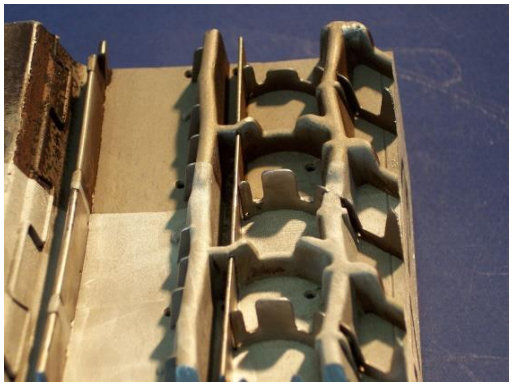
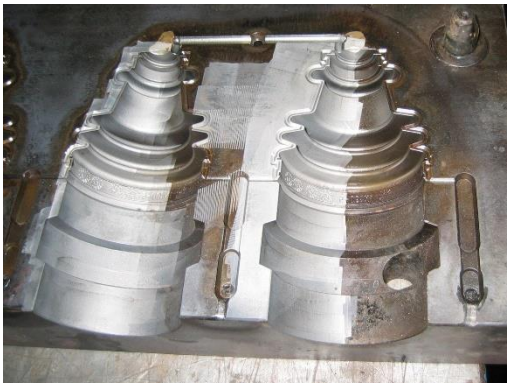
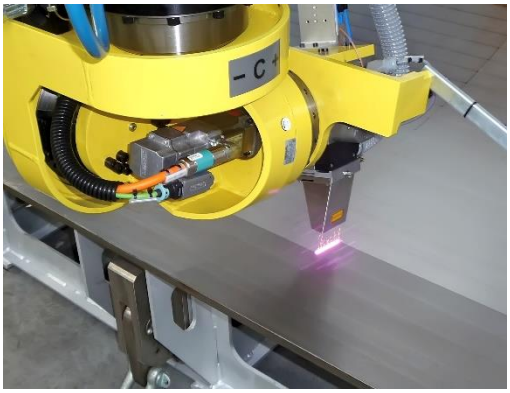
MOLD CLEANING

Gentle removal of process residues







Mold cleaning with laser light provides an economical and ecological alternative to conventional cleaning methods. Even persistent residues can be precisely removed without leaving any abrasives or causing damage to the sensitive mold surfaces. The operating life of the high-value molds and tools increases significantly.

Oxide layers and process residues can be removed quickly and thoroughly by the power of pulsed laser radiation alone. The laser beam is precisely adjusted according to the application to achieve an optimal, reproducible cleaning result.

With rates of approx. 22 m^2 per hour, cleaning times can be reduced and downtimes minimized. The laser systems can be easily integrated into line or used manually for partial cleaning. Even hot molds are cleaned with cleanLASER at an ambient temperature of up to 70 °C (in exceptional cases even significantly more). Thus, there no delays due to cooling times.

- **Manual or automated processing**
- **Easy integration into existing production processes**
- **Damage-free, wear-free and residue-free use even with metal-coated tools**
- **Precise, reproducible cleaning results**
- **Quality control through process monitoring**
- **Cost-effective and energy-saving**
- **High-speed and silent**
- **No blasting and cleaning media**
- **Complete suction of residual particles**
- **Eco-friendly process (German Environmental Award)**

LASER SYSTEMS FOR MOLD CLEANING

For mold cleaning cleanLASER offers specialized hand-guided as well as automated cleaning lasers with 12 to 1000 Watt laser power.

Thanks to the unique beam forming of the cleanLASER systems, laser light in the focus is distributed very evenly and gently over the tool surface. This is the only way to avoid melting of the sensitive tool surface.

Various flexible processing optics are available. The systems can be easily integrated into the running production.

In addition, there are specialized systems for in-line cleaning of vertically or horizontally opening injection molding machines as well as the "bakeLINE" for installation in baking systems.

APPLICATION EXAMPLES:

- **Cleaning of metallic plastic and vulkanising tools**
- **Cleaning of large-area metallic molds for the production of fiber composites**
- **Baking mold cleaning**
- **Cleaning of sensitive molds in the semiconductor industry**
- **Removal of release agent residues**
- **Removal of process residues and oxides**
- **Cleaning of printing rollers**
- **Cleaning of workpiece carriers out of plasma evaporation systems**

EXAMPLES FOR CLEANLASER SYSTEMS

left: Printing roller cleaning
right: bakeLINE for ongoing cleaning of waffle molds

PLEASE CONTACT US – WE ARE HAPPY TO ADVISE!

cleanLASER
cleaning with light

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