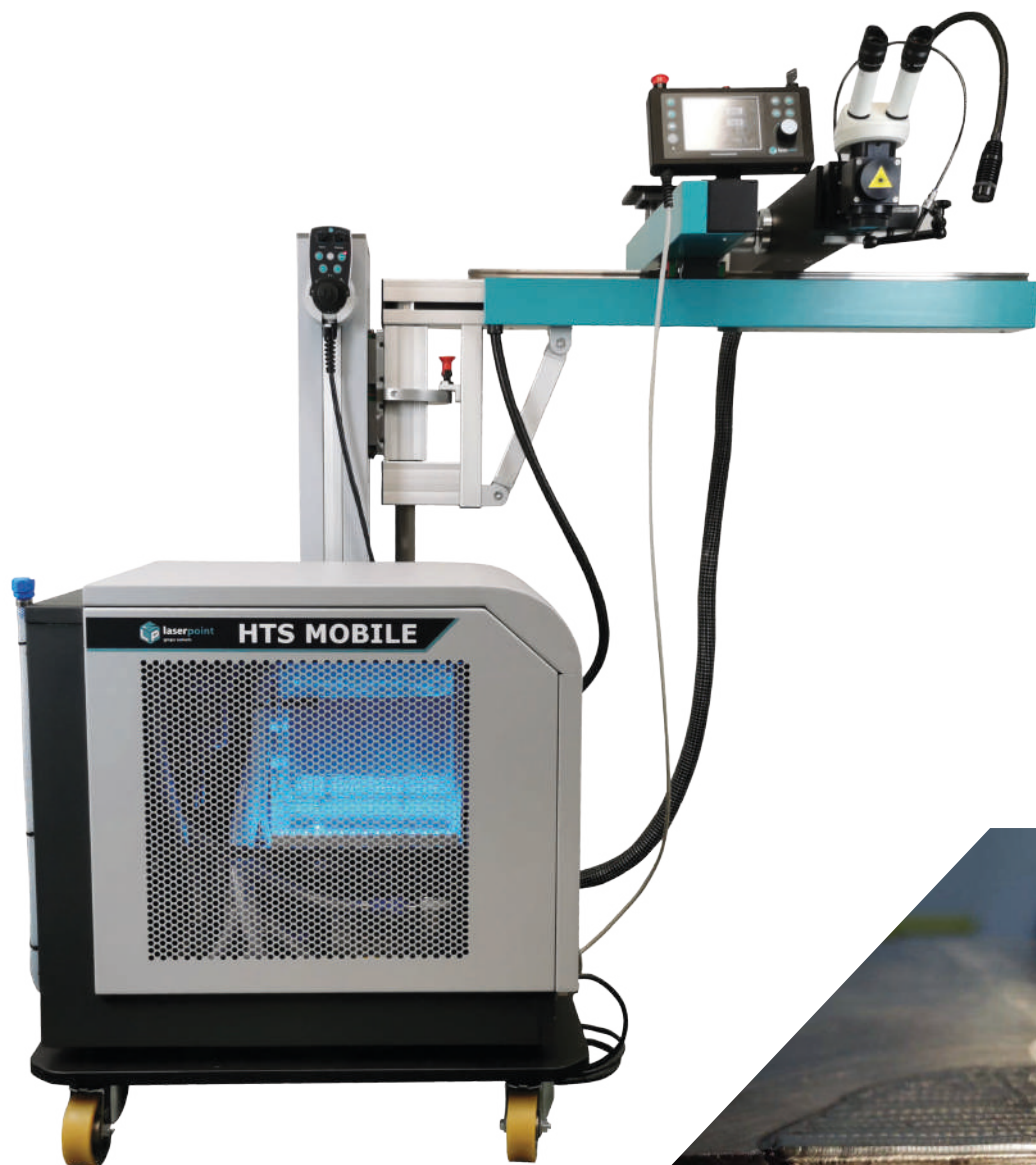


HTS MOBILE

Versatility meets stability

Laser technology for large and small workpieces





WELDING OF LARGE PIECES

Thanks to its mobility, HTS Mobile is perfect for welding large molds - without weight or size restrictions.

SWIVEL ARM

Practical, easy and quick positioning of laser's head thanks to rotatable construction of the stand (0-180°), and with large sliding ranges in all directions (X - 700 mm, Y - 400 mm, Z - 570 mm).



LEICA BINOCULARS

High-quality binoculars with a 10x or 16x magnification allow for precise positioning of the welding position with an accuracy of 0.1 mm.

SMART JOYSTICK

Original digital-analog joystick with the possibility of smooth motion control in three axes + rotary movement. Includes Teach-In function - simple welding path programming function.



HTS MOBILE

The HTS Mobile laser system combines flexibility and stability in repairs ranging from small precision parts to large injection molds.

Large tools, weighing from several to several dozen tons, require such mobile structures, allowing the access of the laser beam to various places.

The HTS MOBILE laser system is a tilt-articulated arm structure with a range of 1 - 1.5 m. with minimized vibration.

The combination of a swivel arm, movable resonator and optional head with 360° torsion optics allows almost any component (place) to be welded, regardless of size, geometry and position.

The device can be easily moved and stably positioned thanks to the brakes. This results in minimal setup times.

The system is equipped with a digital / analog joystick with Teach-In function.



By using high-quality Leica binoculars with 10x or 16x magnification, the welding positions can be determined precisely with an accuracy of 0.1mm.

The HTS Mobile laser system is very well prepared for surfacing both typical steel alloys used in the construction of molds and tools, but also aluminum, bronze or titanium.

With the help of the lens extensions and the 360° optical swivel head as an add-on module, no angle remains inaccessible. The laser beam is guided with millimeter accuracy to the welding point. The minimum set-up times of the HTS Mobile device, as well as long axis slide range, minimize the workload when welding tools (molds).



HTS MOBILE key features:

- Minimized vibrations thanks to the high-quality rail guide system
- Motorized sliding in X / Y / Z axes and R axis
- Direct laser generation source (resonator)
- Teach-In function



Technical data

	160 W	200 W	300 W
Laser type	Nd: YAG	Nd: YAG	Nd: YAG
Max. mean power	160 W	200 W	300 W
Pulse peak power	7.5 KW	9.0 KW	13.0 KW
Max. pulse energy	80 J	100 J	150 J
Pulse duration	0.4 - 20 ms	0.4 - 20 ms	0.4 - 20 ms
Pulse frequency	1 - 20 Hz (100 Hz)	1- 20 Hz (100 Hz)	1- 20 Hz (100 Hz)
Focus diameter	0.2 - 2.0 mm	0.2 - 2.0 mm	0.2 - 2.0 mm
Line voltage (V/Ph/Hz)	400/3/50-60	400/3/50-60	400/3/50-60
Order number	HTS-LP160	HTS-LP200	HTS-LP300

Laser system

Laser resonator with mechanics * crystal * quantron * resonator mirrors * protective shutter * motorized ray expander * power supply with protections * mains switch * emergency switch * motor protection switch * low voltage 24 VDC * interface with equipment monitoring * lamp switch * industrial control panel for indication and setting of power, time and pulse frequency, with external trigger via foot pedal * condenser bank * internal water-air cooling system

Working optics

Adjustable beam diameter expander * beam refracting prism * protective glass * LCD protective shutter * 10x binocular (Leica) * focusing lens

Linear system

Motorized Z axis for resonator * joystick operation * travel path for Z axis: 570 mm, X / Y axes for resonator positioning driven by stepper motors * positioning speed 0.5 - 15 mm/s * slide: X axis - 700mm / Y axis - 400 mm * LED lighting * resonator ball mount enabling tilting setting for welding large molds * protective gas supply controlled by a magnetic valve * stable structure made of aluminum profiles with powder-coated steel sheet covers * solid base of the stand on wheels

Dimension and weight

Dimensions: width 950mm x height 1550mm x length 1250mm * weight 370 kg net.

Installation

The price of the device includes delivery and installation at the customer's plant and instruction of use

Useful accessories



Lens protective glass

perfect protection for your lens. Protects the lens from welding spatter. For lasers up to 300 W. Ø 40 mm x 2 mm.

ON: 2200015/T



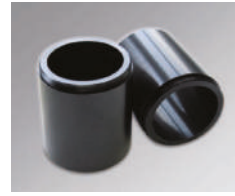
Focus lenses

different focal length laser lenses:
100 mm, 150 mm, 200 mm + adapter M50/M56.

F110 mm - **ON: 2200008/T**

F150 mm - **ON: 2200027/T**

F200 mm - **ON: 2200010/T**



Lens extension

extension of the focus position, extension height 100 mm, in size M50 and M55.

ON: 2200005



LED ring light

ng lighting DC 12 V - LED with 144 LEDs 20000 Lux, 6400 K various light settings, dimming 0-100% distance range: 40-250 mm, low power consumption 4.5 W.

ON: 32-RB2



Protective glasses

Fiber / YAG Laser protection range (850-1300 nm), essential protection for your eyes.

ON: 32-LSG-A



External cooling system CY-6000

compressor cooling system with a cooling capacity of 3.0 kW, weight 60 kg, H 890 x W 550 x D 480 mm, 230 V power supply.

ON: 32-ChZ60



Magnetic spheres

Magnetic spheres of various sizes for easy attachment and manipulation of the workpiece under a microscope. High-quality, strong magnets.

magn. Ø 100 mm, sph. Ø 120 mm - **ON: MCB100**

magn. Ø 125 mm, sph. Ø 170 mm - **ON: MCB125**

magn. Ø 160 mm, sph. Ø 210 mm - **ON: MCB160**



Nd laser lamps

Nd laser flash lamps for all Laserpoint systems. Lamp life is on average up to 3 million discharges.

LS-P 120/160 - **ON: 2700012**

LS-P 200 - **ON: 2700013**

LS-P 300 - **ON: 2700055**



Regulator for protective gas (Ar)

for shielded gas welding for optimal setting of the required amount of gas adjustable from 0.1 - 1.5 l/h.

ON: 2500015



Motorized swivel and tilt handle

A motorized axis rotates the workpiece during engraving or welding. For laser welding systems we recommend 2 models with three-jaw chuck.

Ø 80 mm motor - **ON: 32-MRD80**

Ø 120 mm motor - **ON: 32-MRD120**



Extractor III 200W

Mobile extraction and filter system

For the absorption of dust, as well as harmful combustion fumes, e.g. generated during the welding and laser engraving of metals.

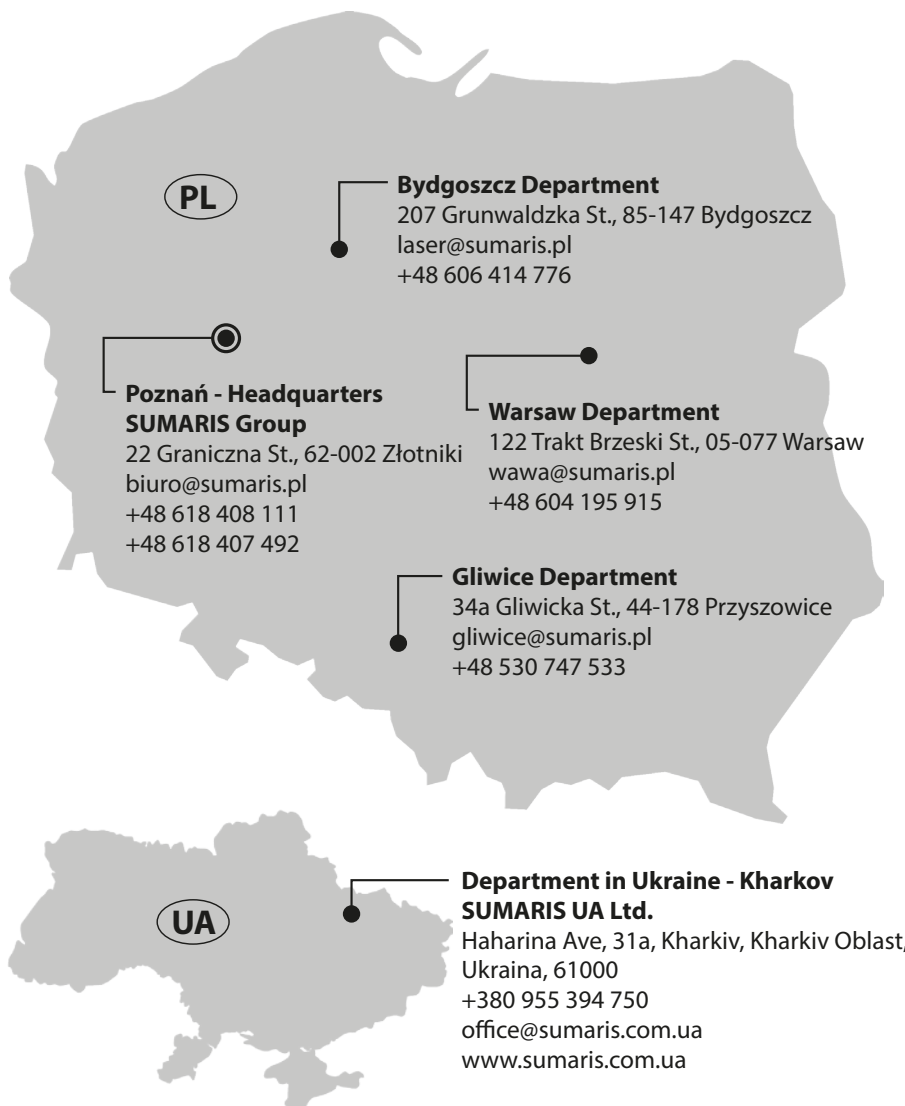
ON: 36-780A



360° optical swivel head

360° optical head for easier welding in hard-to-reach places with large molds and bulky parts 2 x 360° - horizontally and vertically.

ON: 2200012



Our projects



Partners

Die Sparschweine, iHR, Ranco, Coherent, Accu-Lube, Rexim, Sfida, Boride, Gesswein, Kemet, Eclipse Magnetics, Jost Chemicals, Eschmann Textures ...