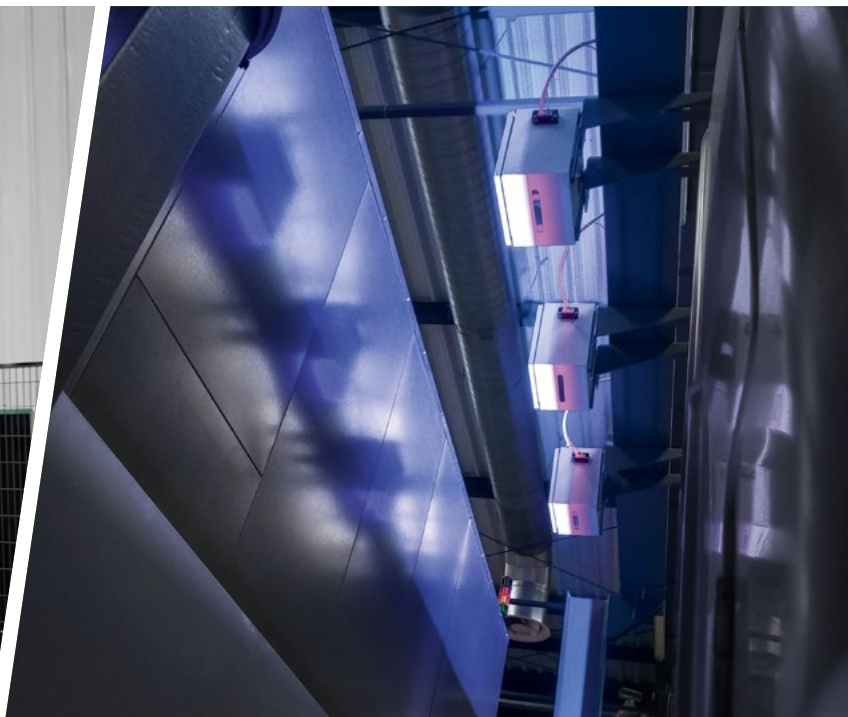
viprotron
we inspect your glass.

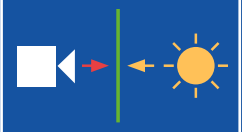
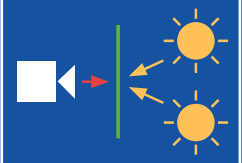
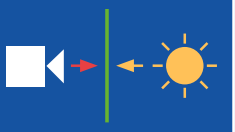
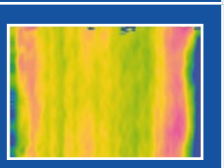
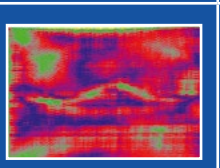
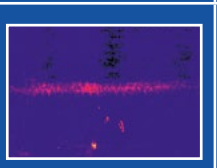
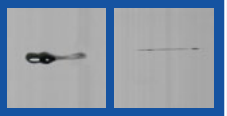
OPTICAL DISTORTION
INCLUDING ROLLERWAVE + EDGE KINK

Temper Scanner 5D

The Next-Generation Complete Tempering Measurement System with Patented True Edge™ Technology

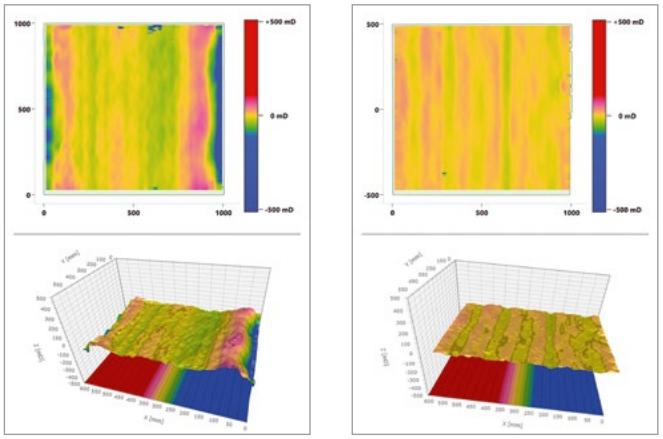


Temper Scanner 5D

Illuminations and camera channels	WORKING PRINCIPLE				
	Distortion channel	**Anisotropy channel**	**Haze channel**	**Brightfield channel transmission**	**Brightfield channel reflection**
	 Measurement of optical distortions	 Simulation of polarised sunlight	 Simulation of lateral sunlight	 Simulation of a bright diffuse sky	 Simulation of direct light reflection
Measurements/ Detection of:	 Optical distortions (all incl. rollerwave and edge kink)	 Anisotropies	 All types of white haze	 Scratches, flaws, bubbles, inclusions etc.	 Coating defects

OBJECTIVES

- Create process stability and a reliable quality standard with regard to optical distortion / edge kink, white haze, anisotropies and typical glass and coating defects
- System designed to allow for the optimization of the tempering process and ensure reliable results
- Store complete detailed record of each lite scanned for reference or audit purposes to avoid costly liability issues



Measurement results of strong (left) and weak (right) optical distortion and edge kink

SYSTEM

- Modular complete metrology system, as well as glass defect detection after furnace exit
- Novel measurement method based on innovative geometric metrology techniques with patented "True Edge™" technology for a control over the complete width and height of a sheet with focus on the edges
- Measurement of optical distortions (saddle, hammer, pocket, etc.) as well as rollerwaves and edge kink
- Display of distortion measurement results in Milli Diopter and Millimeter (Peak–Valley)
- Optional anisotropy channel, which meets the requirements under ASTM C1901 21 / DIN SPEC 18198 for the measurement of optical retardation of architectural glass
- Optional white haze channel can be added
- Optional brightfield channel to detect high contrasted defects with a precise contour
- Optional reflection channel to detect coating defects
- Different special and intuitive user interfaces for operators and supervisors
- Comprehensive documentation and statistics for every glass sheet
- Detailed analysis tools allow for furnace optimization

WE ARE SETTING THE STANDARDS

viprotron

Viprotron GmbH
Ostendstraße 17
64319 Pfungstadt – Germany

Fon: +49 6157 986 38 – 12
Fax: +49 6157 986 38 – 11

E-mail: sales@viprotron.de
Web: www.viprotron.com