

# Glass Inspect



## Modular Inspection and Measurement Solution for Display Glass



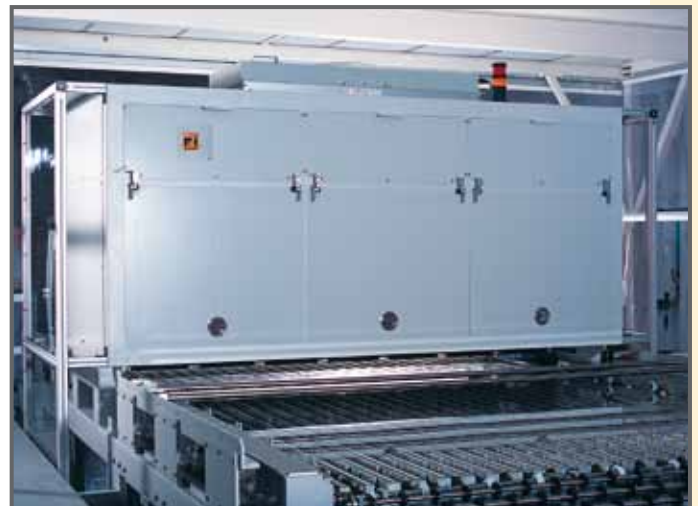
### INTRODUCTION

GlassInspect for display glass is capable of inspecting all glass types involved in the manufacturing and processing of flat panel glass, including raw glass (float or down draw glass), bare glass sheets and coated display glass.

GlassInspect is a modular optical system and is based on high-resolution cameras. A variety of resolution ranges is provided in order to accommodate customer specific manufacturing and inspection environments.

### HIGHEST QUALITY STANDARDS FOR PDP, TFT AND LCD GLASS

- Highest resolutions of cameras - up to 10  $\mu\text{m}$
- 5 times higher sensitivity than conventional cameras thanks to dual line sensor technology
- Outstanding defect sensitivity with unique BEAMED\_LINE illumination units for reliable determination of core size and distortion size of defects
- Realistic, microscope-like images for instant defect interpretation and precise determination of real defect size
- Superior differentiation between glass defects and surface contaminations ("pseudo defects")
- Analysis of the whole width of the glass material (up to GEN 10)
- Defect depth location measurement - an optical set-up with two channels determines whether a defect is on the bottom, top side or inside of the glass
- Inspection of glass sheet edges, including measurement of edge conditions and corner cut dimensions
- Air cushion based glass transportation technology





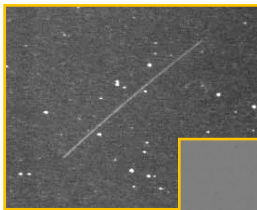
## MODULAR SYSTEM DESIGN

The flat panel system inspects a wide range of panel sizes. Its modular design also allows the system resolution and configuration to be adjusted in order to optimize the price / performance ratio. In-line as well as stand alone systems are available with loading and unloading capability.

## MEASUREMENT OPTIONS AND ADDITIONAL CHANNELS

- Defect depth location measurement
- Measurement of panel size and angularity
- Ream Channel
- Tin Channel

## IMAGES OF DISPLAY GLASS DEFECTS



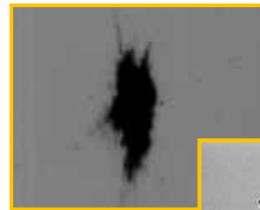
Scratch



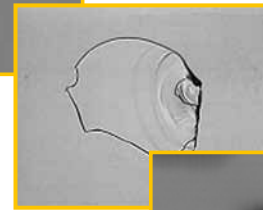
Stone



ITO-Burn



Inclusion



Glass Chip



Bubble

## ABOUT DR. SCHENK

Dr. Schenk GmbH, established in 1985, is an innovative high-tech company based in Munich, Germany. For the third decade now, the range of products and services offered by Dr. Schenk comprises comprehensive solutions for automated quality assurance and production process monitoring to the optical media, flat glass, film and foil, converting, paper, solar and semiconductor industries. In these areas Dr. Schenk continues to set new standards for the inspection of surfaces through the utilization of the latest technical advances in optics and electronics.

The company's primary objective is to achieve complete satisfaction of our customers on a long-term basis. This vision is realized by a perfect synergy between innovative solutions and practical ideas. Global sales and service facilities ensure local support, technical service, training and consulting at any phase of a project. From modular standard units to complex and highly customized systems - Dr. Schenk's high performance test and inspection products have precision in focus!

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