



Precision Laser Cleaning Unit (QUANTUM-SERIES) 50W, 100W, 200W

Non-contact cleaning. A quick and intense procedure – and still gentle to material.

Our pulsed laser cleaning machines originally have been developed for industrial and workshop applications, e.g. for removal of rust, anodic coatings and annealing colors (resulting from weldments), but are frequently used also by construction companies for restoration of natural stone facades. This model proves to be particularly useful in municipal use, as it is extremely practical for mobile maintenance teams performing general surface treatment, e.g. for removal of graffiti and cleaning of public artworks.

Among our laser cleaning systems, the quantum model is the absolute lightweight version. Its weight of only 10KG / 13.5KG / 15KG is ideal for mobile applications, and the machine can alternatively be transported by backpack. Optionally, a pilot laser system can be integrated to make positioning of the laser head easier.

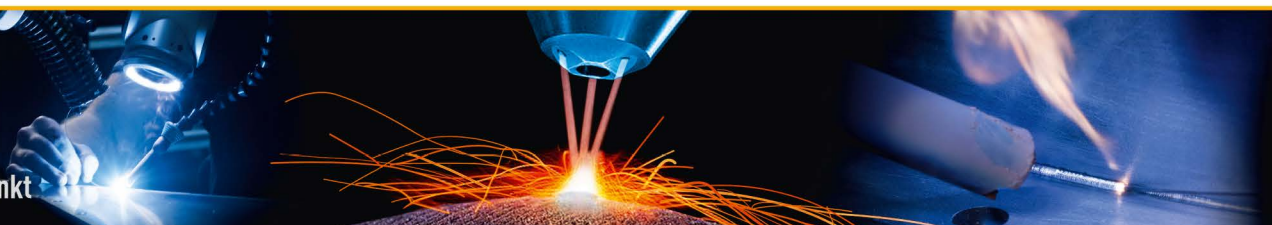
Applications:

1. Removal of rust and graffiti.
2. Cleaning of weld seams.
3. Removal of anodic coating.
4. Cleaning of sculptures.
5. Cleaning of wood surfaces.
6. Cleaning of concrete and natural stone surfaces.
7. Cleaning of tool molds.

Particular Features:

- Lightweight model for mobile work: Only 10KG / 13.5KG / 15KG total weight.
- Flexible laser beam width. Standard: 10 - 120mm.
- 2D focus objective: 6 different laser cleaning patterns.
- Pulsed fiber laser with 300W air cooling.
- Handgun light as a feather: Only 0.7KG, allowing comfortable scanning of surfaces.
- Length of flexible optical fiber cable: 3m.
- High efficiency, low space requirement, high flexibility.
- Simple manual operation.
- Outstanding price / performance ratio.
- Menu language selectable.
- Manufacturer's warranty: 1 year.

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Simple Operation via Touch-Screen (Several Languages Provided):



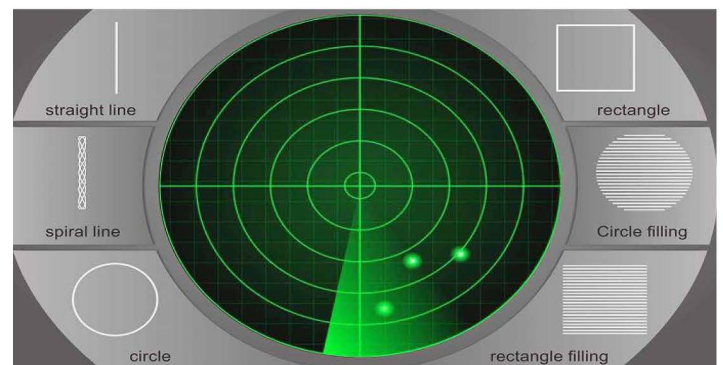
Precise Parameter Optimization:



Specification:

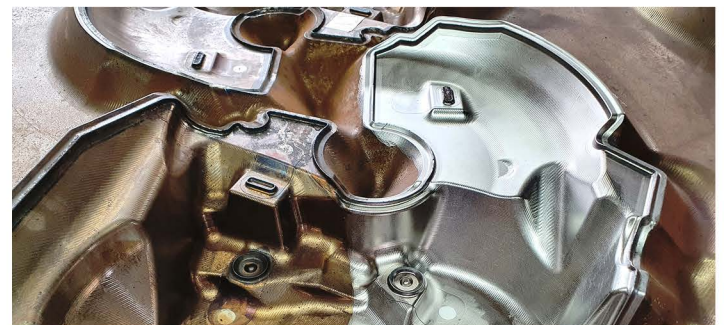
Laser power	50W / 100W / 200W
Laser type	Pulsed fiber laser (MOPA)
Laser wave length	1064±5nm
Pulse width 50W, 100W	100±10ns / 150-190ns
Pulse width 200W	160-200ns
Pulse frequency	45-170kHz / 20-200kHz
max. single pulse energy (MJ)	1.1 / 1.5 / 1.5
Humidity	<70%
Admissible ambient temperature	5-40°C
Power supply	230V / 1PH / 50-60Hz
Power consumption	250W / 450W / 800W
Cooling method	Air cooling
Length of fiber-optic cable	3m (max. 5m)
Width of laser beam	10 to 120mm
Types of laser beam	6 different types
Safety button	yes
Alarm lamp	yes
Menu language	Variable adjustment
Weight cleaning head	0.7KG
Machine dimensions: (LxWxH) 50W	430 x 210 x 285mm
(LxWxH) 100W	430 x 235 x 360mm
(LxWxH) 200W	500 x 265 x 335mm
Net weight machine	10KG / 13.5KG / 15KG

6 different Laser Cleaning Patterns:



We will be happy to advise you on selecting the appropriate machine type that meets your requirements. Individual designs are tailored to your needs and manufactured by our mechanical engineering team according to your wishes. Contact us and ask for a non-binding price and delivery time. We would be happy to rent you one of our machines until your own is ready.

Example (before / after cleaning):



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Lüdenscheid
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Nottebohmstraße 16
Askay 11

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02722 63 59-140

Mo bis Fr: 6.45 - 16h
Mo bis Fr: 6.30 - 15h

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www.klb-laser.de





Laser Cleaning

HIGH-TECH and Quality at a Fair Price.

As a manufacturer of laser cleaning machines, it is our main aim to make available to the clientele highly reliable machines featuring optimum quality. Our mechanical construction meets all challenges concerning HIGH-END Surface treatment, which represents a new element in our product portfolio composed of reliable and valuable machines equipped with advanced laser technology. The concentrated energy transfer to the surface creates a sudden increase in temperature and an effect similar to an explosion, causing impurities to vaporize at once without leaving a trace or residues. Our business network includes corresponding experienced suppliers producing innovative and reliable laser equipment, which we can offer to the clientele at fair terms and conditions, customized and tailored to applications in question.

We produce only machines which we have thoroughly tested and used in our own production as a service provider, knowing each model in detail. For this reason, we can offer service and support for the entire life cycle.

Non-contact cleaning

Expulses contamination – spares the material.

The new and innovative laser technology revolutionizes not only the industrial sector, but conquers also more and more private fields of application. Removal of varnish and de-coating, derusting and removal of contamination belong to the tasks comfortably to be carried out by this method. Surfaces are cleaned thoroughly and intensely, and parts after treatment prove to be completely regenerated. The process is simple and quick, even for very comprehensive cleaning work. The concentrated energy of the laser beam eliminates rust, lacquer, oil, soot, coatings, oxides and many other contaminations from metal, wood, natural stone and concrete.

Thanks to this recently developed method, cleaning of the surface takes place. The laser features a specific wavelength acting only on contamination of every kind and not on the material of a part being cleaned. The non-contact procedure, based on precisely targeted energy input, is also convenient for zones difficult to access.

Discover yourself a new level of refurbishment...

Advantages of Laser Cleaning:

- Simple and quick in daily use.
- Dry and clean.
- Low noise level.
- Clean surfaces by non-contact laser technology.
- Appropriate for both small and large surfaces.
- Ideally suited for zones hard to reach.
- Thoroughness and efficiency exceed the results of many other cleaning methods.
- Accurate and controllable cleaning jet.
- Residues nearly absent.
- Fast cleaning process with minimum delay.
- Minimum maintenance.
- Low operating cost.



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