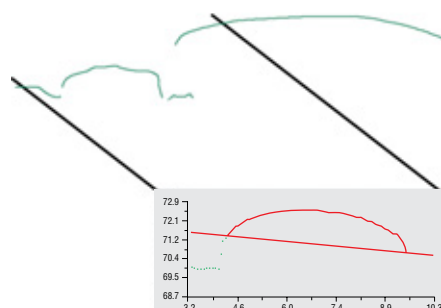## Inspection of adhesive beading on termination strip.

In the vehicle manufacturing process the fitting of strips onto glass represents a critical stage in the process which was previously difficult to inspect. Since the termination strip is glued to glass, the exact application of the special adhesive is of decisive importance. In car production the dimensional monitoring of height, width and position is required rather than just a check of presence/absence.

The robot which applies the adhesive to the strip also carries out the inspection in a second movement. In this respect the strip is moved under the sensor. The system scanCONTROL 2810 acquires the profile of the adhesive beading and calculates the characterizing parameters online directly in the controller. The system assesses the position of the adhesive beading relative to the strip, determines the width and height and provides tolerance infringements as control signals via digital outputs.

The tolerance limits for height, width and position of the adhesive beading are directly configured in the controller using the ICONNECT parameterization software included in the supplied items. The complete system therefore runs in the equipment independently of an external PC.
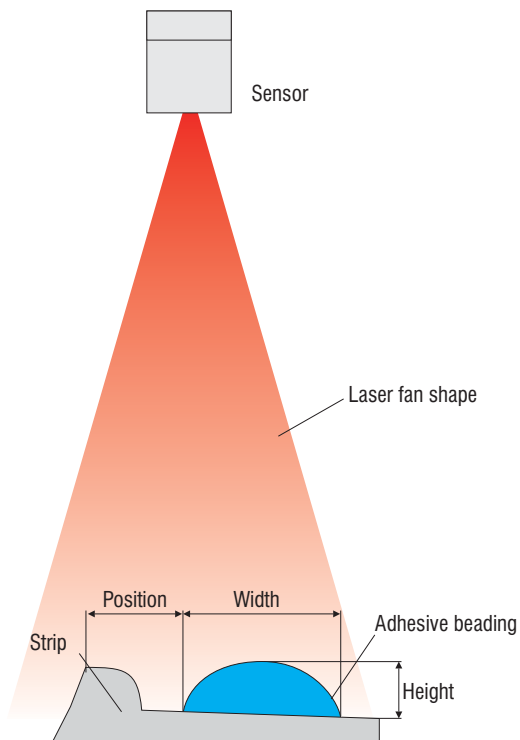
Reasons for the system selection
- High speed
- Measurement in height and width relative to the strip
- Dynamic tracking of the measurement range
- Analysis and assessment directly in the controller
- Rugged and economical system implementation
- Easy fitting and use

Screenshot of the evaluation

Application

Principle

Sensor

Laser fan shape

Position

Width

Strip

Adhesive beading

Height

Measurement system requirements

- Measurement range: 20 mm x 20 mm
- Accuracy: 0.1 mm
- Resolution: 0.01 mm
- Evaluation/measurement frequency: 100 Hz
- Laser class 2M
- Operating temperature 0°C to 50°C

Ambient conditions

- Temperature: 10 to 35 °C
- Medium: Air
- No dust or contamination

System setup for scanCONTROL

- scanCONTROL2810-25
- ICONNECT configuration software
- CE2800-8SB cable extension to 10 m