

## PRESERVE TREASURIES WITH LASER LIGHT

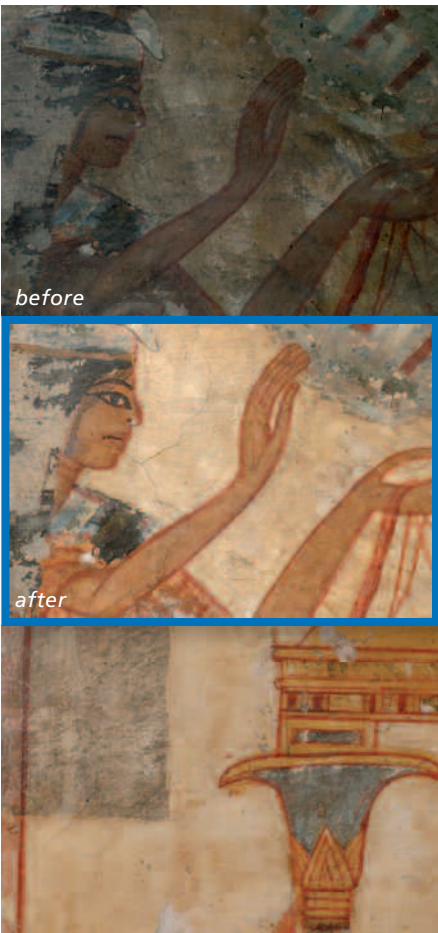


*Sensitive and checkable laser cleaning of metals, e.g. bronze or silver*

- Gentle cleaning with laser light
- No abrasion by means of abrasives
- No mechanical or chemical influences at all
- No harm by means of humidity
- Easy handling
- Mobile tool for environmentally friendly and, at the same time, economical operation

Clean's laser beam cleaning technology is a gentle and efficient tool for restoration and facade cleaning. With the CleanLASER stone and metallic surfaces can be freed from persistent environmental dirt and weathering.

Owing to the extremely short impact time of the laser beam the base material is not strained, mechanical and chemical damage is impossible. Similar to a torch light, the manually guided machining optic is directed across the material to be processed without direct contact with the material. Thereby a best possible result is guaranteed thanks to the interaction of the hand-held laser technique and the skillful restorer.



*Egypt, Valley of the Kings:  
Cleaning of a burial chamber,  
first laser-based project in Egypt.*



## FOR THE RESPONSIBLE RESTORORER



Whether knight's armor or a sculpture of a church door - the CleanLASER turns out to be an ideal tool for the restorer.

- Portable laser technique, extra small and lightweight, battery-driven when needed (Backpacklaser)
- Additionally, powerful mobile systems are available for large-scale applications (beam transmission by light conducting cable up to 50 m in length for best possible flexibility)

The CleanLASER removes substances aggravating surfaces, such as salt deposits and corrosion, without destroying natural grown protective passivation of bronze or other metals. Besides sandstone the CleanLASER can also remove impurities off marble, granite, terracotta as well as cement without any influence on the building physics. Owing to the fine metered laser light actually colored and pigmented surfaces may be cleaned gently of century's soot and dust. Even processing cloth and wood is possible with short-pulsed laser impacts.

The fine metering of the laser system's laser power (0-100%) and intensity displays a unique and innovative technique for restoration. Due to exchangeable objectives the full scope of settings is available to process gently.



Oxford Museum: Large-scale sandstone cleaning

Restoration with laser light – wear-free, workable, and environmentally friendly. Please contact us to discuss your application and discover how the CleanLASER can brilliantly illuminate your precious antique or building.



Chicago-City: Restoration of a natural stone mansion built in 1883, worldwide first big size restoration totally and only proceeded with laser technology, ca. 2500 m<sup>2</sup> surface