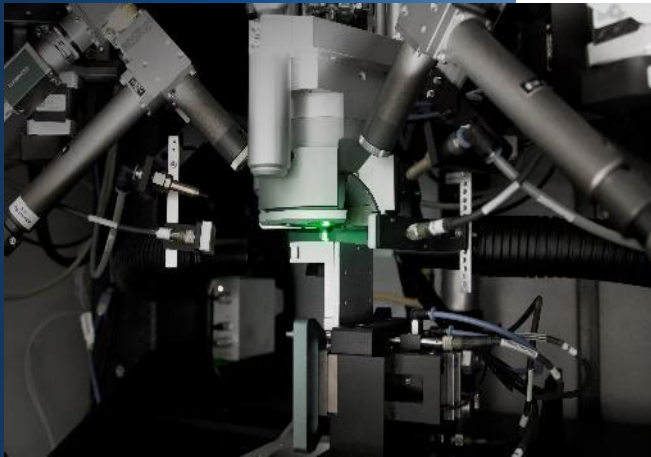


Company Presentation

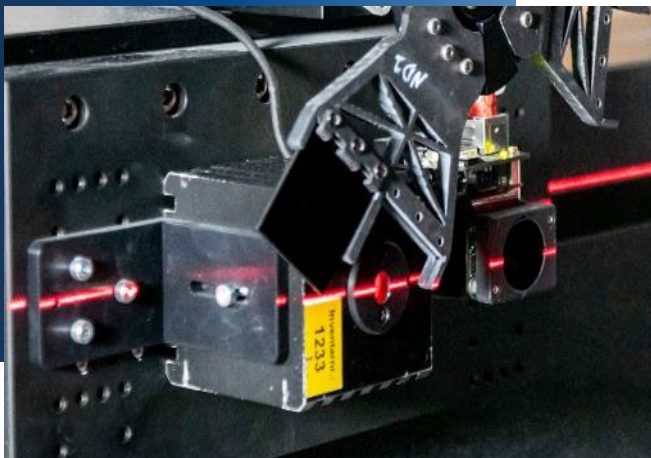
V250423

Z-LASER

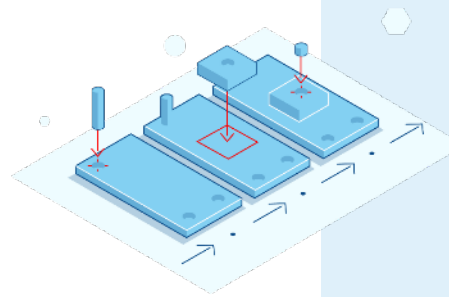
Providing visual guidance to people and machines with laser solutions.



Laser assembly

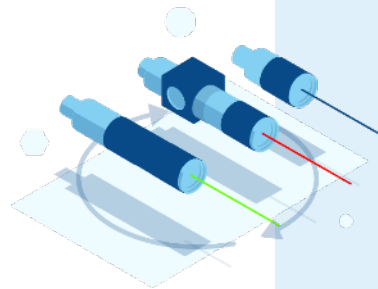


Laser line measuring station



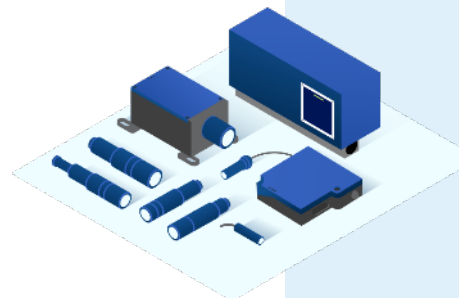
Specialized knowledge since 1985

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 specific customer needs.



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.

Z-LASER

Z-LASER has been developing and producing innovative, high-quality laser solutions since 1985.

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



Headquarters and
manufacturing in
Freiburg/Germany



Exclusive
sales office
in Italy



Over 60 distribution
partnerships
worldwide



Z-LASER is an Exaktera Company

Exaktera Vision

Enable and improve critical and game-changing system solutions by being the expert in the focused application of innovative light-based technology.

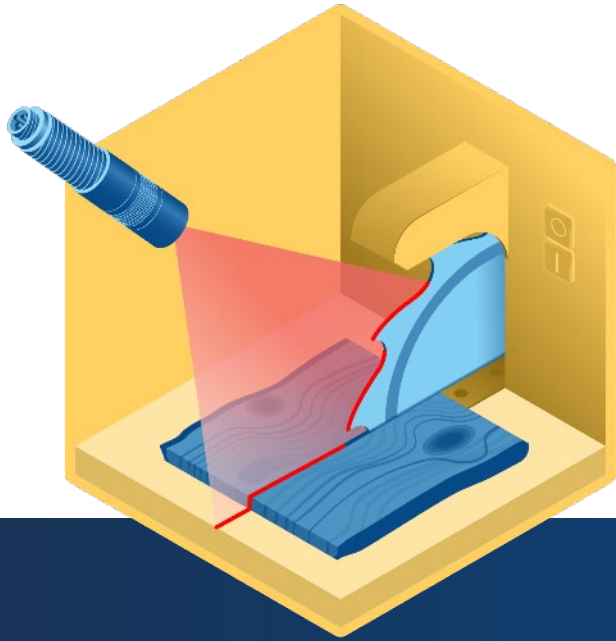


Exaktera Mission

Exaktera will provide key, light-based precision technology components and subsystems that define system performance to our OEM customers. We will add value and solve customer problems by offering the most thorough application expertise, the highest-performing technology, and the best-quality products. We will leverage operational excellence and administrative efficacy to deliver these products efficiently and effectively.

Target markets:

Automotive, Aerospace, Transportation, Construction, Food & Beverage, Machine Vision, Medical, Pharmaceutical, Printing & Packaging, Scientific, Semiconductor, Electronics



Laser for Positioning

Where precision in alignment and positioning is required.

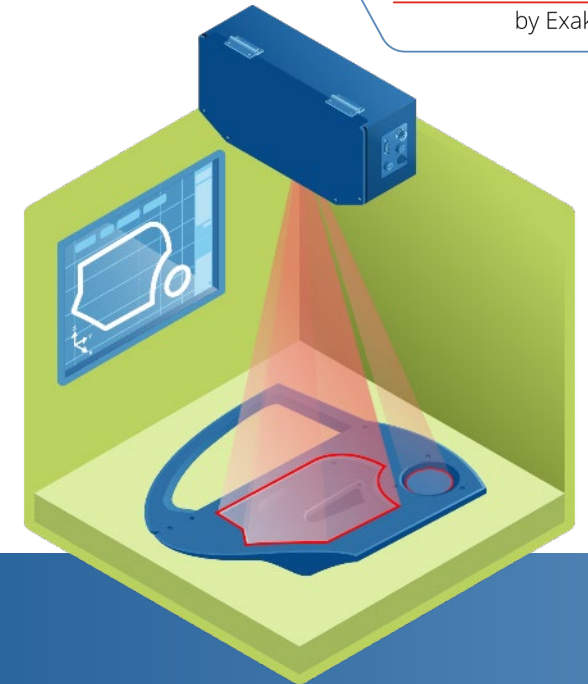
- optimize your work result
- save material & time
- various accessories available



Laser for Machine Vision

Automated optical quality control with structured laser light.

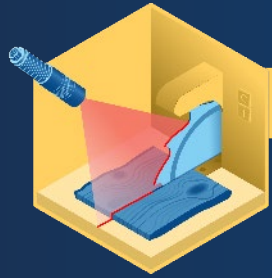
- laser illumination for 3D quality control
- combine laser and smart camera
- serial communication for better control



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



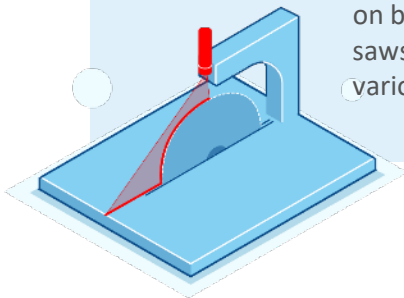
Cross laser



Line laser for positioning

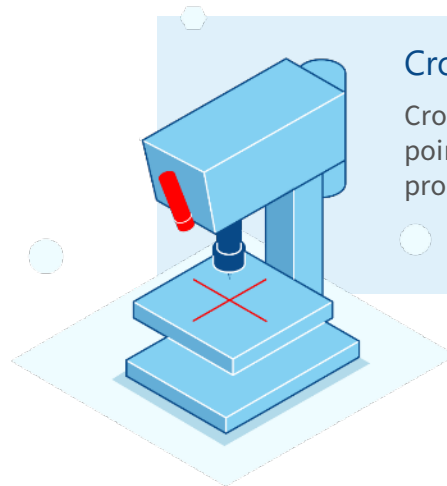
Line lasers

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



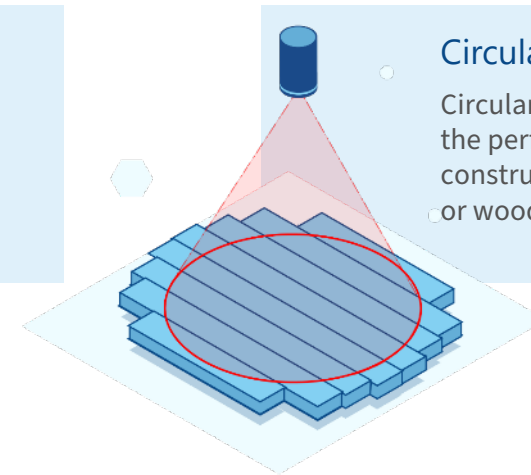
Cross lasers

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.



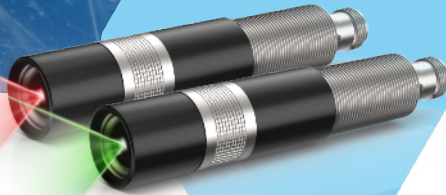


Laser for Positioning

ZM18

The perfect allrounder

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



Output power up to 120 mW



Wavelength: 520-685 nm



IP 67

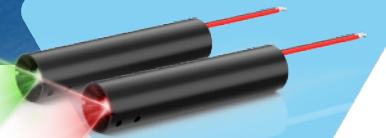


Shock Resistant

ZD

Universal mini laser module

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



Output power up to 15 mW



IP 40



Compact size



Easy installation

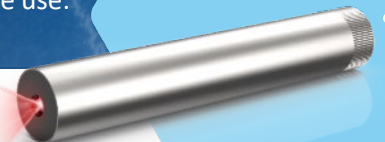
Z-LASER

by Exaktera

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.



ON/OFF



Output power up to 5 mW



IP 40



With AA or rechargeable battery



Easy installation

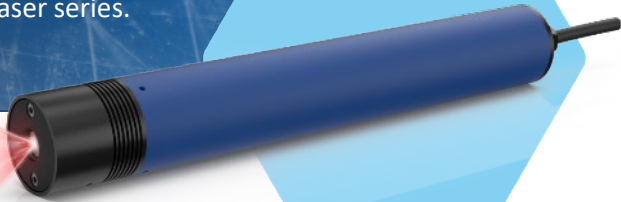


Laser for Positioning

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

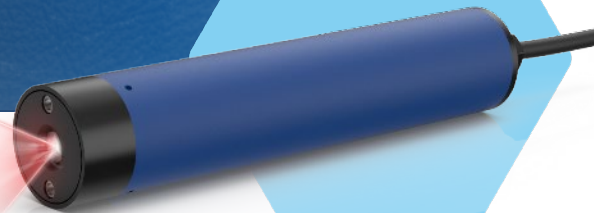


Focusable

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

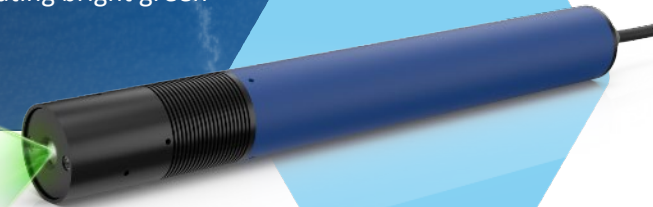


Shock Resistant

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

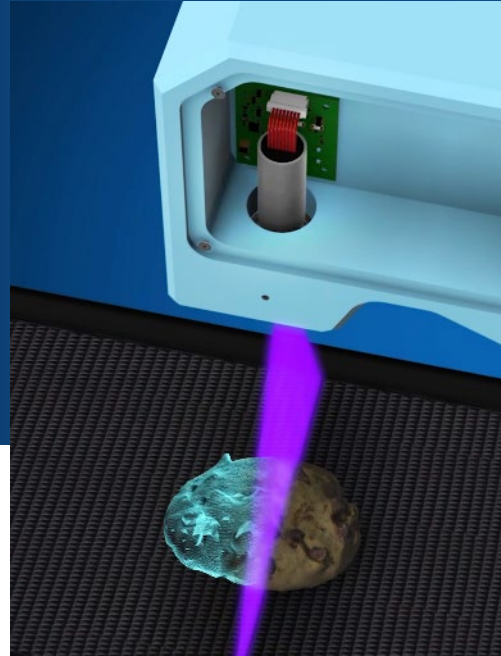


Focusable

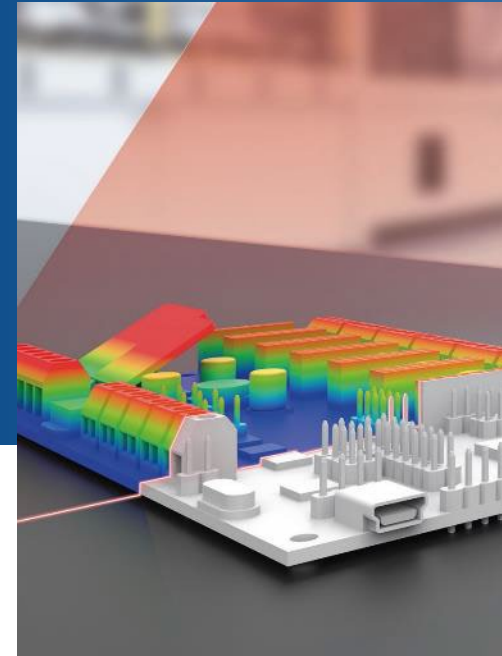


Laser for Machine Vision

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



Embedded vision



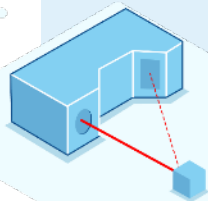
PCB inspection



Tough ambient conditions

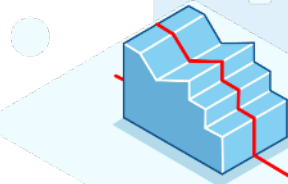
Embedded vision

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



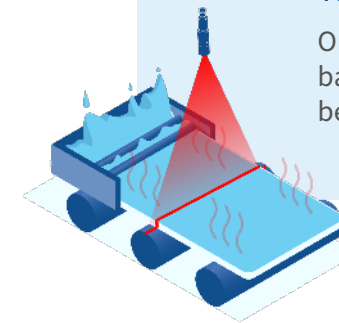
Laser triangulation

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.



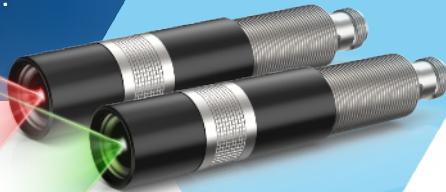


Laser for Machine Vision

ZM18

The perfect allrounder

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



Output power up to 120 mW



TTL modulation up to 500 kHz



Analog intensity control

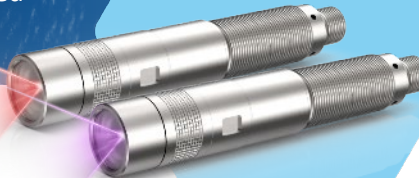


IP 67

ZX20

The high-precision laser module

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



Output power up to 200 mW



Wavelengths 405- 830 nm



Highest reproducibility of beam quality



IP 67



Diameter 20mm

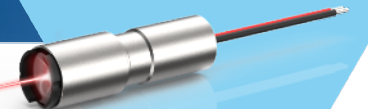


Boresight accuracy < 0.8 mrad

ZX10

Small size, high performance

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



Output power up to 40 mW



Wavelengths 640- 685 nm



Highest reproducibility of beam quality



IP 50 / p6 optional



Diameter 10 mm



Boresight accuracy < 0.8 mrad

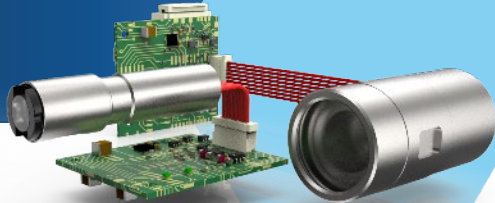


Laser for Machine Vision

ZXS-OEM

The optimal laser for sophisticated triangulation sensors

The focusing optics achieves a boresight error of less than 0.8 mrad.



Output power up to 200 mW (830 nm)



Wavelength: 405 – 830 nm



Boresight accuracy < 0.8 mrad



With compact driver electronics (34 x 30,5 mm)

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.



Output power up to 2.5 W (450nm)



Wavelength from 405-830 nm



IP 67



Active cooling integrated



Certified according to the railway standard [DIN EN 61373:2011-04]

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



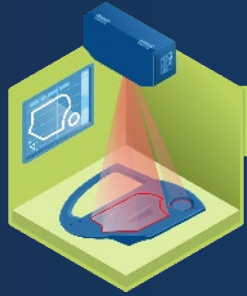
Output power up to 35 mW



IP 50

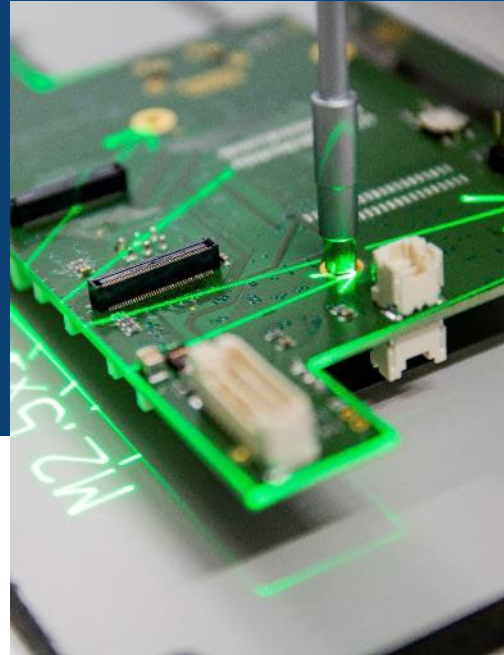


Active cooling integrated

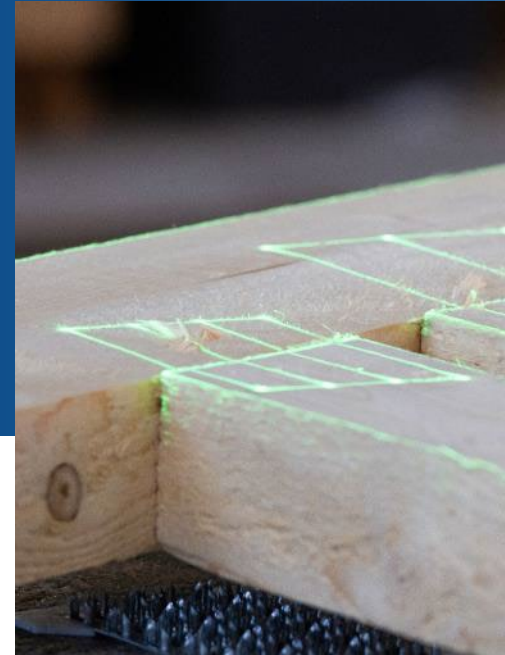


Laser Projectors

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



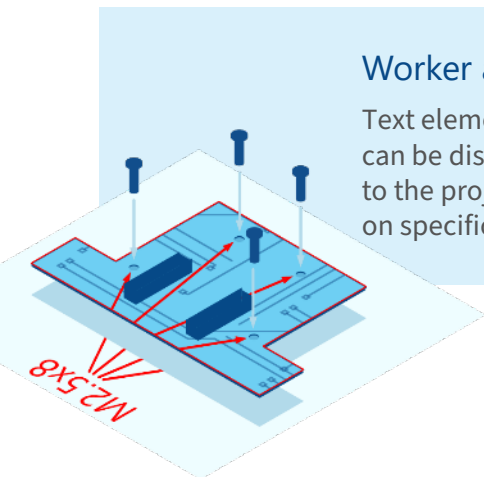
Worker assistance



Truss production

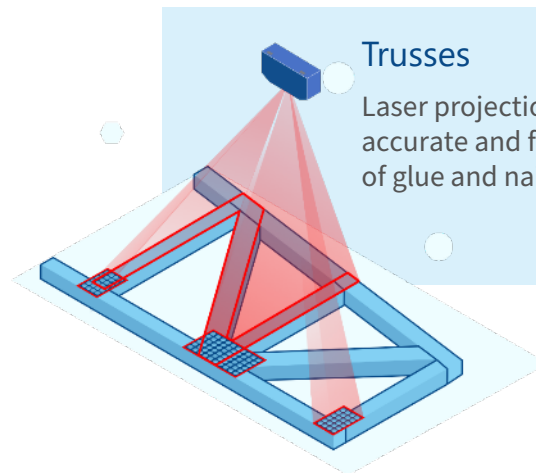


Rotor blades production



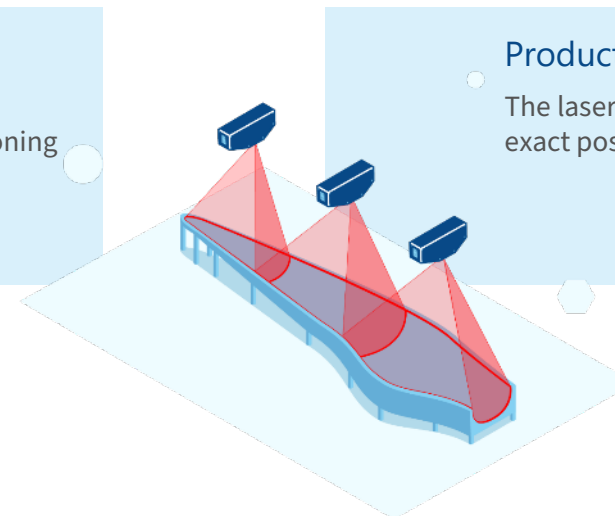
Worker assistance

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



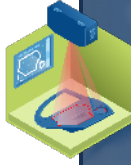
Trusses

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.



Small workspaces (<3x3m)



Short projection distances (1-3m)



Fixed Focus



Sufficient accuracy (+/-3mm)



Ideal for providing a worker with
approximate position information



Laser class 2M

ZLP2

Proven, powerful laser projector
with Z-FIBER source

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



Large workspaces (<10x10m)



Medium projection distances (0.5-7m)



Variable Focus



Medium accuracy (+/-0.25mm/m)



Provides exact position information and
outlines in 3D



Laser class 2M

Z-LASER

by Exaktera

ZLP2-HighPower

The new standard for laser
projections under the most
demanding conditions.

Convincing in the concrete industry,
the aerospace industry, and the
production of rotor blades for
wind turbines



Very large workspaces (>10x10m)



Long projection distances (<15m)



Variable Focus



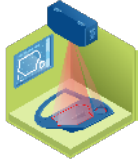
High accuracy (+/-0.1mm/m)



Very fine lines in 3D even at
large distances



Laser class 3R



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

Graphical user interface

Full range of functions without programming knowledge

Teaching

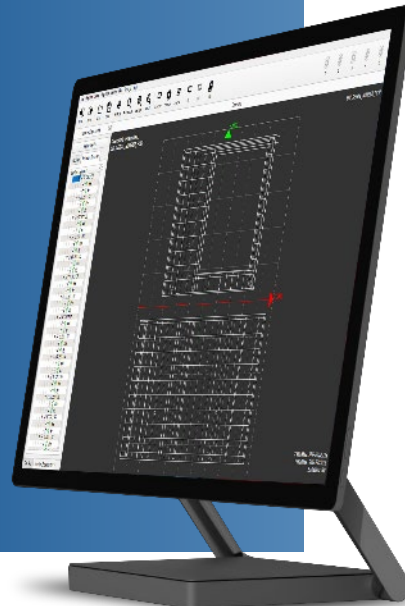
Live projection editor for contours, symbols and texts

Compatibility

Extensive import and export of various formats directly from the software

User administration

Different rights for user groups (e.g. administrator, user, ...)



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

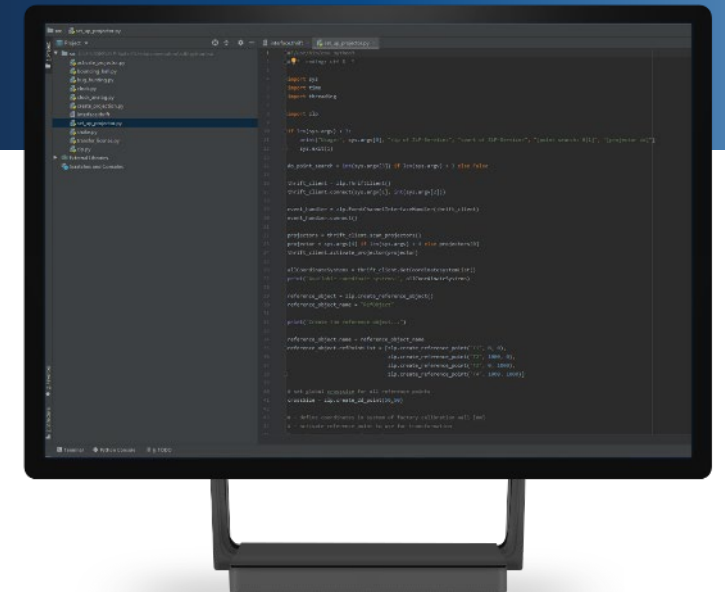
The API scope is on a par with our ZLP-Manager

Perfect integration

Comprehensive API for integration into existing software environments

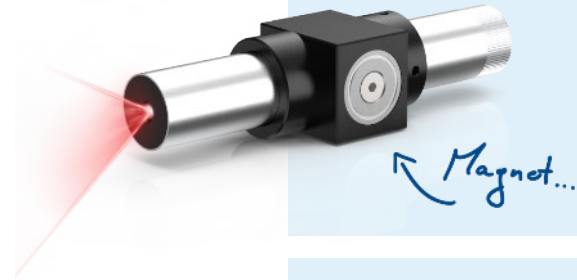
System-independent

Work with your preferred operating system - whether Windows or Linux



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.



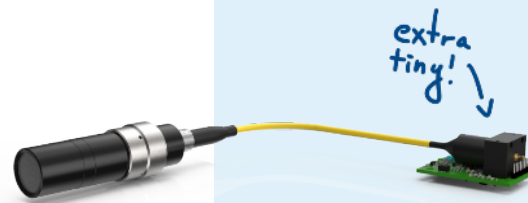
The result will be impressive

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 an idea?
Do not hesitate to contact us!

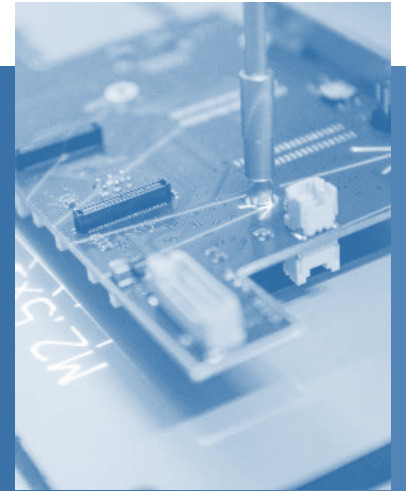
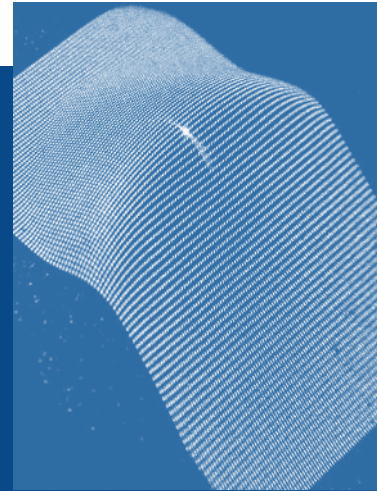


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