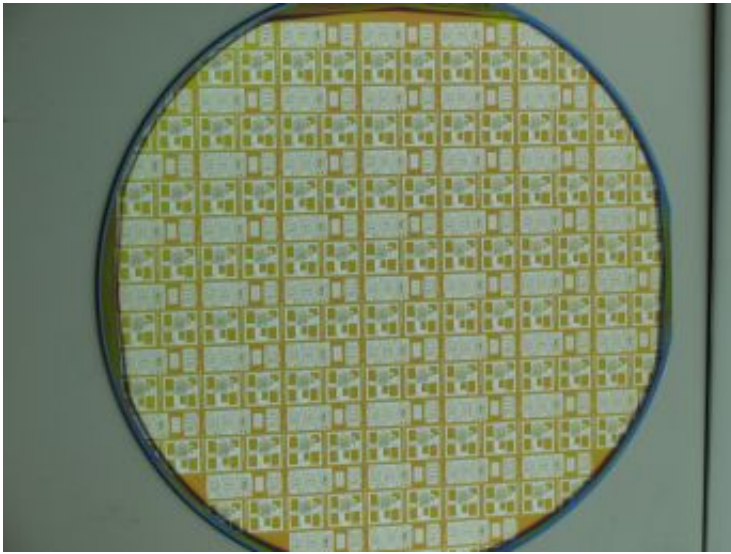
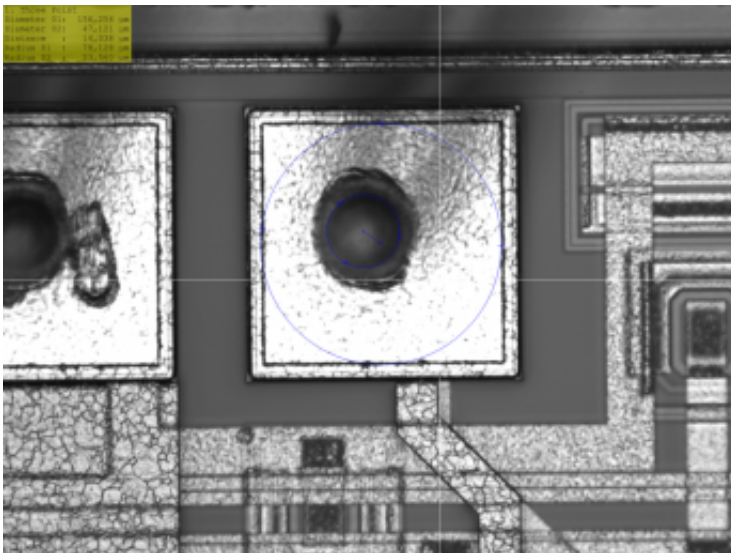


## Macro Inspection



Macro inspection and documentation: The wafer handling system is equipped with different selectable light sources. On the one hand with a homogeneous light field plate for bright field inspection and on the other hand with a dark field light source for the inspection for particles, scratches etc.

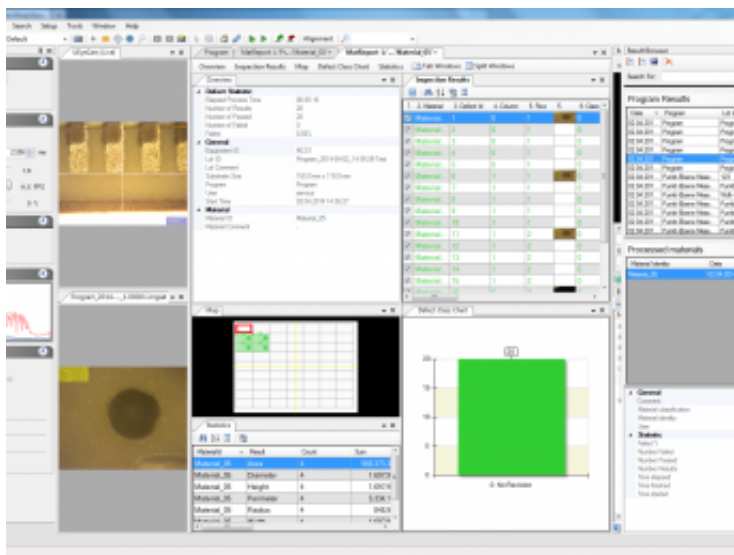
## 3D Bond Control



Testing of wedgebonds and ballbonds with 3D microscopy.

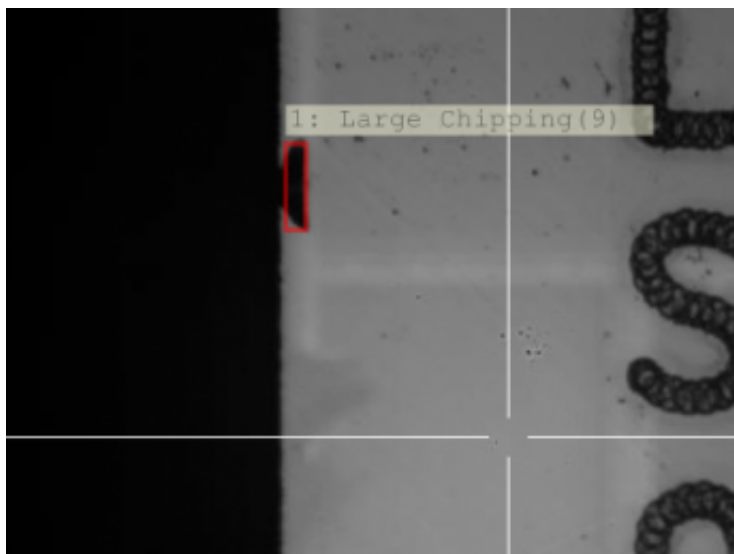
White light interferometrie and confocal microscopy in conjunction with special software modules.

## Screen Printing Control



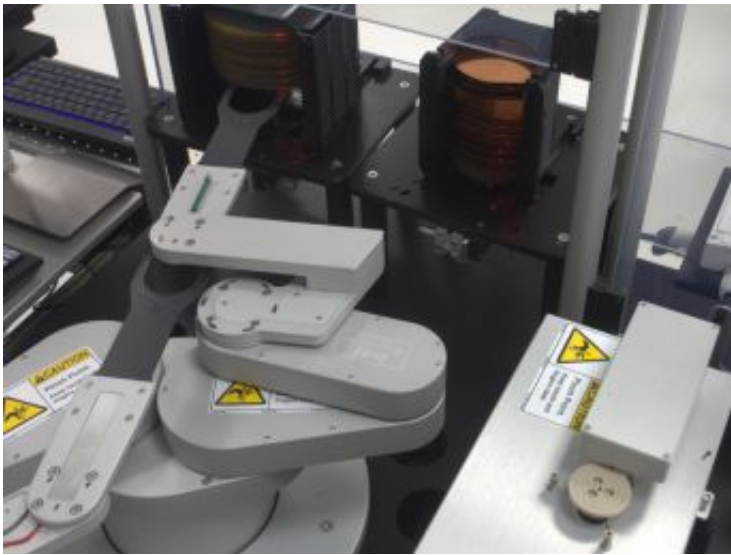
AOI control of the printed image with imported CAD data.

## Chipping Inspection



Example: Chipping examination with infrared camera.

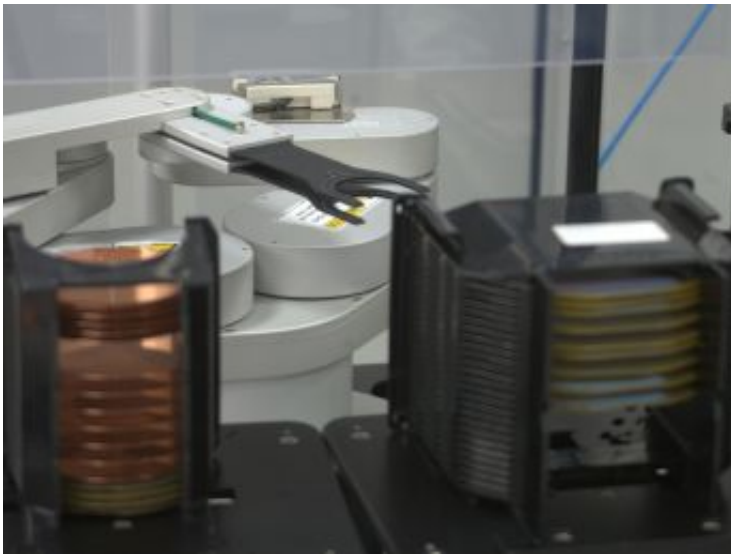
## Wafer Handling



Robots and prealigner according to the requirements and eligible accessories for:

- Vacuum backside handling
- Vacuum edge handling

## **Vacuum Gripping Technology**

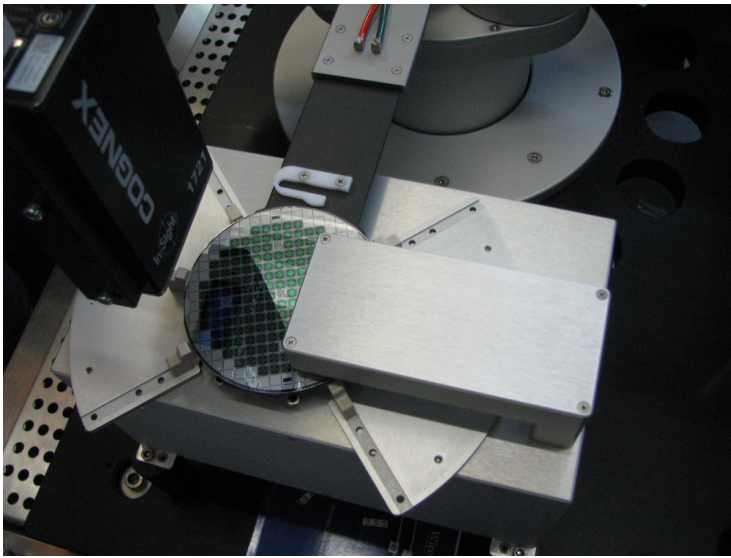


To solve various measurement and inspection tasks, Promicron relies on a large number of [optical methods](#). They are combined according to requirements and customer request.

## **Edge Gripping**

—

An edge gripper takes up a substrate (such as a wafer) and releases it again. To solve various measurement and inspection tasks, Promicron relies on a large number of optical methods. They are combined according to requirements and customer request.

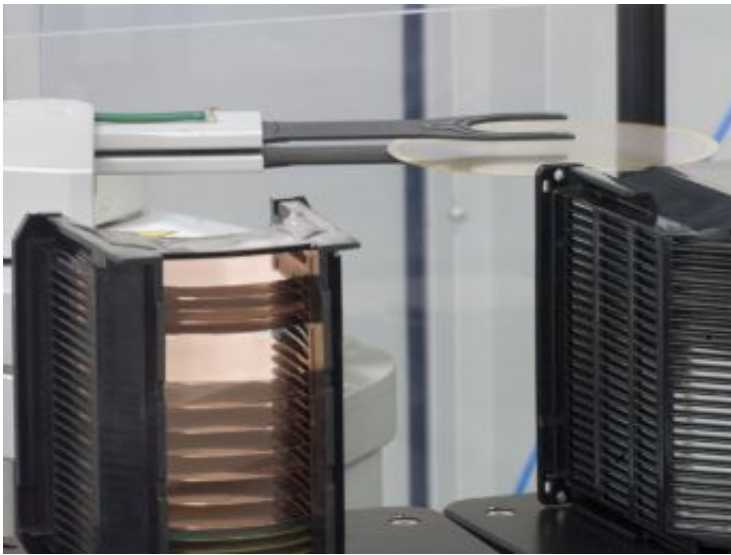


## **Bonded Wafers**



Bonded wafers are considerably thicker than single wafers and can have an offset. They may be non-circular. To solve various measurement and inspection tasks, Promicron relies on a large number of optical methods. They are combined according to requirements and customer request.

## **Bow & Warp Wafer**



Promicron offers proven solutions for safe wafer handling, even for those with clear bow/ warp, to ensure a safe handling.

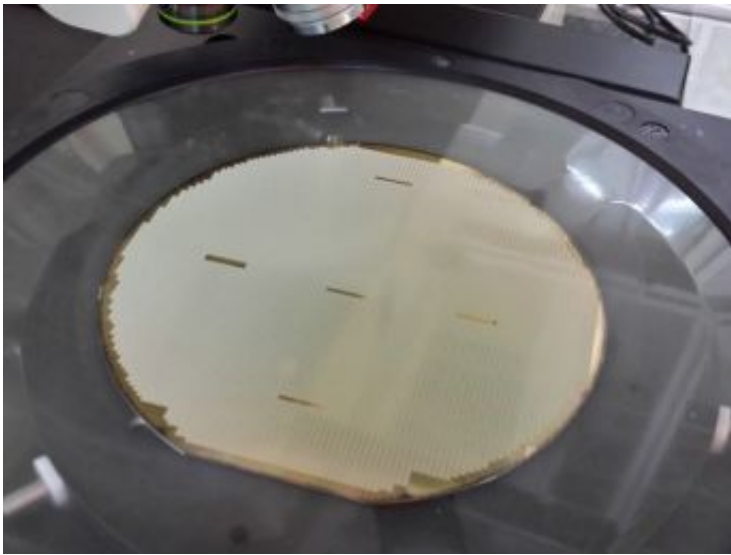
By using corresponding soft- and hardware modules, the measurement and graphic representation of the wafer bow / warp is possible as well.

## **Wafer Chuck**



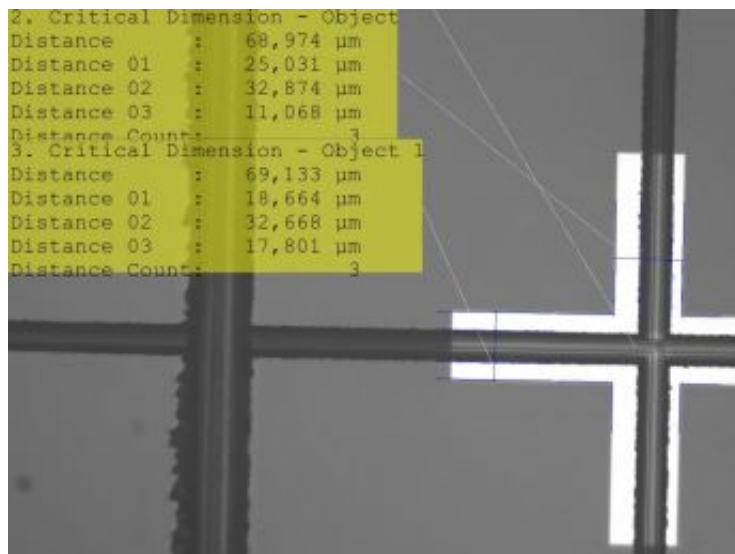
Promicron uses various methods (e.g. friction or vacuum) and adapts them according to the given requirements and the customer' request.

## **Wafer on Tape**



Vakuum Chucks with a finest porous surface for sawn wafers on blue tape. Even wafers with minute dies are sucked in safe and even.

## Wafer Dicing Inspection

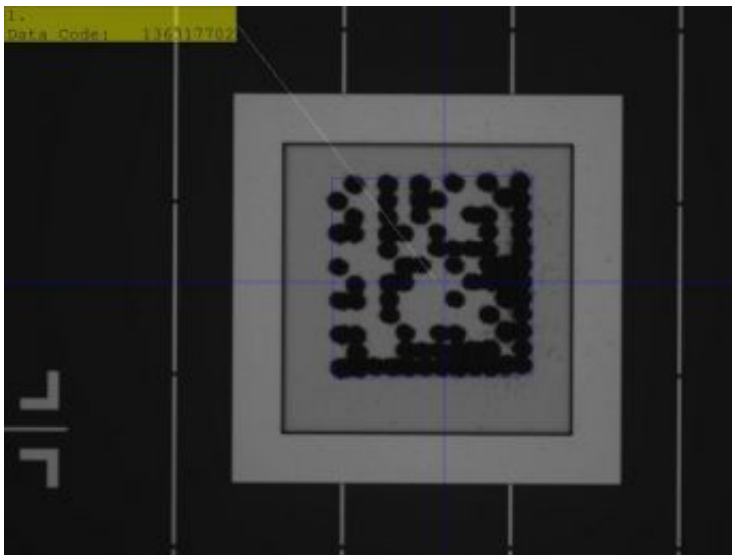


Inspection and metrological control of the sawing lines on:

- Mismatch or alignment error
- Saw depth
- Chipping

## QR Code Reading





QR codes and barcodes or plain text can be read automatically through external adapted reading devices (code reader) or possibly in the camera image of the microscope.

## Mask Inspection



**Inspection** of masks used to produce wafers.

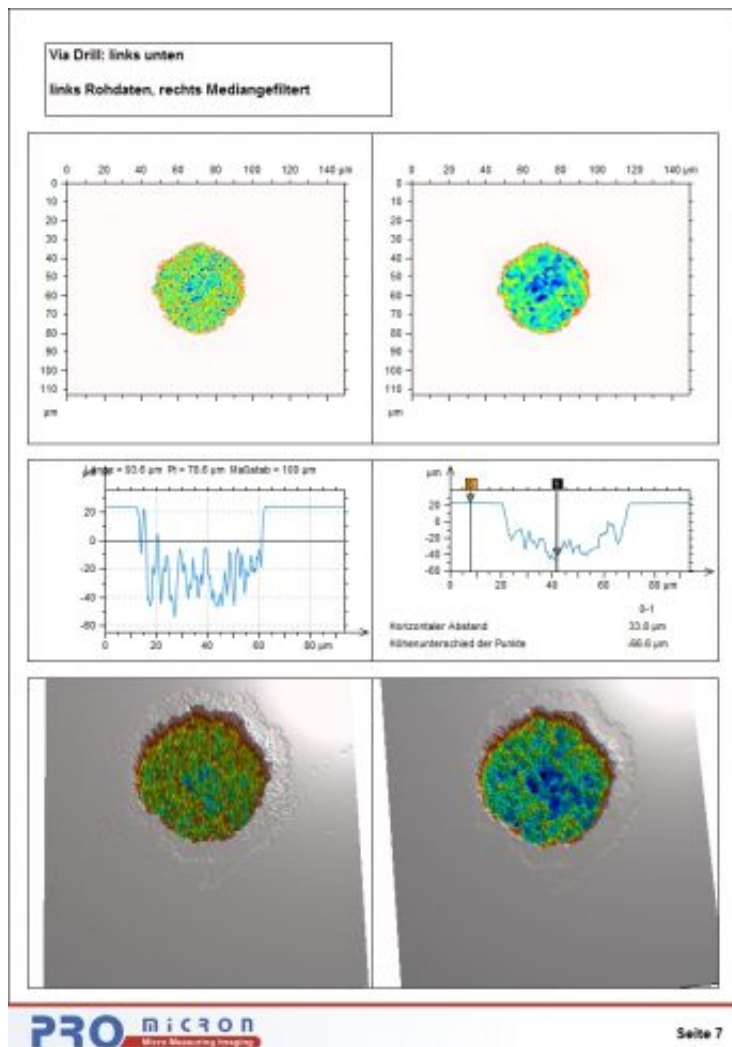
The task of the inspection is to detect random errors (scratches, particles) and systematic / structural faults.

Chrome on glass substrates are usually inspected in transmitted light - incident light and dark field can also be used.

Within the scope of the **measurement**, quality parameters of existing masks (e.g. abrasion) can also be checked.

## 3D VIA Inspection





Inspection of VIA's with 3D microscopy: white light interferometry and confocal microscopy in combination with special software modules.