

# **Technical Exhibition**

**during the**

**34<sup>th</sup> European Mask and Lithography Conference**

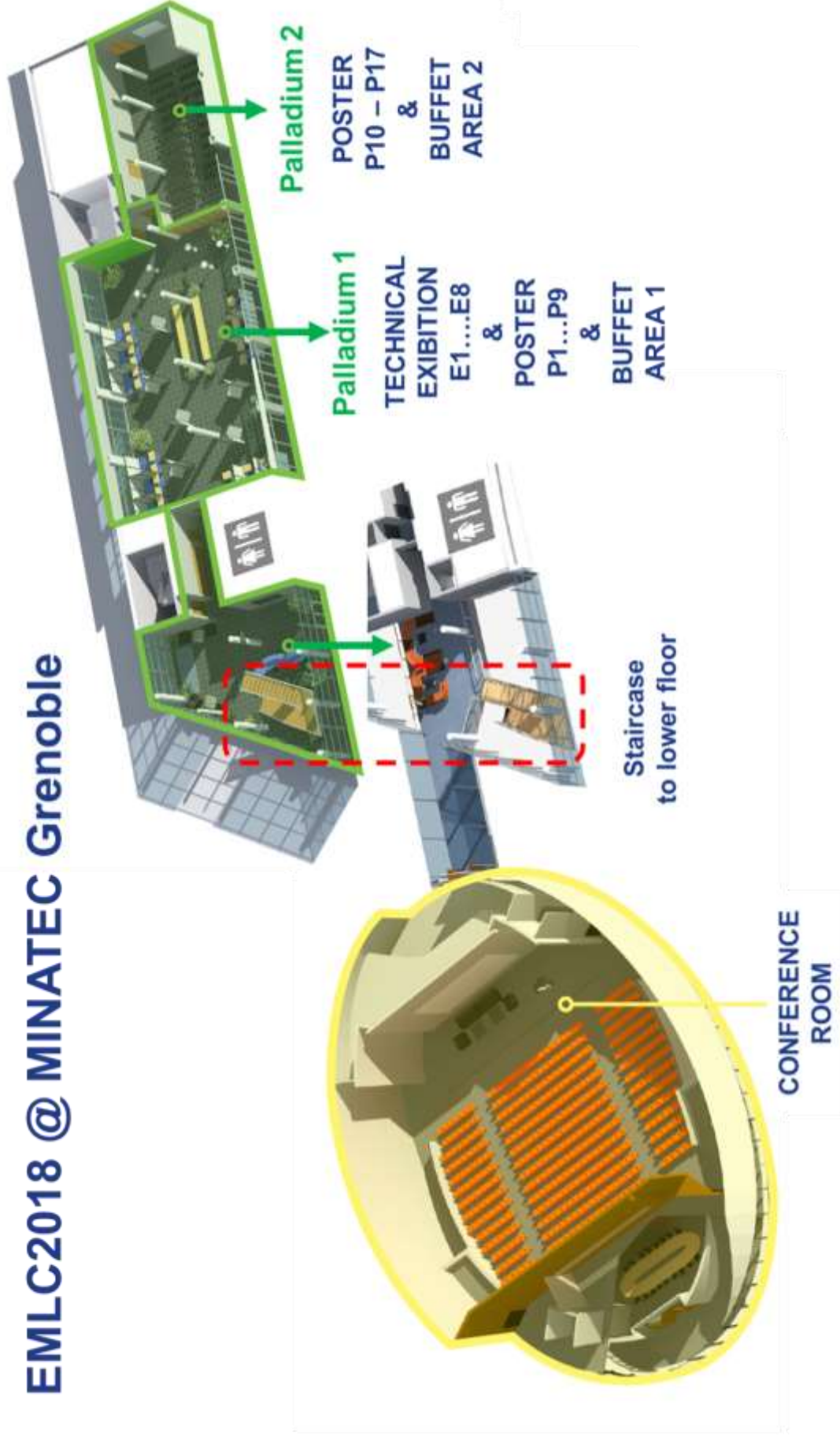
**EMLC2018**

**June 18<sup>th</sup> – June 20<sup>th</sup> 2018**

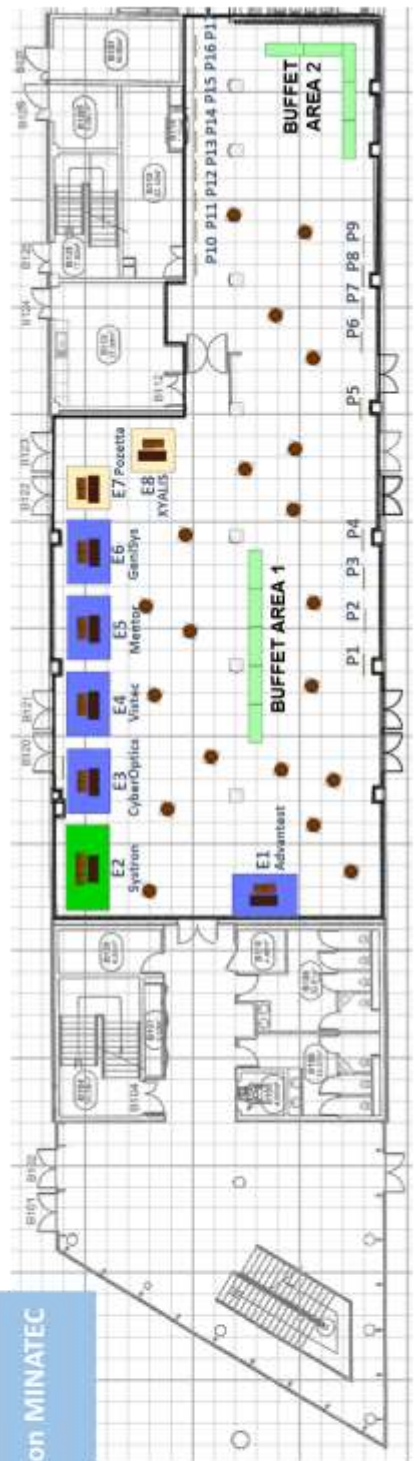
**MINATEC Conference Centre, Grenoble, France**

***Exhibitor Information***






# EMLC2018 @ MINATEC Grenoble



**EMLC2018**  
**18-20 June 2018 – Maison MINATEC**  
**Palladium 1 & 2**



<b>E1</b> Advantest 3m x 2m	<b>E2</b> Systron 4m x 2m	<b>E3</b> CyberOptics 3m x 2m	<b>E4</b> Vistec 2m x 2m	<b>E5</b> Mentor 3m x 2m	<b>E6</b> GenSys 3m x 2m	<b>E7</b> Pozetta 2m x 2m	<b>E8</b> XYALIS 2m x 2m
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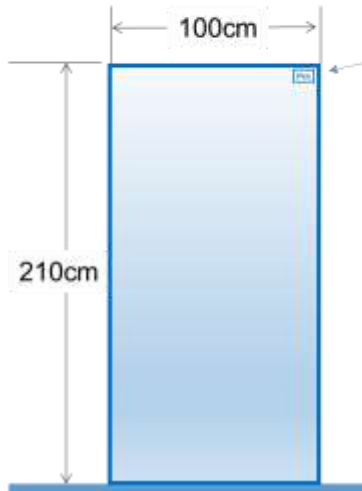
-  Poster panel
-  4m x 2m
-  3m x 2m
-  2m x 2m
-  High tables



V3\_300518

# Floorplan Overview

## Poster Panel and Panel for Exhibition Booth (if ordered)



Poster Number:  
Px (x = 1, 2, ....., 17)

VELCRO tapes will be provided on site  
for the Poster affixation to the Poster Panel

**(!) No Pins (!)**  
**are allowed to fix something onto a Poster Panel**  
**or onto a Panel for an Exhibition Booth**



## Panel Layout



## Booth E1: Advantest

# ADVANTEST®

## Measure the Connected World *And Everything in It*



### Technology Support on the Leading Edge

A world-class technology company, Advantest is the leading producer of automatic test equipment (ATE) for the semiconductor industry and a premier manufacturer of measuring instruments used in the design and production of electronic instruments and systems. Its leading-edge systems and products are integrated into the most advanced semiconductor production lines in the world. The company also focuses on R&D for emerging markets that benefit from advancements in nanotech and terahertz technologies, and has introduced multi-vision metrology scanning electron microscopes essential to photomask manufacturing, as well as a groundbreaking 3D imaging and analysis tool. Founded in Tokyo in 1954, Advantest established its first subsidiary in 1983 in Europe, and now has subsidiaries worldwide. More information is available at [www.advantest.com](http://www.advantest.com).



[www.advantest.com](http://www.advantest.com)

## Booth E2: Systron

### Magnetically shielded rooms for Semiconductor Manufacturing

Systron EMV GmbH was founded 1993 and operates now offices in Germany and Switzerland. The core competences of Systron EMV GmbH include manufacturing, distribution and installation of passive and active systems to reduce low frequency magnetic fields. Furthermore, computer modeling of electrical systems and on-site measurements are carried in order to design and evaluate proper mitigation method. Systron's goal is to provide best possible solutions for the customer and to provide excellent service, prior, during and after finishing the project.

#### Our goals

Protecting highly sensitive equipment against electromagnetic and magnetic fields, for applications in research labs and semiconductor manufacturing.

#### How do we achieve this?

- Magnetically shielded rooms / Active compensation systems
- Magnetic field measurements / Modeling of electrical power systems

**Ebeam applications** such as lithography writers or electron microscopes are very sensitive to electromagnetic interference (EMI), and thus need to be protected from those unwanted noise. Today, two proven methods are widely accepted: passive shielding method with so called "Mu-Metal" plates and active cancellation systems with electronically controlled coils generating counter-fields to cancel unwanted noise. Often, both methods are combined to create cleanest possible environment.



**Unwanted magnetic noise fields** are emanated from remote sources such as railways, subways, overhead lines and tramways, but also from local generated fields, such as from transformers, switch gear or electrical cables. However, often underestimated, is the influence of moving metal objects such as from trucks, cars, elevators and even inside the room widely existing push carts.



**"Mu-Metal" shielded rooms** protect magnetically sensitive tools such as lithography writers, electron beam microscopes from unwanted magnetic noise fields and are even able to mitigate strong fields to uncritical levels.

"Mu-metal" is a clean metal and thus also perfectly suitable for clean room applications. The shielding properties of "Mu-Metal" neither wear out, nor is any kind of maintenance work necessary.



**Magnetic field measurement** allows qualifying rooms prior to tool move in. In case specs are exceeded, customized solutions, in order to reduce magnetic fields, can be provided. However, when tools are already productive, but show inexplicable behaviors, magnetic field measurement can help tracking down the source of the noise fields so actions can be taken to eliminate the source of the noise. Actions might include moving the source, shielding the source or the tool or adding compensation systems to cancel the noise.



## Booth E3:

® Auto Multi Sensor (AMSR) can measure humidity in all locations of the reticle environment. In immersion scanner environments for example, monitoring humidity is critical in reducing Reticle Haze. Haze is an adverse effect on reticles caused by a combination of Mask residue, 193nm light and H<sub>2</sub>O. AMSR can monitor humidity in the total reticle environment and detect any place where H<sub>2</sub>O is exposed to the reticle. AMSR speeds leveling, vibration and Relative Humidity (RH) When you need the world's most efficient and effective measurement devices for semiconductor tool set-up and maintenance processes, count on CyberOptics, the global market leader in wireless semiconductor measurement devices for chamber gapping, leveling, wafer handoff teaching, vibration, relative humidity and airborne particle measurement.

CyberOptics' ReticleSense measurement to help save significant time and expenses. Controlling particles, inclination, humidity and vibration are all important factors in ReticleSense measurement portfolio to enable improvements in fab yields and equipment uptime. increasing yield and reducing downtime.

Semiconductor fabs and OEMs value the accuracy, precision and versatility of the WaferSense and CyberOptics Corporation (NASDAQ: CYBE) is a leading global developer and manufacturer of high-precision sensing technology solutions. By leveraging its leading edge technologies, the company has strategically established itself as a global leader in high-precision 3D sensors. Headquartered in Minneapolis, Minnesota, CyberOptics conducts worldwide operations in through its facilities in North America, Asia and Europe.



## **Booth E4: Vistec**

### **Vistec Electron Beam GmbH**

**As a long-standing equipment supplier, Vistec Electron Beam GmbH is providing leading technology solutions for advanced electron-beam lithography. Based on the Variable Shaped Beam (VSB) principle, the electron-beam lithography systems are mainly utilized for semiconductor applications and advanced research as silicon direct write, compound semiconductor, mask making as well as integrated optics and several new emerging markets.**

**The company is located in Jena, Germany. In addition to its production facility in Germany, Vistec Electron Beam maintains service and support centers in Europe, USA and Taiwan.**

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## Booth E5: Mentor Graphics



Mentor, a Siemens Business, is a world leader in electronic hardware and software design solutions, providing products, consulting services and award-winning support for the world's most successful electronic, semiconductor and systems companies. We enable companies to develop better electronic products faster and more cost-effectively. Our innovative products help conquer complex design challenges.

Mentor is technology leader in Full Chip Emulation, Functional Verification, Design-for-Test and Physical Verification with its Veloce<sup>®</sup>, Questa<sup>®</sup>, Tessent<sup>®</sup> and Calibre<sup>®</sup> platforms.

Visit [www.mentor.com](http://www.mentor.com)





## Booth E6: GenISys

Based in Munich (Germany), with offices in Tokyo (Japan), and California (USA), **GenISys** develops, markets and supports flexible, high-performance software solutions for the optimization of micro- and nano-fabrication processes. Addressing the market for lithography and inspection, **GenISys** combines deep technical expertise in layout data processing, process modeling, correction and optimization with high caliber software engineering and a focus on ease of use.

**GenISys** products give researchers, manufacturers, and system suppliers unparalleled efficiency, ease of use and optimal value in research, development, and production of future nano-patterning technologies. As a company focused on customer service, **GenISys** delivers fast, highly dedicated support for the application and development of the functionality needed to meet demanding customer requirements.

### Products:

#### Electron and Laser Beam Direct Write Software

- Layout data preparation and PEC
- Market leader for Gaussian beam direct write systems
- Installed at most major nano-fabrication centers worldwide
- Has become a MUST for advanced e-beam lithography



#### Monte Carlo simulation software

- MC-Simulation for e-beam lithography simulation and correction
- PSF visualization, extraction and management
- Process Calibration



#### 3D lithography simulation software

- Proximity Lithography (mask aligner, FPD exposure tools)
- Projection Lithography (stepper / scanner)
- Electron Beam Lithography
- Laser Beam Lithography (Heidelberg Instruments laser systems)



#### SEM Image Analysis & Metrology

- Metrology software for SEM images
- Automated feature size (CD) measurements
- Lines & spaces, circle, rectangle, gratings
- LER - line edge roughness analysis





## **Booth E7: Pozzetta**

**Pozzetta Inc**

**3121 S. Platte River Dr.**

**Englewood, CO 80122**

**USA**

**[www.pozzetta.com](http://www.pozzetta.com)**

**+1.303.783.3172**

**"We help our customers reduce costs with customized in-process solutions such as reticle boxes and reticle storage solutions, wafer carriers, and critical device shipping solutions. We help optimize fab space by personally reviewing the storage and processing of critical devices and delivering complete solutions that include RFID tags, reticle pods and custom cleanroom racks. We also help our customers by managing cleaning and maintenance programs for cassettes and pods."**

**Headquarters: 3121 South Platte River Drive,  
Englewood, Colorado 80110, USA**

**Web Site: [www.pozzetta.com](http://www.pozzetta.com) & [www.pozzettamicroclean.com](http://www.pozzettamicroclean.com)**

**The products range of goes from the bare actuator or sensor to parallel-kinematic six-axis positioning systems and the integration of sub-components to complete system solutions.**

**Evaluation of test procedures, production processes and quality management are all included in the development process. The drive and positioning solutions from the PI Group often go beyond the state-of-the-art, providing customers with the competitive edge necessary to be successful on the market and always one step ahead.**



## Booth E8: XYALIS

**XYALIS**  
**5 place Robert Schuman**  
**38000 Grenoble**  
**FRANCE**

[www.xyalis.com](http://www.xyalis.com)

**Tel : +33 456 58 36 34**

XYALIS offers advanced solutions for Mask Data Preparation (MDP) and Design For Manufacturing (DFM) that shorten time to manufacturing, increase manufacturing yield, and remove errors during mask and wafer production. XYALIS solutions have been developed in cooperation with major semiconductor leaders and are being used in production for the most advanced technologies.

Established in 1998, XYALIS is headquartered in Grenoble with offices in San Jose-CA USA and Singapore. XYALIS is the leading specialist in layout finishing and GDSII/OASIS/OASIS.MASK processing software.

XYALIS focuses on two main flows of the layout finishing process: Mask Data Preparation and Metal Filling to address Chemical Mechanical Polishing (CMP) issues.

XYALIS offers a suite of tightly integrated state-of-the-art Mask Data Preparation modules that automate the repetitive and time consuming tasks between design and fracturing:

- Generation of Multi Project Wafers (MPWs) or shuttles with **GOTmuch**, an automated placement tool dedicated to maximizing silicon usage and minimizing saw lines when assembling heterogeneous chips,
- Generation of complex reticles with **GOTframe**, an automated tool for inserting manufacturing items between chips and inside scribe lines, according to reusable process rules,
- Intuitive mask set creation with **GOTmask**, supporting Multi-Layer Reticles (MLRs), optimized 1X flow, and wafer map optimization.