Setting the quality standards

Quality Scanner 3D
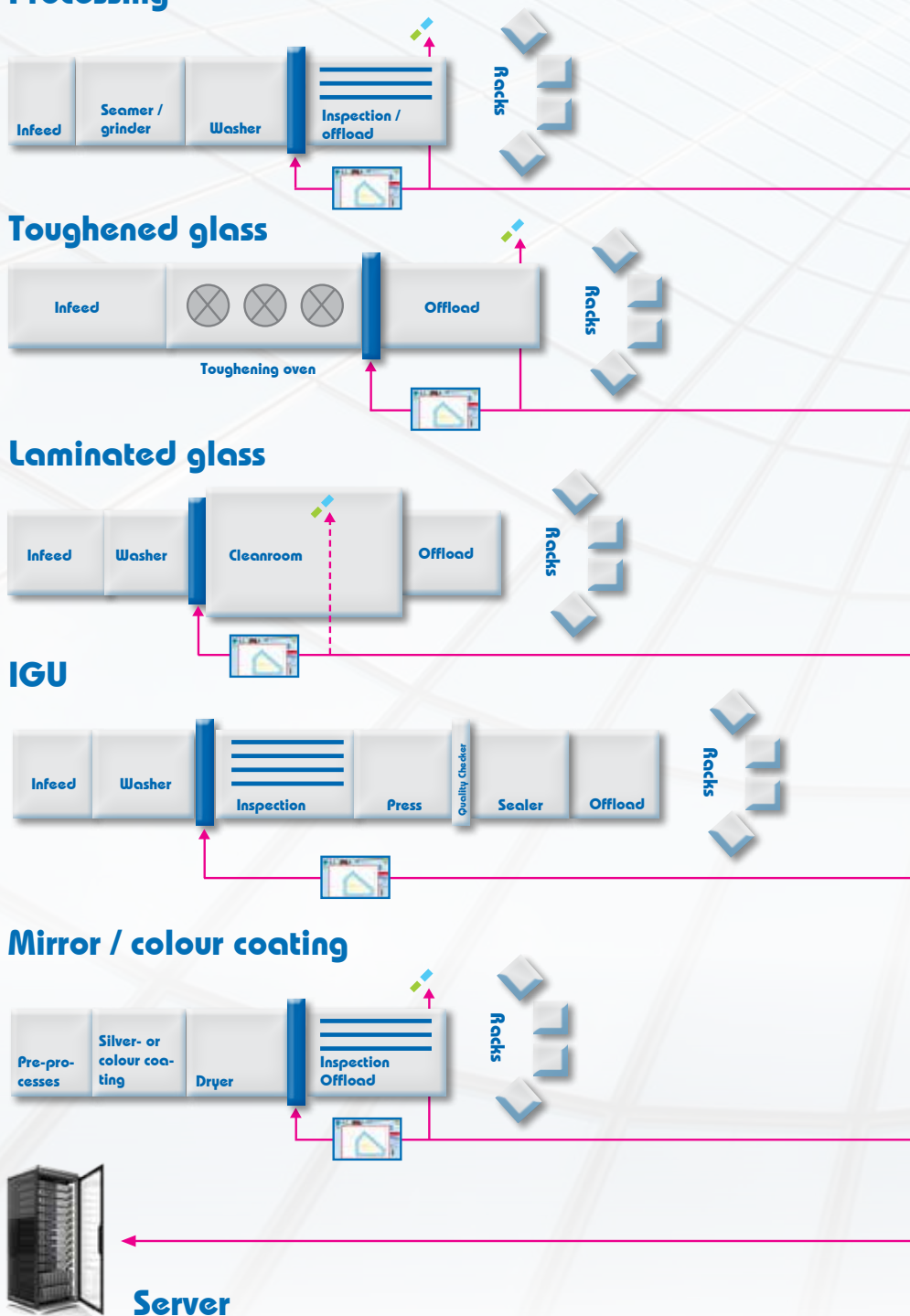
Inspection system for the highest demands in quality

viprotron

we inspect your glass

Reliable detection of defects during the process chain

Objectives for implementation:

- Defining own production quality level
- Saving glass by cleaning or reworking
- Analysing defect causes within the process
- Minimising claim rates

Processing

| Infeed | Seamer / grinder | Washer | Inspection / offload |

Racks

Toughened glass

| Infeed | Toughening oven | Offload |

Racks

Laminated glass

| Infeed | Washer | Cleanroom | Offload |

Racks

IGU

| Infeed | Washer | Inspection | Press | Quality Checker | Sealer | Offload |

Racks

Mirror / colour coating

| Pre-processes | Silver- or colour coating | Dryer | Inspection Offload |

Racks

Server

Quality Scanner 3D (3 detection channels)

Inspection of single glasses

For transparent and light diffusing glasses:

All standard floats and float based glasses, Low€ or solar control coated, toughened, laminated or fire protection glass as well as acid etched, partly sandblasted or printed glasses, laminated glass with matt foils, switchable privacy glazings, etc.

Flexible use and modular addition of defection channels:

- **Brightfield channel (ßT):** Inspection in direct view through the glass (for contrastful defects with a clear contour, like: bubbles, seeds, scratches, Butyl residues, significant finger prints, etc.)

- **Darkfield channel (DT):** Simulation of sunlight from the side (for defects low in contrast and contour, like: hair line scratches, dirt, smear, marks, etc.)

- **Reflection channel (ßR):** Inspection in direct reflection (to reliably detect coating defects, e.g. in Low€)

	ßT	DT	ßR
Quality Scanner 1D	⬤		
Quality Scanner 2D	⬤ +	⬤ or	⬤
Quality Scanner 3D	⬤ +	⬤ +	⬤

For non transparent glasses:

All mirrors or completely colour coated glasses, like: laquered and enamelled glasses for interior and furniture applications as well as spandrels / claddings, etc.

Flexible use and modular addition of defection channels:

- **Brightfield channel (ßT):** Inspection in direct view through the glass (for pinholes or light transmissive scratches, flakes, dirt inclusions, inhomogenities, etc.)

- **Brightfield channel (ßR):** Inspection in direct reflection (for contrastful defects with a clear contour, like: bubbles, seeds, scratches, etc.)

- **Darkfield channel (DR):** Simulation of sunlight from the side (for defects low in contrast and contour, like: hair line scratches, dirt, smear, marks, etc.)

	ßT	ßR	DR
Quality Scanner 1D	⬤		
Quality Scanner 2D	⬤ +	⬤ or	⬤
Quality Scanner 3D	⬤ +	⬤ +	⬤

Applicable for:

- Glass thicknesses up to 45 mm; optional up to 60 or 100 mm
- for glass sizes up to 3.30 x 15 m, with an option to increase

Quality Scanner 3D (3 detection channels)
Inspection of single glasses

System:

- 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 possible

- For high production speeds, optional up to 80 m/min

- Inspection is executed by all channels simultaneously without production delay

- Variety of options for an individual adaptation to your workflow

Software:

- Inspection of rectangular and shaped glasses

- Well-arranged visualization of quality relevant defects only

- Quality zones: rebate, edge and main zone can be individually defined
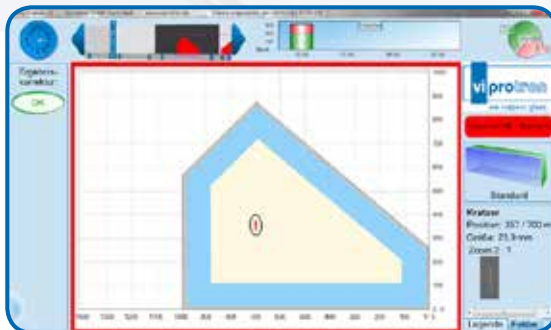
- Intuitive definition of customer specific quality requirements concerning defect type and size, number and quality zone

- 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"

- Documentation and comprehensive statistics

---

viprotron
we inspect your glass

Viprotron GmbH
Ostendstraße 17
64319 Pfungstadt
Germany

Telefon +49 6157 986 38 - 12
Telefax +49 6157 986 38 - 11
Email info@viprotron.com
Web www.viprotron.com