



### Company Profile

Viscom inspection systems are used in virtually every branch of industry – from automotive electronics to aerospace technology, to industrial electronics and the semiconductor and photovoltaic industries. Steadily rising requirements for quality and increasing mechanization in all areas of life require 100 % quality assurance using intelligent, automatic inspection solutions.

Material weaknesses or production defects have economic disadvantages for the manufacturer and potentially fatal consequences for the end user. This is why well-known companies all around the world place their trust in Viscom.

Highly qualified engineers develop application-oriented inspection solutions in close cooperation with our customers. Furthermore, we stand by our customers with advice and support – regardless of whether technical details, questions on system integration, application or comprehensive process optimization are concerned.

### Viscom – Your Partner for all Inspection Tasks

**Satisfied customers are  
our most important corporate goal**

**Constant innovation through close  
customer contact and continuous research  
and development**

**High manufacturing penetration  
guarantees flexibility**

**In-house design and tool making**

**Internal hardware and  
software development**

**Highly qualified team of engineers**

**Highly motivated employees who believe  
in Viscom's mission and purpose**

**First-class service and support worldwide**

**Close working relationship  
between employees and costumers**



# Example uses of successful inspection solutions

## Technology

With the automatic optical batch inspection systems, all inspection gates in the electronics production (i. e. paste print, assembly and solder joint) are covered. 8M camera technology, inclined inspection, OnDemandHR and color evaluation – those are the keywords that indicate the performance advantage of Viscom. This guarantees the greatest inspection depth and the reliable detection of critical defects.

Modern components, which don't show a visible solder joint, such as  $\mu$ BGA or QFN's can easily be inspected with Viscom AXI systems or combination systems that combine optical inspection and X-ray inspection.

Viscom's product line ranges from microfocus X-ray tubes, OEM products and off-line inspection islands to fully automated systems with a  $\mu$ CT option. The high-performance microfocus X-ray tubes produced in-house at Viscom enable non-destructive testing of a broad range of different objects and materials. The applications range from PCBs and electronic components to tasks of the non-destructive testing (NDT), e. g. from light bulbs, cast parts etc.

Microfocus computed tomography supplies insights into internal structures. Using slice images, 3-D images are created which, for example, are used for prototype qualification and reverse engineering or in process tests.

With intelligent inspection cells for versatile applications, Viscom offers customized solutions in the NP sector, e. g. for the electronics industry, medical industry and for mechanical engineering. For example, Viscom develops complete customer-specific solutions for measuring and characterization tasks, for assembly inspection or special solder joint inspections. In addition, Viscom also offers AOI systems for inspection of solar cells, thick-film and bare board inspection. Viscom is the world leader in wire-bond inspection.

The IP business segment specializes in the inspection of wafers for semiconductor production. The heart of the inspection systems is the unique infrared technology. It enables irradiation of the silicon, which permits the detection of defects both on and below the wafer surface.

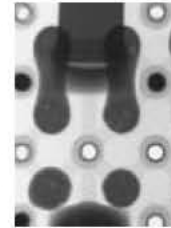
The focus of the IP product line is the quality control of bonded wafers and MEMS. Other applications include the inspection of FlipChip components and the photovoltaic sector.

## Defect detection

Paste



Assembly



Solder joint



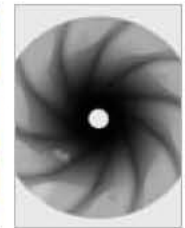
Light bulb ( $\mu$ CT)



Crimped connection ( $\mu$ CT)



Turbine rotor 2-D X-ray image



Chipping



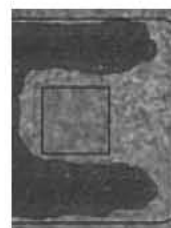
Wire defect (Curling)



Drilled hole inspection



Missing Seal



FlipChip underfilling



Wafer defect



## Viscom Automatic Inspection Systems



- ✎ Highest Inspection depth with 8 module Cameras
- ✎ Selective high resolution with OnDemandHR Operation
- ✎ Precise Linear Drive
- ✎ High Resolution Colour evaluation
- ✎ Suitable for Standard & Lead Free electronic assemblies
- ✎ Fast program creation with EasyPro3D
- ✎ Algorithm based inspection

## Viscom Desktop Automatic Inspection System S2088



- ✎ Sharp Inspection Depth down to 0201, 0.4 mm raster
- ✎ Compact system with integrated PC
- ✎ Precise Linear Drive
- ✎ High Resolution Colour Camera
- ✎ High Performance OCR Software
- ✎ Worldwide Competent Services with remote diagnosis options
- ✎ Rapid Programming with EasyPro