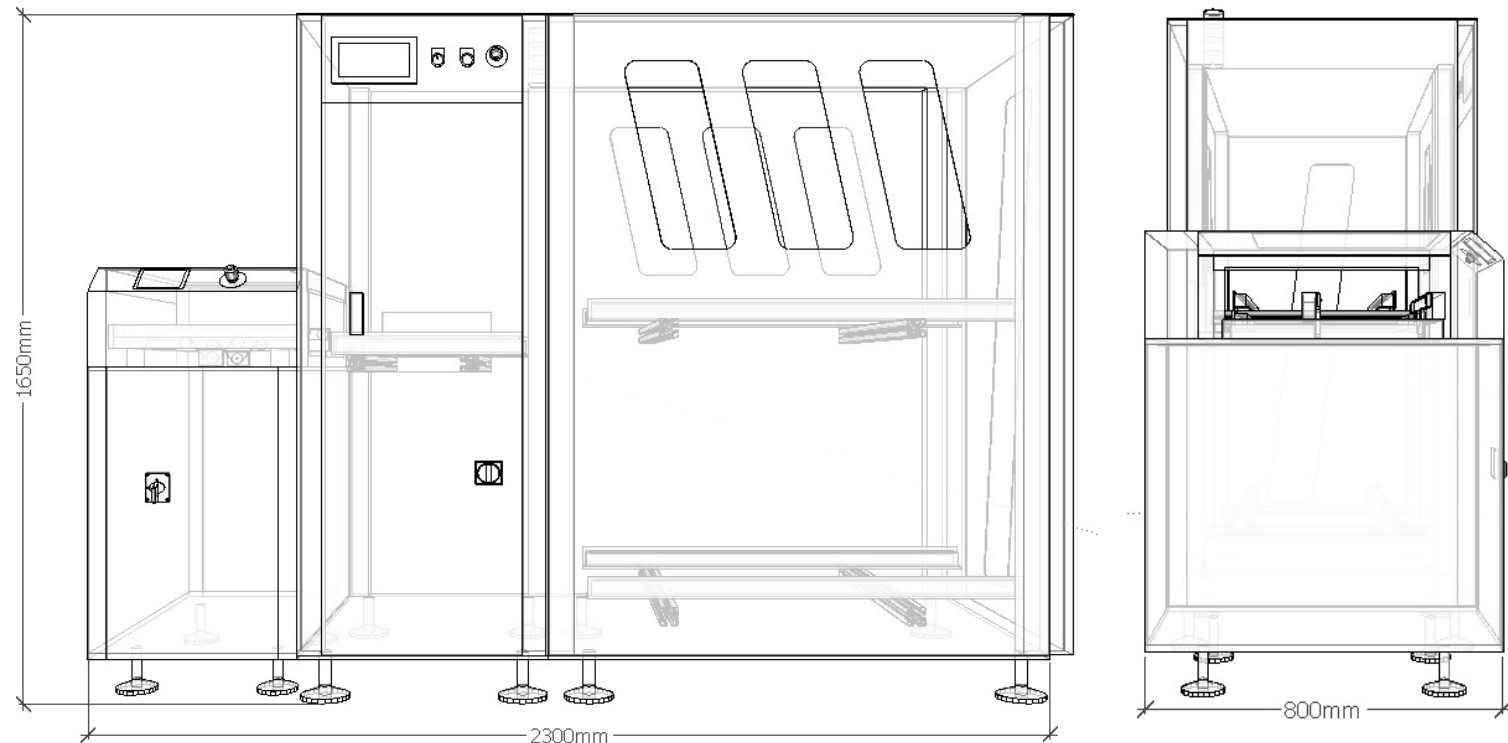
PCB specification

- Max/min PCB width 500 mm/60 mm
- Max PCB length 457 mm
- Max PCB weight 2 Kg
- Max rack dimensions
(L: 535 mm W: 530 mm H: 575 mm)

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)
- 1.000 mm infeed conveyor

Standard Modules		
Rack capacity	3 Racks	5 Racks
L	1.750 mm	2.300 mm
Special Length Upon Request		





Line Unloaders 3-5 racks

Unloads PCBs from production line and loads them into a rack

- R to L or L to R flow direction
- User interface by touch screen
- Programmable unloading pitch
- Automatic rack handlers
- Full racks in lower conveyor level
- Empty racks in the upper conveyor level

Line Unloaders 3-5 racks FX-HU20 / HU25

Technical Features

- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Power Supply - 230Vac 50/Hz 1A
- Air pressure 6 bar
- Weight 250 kg

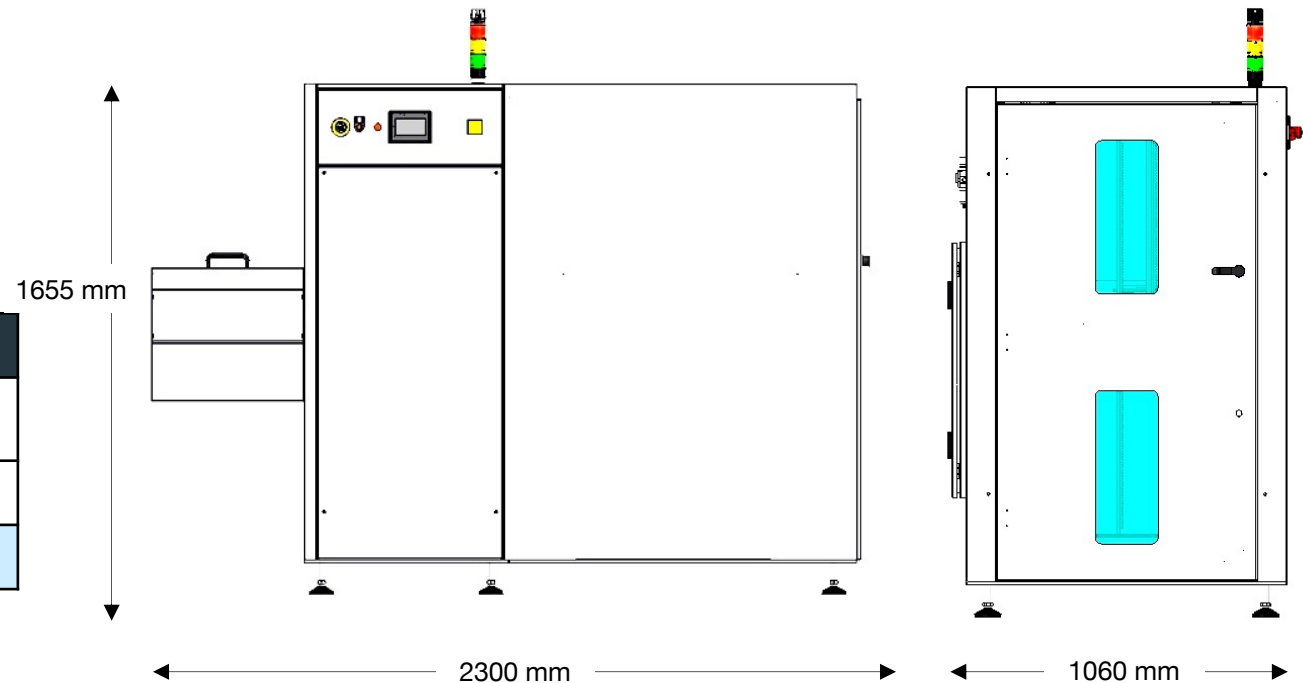
PCB & rack specification

- Max/Min PCB width 500 mm/100 mm
- Max PCB length 457 mm
- Max PCB weight 2 kg
- Max rack dimensions (L: 535 mm W: 530 mm H: 575 mm)

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)

Standard Modules		
Rack capacity	3 Racks (HL25)	5 Racks (HL20)
L	1.750 mm	2.350 mm
Special Length Upon Request		





Line unloaders 2-3 racks

Unloads PCBs from a production line for loading into a rack

- R to L or L to R flow direction
- User interface by touch screen
- Programmable unloading pitch
- Managing three racks in parallel
- Separation of filed board from ok board after AOI or testing equipment



Line unloaders 2-3 racks FX-HU30 / HU31

Technical Features

- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 1A
- Std infeed conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Weight 290 kg

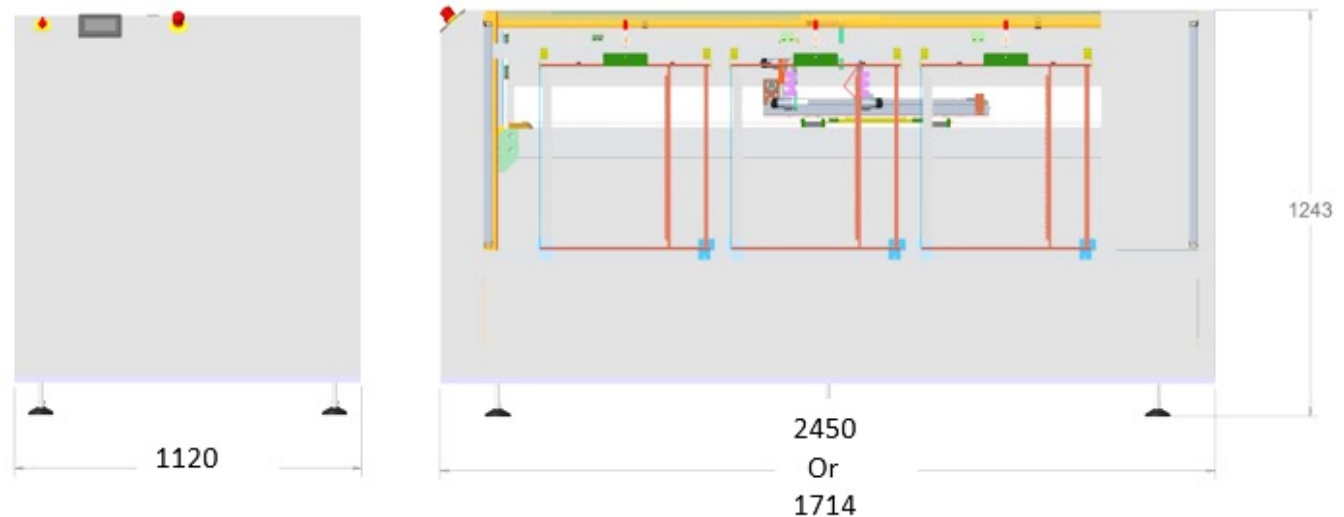
PCB specification

- Max/min PCB width 500 mm/60 mm
- Max PCB length 450 mm
- Max PCB weight 2 Kg
- Max rack dimensions
(L: 535 mm W: 530 mm H: 575 mm)
- HU-31 Max rack dimensions
3 pcs (L535mm W320mm H575mm)
2 pcs (L535mm W530mm H575mm)

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)

Standard Modules		
Rack capacity	2 Racks	3 Racks
L	1.714 mm	2.450 mm
Special Length Upon Request		





Line unloader - Bad & Good separator

Line unloader to rack modules with separation of passed boards from failed ones

- R to L or L to R flow direction
- User interface by touch screen
- Programmable magazine loading pitch
- Bad and Good boards can be forwarded to the upper or the lower conveyor level as desired



Line unloader - Bad & Good separator FX-HM00

Technical Features

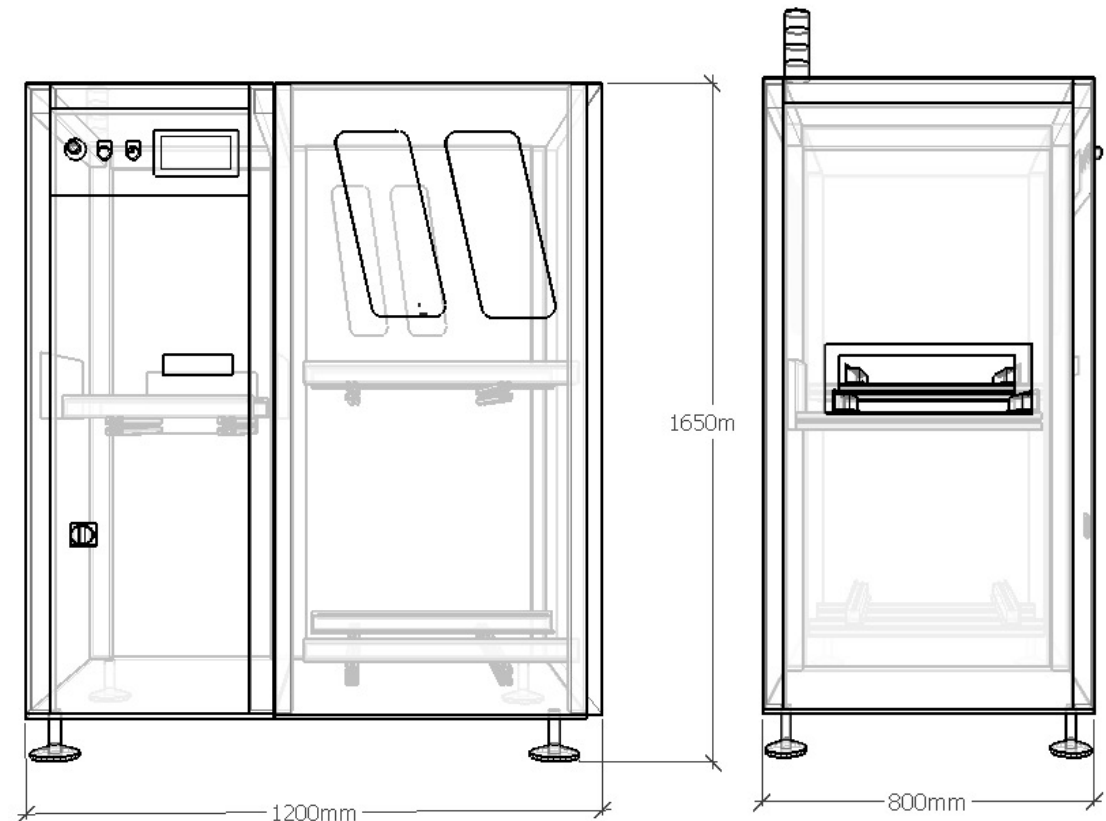
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 1A
- Std conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Air pressure 6 bar
- Weight 250 kg

PCB & rack specification

- Max/Min PCB width 500 mm/60 mm
- Max PCB length 457 mm
- Max PCB weight 2 Kg
- Max rack dimensions (L: 535 mm W: 530 mm H: 575 mm)

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)





Long Board UnLoader

Line unloader to rack modules with separation of passed boards from failed ones

- R to L or L to R flow direction
- User interface by touch screen
- Programmable magazine loading pitch
- Bad and Good boards can be forwarded to the upper or the lower conveyor level as desired

Long Board UnLoader FX-CA05

Technical Features

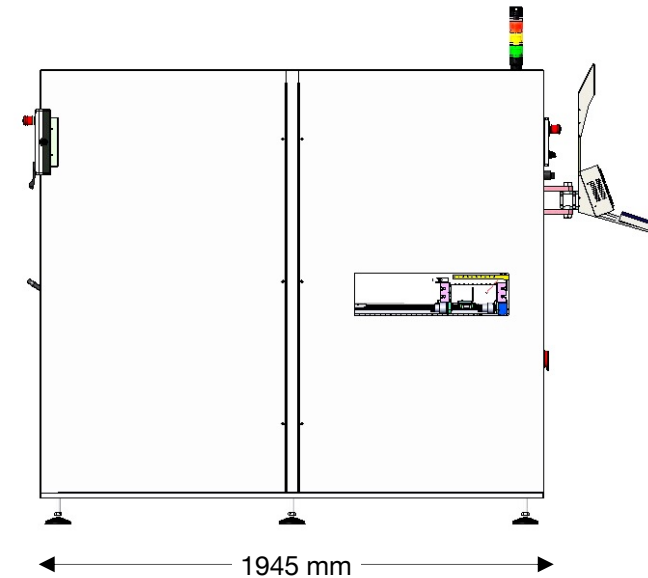
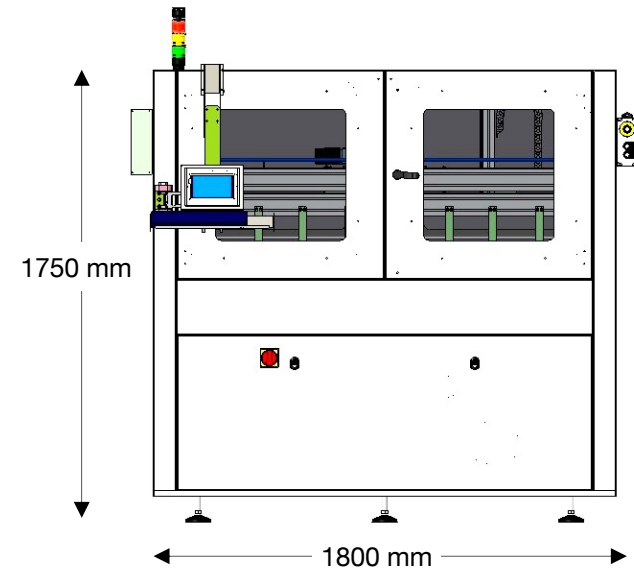
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 1A
- Std conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Air pressure 6 bar
- Weight 250 kg

PCB & rack specification

- Max/Min PCB width 500 mm/60 mm
- Max PCB length 1500 mm
- Max PCB weight 2 Kg
- Max rack dimensions (L: 535 mm W: 530 mm H: 575 mm)

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)
- LED on/off test function





Single rack unloader HR35

- R to L or L to R flow direction
- User interface by touch screen
- Programmable magazine loading pitch
- Small footprint

Single rack unloader FX-HR35

Technical Features

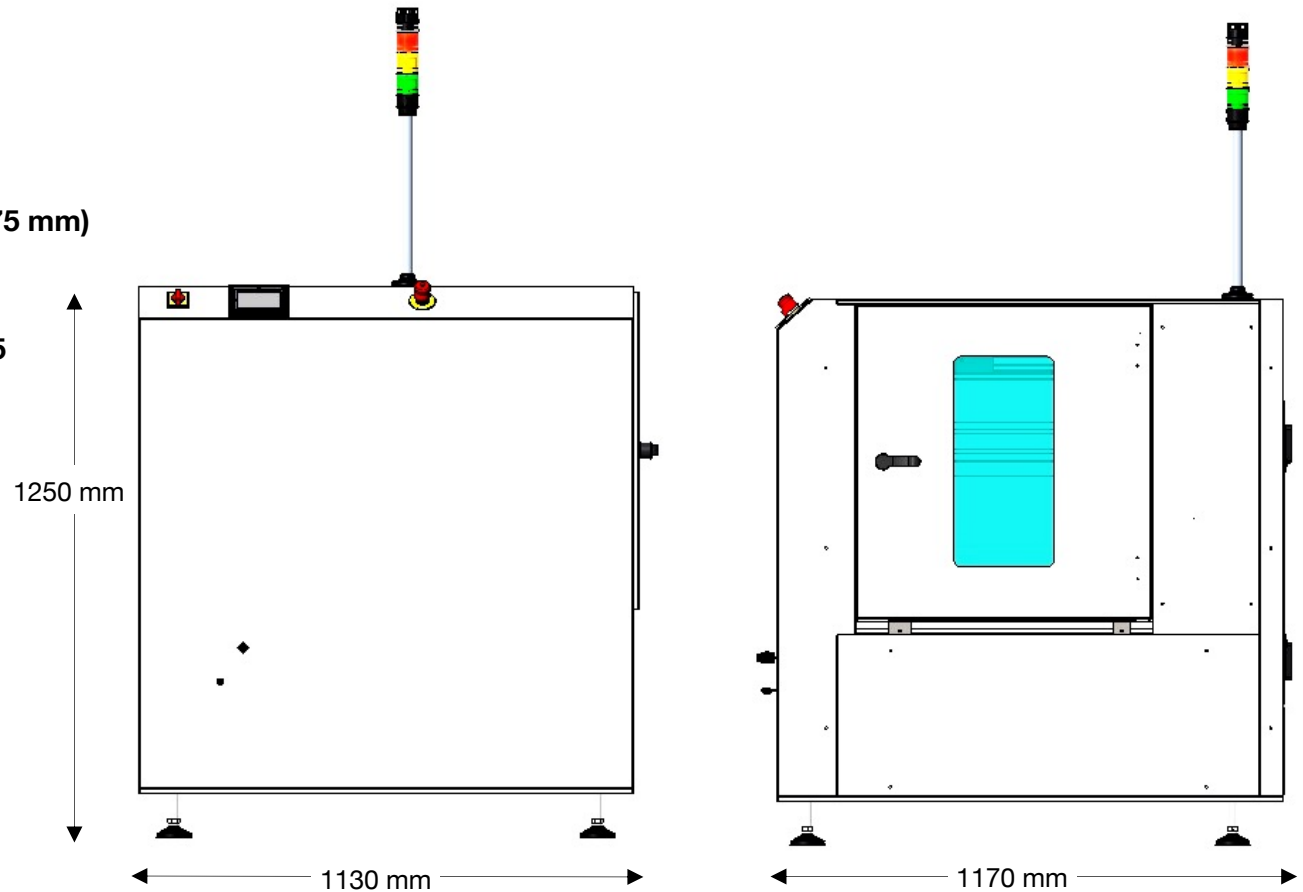
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)- only in HR-25
- Power Supply - 230Vac 50/Hz 1A
- Std conveyor speed 12 m/min- only in HR-25
- Electric Width Adjustment (EWA) only in HR-25
- Weight 150 kg

PCB & rack specification

- Max/Min PCB width 500 mm/60 mm
- Max PCB length 457 mm
- Max PCB weight 2 Kg
- Max rack dimensions (L: 535 mm W: 530 mm H: 575 mm)

Options

- 6 or 18 m/min conveyor speed- only in HR-25
- Automatic Width Adjustment (AWA)- only in HR-25





FIFO 30 PCB buffer

Inline PCBs buffering with FIFO function

- R to L or L to R flow direction
- Pass through function
- User interface by touch screen
- In –Out Safety Sutter
- Standard length 500

FIFO 30 PCB buffer FX-HF00

Technical Features

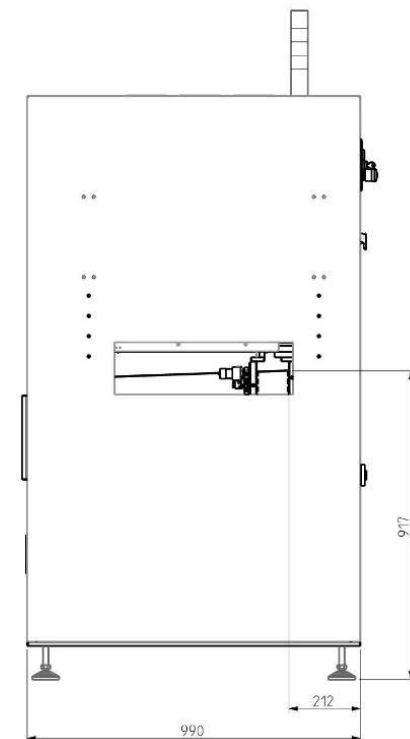
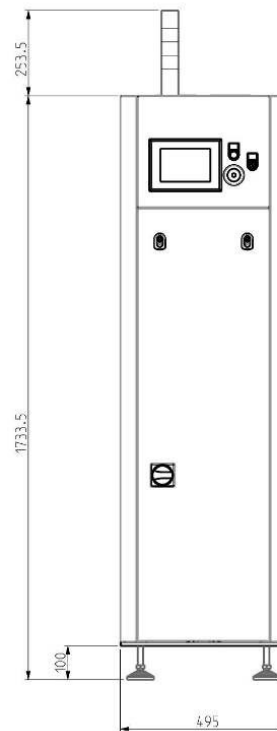
- Capacity 30 PCBs
- Pitch between stored PCBs 24 mm
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 1A
- Std conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Weight 150 kg

PCBs specification

- Max/Min PCB width 500 mm/100 mm
- Max PCB length 457 mm
- Max PCB weight 2 Kg

Options

- *6 or 18 m/min conveyor speed*
- *Automatic Width Adjustment (AWA)*
- *Cooling fans + programmable cooling time*
- *“Almost full” function*
- *Line length 1.000 mm*





FIFO rack

Inline buffer storing PCB in a standard rack with FIFO function

- L to R flow direction
- Pass through function
- Line Loader function
- Line Unloader function
- User interface by touch screen
- Outfeed safety shutter

FIFO rack FX-HF25

Technical Features

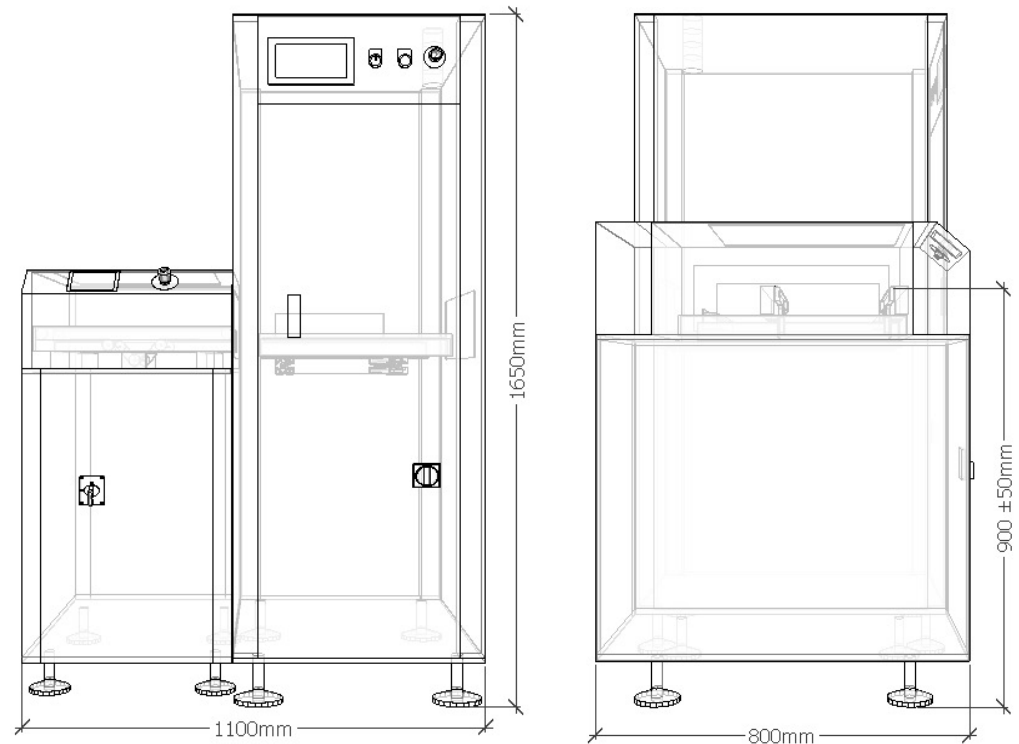
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 1A
- Std conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Weight 350 kg

PCB & Rack specification

- Max/Min PCB width 500 mm / 60 mm
- Max PCB length 457 mm
- Max PCB weight 2 Kg
- Max rack dimensions (L535mm W530mm H575mm)

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)
- 8 mm carrying edge





Single rack handler Bad & Good

In Line unloader to rack modules with separation of passed boards (pass-through) from failed ones (stored in the rack)

- L to R flow direction
- User interface by touch screen
- Programmable magazine loading pitch

Single rack handler Bad & Good FX-HR50

Technical Features

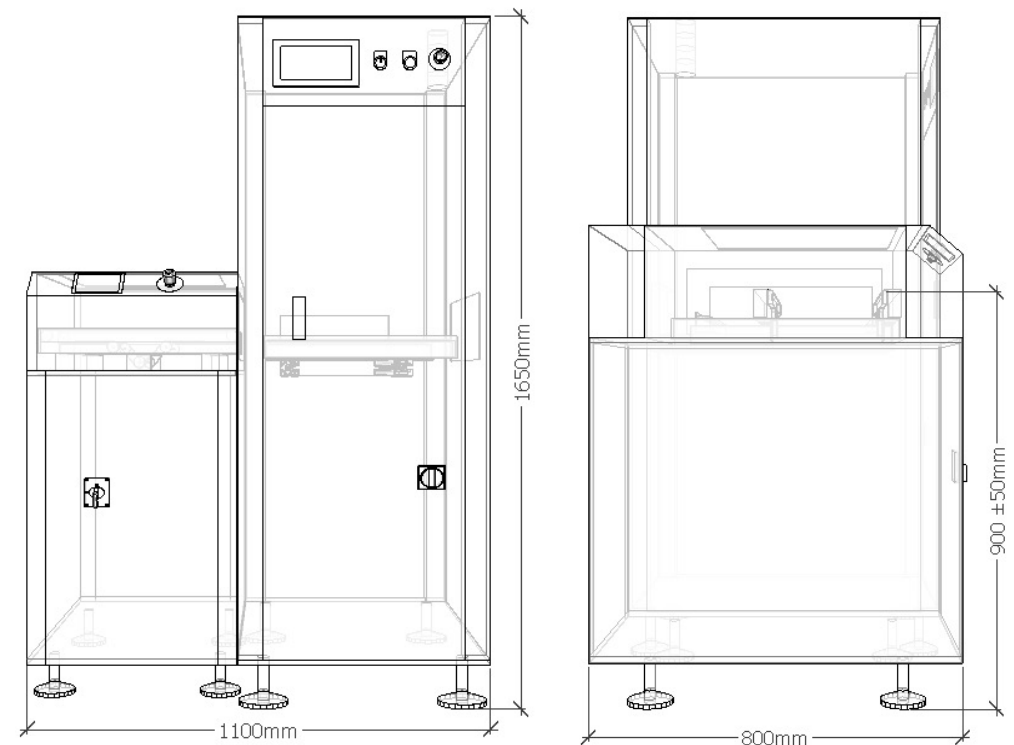
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 1A
- Std conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Weight 350 kg

PCB & rack specification

- Max/Min PCB width 500 mm/60 mm
- Max PCB length 457 mm
- Max PCB weight 2 Kg
- Max rack dimensions (L: 535 mm W: 530 mm H: 575 mm)

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)





PCB Inverter

Inline PCB capsize unit (flips board 180°)

- R to L or L to R flow direction
- Pass through function
- User interface by touch screen
- Safety cover with safety sensors

PCB Inverter FX-HI00

Technical Features

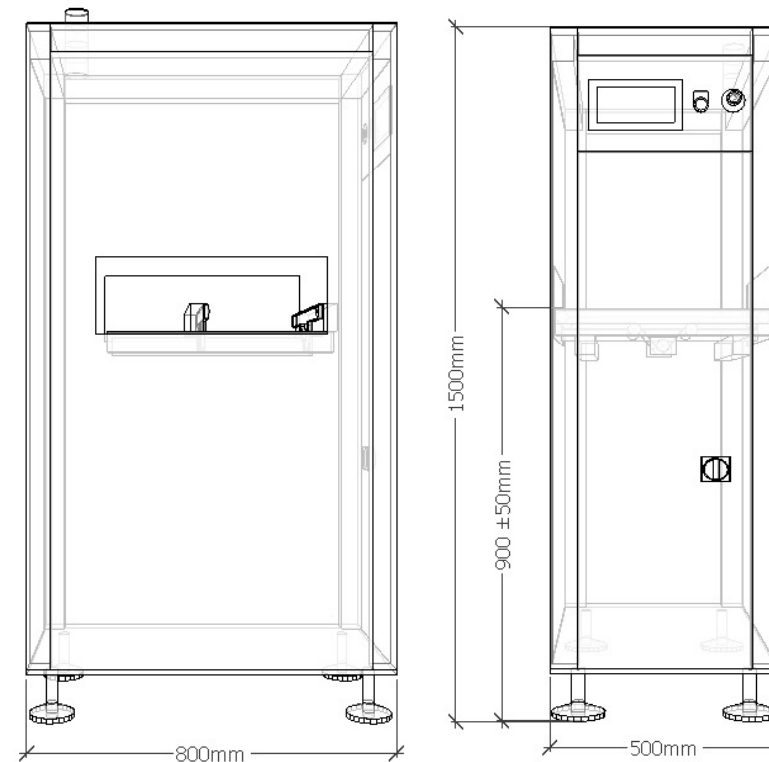
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 11A
- Std conveyor Speed 12 m/min
- Electric Width Adjustment (EWA)
- Weight 150 kg

PCBS specification

- Max/Min PCB width 500 mm/60 mm
- Max PCB length 457mm
- Max PCB weight 2 Kg

Options

- 6 or 12 m/min conveyor speed
- Automatic Width Adjustment (AWA)
- 8 mm carrying edge





Line gate

PCB Conveyor with 1m telescopic bridge retraction for creating passageways through a production line

- R to L or L to R flow direction
- User interface by touch screen
- Programmable gate stroke



Line gate FX-HS00

Technical Features

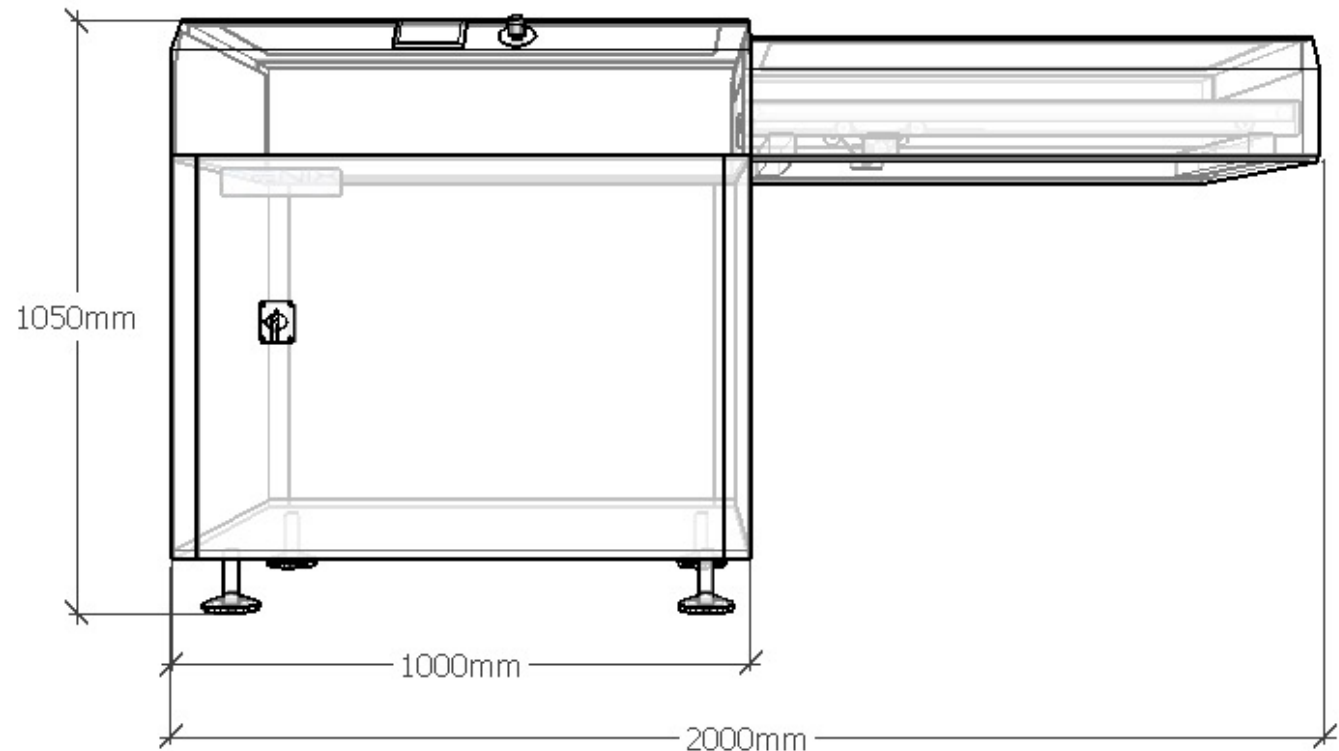
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 1A
- Std conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Weight 250 kg

PCB & rack specification

- Max/Min PCB width 500 mm/60 mm
- Max PCB length 457 mm
- Max PCB weight 2 Kg
- Max rack dimensions
(L: 535 mm W: 530 mm H: 575 mm)

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)





PCB Turn module

In Line PCBs Turn Unit

- L Function
- T Function
- X Function
- Separation of good boards from failed ones

PCB Turn module FX-HT00

Technical Features

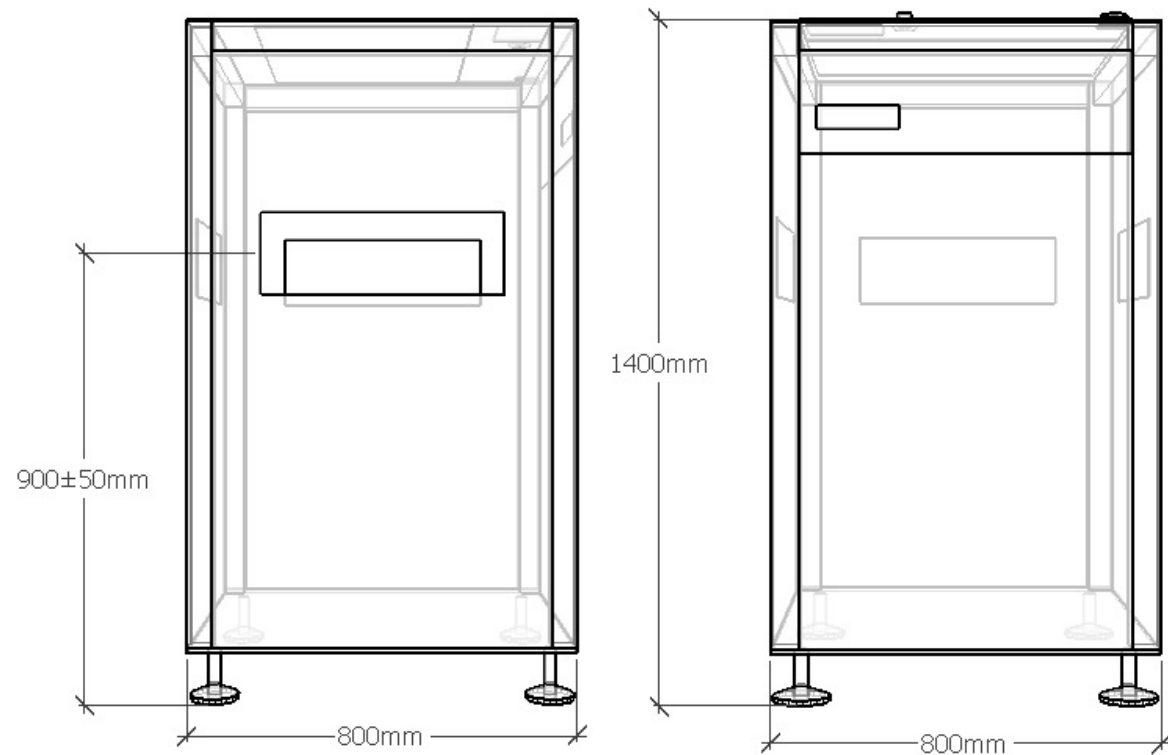
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 1A
- Std conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Weight 150 kg

PCB specification

- Max/min PCB width 500 mm/60 mm
- Max PCB length 457 mm
- Max PCB weight 2 Kg

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)
- Pusher mechanism for rack loader

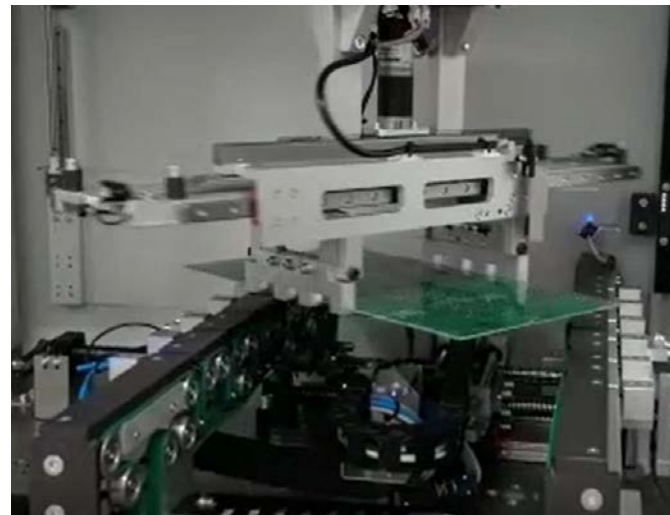




PCB Rotator

In Line PCB Rotator allows to swap the carrying edge of the board

- R to L or L to R flow direction
- User interface by touch screen
- Safety cover with safety sensors



PCB Rotator FX-HT25

Technical Features

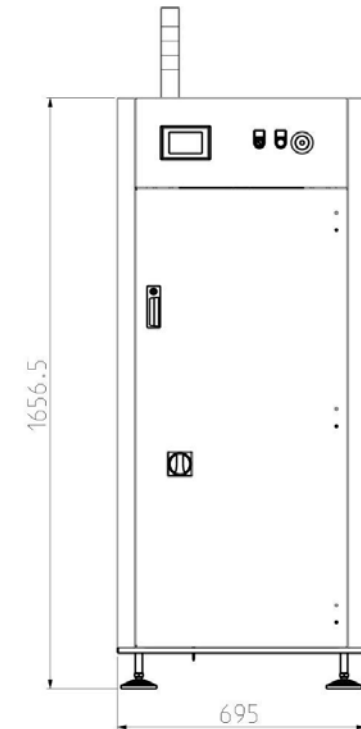
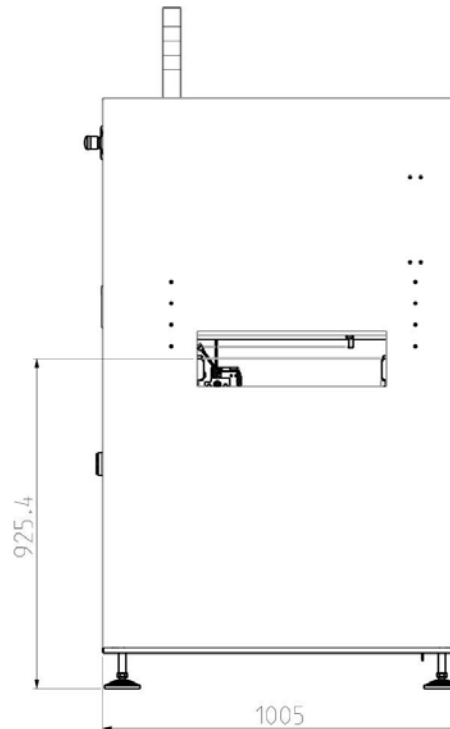
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (std carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 1A
- Std conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Weight 150 kg

PCB specification

- Max/min PCB width 500 mm/60 mm
- Max PCB length 457 mm
- Max PCB weight 2 Kg

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)





Operator Station

Unloads PCBs from a production line for loading into a rack

- R to L or L to R flow direction
- Pass through function
- User interface by touch screen
- Standard length 1000, 1500 mm
- Standard motorized segment 500 mm

Operator Station FX-HW00

Technical Features

- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 1A
- Std conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Weight 150 kg

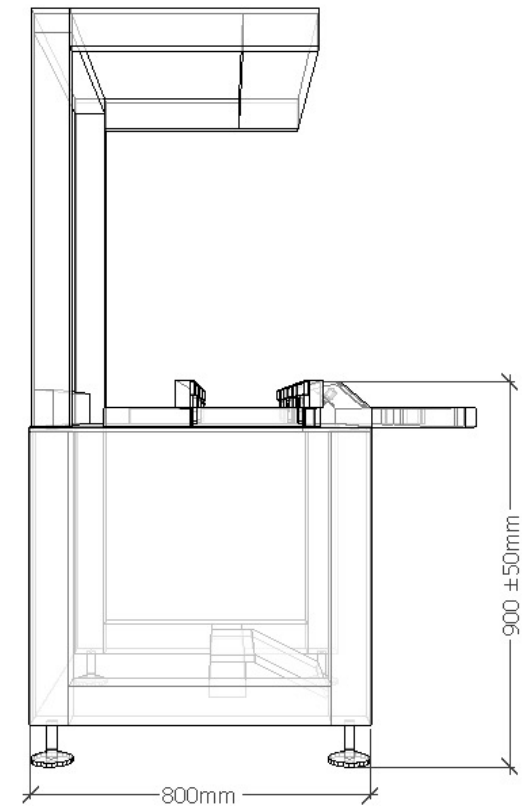
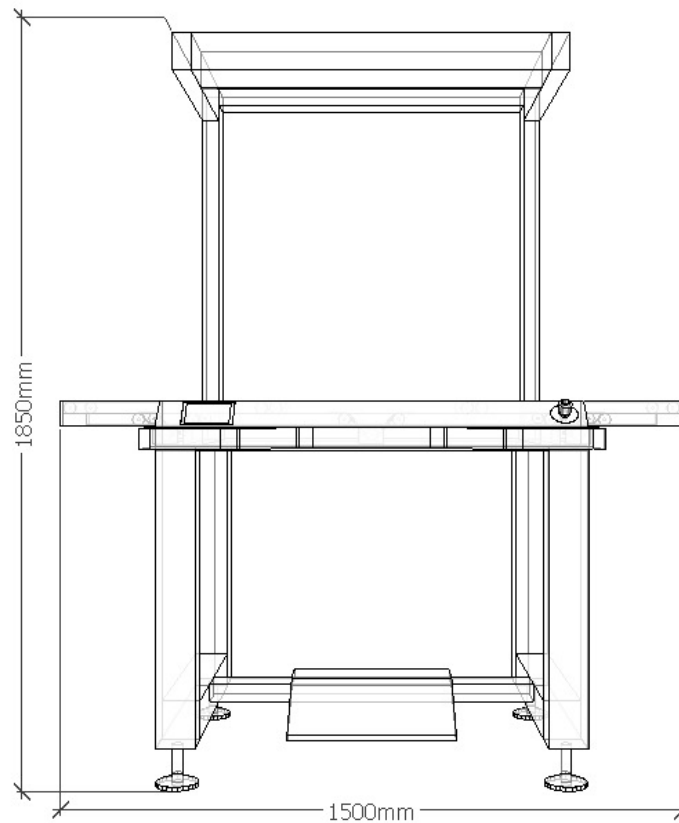
PCB specification

- Max/min PCB width 500 mm/60 mm
- Max PCB length 457mm
- Max PCB weight 2 Kg

Options

- Fail interceptor
- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)
- 8 mm carrying edge

Standard Modules		
L	1.000 mm	1.500 mm
W	800 mm	800 mm
Special Length Upon Request		





Operator Station

Unloads PCBs from a production line for loading into a rack

- R to L or L to R flow direction
- Pass through function
- User interface by touch screen
- Standard length 1.000, 1.500 mm
- Standard motorized segment 500 mm

Operator Station FX-HW75 Basic Line

Technical Features

- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Power Supply - 230Vac 50/Hz 1A
- Std conveyor speed 12 m/min
- Electric Width Adjustment (EWA)
- Weight 150 kg

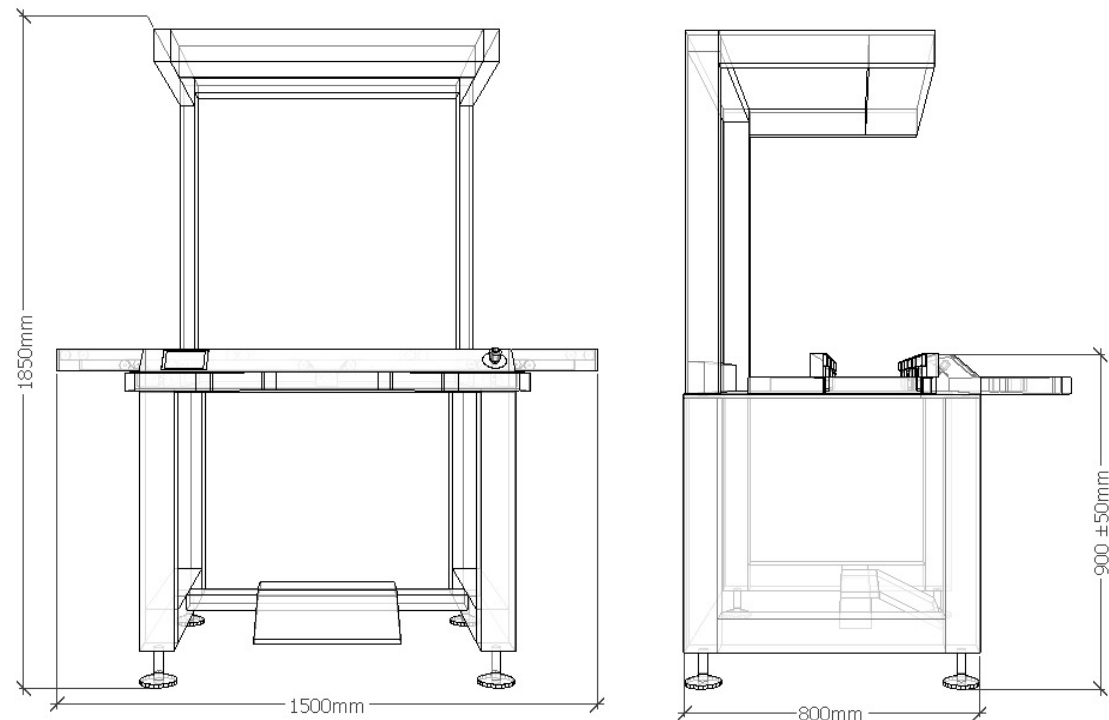
PCB specification

- Max/min PCB width 500 mm/60 mm
- Max PCB length 457mm
- Max PCB weight 2 Kg

Options

- Fail interceptor
- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)
- 8 mm carrying edge

Standard Modules		
L	1.000 mm	1.500 mm
W	800 mm	800 mm
Special Length Upon Request		





PCB & Pallet lifter

Elevator for raising and lowering PCBs & pallets according to line requirements

- R to L or L to R flow direction
- Pass through function
- User interface by touch screen
- Standard length 500
- Suitable for both PCBs and pallets

PCB & Pallet lifter FX-HG00

Technical Features

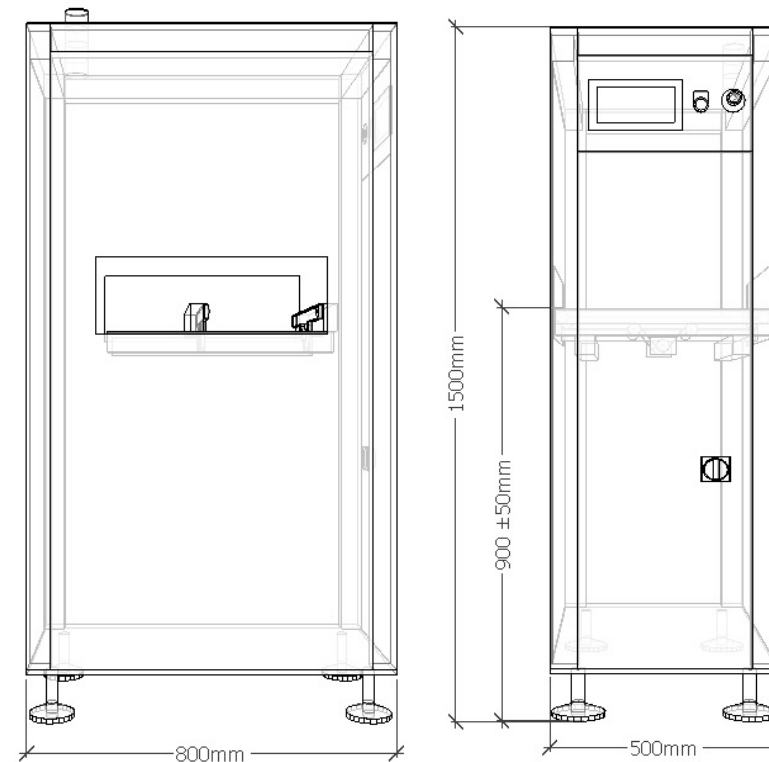
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (carrying edge 3 mm)
- Std. pneumatic movement
- Std. stroke from 240 to 950 mm
- Power Supply - 230Vac 50/Hz 1A
- Std conveyor Speed 12 m/min
- Electric Width Adjustment (EWA)
- Weight 150 kg

PCB & Pallet specification

- Max/Min PCB width 500 mm/60 mm
- Max PCB length 457mm
- Max PCB weight 2 Kg

Options

- 6 or 18 m/min conveyor speed
- Automatic Width Adjustment (AWA)
- Programmable Stroke
- Line length 600 or 750 mm
- 8 mm carrying edge



TTRACEABILITY





Laser marking cell

The in line laser marking cell Fenix ML-50 is used for engraving, directly onto electronic PCBs or the final product cases, barcode, 2d code or images, symbols and editing. The laser and board are moved by servo axis allowing coverage of working surfaces from 450 mm L x 500 mm W (standard version) up to 1500 mm L x 500 mm W.



Flexible laser marking cell FX-ML50

Technical Features

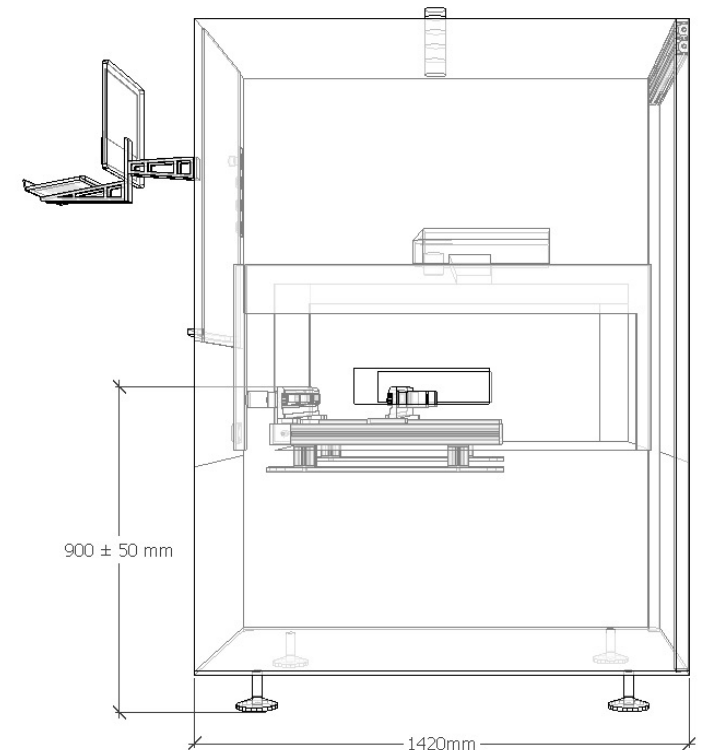
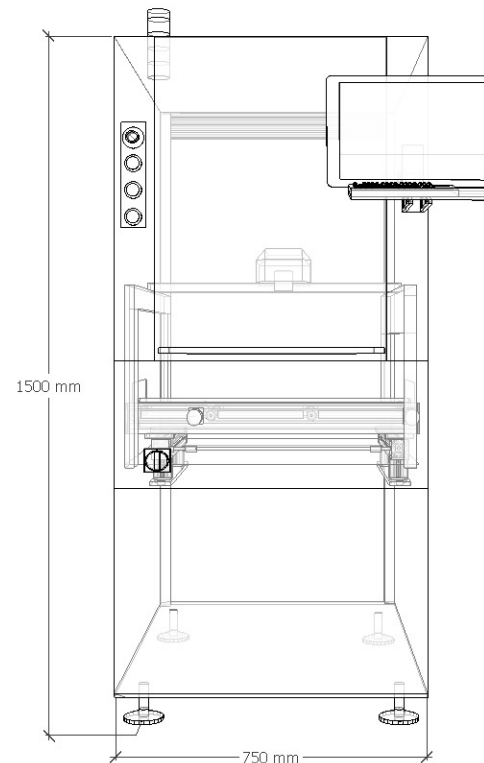
- In – Out SMEMA Interface
- ESD Safety Design
- CE Compliance
- Flat Belt (Width 3 mm)
- Power Supply - 230Vac 50/Hz 16A P = 2kW
- Laser Source CO2 - 10 Watt
- Conveyor Speed 6 m/min
- Automatic Width Adjustment
- Weight 300 kg
- Marking area L=400 x W=500 mm
- Suitable conveyor for pallet and PCB
- Closed marking area by Safety Shutter during engraving process

PCB specification

- Max/min PCB width 500 mm/100 mm
- Max /min PCB length 450 mm/100 mm
- Max PCB weight 2 Kg

Options

- Longer board kit (up to 1.500 mm length)
- Contact-less cleaning sistem post marking





Labeling cell

The FX-MA 01 cell is able to automatically apply adhesive labels directly on the surface of the electronic board, on top of electronic components or on a product transported to a production line.

The cell, which works in line, is equipped with automatic printer and vertical applicator.

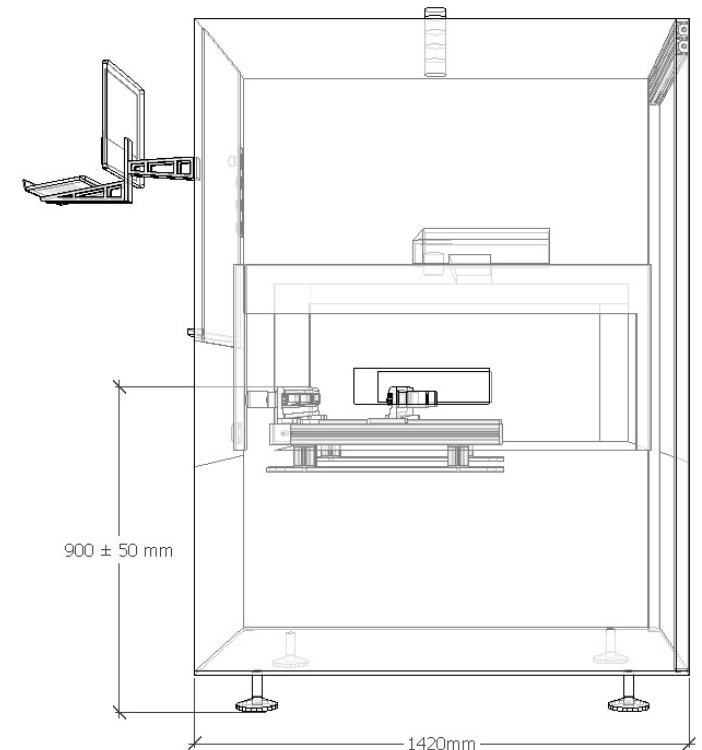
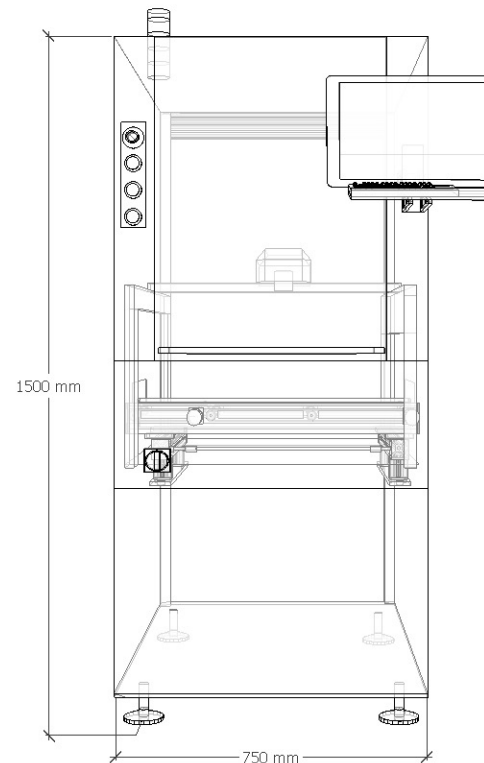
The data to be printed on the labels is transferred to real time. The machine is capable to applying one or more labels in any position of the board or product to be processed.



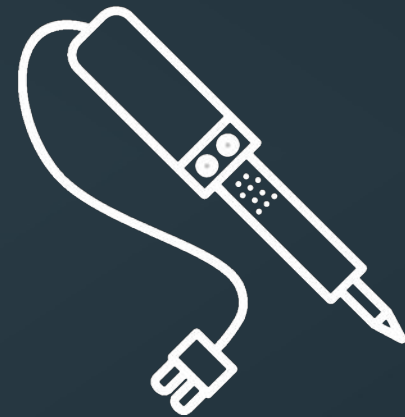
In Line labeling system FX-MA01

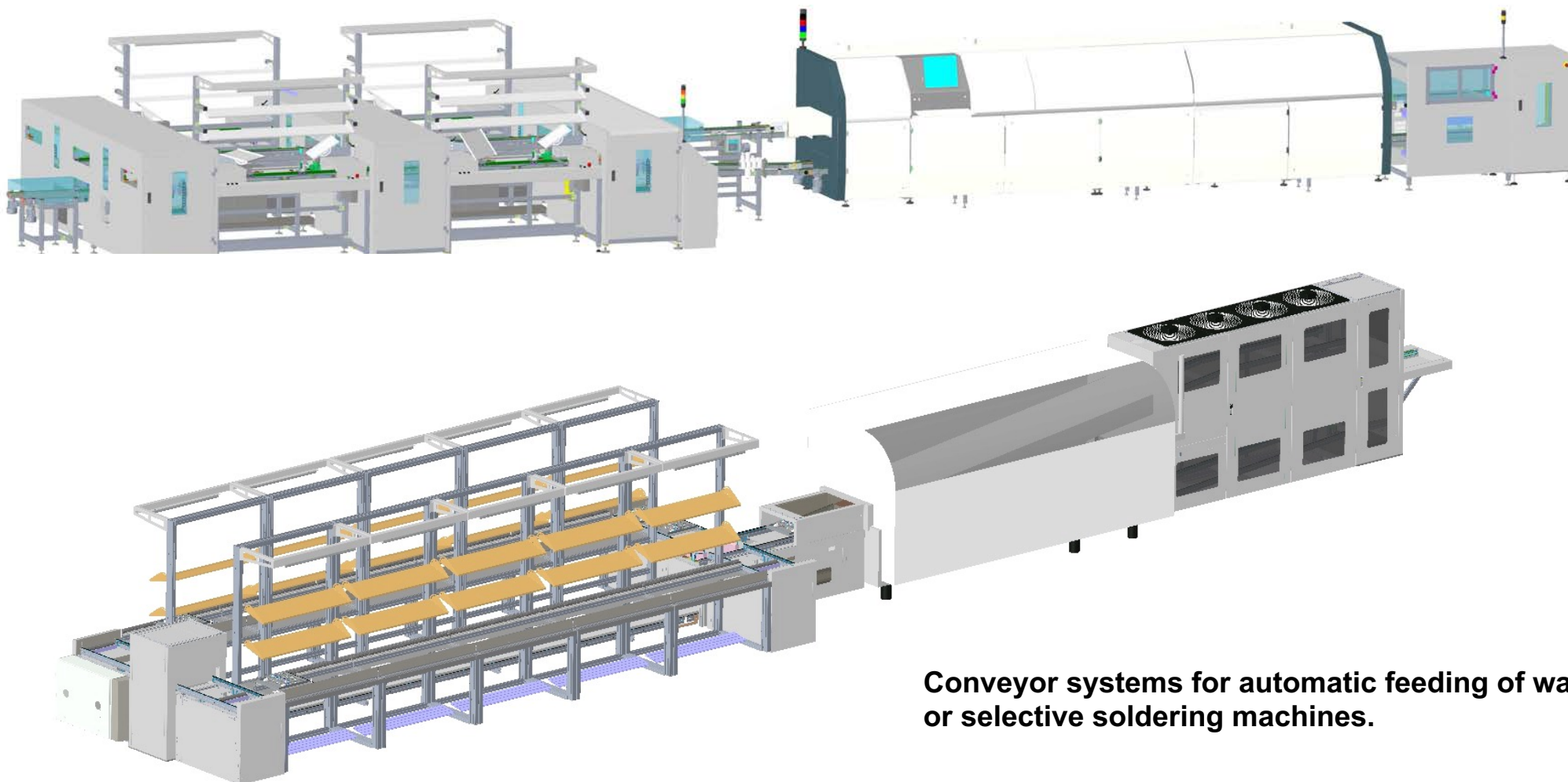
Technical Features

- Line length 750 mm
- Max board width 320 mm
- Max board length 350 mm
- Sliding height SMEMA (950 mm)
- Velocità del convogliatore 12m/ min adjustable
- Width adjustment Electric EWA
- Transport direction L to R
- Fixed side Front
- Power supply - 230 V / 50 Hz
- Belt type on flat conveyor (3mm support)
- Color RAL7035
- Infeed Interface SMEMA
- Outfeed Interface SMEMA
- X axis Servo controlled
- Y axis Servo controlled
- Z axis Pneumatic variable height
- Operator interface Industrial PC
- Printer CAB



PCBs SOLDERING LINE





Conveyor systems for automatic feeding of wave or selective soldering machines.

MOBILE ROBOT





Automatic material handling & transportation





Portata 500 Kg



Movimentazione di Euro
pallet .

Portata 100 Kg



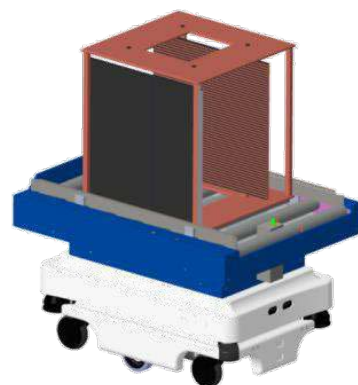
Movimentazione carichi
medi .

Portata 200 Kg



Movimentazione carichi
pesanti .

Mobile Robots, as implemented by Fenix Automation and suitably fitted, allow an automatic, safe and efficient flow of materials and accessories in the production premises.



**Handling of PCB
racks and ESD
component boxes
within the
production area**



ACCESSORIES





Quick width setting



High temperature



Long boards



COP-803

Technical Features

- External size: L355xW320xH563mm
- Side panel slot depth: 3.5 mm, width: 5 mm, pitch:10 mm
- Surface resistance: $10e4-10e6\Omega$ / $10e6-10e9\Omega$
- Specification for PCB: 355x (50-250) mm
- Storage capacity: 50pcs Max
- Tolerant Temperature: 85°C/120°C/200°C
- Materials: conductive side panel, aluminum pillar, zincification steel base
- Adjust way: gear track
- Ref postion: A=34 B=34



COP-806 BELT

Technical Features

- External size: L460xW400xH563mm
- Side panel slot depth: 3.5 mm, width: 5 mm, pitch:10 mm
- Surface resistance: $10e4-10e6\Omega$ / $10e6-10e9\Omega$
- Specification for PCB: 355x (50-250) mm
- Storage capacity: 50pcs
- Max Tolerant Temperature: 85°C
- Adjust way: belt adjust
- Materials: conductive side panel, aluminum pillar, zincification steel base
- Ref postion: A=34 B=34



Alu Board



Long Board



Multi blade



Rack trolley & elevator

Rack trolley with crank-operated platform height adjustment

- Lifting capacity 120 Kg
- Lifting height up to 1.100 mm
- Lifting ratio 70 mm per revolution
- Ø 200 mm main wheels with ball bearings
- Parking brake
- Net weight 25 Kg



The presented list of elements is a sample configuration of the Premium 1530 table.

- Maximum load capacity: 600 kg
- Height adjustment: stepless
- Height adjustment range: 670 - 1120 mm
- Height adjustment lock: 4 screws (on each leg)
- Levelling: feet
- Applicable table top: ergonomic, rectangular
- Metal cast feet for increased stability





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YOUR REFERENCE POINT



Above mentioned data are indicative and Fenix Automation s.r.l. reserves the right to modify them as discretion.