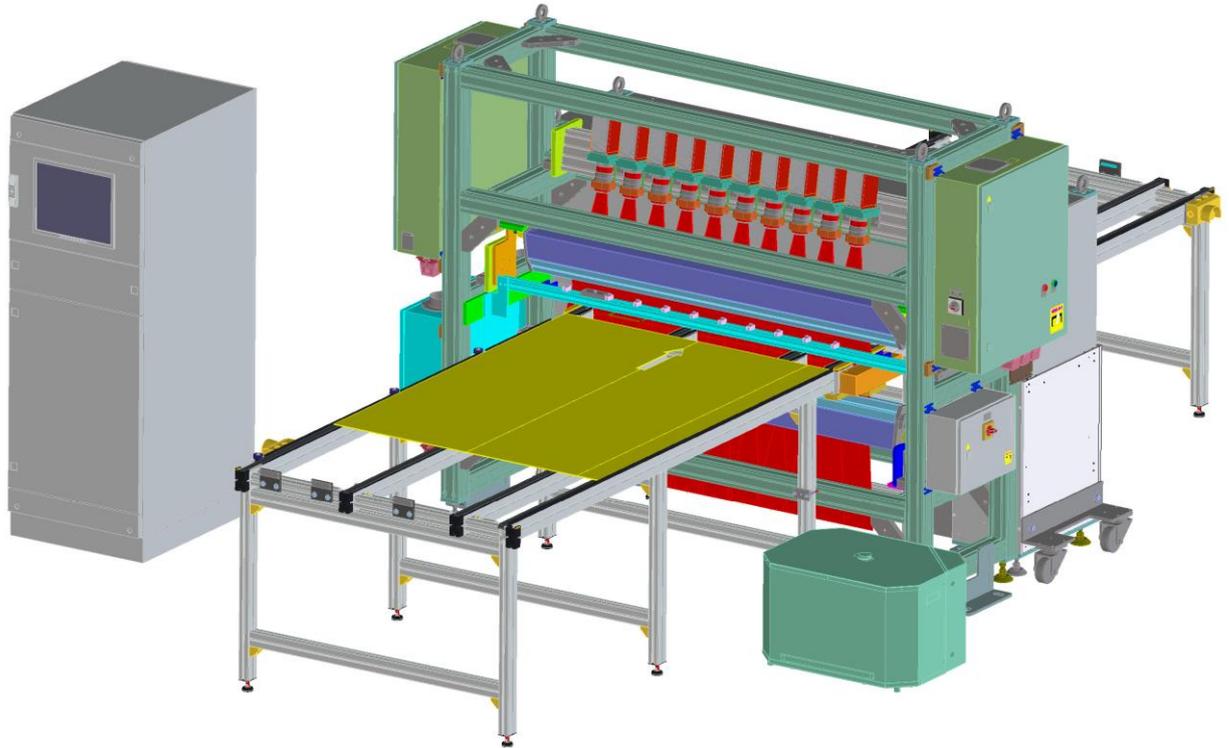


Solar SolarInspect, glass panel inspection system



Overview

The Solar *SolarInspect* glass panel inspection system is used as a glass sheet quality control unit. A glass sheet passes through a fault detector along the conveyor, which is supplied by the Dr. Schenk company as per a separate order. The inspection system scans material along the scanning lines for light reflection and/or light transmittance using an LED lighthouse and several CCD cameras. The measured signals are assessed in a PC-based electronic control system.

Technical data

Material	Glass sheets
Thickness	3-4 mm
Width under test	Depends on the system configuration
Infeed per minute	Depends on the system configuration
Illumination	BRIGHT_LINE LL-xx (diffused light) xx = illuminating length, cm
Illumination emitters	Bright_Line LL-XX
n LED modules x 36 LEDs	
Luxeon (each LED module consists of 36 LEDs).	
– LED rate: 1M	
– Emitting power: max. 420 mW (cw)	
– Wavelength: 627 nm	
– Beam divergence: 120° (perigon)	

Note:

The technical data is provided for the 627 nm wavelength (on default), the technical data for other wavelengths is available on request.

Emitting power control and monitoring
CAN-bus

Camera unit

CCD linear camera DC19:

- optical fiber
- pixels: 4.096
- pixel size: 10 μm x 10 μm
- pixel clock: 50 MHz
- cooling: air (thermal plates)

Camera lens:

- Model: *Nikon 105*
- focal distance: $f' = 105$ mm

Arrangement of optical elements

- Camera-lighthouse angle: up to 40° depending on the system configuration
- Camera-surface normal angle: up to -20° depending on the system configuration
- Lighthouse-surface normal angle: up to +20° depending on the system configuration

Technical data - Dimensions and weight

Mounting of optical elements

Depending on the system configuration (amount and length of the lighthouses, camera amount, arrangement)

Camera unit

Dimensions (H x W x D): 170 x 123 x 76 mm (incl. 50 mm camera lens and working area)

Electrical cabinet

Dimensions (H x W x D): 1800 x 600 x 800 mm

Split-type lamp housing

Dimensions (H x W x D): 760 x 600 x 210 mm

provide a gap between conveyors of min. 118 mm

