

WERKLICHT Pro S

Scalable dynamic 3D laser projection





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WERKLICHT Pro S takes the dynamic laser projection directly to the production line. Take digital work instructions directly onto the moving component. **WERKLICHT Pro S** has been designed for multi-projector fixed mounting installations, in the production line or manufacturing cell.

The synchronous operation of a freely configurable number of projection units allows to focus on all relevant areas, and in conjunction with each other even very large work volumes can be covered efficiently. With the customary **WERKLICHT** dynamics, complex objects in series are fully processed within the shortest time.

The efficiently scalable solution is thus particularly suitable for special requirements with extremely short cycle times.

APPLICATIONS

WERKLICHT Pro S is the product solution for your production lines and cells in a wide range of application areas.

- Positioning tasks
- Assembly support
- Quality control
- Quick identification of individual characteristics
- Support at manual labor sites
- Completeness test





YOUR ENVIRONMENT AND WORK ITEM

The display of contents directly on the workpiece supersedes complex construction drawings, expensive templates or measuring equipment. Work processes and positioning tasks are handled efficiently. Furthermore, the innovative technology of the new system allows a very simple visual test that is performed stepwise in order to increase process safety.

Thanks to the intelligent sensor technology of the **WERKLICHT Pro S** projectors, your product can take almost any imaginable shape, provided you possess a 3D model. It allows the precise representation of any information on the workpiece surface. **WERKLICHT** projects easily the positions for bolts,

construction parts, test points, etc., all that you have measured so far or for which templates have been required. The larger and more complex your product, the higher the savings potential of **WERKLICHT Pro S**.

With WERKLICHT Pro S, EXTEND3D now offers a solution which is easily integrated in the existing production lines, systems or cells. As always, you can profit of course from the intelligent sensors that monitor continuously the position of the component in order to compensate the projections accordingly. Depending on the process implemented, WERKLICHT Pro S provides a precision of up to 0.1 mm per meter.





SAVE TIME BOOST QUALITY MAXIMIZE PROFIT

with WERKLICHT

Technical data	WERKLICHT Pro S
Dimensions (L x W x H)	380 x 200 x 180 mm
Weight	6,5 kg
IP protection class	IP64
Ambient temperature	10 °C − 35 °C
Sensors	Optical, 10 MPix
Marker based tracking	Dynamic referencing via coded 3D position targets
Markerless tracking	Dynamic referencing model-based via 3D data of the component
Working distance	1.3 - 3.0 m or 2.0 - 4.5 m (customization upon request)
Projection precision	Up to 0.1 mm/m (based on 3D reference points)
Projection area	60° / 78° (Reduced projection accuracy)
Laser Class	2M (can be used without safety glasses)
Laser type/color	Diode / 520 nm (green)
Laser output	< 5 mW (adaptation upon request)
Beam width in focus (1/e^2)	≤ 0.9 mm
Control unit	PC or Laptop
Power supply	24 V DC (power supply unit supplied optionally)
Sync- connection	SMA
Interface	Gigabit Ethernet, TCP/IP, HTTP
Connection cable	15 m
Data format	IGES, STEP, DWG, DXF, CATIA V4, V5,V6, JT Open, Parasolid, Pro/E, Rhino, Inventor, NX, Creo, SolidEdge, SolidWorks,

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