

# Condor 200 Series

## Special Inspection Applications

The Condor 200 Series is a versatile, fully automated, optical inspection platform for special applications such as LED, MEMS, optical and medical devices, designed to inspect framed or unframed wafers and various thickness.

The Condor 200 Series delivers the same superior detection ability and ease of operation as the other products of the Condor family.

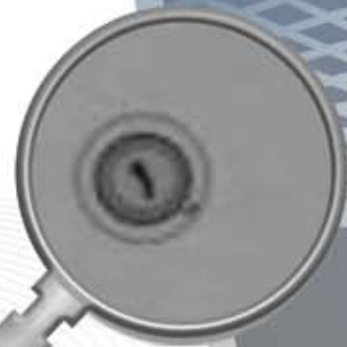
## Application Examples

- **LED and sub-millimeter dice** on stretched tape shift after separation. The Condor's multi level and routines correctly registers each die, enabling reliable inspection and defect reporting at unmatched field-proven throughput.
- **MEMS and perforated wafers**, often used in the production of MEMS sensors, optical devices and inkjet print heads, are securely held at their periphery throughout the automatic cycle.
- **Transparent/translucent materials**, with or without pattern, are inspected under balanced reflective and transmissive light to detect defects on top and bottom surfaces and in between.
- **Wafer Level Packaging (WLP)** especially with glass caps; require inspection of several surfaces at various levels. Multi-recipe consolidates findings of multiple scans with different magnifications; illumination and focus taken in a single load/unload cycle.
- **Thin wafers** that tend to sag under their own weight are safely handled with customized components.

The Condor 200 Series is now available in several performance levels and a wide range of configurations, options and upgrade paths to match your needs and budget as they evolve.

## Product Highlights

- Handling capability of wafers and masks at various size, shape and thickness.
- Innovative image acquisition technology to achieve high detection sensitivity.
- Independent bright field and dark field channels working simultaneously to achieve reliable detection of surface and morphology defects.
- Optional, patented height sensors (CTS™ and CCS™) for multiple metrology capabilities in a single platform.
- Efficient online and offline verification, including filtering, sorting and automated, smart image grabbing.
- Automatic defect binning and classification.
- Offline simulator for high productivity.



# Condor 200 Series Description

200 mm wafer



## Inspection Capabilities

Detecting surface, probemarks, glass and MEMS structure and dicing -related defects for framed and unframed wafers  
All at 100% or sampling

## Options

### Set Up

Reference Automatically generated from production wafer  
On and Offline User-defined detection parameters per defect type and zone;  
Interactive automated routines for easy zone definition;  
Simulation mode allows setup update without the need for rescanning on the machine.

### Review and Classification

Modes Fully automated, semi-automated and manual - incorporating live and monochrome images  
Smart Grab Customized preset for defect type, count and location, minimizing grabbing and verification time, optimizing image quality to defect type  
Offline Station PC-based station for viewing and reclassification of defect images captured during scanning (monochrome) or post-scanning (color and/or monochrome)

### Output

Camtek Statistical Process Control software package available as online or stand alone installation  
Histograms Distribution charts of all defect and metrology data  
Reports SPC analysis at lot, wafer and die level, KLARF  
Wafer Maps Generate, import, edit and export wafer maps in over 50 standard and custom formats

### Particle Removal System

Removes loose particles, eliminating nuisance calls

### Height Sensors

Patented Camtek Triangulation Sensor (CTS™) with micron-level precision  
Patented Chromatic Confocal Sensor (CCS™) with a selection of probes for multiple precision levels

### Barcode Reader

Reads data matrix or barcode formats

### OCR

Automatic wafer ID reading top and/or bottom

### Ink Marker

Automatic marking of rejected die

### Factory Automation

SECS/GEM

### Job Portability & Tool Matching

Allows transfer of jobs between compatible models running on same or higher SW version

### Multi Recipe

Enables running successive scans in one cycle with different focus, magnification, illumination, sensitivity and engines

### Cleanliness

External : Class 100  
Internal: Class 10

### Wafer Cassette Configurations

