

eurolpacer  
HIGH MIX  
PRODUCTIVITY

ii-N2



Ultimate High-Mix Production



**ilineo**  
range

## ii-RC Software

- ▶ A simple and easy-to-use interface
- ▶ Ergonomic and intuitive operation

## Intelligent Conveyor

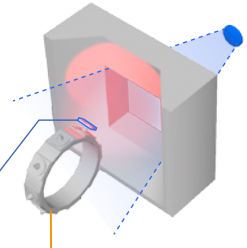
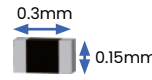
- ▶ Increase productivity without mechanical stops
- ▶ Automatically optimizes board stop position for maximum productivity

## Short Tape Tray

- ▶ 8, 12, 16 and 24mm trays available
- ▶ Virtual feeder up to 30 components
- ▶ Fiducial aligned

## Embedded Camera

- ▶ Hi-Res camera on Tornado head
- ▶ Down to 03015m



# Ultimate High-Mix Production

ii-N2 platform is the perfect combination of performance and flexibility. Equipped with 2 Tornado heads, this machine offers a large loading capacity while providing the trademark performance expected of Europlacer equipment.

Discover our dedicated range of high-mix, low volume placement solutions.

Flexibility ▶▶▶▶

Feeder capacity ▶▶▶▶

Speed ▶▶▶▶

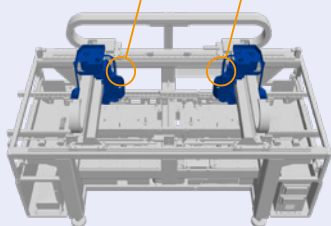


## Smart Nozzles

- ▶ Reduced set-up time
- ▶ Nozzle type identifier
- ▶ Nozzles can be placed anywhere



## 2 Tornado Heads



- ▶ 8 or 12 nozzles
- ▶ Speed 30,780 CPH\*
- ▶ Components up to 99 x 99 x 34mm\*\*

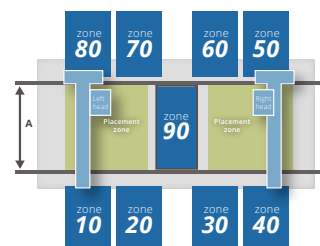


## ii-Tab

- ▶ Mobility Solution
- ▶ 10 Software applications
- ▶ Support for Setup, Stock Management and Production

## Loading Capacity

- ▶ Configurable zones - ii-Feed trolleys (ii-Cart), tape feeder or special feeder
- ▶ Central Jedec tray support for large components



## ii-Cart Intelligent Trolley

- ▶ Up to 33 ii-Feed elements 8mm
- ▶ Accepts any mix of 8, 12, 16 or 24mm tapes

## NT Feeder

- ▶ From 4 to 104mm width
- ▶ Component height up to 26.6mm

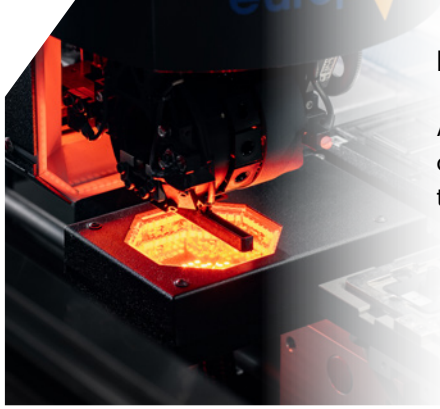
Machine compatible with all feeders in the Europlacer range, see Feeders brochure

\* With 12 nozzle position - Optimum test conditions in factory

\*\* With 8-nozzle Tornado head, matrix tray distributor with fewer shims, or auto tray loader with specific tray support



# Options



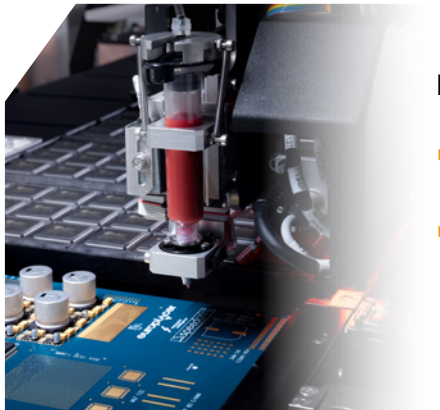
## Fixed Camera

Allowing the placement of large components up to 99 x 99mm

## Special Nozzles Magazines

Can hold 4 special nozzles:

- ▶ Vacuum or gripper nozzles
- ▶ Heavy and large components

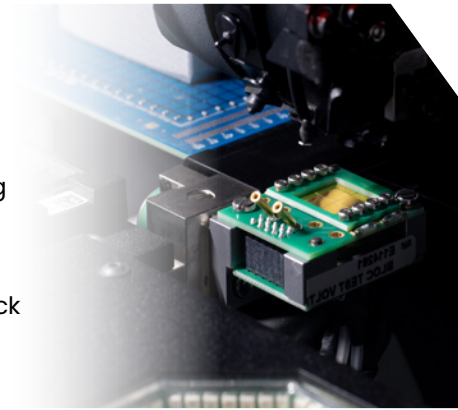


## Dispensing System

- ▶ Glue or paste dispensing
- ▶ 2 different systems: air or auger valve

## Electrical Test

- ▶ Passive RLC and Zener diode testing
- ▶ HAMEG tester from Rhode & Schwarz
- ▶ Diode polarity check



# Recommended Accessories



## Freeform Feeder

- ▶ Tray for unpackaged, bulk components
- ▶ Identify components regardless of their position



## Matrix Tray Distributor

- ▶ Stores up to 30 trays vertically



## Belt Feeder

- ▶ Solution for components supplied in stick format
- ▶ SO, SO medium, SO large and TSSOP type components



## Traceability Option With Label Feeder

- ▶ Dispensing 1D and 2D labels
- ▶ Sticker size from 4 x 8mm to 55 x 55mm
- ▶ Logging the data required for the traceability option

# Benefits



## Flexibility

- ▶ **Component range:**  
From 03015m  
up to 99 x 99 x 34mm\*\*
- ▶ **Feeder capacity:**  
264 x 8mm feeders  
3 Jedec central tray



## Connectivity



- ▶ **ii-Tab:**  
Connect your Pick and Place machine to our mobile solution to help you prepare and monitor your production line.
- ▶ **CFX 1.7 compatible:**  
Easily connect the ii-N2 with all CFX compatible equipment in your production line.



## Versatility

- ▶ **PCB range:**  
From 60 x 45mm  
to 700 x 600mm and 10kg



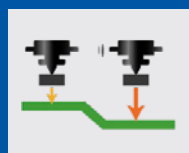
## All-In-One Solution

- ▶ **Standalone:**  
Complete Pick and Place installation with only one machine.

# Features



## 3DPS



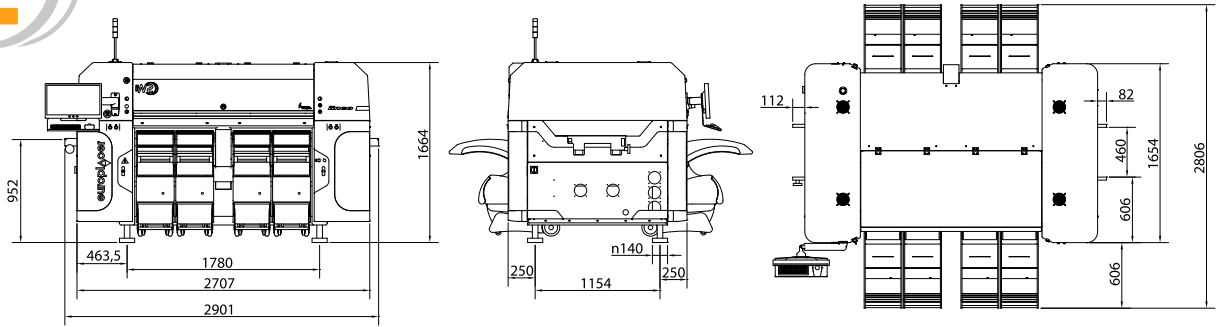
Real-time Z axis adjustment to compensate for any board warpage. No PCB support tooling pin needed.

## AAS



Auto Adaptive Sequencing defines placement priorities and rules to avoid collision. It takes into account component and nozzle shapes, characteristics of the PCB and the trajectory of the heads.

\*\* With 8-nozzle Tornado head, matrix tray distributor with fewer shims, or auto tray loader with specific tray support



## Technical Specification

General	
<b>Electrical</b>	400V/210V three phases 50Hz/60Hz, 5kVA
<b>Air</b>	7 bar, 30l/min
<b>Noise</b>	<70dB (A)
<b>Working temperature</b>	18°C to 30°C
<b>Humidity</b>	20% to 80% RH non-condensing
<b>Weight</b>	2200kg (without feeders)

Component Range	
<b>Types</b>	Chips, MELFs, electrolytic capacitors, SO, PLCC, QFP, TSOP, QFN, BGA, µBGA, LGA, CSP, connectors, Flip chip, through hole and odd-form devices
<b>Minimum size</b>	0.3mm x 0.15mm (03015m)
<b>Maximum size</b>	50mm x 50mm as standard; 99mm x 99mm with fixed camera option (more on demand)
<b>Maximum height</b>	Full revolution of turret 12mm ii-N2 - 1 component mode 34mm** ii-N2 - 1 component mode 31mm*
<b>Minimum lead pitch</b>	0.2mm (QFP), 0.3mm (µBGA) 0.1mm (QFP), 0.15mm (µBGA) with optional fixed camera
<b>Minimum lead/ball size</b>	0.1mm (QFP), 0.15mm (µBGA) 0.05mm (QFP), 0.075mm (µBGA) with optional fixed camera

ii-N2 Capability	
<b>Tact time</b>	ii-N2 - 0.137 sec - 27,300cph ii-N2* - 0.12 sec - 30,780cph
<b>Placement accuracy</b>	22µm (QFPs) to 46µm (chips) @ 3 sigma
<b>Placement head</b>	2 rotary turret heads on X/Y linear motor gantries ii-N2 with 8 nozzle positions ii-N2 with 12 nozzle positions
<b>Nozzles</b>	60 position 'smart' nozzle tool bank for head 1 (20, 40 & 60 positions as an option for head 2) (Special 4 position tool banks as an option)
<b>Component analysis</b>	'On-the-fly' high resolution digital camera (fixed camera as an option)
<b>Feeder range</b>	Full range of intelligent feeders for 4mm to 104mm tapes, components in plastic sticks and matrix trays
<b>Feeder capacity</b>	264 x 8mm tape feeder positions 3 or 4 Jedec matrix trays (equivalent)

Board Handling	
<b>Minimum PCB size</b>	60mm x 45mm
<b>Maximum PCB size</b>	Length: 2 x 700mm (without zone 90 Central Jedec Tray) Width: 460mm (600mm with option)
<b>Thickness</b>	0.5mm to 10.0mm
<b>Weight</b>	3kg max. (10kg max. as an option - Please consult us for higher valued weight)
<b>Under board clearance</b>	25mm
<b>Board location</b>	Full edge clamping with fiducial correction
<b>Board edge clearance</b>	3mm above, 5mm below
<b>Transport criteria</b>	Left to right (right to left optional), Fixed front rail, height-adjustable 890mm to 975mm, SMEMA interface

\* With 12 nozzle position - Optimum test conditions in factory

\*\* With 8-nozzle Tornado head, matrix tray distributor with fewer shims, or auto tray loader with specific tray support

## Options

- ▶ Fixed upward looking camera for larger and very fine pitch components
- ▶ Feeder trolley options for bulk change of individual feeders and 'mass' tape feeder ranges
- ▶ 30-position automatic tray loader (sequencer)
- ▶ Electrical component testing
- ▶ Glue dispenser
- ▶ Additional nozzle magazines
- ▶ Rear operating station
- ▶ Internal fixed tray holder zone 460mm x 325mm - 3 Jedec tray equivalent (4 Jedec tray equivalent with wide board option)

As part of our policy of continuous development, specifications are subject to change without notice.

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