

LASER CLEANING

Innovative, precise and cost-effective laser cleaning equipment





Blast Tehnik is official Netalux distributor for: Slovenia, Serbia, Croatia, Bosnia and Herzegovina, Montenegro and North Macedonia.



ABOUT LASER CLEANING:

Laser Cleaning technology finds its roots in laser marking machines. It uses high energy light pulses to ablate a contaminant from a substrate, reducing secondary waste to nihil.

Due to its basic physics, Laser Cleaning allows for extremely precise cleaning. It's human and environmentally friendly and has a very low operational cost.

HOW IT WORKS:

The pulsed lasers are best to be imagined as bullets of light being shot at a surface. The contaminant will absorb the light that is then reflected on the substrate below. Both layers release each other and the contaminant is extracted immediately.

During the process, the substrate is not significantly heated, nor is it damaged.

BENEFITS:

- removes only unwanted materials,
- low operational cost,
 - wide range of use,
 - environmentally friendly and safe to operate,
- minimal maintenance,
- controllable non-damaging process,
- low thermal input into substrate,
- manual or automated process.

APPLICATIONS:

- weld (pre-) cleaning,
- tool cleaning (moulds, mechanical elements,...),
- turbine cleaning (blades,...),
- tank restoration (rust, dirts and paint removal),
- PVD Coating removal (improved re-coating results),
- decontamination (silicone, grease,...).



the most versatile laser cleaning machine on the market light-weight and ergonomical design roratable laser head (115°) controls integrated in handset



perfect tool for larger jobs
50 meter fiber lenght
integrated 4 hoisting points - crane or forlift manipulation



24/7 operation (up to 80.000 h) easy to integrate superior customer support



NEEDLE MOBILE LASER: 50-300 Watt

With that operational challenge in mind, we developed its Needle. A small, lightweight and versatile laser cleaning machine. It's equipped to be lifted, has additional protection to withstand the most challenging environments and it has just the right size to be taken with you trough most man holes.

Because of sharp Gaussian beam profile, it's the perfect tool to clean welds, eliminating the need for passivation.

TECHNICAL SPECIFICATIONS:

- Laser type: Class IV Pulsed Ytterbium fiber
- Available power: 50, 100, 150, 200 & 300 Watt
- Pulse characteristics: Gaussian, max.1mJ
- Power supply: 230V | 50-60 Hz | 450 W
- Weight: 20 kg (handset = 2,3 kg)
- Dimension (I × w × h): 333 × 244 × 498 mm

JANGO MOBILE LASER: 500 & 1.000 Watt

Jango is Needles big brother with the biggest difference being a top hat profile. It has an impressive 50 metres fiber length, making it the perfect tool for larger jobs like tank cleaning or coating removal. This water cooled laser cleaning machine is available as a mobile machine, but can just as well be integrated.

TECHNICAL SPECIFICATIONS:

- Laser type: Class IV Pulsed Ytterbium fiber
- Available power: 500 or 1.000 Watt
- Pulse characteristics: Top hat, max. 100 mJ
- Power supply: 380V | 50-60 Hz | 7,5 kW
- Weight: 750 kg (handset = 4,0 kg)
- Dimension (l × w × h): 2.117 × 840 × 1.470 mm

STATIONARY STATIONARY LASER: 50 - 1.000 Watt

The integration of our equipment in your production line, partially or fully automated, allows for an unprecedented cleaning precision. Thanks to the software, we can upload CAD drawings to be as precise as possible and win valuable programming time.

TECHNICAL SPECIFICATIONS:

- Laser type: Class IV Pulsed Ytterbium fiber
- Available power: 50-1.000 Watt
- Pulse characteristics: Gaussian or Top hat
- Power supply: see Needle or Jango
- Weight: 750 kg (handset = 4,0 kg)
- Communication: Modbus TCP or IO interface