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SME Pitches - Pollen

**Collaborative AI-Powered Software Framework to Accelerate Yield in
Semiconductor Industry, Displays & Advanced Materials**

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Pollen at a glance

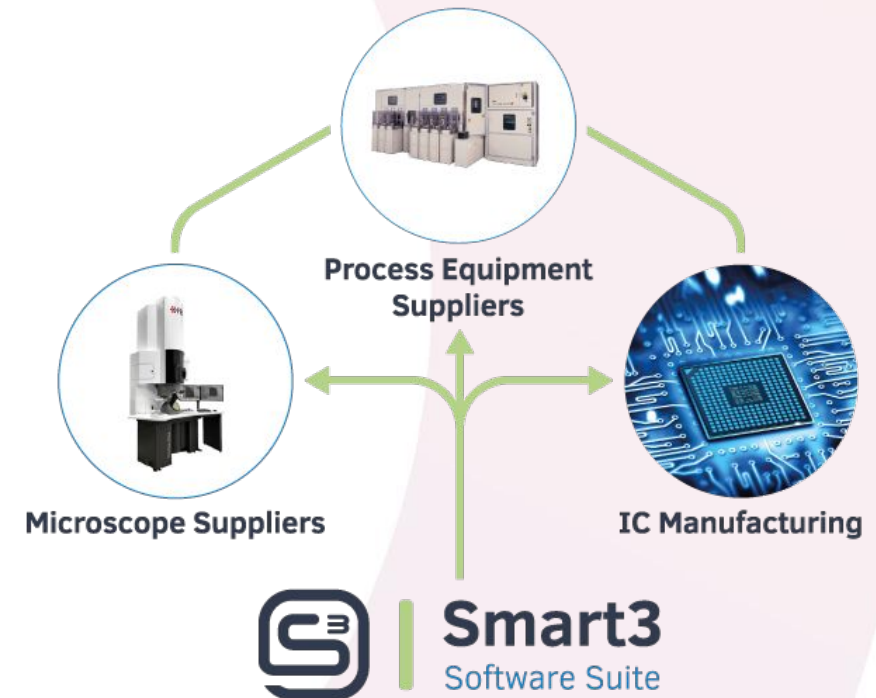


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- **Process Control Software Company**

- Founded: 2014
- Location: Grenoble (France)
- Number of employees: 18 (13 R&I)
- Sales: 3M€
- Customers: Europe, US, Asia
- R&I (expenses as a % of sales): 1M€
- Competences and products: Pollen develops a collaborative AI software framework that integrates metrology, inspection and manufacturing data to accelerate process control and yield optimization in semiconductor manufacturing.
- Contact details: Johann Foucher, CEO,
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Richard Fontanges, Program Manager,
richard.fontanges@pollen-metrology.com



Pollen's Activities

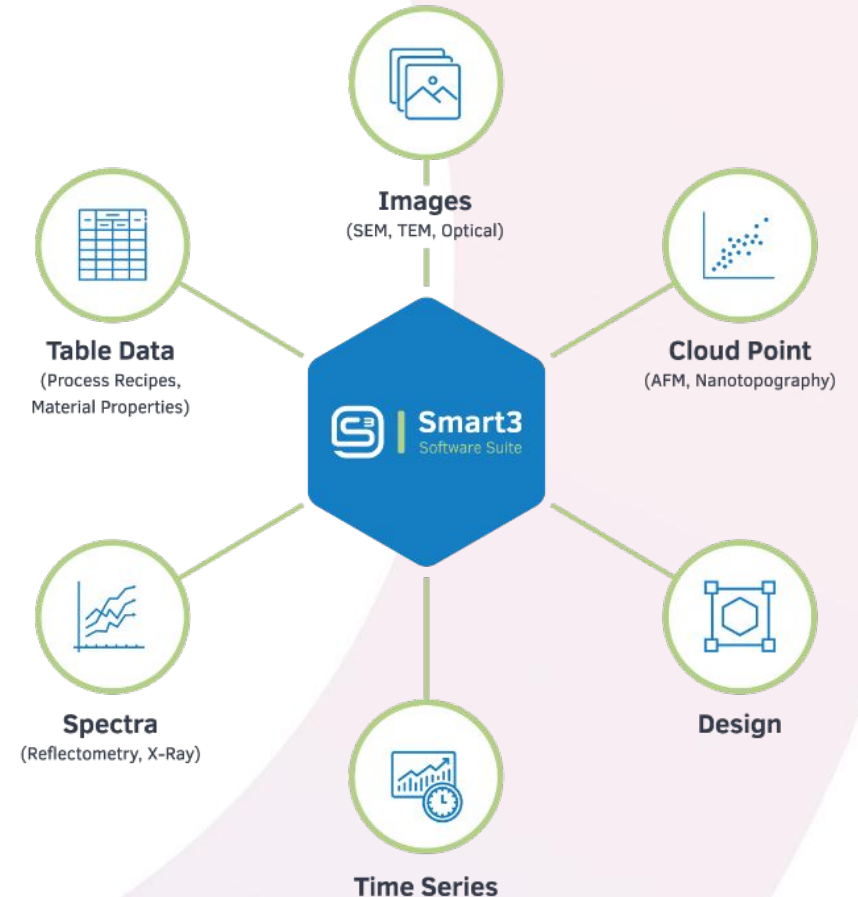
- **Technology:** 10 years technology development to create a unique Generic AI-Driven Process Control Software Framework
- **Our mission**
To empower manufacturers and equipment makers with smarter, faster, and more collaborative ways to optimize R&D, production and fabless processes.
- **Our solution: Smart3 Suite**
A modular, open, and secure platform integrating **metrology, inspection, and yield optimization** — powered by AI and tailored by customers teams.
- **Trusted by industry leaders**
Deployed at leading fabs and equipment makers



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**Bridging Data Silos in Material Science with
Collaborative AI for Yield Enhancement**



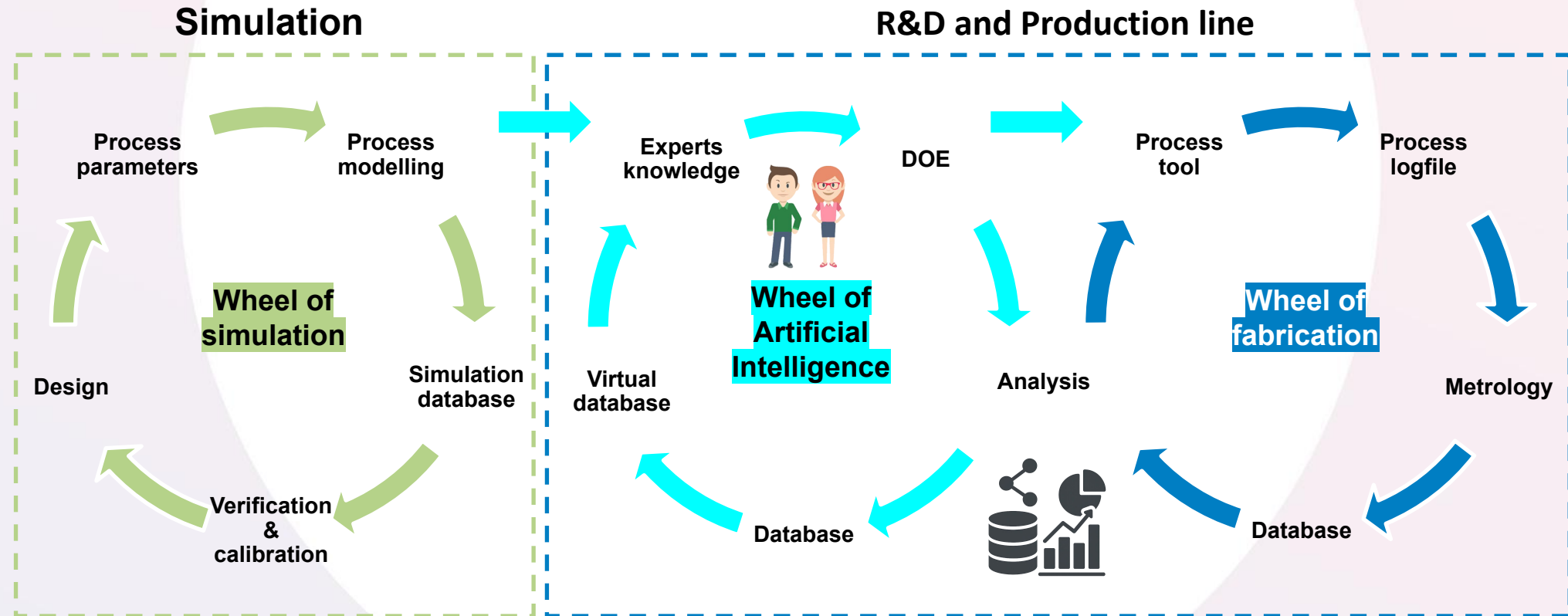
Pollen's Mission



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Augmenting Engineers Through
a Continuous AI-Driven Development Loop

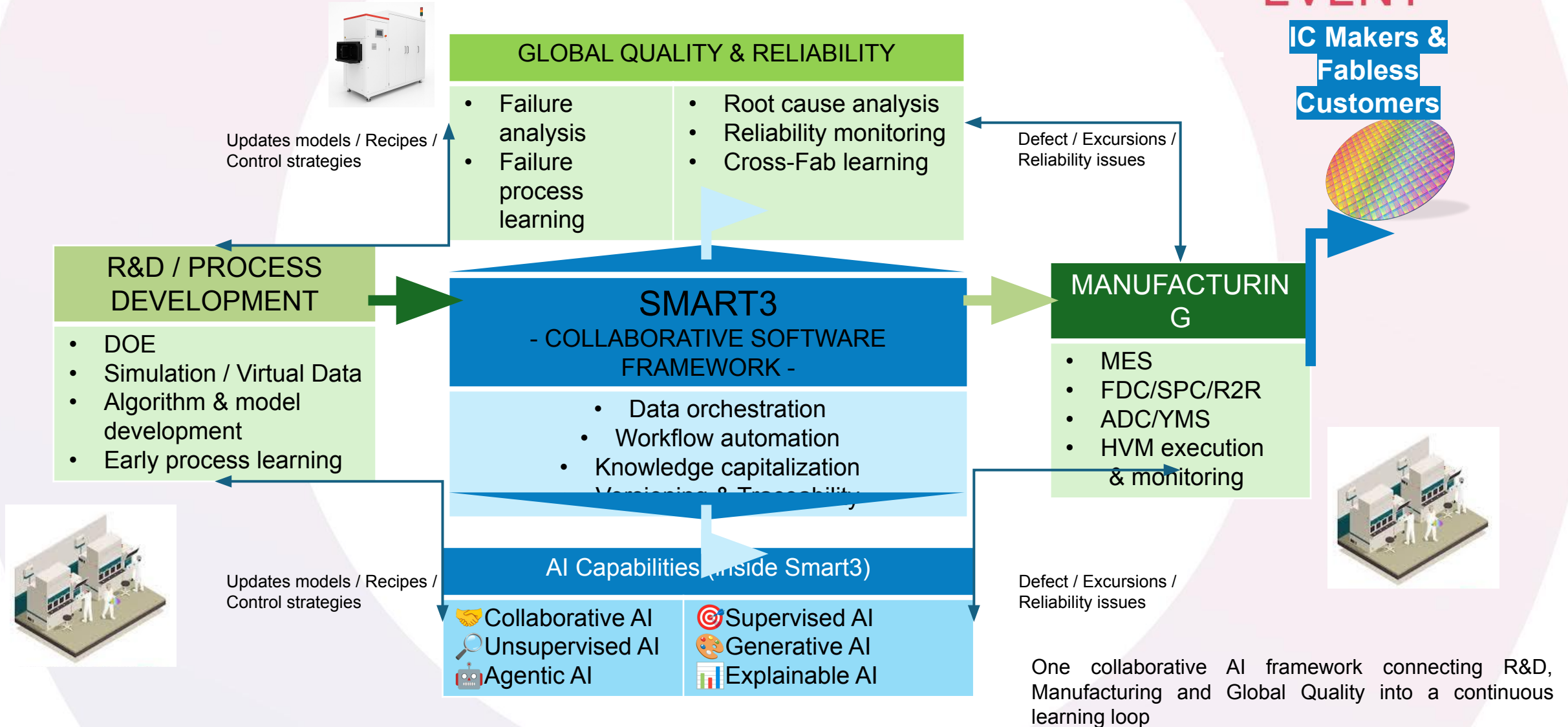


The Sixth Layer: Orchestrating All AI Technologies Seamlessly - Smart3 Collaborative Software Framework for Fabs & Fabless



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**IC Makers &
Fabless
Customers**



Smart3 seamlessly integrates with tool software



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TOOL SUPPLIER ECOSYSTEM

TOOL APPLICATION SOFTWARE

- Metrology / Inspection logic
- Advanced Analytics
- Process intelligence
- Customer specific applications

TOOL CORE SOFTWARE

(Vendor-owned)

- Hardware control
- Realtime execution
- Safety, motion, optics, sensors
- Proprietary IP

SMART3

- COLLABORATIVE SOFTWARE
FRAMEWORK –(Embedded alongside tool
software)

- Workflow orchestration
- Data fusion & AI pipeline
- Algorithm integration (vendor / partner / customer)
 - Automation of advanced use cases
 - Versioning & Traceability

AI Capabilities

- inside Smart3 -

- 🤝 Collaborative AI
- 🔍 Unsupervised AI
- 🤖 Agentic AI
- 🎯 Supervised AI
- 🎨 Generative AI
- 📊 Explainable AI

Data / Results

Insights

Models & Recipes

TOOL SOFTWARE STACK

IC MAKERS & FABLESS CUSTOMERS

- Advanced process monitoring
- Tool Differentiation

- Faster HVM adoption
- Yield & Reliability improvement

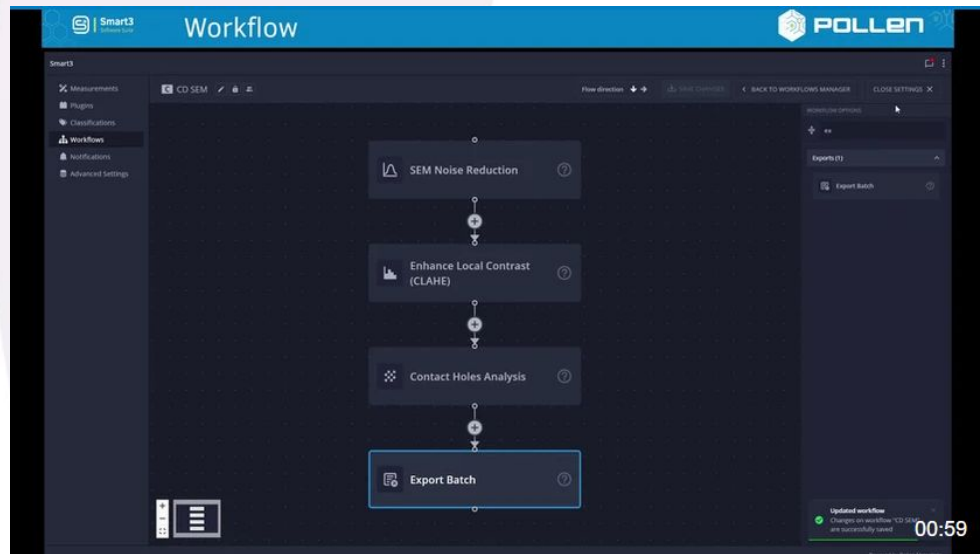
Smart3 complements tool software with advanced AI-driven application capabilities, while full control of hardware and core software remains with the equipment vendor

Examples of workflows for Metrology for R&D

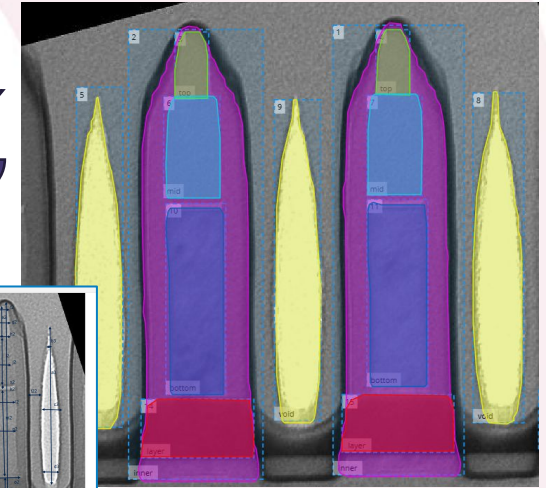
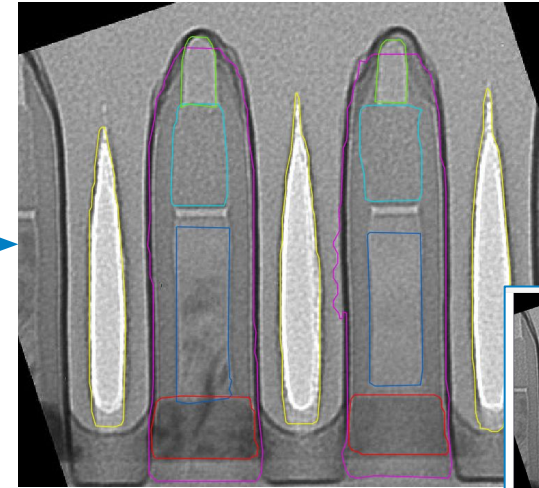


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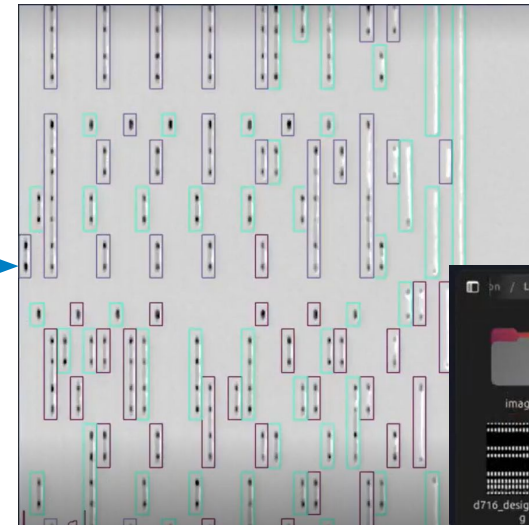
- No Code Workflow Creation



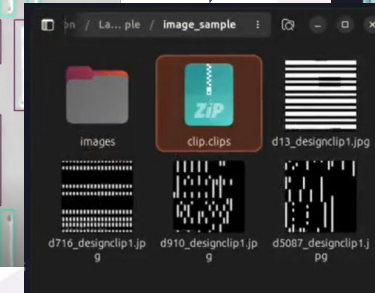
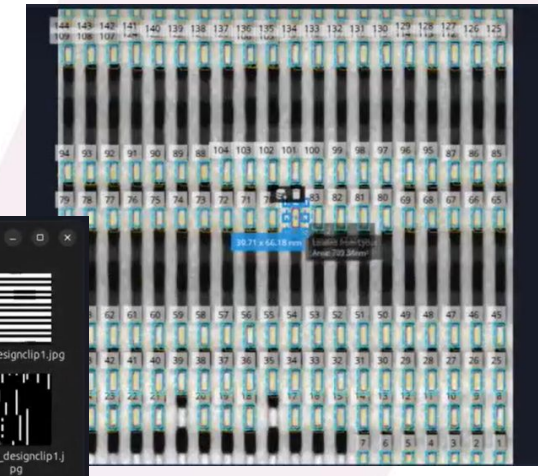
TEM



CD-SEM



Design

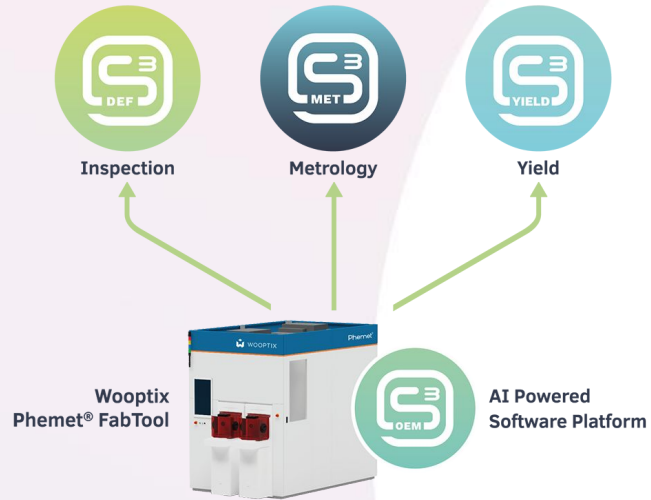


Examples of Smart3 integration within Equipment

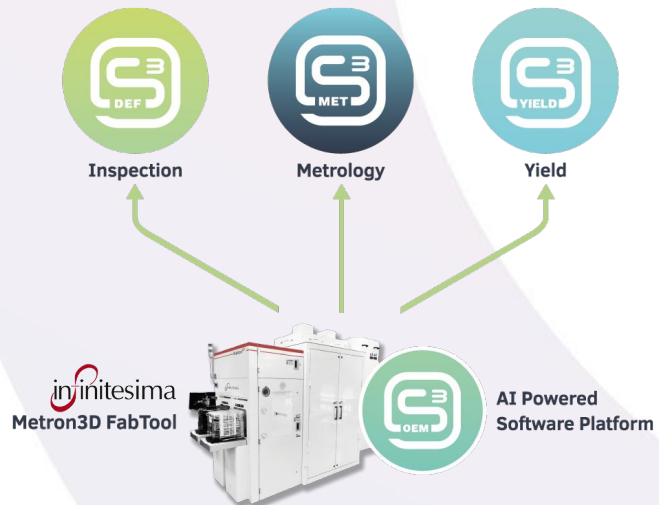
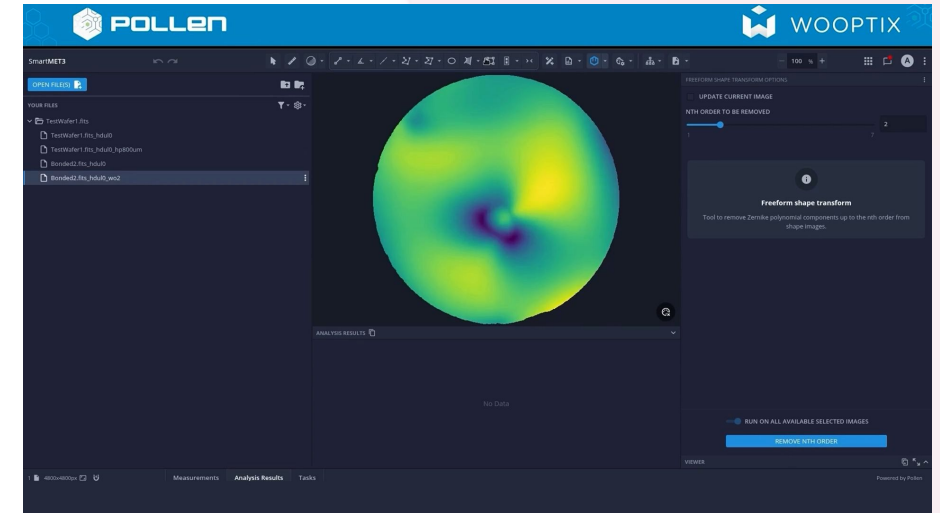


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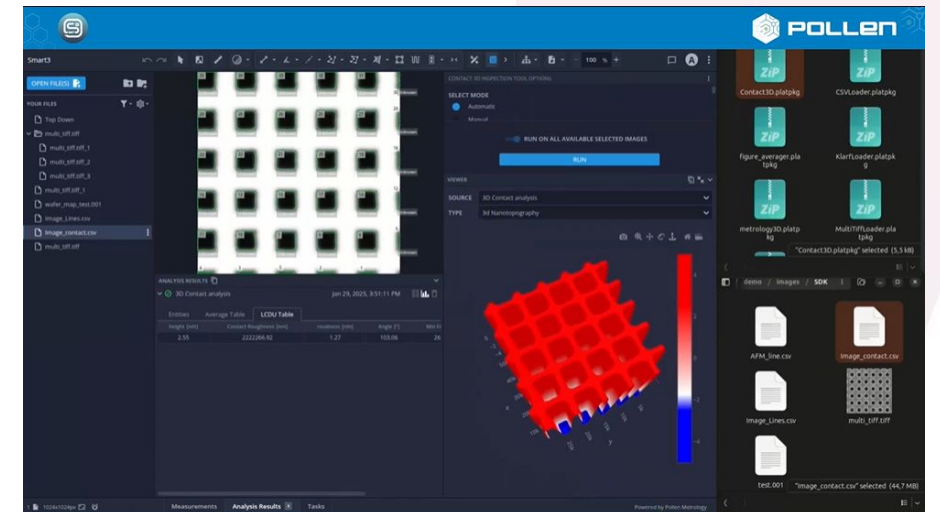
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Wavefront Phase Imaging



Atomic Force Microscope



Pollen's Activities



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- Previous experience with EU collaborative projects
 - EMPIR Project : nPSize, as a partner (01/05/2018 - 31/10/2021)
(Improved traceability chain of nanoparticle size measurements)
- Interaction with the 3IAs or other ETPs
 - Member of AENEAS
 - Member of Minalogic (French cluster)

Collaboration Expectations

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**Collaborative project of
interest to you**

- *Chips JU*
- *Horizon Europe*
- *Eureka Clusters*

Scope

AI-based Yield enhancement: processes for innovative materials and structures)

Project idea

Open for partnership in an ambitious project

Project impact

Accelerate process development and maximize yield with a Scalable Software European Sovereign Framework Solution

Project consortium

Looking for consortium which needs an open collaborative platform to glue yield, metrology, defectivity models and software bricks