

# Lasermachines

laser engraving | laser marking



The Specialist For Lasers







**The Specialist For Lasers**



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*„We love engineering  
and the happy faces of  
our customers in  
presenting our solution  
for their specific needs.“*



**Christoph Kollbach**  
Executive Director SK Laser GmbH





## Experience

Since 2005, SK Laser has specialized in laser marking on almost all materials.



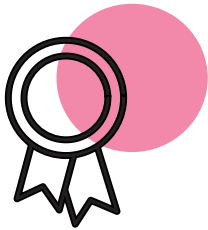
## Employee

15 employees with great laser experience are employed at SK Laser.



## TÜV

In 2017 SK Laser had the workstation F20CW1 tested by TÜV.



## DIN ISO 9001

Since 2014 SK Laser is certified according to the quality standard DIN ISO 9001.



## Bonitätsindex 171

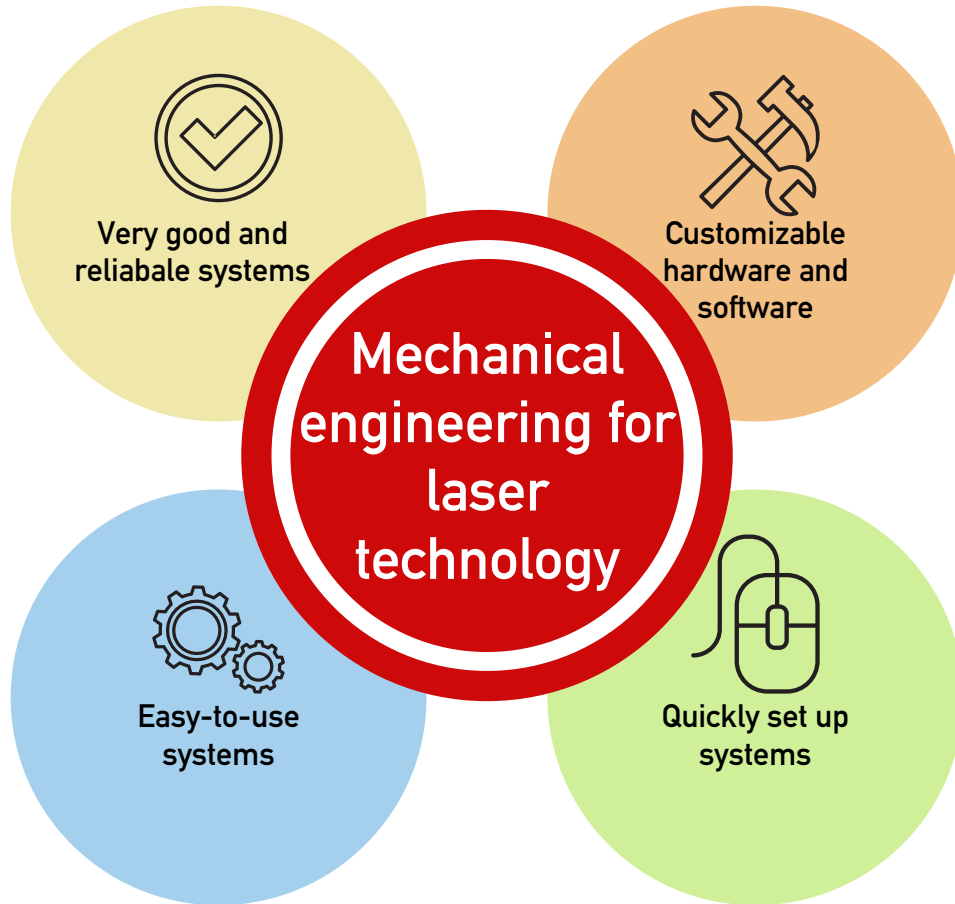
The credit index of SK Laser GmbH is rated 171 with the Creditreform Index.



## Debt free

SK Laser is debt free and profitable

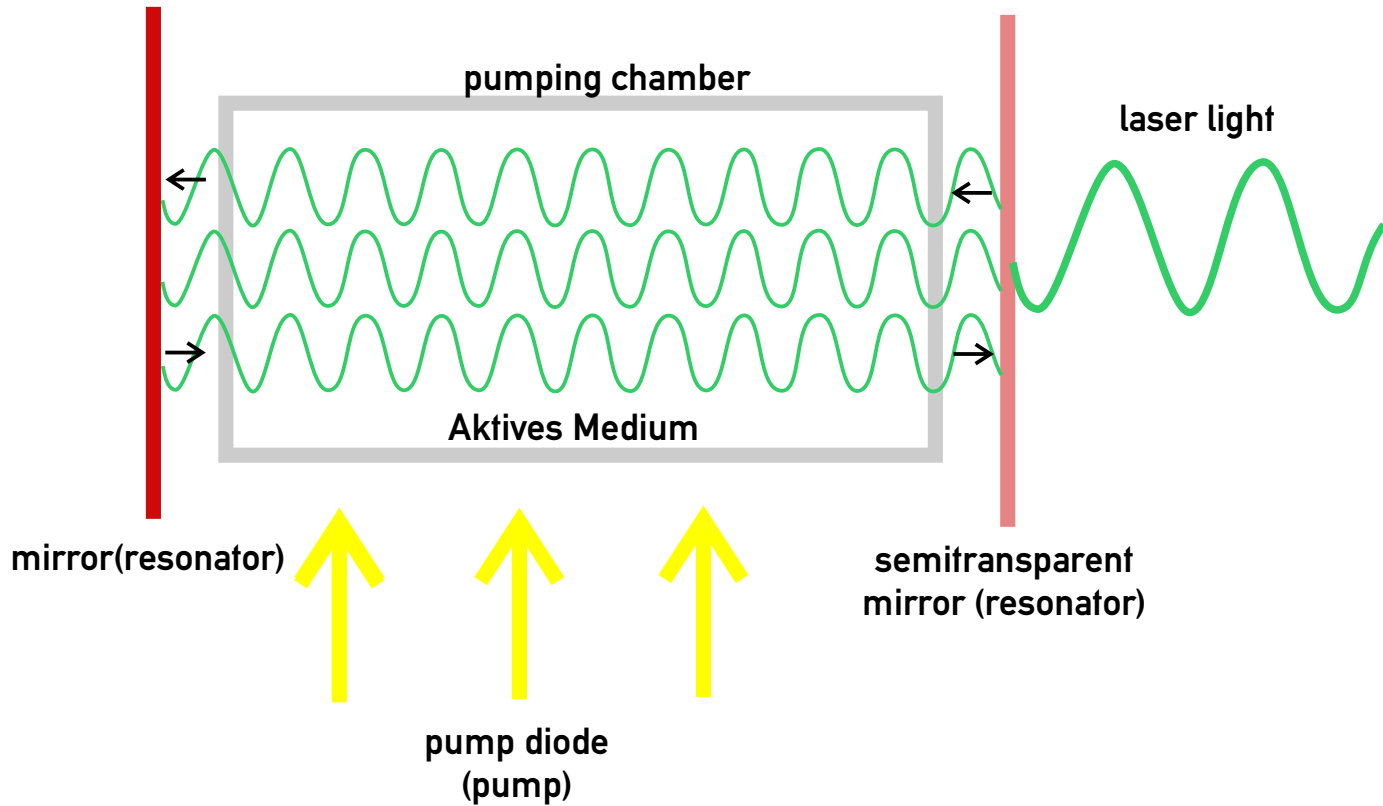




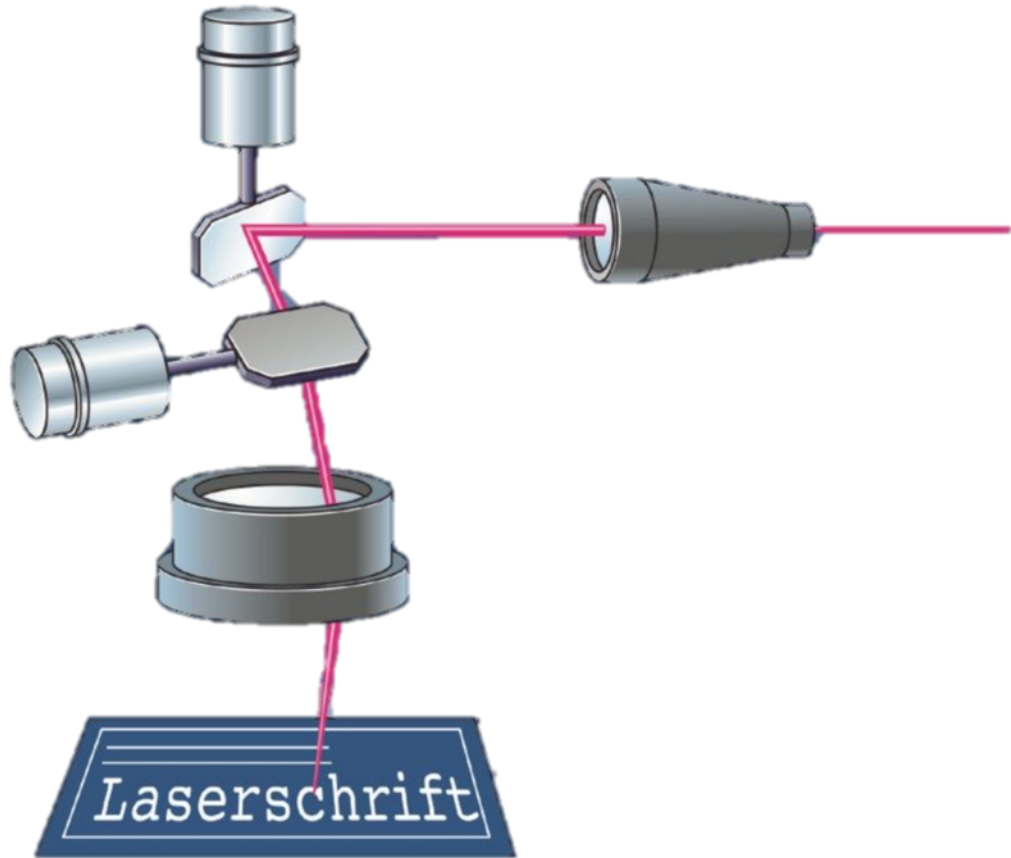














# The laser engraving enables permanent and consistent labeling for complete and unambiguous traceability.

There are hardly any limits to the materials to be marked.  
Therefore, laser engraving is indispensable in many industries

Automotive Industry

mechanical engineering

Electronics / Electrical Engineering

Medical

Plastics industry

Plastics Processing

Aerospace Engineering

defense technology

packaging industry

textile industry

## Metals



Barcode on metal



Filigree marking



Logo and Data-Matrix-Code

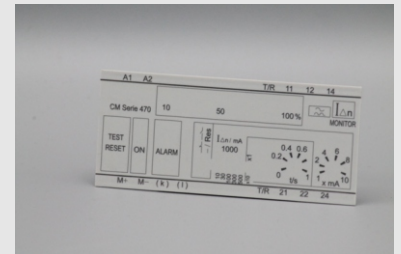
## Kunststoffe



Marking on plastics



DataMatrix on plastics



## Spezielle Anwendungen



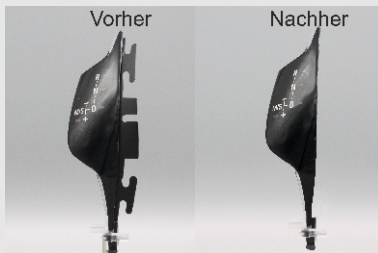
4mm Data-Matrix Code



Day-Night-Design



Colored annealing



Sprue cutting of  
injection mold



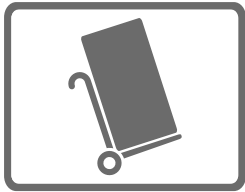
Cutting fleece



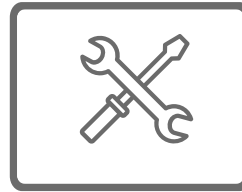
Welding plastics



# Ideal for all laser engraving jobs in the industry



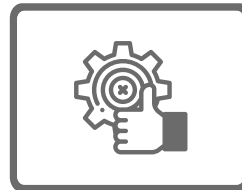
Easily transportable  
thanks to favorable  
external dimensions



Resilient due to stable  
construction



can be used as a sitting  
or standing workplace



Power base components


The standard model on  
which everything is  
built.

Expandable and expandable  
according to customer request





SK Laser scan head  
with pilot laser



Countertop made of stainless  
steel, on which magnets  
adhere, with perforated grid  
for quick positioning.



Rail for moving the scan  
head



Electric Z-axis for moving  
the scan head





























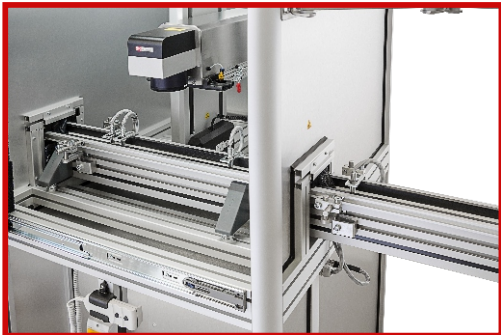








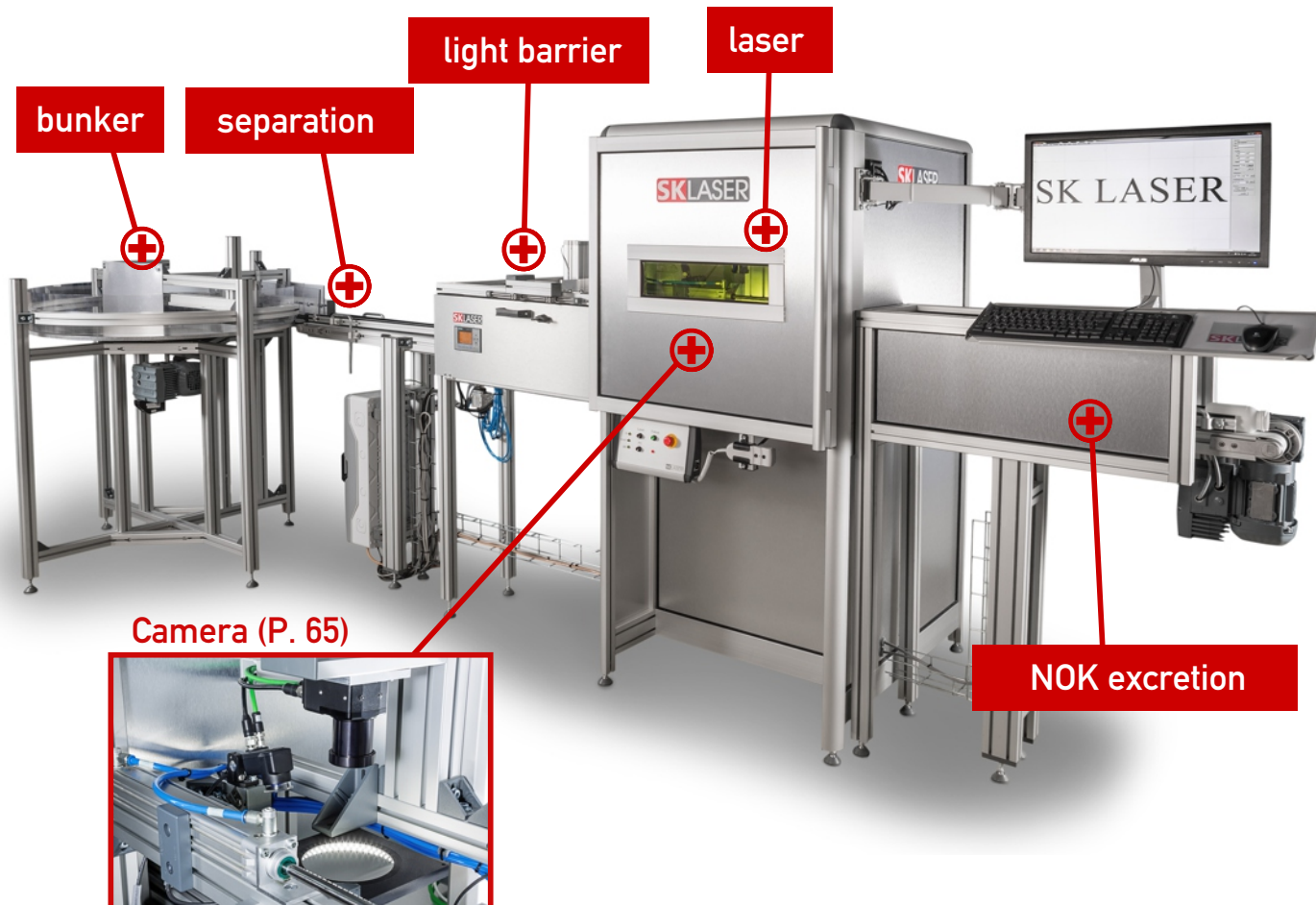












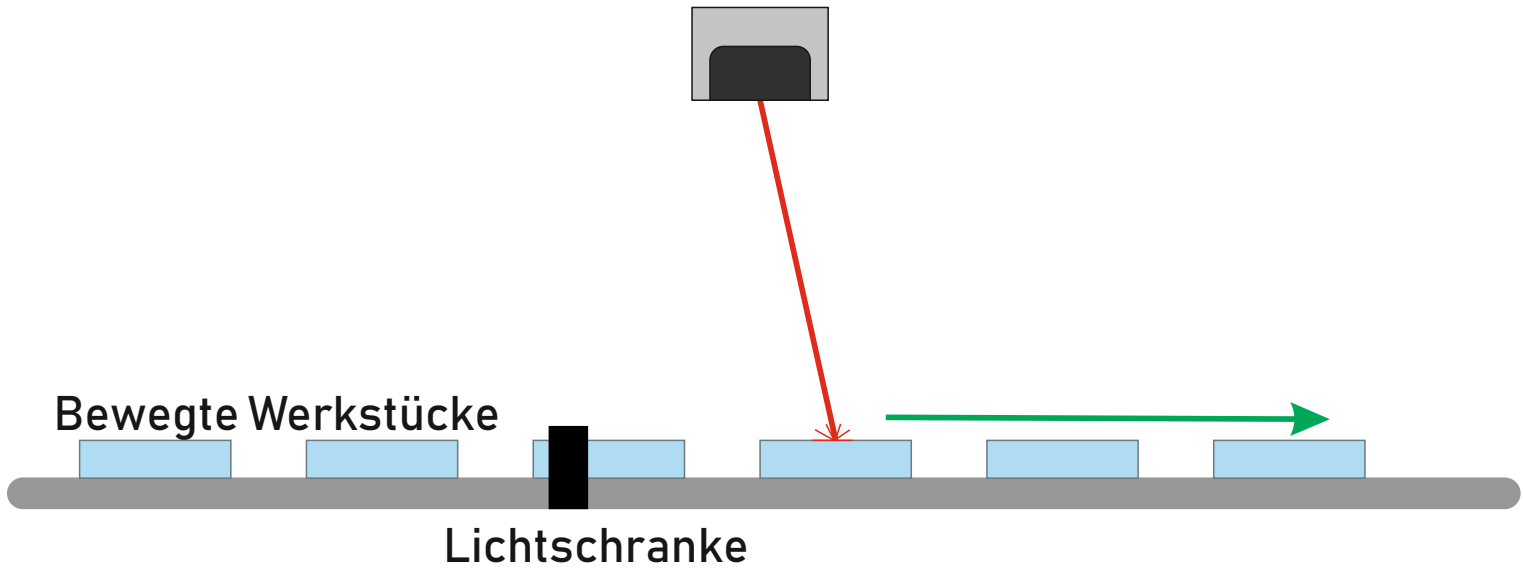














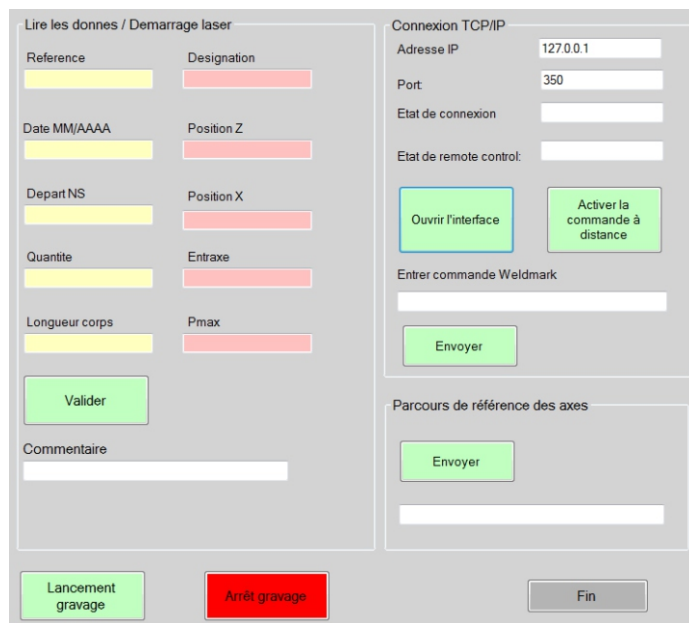
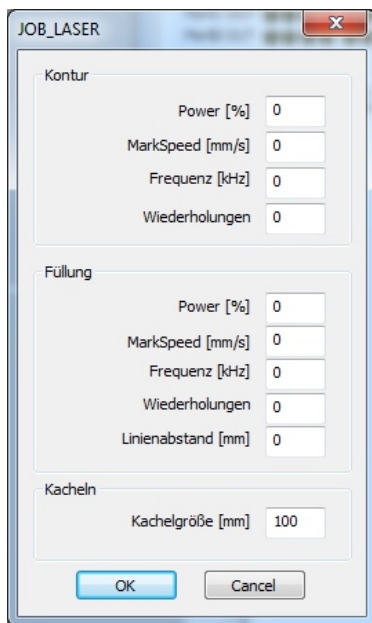


Workstation Mini



Workstation for 3D deep engraving



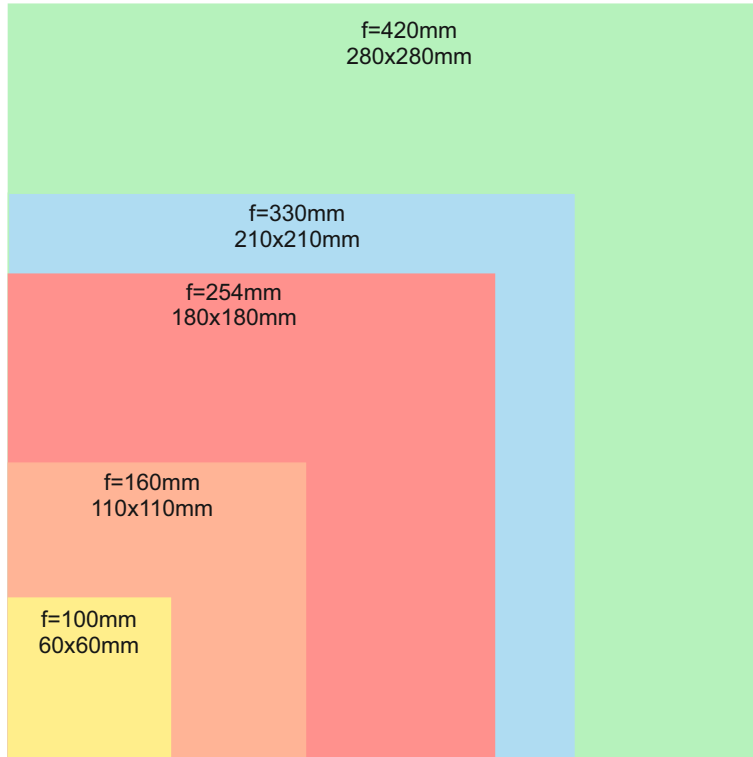








# Lenses and area coverage



f=160mm



f=254mm



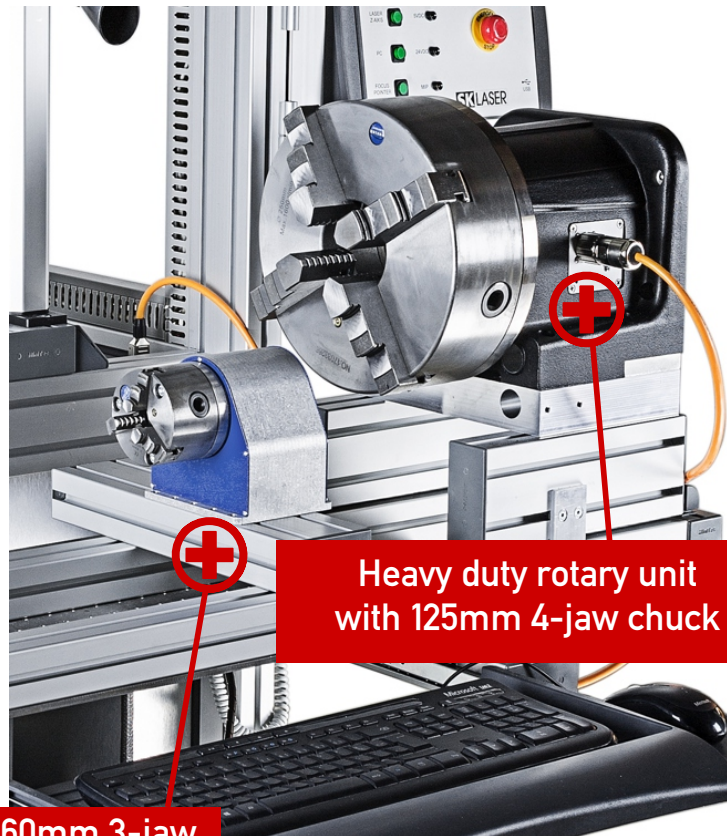
f=420mm

\* The specifications correspond to the information provided by the manufacturer of the optics. It's in physics, that laser results at the edge of the labeling field may be impaired. Therefore, as a precaution, we point out that the size of the labeling field may differ in practice



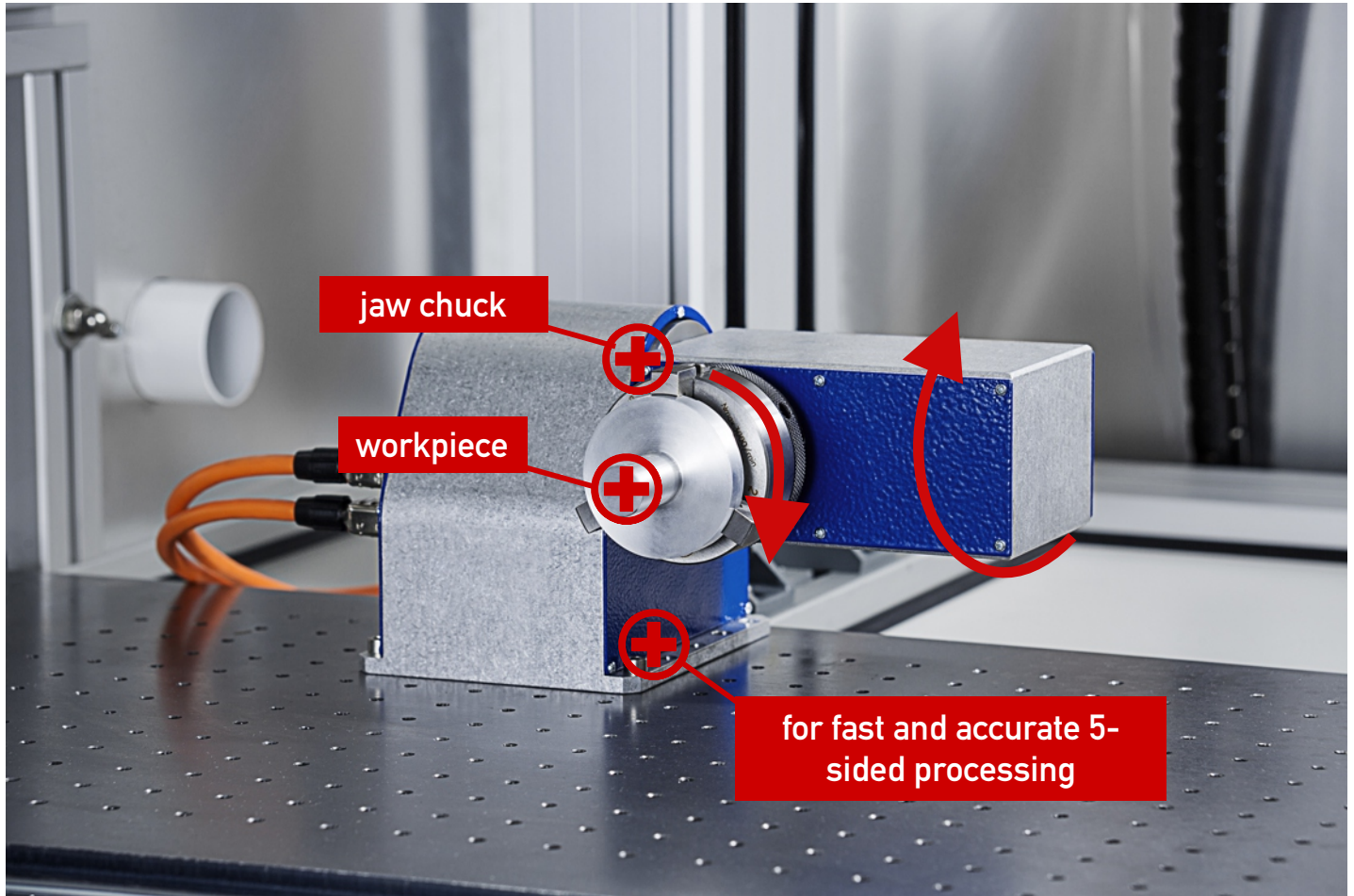


Rotary unit with 60mm 3-jaw  
chuck

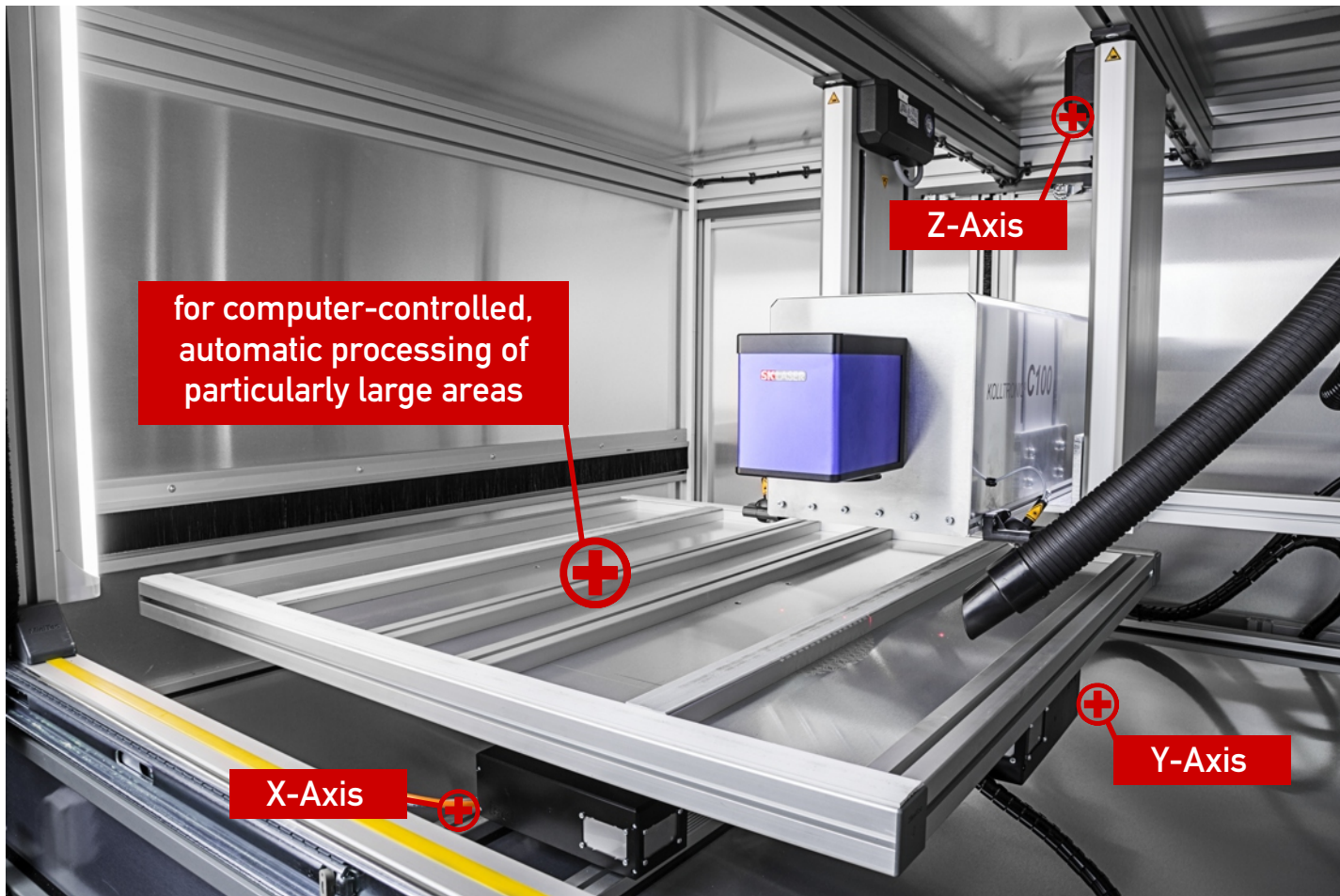


Heavy duty rotary unit  
with 125mm 4-jaw chuck

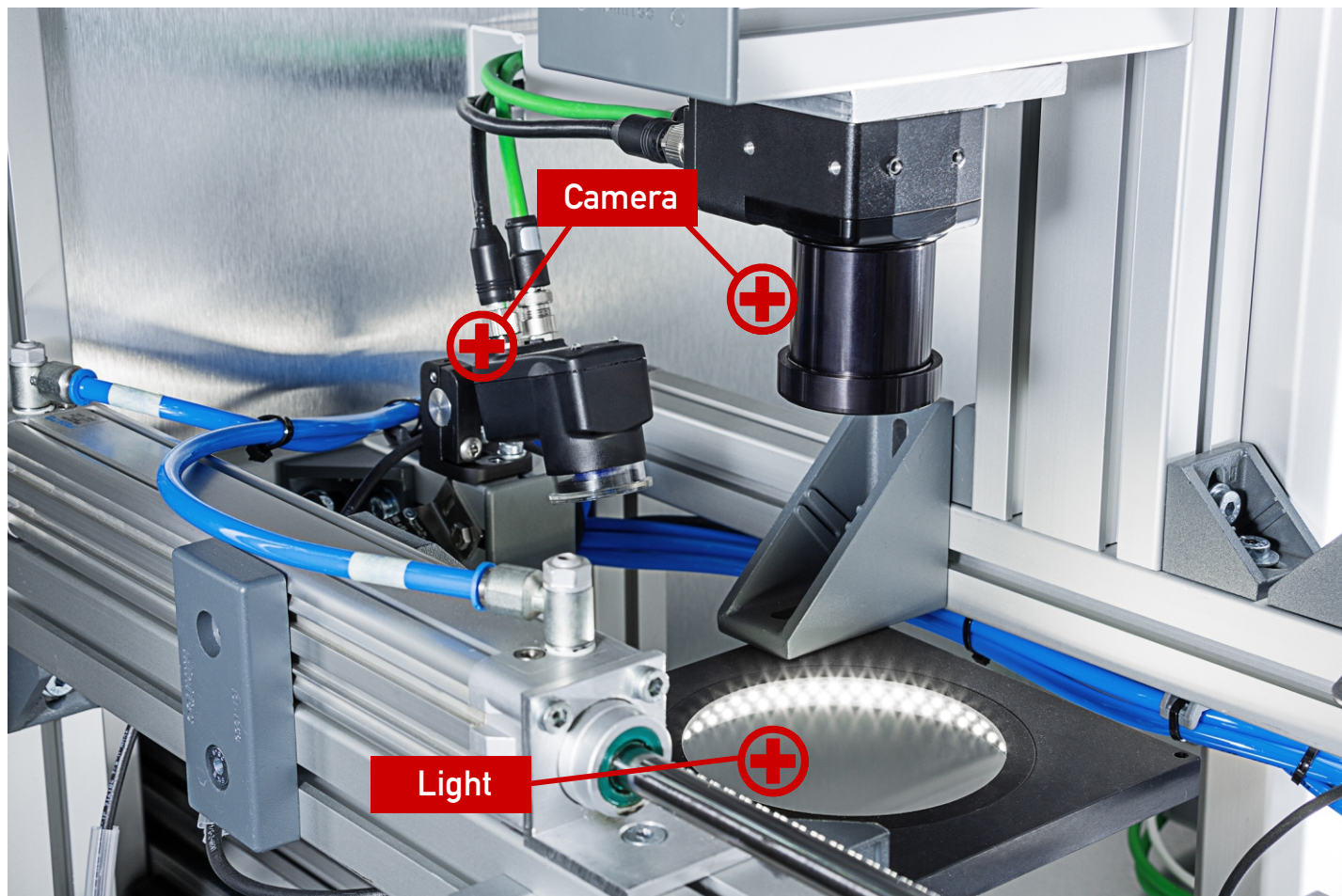




















Fume extraction



Laser engraving can produce dangerous emissions that can strain and even damage the lungs. It also highlights contamination of the laser machine and lens, which can affect laser quality. Therefore, we strongly recommend the use of a suction system when using a laser machine!



Pre-filter



Main-filter





Fiber laser



Grreenlight-Laser



CO<sub>2</sub>-Laser





## F-Series

For processing metals and plastics, as well as plastic welding and perforating



## G-Series

For processing glass and plastics, as well as small letters in the micro range.



## C-Series

For processing plastics and organic materials, such as wood, textiles, stone.





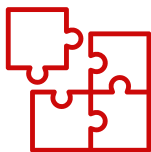
Excellent beam quality



High efficiency



Long lifetime



Compact construction



Fast setup



Energy efficiency



## Application matrix

Material	F-Series	C-Series	Y-Series	G-Series	UKP-Series	UV-Series
<b>Metal</b>						
Engraving	✓	□	✓	✓	✓	□
Removal	✓	□	✓	✓	✓	□
Annealing	✓	□	✓	✓	✓	□
<b>Plastics*</b>						
Engraving	✓	✓	✓	✓	✓	✓
Foaming	✓	✗	✓	✓	✓	✓
Paint removal	✓	✓	✓	✓	✓	□
<b>Wood, paper, leather, ceramics, glas and other organic materials</b>						
	✗	✓	✗	✓	□	□

✓ Very good results

□ Good results

✗ Material can not be marked with this beam source

\* There may be restrictions depending on the material composition.

# 1064nm Wavelength

Fiber laser 20-100W

Für metal and plastics.



# Technical specifications

Fiber laser

## General

Laser power

20W, 30W, 50W, 100 W

Marking field

Standard: 180 x 180 mm, optional: 60 x 60 mm,  
100 x 100 mm, 210 x 210 mm, 280 x 280 mm

Marking speed

2.000 mm/s (optional up to 8.000 mm/s)

Character height

von 0,1 mm until complete field

Minimal line width

0,05mm (optional 0,01 mm)

Safety

Laser class 4

Pilotlaser

Red outline or rectangle

## Control unit

Input/Output

analog and digital in-/outputs (5V/24V) for system  
integration

System messages

MIP (mark-in-progress)

Communication

RS232, Ethernet, USB, Profinet

Computer

Windows, Monitor, Keyboard, Mouse (approx. 12 kg)

Function keys

Turn on (PC and Laser), Emergency Stop, Focus laser

## Scan head

Dimensions (W x H x D)

130 x 160 x 570 mm

Weight

8 kg

Supply

Optical fiber cables length: 2m)

Casing

Stainless steel

# 532nm Wavelength

Greenlight Laser 3 - 10 Watt

Für metals, plastics and glass.



# Technical specifications

Greenlight laser

## General

Laser power	3W, 10 W
Marking field	Standard: 155 x 155 mm, optional: 55 x 55 mm,
Marking speed	2.000 mm/s (optional up to 8.000 mm/s)
Character height	von 0,1 mm until complete field
Minimal line width	0,05mm (optional 0,01 mm)
Safety	Laser class 4
Pilotlaser	Red outline or rectangle

## Control unit

Input/Output	analog and digital in-/outputs (5V/24V) for system integration
System messages	MIP (mark-in-progress)
Communication	RS232, Ethernet, USB, Profinet
Computer	Windows, Monitor, Keyboard, Mouse (approx. 12 kg)
Function keys	Turn on (PC and Laser), Emergency Stop, Focus laser

## Scan head

Dimensions (W x H x D)	123 x 152 x 557 mm
Weight	8 kg
Supply	Optical fiber cables length: 2m)
Casing	Stainless steel

# 10600nm Wavelength

CO<sub>2</sub>-Laser 30-200 Watt

Für plastics, acrylic glass, glass and organic materials, such as cardboard, paper, wood, textiles, fleece or leather.



# Technical specifications

CO<sub>2</sub>-Laser

## General

Laser power	30W, 60W, 80W, 100 W, 200W
Marking field	min 60x60mm, up to 280x280mm
Marking speed	2.000 mm/s (optional up to 8.000 mm/s)
Character height	von 1 mm until complete field
Minimal line width	0,2 mm
Safety	Laser class 4
Pilotlaser	Red outline or rectangle

## Control unit

Input/Output	analog and digital in-/outputs (5V/24V) for system integration
System messages	MIP (mark-in-progress)
Communication	RS232, Ethernet, USB, Profinet
Computer	Windows, Monitor, Keyboard, Mouse (approx. 12 kg)
Function keys	Turn on (PC and Laser), Emergency Stop, Focus laser

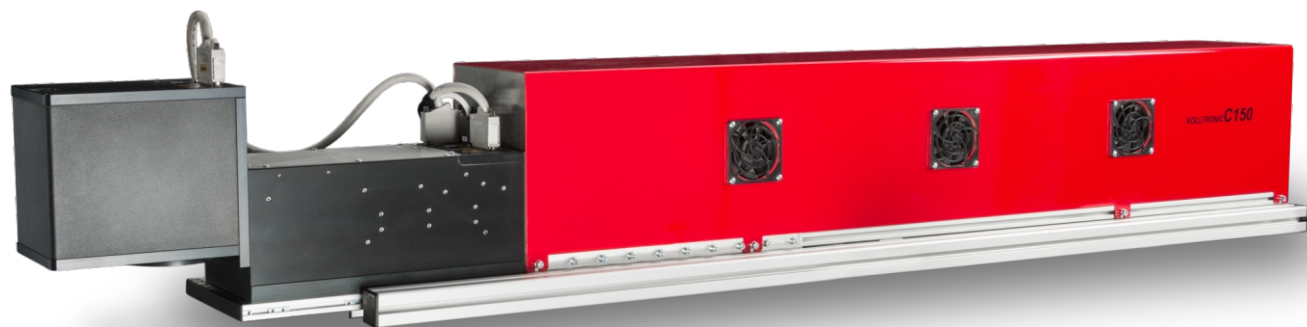
## Scan head

Dimensions (W x H x D)	180 x 160 x 770 mm (30W)
Weight	15-50 kg
Casing	Stainless steel

# Axial scan beam guidance

Customized beam guidance and scanning systems

- 
- Laser marking on large work surfaces with a labeling field of 1000x1000 mm
- Double head systems
- Beam delivery systems



# Unser Service

Alles rund um Ihren Laser

Application consulting



Special construction



Financing



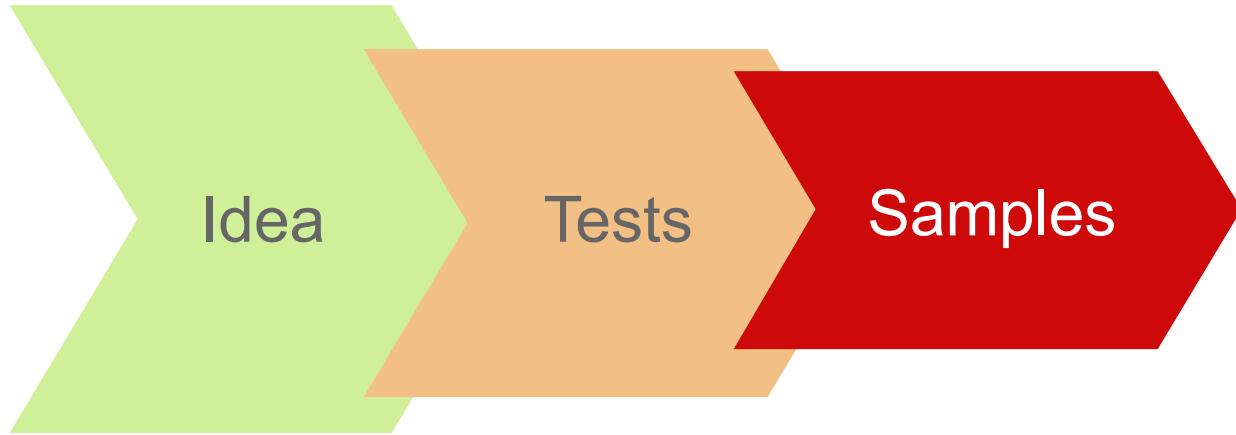
Derlivery, installation and training



Maintenance and reparation

# Application consulting

From your idea to the finished product



We advise you in the selection of the appropriate laser process, tailored to your requirements of laser engraving.

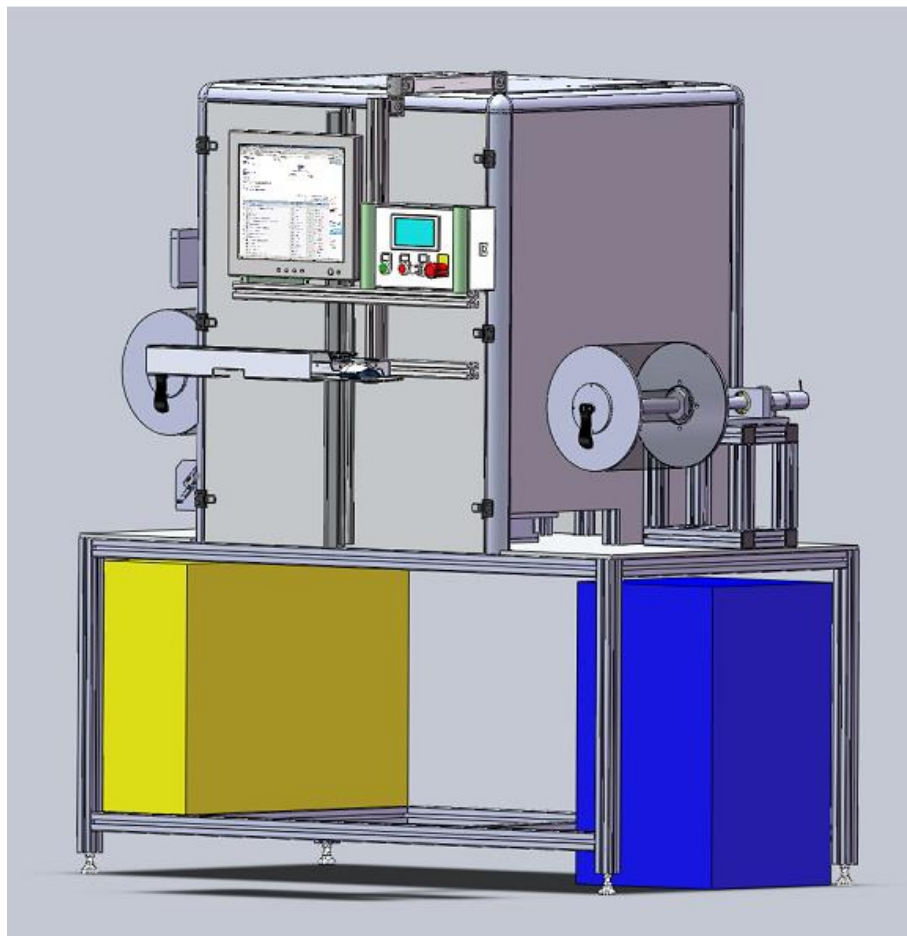
Based on this, we carry out various tests up to product maturity.

# Special construction

Modified series models and individual solutions

From the idea to the finished machine.

1. Clarification of the task.
2. Cooperative development of a solution.
3. Projecting.
4. Structure of the project.
5. Preliminary acceptance by SK Laser.
6. Assembly and commissioning at the



# Financing

## Purchase - Leasing - Rent

For financing we offer leasing and hire purchase through a leasing partner.

Rent our machines for capacity spikes or sporadic / one-time orders.

Book us for your marketing campaign at trade fairs or events. We label the most diverse materials live and on site for you

# Purchase

Bank financing



# Leasing

partial and full leasing in 36 to 72 months



# Rent

Short-term rental for trade fairs and production peaks



# Delivery, installation und training

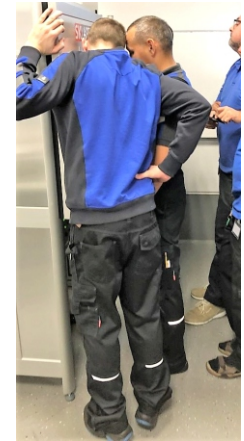
We deliver our machines within Germany and the neighboring countries.



Sea transport packaging

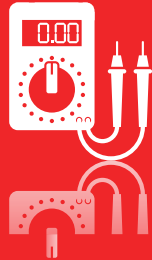


Delivery



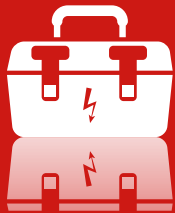
Installation  
and training

# Maintenance und repair



# Maintenance

On request we carry calibration and Maintenance on your laser.  
We are happy to offer a maintenance contract.



# Repair

If you have problems with your laser we can help you with pleasure.



#### Legal disclaimer

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