

SurClean Mobile HPLA Unit



SurClean is proud to introduce the **first complete mobile High-Power Laser Ablation System!**

The **HPLA unit** consists of a **proprietary cart** that carries:

- diesel fueled generator which is exhausted out of the trailer
- compressed air system
- chiller
- laser
- integrated equipment controls
- LPC system
- exhaust collector

The **proprietary cart system** may be loaded into a trailer (as shown) and pulled with a suitable pick up truck (Ford F-350 Diesel) or it could be loaded in or on:

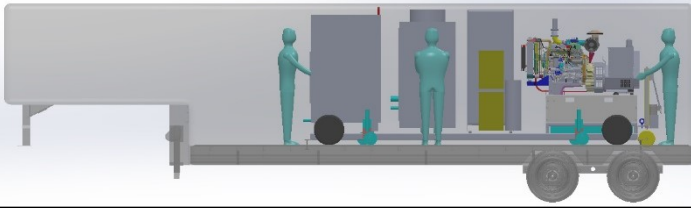
- containers
- scissor lifts
- AGV or other robotic transport

The **workhorse of any laser system is the beam delivery system**. Included with this system is the **SurClean SMR Handheld Unit**. The SMR is built to withstand harsh environments and worker handling. It is connected to the laser source via a fiber and quick disconnect unit allowing for easy, on-site change out. No re-alignment of the optical system is needed. Included is an accessible cover lens compartment to protect the focusing optics from contamination and easy change of the focusing optic for various applications.

Laser coating removal competes with chemical, abrasive and water blast methods. These methods generate hazardous waste, require personal protective apparatus and are not compatible with composites, fiberglass, alloys, and other materials used in manufacturing of high dollar assets today.

SurClean listens! We will **adapt** this **system** for the **customer's application**. This is possible because off-the-shelf items are integrated with SurClean's beam delivery components and process units. As the laser industry pushes forward, customer's will always have the latest technology available.

Mobile High-Power Laser Unit (HPLA)



Features:

- Compatibility with a variety of high-power lasers from multiple OEM Laser Companies*
- Operator Safety
 - Deadman Switch
 - Automatic Laser shut-down when not on target (available upon request)
- Ergonomic Design
 - Quick disconnect for cables and hoses
- HEPA self-cleaning Pulse-Bac vacuum exhaust for a debris particulate collection
- Laser Process Control (LPC) for selective layer by layer removal prevents damage to the base material

Applications:

- Paint Removal & De-Coating
- Surface Preparation for Adhesive Bond and Coating
- Mold Cleaning
- De-Oiling
- Surface Structuring
- Restoration of Stone, Brick, Concrete
- Ideal for Sensitive Substrate Cleaning i.e. CFRP
- Corrosion Cleaning



SMR Handheld

Specifications:

- Fiber Cable lengths from 10 to 30 m (additional lengths available upon request)
- Adjustable Scan Rate up to 30 m/s
- Power Range: 1-10 kW
- Wavelength Range: 250-1550 nm
- Focus Range: 250-1000 mm
- Adjustable Scan Width: 25-200 mm
- Lightweight Design: 15-17 lb without the cabling



SurClean LPC FEATURES:

- Online monitoring of the Laser Beam Ablation Process
- Detects Paint, Primer and Base Materials
- Real-time information
- Contactless
- Non-destructive
- CW and PULSED Laser Modes
- Adaptable Detector Configuration
- Closed loop Laser Power Control
- Suitable for all Industrial Laser Beam Sources