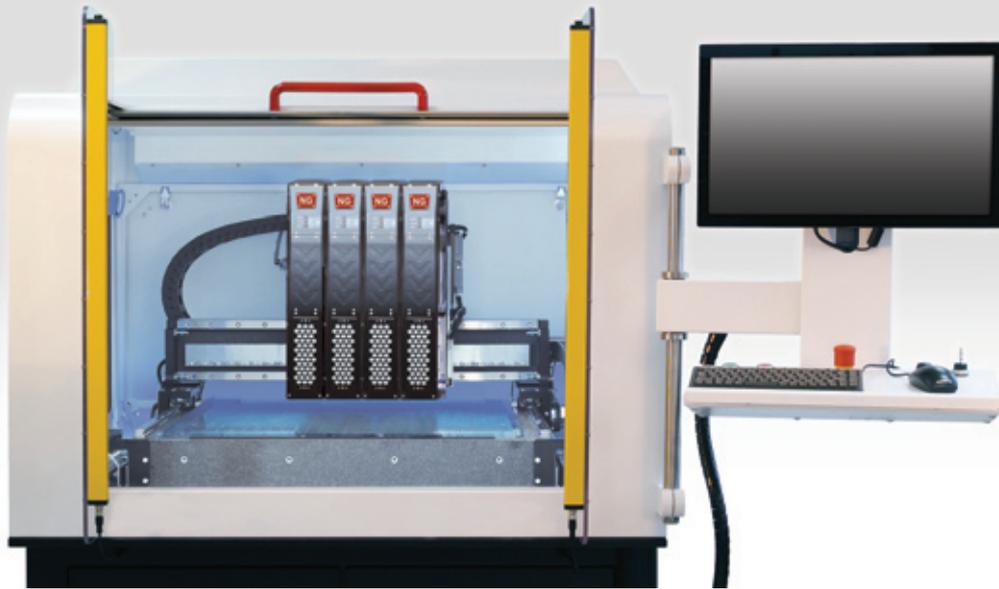




NEXT GENERATION DIRECT IMAGING

www.mivatec.com



New! Miva was the first to introduce Quad-wave technology. Since then this is largest advancement in direct imaging technology to hit the PCB industry. The NextGen LE provides major throughput increases, includes the External Rasterization Engine, and dramatically enhances all aspects of imaging.

Throughput: The NextGen ability to provide 2x throughput allows for fewer light engines and lower total machine costs.

Quad-wave: NextGen employs 360, 370,390, 405nm LEDs that are more than 2x the power. Quad-wave for absolute resist and soldermask flexibility.

Dart Compliant: NextGen includes the External Rasterization Engine. This allows high speed rasterization on the fly including digital linewidth compensation and scaling with no wait-states. Using the DART Optimization Suite for full process control.

Vision Enhancements: Miva's new vision technology permits feature measurement and improves target acquisition. NextGen's larger field of view makes alignment simple.

Resolutions: NextGen is currently available in 30 or 15 micron resolution.

DART™ changes everything. Miva's DART system closes the loop to integrate develop/etch/plating results into the digital imaging process. Expanding the adaptive range of the imaging tool to include external process data is vital to properly controlling feature size, registration, and total yield.

External Rasterization Engine: Provides high speed rasterization at 10x system resolution for high speed, precision digital feature manipulations.

DART Optimization Suite: The DART OS capitalizes on Miva's new vision technology to permit the user to measure panel feature sizes for precise develop, etch and plating.

First Article Tool: The first article tool allows operator level confirmation of feature size post develop/etch/ plating. The measurement results are applied to digitally compensate feature sizes.

Process Control Tool: The DART OS module allows the user to check develop and etch performance everywhere on the panel, then make process adjustments based on the topographical map such as spray bar pressures, AB etch rates, and the like.

MIVA 2200L

Next Generation Series

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APPLICATION	15 Micron			30 Micron		
	1LE	2LE	3LE	1LE	2LE	3LE
Inner Layer	22	34	46	34	50	63
Outer Layer	20	31	42	23	39	50
Soldermask	9	15	21	10	17	23

Note 1: All values include imaging both sides, load and unload times, 18" x 24" [457 x 610mm]

Note 2: All values assume high speed resist types, other resists available upon request.

Note 3: All values are panels/hour

General System Performance

- A/B Registration: $\pm 12\mu$ A/B Registration
- Positional Accuracy: $\pm 9\mu$ with repeatability: $\pm 4\mu$
- Feature Size Accuracy: ± 2 pixels
- Imaging Media: Photoresist, soldermask, legend, silver films, emulsion
- Maximum Image Size:
 - 2000L : 24" x 26" [610 x 660 mm]
 - 2200L : 24" x 30" [610 x 762 mm]
 - 2600L : 34" x 26" [863 x 660 mm]
 - **For larger sizes see 3000L

Environmental Conditions

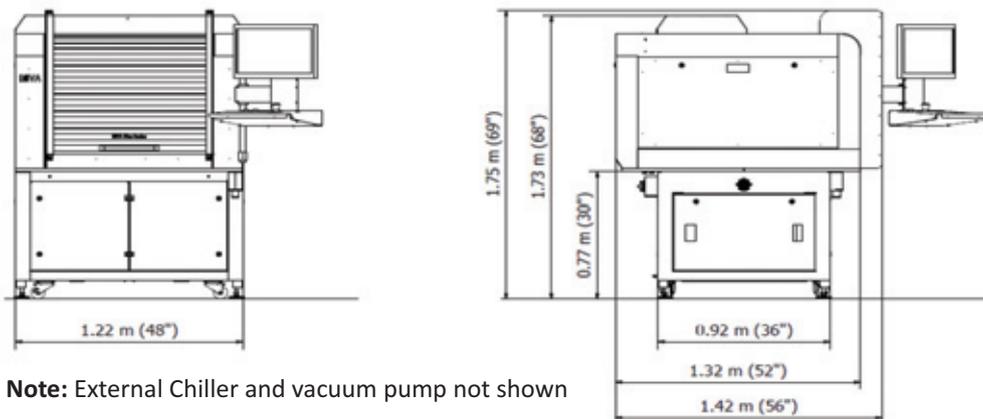
- Environment: For optimal performance, a clean room is required.
- Atmosphere: 70°F \pm 2°F @ 50% relative humidity [20°C \pm 1°C]

Data Standards:

- Protocol Emulations: Gerber, RS 274-X, ODB++, HP-GL, Fire 9000 PostScript,
- Optional Protocols: TIFF, PCX, others on request view makes alignment simple.

Physical Dimensions

- Physical Size: 2000L Series



Note: External Chiller and vacuum pump not shown



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