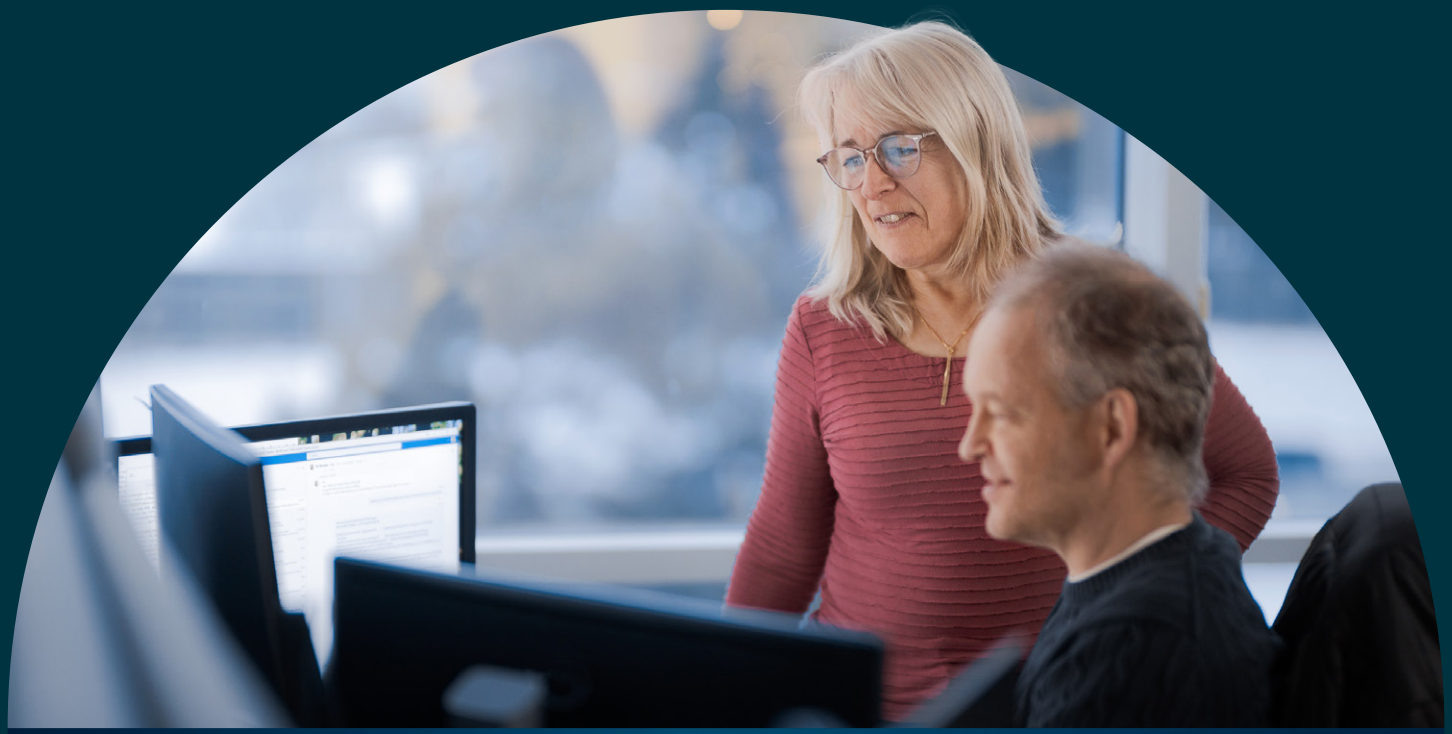
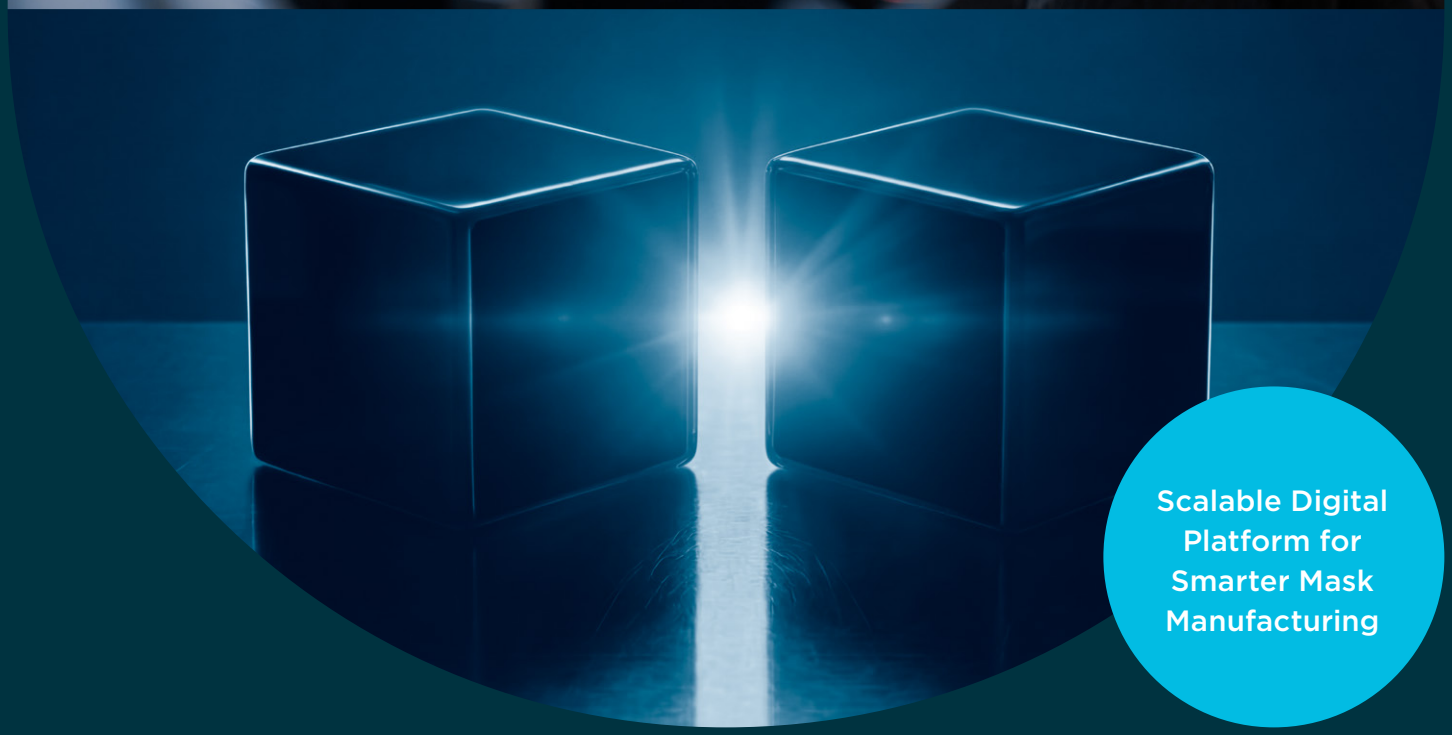
MYCRONIC

Driving Mask Manufacturing **Excellence**

The MYIntelligence Suite





Scalable Digital Platform for Smarter Mask Manufacturing



MYIntelligence:
A Scalable Digital Platform for Smarter Mask Manufacturing

MYIntelligence is a scalable digital solution designed to empower Mycronic photomask equipment with intelligent efficiency, continuous optimization, and actionable insights. It enables manufacturers to move confidently from data visibility to automated, optimized, and sustainable production. By integrating metrology and inspection tools, analytics, and tool-to-tool communication, MYIntelligence transforms manufacturing data into measurable business value.

FROM DATA ACCESSIBILITY TO INTELLIGENT AUTOMATION

MYIntelligence is built on a strong foundation of data accessibility that enables manufacturers to move from insight to action with confidence. By collecting and structuring manufacturing data, MYIntelligence helps to transform raw information into clear trends and deep learning–driven analysis. These insights will support in-depth mask quality evaluation, improved machine stability, and informed decision-making across the production environment.

Advanced analytics enable predictive maintenance, reduce unplanned downtime and increase equipment availability. At the same time, seamless tool-to-tool (T2T) communication allows machines to share information in real time, enabling coordinated responses and adaptive process control. The result is intelligent, hands-free automation – where data flows effortlessly between tools, processes adjust dynamically, and manufacturing performance is continuously optimized. MYIntelligence connects data, insight, and automation to deliver higher stability, efficiency, and long-term reliability.

Analytics Processing Unit:
The Hub of MYIntelligence

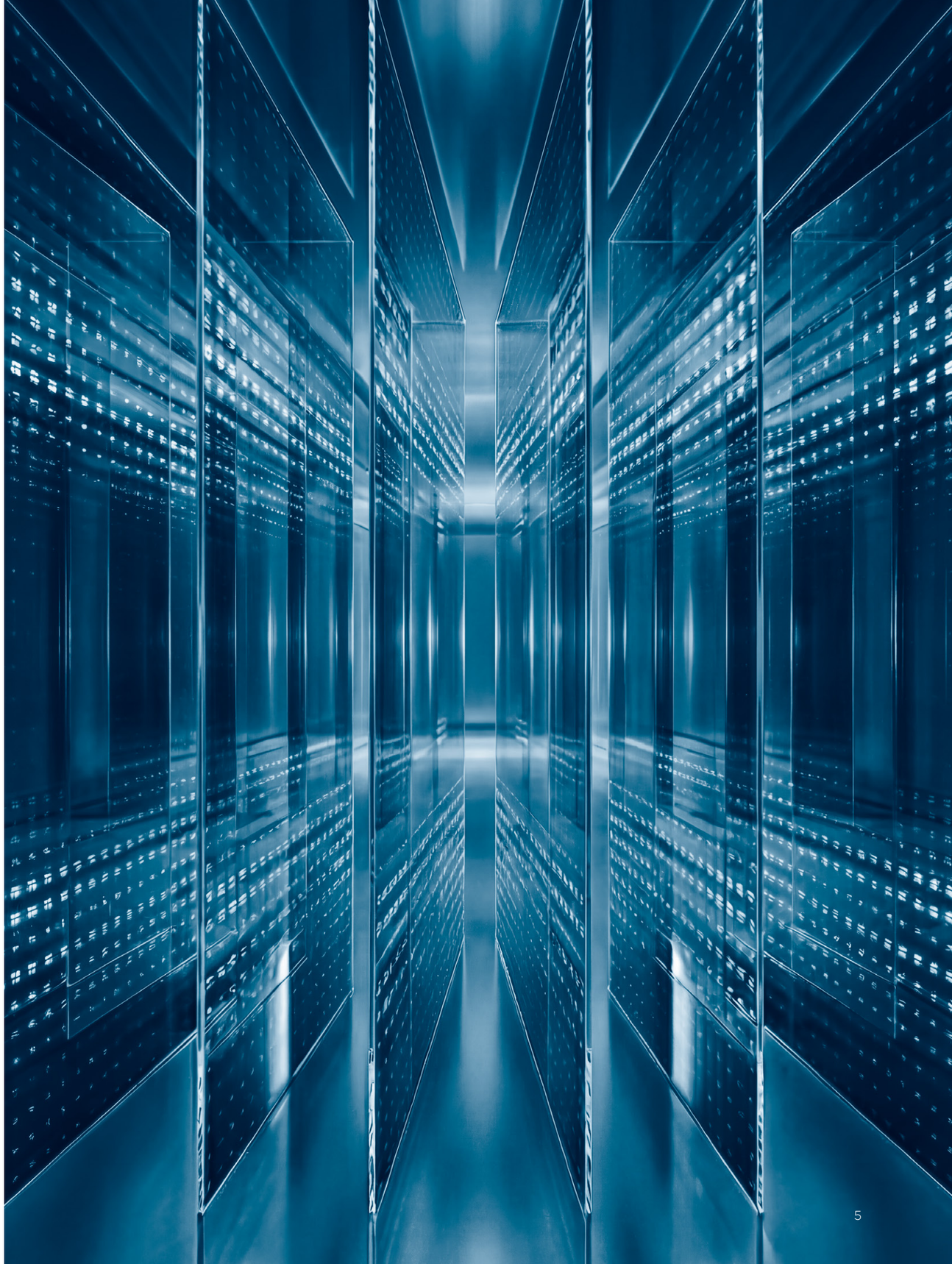
The Analytics Processing Unit (APU) acts as the central hub of MYIntelligence, connecting all Mycronic tools into one unified digital backbone. All operational data is collected, processed, and stored centrally in the APU, creating a single, structured source of truth.

FROM DATA COLLECTION TO ANALYSIS AND TRACEABILITY

As both a storage and analytics platform, the APU not only consolidates data but also transforms it into actionable insights. Realtime data collection and processing allow rapid analysis, while long-term storage supports trend analysis, traceability, and continuous improvement. Through standardized interfaces and secure connectivity, the APU ensures efficient communication between devices, factory systems, and Mycronic applications.



The APU forms the backbone of MYIntelligence – turning connected equipment into an intelligent, data-driven ecosystem that supports Industry 5.0 use cases such as advanced analytics, AI-driven insights, and optimized manufacturing performance.



Signals and Capabilities:
Powered by APU and MYIntelligence

Signals
WHAT WE COLLECT

Exposure
Realtime data related to exposure quality

Subsystems
Signals from subsystems during exposure to monitor

Parameters
Historical data to track exposure condition

Environment
Realtime tracking of utility

Platform Capabilities
WHAT WE ENABLE

Centralized data ingestion
All signals are stored in the APU

Contextualization
Signals and parameters are linked to exposure, job, tool state, and time window

Traceability
Full history of parameter changes and their process impact

Early Alerts & Events
AI and Rule-based detection of abnormal conditions and dropouts

Exposure Analysis
Digitalized strip-log analysis with API access to results

Data Transparency
Raw and processed data available via standardized APIs

Outcome
WHY IT MATTERS

- **Process Reliability**
- **Service Quality**
- **Operational Efficiency**
- **Long-Term Sustainability**



Bringing tomorrow's electronics to life

MYCRONIC

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