WIND-PRO

LASER PROJECTORS

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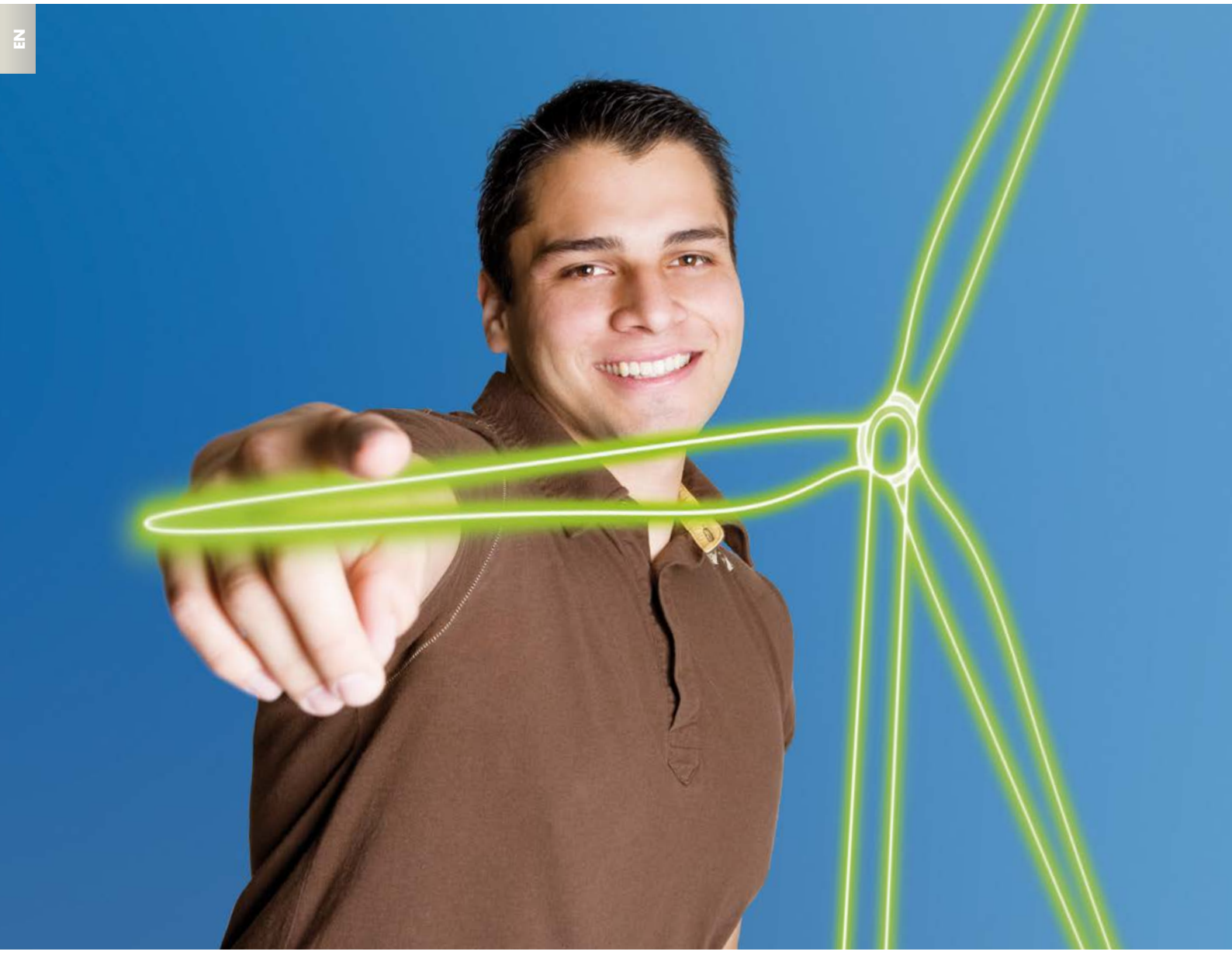
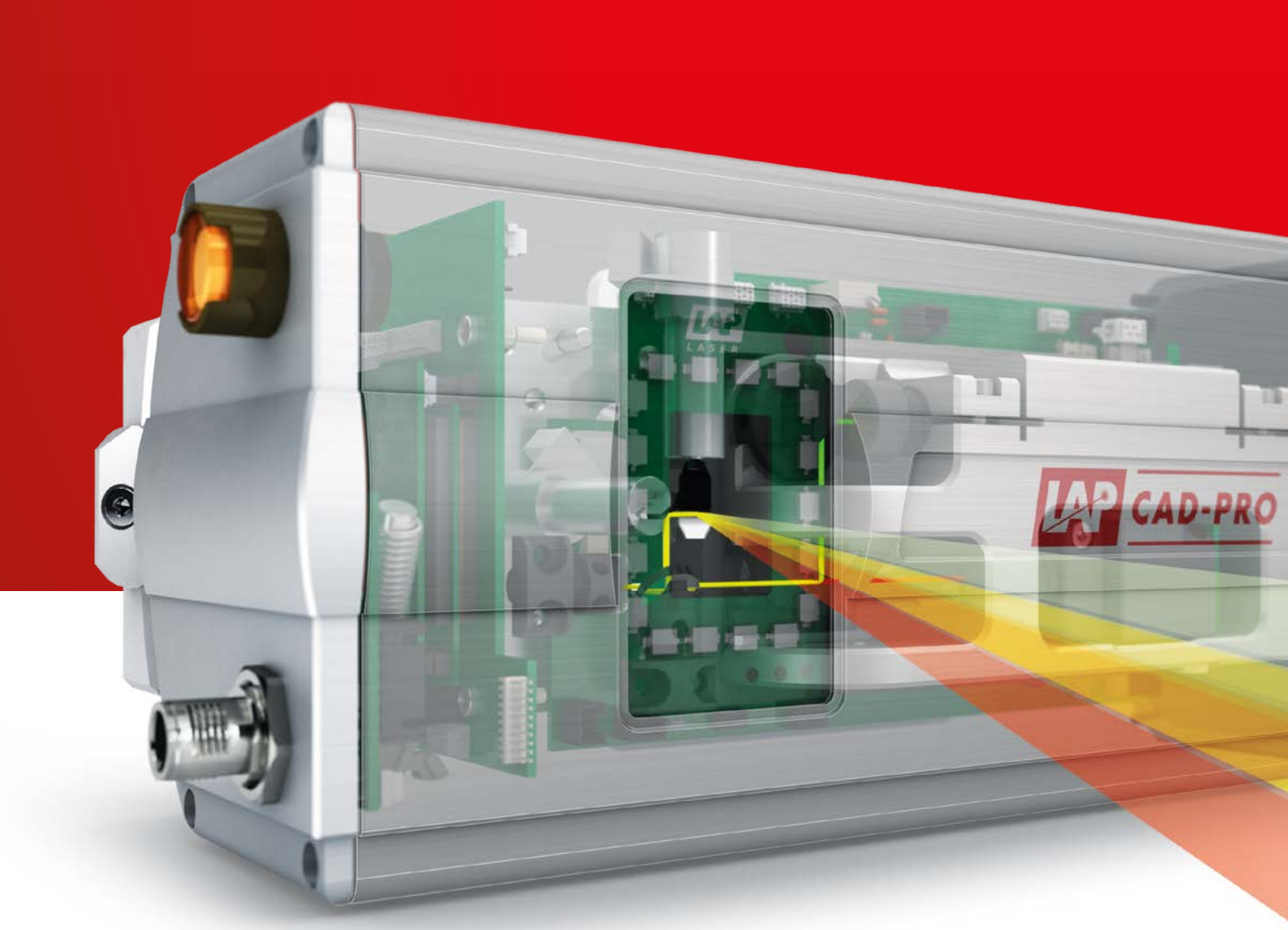


LASER PROJECTORS FOR INDUSTRY AND SMALL BUSINESSES.
MARKING, ALIGNING, POSITIONING, CHECKING.

LAP LASER



CAD-PRO AND CAD-PRO compact REAL SIZE PROJECTION OF CAD DATA

Wherever CAD data has to be projected true to scale on real surfaces, you may use LAP laser projection systems.

Choose from several models with different laser color and power to suit your application.

SMALL SIZE, LIGHT WEIGHT

LAP CAD-PRO compact is the smallest and lightest laser projector in the market. CAD-PRO are easy to handle, from installation to replacement and shipping.
The projector clicks into its tilting bracket and is fixed with one Allen screw. Only ONE cable has to be connected.

MULTICOLOR PROJECTION

LAP CAD-PRO is the only projector in the market that can simultaneously project in three colors. You may display lines in any shape: outlines, straight lines or curves, icons or text.

CAD-PRO

In a projection system, CAD-PRO laser projectors generate the visible lines on the surface of objects or tools. For providing data you may use the PRO-SOFT projection software or access via API.

The system is controlled and handled by a PC and remote controls. Installation is done according to customer's needs, including mechanical (ceiling supports, jigs ...) and electrical (turn-key cabinet, distribution boxes, cable ...) components.

ENHANCED SERVICE LIFE WITH DIODE LASER SOURCES

The new CAD-PRO LD models use green laser diodes that offer an operating lifetime of up to 30,000 hours – more than three times the service life of DPSS lasers.

DIGITAL CONTROL OF GALVANOMETERS

The actuators for the turning mirrors in CAD-PRO and CAD-PRO compact laser projectors are controlled digitally. This eliminates typical errors of analog systems like thermal drift or susceptibility to EMP. Using the parameters of the digital control, the projectors may be optimized for their individual task.

SYSTEMS FOR THE PRODUCTION OF WIND TURBINE ROTOR BLADES

The attraction of renewable energies is still growing, and for profitable production the size of wind power plants has to increase – and so do the rotor blades. Use of glass fibre during the initial production process is being increasingly replaced by precisely calculated composite construction. This process needs more precision to be cost-effective. The more complex the structures get, the greater and more rapid the return on investment in LAP laser projection systems will be.

SCALABILITY

One system may handle up to 16 CAD-PRO projectors. Depending on PRO-SOFT software version, they can be used single, connected or in independent groups. Projection areas may be adjacent or partly or completely overlapping. Complex projection tasks are automatically balanced between projectors covering the same area.

FLEXIBILITY

Depending on objective, accuracy requirements, projection distance and visibility of laser color on your material you may select an appropriate CAD-PRO model.

EASY HANDLING

You can operate CAD-PRO either by PC and remote control or by tablet PC. For rough working environments (humidity, dirt ...) there is a „heavy duty" remote control.

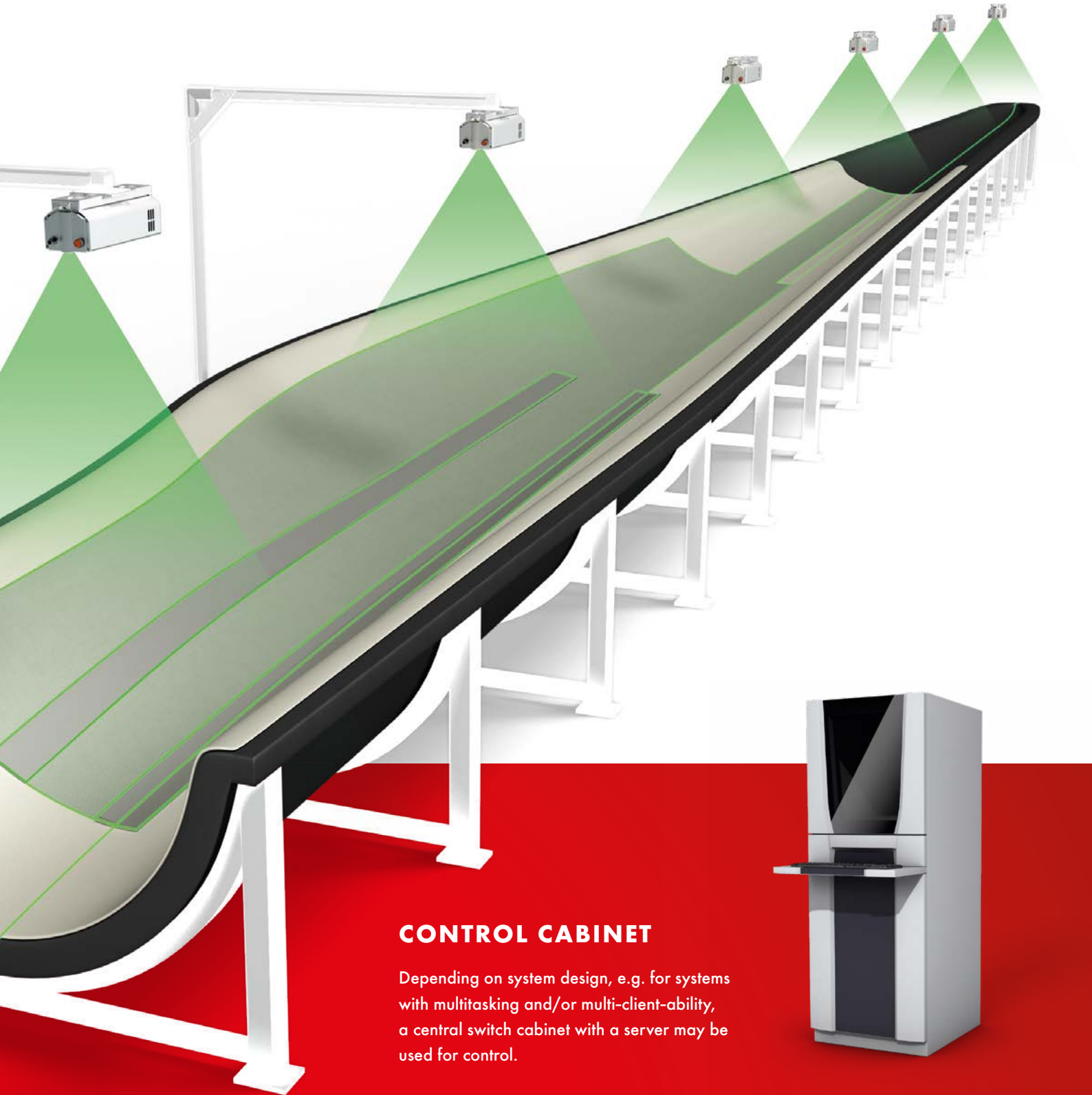
MOBILITY

LAP CAD-PRO may be provided on a movable cart with batteries to allow for independent operation.

SYSTEM DESIGN AND OPERATION

You can find the specific description of features and operation in the PRO-SOFT software brochure and in the description of applications or industry solutions.

LAP LASER



CONTROL CABINET

Depending on system design, e.g. for systems with multitasking and/or multi-client-ability, a central switch cabinet with a server may be used for control.

SPECIFICATIONS
CAD-PRO AND CAD-PRO compact

MODEL	PRECISION */**	LASERTYPE, WAVELENGTH	PROJECTION COLORS	LASER POWER	LASER CLASS
CAD-PRO LD	± 0.2 mm/m	red: diode, 640 nm	●	10 mW Power	3B
		green: diode, 520 nm	●	10 mW Power	3B
				30 mW Power Plus	3B
		color: red diode + green diode	● ● ●	10 mW Power	3B
CAD-PRO compact	± 0,2 mm/m	green: diode, 520 nm	●	5 mW	2M

	CAD-PRO	CAD-PRO compact
Repeatability*/**	± 0.025 mm/m	
Beam width*	0.5 mm FWHM	
Max. projection angle	80° × 80°	
Enclosure rating	IP 54	IP65 and IP67
Ambient conditions	0 ... 40 °C, 35 ... 85 % rel. humidity, non-condensing	
Power supply	24 VDC, 1.5 ... 3 A	
Connection	RS 485, Ethernet by interface	
Dimensions (L xWx H)	300 × 110 × 110 mm	240 × 110 ×110 mm
Weight	approx. 3 kg	approx. 2.8 kg

* within ± 30° projection area in up to 4 m distance, beam impact perpendicular to surface, optimal focusing and calibration, > 30 minutes warm-up time

** mm per m distance projector to surface

CE

ACCESSORIES CAD-PRO

CALIBRATION PLATE

Customized, precisely measured calibration plate with targets and certificate for quality monitoring (optional)

TARGETS

High precision reflectors for calibration of the projection system, number depends on application, different shapes and pin diameters, repair kit (optional)

TILTING BRACKET

with spring-loaded catch and locking screw (standard)

REMOTE CONTROL

Infrared remote control (standard), „heavy duty“ RC optional

CONTROL CABINET

Optional. Alternative: connection to customer PC via switchboxes and interface

CAD-PRO AND CAD-PRO compact, HIGH-TECH QUALITY BY LAP

For more than 35 years, LAP has been developing, manufacturing and distributing laser measurement systems, line lasers and laser template projectors for industrial and medical applications. LAP products are high-precision devices *Made in Germany*.

Using LAP laser systems, our customers improve performance and increase the quality of their products as well as the effectiveness of their processes.

As a result of continuous product innovation, LAP has become a world leader in lasers for projection and measurement. LAP products are setting the standards in a wide range of markets from manufacturing to heavy industrial environments and medical applications.

Environmental protection is important to us. We use solar panels, green electricity and roofs planted with grass. Our production is planned by standards of sustainability.

Quality has always been part of our commitment. We are content if you are. We know your high demands. To meet your requirements, the quality management of LAP is certified by DIN EN ISO 9001:2008 for industrial products and by EN ISO 13485:2007 for medical engineering products.

www.lap-laser.com/WIND

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ISO 9001
ISO 13485

made in Germany

CE

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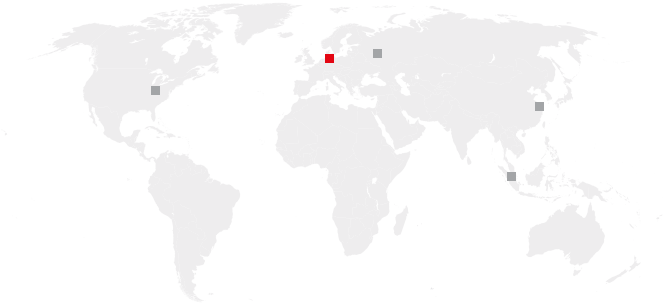

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