## Setting the quality standards





# **Quality Checker**

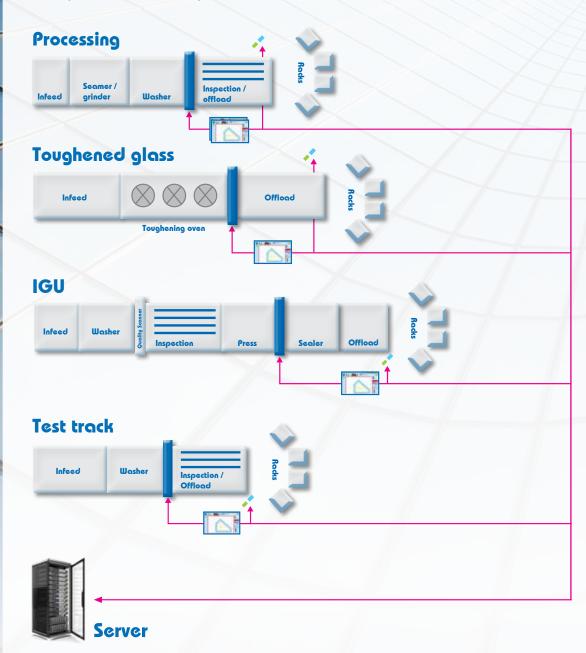
Reliable final quality control of IG units and safety glasses



# Reliable detection of glass defects and glass measurement in final quality control

#### Objectives for implementation:

- Minimising claim costs
- Securing of normed or negotiated quality level
- legal protection of warranty
- Complete documentation of all quality relevant control results
- Optimisation of internal processes



# Quality Checker Your tool for quality management

#### System:

- Defect detection in telecentric brightfield: Reliable detection of standard glass defects as per national
  guideline. Even small defects, rich in contrast and sharp in contour, like scratches, inclusions, bubbles,
  dirt, Butyl as well as significant finger prints and defects in dark coatings are detected reliably
- Optical inspection and measurement with a parallel projection through the patented telecentric illumination
- Available as a vertical or horizontal system
- Standard system sizes from 1.60 m to 3.30 m, optional customer specific smaller or larger sizes
- Compact system design requires only minimum space
- Easy to integrate in both new and existing production lines due to different industrial housing standards
- From stand-alone device up to a complete integration in line control or ERP software is possible
- For high production speeds, optional up to 80 m/min
- Inspection is executed without production delay
- Variety of options for an individual adaptation to your workflow



#### Applicable for:

- All units, safety and fire protection glasses made from standard float and float based glasses with and without LowE, solar control or other metallic functional coatings
- Glass thicknesses up to 60 mm, optional 100 mm
- For glass sizes up to 3.30 x 15 m, with option to increase

#### Software:

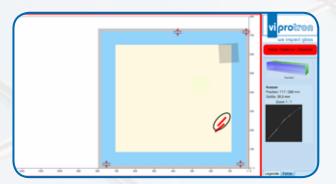
- Inspection and measurement of rectangular and shaped glass
- Well-arranged visualization of quality relevant defects only
- Quality zones: rebate, edge and main zone can be individually defined
- Intuitive definition of customer specific quality requirements concerning defect type and size, number and quality zone
- Automatic adaptation to variations in light and conveyer speed
- Pre-classification proven in practice to assure that not each small glass defect will be displayed or leads to a reject
- Display of results of different quality recipies after the scanning process:
   e.g.: "bad" according to Q-level "A" but "good" according to Q-level "B"

### **Quality Checker**

### Your tool for quality management

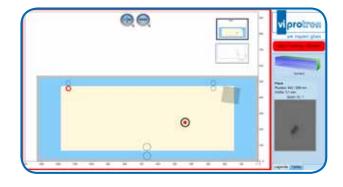
#### Application IGU:

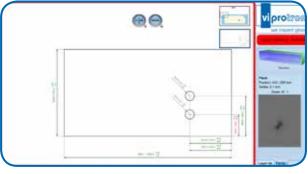
- Located after the press or sealer
- Detection of bubbles, scratches, inclusions, dirt
- Detection of butyl threads and contaminations in the visible area
- Deviation or parallelism of the spacers even in triple / quadruple units
- Straightness and rectangularity of the Georgian / muntin bars
- Optional control and documentation of the thickness and size of a unit and comparison of the used components with the ERP-system



#### Application safety glass:

- Detection of bubbles, scratches, inclusions, dirt, shells
- Size control (width and height)
- Control of holes (area and diameter)
- Control of area and geometrie of cutouts
- Optional control and documentation of the results and comparison with the dxf file from the ERP-system







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