

LASER DECONTAMINATION

Fast, safe and cost saving processing in nuclear industry



cleanLASER technology allows fast, highly sensitive and cost saving decontamination in the nuclear industry.

More than 440 nuclear power plants are currently worldwide in operation while around 50 new plants are under construction. Most of American and European NPPs are older than 30 years. Maintenance, decommissioning and dismantling represent major challenges and involve high costs. Further industries with nuclear operations are research institutes, military defense and pharmaceutical industry. Laser can provide significant cost savings and process efficiencies for these industries. Multiple beneficial applications for laser among others are:

- Production of components for operational NPPs – e.g. cleaning of weld seams, decoating for NDT, dose rate reduction in fuel generation
- Operational NPPs – e.g. dose rate reduction, maintenance, preparation for NDT
- Dismantling of nuclear power plants – decontamination of metals and concrete
- Material processing centers/storage – decontamination
- Disaster areas – decontamination and decoating of buildings, streets and inventory



CL 1000 mobile High Power laser system



Patented underwater decontamination by ONET and our french distributor Meliad



Ready for decontamination

cleanDECONT – laser decontamination in nuclear areas



CL 1000 with suction nozzle and contamination cover plate

The media-free laser removes oxides, paint, rust, hydrocarbon, oil and grease in one step by means of light and is the ideal alternative to blasting, grinding, water jet and chemical decontamination. CL 1000 or CL 2000 High Power laser systems allow a fast process. New dust protected optic technologies can be used in an automated or handheld way. The combination with a nuclear suction makes the process safe and reduces disposal costs for filters.

An individual implementation of a laser- and radiation-safe solution is possible. A very flexible configuration can enhance the material flow and throughput of decontamination with up to 10 m²/h decoating and cleaning speed.



Handheld and remote decontamination for D&D and operational NPP



The cleanDECONT MACHINE is a gantry-based laser system for automated decontamination, frequently to achieve the release of metal and concrete parts for recycling

COST SAVINGS THROUGH LASER DECONTAMINATION

- One step NDE inspections
- Safer than traditional cleaning methods
- Reduces up to 90% of waste
- Extends the lifespan of equipment
- Easy set-up
- Environmentally friendly
- Media-free, non-contact and non-hazardous cleaning with light
- Does not create radiological mixed waste
- Reduces dose rates significantly
- Decontamination rates of 99.6 % and more
- Nearly zero harm to base material and surrounding equipment

10.2021. Subject to technical changes

PLEASE CONTACT US – WE ARE HAPPY TO ADVISE!

 **cleanLASER**
cleaning with light