

V2000 BRIGHT LIGHT SYSTEM

A Superior Macro Inspection Tool

Benefits

- Catch nearly all macro wafer defects
- Save cost, time, and energy by reducing microscope inspection time
- Dual operation mode (auto and manual) ensures both operation efficiency and flexibility
- Recipes allow you to easily create and standardize wafer inspection procedures

Features

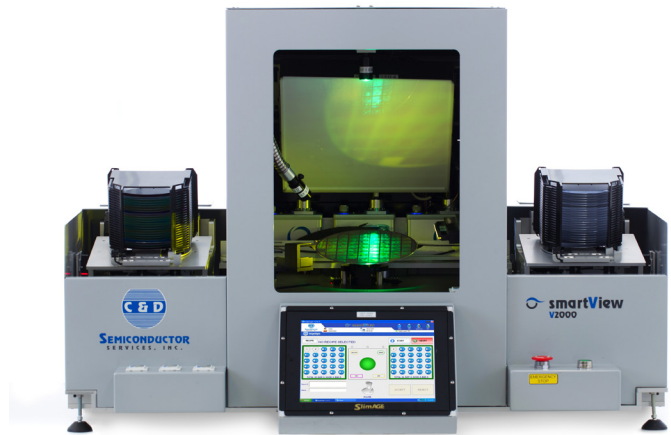
- Cassette mapping automatically identifies and displays the content of a cassette.
- PC Windows-based interface with smartview GUI
- Ergonomic control panel
- 3-Axis tilt and rotate gimble chuck
- Light-controlled inspection housing offers optimal wafer-inspection environment.
- CE Mark

Options

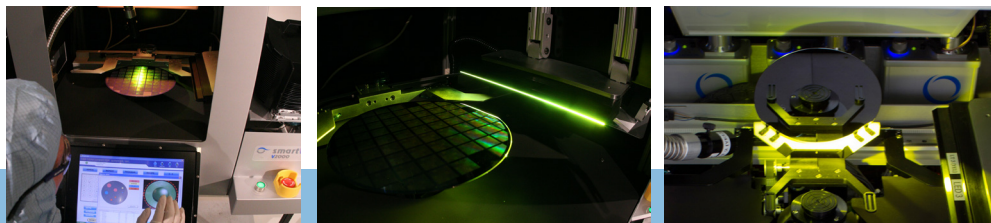
- Four light configuration
- Backside inspection
- Dual-size bridging
- Wafer alignment
- Ergonomic cassette loading/unloading
- Barcode Download
- SECS/GEM compliance
- Contact C&D for more options

Description

The V2000 Bright Light is a powerful, easy-to-use, dual-cassette, wafer-inspection system that can effectively discover many types of defects on wafers. The system can be operated in either auto or manual mode which gives the the maximum operation flexibility. All operations, whether auto or manual, are carried out through the system's intuitive graphical user interface. Its 34" x 45" footprint ensures that the system can be conveniently installed on a table top.



Model V2000



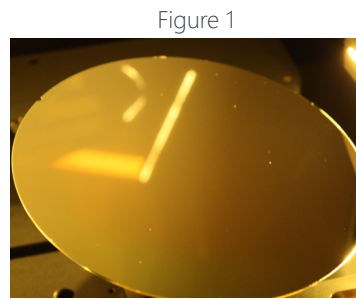
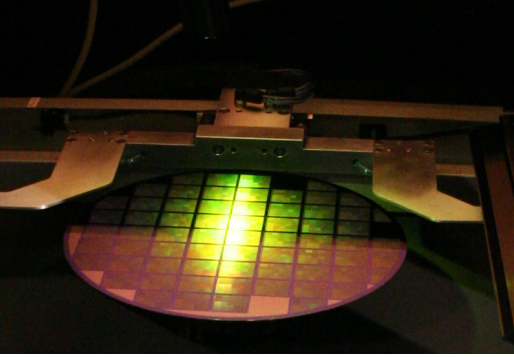


Figure 1

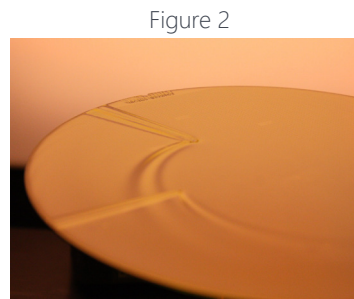


Figure 2

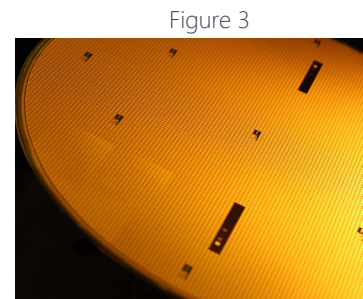


Figure 3

Catch nearly all wafer defects

The V2000 can be configured with a combination of up to four different light types that have been specifically selected to detect various types of wafer defects.

- The super bright "Line Light" illuminates the wafer with collimated high angle light that provides dark illumination. This type of illumination reveals surface particles (Figure 1).
- The bright light reveals a resist striation from two separate particles that were on the wafer prior to spin coat (Figure 2).
- The nearly monochromatic pink light easily shows a very small stepper focus spot (Figure 3).
- The monochromatic green light shows a photoresist drip (Figure 4).
- The bright LED topside illumination reveals die damage from process tools (Figure 5).
- The imprint of the spin chuck as well as particles can easily be seen by using the neon tube soft pink lighting (Figure 6).

Reduce microscope inspection time

The V2000 allows for the human eye to quickly detect various types of defects without eyestrain. Defects that can be difficult or time consuming to see using a microscope are quickly and easily seen. Quality is improved by identifying defects quickly with macro inspection while fewer man hours are spent on microscope inspection.

Our customers have reduced microscope inspection by 90% — saving time, money, and operator fatigue while improving yield out of the lithography area. The bright light catches nearly all wafer defects found in most photolithography areas.

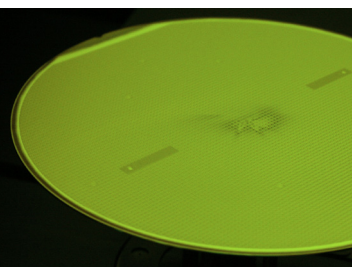


Figure 4

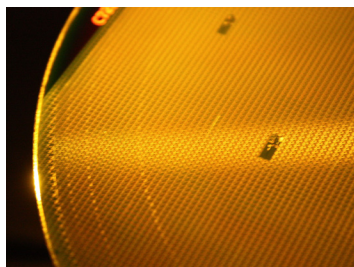


Figure 5

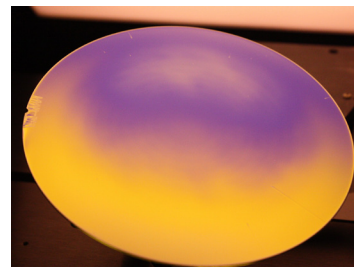


Figure 6

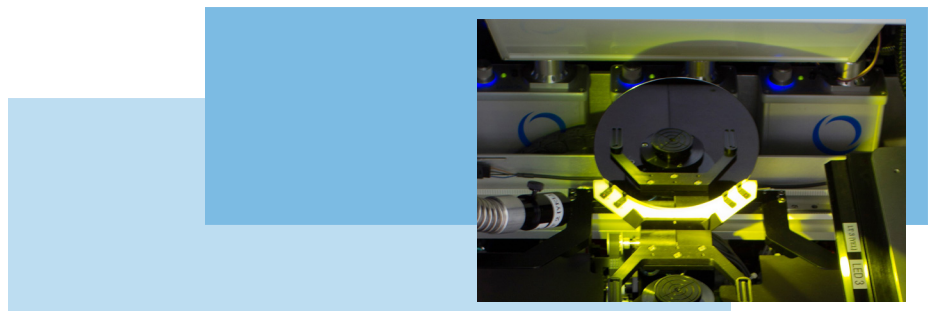
Backside inspection

Contamination and process defects can occur on the topside or bottomside of the wafer. The V2000 has an option for backside inspection where the entire bottomside of the wafer minus a small vacuum grip area is presented to the operator for inspection.

User friendly interface

The User Interface is designed so that operators use the machine through engineer developed recipes. Recipe creation is a quick and simple process and once saved operators have a simple "Single Click" Operation to get started. Operator use is simple and ergonomic.

Wafers are presented for inspection under a gimbal chuck with the correct lighting requirements. Operators have the ability to reject a wafer and store a visual map of the wafer for easy recall at later use.



V2000 Technical Data

Substrate Size	50 mm - 200 mm
Interface	Touchscreen PC based software user interface
Lights	Up to four lights
Dimensions	45" Length x 34" Depth
Facility Requirements	Vacuum: 25" / 600 mm Hg 110/220V 15 A