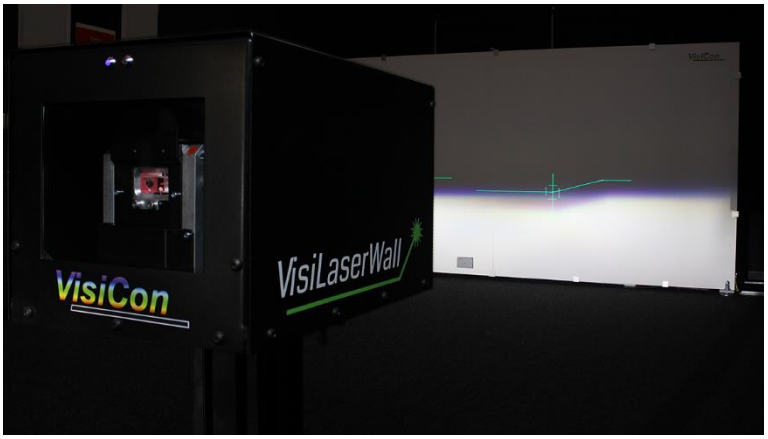
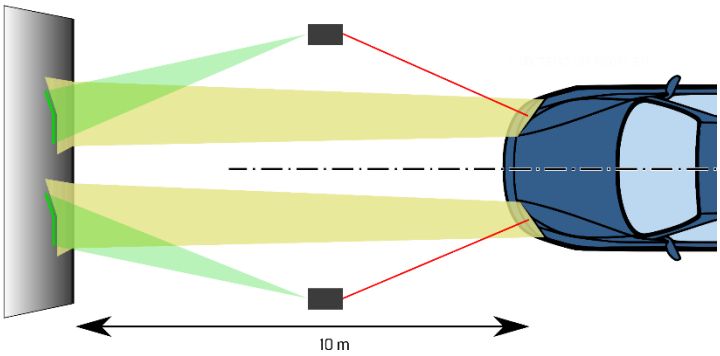
Description



Projection box and laser contour

The *Visi*LaserWall offers a new, revolutionary concept for simple and flexible auditing of headlight adjustment in production lines. The space-saving design consists of two *Visi*LaserWall boxes, each equipped with a green laser for projecting the cut-off line and a red laser for referencing the optical axis of the headlight to be inspected. The boxes are placed between the vehicle to be tested and a static or movable projection screen, while the vehicle is aligned on a centering device along the line of symmetry. The system is completed by a measurement PC and VisiCon's own *VisiLaserWall Control* inspection and evaluation software. The lasers can be conveniently controlled with a remote control if required. During the inspection process, the headlights can be evaluated purely visually by the auditor as well as measured in relation to their nominal position in height and side. The combination of the *Visi*LaserWall with a VisiCon digital camera (= ***Visi*LaserWall+**) also enables extensive objective measurement methods such as automatic photometric analysis of the headlights using our proven measurement and inspection algorithms as well as intensity measurement in accordance with UN Vehicle Regulation. An evaluation of the headlight images based on the evaluation criteria of the American IIHS measurement and documentation of the measurement results are also included.



Functional principle

Benefits for our customers

- Precise evaluation of the adjustment using clearly recognizable reference lines.
- Maximum flexibility regarding changing headlamp light contours (incl. editor for adjusting the cut-off line).
- Low maintenance costs and high safety standards as there are no moving parts.
- Reliable referencing to the optical axis of the headlight.
- Automatic storage of the evaluation of the editor.

Additional benefits of the *Visi*LaserWal+

- Automatic documentation of the measurement results as an image/video file.
- Objective measurement of the headlight image with proven software and algorithms.
- Intensity measurement in accordance with UN Vehicle Regulation (with golden sample or reference light source)
- Analysis of the headlight in reference to IIHS.

VisiCon Automatisierungstechnik GmbH
Gartestraße 2b
37130 Gleichen-Rittmarshausen, Germany

Tel.: +49 (0)5508/9862-0
E-Mail: info@visicon.eu
Web: www.visicon.eu

Technical Data

	Features, functions etc.
Centering	Via pneumatic roll pusher
Dimensions projection box (H x W x D)	232,5 mm x 262,5 mm x 360,5 mm
Weight projection box	Ca. 12 kg
	24 V DC
Laser class according to DIN EN 60825-1	Up to 2M
Wave length	Red laser: 650 nm (laser class 1) Green laser: 515 nm (laser class 2M)
Accuracy of the projection	Up to ±0,02 % (depending on the size of the projection area)
Basic functions of the *Visi*LaserWall	Reproducibly accurate projection of the nominal cut-off line corresponding with the headlight type (matrix, halogen, LED, ...) Editor for defining the cut-off line Test sequence for headlight measurement
Additional functions of the *Visi*LaserWall+	Measurement of the kink point and the cut-off line in the camera image Intensity test according to UN Vehicle Regulations Measurement of illumination and glare in reference to the IIHS Headlight Rating Protocol Dynamic laser control, e. g. for simulating vehicles Automatic storage of results, camera images and sequences
Camera (only *Visi*LaserWall+)	VisiCon DigiCam 4.2
Protection type (projection box) according to DIN EN 60529	IP20
Temperature range	5 °C-40 °C
Humidity	Up to 90 %, not condensing

VisiCon Automatisierungstechnik GmbH
Gartestraße 2b
37130 Gleichen-Rittmarshausen, Germany

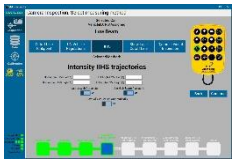
Tel.: +49 (0)5508/9862-0
E-Mail: info@visicon.eu
Web: www.visicon.eu

Components

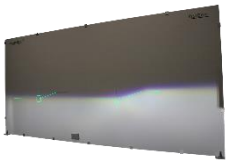
Projection boxes: Boxes with a green and a red laser, which are positioned between the projection screen and the vehicle. The red laser references the headlight to be tested, while the green laser projects the nominal contour for the headlight type.

VisiCon DigiCam 4.2 (only for *Visi*LaserWall+): Enables the measurement of photometric properties that are required for the additional functions of the VisiLaserWall+. For this purpose, the DigiCam can be mounted on an existing gantry, for example.

Centralizer: The centralizer is used to level and align the vehicle along the axis of symmetry. This defined and reproducible position of the vehicle is required for the correct measurement and adjustment of the driver assistance systems.



Software: Storage of nominal contours, offsets etc. for each headlight type. Sequence control or integration into the customer's own software environment on request.



Projection screen: White, matt reflective projection screen for displaying the laser contours and the headlight image.

Master gauge: For calibration of the projection boxes and camera.

***Visi*LaserCal + calibration panel** (optional): For simplified calibration of the projection boxes. The green lasers can be calibrated by projecting a dot matrix, while the red lasers can be calibrated in the same way using the markings on the calibration panel. For this purpose the *Visi*LaserCal and the calibration panel are mounted on the master gauge.

VisiCon Automatisierungstechnik GmbH
Gartestraße 2b
37130 Gleichen-Rittmarshausen, Germany
Tel.: +49 (0)5508/9862-0
E-Mail: info@visicon.eu
Web: www.visicon.eu