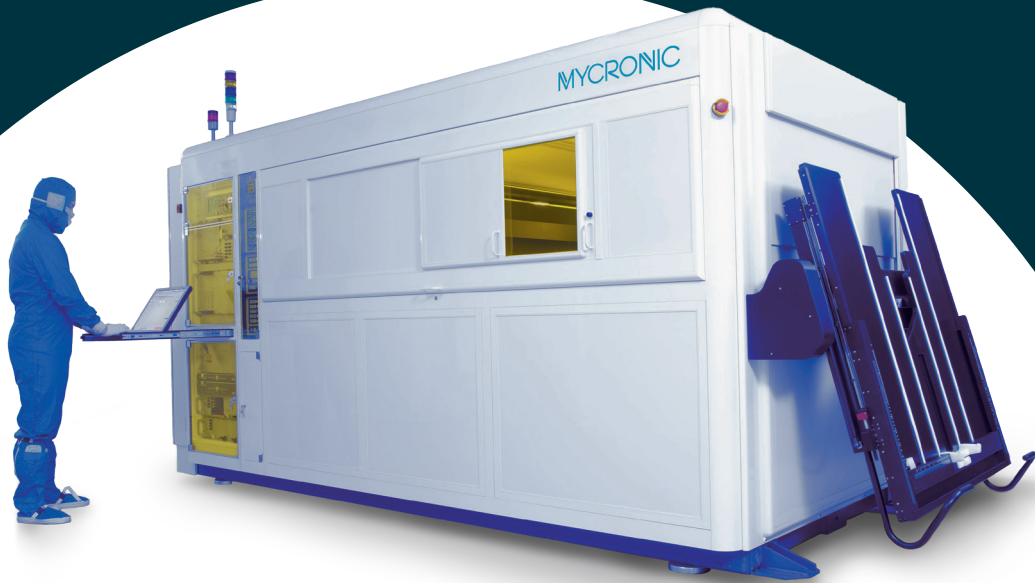


Built for world-class **photomasks**

The new FPS™ series



Full flexibility
for multi-
purpose
photomasks



Laser path at optical rails

To ensure pattern quality on the photomask, a great treatment on laser beam is essential. Mycronic FPS series uses the same writing principle as other high-end mask writers from Mycronic and delivers superior image quality performance.

The FPS Evo series **Full flexibility for multi-purpose photomasks**

The new generation FPS series is built on the Evo control platform. Updated with new, innovative software and hardware architecture, it's been designed for the future of production automation, advanced connectivity and big data applications.

IMPROVED STABILITY AND HIGHER UPTIME

New servo board with linear movement, simplified electronics with better performance and modern bus structure provide superior stability and better error handling to create higher system uptime.

SUPPORT FOR HIGHER LEVEL OF FACTORY AUTOMATION WITH VARIOUS LOADER SOLUTIONS

Newly developed PLS (Pre Loading System) and interface supporting communication from factory automation system minimize human interface, in order to reduce contamination and human error.

BETTER SUPPORT FOR LOGGING, CONNECTIVITY AND BIG DATA APPLICATIONS

New servo board logs all motions in system which can be analyzed and used for many different purposes. This enables stable system operation and extension to big data applications.

EXTENDABLE WITH NEW FUNCTIONALITY

Built on completely new modern hardware and software architecture, it enables development of new functions to meet customers' future demand.



FPS 6100 Evo & FPS 6100E Evo

Improved stability, higher speed and lower costs for the advanced multi-purpose market

Advanced photomasks for the multi-purpose market have continuously adapted to the requirements driven by electronics component miniaturization, while at the same time operating in a cost sensitive market space. Reliable and well proven, the FPS 6100 Evo is used by some of the world's leading photomask manufacturers to achieve superior image quality and productivity for advanced multi-purpose applications.

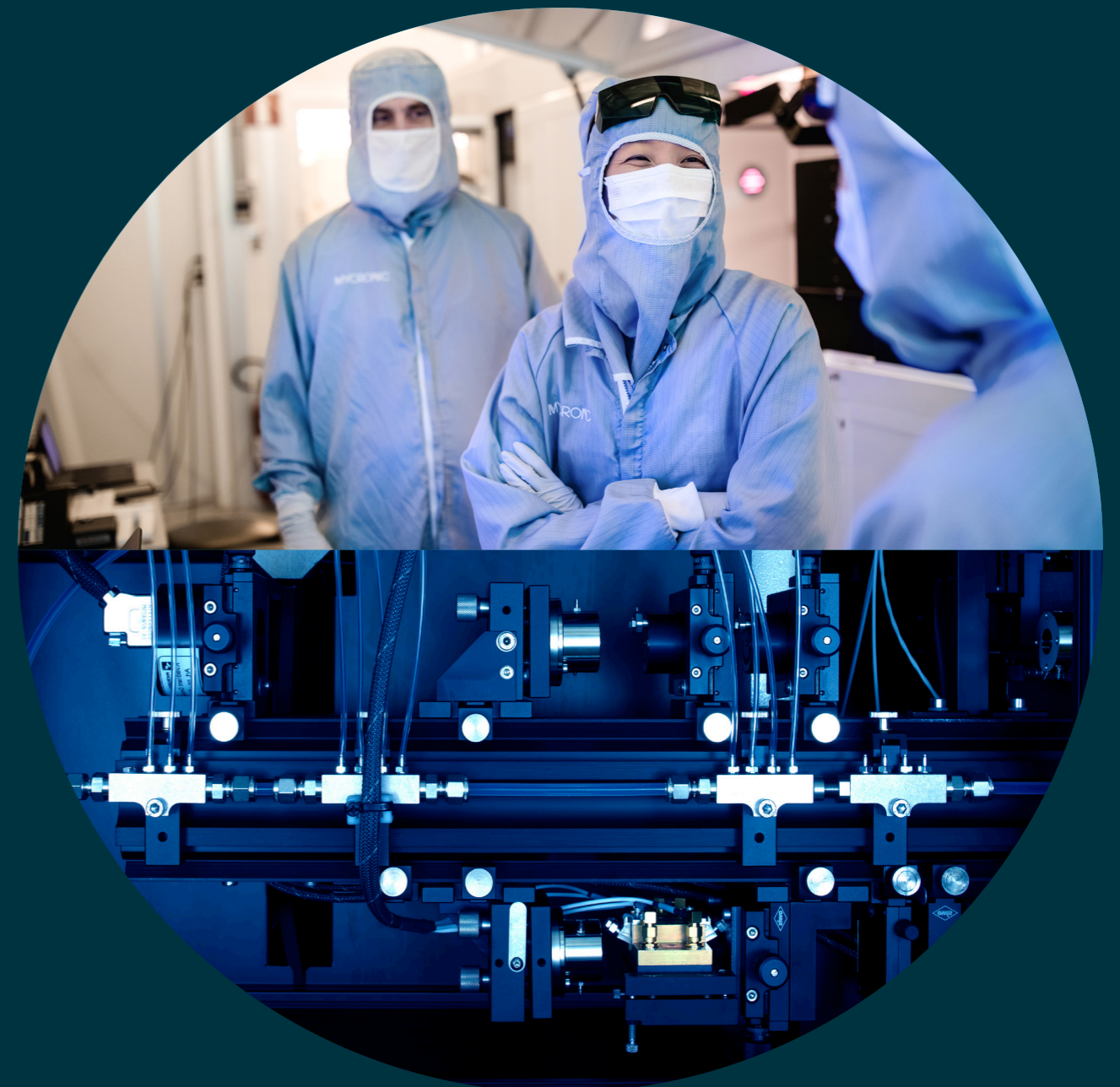
The FPS series has field-proven stability, high productivity and great writing quality, and is now re-launched with the FPS 6100 Evo and FPS 6100E Evo – designed to achieve superior image quality and productivity and, win the competition within multi-purpose market.

FPS 6100 EVO FOR CHROME MASK

KEY SPECIFICATIONS	LEVEL 80	LEVEL 60	LEVEL 40	LEVEL 25	LEVEL 20	LEVEL 15
Writing speed (mm ² /min)	525	1 250	2 600	6 000	8 000	12 000
XT mode (mm ² /min)	650	1 500	4 500	8 500	12 000	20 000
Minimum lines and spaces (pitch/2)	0.75 μm	1.2 μm	2.0 μm	3.5 μm	5.0 μm	7.0 μm
CD Uniformity (3σ)	30 nm	40 nm	60 nm	80 nm	100 nm	200 nm
Pattern butting (3σ)	60 nm	60 nm	80 nm	100 nm	150 nm	170 nm
Overlay (3σ)	70 nm	85 nm	100 nm	120 nm	140 nm	160 nm
Max. mask size (mm)	813x813					

FPS 6100E EVO FOR EMULSION MASK

KEY SPECIFICATIONS	LEVEL 25	LEVEL 20	LEVEL 15
Writing speed (mm ² /min)	5 000	10 000	12 000
Minimum lines and spaces (pitch/2)	1.6 μm	2.1 μm	2.4 μm
CD Uniformity (3σ)	250 nm	350 nm	450 nm
Pattern butting (3σ)	200 nm	300 nm	400 nm
Overlay (3σ)	120 nm	140 nm	160 nm
Max. mask size (mm)	813x813		



KEY HIGHLIGHTS:

- 6 different optical levels for chrome mask writer
- 3 different optical levels for emulsion mask writer
- XT mode for FPS 6100E to enhance writing speed up to 73% compared to standard mode
- Various loader solutions: MLU, HMU and fully automated PLS
- Various configurable options that customer can choose depending on users' business strategy



KEY HIGHLIGHTS:

- Two optical levels to choose
- Maximum mask size up to 1 400x1 620 mm
- Fastest writing speed among FPS series with further speed increase up to 54% using XT-mode option
- Various loader solutions: HMU, Semi-automated HMU and fully automated PLS

FPS 8100 Evo

Scale up your capability

The FPS 8100 Evo is our high-end solution for mask producers who want all the flexibility of the FPS concept but face new challenges relating to the microfabrication of LEDs, advanced electronic packages or fine metal mask applications. It is the best fit for users who want to have FPS 6100's flexibility and the perks of improved capability to take on new

business opportunities that was previously limited because of stage size.

The FPS 8100 Evo has an 87% increase in writing area compared to the FPS 6100 Evo, which handles photomask to manufacture display generation 6 size of Fine Metal Mask.

FPS 8100 EVO FOR CHROME MASK

KEY SPECIFICATIONS	LEVEL 40	LEVEL 25
Writing speed (mm ² /min)	4 500	6 500
XT mode (mm ² /min)	6 000	10 000
Minimum lines and spaces (pitch/2)	2 μm	3.5 μm
CD Uniformity (3σ)	60 nm	80 nm
Pattern butting (3σ)	80 nm	100 nm
Overlay (3σ)	100 nm	120 nm
Max. mask size (mm)	1 100x1 660 and 1 400x1 620	

Bringing tomorrow's electronics to life

MYCRONIC

MYCRONIC.COM

SWEDEN

Mycronic AB
PO Box 3141
Nytorpsvägen 9
SE-183 03 Täby
Sweden

Tel: +46 8 638 52 00

SOUTH KOREA

Mycronic Co. Ltd.
3rd Floor, Jung-San
Bldg. 1026-8
Sanbon-Dong, Gunpo-Si
Gyeonggi-Do, 15808
South Korea

Tel: +82 31 387 5111

CHINA

Mycronic Co., Ltd.
Unit 106, E Block
Lane 168, Da Duhe Road.
Putuo District, 200062
Shanghai P.R. China

Tel: +86 21 3252 3785/86

JAPAN

Mycronic Technologies KK
Chofu Center Bldg.
1-18-1 Chofugaoka,
Chofu-shi
Tokyo 182-0021
Japan

Tel: +81 42 433 9400

USA

Mycronic Inc.
6292-G
San Ignacio Blvd
San Jose
CA 95119
USA

Tel: +1 408 392 2260