EagleView 5:
The Industry's Most Yield-Enhancing Macro Defect Inspection System
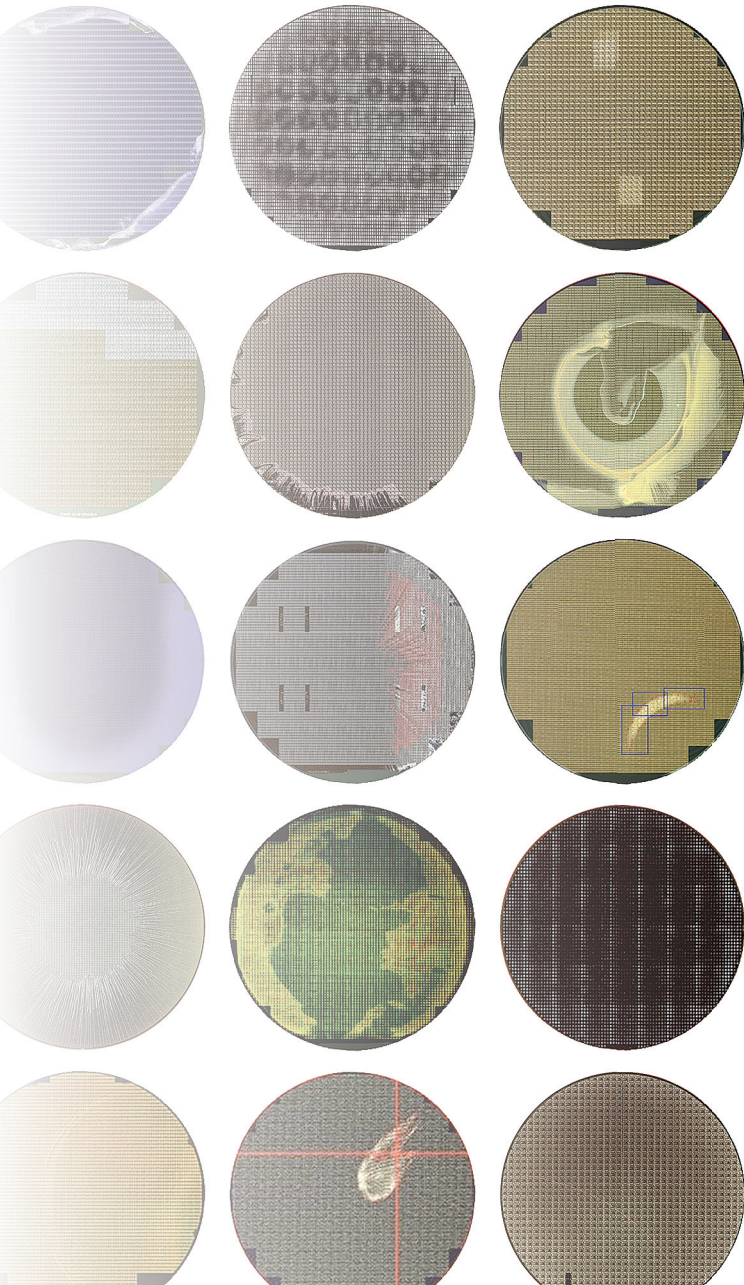
■ **Inspects <u>all</u> wafers. No sampling.**

■ **Fully automatic. No recipes needed.**

■ **Super-fast. 3000+ wafers/day.**

■ **Catches more problems. Helps correct them faster.**

microtronic
macro defect management

Now, 100% wafer inspection is a practical reality...

To see more defects, correct more problems and boost your yields.

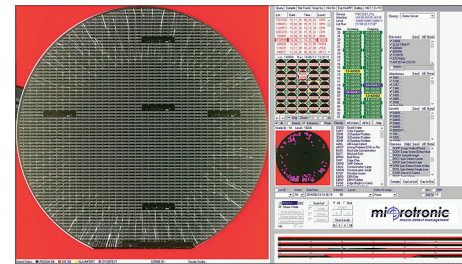### It's made possible by EagleView 5.

The Microtronic EagleView 5:

Nothing else gives you as much information on as many wafers — or as many ways to reduce defects and increase yields...

No sampling. Inspect __all__ wafers. Super fast.

The EagleView 5 automatically macro-inspects every single wafer in every lot. Edge to edge. At ultra high speed: 3000+ wafers/day.

This unique tool delivers an actual high-resolution full-wafer color image, not a digital construct. It creates a complete, trackable "waferbase" with defect lists and defect maps along with each wafe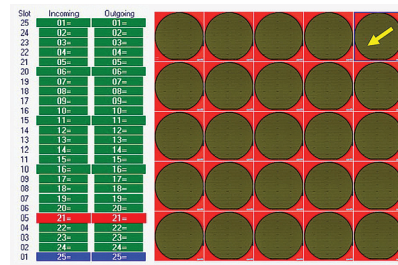r's OCR number and slot position. Optionally, it can even weigh each wafer automatically. This data hub can provide a unique wholistic picture of every wafer at every step. Plus, it can integrate inputs from microscope and micro defect inspection.

ProcessGuard shows wafer images, defect lists, defect maps, wafer tracking and more.

No recipes required. Just load and go.

Absolutely no recipes are needed. EagleView is totally plug-and-play. So you can eliminate all the time, hassle and special staff that used to be required to generate and maintain recipes. With full automation, virtually anyone in your fab can use it anytime.
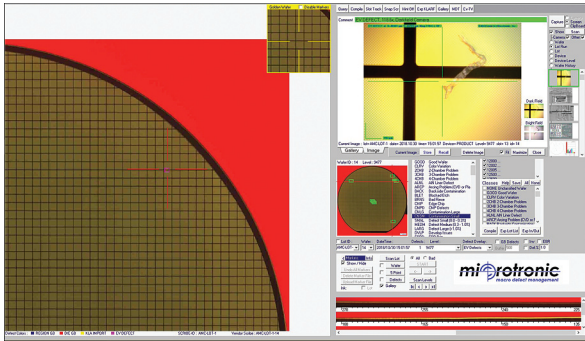
Catch more defects. And more root causes.

Because it sees every wafer, EagleView can catch a lot more defects. Including edge chips. And, it gives you smarter ways to track down defect root causes. At the start of each run, the fab's host automation system sends the lot's tool history to EagleView,

A small defect is seen on one wafer in the lot without the need for recipes.

where that gets integrated with the wafer image data. So when you spot a defect you can readily drill down and track back to a particular process tool problem.

MicroView option adds microscope images to macro images, allows many types of defect data to be stored with each wafer.

Spot onesie-twosies. Stop excursions.

EagleView's 100% inspection catches even those elusive one-time problems. Spotting them earlier often lets you rework wafers rather than scrapping them later. And fixing excursion issues earlier can improve fab performance. Plus, EagleView's guardbanding can ink-off wafer trouble areas so they won't cause problems later.

Next-generation tool. Maximum performance.

The EagleView 5 is the most advanced EagleView to date. Its next-generation imager provides improved lighting, color fidelity and image resolution. Coupled with more advanced software algorithms it delivers a cleaner signal and increased defect detection. The tool is equipped with advanced imaging technology, analytical software, robotics and a 4-cassette multi-sized (100mm-300mm) wafer platform for fully-automated, unattended operation.

Machine vision: More consistent data.

EagleView removes the variables of human optical inspection. Its defect data recording is complete and consistent. Every day. Every shift. And by using the MicroView option, microscope images are automatically captured and stored with the macro images in the database. MicroView captures in Brightfield and Darkfield and allows quicker root-cause analysis and lot disposition. With MicroView many types of data (SEM, FIB, particle, etc.) can be stored and archived with the individual wafers.

Wafer randomization for free.

While EagleView is inspecting wafers it can also randomize or sort them. Automatically. Without operator intervention. While maintaining full speed. So, if you want to do slot position analysis you won't need to buy extra sorters. And you won't need special IT efforts to create usable databases. With EagleView it's automatic.

Information for all.

There are no licenses restricting how many stations can use the EagleView wafer data. Everyone can have access. Throughout your fab or enterprise, around the world. No extra charge.

Reduced expenses. Lowest CoO.

With EagleView there are no consumables, and maintenance is so minimal, customers can do it themselves. Plus, you can eliminate all the resources and time you used to spend creating and maintaining recipes. And you can get guardbanding (ink-off) virtually for free. Bottom-line: EagleView gives you the greatest savings at the lowest costs of any tool in its class.

We can also customize EagleView capabilities.

We can take on special challenges: Like silicon carbide and other transparent substrates. Or OCR to convert vendor scribes to lot IDs. Or splitting wafers to double-spaced cassettes. Or customizing slot positions by level or technology. Just tell us what you need!

Popular and proven.

Microtronic has earned many accolades: Texas Instruments' Supplier Excellence Award, multiple Lucent Technologies Vendor of the Year Awards and the Best of West Product Award at Semicon West. EagleView has inspected over 300 million wafers around the world. See if it could be boosting your yields, too. Just call and set up a demo.

The fully-automated EagleView 5 needs no recipes and features four cassettes for 100mm to 300mm wafers.
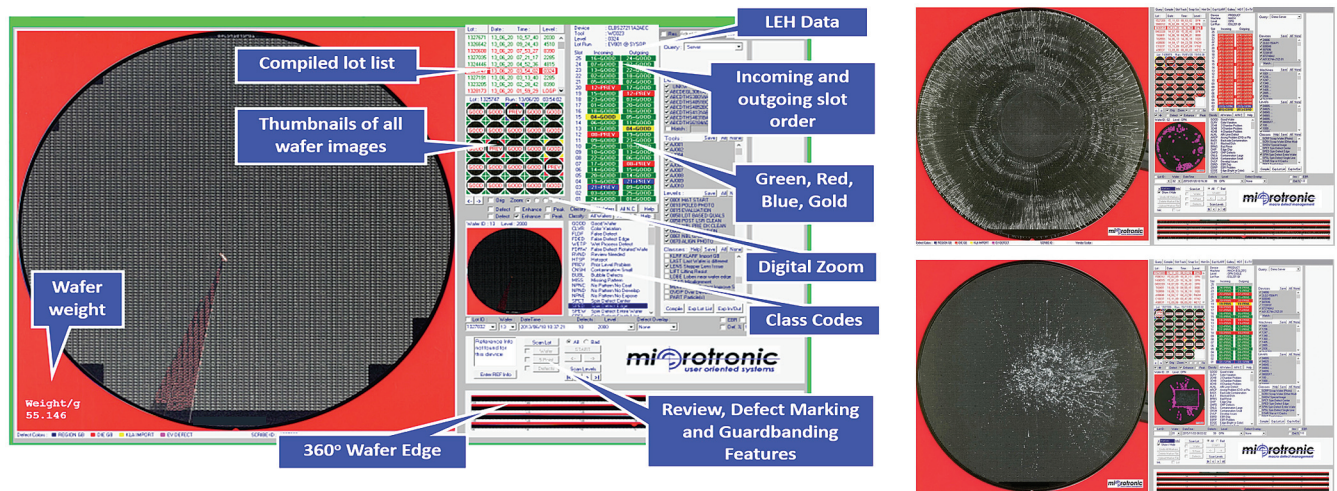
ProcessGuard Software from Microtronic

Defect intelligence and data management for the EagleView 5

Smarter, more powerful software.

Microtronic's ProcessGuard software is the desktop client for the EagleView macro defect inspection system. This software provides both power and flexibility to customize the user interface and application features to your precise needs. It is a high-speed, high-volume solution that delivers an extremely easy-to-use and extendable means of managing your fab's inspection processes. ProcessGuard is feature-rich and includes a user-definable defect library, an integrated trainer and knowledge base, wafer randomization capability and a great deal more...

ProcessGuard Advanced Capabilities

- Unlimited ProcessGuard desktop clients
- Enterprise-wide ProcessGuard access
- Integrated user-definable defect library
- Integrated lot and equipment historical data
- Easy drill-down Pareto for root-cause analysis
- MicroView – integrated microscope images
- View multiple layers and guard-banding for each wafer
- Sort by class code, tool, operation, time, or device
- Automated wafer randomization analysis
- Incoming and outgoing slot order
- Export KLARF files
- Export compiled lot lists
- Edge bead removal review (EBR)
- Customizable user interface, customizable query screens
- Import any data/images into the macro database
- Integrated trainer and knowledge base

EagleView's ProcessGuard user interface is powerful, informative and very flexible.