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MACHINES PICK AND PLACE MODELE **NOVAPLACE**

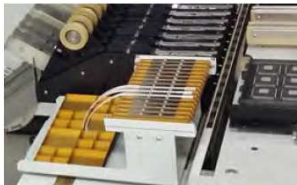
Economical Automated Benchtop Pick and Place

The NovaPlace Series

Models: L-NP00, L-NP32, L-NP64, and L-NP64S

Model L-NP64 shown with 8 mm tape,
12 lane bank and vibratory stick feeders

Model L-NP64 shown with
popular cut tape strip holder.
Available in multiple sizes.



Your Economic Solution for Easy Start-Up in PCB Production

- Pilot Manufacturing
- Prototyping
- Low Volume Production
- Product Development
- Short Run, High-Mix Manufacturing Applications

System Features

- Provides affordable automatic pick and place operation in a tabletop system
- Easy to set up, easy to program and easy to use with Windows™ based software
- CAD editing Software
- System includes 4 position nozzle changer for most SMT component sizes
- Placement accuracy, up to 0.001"
- Uses Micro Stepper Technology
- Enhanced Accuracy & Repeatability with Linear Scales & Encoders
- Cut tape strip holders available in various widths & configurations
- Optional convenient SuperStrip™ feeders for short tape strips
- Inserts available for stick/tube/loose components in a vibratory feeder for SMT components including discretes, 0402s, 0603s, SOICs, PLCCs, and 20 mil pitch QPPs
- Individual 8, 12, 16, 24, 32 & 44 mm & 12 lane 8 mm tape bank feeders available. (Not available on the L-NP00 Model)
- Placement rates up to 2100 CPH

Model Comparisons

SPECs	L-NP00	L-NP32	L-NP64	L-NP64S
Cut Tape Strips	✓	✓	✓	✓
Electric Tape Feeders	- 0 -	Up to 48	Up to 96	Up to 96
Placement Accuracy	± 0.004"	± 0.004"	± 0.004"	± 0.001"
Smallest Component	0402	0402	0402	0201
Fine Pitch Capability	25 mil	25 mil	25 mil	15 mil
Closed Loop System	- No -	- No -	- No -	- Yes - (Linear Scales & Digital Encoders)

Operation

Once a specific PCB is programmed, the machine automatically picks up each component from its designated feeder or tray, centers the part and moves to the placement location, and accurately places the part. The feeders automatically position the next component for pick-up.

Feeders

- Easy to change feeders are available for tape, tube, bulk or matrix tray components.
- Standard tape feeder sizes include 8 mm, 12 mm, 16 mm, 24 mm, 32 mm and 44 mm.
- The vibratory feeder can handle loose and tube components.
- Cut Tape Strip Holders are available in various configurations from 8 mm up to 24 mm width lanes.
- Unique SuperStrip™ feeders are a convenient way to use short tape strips.
- Feeder positions are pre-programmed for quick set-up

Numerous Feeder Configurations



Cut Tape Strip Holders



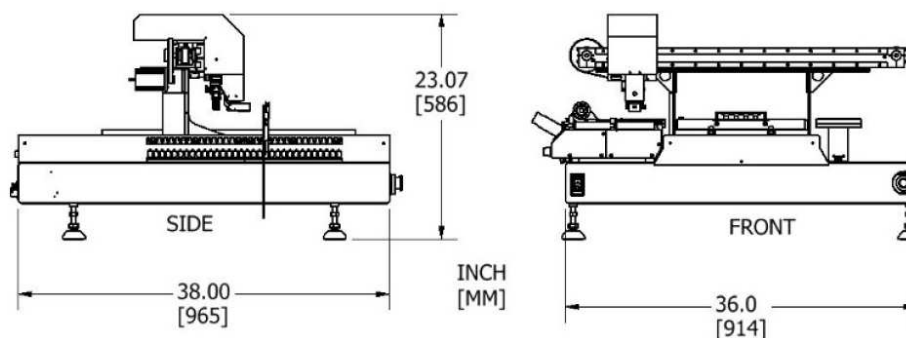
Matrix Tray & Holder



Electrical Tape Feeder



12 Lane, 8 mm Bank Feeders





L-NP Series showing easily accessible, unobstructed work deck

Machine Options

- L-NC4 Extra 4 position nozzle changer - for 8 total positions
- L-LD Liquid dispenser
- L-BHS Board support
- L-UCT CAD editor software option
- L-SCV Vacuum - self contained

Feeder Options

- L-VF Vibratory tube/loose feeder - option
- L-T (tape feeders)..... 8, 12, 16, 24, 32, & 44 mm - option
- L-MBH Matrix tray holders (set of 2) - option
- L-LCB8 Cut tape strip holder. Holds up to 15 8 mm lanes.
- L-LCB8-12 . . . Cut tape strip holder. Holds (8) 8 mm & (3) 12 mm lanes.
- L-LCB12 Cut tape strip holder. Holds up to (11) 12 mm lanes.
- L-LCB16-24 . Cut tape holder. Holds (2) 12 mm, (3) 16 mm & (3) 24 mm lanes.
- L-SS-XX . . . Dual Lane SuperStrip™ feeder for strips from 1" to 12"- option
 XX indicates tape width: 8, 12, 16, 24, 32, 44, and 56 mm
- L-BF-12..... 12 lane bank feeder for 8 mm tapes
- L-BFRH-12..... Reel holder for L-BF-12 bank feeder

* Custom options, nozzles and feeders available - contact factory.

Specifications

Max board area	13.5" x 22" (343 x 560 mm)
Max travel area	22"(X axis) x 22"(Y axis) (560 x 560 mm)
Z axis max travel	1.5" (38 mm)
Board thickness	0.020"- 0.156" (0.5mm - 4.0 mm)
Typical verifiable placement rate	1000-1800 cph
Max placement rate	2100 cph
Placement accuracy	±0.004" to 0.001"
Fine pitch capability	See Chart Above
Smallest component capability	See Chart Above
Largest component size	1.378" (35mm) square body
Max no. of feeders, 8mm tape width	64 (individual), 96 (bank)
Individual tape feeders	8, 12, 16, 24, 32 & 44 mm (Electrical)
Cut Tape Strip Holders	8 mm up to 24 mm width lanes
Vibratory feeders	loose, tube, stick (Freq. & amplitude control)
Matrix Tray Feeders	with Board/Matrix tray holders
Component orientation Ø-axis motion	±360° in 0.90° step
Board holding	Edge clamp w/optional board support tooling
Centering	Centering Fingers
Data entry: coordinate entry, "teach" mode with color CCD camera, CAD download	
Vision system	Color CCD card camera
Automatic 4 position tool changer	additional changer optional
Operating system	Windows®
Dispenser option	Time & pressure, clean dry air @ 80 psi required
Power	120 VAC, 50/60Hz, 220-240 VAC available
Compressed air	Shop Air Required, 60 psi
Monitor	15" flat screen monitor included
System dimensions	40" x 42" x 25"h (1016 x 1067 x 635 mm)
Weight	200 lbs (114 kg)