

Helios

Inspection and metrology module for wafer testing

The later a defect in a wafer shows up, the more expensive it gets. Helios finds cracks and damage before they become a problem: the wafer is held on the hot plate by vacuum, heated under control following a recipe and captured step by step under structured light. Intelligent object recognition makes cracks and damage visible and documents every result traceably.

HOW THE TEST RUNS

Fix and heat: The wafer is held on the hot plate by vacuum and brought to target temperature by recipe, with defined ramp and hold times.

Illuminate and capture: The dome light projects a line pattern onto the wafer; the camera captures a series of images while the linear axis moves it step by step.

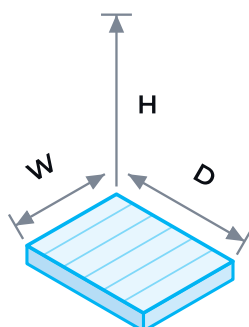
Analyse and document: The analysis detects cracks and damage in the images and documents the result traceably for every wafer.



TECHNICAL DATA

Function	inspection and metrology of wafers under temperature
Wafer handling	held on the hot plate by vacuum
Heating	recipe-controlled with defined ramp and hold times
Optics	dome light with slit aperture, camera, linear axis
Analysis	intelligent object recognition, real-time chart monitoring, data export
Control	integrated IPC with recipe management
Interfaces	Ethernet, EtherCAT, SECS, API, FDC, digital I/O
Safety	safety-interlocked door, UPS backup for the entire system
Environment	cleanroom up to and including ISO 5, 24/7 duty, redundant architecture

FOOTPRINT



0.76 m

Width

0.99 m

Depth

1.32 m

Height

Footprint excludes cantilevered attachments.