NTA
Nutek Advanced Series
PCB handling
Rev 1.01 oct 2019
Company

Nutek Europe BV is the European distributor of Nutek Board Handling & Traceability Equipment and is the leading supplier of this equipment for the European, African and Middle East PCB Assembly industry.

Our history traces back to 1992, when Nutek Europe obtained the exclusive European sales rights of Nutek Pte Ltd, Singapore. Since then a network of agents has been setup and maintained to serve customers throughout our sales region. The agents are supported by the Nutek Europe’s area sales managers who are familiar with the entire production process and specialize in several specific areas.

Nutek Europe has its own customer-service department with a fast response time. Naturally, Nutek Europe has the necessary spare parts on stock for fast delivery, if required.

The Nutek Europe facility offers adequate space for customer demonstrations, technical- and sales training and has a 750 square meter warehouse, where the European stock of Nutek equipment, including spare parts and magazine racks are stored.
Contents

**Magazine Line loaders & magazine line unloaders**
- Single magazine line loader.
- Single magazine line unloader.
- Dual magazine line loader.
- Dual magazine line unloader.
- Dual magazine line loader (Stationary platform).
- Dual magazine line unloader (Stationary platform).
- Triple magazine line loader.
- Triple magazine line unloader.
- Triple magazine line loader (Stationary platform).
- Triple magazine line unloader (Stationary platform).
- Multi magazine line loader.
- Multi magazine line unloader.
- Multi magazine line loader (Stationary platform).
- Multi magazine line unloader (Stationary platform).
- Multi magazine line loader (L-Type).
- Multi magazine line unloader (L-Type).
- Pusher conveyor.

**Bare board loaders & Bare board unloaders**
- Bareboard loader (by-pass).
- Destacker.
- Push-up destacker.
- Push-up stacker.

**Conveyors**
- Linking conveyor.
- Inspection conveyor.
- Reject conveyor.
- Inline workstation.
- Manual gate.
- Telescopic gate.
- Telescopic gate NC/NO.
- PCB cleaning conveyor.

**Buffers**
- Single magazine buffer.
- Multi magazine buffer.
- FIFO buffer.
- Belt FIFO buffer.

**Traffic controllers**
- Inverter.
- Lifter.
- Turn conveyor (L, T, I, X type).
- Shuttle conveyor.

**Nutek Advanced series summary**
In the everchanging PCB fabrication industry there is a need to be as versatile as possible, high flexibility and production cost reduction are important topics.

With the use of servo motors, automatic product change-over, the line control software preparation, a large database of product recipes, multiple machine to machine communication options (e.g. IPC-HERMES-9852) this range is ideal for fast and easy product change-over.
The operator is not forgotten by means of an intuitive graphic touch screen display, that allows easy operation and high flexibility.

Nutek is known for its high quality, highly customizable board handling since 1989 and with the NTA series ready for the future and industry 4.0.
The NTA 710L is a single magazine line loader with a servo driven magazine lifter platform with a single magazine capacity. The magazine is manually placed and clamped on the platform. The pneumatic pusher is used to push a PCB out of the magazine to the downstream machine. The 7" full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**
- Servo driven lifter platform.
- 7" full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In,- & Output diagnostics on touchscreen display.
- Flexible pitch settings.
- 2000 product recipes storage.
- 10 magazine recipes storage.
- Magazine unloading selectable ‘top to bottom’ or ‘bottom to top’.
- Regulated pressure on the pusher cylinder.
- Manually adjustable pusher position.
- Ethernet connection for network interface.
- Towerlight display for machine status.

**Options**
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Automatic pusher positioning.
- Remotely accessible PLC.
- Cantilevered output conveyor (500 mm).
- Remotely accessible PLC.
- Front side magazine loading.
- Alarm buzzer.

Other options available on request.
**General machine specification**

- Transfer height: 950 mm ± 25 mm*
- Colour: RAL 9002*
- Flow direction: Left to right*
- Fixed rail: Front*
- Machine interface: IPC-SMEMA-9851*
- Components clearance: Top 30 mm, bottom 30 mm*
- PCB loading time: ± 7 seconds
- Pitch control: Flexible pitch settings
- Maximum total magazine weight: 50 kg

**Installation requirements**

- Power supply: 230 VAC/50 Hz/1 Ph
- Power consumption: 410 VA max
- Air supply: 6 bar
- Air consumption: 10 ltr/min max

**Machine dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 710LM</th>
<th>NTA 710LXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>1265 x 880 x 1330 mm</td>
<td>1330 x 1130 x 1330 mm</td>
</tr>
<tr>
<td>Machine weight:</td>
<td>170 kg</td>
<td>180 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>475 mm</td>
<td>475 mm</td>
</tr>
<tr>
<td>Towerlight height (Z):</td>
<td>2000 mm</td>
<td>2000 mm</td>
</tr>
</tbody>
</table>

**PCB dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 710LM</th>
<th>NTA 710LXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length:</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width:</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness:</td>
<td>0.4 - 2.6 mm*</td>
<td>0.4 - 2.6 mm*</td>
</tr>
<tr>
<td>PCB weight:</td>
<td>2.5 kg*</td>
<td>2.5 kg*</td>
</tr>
<tr>
<td>Magazine dimensions (max.):</td>
<td>355 x 320 x 570 mm*</td>
<td>535 x 530 x 570 mm*</td>
</tr>
</tbody>
</table>

* Depending on specification.
NTA 710UM • NTA 710UXL

The NTA 710U is a single magazine line unloader with a servo driven magazine lifter platform with a single magazine capacity. The magazine is manually placed and clamped on the platform. The cantilevered pusher conveyor is used to collect a PCB from the upstream machine and push it into the magazine. The 7” full colour touchscreen display allows easy operation on multiple user levels.

### Standard features
- Servo driven lifter platform.
- Automatic conveyor width adjustment.
- 7” full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In- & Output diagnostics on touchscreen display.
- Flexible pitch settings.
- 2000 product recipes storage.
- 10 magazine recipes storage.
- Selectable ‘top to bottom’ or ‘bottom to top’ sequence.
- Regulated pressure on the pusher cylinder.
- Manually adjustable pusher position.
- Ethernet connection.
- Towerlight display for machine status.

### Options
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Automatic pusher positioning.
- Pusher position moves in ratio 1:2 with conveyor width.
- Remotely accessible PLC.
- Front side magazine loading.
- Pneumatic stopper, to control PCB flow from upstream reflow oven.
- Alarm buzzer.

Other options available on request
**General machine specification**

- **Transfer height:** 950 mm ± 25 mm*
- **Colour:** RAL 9002*
- **Flow direction:** Left to right*
- **Fixed rail:** Front*
- **Machine interface:** IPC-SMEMA-9851 *
- **Components clearance:** Top 30 mm, bottom 30 mm*
- **Belt speed:** 14 m/min
- **PCB edge support:** 3 mm
- **PCB loading time:** ± 6 seconds
- **Pitch control:** Flexible pitch settings
- **Maximum magazine weight:** 50 kg (each)

**Installation requirements**

- **Power supply:** 230 VAC/50 Hz/1 Ph
- **Power consumption:** 530 VA max.
- **Air supply:** 6 bar
- **Air consumption:** 10 ltr/min max.

**Machine dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 710UM</th>
<th>NTA 710UXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>1200 x 900 x 1330 mm</td>
<td>1500 x 1160 x 1330 mm</td>
</tr>
<tr>
<td>Machine weight:</td>
<td>200 kg</td>
<td>230 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>475 mm</td>
<td>475 mm</td>
</tr>
<tr>
<td>Towerlight height (Z):</td>
<td>2000 mm</td>
<td>2000 mm</td>
</tr>
</tbody>
</table>

**PCB dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 710UM</th>
<th>NTA 710UXL</th>
</tr>
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<tbody>
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<td>80 - 330 mm</td>
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<tr>
<td>PCB thickness:</td>
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</tr>
<tr>
<td>PCB weight:</td>
<td>2.5 kg*</td>
<td>2.5 kg*</td>
</tr>
<tr>
<td>Magazine dimensions (max.):</td>
<td>365 x 320 x 570 mm</td>
<td>535 x 530 x 570 mm</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA 720L is a dual magazine line loader with a servo driven magazine lifter platform with two magazines placed side by side. The magazines are manually placed and clamped on the platform. The servo driven shuttle conveyor moves sidewards between the magazines. A puller cylinder extracts a PCB from the magazine onto the shuttle conveyor. An empty magazine can be exchanged at any time. The 7” full colour touchscreen display allows easy operation on multiple user levels.

**Options**
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Automatic puller positioning.
- Puller position moves in ratio 1:2 with conveyor width.
- Magazine unloading 'bottom to top'.
- Remotely accessible PLC.
- Safety shutter at outlet.
- Rotating puller tip.
- Alarm buzzer.

Other options available on request.

**Standard features**
- Servo driven lifter platform.
- Servo driven shuttle conveyor movement.
- Automatic conveyor width adjustment.
- 7” full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In,- & Output diagnostics on touchscreen display.
- Flexible pitch settings.
- 2000 product recipes storage.
- 10 magazine recipes storage.
- Magazine unloading 'top to bottom'.
- Top 5 magazine slots to remain empty.
- Regulated pressure on the puller cylinder.
- Manually adjustable puller position.
- Ethernet connection for network interface.
- Towerlight display for machine status.
Dual magazine line loader

NTA 720LM • NTA 720LXL

**General machine specification**

<table>
<thead>
<tr>
<th>Specification</th>
<th>NTA 720LM</th>
<th>NTA 720LXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer height:</td>
<td>950 mm ± 25 mm*</td>
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</tr>
<tr>
<td>Colour:</td>
<td>RAL 9002*</td>
<td></td>
</tr>
<tr>
<td>Flow direction:</td>
<td>Left to right*</td>
<td></td>
</tr>
<tr>
<td>Fixed rail:</td>
<td>Front*</td>
<td></td>
</tr>
<tr>
<td>Machine interface:</td>
<td>IPC-SMEMA-9851 *</td>
<td></td>
</tr>
<tr>
<td>Components clearance:</td>
<td>Top 30 mm, bottom 30 mm*</td>
<td></td>
</tr>
<tr>
<td>Belt speed:</td>
<td>14 m/min</td>
<td></td>
</tr>
<tr>
<td>PCB edge support:</td>
<td>3 mm</td>
<td></td>
</tr>
<tr>
<td>PCB loading time:</td>
<td>± 18 seconds (rear magazine)</td>
<td></td>
</tr>
<tr>
<td>Pitch control:</td>
<td>Flexible pitch settings</td>
<td></td>
</tr>
<tr>
<td>Maximum magazine weight:</td>
<td>50 kg (each)</td>
<td></td>
</tr>
</tbody>
</table>

**Installation requirements**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>NTA 720LM</th>
<th>NTA 720LXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply:</td>
<td>230 VAC/50 Hz/1 Ph</td>
<td></td>
</tr>
<tr>
<td>Power consumption:</td>
<td>830 VA max.</td>
<td></td>
</tr>
<tr>
<td>Air supply:</td>
<td>6 bar</td>
<td></td>
</tr>
<tr>
<td>Air consumption:</td>
<td>10 ltr/min max.</td>
<td></td>
</tr>
</tbody>
</table>

**Machine dimensions**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>NTA 720LM</th>
<th>NTA 720LXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>1080 x 1370 x 1750 mm</td>
<td>1250 x 1990 x 1750 mm</td>
</tr>
<tr>
<td>Machine weight:</td>
<td>330 kg</td>
<td>480 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>400 mm</td>
<td>400 mm</td>
</tr>
<tr>
<td>Towerlight height (Z):</td>
<td>2000 mm</td>
<td>2000 mm</td>
</tr>
</tbody>
</table>

**PCB dimensions**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>NTA 720LM</th>
<th>NTA 720LXL</th>
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<tbody>
<tr>
<td>PCB length:</td>
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</tr>
<tr>
<td>PCB thickness:</td>
<td>0,4 - 2,6 mm*</td>
<td>0,4 - 2,6 mm*</td>
</tr>
<tr>
<td>PCB weight:</td>
<td>2,5 kg*</td>
<td>2,5 kg*</td>
</tr>
<tr>
<td>Magazine dimensions (max.):</td>
<td>355 x 320 x 570 mm</td>
<td>535 x 530 x 570 mm</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA 720U is a dual magazine line unloader with a servo driven magazine lifter platform with two magazines placed side by side. The magazines are manually placed and clamped on the platform. The servo driven shuttle conveyor moves sidewards between the magazines. A cylinder on the shuttle conveyor is used to push a PCB completely in the magazine. An empty magazine can be exchanged at any time. The 7” full colour touchscreen display allows easy operation on multiple user levels.

### Standard features
- Servo driven lifter platform.
- Servo driven shuttle conveyor movement.
- Automatic conveyor width adjustment.
- 7” full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In, - & Output diagnostics on touchscreen display.
- Flexible pitch settings.
- 2000 product recipes storage.
- 10 magazine recipes storage.
- Magazine loading ‘top to bottom’.
- Regulated pressure on the pusher cylinder.
- Manually adjustable pusher position.
- Oven info threshold signal.
- Good/bad separation function.
- Ethernet connection for network interface.
- Towerlight display for machine status.

### Options
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Automatic pusher positioning.
- Pusher position moves in ratio 1:2 with conveyor width.
- Remotely accessible PLC.
- Safety shutter at inlet.
- Pneumatic stopper, to control PCB flow from upstream reflow oven.
- Intelligent threshold counter to stop PCB infeed into reflow oven.
- Alarm buzzer.

Other options available on request.
**General machine specification**

- **Transfer height:** 950 mm ± 25 mm*
- **Colour:** RAL 9002*
- **Flow direction:** Left to right*
- **Fixed rail:** Front*
- **Machine interface:** IPC-SMEMA-9851 *
- **Components clearance:** Top 30 mm, bottom 30 mm*
- **Belt speed:** 14 m/min
- **PCB edge support:** 3 mm
- **PCB unloading time:** ± 15 seconds (rear magazine board to board)
- **Pitch control:** Flexible pitch settings
- **Maximum magazine weight:** 50 kg (each)

**Installation requirements**

- **Power supply:** 230 VAC/50 Hz/1 Ph
- **Power consumption:** 830 VA max.
- **Air supply:** 6 bar
- **Air consumption:** 5 ltr/min max.

<table>
<thead>
<tr>
<th>Machine dimensions (l x w x h)</th>
<th>NTA 720UM</th>
<th>NTA 720UXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>1080 x 1370 x 1750 mm</td>
<td>1250 x 1990 x 1750 mm</td>
</tr>
<tr>
<td>Machine weight:</td>
<td>330 kg</td>
<td>480 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>400 mm</td>
<td>400 mm</td>
</tr>
<tr>
<td>Towerlight height (Z):</td>
<td>2000 mm</td>
<td>2000 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PCB dimensions</th>
<th>NTA 720UM</th>
<th>NTA 720UXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length:</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width:</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness:</td>
<td>0,4 - 2,6 mm*</td>
<td>0,4 - 2,6 mm*</td>
</tr>
<tr>
<td>PCB weight:</td>
<td>2,5 kg*</td>
<td>2,5 kg*</td>
</tr>
<tr>
<td>Magazine dimensions (max.):</td>
<td>355 x 320 x 570 mm</td>
<td>535 x 530 x 570 mm</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA 721L is a dual magazine line loader with a stationary magazine platform with two magazines placed side by side. The magazines are manually placed and clamped on the platform. The servo driven shuttle conveyor moves in horizontal and vertical direction to align with the magazine and slot position. A puller cylinder extracts a PCB from the magazine onto the shuttle conveyor. An empty magazine can be exchanged at any time.

The 7" full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**

- Stationary magazine platform prepared for loading with AGV/AIV.
- Servo driven shuttle conveyor movement (vertical & horizontal).
- Automatic conveyor width adjustment.
- 7" full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In,- & Output diagnostics on touchscreen display.
- Flexible pitch settings.
- 2000 product recipes storage.
- 10 magazine recipes storage.
- Magazine unloading 'top to bottom'.
- Top 5 magazine slots to remain empty.
- Regulated pressure on the puller cylinder.
- Manually adjustable puller position.
- Ethernet connection for network interface.
- Towerlight display for machine status.

**Options**

- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Automatic puller positioning.
- Puller position moves in ratio 1:2 with conveyor width.
- Magazine unloading 'bottom to top'.
- Remotely accessible PLC.
- Safety shutter at outlet.
- Rotating puller tip.
- Alarm buzzer.

Other options available on request.
## General machine specification

<table>
<thead>
<tr>
<th>Specification</th>
<th>NTA 721LM</th>
<th>NTA 721LXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer height:</td>
<td>950 mm ± 25 mm*</td>
<td></td>
</tr>
<tr>
<td>Colour:</td>
<td>RAL 9002*</td>
<td></td>
</tr>
<tr>
<td>Flow direction:</td>
<td>Left to right*</td>
<td></td>
</tr>
<tr>
<td>Fixed rail:</td>
<td>Front*</td>
<td></td>
</tr>
<tr>
<td>Machine interface:</td>
<td>IPC-SMEMA-9851*</td>
<td></td>
</tr>
<tr>
<td>Components clearance:</td>
<td>Top 30 mm, bottom 30 mm*</td>
<td></td>
</tr>
<tr>
<td>Belt speed:</td>
<td>14 m/min</td>
<td></td>
</tr>
<tr>
<td>PCB edge support:</td>
<td>3 mm</td>
<td></td>
</tr>
<tr>
<td>PCB loading time:</td>
<td>± 18 seconds (rear magazine)</td>
<td></td>
</tr>
<tr>
<td>Pitch control:</td>
<td>Flexible pitch settings</td>
<td></td>
</tr>
<tr>
<td>Maximum magazine weight:</td>
<td>50 kg (each)</td>
<td></td>
</tr>
</tbody>
</table>

## Installation requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply:</td>
<td>230 VAC/50 Hz/1 Ph</td>
</tr>
<tr>
<td>Power consumption:</td>
<td>830 VA max.</td>
</tr>
<tr>
<td>Air supply:</td>
<td>6 bar</td>
</tr>
<tr>
<td>Air consumption:</td>
<td>10 ltr/min max.</td>
</tr>
</tbody>
</table>

## Machine dimensions

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>NTA 721LM</th>
<th>NTA 721LXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>1420 x 1730 x 1330 mm</td>
<td>1420 x 2365 x 1330 mm</td>
</tr>
<tr>
<td>Machine weight:</td>
<td>330 kg</td>
<td>480 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>535 mm</td>
<td>535 mm</td>
</tr>
<tr>
<td>Towerlight height (Z):</td>
<td>2000 mm</td>
<td>2000 mm</td>
</tr>
</tbody>
</table>

## PCB dimensions

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>NTA 721LM</th>
<th>NTA 721LXL</th>
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</thead>
<tbody>
<tr>
<td>PCB length:</td>
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</tr>
<tr>
<td>PCB weight:</td>
<td>2,5 kg*</td>
<td>2,5 kg*</td>
</tr>
<tr>
<td>Magazine dimensions (max.):</td>
<td>355 x 320 x 570 mm</td>
<td>535 x 530 x 570 mm</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA 721U is a dual magazine line unloader with a stationary magazine platform with two magazines placed side by side. The magazines are manually placed and clamped on the platform. The servo driven shuttle conveyor moves in horizontal and vertical direction to align with the magazine and slot position. A cylinder on the shuttle conveyor is used to push a PCB completely in the magazine. An empty magazine can be exchanged at any time.

The 7" full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**
- Stationary magazine platform prepared for loading with AGV/AIV.
- Servo driven shuttle conveyor movement (vertical & horizontal).
- Automatic conveyor width adjustment.
- 7" full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In,- & Output diagnostics on touchscreen display.
- Flexible pitch settings.
- 2000 product recipes storage.
- 10 magazine recipes storage.
- Magazine loading 'top to bottom'.
- Regulated pressure on the pusher cylinder.
- Manually adjustable pusher position.
- Oven info threshold signal.
- Good/bad separation function.
- Ethernet communication for network interface.
- Towerlight display for machine status.

**Options**
- IPC-HERMES:9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Automatic pusher positioning.
- Pusher position moves in ratio 1:2 with conveyor width.
- Remotely accessible PLC.
- Safety shutter at inlet.
- Pneumatic stopper, to control PCB flow from upstream reflow oven.
- Intelligent threshold counter to stop PCB infeed into reflow oven.
- Alarm buzzer.

Other options available on request.
General machine specification

- **Transfer height:** 950 mm ± 25 mm*
- **Colour:** RAL 9002*
- **Flow direction:** Left to right*
- **Fixed rail:** Front*
- **Machine interface:** IPC-SMEMA-9851 *
- **Components clearance:** Top 30 mm, bottom 30 mm*
- **Belt speed:** 14 m/min
- **PCB edge support:** 3 mm
- **PCB unloading time:** ± 15 seconds (rear magazine board to board)
- **Pitch control:** Flexible pitch settings
- **Maximum magazine weight:** 50 kg (each)

Installation requirements

- **Power supply:** 230 VAC/50 Hz/1 Ph
- **Power consumption:** 830 VA max.
- **Air supply:** 6 bar
- **Air consumption:** 10 ltr/min max.

Machine dimensions

<table>
<thead>
<tr>
<th></th>
<th><strong>NTA 721UM</strong></th>
<th><strong>NTA 721UXL</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>1420 x 1730 x 1330 mm</td>
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<tr>
<td>Machine weight:</td>
<td>330 kg</td>
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<tr>
<td>Fixed rail to front dimension (X):</td>
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<tr>
<td>Towerlight height (Z):</td>
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PCB dimensions

<table>
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<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>PCB length:</td>
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<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width:</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness:</td>
<td>0,4 - 2,6 mm*</td>
<td>0,4 - 2,6 mm*</td>
</tr>
<tr>
<td>PCB weight:</td>
<td>2,5 kg*</td>
<td>2,5 kg*</td>
</tr>
<tr>
<td>Magazine dimensions (max.):</td>
<td>355 x 320 x 570 mm</td>
<td>535 x 530 x 570 mm</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA 730L is a triple magazine line loader with a servo driven magazine lifter platform with three magazines placed side by side. The magazines are manually placed and clamped on the platform. The servo driven shuttle conveyor moves sidewards between the magazines. A puller cylinder extracts a PCB from the magazine onto the shuttle conveyor. An empty magazine can be exchanged at any time. The 7” full colour touchscreen display allows easy operation on multiple user levels.

Standard features
- Servo driven lifter platform.
- Servo driven shuttle conveyor movement.
- Automatic conveyor width adjustment.
- 7” full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In,- & Output diagnostics on touchscreen display.
- Flexible pitch settings.
- 2000 product recipes storage.
- 10 magazine recipes storage.
- Magazine unloading ‘top to bottom’.
- Top 5 magazine slots to remain empty.
- Regulated pressure on the puller cylinder.
- Manually adjustable puller position.
- Ethernet connection for network interface.
- Towerlight display for machine status.

Options
- IPC-HERMES: 9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Automatic puller positioning.
- Puller position moves in ratio 1:2 with conveyor width.
- Magazine unloading ‘bottom to top’.
- Remotely accessible PLC.
- Safety shutter at outlet.
- Rotating puller tip.
- Alarm buzzer.

Other options available on request.
Triple magazine line loader

NTA 730LM • NTA 730LXL

General machine specification

Transfer height: 950 mm ± 25 mm*
Colour: RAL 9002*
Flow direction: Left to right*
Fixed rail: Front*
Machine interface: IPC-SMEMA-9851*
Components clearance: Top 30 mm, bottom 30 mm*
Belt speed: 14 m/min
PCB edge support: 3 mm
PCB loading time: ± 18 seconds (rear magazine)
Pitch control: Flexible pitch settings
Maximum magazine weight: 50 kg (each)

Installation requirements

Power supply: 230 VAC/50 Hz/1 Ph
Power consumption: 930 VA max.
Air supply: 6 bar
Air consumption: 10 ltr/min max.

Machine dimensions

<table>
<thead>
<tr>
<th></th>
<th>NTA 730LM</th>
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</thead>
<tbody>
<tr>
<td>Machine dimensions</td>
<td>1080 x 1805 x 1750 mm</td>
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<tr>
<td>Machine weight</td>
<td>430 kg</td>
<td>580 kg</td>
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<tr>
<td>Fixed rail to front dimension (X)</td>
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</tr>
<tr>
<td>Towerlight height (Z)</td>
<td>2000 mm</td>
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PCB dimensions

<table>
<thead>
<tr>
<th></th>
<th>NTA 730LM</th>
<th>NTA 730LXL</th>
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</thead>
<tbody>
<tr>
<td>PCB length</td>
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<tr>
<td>PCB width</td>
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<td>50 - 460 mm*</td>
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<td>PCB thickness</td>
<td>0,4 - 2,6 mm*</td>
<td>0,4 - 2,6 mm*</td>
</tr>
<tr>
<td>PCB weight</td>
<td>2,5 kg*</td>
<td>2,5 kg*</td>
</tr>
<tr>
<td>Magazine dimensions (max.)</td>
<td>555 x 320 x 570 mm</td>
<td>535 x 530 x 570 mm</td>
</tr>
</tbody>
</table>

* Depending on specification:
The NTA 730U is a triple magazine line unloader with a servo driven magazine lifter platform with three magazines placed side by side. The magazines are manually placed and clamped on the platform. The servo driven shuttle conveyor moves sidewards between the magazines. A cylinder on the shuttle conveyor is used to push a PCB completely in the magazine. An empty magazine can be exchanged at any time. The 7" full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**
- Servo driven lifter platform.
- Servo driven shuttle conveyor movement.
- Automatic conveyor width adjustment.
- 7" full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In- & Output diagnostics on touchscreen display.
- Flexible pitch settings.
- 2000 product recipes storage.
- 10 magazine recipes storage.
- Magazine loading 'top to bottom'.
- Regulated pressure on the pusher cylinder.
- Manually adjustable pusher position.
- Oven info threshold signal.
- Good/bad separation function.
- Ethernet connection for network interface.
- Towerlight display for machine status.

**Options**
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Automatic pusher positioning.
- Pusher position moves in ratio 1:2 with conveyor width.
- Remotely accessible PLC.
- Safety shutter at inlet.
- Pneumatic stopper, to control PCB flow from upstream reflow oven.
- Intelligent threshold counter to stop PCB infeed into reflow oven.
- Alarm buzzer.

Other options available on request.
General machine specification

Transfer height: 950 mm ± 25 mm*
Colour: RAL 9002*
Flow direction: Left to right*
Fixed rail: Front*
Machine interface: IPC-SMEMA-9851*
Components clearance: Top 30 mm, bottom 30 mm*
Belt speed: 14 m/min
PCB edge support: 3 mm
PCB unloading time: ± 18 seconds
Pitch control: Flexible pitch settings
Maximum magazine weight: 50 kg (each)

Installation requirements

Power supply: 230 VAC/50 Hz/1 Ph
Power consumption: 930 VA max.
Air supply: 6 bar
Air consumption: 5 ltr/min max.

Machine dimensions

<table>
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<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
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<td>1420 x 2505 x 1750 mm</td>
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<tr>
<td>Towerlight height (Z):</td>
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PCB dimensions

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</thead>
<tbody>
<tr>
<td>PCB length:</td>
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<td>PCB width:</td>
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<td>50 - 460 mm*</td>
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<tr>
<td>PCB thickness:</td>
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<td>0,4 - 2,6 mm*</td>
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<tr>
<td>Magazine dimensions (max.):</td>
<td>555 x 320 x 570 mm</td>
<td>595 x 590 x 570 mm</td>
</tr>
</tbody>
</table>

* Depending on specification.
NTA 731LM • NTA 731LXL

Triple magazine line loader AGV

**The NTA 731L is a triple magazine line loader with a stationary magazine platform with three magazines placed side by side.**

The magazines are manually placed and clamped on the platform. The servo driven shuttle conveyor moves in horizontal and vertical direction to align with the magazine and slot position. A puller cylinder extracts a PCB from the magazine onto the shuttle conveyor. An empty magazine can be exchanged at any time.

The 7” full colour touchscreen display allows easy operation on multiple user levels.

### Standard features
- Stationary magazine platform prepared for loading with AGV/AIV.
- Servo driven shuttle conveyor movement (vertical & horizontal).
- Automatic conveyor width adjustment.
- 7” full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In-, & Output diagnostics on touchscreen display.
- Flexible pitch settings.
- 2000 product recipes storage.
- 10 magazine recipes storage.
- Magazine unloading ‘top to bottom’.
- Top 5 magazine slots to remain empty.
- Regulated pressure on the puller cylinder.
- Manually adjustable puller position.
- Ethernet connection for network interface.
- Towerlight display for machine status.

### Options
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Automatic puller positioning.
- Puller position moves in ratio 1:2 with conveyor width.
- Magazine unloading ‘bottom to top’.
- Remotely accessible PLC.
- Safety shutter at outlet.
- Rotating puller tip.
- Alarm buzzer.

Other options available on request.
**General machine specification**

- **Transfer height:** 950 mm ± 25 mm*
- **Colour:** RAL 9002*
- **Flow direction:** Left to right*
- **Fixed rail:** Front*
- **Machine interface:** IPC-SMEMA-9851 *
- **Components clearance:** Top 30 mm, bottom 30 mm
- **PCB unloading time:** ± 18 seconds (rear magazine)
- **Pitch control:** Flexible pitch settings
- **Maximum total magazine weight:** 50 kg

**Installation requirements**

- **Power supply:** 230 VAC/50 Hz/1 Ph
- **Power consumption:** 350 VA max
- **Air supply:** 6 bar
- **Air consumption:** 10 ltr/min max

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<tr>
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<tbody>
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<td>Machine weight:</td>
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<td>480 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>535 mm</td>
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<td>Towerlight height (Z):</td>
<td>2000 mm</td>
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<table>
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<tr>
<th>PCB dimensions</th>
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<th>NTA 731LXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length:</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width:</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
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<tr>
<td>PCB thickness:</td>
<td>0.6 - 2.6 mm*</td>
<td>0.6 - 2.6 mm*</td>
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<tr>
<td>Magazine dimensions (max):</td>
<td>370 x 320 x 570 mm</td>
<td>535 x 580 x 570 mm</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA 731U is a triple magazine line unloader with a stationary magazine platform with three magazines placed side by side. The magazines are manually placed and clamped on the platform, the servo driven shuttle conveyor conveyor is used to collect a PCB from the upstream machine and pushes it into the magazine. A full magazine can be exchanged at any time. The 7" full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**
- Stationary magazine platform prepared for loading with AGV/AIV.
- Servo driven traversing movement.
- Servo driven width adjustment on traverser.
- 7" full colour touchscreen display.
- Multi level user acces control.
- In,- & Output diagnostics on touchscreen display.
- Flexible pitch settings.
- 2000 product recipes storage.
- 10 magazine recipes storage.
- Regulated pressure on the pusher cylinder.
- Manually adjustable pusher position.
- Oven info threshhold signal.
- Good/bad separation function.
- Ethernet connection for network interface.

**Options**
- Hermes Communication.
- Leader - follower communication.
- Line Control Software ready.
- Automatic pusher positioning.
- Pusher position moves in ratio 1:2 with conveyor width.
- Remotely accessible PLC.
- Safety shutter at inlet.
- Pneumatic stopper, to control PCB flow from upstream reflow oven.
- Intelligent threshhold counter to stop PCB infeed into reflow oven.
- Alarm buzzer.

Other options available on request.
**General machine specification**

- **Transfer height:** 950 mm ± 25 mm*
- **Colour:** RAL 9002*
- **Flow direction:** Left to right*
- **Fixed rail:** Front*
- **Machine interface:** IPC-SMEMA-9851*
- **Components clearance:** Top 30 mm, bottom 30 mm
- **PCB unloading time:** ± 18 seconds (rear magazine)
- **Pitch control:** Flexible pitch settings
- **Maximum total magazine weight:** 50 kg

**Installation requirements**

- **Power supply:** 230 VAC/50 Hz/1 Ph
- **Power consumption:** 350 VA max
- **Air supply:** 6 bar
- **Air consumption:** 10 ltr/min max.

**Machine dimensions**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>1225 x 2185 x 1330 mm</td>
<td>1225 x 3090 x 1330 mm</td>
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<tr>
<td>Machine weight:</td>
<td>330 kg</td>
<td>480 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>535 mm</td>
<td>535 mm</td>
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<tr>
<td>Towerlight height (Z):</td>
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<td>2000 mm</td>
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</table>

**PCB dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 731UM</th>
<th>NTA 731UXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length:</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width:</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness:</td>
<td>0.6 - 2.6 mm*</td>
<td>0.6 - 2.6 mm*</td>
</tr>
<tr>
<td>Magazine dimensions (max.):</td>
<td>370 x 320 x 570 mm</td>
<td>535 x 580 x 570 mm</td>
</tr>
</tbody>
</table>
The NTA 110L is a multi magazine line loader with a 6 magazine capacity, 3 full magazines are placed on the lower magazine conveyor, 1 magazine is on the servo driven lifter. A pneumatic pusher cylinder pushes the PCB out of the magazine to downstream.

The upper magazine conveyor has a capacity for 2 empty magazines. After a magazine is emptied the magazine is automatically exchanged. The 7" full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**
- Servo driven lifter platform.
- 7" full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In, & Output diagnostics on touchscreen display.
- Flexible pitch settings.
- 2000 product recipes storage.
- 10 magazine recipes storage.
- Magazine unloading ‘top to bottom’ or ‘bottom to top’.
- Tailor made to the magazine of your choice.
- Automatic magazine alignment by upper and lower pneumatic clamping.
- High throughput with short magazine change over time.
- Regulated pressure on the pusher cylinder.
- Manually adjustable pusher position.
- Ethernet connection for network interface.
- Towerlight display for machine status.

**Options**
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Automatic pusher positioning.
- Remotely accessible PLC.
- Safety shutter at outlet.
- Increased magazine capacity.
- Reduced magazine capacity.
- Width adjustable magazine conveyors to handle other magazine width.
- Alarm buzzer.

Other options available on request.
General machine specification

Transfer height: 950 mm ± 25 mm*
Colour: RAL 9002*
Flow direction: Left to right*
Fixed rail: Front*
Machine interface: IPC-SMEMA-9851*
Components clearance: Top 30 mm, bottom 30 mm*
PCB loading time: ± 6 seconds
Magazine change over time: ± 22 seconds (top to bottom sequence)
Pitch control: Flexible pitch settings
Maximum magazine weight: 50 kg (each)

Installation requirements

Power supply: 230 VAC/50 Hz/1 Ph
Power consumption: 620 VA max.
Air supply: 6 bar
Air consumption: 27 ltr/min max.

Machine dimensions

<table>
<thead>
<tr>
<th>Machine dimensions</th>
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<th>NTA 110LXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
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<td>Machine weight:</td>
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<tr>
<td>Fixed rail to front dimension (X):</td>
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<tr>
<td>Towerlight height (Z):</td>
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</tbody>
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PCB dimensions

<table>
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<tr>
<th>PCB dimensions</th>
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<th>NTA 110LXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length:</td>
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<td>80 - 460 mm*</td>
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<tr>
<td>PCB width:</td>
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<td>50 - 460 mm*</td>
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<tr>
<td>PCB thickness:</td>
<td>0,4 - 2,6 mm*</td>
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<tr>
<td>PCB weight:</td>
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<td>2,5 kg*</td>
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<tr>
<td>Magazine dimensions (max.):</td>
<td>555 x 320 x 570 mm</td>
<td>535 x 530 x 570 mm</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA 110U is a multi magazine line unloader with a six magazine capacity. 2 empty magazines are placed on the upper magazine conveyor, 1 magazine is on the servo driven lifter. The upstream pusher conveyor pushes the PCB completely in the magazine. The lower magazine conveyor has a capacity for 3 full magazines. After a magazine is filled the magazine is automatically exchanged. The 7” full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**
- Servo driven lifter platform.
- 7” full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In- & Output diagnostics on touchscreen display.
- Flexible pitch settings.
- 2000 product recipes storage.
- 10 magazine recipes storage.
- Magazine loading 'top to bottom' or 'bottom to top'.
- Tailor made to the magazine of your choice.
- Automatic magazine alignment by upper and lower pneumatic clamping.
- High throughput with short magazine change over time.
- Ethernet connection for network interface.
- Towerlight display for machine status.

**Options**
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Increased magazine capacity.
- Reduced magazine capacity.
- Width adjustable magazine conveyors to handle other magazine width.
- Alarm buzzer.

Other options available on request.

Note: pusher conveyor to be ordered separately.
Multi magazine line unloader

General machine specification

Transfer height: 950 mm ± 25 mm*
Colour: RAL 9002*
Flow direction: Left to right*
Fixed rail: Front*
Machine interface: IPC-SMEMA-9851*
Components clearance: Top 30 mm, bottom 30 mm*
PCB unloading time: ± 6 seconds
Magazine change over time: ± 22 seconds (bottom to top sequence)
Pitch control: Flexible pitch settings
Maximum magazine weight: 50 kg (each)

Installation requirements

Power supply: 230 VAC/50 Hz/1 Ph
Power consumption: 740 VA max (including separate pusher conveyor)
Air supply: 6 bar
Air consumption: 27 ltr/min max

Machine dimensions

<table>
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<tr>
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<tr>
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<tr>
<td>Towerlight height (Z):</td>
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<td>2000 mm</td>
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PCB dimensions

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<tbody>
<tr>
<td>PCB length:</td>
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<td>PCB weight:</td>
<td>2,5 kg*</td>
<td>2,5 kg*</td>
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<tr>
<td>Magazine dimensions (max.):</td>
<td>355 x 320 x 570 mm</td>
<td>535 x 530 x 570 mm</td>
</tr>
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</table>

* Depending on specification.
The NTA 115L is a multi magazine line loader with a 7 magazine capacity. This line loader has 2 magazine conveyors placed side by side for convenient magazine exchange at ergonomic height, 1 for full magazines, 1 for empty magazines (capacity of 3 magazines each). 1 magazine is on the servo driven lifter/shuttle conveyor. A pneumatic pusher cylinder pushes the PCB out of the magazine to downstream. Magazines are automatically changed over.

The 7” full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**
- Servo driven lifter movement (vertical & horizontal).
- 7” full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In,- & Output diagnostics on touchscreen display.
- Flexible pitch settings.
- 2000 product recipes storage.
- 10 magazine recipes storage.
- Magazine unloading ‘top to bottom’ or ‘bottom to top’.
- Tailor made to the magazine of your choice.
- Automatic magazine alignment by upper and lower pneumatic clamping.
- High throughput with short magazine change over time.
- Regulated pressure on the pusher cylinder.
- Manually adjustable pusher position.
- Ethernet connection for network interface.
- Towerlight display for machine status.

**Options**
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Automatic pusher positioning.
- Remotely accessible PLC.
- Safety shutter at outlet.
- Increased magazine capacity.
- Reduced magazine capacity.
- Width adjustable magazine conveyors to handle other magazine width.
- AGV/AIV prepared.
- Alarm buzzer.

Other options available on request.
**General machine specification**

- **Transfer height:** 950 mm ± 25 mm*
- **Colour:** RAL 9002*
- **Flow direction:** Left to right*
- **Fixed rail:** Front*
- **Machine interface:** IPC-SMEMA-9851*
- **Components clearance:** Top 30 mm, bottom 30 mm*
- **PCB loading time:** ± 6 seconds
- **Magazine change over time:** ± 22 seconds (top to bottom sequence)
- **Pitch control:** Flexible pitch settings
- **Maximum magazine weight:** 50 kg (each)

**Installation requirements**

- **Power supply:** 230 VAC/50 Hz/1 Ph
- **Power consumption:** 620 VA max
- **Air supply:** 6 bar
- **Air consumption:** 27 ltr/min max

**Machine dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 115LM</th>
<th>NTA 115LXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions</td>
<td>1800 x 1540 x 1700 mm</td>
<td>2530 x 2165 x 1700 mm</td>
</tr>
<tr>
<td>Machine weight</td>
<td>400 kg</td>
<td>580 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X)</td>
<td>460 mm</td>
<td>460 mm</td>
</tr>
<tr>
<td>Towerlight height (Z)</td>
<td>2000 mm</td>
<td>2000 mm</td>
</tr>
</tbody>
</table>

**PCB dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 115LM</th>
<th>NTA 115LXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness</td>
<td>0,4 - 2,6 mm*</td>
<td>0,4 - 2,6 mm*</td>
</tr>
<tr>
<td>PCB weight</td>
<td>2,5 kg*</td>
<td>2,5 kg*</td>
</tr>
<tr>
<td>Magazine dimensions (max.)</td>
<td>355 x 320 x 570 mm</td>
<td>535 x 530 x 570 mm</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA 115U is a multi magazine line unloader with a 7 magazine capacity. This line loader has 2 magazine conveyors placed side by side for convenient magazine exchange at ergonomic height. 1 for full magazines, 1 for empty magazines (capacity of 3 magazines each). 1 magazine is on the servo driven lifter/shuttle conveyor. The upstream pusher conveyor pushes the PCB completely in the magazine. Magazines are automatically changed over.

The 7” full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**
- Servo driven lifter movement (vertical & horizontal).
- 7” full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In,- & Output diagnostics on touchscreen display.
- Flexible pitch settings.
- 2000 product recipes storage.
- 10 magazine recipes storage.
- Magazine loading ‘top to bottom’ or ‘bottom to top’.
- Tailor made to the magazine of your choice.
- Automatic magazine alignment by upper and lower pneumatic clamping.
- High throughput with short magazine change over time.
- Ethernet connection for network interface.
- Towerlight display for machine status.

**Options**
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Increased magazine capacity.
- Reduced magazine capacity.
- Width adjustable magazine conveyors to handle other magazine width.
- Alarm buzzer.

Other options available on request.

Note: pusher conveyor to be ordered separately.
General machine specification

Transfer height: 950 mm ± 25 mm*
Colour: RAL 9002*
Flow direction: Left to right*
Fixed rail: Front*
Machine interface: IPC-SMEMA-9851 *
Components clearance: Top 30 mm, bottom 30 mm*
PCB unloading time: ± 6 seconds
Magazine change over time: ± 22 seconds (bottom to top sequence)
Pitch control: Flexible pitch settings
Maximum magazine weight: 50 kg (each)

Installation requirements

Power supply: 230 VAC/50 Hz/1 Ph
Power consumption: 740 VA max (including separate pusher conveyor)
Air supply: 6 bar
Air consumption: 27 ltr/min max

Machine dimensions

<table>
<thead>
<tr>
<th>Machine dimensions</th>
<th>NTA 115UM</th>
<th>NTA 115UXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>1800 x 1540 x 1700 mm</td>
<td>2530 x 2165 x 1700 mm</td>
</tr>
<tr>
<td>Machine weight:</td>
<td>400 kg</td>
<td>580 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>460 mm</td>
<td>460 mm</td>
</tr>
<tr>
<td>Towerlight height (Z):</td>
<td>2000 mm</td>
<td>2000 mm</td>
</tr>
</tbody>
</table>

PCB dimensions

<table>
<thead>
<tr>
<th>PCB dimensions</th>
<th>NTA 115LM</th>
<th>NTA 115LXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length:</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width:</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness:</td>
<td>0,4 - 2,6 mm*</td>
<td>0,4 - 2,6 mm*</td>
</tr>
<tr>
<td>PCB weight:</td>
<td>2,5 kg*</td>
<td>2,5 kg*</td>
</tr>
<tr>
<td>Magazine dimensions (max.):</td>
<td>355 x 320 x 570 mm</td>
<td>535 x 530 x 570 mm</td>
</tr>
</tbody>
</table>

* Depending on specification.
The **NTA 120L** is a multi magazine line loader with a 6 magazine capacity. 3 full magazines are placed on the lower magazine conveyor, 1 magazine is on the servo driven lifter. A pneumatic pusher cylinder pushes the PCB out of the magazine to downstream.

The upper magazine conveyor has a capacity for 2 empty magazines. After a magazine is emptied the magazine is automatically exchanged. This loader has a reduced length as the magazine conveyors are positioned at a 90° angle.

The 7” full colour touchscreen display allows easy operation on multiple user levels.

**Options**
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Automatic pusher positioning.
- Remotely accessible PLC.
- Safety shutter at outlet.
- Increased magazine capacity.
- Reduced magazine capacity.
- Width adjustable magazine conveyors to handle other magazine length.
- Front side magazine loading.
- Alarm buzzer.

Other options available on request.
## General machine specification

<table>
<thead>
<tr>
<th>Specification</th>
<th>NTA 120LM</th>
<th>NTA 120LXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer height</td>
<td>950 mm ± 25 mm*</td>
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</tr>
<tr>
<td>Colour: RAL</td>
<td>9002*</td>
<td></td>
</tr>
<tr>
<td>Flow direction:</td>
<td>Left to right*</td>
<td></td>
</tr>
<tr>
<td>Fixed rail:</td>
<td>Front*</td>
<td></td>
</tr>
<tr>
<td>Machine interface:</td>
<td>IPC-SMEMA-9851 *</td>
<td></td>
</tr>
<tr>
<td>Components clearance:</td>
<td>Top 30 mm, bottom 30 mm*</td>
<td></td>
</tr>
<tr>
<td>PCB loading time:</td>
<td>± 6 seconds</td>
<td></td>
</tr>
<tr>
<td>Magazine change over time:</td>
<td>± 22 seconds (top to bottom sequence)</td>
<td></td>
</tr>
<tr>
<td>Pitch control:</td>
<td>Flexible pitch settings</td>
<td></td>
</tr>
<tr>
<td>Maximum magazine weight:</td>
<td>50 kg (each)</td>
<td></td>
</tr>
</tbody>
</table>

## Installation requirements

- Power supply: 230 VAC/50 Hz/1 Ph
- Power consumption: 620 VA max
- Air supply: 6 bar
- Air consumption: 27 ltr/min max

## Machine dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>NTA 120LM</th>
<th>NTA 120LXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>1200 x 2165 x 1700 mm</td>
<td>1560 x 2915 x 1700 mm</td>
</tr>
<tr>
<td>Machine weight:</td>
<td>260 kg</td>
<td>430 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>405 mm</td>
<td>405 mm</td>
</tr>
<tr>
<td>Towerlight height (Z):</td>
<td>2000 mm</td>
<td>2000 mm</td>
</tr>
</tbody>
</table>

## PCB dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>NTA 120LM</th>
<th>NTA 120LXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length:</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width:</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness:</td>
<td>0.4 - 2.6 mm*</td>
<td>0.4 - 2.6 mm*</td>
</tr>
<tr>
<td>PCB weight:</td>
<td>2.5 kg*</td>
<td>2.5 kg*</td>
</tr>
<tr>
<td>Magazine dimensions (max.):</td>
<td>355 x 320 x 570 mm</td>
<td>535 x 530 x 570 mm</td>
</tr>
</tbody>
</table>

* Depending on specification,
The NTA 120U is a multi magazine line unloader with a 6 magazine capacity. 2 empty magazines are placed on the upper magazine conveyor, 1 magazine is on the servo driven lifter. A pneumatic pusher cylinder pushes the PCB out of the magazine to downstream. The lower magazine conveyor has a capacity for 3 full magazines. After a magazine is filled the magazine is automatically exchanged. This unloader has a reduced length as the magazine conveyors are positioned at a 90° angle.

The 7” full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**
- Servo driven lifter platform.
- 7” full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In-, & Output diagnostics on touchscreen display.
- Flexible pitch settings.
- 2000 product recipes storage.
- 10 magazine recipes storage.
- Magazine unloading ‘top to bottom’ or ‘bottom to top’.
- Tailor made to the magazine of your choice.
- Automatic magazine alignment by upper and lower pneumatic clamping.
- High throughput with short magazine change over time.
- Regulated pressure on the pusher cylinder.
- Manually adjustable pusher position.
- Ethernet connection for network interface.
- Towerlight display for machine status.

**Options**
- IPC-HERMES:9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Automatic pusher positioning.
- Remotely accessible PLC.
- Safety shutter at outlet.
- Increased magazine capacity.
- Reduced magazine capacity.
- Width adjustable magazine conveyors to handle other magazine length.
- Front side magazine loading.
- Alarm buzzer.

Other options available on request.
Multi magazine line unloader L-type

**General machine specification**

<table>
<thead>
<tr>
<th>Specification</th>
<th>NTA 120UM</th>
<th>NTA 120UL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer height</td>
<td>950 mm ± 25 mm*</td>
<td></td>
</tr>
<tr>
<td>Colour</td>
<td>RAL 9002*</td>
<td></td>
</tr>
<tr>
<td>Flow direction</td>
<td>Left to right*</td>
<td></td>
</tr>
<tr>
<td>Fixed rail</td>
<td>Front*</td>
<td></td>
</tr>
<tr>
<td>Machine interface</td>
<td>IPC-SMEMA-9861 *</td>
<td></td>
</tr>
<tr>
<td>Components clearance</td>
<td>Top 30 mm, bottom 30 mm*</td>
<td></td>
</tr>
<tr>
<td>PCB loading time</td>
<td>± 6 seconds</td>
<td></td>
</tr>
<tr>
<td>Magazine change over time</td>
<td>± 22 seconds (top to bottom sequence)</td>
<td></td>
</tr>
<tr>
<td>Pitch control</td>
<td>Flexible pitch settings</td>
<td></td>
</tr>
<tr>
<td>Maximum magazine weight</td>
<td>50 kg (each)</td>
<td></td>
</tr>
</tbody>
</table>

**Installation requirements**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>NTA 120UM</th>
<th>NTA 120UL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>230 VAC/50 Hz/1 Ph</td>
<td></td>
</tr>
<tr>
<td>Power consumption</td>
<td>620 VA max</td>
<td></td>
</tr>
<tr>
<td>Air supply</td>
<td>6 bar</td>
<td></td>
</tr>
<tr>
<td>Air consumption</td>
<td>27 ltr/min max</td>
<td></td>
</tr>
</tbody>
</table>

**Machine dimensions**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>NTA 120UM</th>
<th>NTA 120UL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>1200 x 2165 x 1700 mm</td>
<td>1560 x 2915 x 1700 mm</td>
</tr>
<tr>
<td>Machine weight</td>
<td>260 kg</td>
<td>430 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>405 mm</td>
<td>405 mm</td>
</tr>
<tr>
<td>Towerlight height (Z):</td>
<td>2000 mm</td>
<td>2000 mm</td>
</tr>
</tbody>
</table>

**PCB dimensions**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>NTA 120UM</th>
<th>NTA 120UXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness</td>
<td>0.4 - 2.6 mm*</td>
<td>0.4 - 2.6 mm*</td>
</tr>
<tr>
<td>PCB weight</td>
<td>2.5 kg*</td>
<td>2.5 kg*</td>
</tr>
<tr>
<td>Magazine dimensions (max.):</td>
<td>355 x 320 x 570 mm</td>
<td>535 x 530 x 570 mm</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA 110P is a pusher conveyor and is used in combination with any multi magazine line unloader. The pusher conveyor is controlled by the multi magazine line unloader and guarantees that PCB’s are completely pushed into the magazine.

**Standard features**
- Controlled by multi magazine line unloader.
- Automatic conveyor width adjustment.
- Regulated pressure on the pusher cylinder.
- Manually adjustable pusher position.

**Options**
- Automatic pusher positioning.
- Pusher position moves in ratio 1:2 with conveyor width.
- Safety shutter at inlet.

Other options available on request.
### General machine specification

- **Transfer height:** 950 mm ± 25 mm*
- **Colour:** RAL 9002*
- **Flow direction:** Left to right*
- **Fixed rail:** Front*
- **Machine interface:** IPC-SMEMA-9851 *
- **Components clearance:** Top 30 mm, bottom 30 mm
- **Belt speed:** 14 m/min
- **PCB edge support:** 3 mm

### Installation requirements

- **Power supply:** Controlled by unloader
- **Power consumption:** Controlled by unloader
- **Air supply:** Controlled by unloader
- **Air consumption:** Controlled by unloader

### Machine dimensions

<table>
<thead>
<tr>
<th></th>
<th>NTA 110PM</th>
<th>NTA 110PXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>755 x 590 x 1130 mm</td>
<td>950 x 820 x 1130 mm</td>
</tr>
<tr>
<td>Machine weight:</td>
<td>70 kg</td>
<td>100 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>175 mm</td>
<td>175 mm</td>
</tr>
</tbody>
</table>

### PCB dimensions

<table>
<thead>
<tr>
<th></th>
<th>NTA 110PM</th>
<th>NTA 110PXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length:</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width:</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness:</td>
<td>0,4 - 2,6 mm*</td>
<td>0,4 - 2,6 mm*</td>
</tr>
<tr>
<td>PCB weight:</td>
<td>2,5 kg*</td>
<td>2,5 kg*</td>
</tr>
</tbody>
</table>

* Depending on specification.
**Bare board loader by-pass**

**NTA 210BMBP • NTA 210BXLBP**

The NTA 210B is a bare board loader designed to automatically load PCB’s from a stack to the downstream machine. 
PCB stack is located under the conveyor segment. The upper pcb is lifted from the stack by use of suction cups (vacuum) and lowered onto the ESD edge belt segment. Stack loading is done by opening the front door. The 7” full colour touchscreen display allows easy operation on multiple user levels.

### Standard features
- Automatic conveyor width adjustment.
- 7” full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In,- & Output diagnostics on touchscreen display.
- 2000 product recipes storage.
- Bypass mode selectable without removing PCB stack.
- Low stack prewarning.
- Top safety cover can be opened for easy access.
- Thin and fragile PCB capability.
- Adjustable suction cup positioning for better grip of PCB’s.
- Ethernet connection for network interface.
- Towerlight display for machine status.

### Options
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Cantilevered input or output conveyor (500mm).
- Safety shutter at in,- or outlet.
- Alternative suction cup size.
- Additional set of suction cups.
- Alarm buzzer.

Other options available on request.
**General machine specification**

- **Transfer height:** 950 mm ± 25 mm
- **Colour:** RAL 9002
- **Flow direction:** Left to right
- **Fixed rail:** Front
- **Machine interface:** IPC-SMEMA-9851
- **Components clearance:** Top 30 mm, bottom 30 mm
- **Belt speed:** 14 m/min
- **PCB edge support:** 3 mm
- **PCB cycle time:** ±10 seconds
- **PCB Stock capacity:** 220 mm
- **Diameter suction pads:** 15 mm

**Installation requirements**

- **Power supply:** 230 VAC/50 Hz/1 Ph
- **Power consumption:** 190 VA max
- **Air supply:** 6 bar
- **Air consumption:** 90 ltr/min max

**Machine dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 210BMBP</th>
<th>NTA 210BXLBP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>500 x 965 x 1330 mm</td>
<td>653 x 1155 x 1330 mm</td>
</tr>
<tr>
<td>Machine weight:</td>
<td>110 kg</td>
<td>160 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>258 mm</td>
<td>258 mm</td>
</tr>
<tr>
<td>Towerlight height (Z):</td>
<td>2000 mm</td>
<td>2000 mm</td>
</tr>
</tbody>
</table>

**PCB dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 210BMBP</th>
<th>NTA 210BXLBP</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length :</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width :</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness :</td>
<td>0,2 - 4 mm*</td>
<td>0,2 - 4 mm*</td>
</tr>
<tr>
<td>PCB weight:</td>
<td>2,5 kg*</td>
<td>2,5 kg*</td>
</tr>
</tbody>
</table>

* Depending on specification.
Destacker

The NTA 220DS is a bare board loader designed to automatically load PCB’s from a stack to the downstream machine. PCB stack is located above the conveyor segment. The bottom pcb is separated from the stack by unique separation cams and lowered onto the ESD edge belt segment. The open design allows continuous stack loading without stopping operation. The 7” full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**
- Automatic conveyor width adjustment.
- 7” full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In,- & Output diagnostics on touchscreen display.
- 2000 product recipes storage.
- Bypass mode selectable without removing PCB stack.
- Low stack prewarning.
- Ethernet connection for network interface.
- Towerlight display for machine status.

**Options**
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Automatic PCB thickness adjustment.
- Cantilevered input or output conveyor (500mm).
- Sliding topcover for dust protection.
- Conveyor rail extension of 200mm.
- Alarm buzzer.

Other options available on request.
**General machine specification**

<table>
<thead>
<tr>
<th>Specification</th>
<th>NTA 220DSM</th>
<th>NTA 220DSXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer height</td>
<td>950 mm ± 25 mm*</td>
<td></td>
</tr>
<tr>
<td>Colour</td>
<td>RAL 9002*</td>
<td></td>
</tr>
<tr>
<td>Flow direction</td>
<td>Left to right*</td>
<td></td>
</tr>
<tr>
<td>Fixed rail</td>
<td>Front*</td>
<td></td>
</tr>
<tr>
<td>Machine interface</td>
<td>IPC-SMEMA-9851*</td>
<td></td>
</tr>
<tr>
<td>Components clearance</td>
<td>Top 30 mm, bottom 30 mm</td>
<td></td>
</tr>
<tr>
<td>Belt speed</td>
<td>14 m/min</td>
<td></td>
</tr>
<tr>
<td>PCB edge support</td>
<td>3 mm</td>
<td></td>
</tr>
<tr>
<td>PCB cycle time</td>
<td>± 8 seconds</td>
<td></td>
</tr>
<tr>
<td>PCB Stock capacity</td>
<td>220 mm</td>
<td></td>
</tr>
<tr>
<td>PCB Stack weight</td>
<td>30 kg (max.)</td>
<td></td>
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</table>

**Installation requirements**

<table>
<thead>
<tr>
<th>Requirement</th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>230 VAC/50 Hz/1 Ph</td>
<td></td>
</tr>
<tr>
<td>Power consumption</td>
<td>190 VA max.</td>
<td></td>
</tr>
<tr>
<td>Air supply</td>
<td>6 bar</td>
<td></td>
</tr>
<tr>
<td>Air consumption</td>
<td>5 ltr/min max.</td>
<td></td>
</tr>
</tbody>
</table>

**Machine dimensions**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>NTA 220DSM</th>
<th>NTA 220DSXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>500 x 1205 x 1330 mm</td>
<td>653 x 1260 x 1330 mm</td>
</tr>
<tr>
<td>Machine weight</td>
<td>150 kg</td>
<td>160 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>247 mm</td>
<td>247 mm</td>
</tr>
<tr>
<td>Towerlight height (Z):</td>
<td>2000 mm</td>
<td>2000 mm</td>
</tr>
</tbody>
</table>

**PCB dimensions**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>NTA 220DSM</th>
<th>NTA 220DSXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness</td>
<td>0.6 - 4 mm*</td>
<td>0.6 - 4 mm*</td>
</tr>
<tr>
<td>PCB weight</td>
<td>2.5 kg*</td>
<td>2.5 kg*</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA 225DS is a bare board loader designed to automatically load PCB's from a stack to the downstream machine.

PCB stack is located under the conveyor segment. The upper pcb is separated from the stack by use of a clamping system and lowered onto the ESD edge belt segment. Stack loading is done by opening the topcover and placing the PCB’s on the motorized lifter platform. The 7" full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**
- Automatic conveyor width adjustment.
- Motorized lifter platform.
- 7" full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In- & Output diagnostics on touchscreen display.
- 2000 product recipes storage.
- Bypass mode selectable without removing PCB stack.
- Ethernet connection for network interface.
- Low stack prewarning.
- Towerlight display for machine status.

**Options**
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Cantilevered input or output conveyor (500mm).
- Safety shutter at in- or outlet.
- Alarm buzzer.

Other options available on request.
**General machine specification**

- **Transfer height:** 950 mm ± 25 mm*
- **Colour:** RAL 9002*
- **Flow direction:** Left to right*
- **Fixed rail:** Front*
- **Machine interface:** IPC-SMEMA-9851 *
- **Components clearance:** Top 30 mm, bottom 30 mm
- **Belt speed:** 14 m/min
- **PCB edge support:** 3 mm
- **PCB cycle time:** ± 8 seconds
- **PCB Stack capacity:** 220 mm
- **PCB Stack weight:** 30 kg (max.)

**Installation requirements**

- **Power supply:** 230 VAC/50 Hz/1 Ph
- **Power consumption:** 370 VA max
- **Air supply:** 6 bar
- **Air consumption:** 5 ltr/min max

**Machine dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 225DSM</th>
<th>NTA 225DSXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>653 x 1430 x 1185 mm</td>
<td>653 x 1430 x 1185 mm</td>
</tr>
<tr>
<td>Machine weight:</td>
<td>180 kg</td>
<td>180 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>256 mm</td>
<td>256 mm</td>
</tr>
<tr>
<td>Towerlight height (Z):</td>
<td>2000 mm</td>
<td>2000 mm</td>
</tr>
</tbody>
</table>

**PCB dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 225DSM</th>
<th>NTA 225DSXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length:</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width:</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness:</td>
<td>0,8 - 4 mm</td>
<td>0,8 - 4 mm</td>
</tr>
<tr>
<td>PCB weight:</td>
<td>2,5 kg*</td>
<td>2,5 kg*</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA 230PS is a bare board unloader designed to automatically restack unpopulated PCB’s from upstream machine. PCB stack is located above the conveyor segment. The PCB coming from upstream will lifted from the conveyor and added to the bottom of the stack. The open design allows continuous stack unloading without stopping operation. The 7” full colour touchscreen display allows easy operation on multiple user levels.

**Options**
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Cantilevered input conveyor (500mm).
- Double stack function for re-stacking fragile boards.
- Bypass mode.
- Alarm buzzer.

Other options available on request.

**Standard features**
- Automatic conveyor width adjustment.
- 7” full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In-, & Output diagnostics on touchscreen display.
- 2000 product recipes storage.
- Full stack prewarning.
- Ethernet connection for network interface.
- Towerlight display for machine status.
Push-up stacker

NTA 230PSM • NTA 230PSXL

**General machine specification**

Transfer height: 950 mm ± 25 mm*
Colour: RAL 9002*
Flow direction: Left to right*
Fixed rail: Front*
Machine interface: IPC-SMEMA-9851*
Components clearance: Top 30 mm, bottom 30 mm
Belt speed: 14 m/min
PCB edge support: 3 mm
PCB cycle time: ± 9 seconds
PCB Stock capacity: 220 mm
PCB Stack weight: 30 kg (max)

**Installation requirements**

Power supply: 230 VAC/50 Hz/1 Ph
Power consumption: 190 VA max
Air supply: 6 bar
Air consumption: 5 ltr/min max

**Machine dimensions**

<table>
<thead>
<tr>
<th>Machine dimensions</th>
<th>NTA 230PSM</th>
<th>NTA 230PSXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>500 x 1205 x 1330 mm</td>
<td>653 x 1260 x 1330 mm</td>
</tr>
<tr>
<td>Machine weight:</td>
<td>120 kg</td>
<td>180 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>247 mm</td>
<td>247 mm</td>
</tr>
<tr>
<td>Towerlight height (Z):</td>
<td>2000 mm</td>
<td>2000 mm</td>
</tr>
</tbody>
</table>

**PCB dimensions**

<table>
<thead>
<tr>
<th>PCB dimensions</th>
<th>NTA 230PSM</th>
<th>NTA 230PSXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length:</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width:</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness:</td>
<td>0.6 - 4 mm*</td>
<td>0.6 - 4 mm*</td>
</tr>
<tr>
<td>PCB weight:</td>
<td>2.5 kg*</td>
<td>2.5 kg*</td>
</tr>
</tbody>
</table>

* Depending on specification.
Linking conveyor

The NTA 410 series is used to link process machines or board handling units in a PCB production line. The linking conveyor is available in multiple standard or custom made lengths.

The 4.3” full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**
- Automatic conveyor width adjustment.
- 4.3” full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In,- & Output diagnostics on touchscreen display.
- 2000 product recipes storage.
- Ethernet connection for network interface.
- Standard lengths: 500 mm, 1000 mm, 1500 mm and 2000 mm.
- Stainless steel PCB side guides.

**Options**
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Custom made length upon specification.
- Multi zone concept.
- Variable speed.
- Dual speed (adjustable PCB transfer out speed).
- Hinging topcover.
- Inspect function.
- Alarm buzzer.

Other options available on request.
Linking conveyor

NTA 410M 1000 • NTA 410XL 1000

General machine specification

- Transfer height: 950 mm ± 25 mm*
- Colour: RAL 9002*
- Flow direction: Left to right*
- Fixed rail: Front*
- Machine interface: IPC-SMEMA-9851*
- Components clearance: Top 30 mm, bottom 30 mm.
- Belt speed: 14 m/min
- PCB edge support: 3 mm

Installation requirements

- Power supply: 230 VAC/50 Hz/1 Ph
- Power consumption: 170 VA max

Machine dimensions

<table>
<thead>
<tr>
<th></th>
<th>NTA 410M 1000</th>
<th>NTA 410XL 1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (l x w x h):</td>
<td>1000 x 660 x 980 mm*</td>
<td>1000 x 870 x 980 mm*</td>
</tr>
<tr>
<td>Machine weight:</td>
<td>70 kg*</td>
<td>100 kg*</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>177 mm</td>
<td>177 mm</td>
</tr>
</tbody>
</table>

PCB dimensions

<table>
<thead>
<tr>
<th></th>
<th>NTA 410M 1000</th>
<th>NTA 410XL 1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length:</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width:</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness:</td>
<td>0,1 - 4 mm*</td>
<td>0,1 - 4 mm*</td>
</tr>
<tr>
<td>Max PCB weight:</td>
<td>2,5 kg*</td>
<td>2,5 kg*</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA 510C series is used in the PCB production line when frequent visual inspection of the PCB's is required. The 4.3" full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**
- Automatic conveyor width adjustment.
- 4.3" full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In,- & Output diagnostics on touchscreen display.
- 2000 product recipes storage.
- Ethernet connection for network interface.
- Standard conveyor lengths: 500 mm, 1000 mm, 1500 mm.
- Selectable 'Inspect' and 'Bypass' modes.
- Separate PCB release button.
- Dual speed (adjustable PCB transfer out speed).
- Stainless steel PCB side guides.

**Options**
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Custom made length upon specification.
- Multi zone concept.
- Variable speed.
- Hinging top cover.
- Inspection interval counter.
- Alarm buzzer.

Other options available on request.
# Inspection conveyor

## General machine specification

<table>
<thead>
<tr>
<th>Specification</th>
<th>NTA 510ICM 1000</th>
<th>NTA 510ICXL 1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer height</td>
<td>950 mm ± 25 mm*</td>
<td></td>
</tr>
<tr>
<td>Colour</td>
<td>RAL 9002*</td>
<td></td>
</tr>
<tr>
<td>Flow direction</td>
<td>Left to right*</td>
<td></td>
</tr>
<tr>
<td>Fixed rail</td>
<td>Front*</td>
<td></td>
</tr>
<tr>
<td>Machine interface</td>
<td>IPC-SMEMA-9851*</td>
<td></td>
</tr>
<tr>
<td>Components clearance</td>
<td>Top 30 mm, bottom 30 mm</td>
<td></td>
</tr>
<tr>
<td>Belt speed</td>
<td>Fixed in 14 m/min</td>
<td>Variable out 2 - 14 m/min</td>
</tr>
<tr>
<td>PCB edge support</td>
<td>3 mm</td>
<td></td>
</tr>
</tbody>
</table>

## Installation requirements

- **Power supply:** 230 VAC/50 Hz/1 Ph
- **Power consumption:** 150 VA max.

## Machine dimensions

<table>
<thead>
<tr>
<th>Dimensions (l x w x h)</th>
<th>NTA 510ICM 1000</th>
<th>NTA 510ICXL 1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions</td>
<td>1000 x 660 x 980 mm*</td>
<td>1000 x 870 x 980 mm*</td>
</tr>
<tr>
<td>Machine weight</td>
<td>70 kg</td>
<td>100 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X)</td>
<td>177 mm</td>
<td>177 mm</td>
</tr>
</tbody>
</table>

## PCB dimensions

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>NTA 510ICM 1000</th>
<th>NTA 510ICXL 1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness</td>
<td>0,1 - 4 mm*</td>
<td>0,1 - 4 mm*</td>
</tr>
<tr>
<td>Max PCB weight</td>
<td>2,5 kg*</td>
<td>2,5 kg*</td>
</tr>
</tbody>
</table>

* Depending on specification.

---

Europe +31 (0)162 578 578
United Kingdom +44 (0)1206 233 538

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The NTA 510RC series is used for good/bad PCB separation and verification by operator without interrupting the PCB flow. A rejected PCB that needs to be checked is lifted 65mm from the ESD belt by metal fingers, allowing good PCB’s to pass underneath the lifted PCB.

The 4.3” full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**
- Automatic conveyor width adjustment.
- 4.3” full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In,- & Output diagnostics on touchscreen display.
- 2000 product recipes storage.
- Ethernet connection for network interface.
- Variable transfer speed.
- Separate PCB release button.
- Stainless steel PCB side guides.

**Options**
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Custom made length upon specification.
- Multi zone concept.
- Dual speed (adjustable PCB transfer out speed).
- Hinging topcover.
- Overhead lighting.
- Additional reject position.
- Alarm buzzer.

Other options available on request.
**Reject conveyor**

**General machine specification**
- Transfer height: 950 mm ± 25 mm*
- Colour: RAL 9002*
- Flow direction: Left to right*
- Fixed rail: Front*
- Machine interface: IPC-SMEMA-9851 *
- Components clearance: Top 30 mm, bottom 30 mm
- Belt speed: 2 - 14 m/min
- PCB edge support: 3 mm

**Installation requirements**
- Power supply: 230 VAC/50 Hz/1 Ph
- Power consumption: 170 VA max
- Air supply: 6 bar
- Air consumption: 10 ltr/min

**Machine dimensions**
- **NTA 510RCM 1000**
  - Machine dimensions (l x w x h): 1000 x 825 x 980 mm*
  - Machine weight: 100 kg
  - Fixed rail to front dimension (X): 165 mm
- **NTA 510RCXL 1000**
  - Machine dimensions (l x w x h): 1000 x 1030 x 980 mm*
  - Machine weight: 120 kg
  - Fixed rail to front dimension (X): 165 mm

**PCB dimensions**
- **NTA 510RCM 1000**
  - PCB length: 80 - 330 mm
  - PCB width: 50 - 250 mm
  - PCB thickness: 0,1 - 4 mm*
  - Max PCB weight: 2,5 kg*
- **NTA 510RCXL 1000**
  - PCB length: 80 - 460 mm*
  - PCB width: 50 - 460 mm*
  - PCB thickness: 0,1 - 4 mm*
  - Max PCB weight: 2,5 kg*

* Depending on specification.
In line workstation

NTA 530WSM • NTA 530WSXL

The NTA 530WS series is used where manual work in the production line is performed without removing the PCB from the belt segment. The workstation is standard equipped with a work table, overhead lighting, footrest and a sliding part shelve for operator convenience. The 4.3" full colour touchscreen display allows easy operation on multiple user levels.

Options

- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Custom made length upon specification.
- Multi zone concept.
- Variable speed.
- 0-15° angle sliding part shelve.
- Reject fingers for good/bad PCB separation.
- Alarm buzzer.

Other options available on request.

Standard features

- Automatic conveyor width adjustment.
- 4.3" full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In,- & Output diagnostics on touchscreen display.
- 2000 product recipes storage.
- Ethernet connection for network interface.
- Selectable 'Inspect' and 'Bypass' modes.
- Dual speed (adjustable PCB transfer out speed).
- Separate PCB release button.
- ESD work table.
- ESD bracelet connection.
- Foot rest.
- Sliding part shelve (straight)
- LED overhead lighting.
- Stainless steel PCB side guides.

0-15° angle sliding part shelve.

4,3" colour touchscreen display.
# General machine specification

<table>
<thead>
<tr>
<th>Specification</th>
<th>NTA 530WSM 1000</th>
<th>NTA 530WSXL 1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer height</td>
<td>950 mm ± 25 mm*</td>
<td></td>
</tr>
<tr>
<td>Colour</td>
<td>RAL 9002*</td>
<td></td>
</tr>
<tr>
<td>Flow direction</td>
<td>Left to right*</td>
<td></td>
</tr>
<tr>
<td>Fixed rail</td>
<td>Front*</td>
<td></td>
</tr>
<tr>
<td>Machine interface</td>
<td>IPC-SMEMA-9851*</td>
<td></td>
</tr>
<tr>
<td>Components clearance</td>
<td>Top 30 mm, bottom 30 mm</td>
<td>Top 30 mm, bottom 30 mm</td>
</tr>
<tr>
<td>Belt speed</td>
<td>Fixed in 14 m/min</td>
<td>Variable out 2 - 14 m/min</td>
</tr>
<tr>
<td>PCB edge support</td>
<td>3 mm</td>
<td></td>
</tr>
</tbody>
</table>

# Installation requirements

- **Power supply**: 230 VAC/50 Hz/1 Ph
- **Power consumption**: 170 VA max.

# Machine dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>NTA 530WSM 1000</th>
<th>NTA 530WSXL 1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>1000 x 1050 x 2190 mm*</td>
<td>1000 x 1250 x 2190 mm*</td>
</tr>
<tr>
<td>Machine weight</td>
<td>130 kg</td>
<td>150 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>461 mm</td>
<td>461 mm</td>
</tr>
</tbody>
</table>

# PCB dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>NTA 510WSM 1000</th>
<th>NTA 530WSXL 1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness</td>
<td>0.1 - 4 mm*</td>
<td>0.1 - 4 mm*</td>
</tr>
<tr>
<td>Max PCB weight</td>
<td>2.5 kg*</td>
<td>2.5 kg*</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA 451TG series is used to create a normally open passage way in a PCB production line. An integrated conveyor segment slides across the opening to deliver the PCB to the downstream machine. The 7” full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**
- Automatic conveyor width adjustment.
- 7” full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In,- & Output diagnostics on touchscreen display.
- 2000 product recipes storage.
- Ethernet connection for network interface.
- Fully closed design.
- Swift and smooth retraction/extension by frequency controller.
- Safety retro-reflective sensor for enhanced safety.
- 847 mm open passage way.
- Stainless steel PCB side guides.

**Options**
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Variable speed.
- Normally closed operation (reduces passage way to 745mm).
- Machine length 2000mm (increase passage way to 1100mm).
- Towerlight display.
- Wireless SMEMA.
- Alarm buzzer.

Other options available on request.
Telescopic conveyor

NTA 451TGM • NTA 451TGXL

General machine specification

- **Transfer height:** 950 mm ± 25 mm*
- **Colour:** RAL 9002*
- **Flow direction:** Left to right*
- **Fixed rail:** Front*
- **Machine interface:** IPC-SMEMA-9851*
- **Components clearance:** Top 30 mm, bottom 30 mm
- **Belt speed:** 14 m/min
- **Cycle time:** ± 15 seconds

Installation requirements

- **Power supply:** 230 VAC/50 Hz/1 Ph
- **Power consumption:** 240 VA max

<table>
<thead>
<tr>
<th>Machine dimensions</th>
<th>NTA 451 TGM</th>
<th>NTA 451 TGXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>1500 x 765 x 1130 mm*</td>
<td>1500 x 1030 x 1130 mm*</td>
</tr>
<tr>
<td>Machine weight:</td>
<td>230 kg</td>
<td>280 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>234 mm</td>
<td>234 mm</td>
</tr>
<tr>
<td>Passage way (U):</td>
<td>845 mm*</td>
<td>845 mm*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PCB dimensions</th>
<th>NTA 451 TGM</th>
<th>NTA 451 TGXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length:</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width:</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness:</td>
<td>0,1 - 4 mm*</td>
<td>0,1 - 4 mm*</td>
</tr>
<tr>
<td>Max PCB weight:</td>
<td>2,5 kg*</td>
<td>2,5 kg*</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA 452TG series is used to create a normally closed or a normally open passage way in a PCB production line. A timing belt is used to deliver the PCB to the downstream machine and extend/retract the belt guid bars. The 7” full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**
- Automatic conveyor width adjustment.
- 7” full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In-, & Output diagnostics on touchscreen display.
- 2000 product recipes storage.
- Ethernet connection for network interface.
- Variable speed.
- Selectable operation mode (normally open or normally closed).
- Passageway of 675 mm.
- Stainless steel PCB side guides.

**Options**
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Dual speed (adjustable PCB transfer out speed).
- Towerlight display.
- Top cover.
- Alarm buzzer.

Other options available on request.
Telescopic conveyor (NC/NO)

NTA 452TGM • NTA 452TGXL

**General machine specification**

- **Transfer height:** 950 mm ± 25 mm*
- **Colour:** RAL 9002*
- **Flow direction:** Left to right*
- **Fixed rail:** Front*
- **Machine interface:** IPC-SMEMA-9851 *
- **Components clearance:** Top 30 mm, bottom 30 mm
- **Belt speed:** Variable 2 - 14 m/min
- **Cycle time:** ± 15 sec normally open operation
  ± 8 sec normally closed operation

**Installation requirements**

- **Power supply:** 230 VAC/50 Hz/1 Ph
- **Power consumption:** 300 VA max
- **Air supply:** 6 bar
- **Air consumption:** 2 ltr/min

**Machine dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 452TGM</th>
<th>NTA 452TGXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions</td>
<td>825 x 910 x 1285 mm*</td>
<td>825 x 1120 x 1285 mm*</td>
</tr>
<tr>
<td>Machine weight</td>
<td>130 kg</td>
<td>150 kg</td>
</tr>
<tr>
<td>Fixed rail to front</td>
<td>360 mm</td>
<td>360 mm</td>
</tr>
<tr>
<td>Passage way (U)</td>
<td>675 mm</td>
<td>675 mm</td>
</tr>
</tbody>
</table>

**PCB dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 452TGM</th>
<th>NTA 452TGXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness</td>
<td>0,6 - 4 mm*</td>
<td>0,6 - 4 mm*</td>
</tr>
<tr>
<td>Max PCB weight</td>
<td>2,5 kg*</td>
<td>2,5 kg*</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA 450MG series is used to create a normally closed passage way in a PCB production line. By manually lifting the conveyor segment, a passage way is created to access the other side of the PCB production line. The 4.3” full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**
- Automatic conveyor width adjustment.
- 4.3” full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In-, & Output diagnostics on touchscreen display.
- 2000 product recipes storage.
- Ethernet connection for network interface.
- Ergonomic air pressure supported opening and closing.
- Locking device to avoid opening during PCB transfer.
- Passage way of 600 mm.
- Stainless steel PCB side guides.

**Options**
- IPC-HERMES-9852 communication.
- Automatic product change over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Variable speed.
- Dual speed (adjustable PCB transfer out speed).
- Buffer mode.
- Inspect function.
- Machine length 1500mm to increase passage way to 900 mm.
- Towerlight display.
- Top cover.
- Alarm buzzer.

Other options available on request.
**General machine specification**

<table>
<thead>
<tr>
<th>Specification</th>
<th>NTA 450MGM</th>
<th>NTA 450MGXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer height</td>
<td>950 mm ± 25 mm*</td>
<td></td>
</tr>
<tr>
<td>Colour</td>
<td>RAL 9002*</td>
<td></td>
</tr>
<tr>
<td>Flow direction</td>
<td>Left to right*</td>
<td></td>
</tr>
<tr>
<td>Fixed rail</td>
<td>Front*</td>
<td></td>
</tr>
<tr>
<td>Machine interface</td>
<td>IPC-SMEMA-9851*</td>
<td></td>
</tr>
<tr>
<td>Components clearance</td>
<td>Top 30 mm, bottom 30 mm</td>
<td></td>
</tr>
<tr>
<td>Belt speed</td>
<td>14 m/min</td>
<td></td>
</tr>
<tr>
<td>PCB edge support</td>
<td>3 mm</td>
<td></td>
</tr>
</tbody>
</table>

**Installation requirements**

<table>
<thead>
<tr>
<th>Requirement</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>230 VAC/50 Hz/1 Ph</td>
<td></td>
</tr>
<tr>
<td>Power consumption</td>
<td>170 VA max.</td>
<td></td>
</tr>
<tr>
<td>Air supply</td>
<td>6 bar</td>
<td></td>
</tr>
<tr>
<td>Air consumption</td>
<td>35 ltr/lift</td>
<td></td>
</tr>
</tbody>
</table>

**Machine dimensions**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>NTA 450MGM</th>
<th>NTA 450MGXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h)</td>
<td>1000 x 945 x 1100 mm*</td>
<td>1000 x 1145 x 1100 mm*</td>
</tr>
<tr>
<td>Machine weight</td>
<td>80 kg</td>
<td>100 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension</td>
<td>250 mm</td>
<td>250 mm</td>
</tr>
<tr>
<td>Passage way</td>
<td>600 mm</td>
<td>600 mm</td>
</tr>
</tbody>
</table>

**PCB dimensions**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>NTA 450MGM</th>
<th>NTA 450MGXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness</td>
<td>0,1 - 4 mm*</td>
<td>0,1 - 4 mm*</td>
</tr>
<tr>
<td>Max PCB weight</td>
<td>2,5 kg*</td>
<td>2,5 kg*</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA 461TC series is used to clean the PCB’s in line, the machine uses specially formulated elastomer rollers to remove particles from the PCB surface. The contamination is transferred from the elastomer rollers to the easy exchangeable adhesive rolls. The 7” full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**
- Automatic conveyor width adjustment.
- 7” full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In, & Output diagnostics on touchscreen display.
- 2000 product recipes storage.
- Ethernet connection for network interface.
- Preset PCB counter and warning for changing sheets of the adhesive rolls.
- Ionizer bar (discharge result may vary).
- Easy access to adhesive rolls.
- Variable speed.
- Alarm buzzer.

**Options**
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Double sided cleaning (selectable).
- Tower light.

Other options available on request.
**General machine specification**

- **Transfer height:** 950 mm ± 25 mm*
- **Colour:** RAL 9002*
- **Flow direction:** Left to right*
- **Fixed rail:** Front*
- **Machine interface:** IPC-SMEMA-9851*
- **Components clearance:** Top 30 mm, bottom 30 mm
- **Belt speed:** Variable 2-14 m/min
- **PCB edge support:** 3 mm

**Installation requirements**

- **Power supply:** 230 VAC/50 Hz/1 Ph
- **Power consumption:** 260VA max
- **Air supply:** 4-6 bar
- **Air consumption:** 2 ltr/min

**Machine dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 461 TCM</th>
<th>NTA 461 TCXL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Machine dimensions (l x w x h):</strong></td>
<td>653 x 800 x 1330 mm*</td>
<td>750 x 1055 x 1330 mm*</td>
</tr>
<tr>
<td><strong>Machine weight:</strong></td>
<td>180 kg</td>
<td>200 kg</td>
</tr>
<tr>
<td><strong>Fixed rail to front dimension (X):</strong></td>
<td>225 mm</td>
<td>225 mm</td>
</tr>
<tr>
<td><strong>Towerlight height (Z):</strong></td>
<td>2000 mm</td>
<td>2000 mm</td>
</tr>
</tbody>
</table>

**PCB dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 461 TCM</th>
<th>NTA 461 TCXL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PCB length:</strong></td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td><strong>PCB width:</strong></td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td><strong>PCB thickness:</strong></td>
<td>0.6 - 3 mm*</td>
<td>0.6 - 3 mm*</td>
</tr>
<tr>
<td><strong>Max PCB weight:</strong></td>
<td>2.5 kg*</td>
<td>2.5 kg*</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA 910TV series is used to transfer PCB’s from one PCB production line into two PCB production lines, ‘from single track to dual track operated machines’ or vice versa. The integrated shuttle conveyor moves sideward to align with up, and downstream machines. The 7" full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**
- Servo driven shuttle conveyor movement.
- Automatic conveyor width adjustment.
- 7" full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In- and Output diagnostics on touchscreen display.
- 2000 product recipes storage.
- Ethernet connection for network interface.
- Front and rear adjustable stop positions.

**Options**
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Customized traversing distance (max 4000 mm)
- Good/bad separation function.
- Safety shutter at in,- and outlet.
- Cantilevered input or output conveyor (500 mm)
- Towerlight.
- Alarm buzzer.

Other options available on request.
Shuttle conveyor

NTA 910TVM • NTA 910TVXL

**General machine specification**
- **Transfer height:** 950 mm ± 25 mm*
- **Colour:** RAL 9002*
- **Flow direction:** Left to right*
- **Fixed rail:** Front*
- **Machine interface:** IPC-SMEMA-9851 *
- **Components clearance:** Top 30 mm, bottom 30 mm
- **Belt speed:** Fixed 14 m/min
- **Machine cycle time:** Depending on traversing distance*

**Installation requirements**
- **Power supply:** 230 VAC/50 Hz/1 Ph
- **Power consumption:** 340 VA max.

**Machine dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 910TVM</th>
<th>NTA 910TVXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>500 x 1750 x 1130 mm*</td>
<td>653 x 1750 x 1130 mm*</td>
</tr>
<tr>
<td>Machine weight:</td>
<td>180 kg</td>
<td>240 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X1):</td>
<td>256 mm</td>
<td>256 mm</td>
</tr>
<tr>
<td>Fixed to Fixed distance (X2):</td>
<td>800 mm*</td>
<td>800 mm*</td>
</tr>
<tr>
<td>Towerlight height (Z):</td>
<td>2000 mm</td>
<td>2000 mm</td>
</tr>
</tbody>
</table>

**PCB dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 910TVM</th>
<th>NTA 910TVXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length:</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width:</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness:</td>
<td>0,4 - 4 mm*</td>
<td>0,4 - 4 mm*</td>
</tr>
<tr>
<td>Max PCB weight:</td>
<td>2,5 kg*</td>
<td>2,5 kg*</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA 310I series is used to invert/flip PCB’s 180° for double sided production, the flip is done over the Y-axis of the PCB. PCB leading edge will become PCB trailing edge.

The 7” full colour touchscreen display allows easy operation on multiple user levels.

Standard features
- Automatic conveyor width adjustment.
- 7” full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In,- & Output diagnostics on touchscreen display.
- 2000 product recipes storage.
- Ethernet connection for network interfaces.
- Built-in torque limiter.
- Inversions continue from last unloading, cycle time decrease.

Options
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Cantilevered input or output conveyor.
- Top clamping to hold down PCB during inverting.
- Safety shutter at in,- or outlet.
- Towerlight.
- Alarm buzzer.

Other options available on request.
### General machine specification

<table>
<thead>
<tr>
<th>Specification</th>
<th>NTA 310IM</th>
<th>NTA 310IXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer height</td>
<td>950 mm ± 25 mm*</td>
<td></td>
</tr>
<tr>
<td>Colour</td>
<td>RAL 9002*</td>
<td></td>
</tr>
<tr>
<td>Flow direction</td>
<td>Left to right*</td>
<td></td>
</tr>
<tr>
<td>Fixed rail</td>
<td>Front*</td>
<td></td>
</tr>
<tr>
<td>Machine interface</td>
<td>IPC-SMEMA-9851 *</td>
<td></td>
</tr>
<tr>
<td>Components clearance</td>
<td>Top 30 mm, bottom 30 mm</td>
<td></td>
</tr>
<tr>
<td>Belt speed</td>
<td>Fixed 14 m/min</td>
<td></td>
</tr>
<tr>
<td>Machine cycle time</td>
<td>±8 seconds</td>
<td></td>
</tr>
</tbody>
</table>

### Installation requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>NTA 310IM</th>
<th>NTA 310IXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>230 VAC/50 Hz/1 Ph</td>
<td></td>
</tr>
<tr>
<td>Power consumption</td>
<td>240 VA max</td>
<td></td>
</tr>
<tr>
<td>Air supply</td>
<td>6 bar</td>
<td></td>
</tr>
<tr>
<td>Air consumption</td>
<td>2 ltr/min</td>
<td></td>
</tr>
</tbody>
</table>

### Machine dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>NTA 310IM</th>
<th>NTA 310IXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h)</td>
<td>500 x 815 x 1330 mm</td>
<td>653 x 985 x 1330 mm*</td>
</tr>
<tr>
<td>Machine weight</td>
<td>110 kg</td>
<td>130 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X)</td>
<td>256 mm</td>
<td>256 mm</td>
</tr>
</tbody>
</table>

### PCB dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>NTA 310IM</th>
<th>NTA 310IXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness</td>
<td>0.6 - 4 mm*</td>
<td>0.6 - 4 mm*</td>
</tr>
<tr>
<td>Max PCB weight</td>
<td>2.5 kg*</td>
<td>2.5 kg*</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA 340L series is used in production lines with a PCB/pallet return conveyor system. The lift brings PCB/pallet from the upper to the lower conveyor level or vice versa.

The 7" full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**

- Automatic conveyor width adjustment.
- 7" full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In, - & Output diagnostics on touchscreen display.
- 2000 product recipes storage.
- Ethernet connection for network interface.
- Frequency inverter controlled lifting motion.
- Machine configuration upon request.

**Options**

- IPC-HERMES-9852 communication.
- Automatic product change over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Servo driven lifter for shortened cycle time.
- Tall version for ‘overhead’ solutions.
- Built according to specification.
- Cantilevered input - or output conveyor (500mm).
- Good/bad separation function.
- Safety shutter at in,- or outlet.
- Pneumatic stopper at inlet to control product flow from upstream.
- Towerlight.
- Alarm buzzer.

Other options available on request.
**General machine specification**

Transfer height: 950 mm ± 25 mm*
Colour: RAL 9002*
Flow direction: Left to right*
Fixed rail: Front*
Machine interface: IPC-SMEMA-9851*
Components clearance: Top 30 mm, bottom 30 mm
Belt speed: Fixed 14 m/min
Machine cycle time: ±25 seconds*

**Installation requirements**

Power supply: 230 VAC/50 Hz/1 Ph
Power consumption: 350 VA max

**Machine dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 340LM</th>
<th>NTA 340LXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>500 x 1175 x 1330 mm*</td>
<td>653 x 1385 x 1330 mm*</td>
</tr>
<tr>
<td>Machine weight:</td>
<td>160 kg</td>
<td>200 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>320 mm</td>
<td>320 mm</td>
</tr>
</tbody>
</table>

**PCB dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 340LM</th>
<th>NTA 340LXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length:</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width:</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness:</td>
<td>0,4 - 4 mm*</td>
<td>0,4 - 4 mm*</td>
</tr>
<tr>
<td>Max PCB weight:</td>
<td>2,5 kg*</td>
<td>2,5 kg*</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA turn conveyor series is designed to change the flow direction of a PCB production line. The PCB is transferred onto the built-in conveyor which turns clockwise and/or counter clockwise.

The 7” full colour touchscreen display allows easy operation on multiple user levels.

### Standard features
- Automatic conveyor width adjustment.
- 7” full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In- & Output diagnostics on touchscreen display.
- 2000 product recipes storage.
- Ethernet connection for network interface.
- NTA 91 turning 90° clockwise or counter clockwise.
- NTA 181 turning 180° to change fixed rail position.
- NTA 271, NTA 361 various configurations possible (upon specification).
- By pass mode.
- Lateral transfer system to reduce gap with up,- and downstream machine.
- Machine configuration upon request.

### Options
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Servo drive upgrade for shortened cycle time.
- Built according to specification.
- Cantilevered input- or output conveyor.
- Good/bad separation function.
- Safety shutter at in- and outlet.
- Towerlight.
- Alarm buzzer.

Other options available on request.
# General machine specification

- **Transfer height:** 950 mm ± 25 mm*
- **Colour:** RAL 9002*
- **Flow direction:** Left to right*
- **Fixed rail:** Front*
- **Machine interface:** IPC-SMEMA-9851*
- **Components clearance:** Top 30 mm, bottom 30 mm
- **Belt speed:** Fixed 14 m/min
- **Machine cycle time:** ±16 seconds*

## Installation requirements

- **Power supply:** 230 VAC/50 Hz/1 Ph
- **Power consumption:** 270 VA max
- **Air supply:** 6 bar
- **Air consumption:** 1.5 ltr/min

## Machine dimensions

<table>
<thead>
<tr>
<th></th>
<th>NTA 91,181,271,361 M</th>
<th>NTA 91,181,271,361 XL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>795 x 795 x 1130 mm</td>
<td>975 x 975 x 1130 mm*</td>
</tr>
<tr>
<td>Machine weight:</td>
<td>160 kg</td>
<td>200 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>272.5 mm</td>
<td>257.5 mm</td>
</tr>
</tbody>
</table>

## PCB dimensions

<table>
<thead>
<tr>
<th></th>
<th>NTA 91,181,271,361 M</th>
<th>NTA 91,181,271,361 XL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length:</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width:</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness:</td>
<td>0.4 - 4 mm*</td>
<td>0.4 - 4 mm*</td>
</tr>
<tr>
<td>Max PCB weight:</td>
<td>2.5 kg*</td>
<td>2.5 kg*</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA 610S is a single magazine buffer with a servo driven magazine lifter platform with a single magazine capacity. The dual function pneumatic pusher assembly is used to push the PCB in or out of the magazine. This buffer can be used as a mid-line loader/unloader, as a LIFO/FIFO buffer or as an reject buffer. The 7" full colour touchscreen display allows easy operation on multiple user levels.

---

**Standard features**
- Servo driven lifter platform.
- Automatic conveyor width adjustment.
- 7" full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In- & Output diagnostics on touchscreen display.
- 2000 product recipes storage.
- Ethernet connection for network interface.
- 5 operation modes.
  - Buffer mode (LIFO/FIFO).
  - Load mode.
  - Unload mode.
  - Reject mode.
  - Bypass mode (Push PCB through magazine).
- Oven info threshold signal.
- Programmable outfeed delay timer.
- Regulated pressure on the pusher cylinders.
- Manual adjustable pusher position.
- Towerlight display for machine status.

**Options**
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Safety shutter at in-, and/or outlet.
- Front side magazine exchange.
- By-pass conveyor above magazine platform.
- Two magazine lengths option (incl. rotary idler).
- Width adjustable magazine conveyor to handle other magazine length.
- Cooling fans.
- Alarm buzzer.

Other options available on request.
**General machine specification**

- Transfer height: 950 mm ± 25 mm*
- Colour: RAL 9002*
- Flow direction: Left to right*
- Fixed rail: Front*
- Machine interface: IPC-SMEMA-9851*
- Components clearance: Top 30 mm, bottom 30 mm
- Machine cycle time: ± 19 seconds (board to board)
- Pitch control: Flexible pitch settings.
- Maximum magazine weight: 50 kg.

**Installation requirements**

- Power supply: 230 VAC/50 Hz/1 Ph
- Power consumption: 530 VA max
- Air supply: 6 bar
- Air consumption: 27 ltr/min max

**Machine dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 610SM</th>
<th>NTA 610SXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>1260 x 1190 x 1700 mm</td>
<td>1560 x 1610 x 1700 mm</td>
</tr>
<tr>
<td>Machine weight:</td>
<td>200 kg</td>
<td>300 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>405 mm</td>
<td>405 mm</td>
</tr>
<tr>
<td>Towerlight height (Z):</td>
<td>2000 mm</td>
<td>2000 mm</td>
</tr>
</tbody>
</table>

**PCB dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 610SM</th>
<th>NTA 610SXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length:</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width:</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness:</td>
<td>0.4 - 2.6 mm*</td>
<td>0.4 - 2.6 mm*</td>
</tr>
<tr>
<td>PCB weight:</td>
<td>2.5 kg*</td>
<td>2.5 kg*</td>
</tr>
<tr>
<td>Magazine dimensions (max.):</td>
<td>355 x 320 x 570 mm</td>
<td>535 x 530 x 570 mm</td>
</tr>
</tbody>
</table>

* Depending on specification.
The NTA 620S is a multi magazine buffer with a 5 magazine capacity, 2 empty magazines on the upper magazine conveyor, 2 full magazines on the lower magazine conveyor and 1 magazine is on the servo driven lifter. The dual function pneumatic pusher assembly is used to push the PCB in or out of the magazine. This buffer can be used as a high capacity mid-line loader/unloader, as a LIFO/FIFO buffer or as a reject buffer. The 7" full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**
- Servo driven lifter platform.
- Automatic conveyor width adjustment.
- 7" full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In- & Output diagnostics on touchscreen display.
- 2000 product recipes storage.
- Ethernet connection for network interface.
- 5 operation modes.
  - Buffer mode (LIFO/FIFO).
  - Load mode.
  - Unload mode.
  - Reject mode.
  - Bypass mode (Push PCB through magazine).
- Oven info threshold signal.
- Programmable outfeed delay timer.
- Regulated pressure on the pusher cylinders.
- Manual adjustable pusher position.
- Towerlight display for machine status.

**Options**
- IPC-HERMES 9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Safety shutter at in- and/or outlet.
- Front side magazine exchange.
- By-pass conveyor above magazine platform.
- Two magazine lengths option (incl. rotary idler).
- Width adjustable magazine conveyor to handle other magazine length.
- Cooling fans.
- Alarm buzzer.

Other options available on request.
Multi magazine buffer

NTA 620SM • NTA 620SXL

**General machine specification**

- **Transfer height**: 950 mm ± 25 mm*
- **Colour**: RAL 9002*
- **Flow direction**: Left to right*
- **Fixed rail**: Front*
- **Machine interface**: IPC-SMEMA-9851*
- **Components clearance**: Top 30 mm, bottom 30 mm
- **Machine cycle time**: ± 19 seconds (board to board)
- **Magazine change over time**: ± 22 seconds
- **Pitch control**: Flexible pitch settings
- **Maximum magazine weight**: 50 kg.

**Installation requirements**

- **Power supply**: 230 VAC/50 Hz/1 Ph
- **Power consumption**: 740 VA max
- **Air supply**: 6 bar
- **Air consumption**: 27 ltr/min max

**Machine dimensions**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>NTA 620SM</th>
<th>NTA 620SXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>1260 x 1775 x 1700 mm</td>
<td>1560 x 2470 x 1700 mm</td>
</tr>
<tr>
<td>Machine weight:</td>
<td>230 kg</td>
<td>330 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>405 mm</td>
<td>405 mm</td>
</tr>
<tr>
<td>Towerlight height (Z):</td>
<td>2000 mm</td>
<td>2000mm</td>
</tr>
</tbody>
</table>

**PCB dimensions**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>NTA 620SM</th>
<th>NTA 620SXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length:</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width:</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness:</td>
<td>0,4 - 2,6 mm*</td>
<td>0,4 - 2,6 mm*</td>
</tr>
<tr>
<td>PCB weight:</td>
<td>2,5 kg*</td>
<td>2,5 kg*</td>
</tr>
<tr>
<td>Magazine dimensions (max):</td>
<td>355 x 320 x 570 mm</td>
<td>535 x 530 x 570 mm</td>
</tr>
</tbody>
</table>

* Depending on specification

---

Europe +31 (0)162 578 578
United Kingdom +44 (0)1206 233 538

www.nutek.com
The NTA 640S FIFO buffer is designed to buffer PCB’s in FIFO mode. The PCB’s are transferred by special ESD rollers onto the pick-up location. Metal support bars lift the PCB carefully from the conveyor segment and store them until downstream request. The 7” full colour touchscreen display allows easy operation on multiple user levels.

**Options**
- IPC-HERMES-9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Safety shutter at in-, and/or outlet.
- Reject mode for buffering bad boards.
- Cooling fans.
- Cantilevered input or output conveyor (500 mm).
- Intelligent threshold counter to stop PCB infeed into reflow oven.
- Alarm buzzer.

Other options available on request.
**General machine specification**

- **Transfer height:** 950 mm ± 25 mm\*
- **Colour:** RAL 9002\*
- **Flow direction:** Left to right\*
- **Fixed rail:** Front\*
- **Machine interface:** IPC-SMEMA-9851 \*
- **Components clearance:** Top 30 mm, bottom 30 mm
- **Machine cycle time:** 10 - 25 seconds\*
- **Buffer capacity:** 26 PCB’s at pitch 1
- **Pitch control:** Flexible pitch settings
- **Pitch:** 20 mm
- **Product height:** Selected pitch setting -5 mm

**Installation requirements**

- **Power supply:** 230 VAC/50 Hz/1 Ph
- **Power consumption:** 730 VA max
- **Air supply:** 6 bar
- **Air consumption:** 2 ltr/min max

**Machine dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 640SM</th>
<th>NTA 640SXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
<td>500 x 1190 x 1700 mm</td>
<td>653 x 1350 x 1700 mm</td>
</tr>
<tr>
<td>Machine weight:</td>
<td>210 kg</td>
<td>260 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>450 mm</td>
<td>450 mm</td>
</tr>
<tr>
<td>Towerlight height (Z):</td>
<td>2000 mm</td>
<td>2000 mm</td>
</tr>
</tbody>
</table>

**PCB dimensions**

<table>
<thead>
<tr>
<th></th>
<th>NTA 640SM</th>
<th>NTA 640SXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length:</td>
<td>80 - 330 mm</td>
<td>80 - 460 mm*</td>
</tr>
<tr>
<td>PCB width:</td>
<td>50 - 250 mm</td>
<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness:</td>
<td>0,4 - 2,6 mm*</td>
<td>0,4 - 2,6 mm*</td>
</tr>
<tr>
<td>PCB weight:</td>
<td>2,5 kg*</td>
<td>2,5 kg*</td>
</tr>
</tbody>
</table>

* Depending on specification.
**Belt FIFO buffer**

The NTA 660S Belt FIFO buffer allows buffering of PCB's in FIFO or LIFO mode, the buffer uses individual belt segments which support each PCB over its full length. When a PCB is buffered or released a drive mechanism engages with the belt segment to smoothly transfer the PCB. The 7” full colour touchscreen display allows easy operation on multiple user levels.

**Standard features**
- Servo driven lifter.
- Automatic conveyor width adjustment.
- 7” full colour touchscreen display.
- Advanced graphic Human Machine Interface (HMI).
- Multi level user access control.
- In, & Output diagnostics on touchscreen display.
- 2000 product recipes storage.
- Ethernet connection for network interface.
- Buffer capacity of 20 PCB’s at 27mm pitch.
- 3 operation modes.
  - Buffer mode (LIFO/FIFO).
  - Bypass mode.
  - Oven info threshold signal.
- Programmable outfeed delay timer.
- Ethernet communication for network interface.
- Towerlight display for machine status.

**Options**
- IPC-HERMES:9852 communication.
- Automatic product change-over by Nutek leader - follower software.
- Line Control Software ready.
- Remotely accessible PLC.
- Safety shutter at in,- and/or outlet.
- Different belt concept for product weight > 2 kg.
- Reject mode for buffering bad boards.
- Cooling fans.
- Cantilevered input or output conveyor (500 mm).
- Intelligent threshold counter to stop PCB infeed into reflow oven.
- Buffer capacity of 12 PCB’s at 27 mm pitch.
- Buffer capacity of 30 PCB’s at 24 mm pitch.
- Alarm buzzer.

Other options available on request.
### General machine specification

<table>
<thead>
<tr>
<th>Specification</th>
<th>NTA 660SM</th>
<th>NTA 660SXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer height</td>
<td>950 mm ± 25 mm*</td>
<td></td>
</tr>
<tr>
<td>Colour</td>
<td>RAL 9002*</td>
<td></td>
</tr>
<tr>
<td>Flow direction</td>
<td>Left to right*</td>
<td></td>
</tr>
<tr>
<td>Fixed rail</td>
<td>Front*</td>
<td></td>
</tr>
<tr>
<td>Machine interface</td>
<td>IPC-SMEMA-9851*</td>
<td></td>
</tr>
<tr>
<td>Components clearance</td>
<td>Top 30 mm, bottom 30 mm</td>
<td></td>
</tr>
<tr>
<td>Machine cycle time</td>
<td>10 - 23 seconds*</td>
<td></td>
</tr>
<tr>
<td>Buffer capacity</td>
<td>20 PCB’s at pitch 1</td>
<td></td>
</tr>
<tr>
<td>Pitch control</td>
<td>Flexible pitch settings</td>
<td></td>
</tr>
<tr>
<td>Pitch</td>
<td>27 mm</td>
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</table>

### Installation requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>230 VAC/50 Hz/1 Ph</td>
</tr>
<tr>
<td>Power consumption</td>
<td>730 VA max</td>
</tr>
<tr>
<td>Air supply</td>
<td>6 bar</td>
</tr>
<tr>
<td>Air consumption</td>
<td>2 ltr/min max</td>
</tr>
</tbody>
</table>

### Machine dimensions

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>NTA 660SM</th>
<th>NTA 660SXL</th>
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</thead>
<tbody>
<tr>
<td>Machine dimensions (l x w x h):</td>
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<td>653 x 1535 x 1700 mm</td>
</tr>
<tr>
<td>Machine weight</td>
<td>210 kg</td>
<td>260 kg</td>
</tr>
<tr>
<td>Fixed rail to front dimension (X):</td>
<td>435 mm</td>
<td>435 mm</td>
</tr>
<tr>
<td>Towerlight height (Z):</td>
<td>2000 mm</td>
<td>2000 mm</td>
</tr>
</tbody>
</table>

### PCB dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>NTA 660SM</th>
<th>NTA 660SXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB length:</td>
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<td>50 - 460 mm*</td>
</tr>
<tr>
<td>PCB thickness:</td>
<td>0.4 - 2.6 mm*</td>
<td>0.4 - 2.6 mm*</td>
</tr>
<tr>
<td>PCB weight:</td>
<td>2 kg*</td>
<td>2 kg*</td>
</tr>
</tbody>
</table>

* Depending on specification.