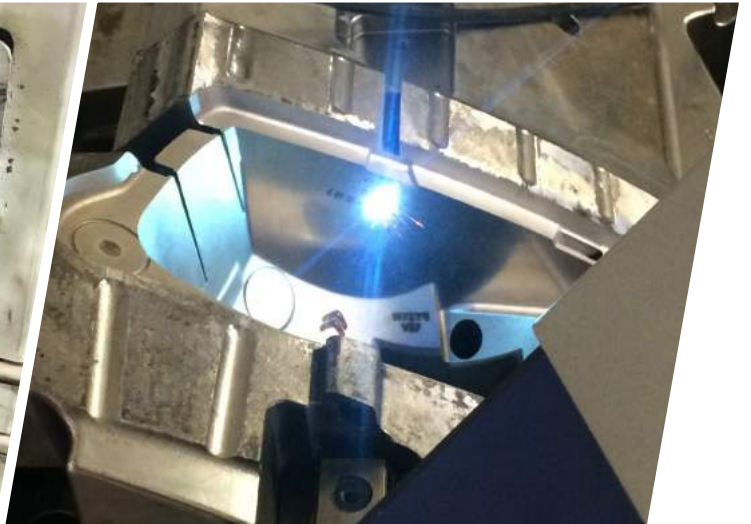
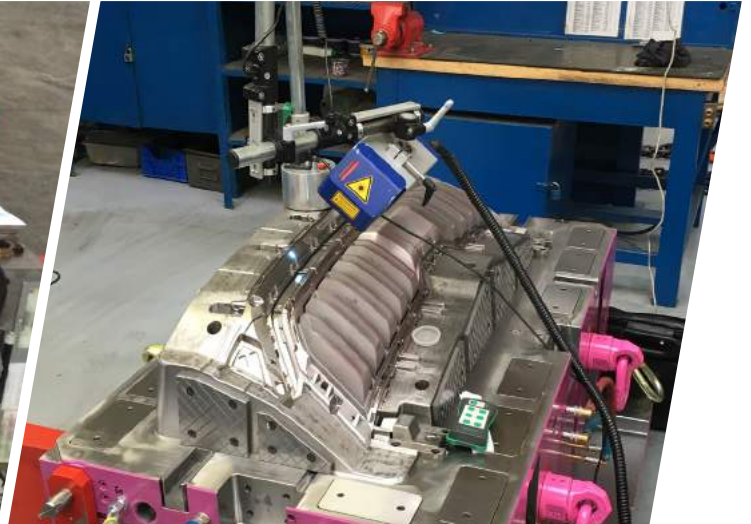




# LASER ENGRAVING MACHINES







## Fiber laser HCP 20



New way of laser head clamping to optimise its rotating to work position. Improved focusing of laser head on the working area by using two red points.

Ethernet connection with superior PC (notebook is advantage) allows to prepare data far from laser (without laser) or to use remote control of system HCP20.

Optimization of working box designed for storing of the whole laser system. The box is smaller, more mobile and also adapted for loading to car and moving in a hall. It is equipped with rotary drum for careful placing of laser head and optical cable.

Manual travel X, Y, Z for quick setting of laser head working position.

Motor travel X,Y,Z for very precise moving of laser head to work position. KEY button on the control board allows to lock the axis in the chosen place without any aberration.

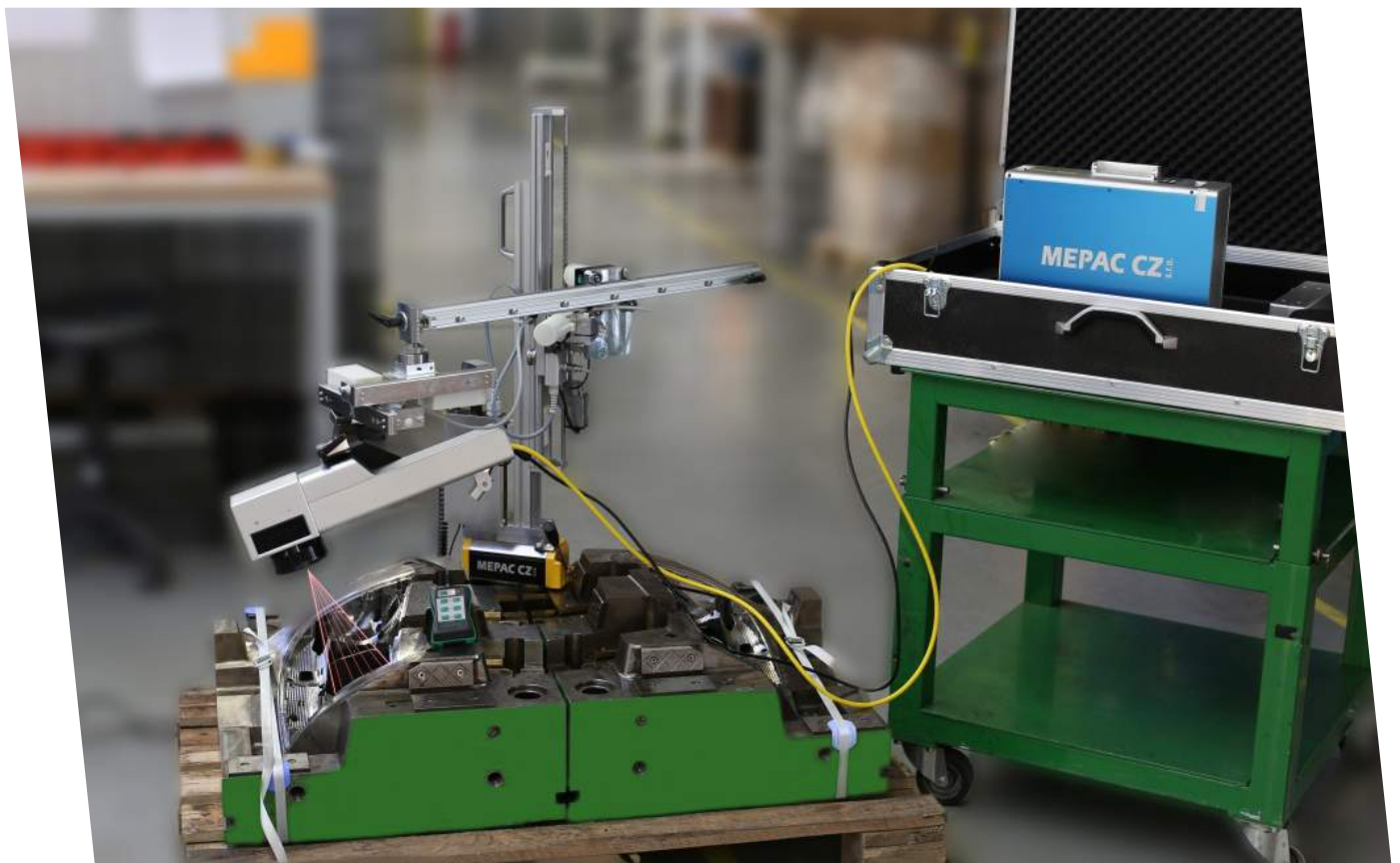
### TECHNICAL SPECIFICATION

	HCP 20 - 20 W	HCP 30 - 30 W	HCP 50 - 50 W
nominal power	20W	30W	50W
pulse energy (max.)	1000 µJ	1000 µJ	1000 µJ
peak power (max.)	10 kW	10 kW	12 kW
max. power	300 W	300 W	300 W
input voltage	100 - 240 V	100 - 240 V	100 - 240 V
input current	3 - 1,25 A max	3 - 1,25 A max	3 - 1,4 A max
head cable length	3 m standard	3 m standard	3 m standard
laser source	fiber laser	fiber laser	fiber laser
emission of radiation	pulsed	pulsed	pulsed
wavelength	1060 - 1080 nm	1060 - 1080 nm	1060 - 1080 nm
modulation	20 kHz - 100 kHz	30 kHz - 100 kHz	50 kHz - 100 kHz
aiming beam	1 mW @ 635 nm	5 mW @ 635 nm	5 mW @ 635 nm
temperature range - operative	5 °C to 50 °C	5 °C to 40 °C	5 °C to 35 °C
temperature range - storing	-10 °C to 60 °C	-10 °C to 60 °C	-10 °C to 60 °C
cooling	forced air	forced air	forced air
marking speed	up to 2000mm/sec	up to 2000mm/sec	up to 2000mm/sec

### FEATURES AND BENEFITS

- laser engraving mobile system for engraving of big moulds
- new way of laser head clamping
- new Motor travel X,Y,Z
- remote control of system HCP20
- more mobile and smaller metal box
- easy of use with LIGHTER software





## Fiber laser HXM20-COMPACT



HXM20-COMPACT Laser is cutting-edge product, and it is revolutionary to integration of the high-speed high-resolution laser marking system. Laser edges out traditional intelligent lasers with diode pumped crystal, including neodymium (Nd): YAG intelligent pulse fiber. It uses the structures of the master oscillator and high power fiber amplifier (MOPFA) of the Q-switch. Laser has low power consumption and uses practical and durable design, so it suits lab and market use. Boasting compact structure and highly integrated system, it is embedded with a computer system, a laser control system and a motion control system. Transmits periodical pulse trains with the wavelength of about 1060nm and peak power up to 7KW.

HXM20-COMPACT is an ideal high power source for the laser marking industry.

The laser can be supplied as a type for color marking on metals: HXM20-COLOR.

### PACKAGE CONTENTS

- laser source 20W, laser head, power supply, 3m optical cable, aluminium stand for laser head
- software, USB cable, protection glasses

### TECHNICAL SPECIFICATION

average output power	20W	max. power	≤ 650 W
central wavelength	1064±4nm	power supply	220V ± 10% / 50Hz/4A
beam quality	<2M <sup>2</sup>	laser lifetime	> 50 000h
frequency tuneable range	20 kHz - 70 kHz	cooling	forsed air
marking area	110 x 110 mm	composition of the system	control system, industrial computer, work desk
marking speed	≤ 7000 mm/s	working environment	clean and dust-free environment
marking depth	≤ 1 mm	operating temperature	10 °C to 35 °C
minimum line width	0,02 mm	working humidity	5% to 75%
minimum character size	0,15 mm	total weight	15 Kg
repeat accuracy	± 0,002 mm	machine dimensions	300 x 400 x 150 mm

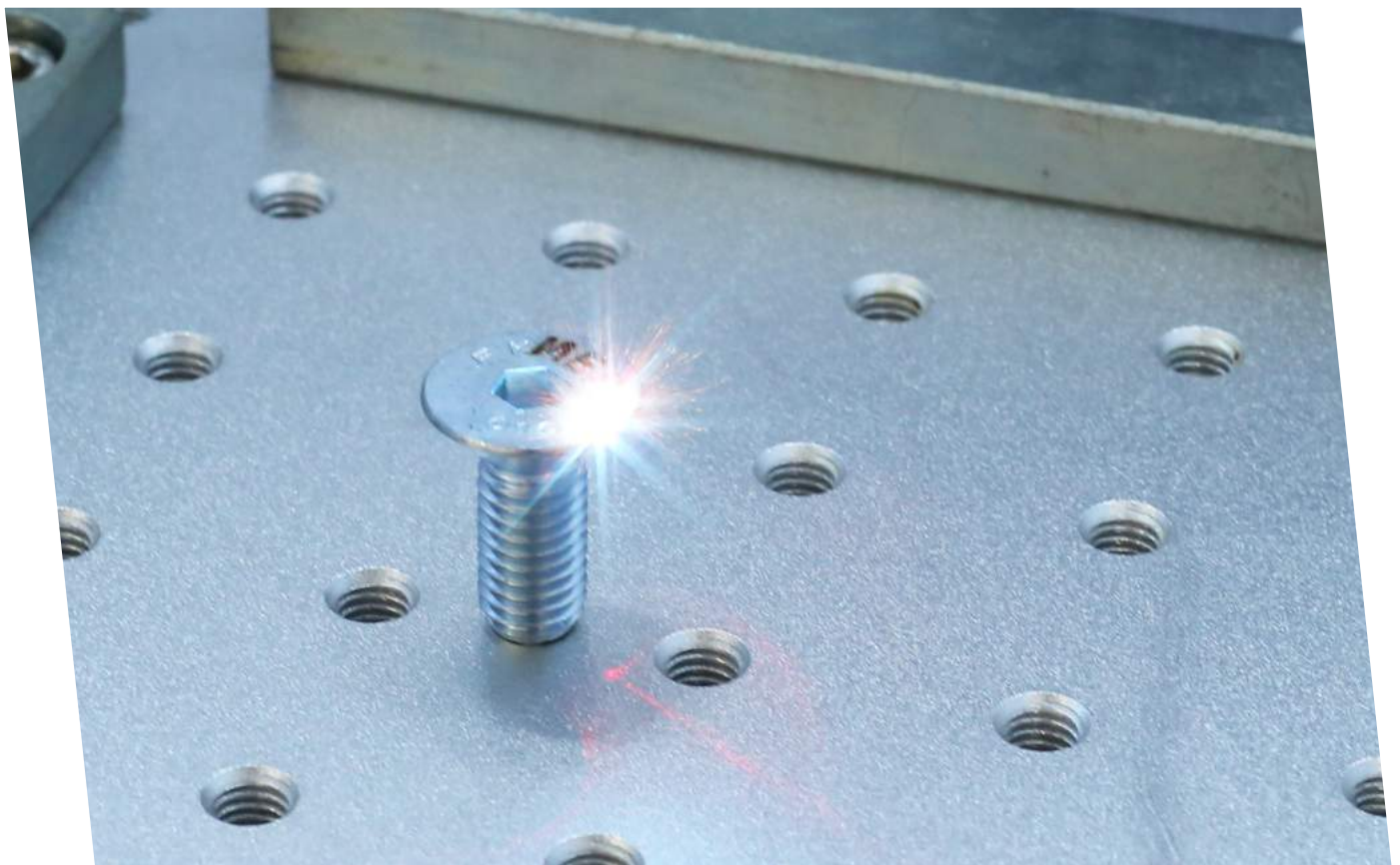
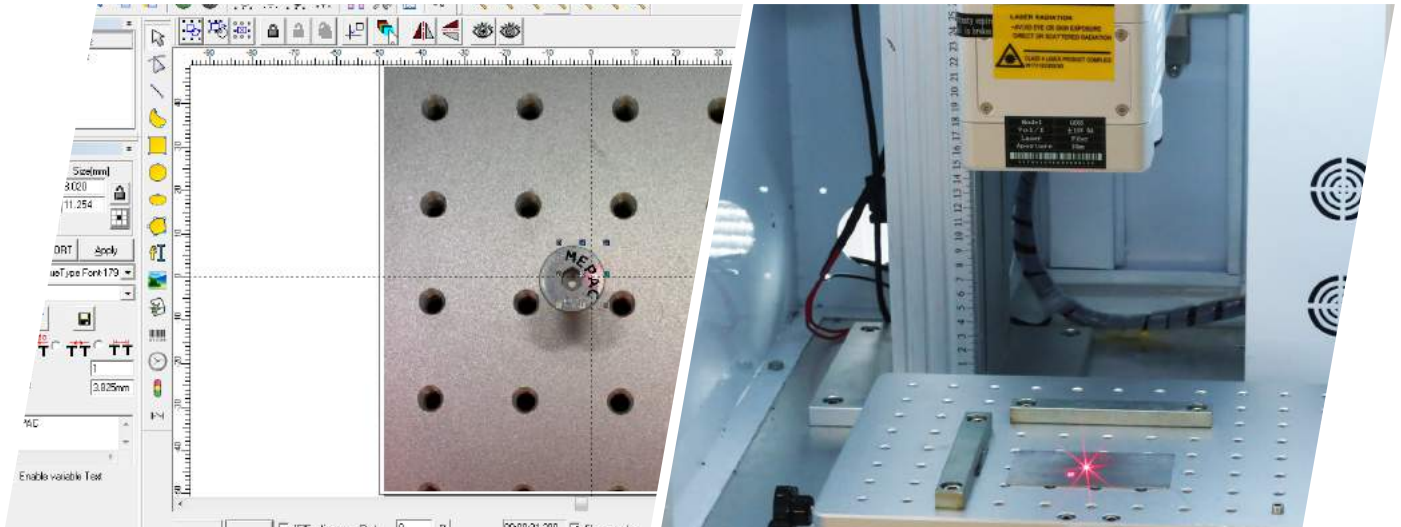
### NOTE

- the system is suitable for all kinds of metals, industrial plastics, metallized materials, rubber, ceramics, etc.
- wide area of use, eg: button marking, electronic components, tool accessories, watch, stainless steel products, spare parts, etc.

### OPTIONS

- rotation axis including connection to user software
- mobile stand STA-01, STA-02
- transport case
- suction unit PAC01





## Fiber laser HXM20-COVER



- compact laser workplace
- the electric displacement of the Z axis
- lighting of the working area
- optical camera for precise positioning
- sliding table X, Y
- possibility of connecting a rotary axis
- security class 1

### FUNCTIONS

- Branded fiber laser, 2-year warranty, quality laser point, uniform laser power density and stable output. Laser meets major market demands.
- The Digital High Speed Galva Scanner features compact dimensions, high speed and stability. The quality of galva scanner reaches international level.
- The whole device has a steady performance, compact dimensions and low power consumption.
- Advanced control software supports optimization of data processing depending on the different descriptions made. The software supports multiple languages and layer control with up to 256 colors. The laser can satisfy most of the processing requirements from different industries.

### TECHNICAL SPECIFICATION

output power	20W, 30W, 50W	max. power	≤ 650 W
wavelength	1064±4nm	power supply	220V ± 10% / 50Hz/4A
beam quality	<2M <sup>2</sup>	laser lifetime	> 50 000h
frequency tuneable range	20 kHz - 100KHz	cooling	forced air
marking area	110 x 110 mm	composition of the system	control system, industrial computer, work desk
marking speed	≤ 7000 mm/s	working environment	clean and dust-free environment
marking depth	≤ 1 mm	operating temperature	10 °C to 35 °C
minimum line width	0,02 mm	working humidity	5% to 75%
minimum character size	0,15 mm	total weight	90 Kg
repeat accuracy	± 0,002 mm	machine dimensions	400 x 600 x 600 mm

### MARKING MATERIALS

- Plastics, stainless steel and other metallic materials.







## Fiber laser HXP 20-A



Fiber laser series HXP contains fiber laser generator and high-speed high-precision galvo-scanner RAYLASE (Germany), making it excel stable output and high quality working modes of the laser. This system is to be used in mass production where it is needed high marking speed, good marking effect and high efficiency. System is also easy to operate, has low operating costs, long life and minimal maintenance. The system has the CE mark, is produced by CE standards and complies with all regulations for working with lasers in safety class IV.

### PACKAGE CONTENTS

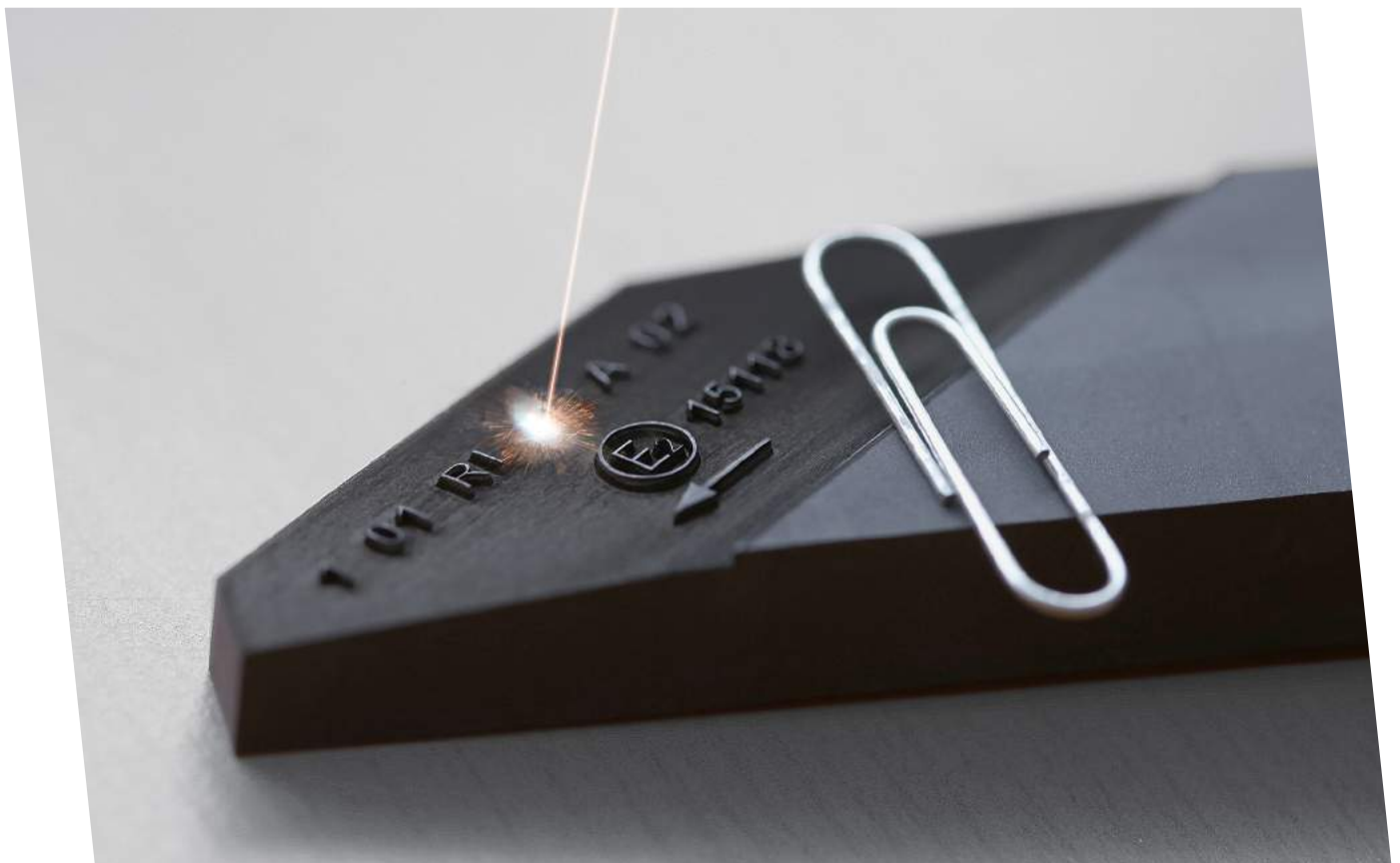
- source unit containing: laser control unit, laser fiber source, PC with installed software and Windows operating system, monitor, mouse and keyboard, main system switch.
- stand with laser head with fast and high precision galvo scanner Raylase
- work table for engraved items

### TECHNICAL SPECIFICATION

wavelength	1064±4 nm	pulse width	80~140 ns
polarizace	random	pulse power setting	5~100%
output power	20 W	operating voltage	100 - 240 VAC
power supply	AC 220 V ± 5% / 50-60 Hz	length of optical fiber	1.5 m
marking area - option/standard	70x70 mm/110x110 mm	cooling	forced air
marking speed	≤ 5000 mm/s	operating temperature	0~35 C°
marking depth	max. 0,5 mm stainless steel	working humidity	10~95%
laser lifetime	>30000 h	storage temperature	-10~60 C°
energy on one pulse	0.8~1.0 mj	dimensions of laser head (L x W x H)	445 x 95 x 95 mm
beam quality	<1.7 M <sup>2</sup>	dimensions of laser source (L x W x H)	331 x 110 x 220 mm
power stability	<5%	power supply dimensions (L x W x H)	250 x 100 x 60 mm
frequency tuneable range	30~60 kHz		

### NOTE

- the system is suitable for all kinds of metals, industrial plastics, metallized materials, rubber, ceramics, etc.
- wide area of use, e.g.: button marking, electronic components, tool accessories, watch, stainless steel products, spare parts, etc.





## Fiber laser HXP 20-E



### High-speed galvanometer scanner

Full digital drive and scanning engine, low zero fluctuations for long-term operation, long-term stability with gentle labeling (engraving) effects.

### User-friendly software system

Patented system, easy to use, multi-language compatible, individual development, constant updating for free. The built-in Emergency Stop button ensures maximum production safety. High-quality electrical components improve system stability over long-term operation.

### PACKAGE CONTENTS

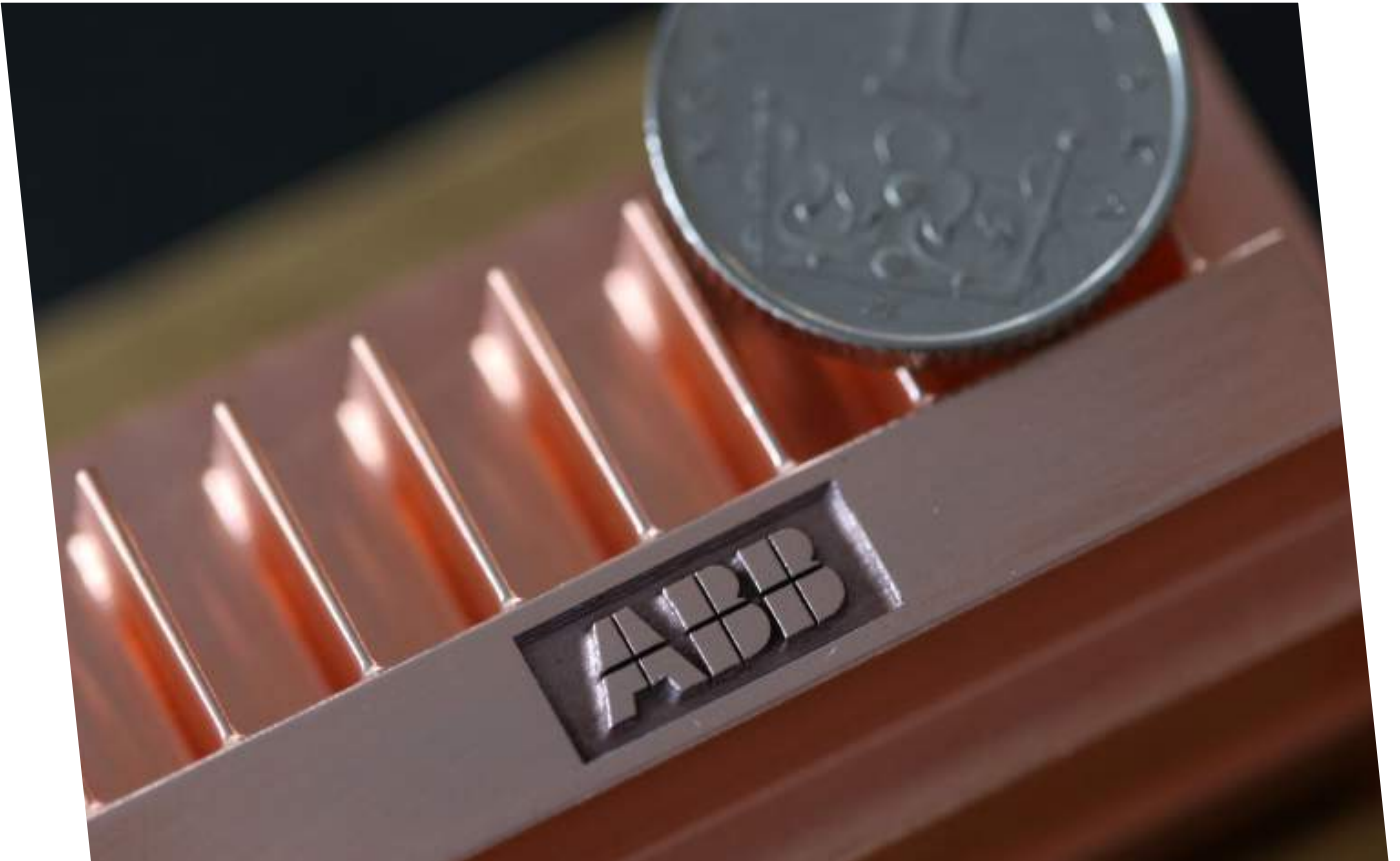
- laser generator: 20W
- working lens for the marking area 110x110mm
- work desk: shift X/Y
- computer: Lenovo with Windows 7 Professional
- control panel: LMC2010, support pulse width adjustment
- software + other setup features
- foot switch

### TECHNICAL SPECIFICATION

output power	20 W, 30 W, 50 W	frequency	50/60 Hz
wavelength	1,06 $\mu$ m	power supply	220 V $\pm$ 10% / 50 Hz / 4A
beam quality	<1,2 M <sup>2</sup>	total power	1 kW
frequency tuneable range	20 kHz - 80 kHz	cooling	forsed air
marking area	110x110 mm / 175x175 mm	operating temperature	10~35 °C
working distance	184 mm / 288 mm	operating humidity	max 75%
marking speed	max 7000 mm/s	working environment	clean and dust-free
marking depth	max 1 mm	total weight	80 kg
minimum line width	0,02 mm	graphic formats	bmp, plt, ai, dxf,...
minimum character size	0,2 mm	machine dimensions	750 x 600 x 1270 (mm)

### NOTE

- the system is suitable for all kinds of metals, industrial plastics, metallized materials, rubber, ceramics, etc.
- wide area of use, e.g.: button marking, electronic components, tool accessories, watch, stainless steel products, spare parts, etc.





## Fiber 3D laser HXP50-3D



### FUNCTIONS

- Equipped with an advanced 3D galvo scanner, which at a height of 0-60 mm generates a very precise laser point. It is possible to engrave into 3D curved surfaces while maintaining the quality of markings (at a height of 0-60 mm).
- The maximum marking area is 400 x 400 mm, which is much more than conventional fiber lasers offer.
- An advanced triaxial digital galva scanner engraves quickly, focuses in real time and can create a precise and uniform laser point.
- Modular design. This machine is compatible with most sources for fiber lasers.
- Markup software is able to import charts from common 3D software and modify these graphs in a simple way.

### TECHNICAL SPECIFICATION

output power	20 W / 30 W / 50 W	working environment	clean and dust-free temperature: 10 ~ 30 °C humidity: 5 ~ 85 %
power supply	AC 220 V ± 10%, 50 Hz	supported graphics formats	AI, DXF, BMP, JPG, PLT,...
accuracy of displacement	≤ 0,02 mm	gross power	< 1000 W
marking speed	0 ~ 7000 mm/s	dimensions	600x935x1600 (mm)
marking area	max 400x400 (mm)	weight	approx. 120 kg

### MARKING MATERIALS

- Plastics, steel, stainless steel, aluminum and magnesium alloy, zinc alloy, copper, nickel plated materials, galvanized materials, alumina etc.





## CO<sub>2</sub> laser MX30



### FUNCTIONS

- American CO<sub>2</sub> laser source with high quality laser beam, consistent power and stable laser output. These features can satisfy the demand of most industrial applications on the market.
- The high-speed digital galvo scanner has a small dimensions, high speed and stable quality. Thanks to these features, it is at the international level.
- The powerful control system can optimize data according to different technologies, supports multiple languages and control layers with up to 256 colors. All these features can satisfy the demand of most customers in the industry.

### TECHNICAL SPECIFICATION

wavelength	10,6 μm ( can be selected 9,3 μm)	supported graphics formats	AI, DXF, BMP, JPG, PLT,...
beam quality	<1,2 M <sup>2</sup>	power voltage	AC 220 V ± 10%
output power	30 W / 60 W	frequency	50/60 Hz
pulse frequency	0 ~ 25 KHz	machine dimensions	1300x1100x1400 mm / 2100x1800x1400 mm
cooling	air / water	total weight	cca 141 kg / cca 170 kg
marking area	110x110, 175x175, 300x300 (mm)	pracovní prostředí	clean and dust-free temperature: 10 ~ 35 °C humidity: 5 ~ 85 %
minimum line width	0,1 mm	gross power	< 1,75 KW < 2,05 KW
minimum character size	1,5 mm	laser safety class	4
marking speed	0~5000 mm/s (0~7000 mm/s supplied galvanometer)		

### MARKING MATERIALS

- wood, plastic, paper, rubber, glass, etc.





## CO<sub>2</sub> laser CMA6040K / 1080K / 1390K



- compact laser workplace
- electric displacement of the Z axis
- workspace lighting
- possibility of connecting a rotary axis
- security class 1

### FUNCTIONS

- Different accessories are available for specific requirements such as aluminum or iron washers, a metal grille, suction platform for soft materials and various separating blades.
- A lifting platform designed specifically for engraving and cutting thicker materials.
- Optional rotary clamp for rotary engraving of cylindrical and conical shapes.

### TECHNICAL SPECIFICATION

wavelength	10,64 μm	marking speed	0~64 m/min
output power	60 W / 80 W / 100 W / 130 W	cooling	water
power voltage	AC 220 V ± 10%	working environment	clean and dust-free temperature: 10 ~ 35 °C humidity: 5 ~ 85 %

### SIZE AND WEIGHT

Model	Marking area	Weight	Overall dimensions
CMA6040K	600 x 400 (mm)	260 kg	1100 x 920 x 1060 (mm)
CMA1080K	1000 x 800 (mm)	450 kg	1750 x 1310 x 1100 (mm)
CMA1390K	1300 x 900 (mm)	410 kg	2200 x 1600 x 1300 (mm)

### MARKING MATERIALS

- non-metallic materials such as rubber, plastic, acrylic, ceramics, crystal, wood, bamboo, paper, ...





## CO<sub>2</sub> laser MXC390-D



### FUNCTIONS

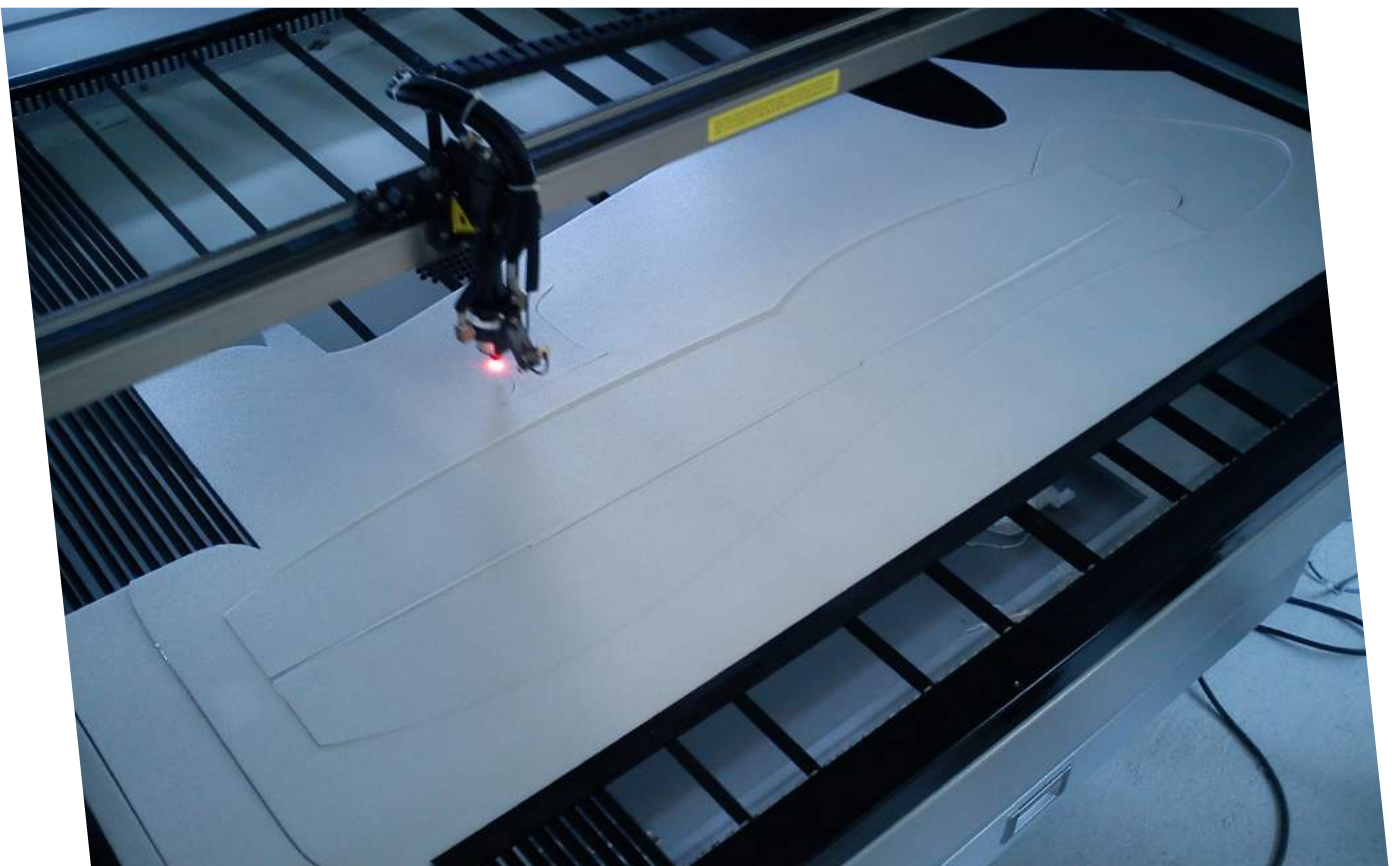
- High-speed galvo-head
- German CO<sub>2</sub> Rofin source ensures a high quality laser point and stable output.
- Equipped with a high-quality, powerful, three-axis automatic scanner with compact design, amazing stability, robustness and anti-interference capabilities. This guarantees the stability of the system in high-speed operation.
- Reliable and high-quality ray extender and reflector with low light attenuation ensure stable process with identical output and size.
- A high-quality enclosure construction protects the user from radiation. The entire device is very safe and environmentally friendly.
- Custom professional software provides easy handling, fast data processing of any shape or size. The software is compatible with GTools software, which guarantees high speed, high efficiency and high-quality, powerful marking.

### TECHNICAL SPECIFICATION

wavelength	10,6 μm	voltage	AC 220V ± 10%
beam quality	<1,2 M <sup>2</sup>	current frequency	50/60 Hz
peak power	350 W	machine dimensions	1010 x 2015 x 2025 (mm)
pulse frequency	0~100 kHz	dimensions of the cooler	670 x 470 x 890 (mm)
cooling	water cooling	body weight of the machine	≤750 kg
marking area	800x800 (mm)	weight of cooler	≤82 kg
focal distance	1546 mm	working environment	clean with minimal dust
working distance	350/450/550/660/825 (mm)	working temperature	5~40 °C
minimum line width	0,7 mm	working humidity	5-85 %
minimum character size	2 mm	gross power	≤12 kW
marking speed	0~15000 mm/s	laser safety class	4
graphic formats	bmp, plt, ai, dxf	enclosure rating	IP54

### MARKING MATERIALS

- non-metallic materials such as acrylic, wood, etc.





## CO<sub>2</sub> laser CMA1390



### FUNCTIONS

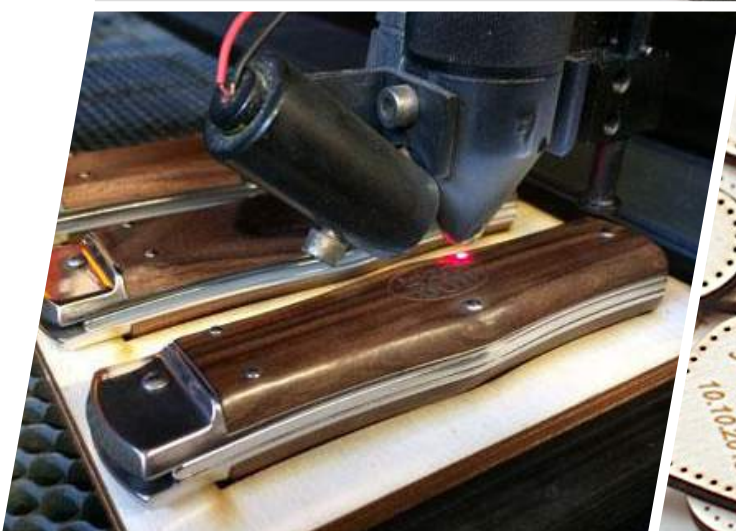
- Fully enclosure protective cover.
- The solid aluminum alloy beam is lighter in comparison to the traditional steel frame, generates less resonance and has a smoother operation.
- The dynamic stepper motor and high precision linear line guarantee dynamic response and increased load capacity.
- The cabinet air extractor ensures a clean working environment.
- Usable materials: MDF, acrylic and others.

### TECHNICAL SPECIFICATION

output power	80 W (optional 100 W, 130 W)	gross power	≤ 3,2 kW (including auxiliary accessories)
power supply	AC 220-240 V, 50/60 Hz	supported graphics formats	ai, dxf, bmp, jpg, plt, dst, dsb, ...
marking speed	0~30 m/min	cooling	water cooling
marking area	1300 x 900 (mm)	overall dimensions	2240 x 1780 x 1290 (mm)
weight	605 kg	working environment	clean and dust-free temperature: 5~40 °C humidity: 5~80%

### MARKING MATERIALS

- Non-metallic materials such as rubber, plastic, acrylic, ceramics, crystal, wood, bamboo, paper etc.





## CO<sub>2</sub> laser CMA4030



### FUNCTIONS

- Small dimensions save space and costs.
- High performance control board, friendly user interface, support for graphic formats: DXF, AI, PLT, DST, DSB.
- High-precision linear guide rail and stepper motor.
- Equipped with a lightweight and fast-moving laser head.
- The suction system ensures a clean working environment.

### TECHNICAL SPECIFICATION

wavelength	10,64 μm	cooling	water cooling
output power	25 W	weight	76 kg
marking area	400x300 (mm)	overall dimensions	860x672x465 (mm)
voltage supply	AC 220 V ± 10%	working environment	clean and dust-free temperature: 5~40 °C humidity: 5~80%
marking speed	60 m/min		

### MARKING MATERIALS

- Non-metallic materials such as rubber, plastic, acrylic, ceramics, crystal, wood, bamboo, paper, etc.



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