

# SENIS MAGNETOMETERS & FIELD MAPPERS – PRECISION MAGNETIC MEASUREMENT

ENABLING QUALITY, PERFORMANCE & INNOVATION IN SEMICONDUCTOR MANUFACTURING

Testing, calibrating and characterizing magnetic sensors, systems and processes across the semiconductor value chain.

## WAFER-LEVEL MAGNETIC SENSOR TESTING & CALIBRATION



Measure, test and calibrate magnetic sensors and ICs on wafer for offset, sensitivity, linearity, noise and cross-axis behavior.

- Hall, AMR, GMR, TMR, CMOS magnetic sensors
- Wafer-level parametric test & calibration
- High accuracy, high throughput solutions

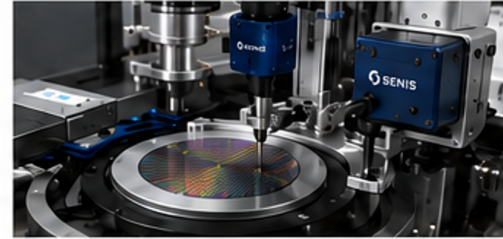
## MAGNETIC SYSTEMS FOR SEMICONDUCTOR EQUIPMENT



Characterize and verify magnetic systems used in sputtering, deposition, ion implantation, etching and inspection equipment.

- Magnet field mapping & uniformity
- Magnet design validation
- Process optimization & troubleshooting

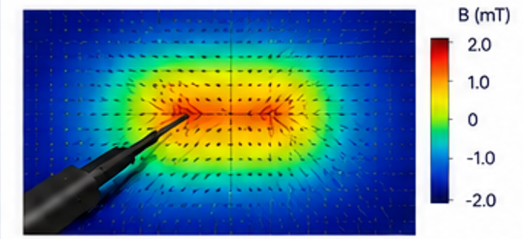
## INTEGRATION IN SEMICONDUCTOR TEST EQUIPMENT



Seamless integration of SENIS magnetometers and transducers into ATE and process control systems for in-line measurement.

- Compact, robust & system-ready
- Fast data acquisition & real-time output
- Supports automation & high-volume test

## R&D, FAILURE ANALYSIS & PROCESS DEVELOPMENT



Advanced magnetic field mapping and analysis for R&D, failure analysis and next-generation device development.

- 2D/3D magnetic field mapping
- Root cause analysis of magnetic anomalies
- Support for new materials & device innovation

## SENIS INSTRUMENTS FOR SEMICONDUCTOR APPLICATIONS



**3FB Field Transducer**

Ultra-high bandwidth for dynamic & pulsed field measurements (up to MHz range)



**I3D Isotropic 3-Axis Transducer**

True 3D magnetic field measurement for complex field analysis & mapping



**3MH4 Teslameter**

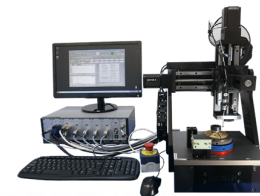
Versatile 3-axis teslameter for R&D, production & quality control



**3MH1-E Teslameter**

Compact 3-axis teslameter for small magnets & magnetic components

## MAGNETIC FIELD MAPPERS



**3D Automated Field Mapper**

High-resolution 3D mapping of magnetic fields for systems, tools & components

## KEY BENEFITS

- ✓ High accuracy & traceability
- ⌚ Fast & reliable measurements
- ⚙️ Compact & easy integration
- 📈 Support for R&D to production
- ✓ Improved yield & process control

## TYPICAL SEMICONDUCTOR APPLICATIONS



Wafer-level sensor testing & calibration



Sputtering & thin film equipment validation



Ion implantation system verification



Etch & deposition process control



ATE integration & in-line testing



Failure analysis & R&D characterization

## TRUSTED BY SEMICONDUCTOR LEADERS

SENIS magnetometers and field mappers are used worldwide by semiconductor manufacturers, equipment suppliers, OSATs and R&D labs to ensure performance, reliability and innovation.



**SENIS**  
magnetic & current measurement

www.senis.swiss 

Precision. Performance. Innovation.