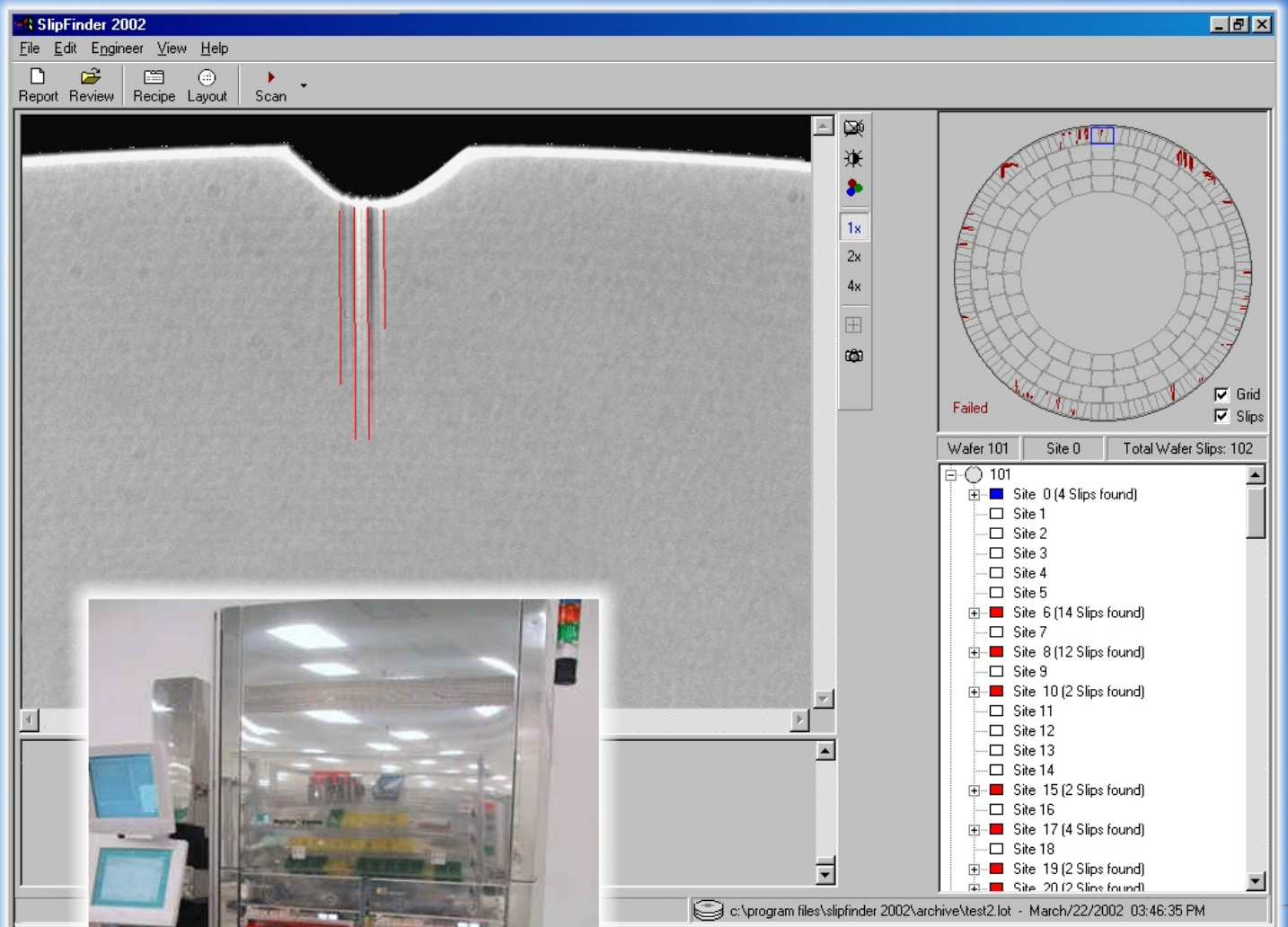


NEW

YIS-300HM SlipFinder Slip Line Detection System



Fully Automatic
300 mm Wafer Inspection
Sub-micron Defect Detection
High Speed Optical Metrology



YIS/SF Series SlipFinder Metrology Systems

DESCRIPTION

The YIS and SF Series metrology systems are designed for optical detection of wafer defects such as crystal dislocations, slip and other defects. The YIS-300HM (for 300 mm wafers) and YIS-200HM (for 200 mm wafers) utilize Makyoh optics technology (Magic Mirror) and integrated robotic wafer handler provided by Hologenix.

The SF300M and SF300N systems offer a low cost functionally equivalent alternative to the YIS series. They are designed for inspection of single 300/200mm wafers without the robotic wafer handling. The flexible SF Series also offers a choice of either Olympus/ Nikon Nomarski microscope (SF300N) or Hologenix Magic Mirror (SF300M), with single wafer precision R-Theta-Z stage provided by Pacific Precision Laboratories.

APPLICATIONS

The SlipFinder is capable of detecting crystal dislocations that occur during many types of wafer processes:

- ☐ Epitaxy
- ☐ Oxidation, Diffusion
- ☐ Post Implant Annealing
- ☐ SOI
- ☐ Polishing
- ☐ Strained Silicon
- ☐ Many other Semiconductor Applications



Specifications

SYSTEM SPECIFICATIONS (Summary)

- ☐ Fully Automated Defect Detection
- ☐ Full or Partial Wafer Inspection
- ☐ Adjustable Inspection Recipes
- ☐ Sub-micron Detection Sensitivity
- ☐ Macro optical Field of View: 15mm X 11mm
- ☐ Throughput: Approx 20 – 80 WPH
- ☐ Dual FOUPs; Optional FOSB, Open Cassette
- ☐ Optical Non-Contact Notch Finding
- ☐ Optional class M1 Mini-Environment
- ☐ Windows XP Software Environment
- ☐ SECS-GEM via RS232 or HSMS
- ☐ Full Factory Automation
- ☐ Sorter Capabilities – Optional OCR
- ☐ Non-contact Notch, Flat-Finding and Centering Technology
- ☐ Software: RMS Vision Systems' SlipFinder Advanced Metrology Suite under Windows XP
- ☐ Platform:
 - o YIS Series: Hologenix YIS300/200
 - o SF Series: PPL Z-Scope w/ R-Theta Stage
- ☐ Magic Mirror™ Optics (YIS series & SF300M):
 - o Macro Field of View: 15mm X 11mm for speed
 - o Slip Detection Sensitivity < 0.05 microns depth
- ☐ Nomarski (DIC) Optics (SF300N only):
 - o Micro Field of View (< 3 mm)
 - o Standard microscope options

SOFTWARE FEATURES

- ☐ Automated detection of Slip Lines & other defects
- ☐ Detect, Count, Locate and Measure (Length)
- ☐ Windows XP Interface
- ☐ Adjustable Detection Sensitivity
- ☐ Adjustable Edge Exclusion
- ☐ Graphic display of wafer with highlighted Slip Sites
- ☐ Wafer Accept/Reject recipes
- ☐ Lot file Reports, Image Archiving and Printing
- ☐ Automated, Semi-Automated and Engineering Mode
- ☐ Inspection locations are completely configurable via a Layout/Grid tool.
- ☐ All Slip Lines are reported in mm using Wafer Coordinates
- ☐ System outputs Wafer Maps showing actual orientation and length of Slip Lines
- ☐ Stitching - Sections of Slip Lines from different fields of view can be automatically combined and reported as one long Slip Line
- ☐ System can be configured to stop the Inspection upon failure to improve throughput
- ☐ SOI Edge Exclusion measurement capability