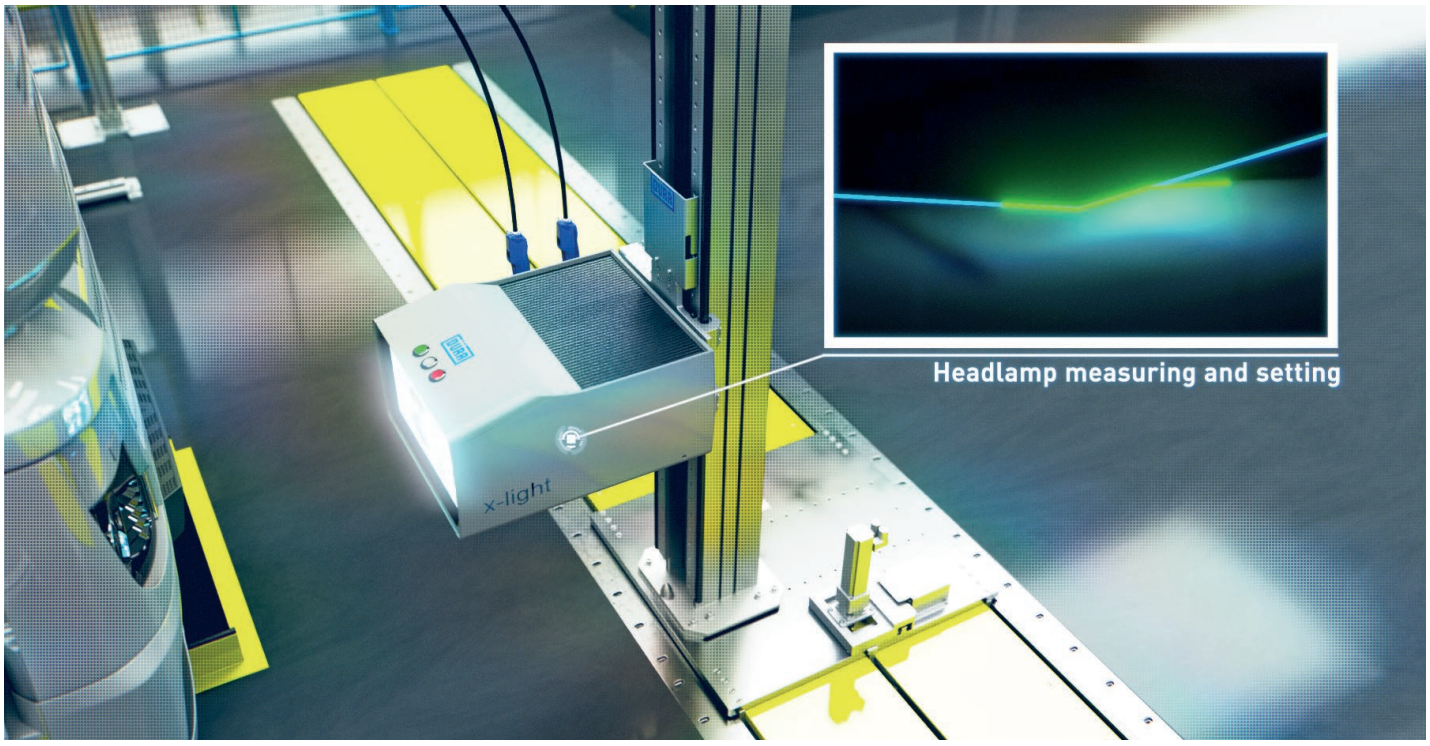


NEXT.assembly

x-light truck

The headlamp measuring and setting system for commercial vehicles

Commercial vehicle customers can also benefit from Dürr's extensive experience of installing many manual, semi-automatic and fully automatic headlamp setting systems at the end of production lines in automotive plants.

In addition to portal systems for vans and minibuses, Dürr also offers ground-guided systems, especially for trucks and buses with up to 10 t axle load.

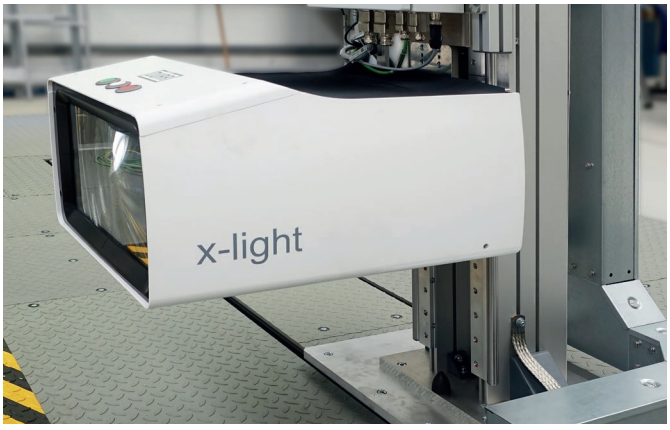
The low- and high-beams and the fog lamps are measured and adjusted using a light measuring system that can be manually or automatically positioned at a Z-column. The x-line automation software and proven measuring algorithms complement the system.

CUSTOMER BENEFITS

- Scalable test stand, tailored to the customer's requirements
- Operator-independent analysis and automated documentation of the measuring values
- Comprehensive self-diagnosis and fault detection
- Considering chassis and car body parameters determined in the wheel alignment stand
- Traceable calibration of the test stand as a whole with calibration gauge

Technical data

x-light truck



Light measuring device x-light

LIGHT MEASURING DEVICE X-LIGHT

- GigE camera technology with automated exposure control
- Storage of headlamp setting sequences for "off-line" analysis
- Extra wide Fresnel lens for measuring wide LED headlamp systems, special design for headlamp measurement
- Quick-change coupling for replacing the complete light measuring device
- Extra-large window below a rubberized storage surface
- Graved projection plate for check that can be folded down from the outside
- Nanoparticle-coated projection surface in the light measuring device for optimized analysis

SETTING TOOLS

The Smart Ergo Drive adjustment tools can be used for semi-automatic adjustment of the headlamps. This new generation of adjustment tools sets new standards in terms of ergonomics and weight.

The optionally available tools were developed by Dürr especially for headlamp and sensor adjustment according to the torque and speed characteristics. In addition to a rubberized grip area for perfect handling and LED lighting for illumination of the screw position, the tool is also equipped with a rotary encoder, which can be used to make highly precise adjustments with a preset rotary angle if required.

As a unique feature on the market, a built-in sensor can be used to check whether forces are exerted on the adjustment screw during the adjustment process.

This ensures the quality of the adjustment process.

During the entire adjustment process, the headlamp light image is analysed by the camera system integrated in the light measuring device. The semi-automatic setting tools are controlled via decentralised control units and automatically deactivated when reaching nominal value.

FLEXIBILITY

Thanks to their modular design and high flexibility, the adjustment stands offer the security of being able to meet future requirements without any problems. The powerful automation reduces production costs and ensures highly accurate, reproducible test and adjustment results at an ergonomic workstation.

The wheel geometry measuring system in the x-wheel truck d determines chassis and body parameters such as position of vehicle as well as symmetry and driving axis (non-contact measurement) and transmits these parameters to the headlamp measuring and setting system for further processing.

TECHNICAL DATA

x-light truck	
Measuring accuracy	< 0,1 % (3,43') Boundary condition: Light exit point on the headlamp is positioned in front of the centre of the lens
Max. clearance height for gantry system	2,2 m
Max. axle load for floor guide	10 t

Smart Ergo Drive	
Lightning	LED
Push-Down sensor	Process-safe storage of setting values
Position feedback	Digital encoder
Weight	590 g, without bits
Length	270 mm, without bits
Housing	Glass fibre reinforced plastic housing with rubberized grip area

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