

Research Group Cleaning Technologies

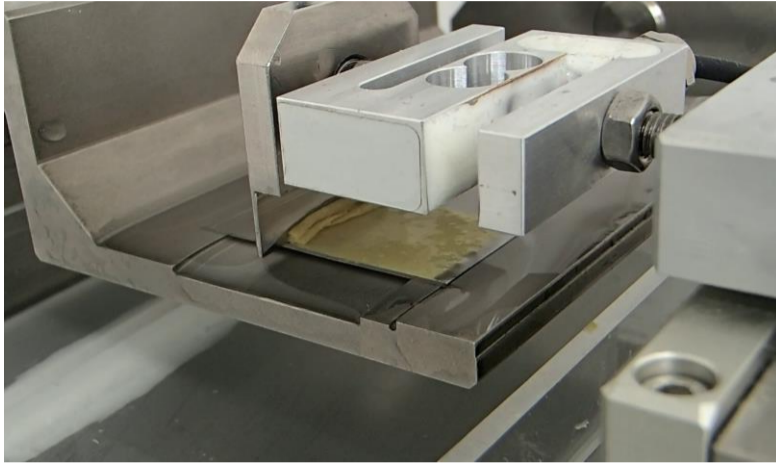
The cleaning of machines and facilities is a decisive process for maintaining product quality in the food and pharmaceutical industries.

Increasing cost pressure as well as higher demands on environmental and consumer protection lead to a discrepancy between process reliability and a minimum use of resources.

The Cleaning Technologies Research Group of the Chair of Processing Machinery / Processing Technology focuses on the design of safe and efficient cleaning processes in close cooperation with the Fraunhofer IVV Dresden.

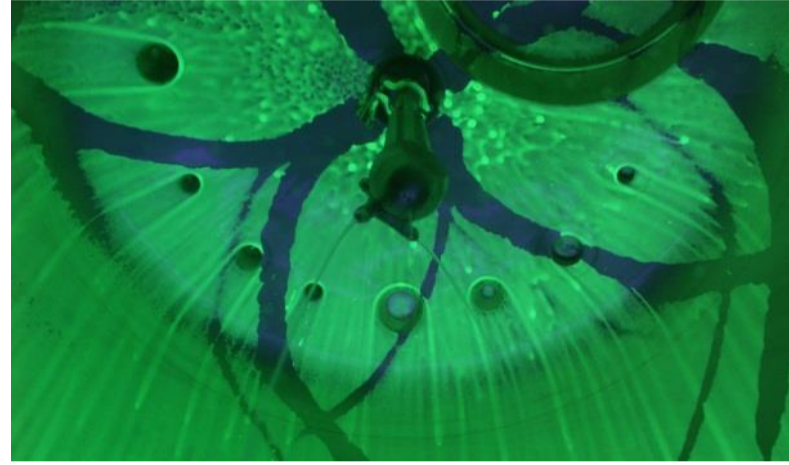
Here we see ourselves as a cross-industry expert for automated industrial cleaning tasks.





Technical equipment

- Modular test rig for CIP processes
- Spray cleaning test rigs
- Falling film test rig
- Parts washing machine
- Spray cabin with robot
- 10 m³ test tank
- High-pressure pump
- Foam applicator
- Measuring instruments for spray and jet characterisation
- Equipment for soil application and characterisation



Research areas

- Investigation of cleaning progress and process influences for open and closed cleaning processes
- Evaluation of cleaning efficiencies
- Development of cleaning sensors for inline detection of soilings
- Soil characterisation
- Characterisation of liquid jets and films
- Cleaning simulation to increase process understanding and for purposeful optimisation
- Design and development of automated cleaning devices
- Development of hygienic components for the food processing industry
- Collaboration in EHEDG Subgroups Training-Education & Tank Cleaning

Contact us!

Hannes Köhler

Research group leader

Tel.: +49 351 463-42273

Fax: +49 351 463-37142

E-Mail: hannes.koehler@tu-dresden.de

