

# MY-Series ECR

Extended Component Range



For a fast changing world

**MYDATA**<sup>®</sup>

# Place virtually any component

## Extending the MY-Series even further

The new Extended Component Range (ECR) model virtually eliminates manual assembly by extending the range of components that can be handled by a MY-Series line. The MY12 ECR has a capacity of up to 144 8 mm feeder positions.

The ECR is designed for high-mix production where component compatibility and accuracy are more important than placement speed. Since the ECR is built entirely for component compatibility, it can place parts ranging from extremely small 01005s and small-pitch QFPs to complex CCGAs and surface-mount connectors.

## Places virtually any component accurately

The ECR features a specially adapted machine frame fitted with an elevated X-beam, Midas mounthead and Linescan Vision Camera (LVC). This unique configuration enables the ECR to safely handle up to 40 mm tall components and 156 mm long connectors. Complex components such as CCGAs and FCs can be placed accurately with the help of the Linescan Vision Camera with the Front Light, which is - standard on the ECR.

Heavy components are also handled safely in combination with MYDATA's wide range of special mounting tools. All components can be placed using a single machine and with proven accuracy according to the IPC 9850 standard.

## Flexible board handling

Like all MY-Series machines, the ECR can be configured to your board handling and feeder requirements. You can choose the standard-sized T3 or T4 conveyors, or the larger T5 and T6 conveyors. These options are especially useful in large board production - when placing SMT connectors. All T-series conveyors handle a wide range of board sizes and thicknesses and offer secure top reference board clamping during assembly.

## Benefits of the MYDATA platform

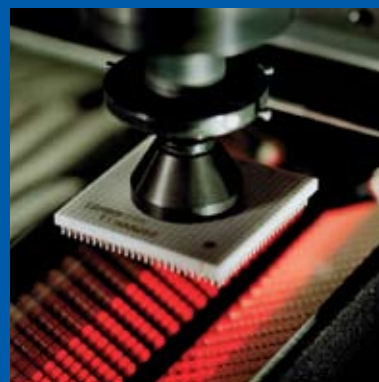
Why choose a MYDATA machine for special placement of tall and long components? Since the MY-Series ECR model uses the same feeder system, mounting tools and spare parts, the investment is lower. The machine also integrates with your existing MY-Series line and databases, making line balancing and changeovers just as easy. And since it's based on the MYDATA machine platform, there's no need for additional programming, operator or service training.

## Key Benefits

- High placement accuracy to IPC 9850 standard
- Comprehensive component range from 01005 to 40 mm tall and 156 mm long components
- Virtually any board size and thickness
- Benefit from common feeders, software, spare parts and training
- Reduce manual component assembly



*MYDATA offers customized tools such as grippers and nozzles to mount connectors, switches and odd-shaped components.*



*The Linescan Vision Camera (LVC) is standard on ECR machines and has a new front light for reliable vision handling of complex components.*

## PLACEMENT SPEED AND ACCURACY

### MY-Series ECR

LVC, Linear Y-unit and T-Series conveyor

Midas - Single Mounthead		
Rated Speed	(1)	5 800 CPH
IPC 9850 Fine Pitch Net Throughput *	(2)	2 900 CPH
IPC 9850 Fine Pitch Tact Time	(4)	1.04 sec
IPC 9850 Chip Accuracy @ Cpk = 1.33 (X, Y, Theta)**	(5)	63 µm, 2.2°
IPC 9850 Chip Repeatability 3 σ (X, Y, Theta)	(3)	36 µm, 1.05°
IPC 9850 Fine Pitch Accuracy @ Cpk = 1.33 (X, Y, Theta)	(5)	35 µm, 0.09°
IPC 9850 Fine Pitch Repeatability 3 σ (X, Y, Theta)	(4)	21 µm, 0.05°

\*) Vision centering QFP100. \*\*) Vision centering of 01005 - 0603 Chips.

(1) Depending on component and application.

(2) According to IPC 9850. Net Throughput = (no of parts x 3600) / (board build time + board transfer time).

(3) According to IPC 9850 0603C verification panel.

(4) According to IPC 9850 QFP100 verification panel.

(5) According to IPC 9850 Cpk 1.33 = 4 σ + offset.

Component Range		
A - Max Component Size (L, W, H.) (6)	156 x 26 x 40 mm	6.14" x 1.02" x 1.57"
	76 x 66 x 40 mm	2.99" x 2.60" x 1.57"
B - Max Component Size (L, W, H.)	156 x 26 x 6 mm	6.14" x 1.02" x 0.23"
	76 x 66 x 6 mm	2.99" x 2.60" x 0.23"
	56 x 56 x 40	2.20" x 2.20" x 1.57"
Min Component Size	0.4 x 0.2 mm (01005)	0.016" x 0.08"
Maximum Component Weight	300 gr	0.66 lbs

(6) Electrical verification option not available on A configuration.

Linescan Vision Camera				
Component Type	Camera	Max Active* Field of View	Min Pitch	Min Lead Width
Leaded Components	LVC	56 x 56 mm (2.2" x 2.2")	0.20 mm (8 mil)	0.10 mm (4 mil)
Bumped Components	LVC	56 x 56 mm (2.2" x 2.2")	0.30 (12 mil)	0.15 mm (6 mil)

\*) Valid with Electrical verifier.

Miscellaneous Information	
Feeder positions	Up to 144 8 mm feeders
Internal Conveyor Size	T3, T4, T5 and T6 (7)
Board Handling Specification	Depending on internal conveyor size
Electrical Verification	Available for Component Range B
Mount Head	Midas Single Head (HYDRA Multi head not available)

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(7) ML adaptor not available.



Now even tall components such as NeXLev® connectors can be placed using the flexible MY-Series machine.



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