



### **ABOUT US**

IRLaser Sp. z o.o. offers the latest laser cleaning technology. This technology significantly accelerates the processes of preparing historic buildings for further conservation works. Our mobile laser systems allow us to provide services in any place indicated by the customer, both in open and closed spaces.

The wide range of control of the laser beam parameters allows us to clean almost any type of surface. The device we use is perfect for such surfaces as: wood, sandstone, mineral plaster, red brick, concrete, metal, paper and many other surfaces. We specialize in cleaning both large-format surfaces in the form of facades or entrance portals, as well as in small architectural elements in the form of sculptures, bas-reliefs or figurines.

Laser technology allows us to perform extremely precise works, such as uncovering repainted paintwork, selective cleaning of surfaces to an appropriate level of cleanliness, so that the object retains its historic character. Moreover, thanks to the latest laser cleaning technology, we are able to quickly and effectively remove graffiti from various types of surfaces, as well as individual accumulations, while leaving others.





## ABOUT TECHNOLOGY

Laser cleaning is a non-invasive process of removing unwanted layers from the original material. The device produces a highly concentrated but very short laser pulse to evaporate impurities from the surface of objects, without damaging it.

### The advantages of the technology:

**Safety** – laser ablation technology is the safest way to remove accumulations and is approved where chemicals and abrasive methods are excluded

**No contact** – the cleaning medium is the light energy, so that there is no physical contact with the cleaned surface and no abrasive material is used

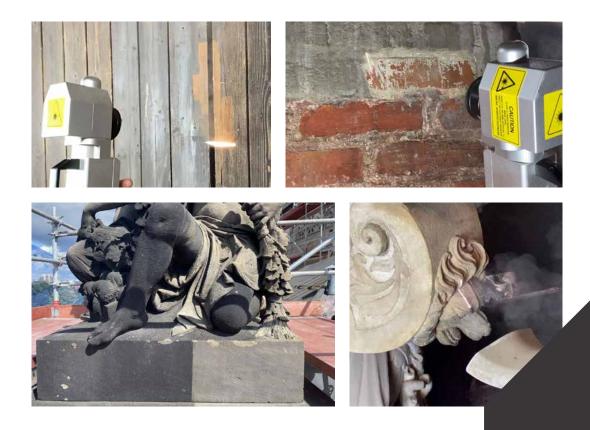
**Selectivity** – the laser beam only removes exposed dirt. This allows the technology to be applied to the most delicate surfaces

#### **Environmental performance**

 no waste that needs to be disposed of is generated during the cleaning process

**Efficiency** – the efficiency of modern lasers allows us to reduce the downtime process to an absolute minimum

**Cleanliness** – the laser removes up to 98% of impurities from the surface, thus ensuring the highest degree of cleanliness of all available methods







# MORE INFORMATION

The technology of laser cleaning of architectural monuments was already known in the world at the end of the 20th century. Current technological development has allowed not only to reduce the size of the devices, but also to increase their efficiency. As a result, mobile cleaning systems have begun to emerge, thanks to which the technology can be used anywhere.

The development of Fiber beam production technology has given new importance to the use of lasers for the process of cleaning historical buildings. The development of beam production technology on a Fiber type source has given a new meaning to the use of lasers for the process of cleaning historical buildings. Laser technology currently has a significant impact on the protection of cultural heritage and is in many cases the only possible method of cleaning objects without damaging them.

The essence of the entire cleaning process lies in the selection of the right laser, the wavelength of light and the setting of appropriate parameters. The safety of the process is therefore in the hands of the machine operator.

Thanks to a qualified team and cooperation with conservationists from all over Poland, our company has the appropriate experience in working on historical buildings. IRLaser Sp. z o.o. uses only certified devices that produce the highest quality stable laser beam which guarantees safety, efficiency and precision of the cleaning process.

YouTube

youtube.com/irlaser



Please contact us

🔀 export@irlaser.pl

**]** +33 673188241

www.irlaser.pl

