# HawkEye®

## CUT-GLASS VISION INSPECTION SYSTEM

*HawkEye* has set
new standards in glass quality.

This highly accurate and reliable
real-time vision system enables
flat-glass manufacturers to improve
product quality, increase production
yield and reduce costs.

I-Scan Robotics
*Automated Systems for the Glass Industry*

# ADVANTAGES

# OF THE

# HawkEye

### IMPROVES QUALITY

by allowing manufacturers a second evaluation of the size and quality of each glass sheet after cutting.

### STABILIZES PROCESS QUALITY

by eliminating human intervention.

### REDUCES COSTS

not only by reducing labor requirements and human intervention, but also by performing inspection with no interruption to the production process.

**I-Scan**'s Cut-Glass Inspection System both inspects and sorts each and every cut glass sheet. By utilizing advanced web technology, the system detects marks, edge errors, cracks, skews and glass dimensions without interrupting the running line and regardless of its speed.

**HawkEye**

CUT-GLASS VISION INSPECTION SYSTEM

## The HawkEye Components

A rigid, vibration-free **bridge** installed above the conveyor line.
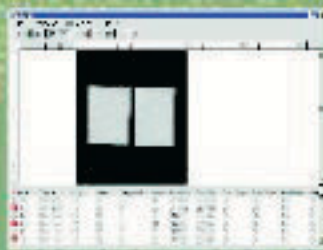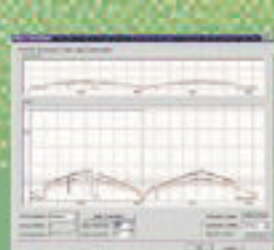
State-of-the-art digital line-scan **CCD cameras** with 4096 pixels resolution each.

Readily available **fluorescent lamps** with high-frequency industrial light controller.

A user-friendly, multi-lingual **point-and-click** graphical interface.

A **visual display** of each glass sheet during inspection.
and
An **online display** of inspection results. **Windows** based platform.

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## TECHNICAL SPECIFICATIONS

### Hardware

#### Computer
- Industrial protection cabinet.
- Industrial PC Work Station.

#### Camera bridge
- Heavy duty, resistant to shock and vibration; service area and ladders on both sides.

#### Cameras
- 1 to 4 high-resolution digital line scan CCD cameras, 4096 pixels
- Resolution: 0.5 mm (optional 0.25 mm)
- Lens: Nikkon

#### Lighting
- Lighting system: heavy duty with light-intensity regulation.

### Software

#### System Platform
- Microsoft Windows NT
- Output Information generated: the glass sheet's gravity-center coordinates and orientation, dimensions, and defects (warning level and rejection level).
- Defect types inspected: breaks, cracks, edge defects, corners and ink marks.

#### Rejection Data
- Rejection of glass edge defects: +/-2 pixels or higher (user regulated).
- Rejection of glass dimensions (length, width, diagonal): +/- 4 pixels or higher (user regulated).
- Rejection of ink marking: Minimum mark dimensions 3.0 x 3.0 mm.