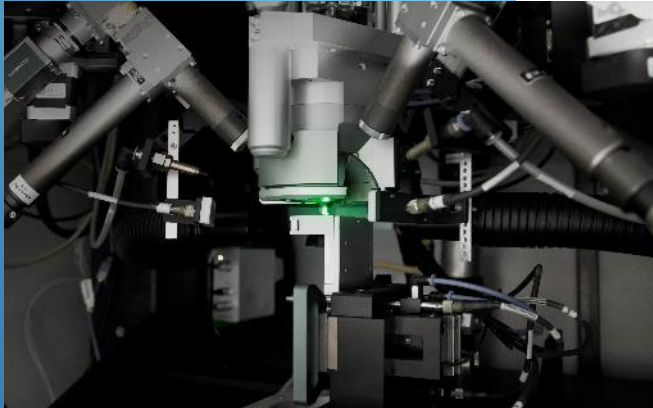


Laser for Machine Vision

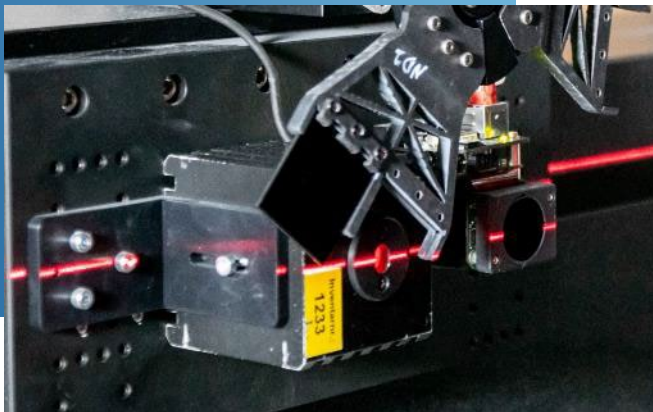
Laser for Positioning

Laser Projectors

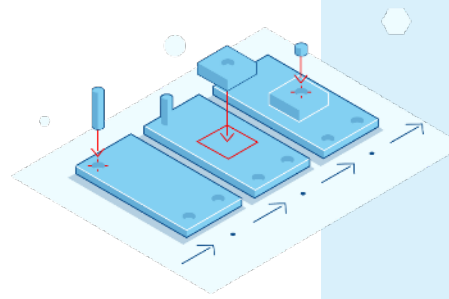
Z-LASER



Laser assembly

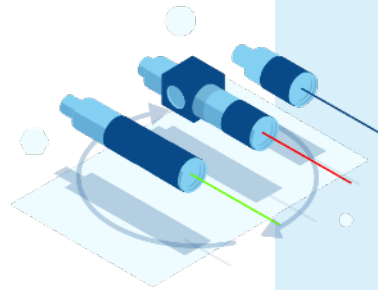


Laser line measuring station



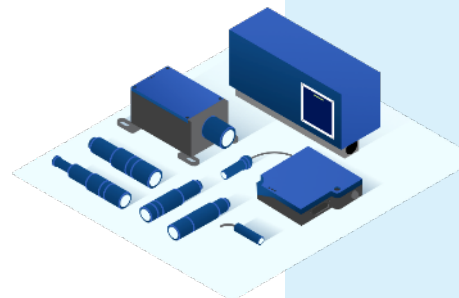
Specialized knowledge since 1985

Since the foundation of Z-LASER in 1985, the company stands like no other for innovation, quality and reliability in the industry.



Dedicated to customized solutions

We always think solutions from the customer's approach to ensure ideal integration into an existing system and to comply with the demands of individual requirements.



Extensive range of modular products

To ensure that we can optimally fulfill the requirements of customers from various industries, we have an extensive portfolio of configurable laser modules and projectors.

About Z-LASER

Z-LASER has been developing and producing innovative, high-quality laser solutions for over 35 years.

By providing visual guidance and orientation for people as well as machines, our lasers contribute to optimizing your production processes, ensuring quality, and to using resources carefully.



Business Excellence



Production



R & D

More than 120
employees

25% of the
company represents
the R&D department

Headquarter and
manufacturing in
Freiburg / Germany

Three international
sales offices in
Italy, USA, Canada

Over 60 distribution
partnerships
worldwide





Part of Exaktera

Focus on building a global leader in the highly fragmented OEM components market with a focus on "light-based" technologies and other, performance-enhancing OEM components and subsystems.

Establishment of group of companies for high-precision OEM systems

Lasers, illumination solutions & specialized photonic subsystems

Target markets:

Machine Vision, Metrology, Composites, Robotics, Analytical & Measurement, Medical, Material Diagnosis, Advanced Industrial, Scientific Research, Life Science, Micromachining



Laser for Positioning

Where precision in alignment and positioning is required.

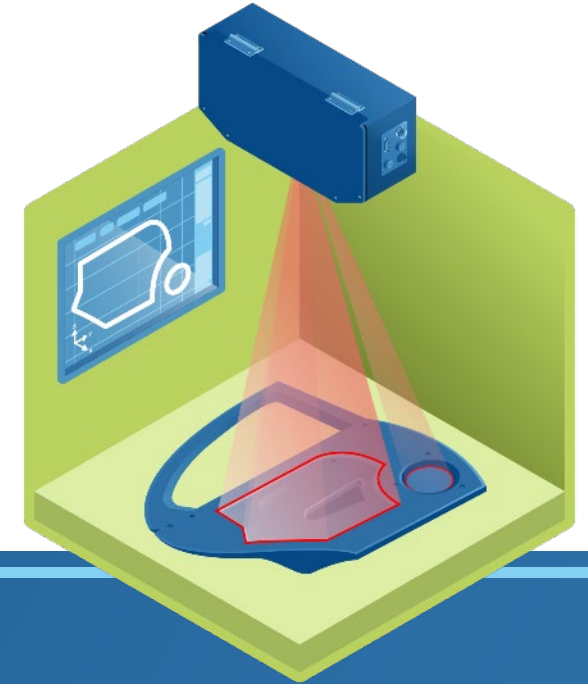
- optimize your work result
- save material & time
- various accessories available



Laser for Machine Vision

Automated optical quality control with structured laser light.

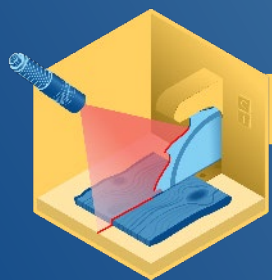
- laser illumination for 3D quality control
- combine laser and smart camera
- serial communication for better control



Laser Projectors

Mechanical templates are being replaced by laser projections.

- worker guidance for assembly processes
- optical guidance systems
- increase speed of work



Laser for Positioning

Positioning lasers are always used where precision in alignment is required. Positioning lasers thus save material and time and help to achieve the optimum work result!



Line laser



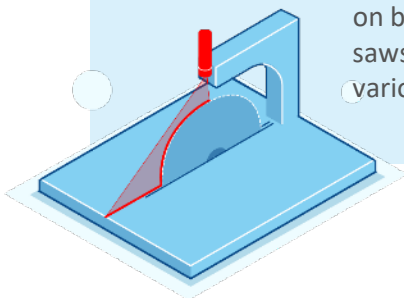
Cross laser



Line laser for positioning

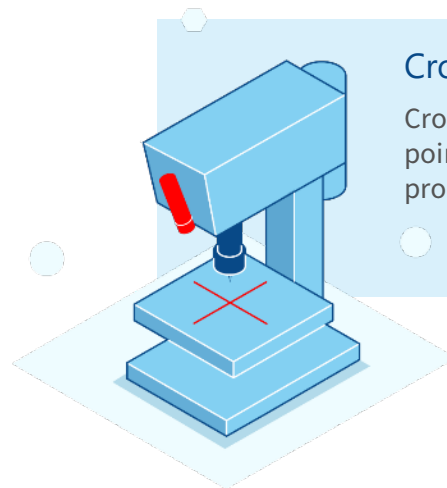
Line lasers

Line lasers are often used on band saws, cross-cut saws, press brakes and various cutting machines.



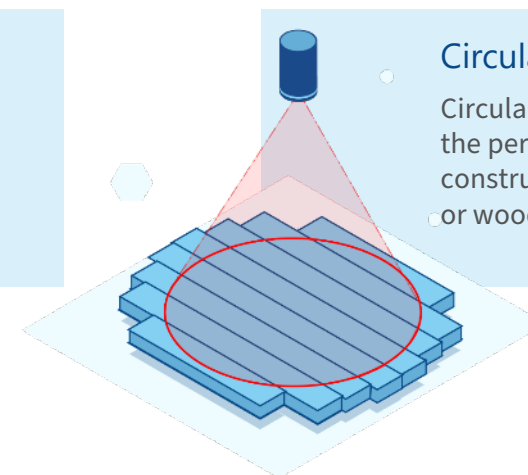
Cross lasers

Cross lasers reliably mark points for drilling or other processing steps.



Circular lasers

Circular lasers have proven to be the perfect solution for the construction of large cable drums or wooden barrel bottoms.



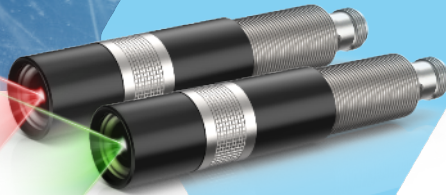


Laser for Positioning

ZM18

The perfect allrounder

The products of the ZM18 series sets the standard for modern laser modules for industrial use.



Easy installation



Output power up to 120 mW



IP 67

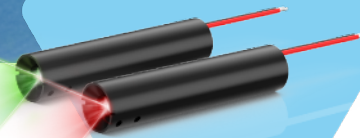


Shock Resistant

ZD

Universal mini laser module

The ZD laser module can optionally display a line, point, or cross projection.



Easy installation



Output power up to 40 mW



IP 40

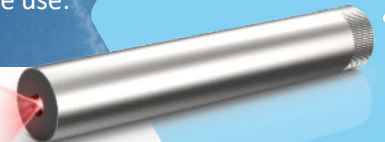


Compact size

ZAT

Autonomous and flexible

The battery-powered ZAT has been successfully used in the Belt Aligner Set for years and is particularly suitable for mobile use.



Easy installation



Output power up to 5 mW



IP 40



With AA or rechargeable battery

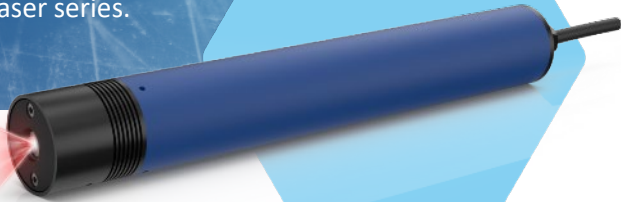


Laser for Positioning

ZPT-F

The world's unique positioning laser with Peltier cooling

The ZPT-F with its integrated heavy duty power supply is one of our long time and well known laser series.



Easy installation



Output power up to 80 mW



IP 65

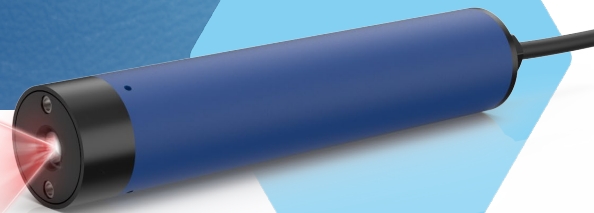


Focusable

ZR

Robust entry-level model for rough working conditions

This line laser is an entry-level model for use in harsh environments.



Easy installation



Output power up to 40 mW



IP 65

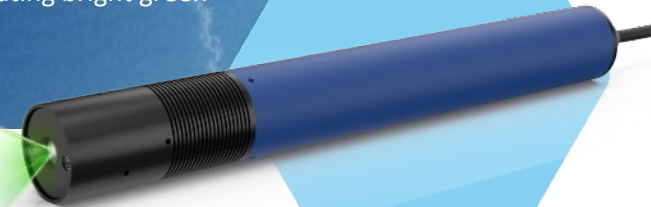


Shock Resistant

ZRG-F

It doesn't get any brighter!

It remains unbeaten as a line laser when it comes to generating bright green lines.



Easy installation



Output power up to 40 mW



IP 65



Focusable

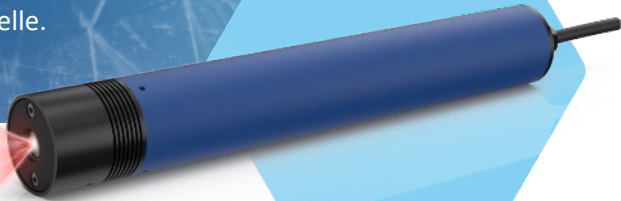


Positionierlaser

ZPT-F

Der weltweit einzige
Positionierlaser mit Peltierkühlung

Er ist der einzige Laser
seiner Art mit einer
temperaturstabilisierten
Laserquelle.



Einfache Installation



Ausgangsleistung bis zu 80 mW



IP 65

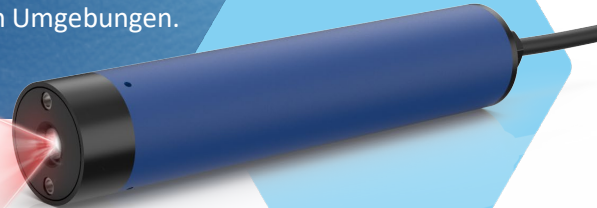


Fokussierbar

ZRG-F

Robustes Einstiegsmodell für
raue Arbeitsumgebungen

Mit seinem integrierten
heavy-duty-Netzteil
beginnt seine Arbeit in
staubigen Umgebungen.



Einfache Installation



Ausgangsleistung bis zu 40 mW



IP 65

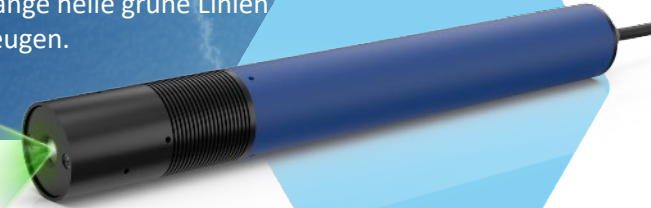


Stoßfest

ZRG-F

Heller wird's nicht!

Als Linienlaser ist er bislang
unschlagbar, wenn es darum
geht, lange helle grüne Linien
zu erzeugen.



Einfache Installation



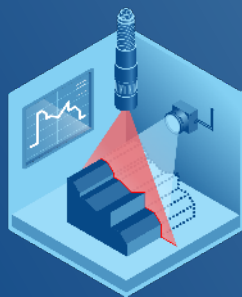
Ausgangsleistung bis zu 40 mW



IP 67

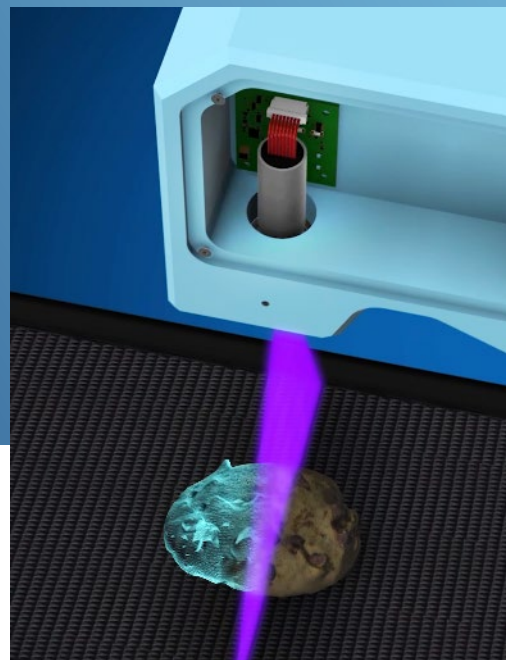


Fokussierbar

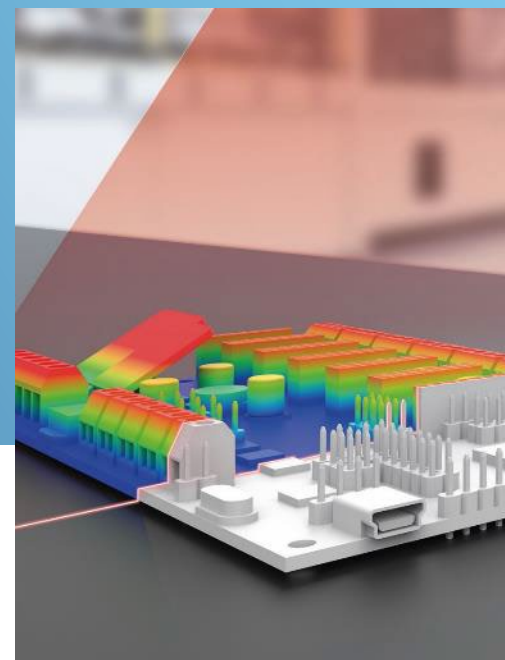


Laser for Machine Vision

The combination of laser illumination and smart cameras offers interesting possibilities for the automation of optical quality control.



Embedded vision



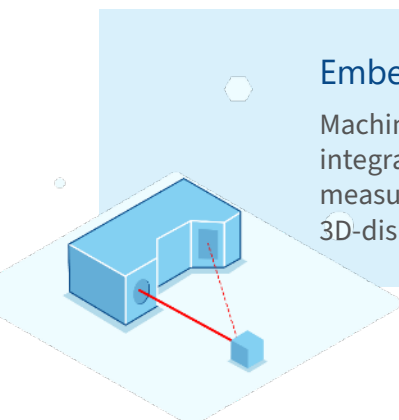
PCB inspection



Tough ambient conditions

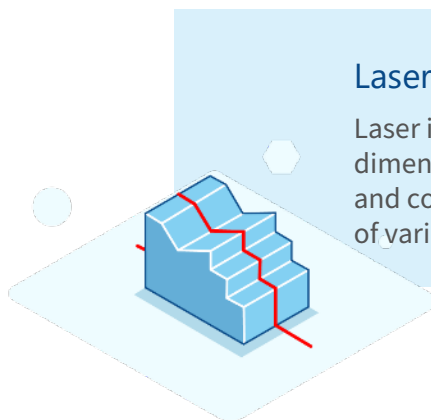
Embedded vision

Machine vision lasers are a deeply integrated component in optical measurement systems like 3D-displacement sensors.



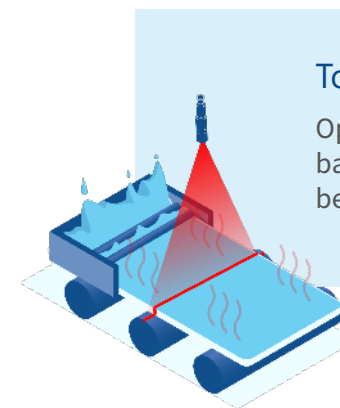
Laser triangulation

Laser illumination used for dimensional check of components and control presence and position of various parts.



Tough ambient conditions

Optical measurement systems based on laser triangulation can be used for hot steel applications.





Laser for Machine Vision

ZX20

The high-precision laser module

The structured light laser ZX20 sets new standards for machine vision illumination due to its automated production.



Increase of work quality



Output power up to 200 mW



IP 67

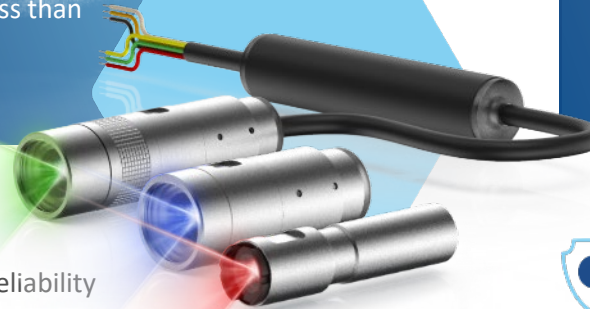


Boresight accuracy < 0.8 mrad

ZXS

The flexible laser module

The ZXS-laser reaches an unrivalled accuracy with its boresight error of less than 0.8 mrad.



High Process Reliability



Output power up to 200 mW



IP 67

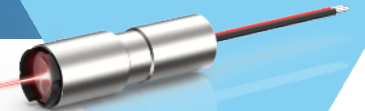


Boresight accuracy < 0.8 mrad

ZX10

Small size, high performance

The ZX-laser series offers diverse, application specific customization possibilities.



High Process Reliability



Output power up to 100 mW



IP 50 o. IP 67



Boresight accuracy < 0.8 mrad

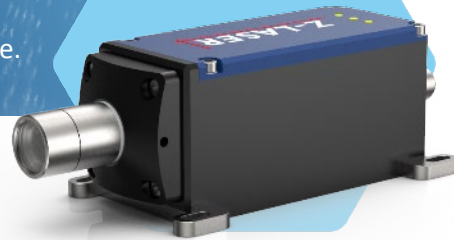


Laser for Machine Vision

ZQ1

Compact high-performance laser

Wherever high output power, excellent beam characteristics and industrial-grade design are required, the ZQ1 series is the right choice.



High Process Reliability



Output power up to 2.5 W



IP 67

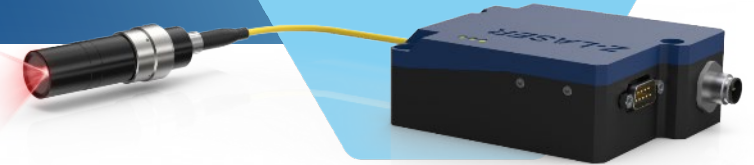


Active cooling integrated

Z-Fiber

High-end laser with active cooling

The structured light fiber laser series Z-FIBER has been developed for the most demanding applications in the market.



High Process Reliability



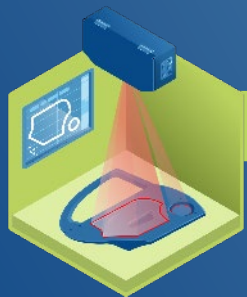
Output power up to 35 mW



IP 50

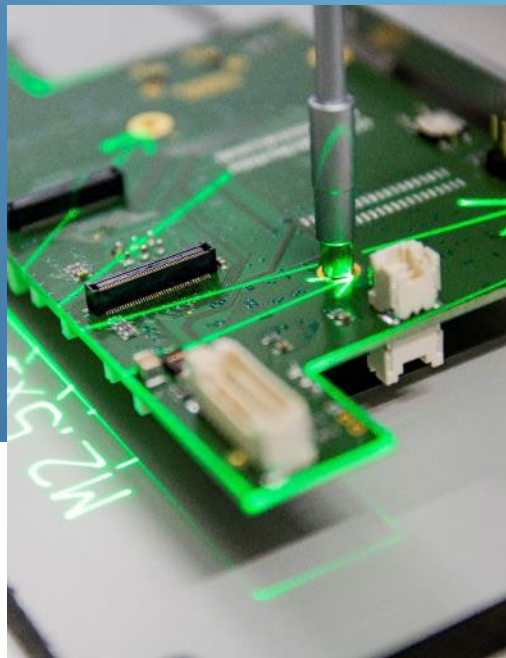


Active cooling integrated

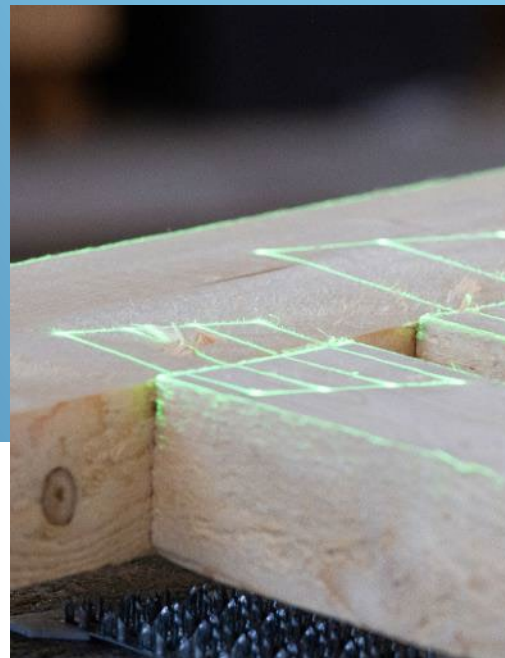


Laser Projectors

Industrial laser projectors serve as optical guidance systems. Mechanical templates are being replaced by laser projections.



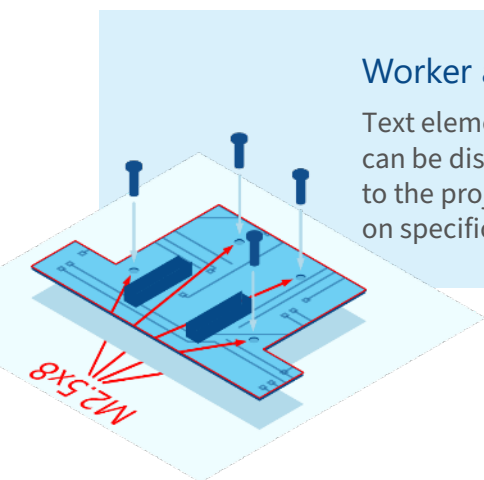
Worker assistance



Truss production

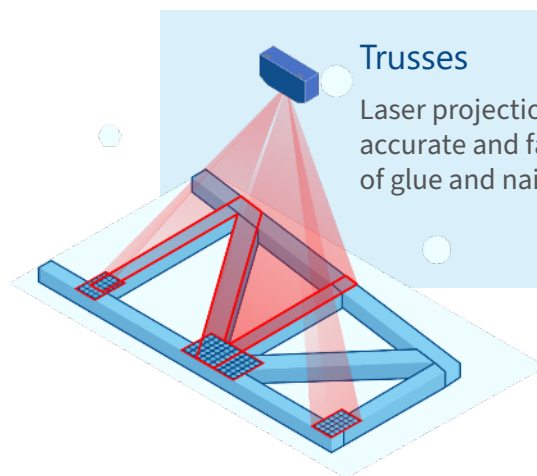


Rotor blades production



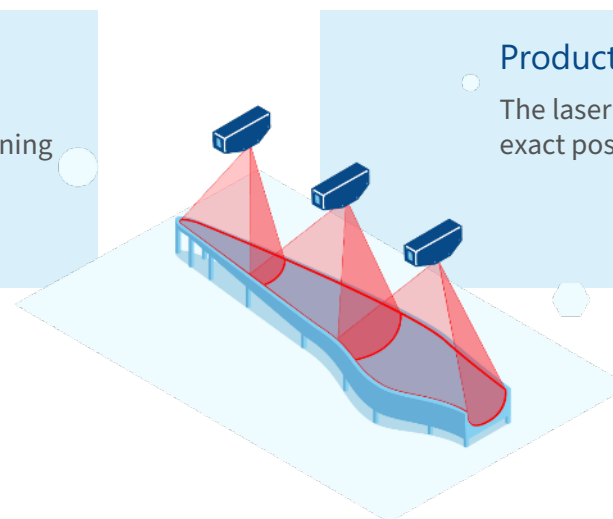
Worker assistance

Text elements and numbers can be displayed in addition to the projection of contours on specific positions.



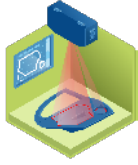
Trusses

Laser projections used for accurate and faster positioning of glue and nail binders.



Production of rotor blades

The laser projector indicates the exact positions of the fiber mats.

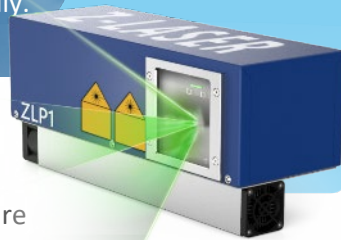


Laser Projectors

ZLP1

Compact, powerful,
and easy to use

ZLP1 is a cost effective entry
to laser projection. It is the
smallest laser projector in
the Z-LASER ZLP family.



Intuitive software



Optical angle up to 60°



Optimized for 2D and 3D projection



Integration into multi-projector systems



Improved thermal management



IP54

ZLP2

High-performance laser
projector with Z-FIBER source

ZLP2 comes with an
unmatched beam quality
due to the use of a fiber-
coupled laser source.



Intuitive software



Optical angle up to 80°



Optimized for 2D and 3D projection



Integration into multi-projector systems



Improved thermal management



IP65

ZLP-Suite

As a graphical user interface, **ZLP-Manager** ① offers an easy and reliable way to access and begin using the control system of laser projectors. The ZLP-Service can also be controlled directly via an extensive programming interface (**API** ②).

1

ZLP-Manager

Graphical user interface (GUI) for controlling laser projectors without programming

Teachen

Live projection editor for contours, symbols and text

User management

Various rights for different user groups

Selection Clipping

Projection control via remote control for certain areas

GUI

Visual instructions for workflows



2

SDK & API

Direct integration into your existing software environment

Familiar language

Program in your preferred language (such as Python, C++, C#, etc.)

Full API scope

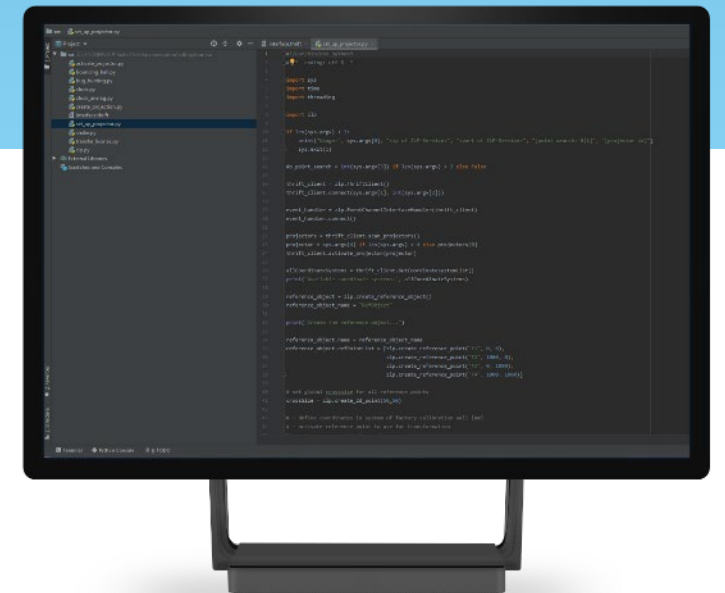
The API scope is on a par with our ZLP-Manager

Perfect integration

Comprehensive API for integration into existing software environments

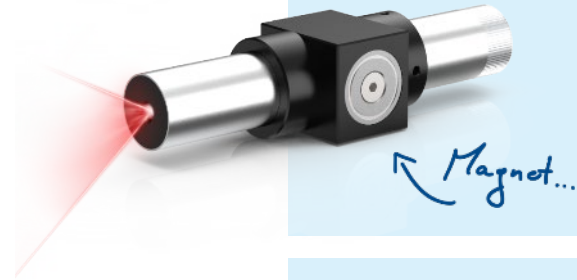
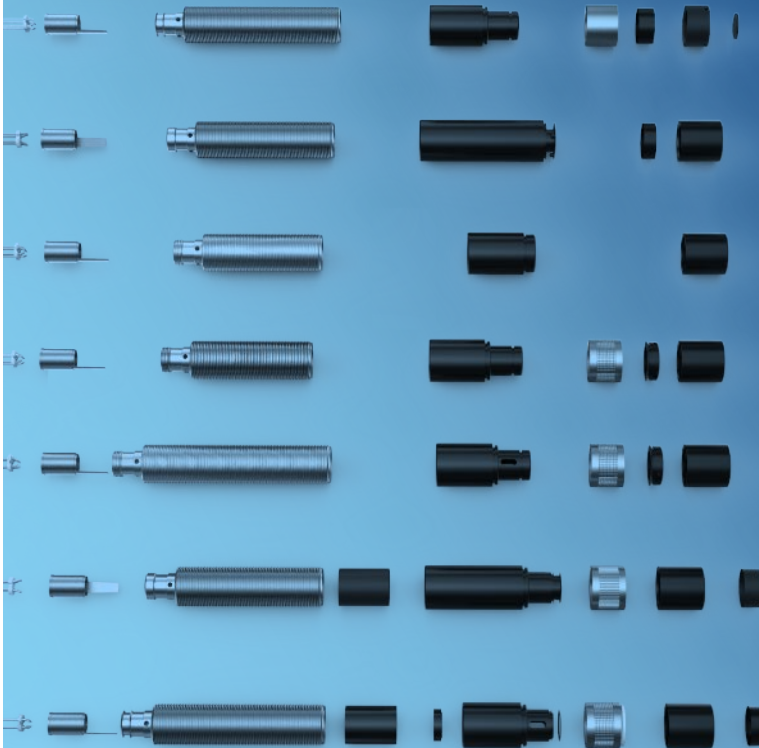
System-independent

Work with your preferred operating system - whether Windows 10 or Linux (Debian 8, Raspbian 8)



OEM Solutions

Z-LASER is the right partner for the development of your individual laser solutions. You will receive exactly the product that makes your application possible or reduces the total costs of your system.



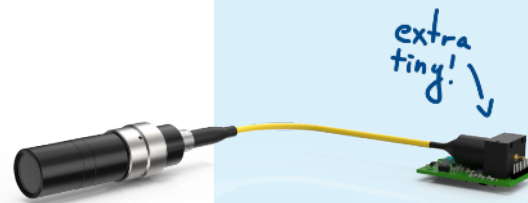
The result will be impressive

Describe your application to us without obligation and you will noticeably benefit from the 35 years of experience of our company and the expertise of our team of experts.



The OEM lasers are unique in their application

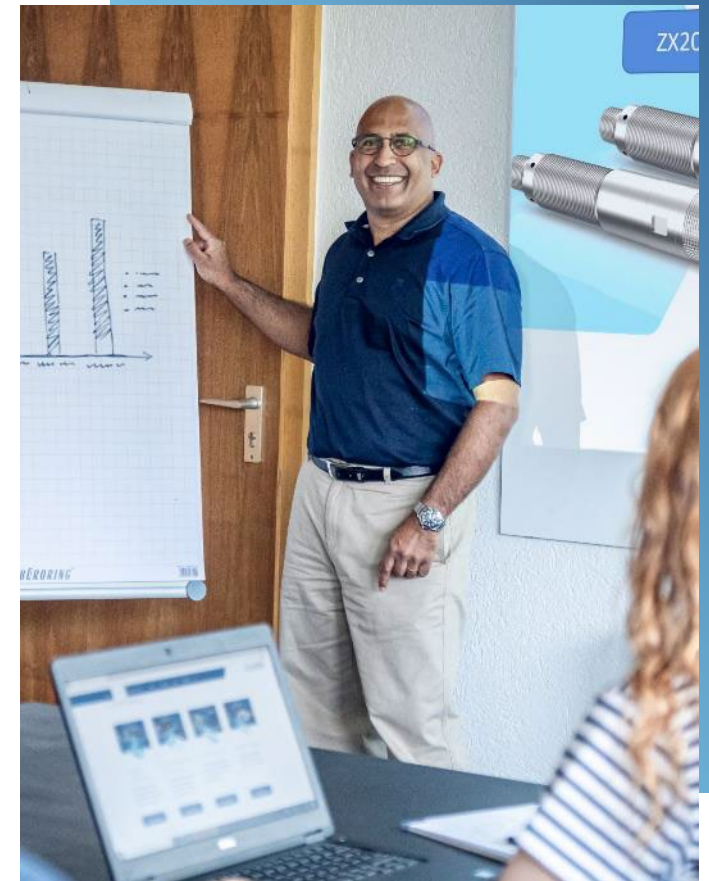
In the shortest possible time, our experienced engineers develop one or more solution concepts from your requirements and wishes and implement them in the form of prototypes.



Special requirements deserve special solutions

When developing your solution, you and your needs are the focus of attention.

You have a requirement or idea?
Do not hesitate to contact us!

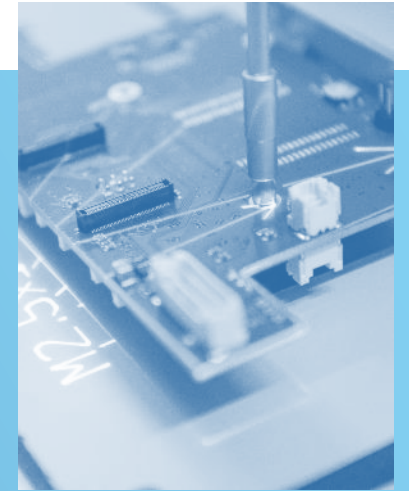
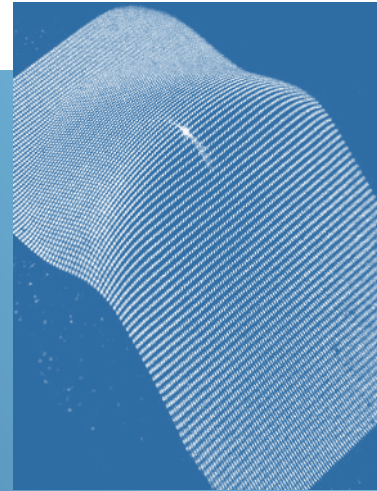


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