



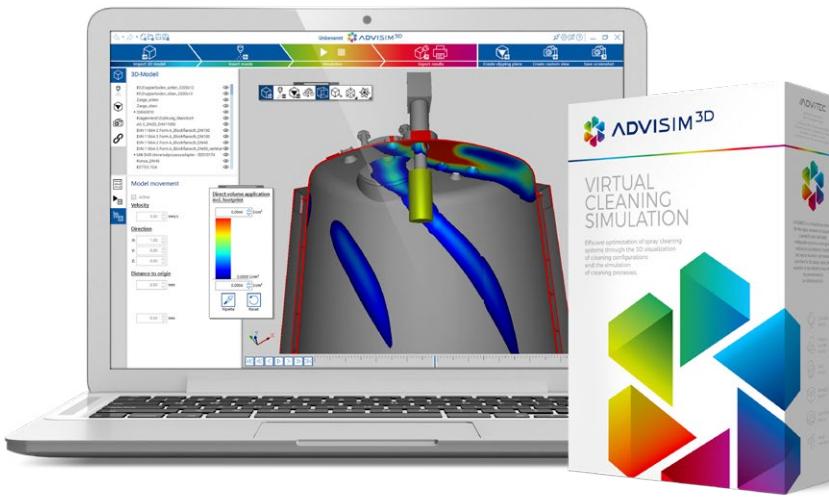
A brand of ADVITEC Informatik GmbH

# ADVISEM<sup>3D</sup>

Virtual Cleaning Simulation

## VIRTUALIZE YOUR EXPENDITURE MAXIMIZE YOUR BENEFITS

**3D cleaning simulation for the food, pharmaceutical and manufacturing industries to provide digital support to the engineer in the design process, testing and optimizing cleaning systems**



When designing and validating cleaning systems, the focus is always on the optimum nozzle configuration to remove contaminants from each individual point of the cleaning object in a resource-optimized manner. ADVISEM<sup>3D</sup> reliably visualizes spray shadows as well as the volume flow distribution and cleaning effect in its temporal progression.

### ADVISEM<sup>3D</sup> Highlights

- Instant display of spray shadows with nozzle placement
- Import of complex CAD models in STEP file format
- Simulation of linear and rotating nozzle motions with user-defined time and velocity
- Large catalog of scientifically measured nozzles from numerous manufacturers
- Precise simulation of volume flow distribution over time for meaningful cleanability proofs
- Determination of the cleaning effect under the ideal conditions of a scientific laboratory test
- Simulation results as color visualization and as a report

Industry solution for



Cosmetics



Pharma



Food



Packaging



Automobile



Nozzle Technology

You have questions?  
We advise you!

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- Order trial version
- Request live presentation
- Purchase license

Software subscription  
from 4150 EUR net

annually per license

- Unlimited installations
- 1 active user
- Support and updates included



## What makes ADVISIM<sup>3D</sup> so valuable for you

### REQUIREMENT

The hygienic production, storage and delivery of pharmaceutical products, cosmetics and the food industry place high demands on the cleanability of the production areas as well as storage and transport containers. Complex plants with integrated cleaning systems that ensure both product safety and environmental protection are usually required.

### PROBLEM

The efficient design of plants ties up enormous resources and is often based solely on the valuable experience and knowledge of engineers. Optimally positioning static and dynamic cleaning nozzles is a major challenge. Thus, cleaning systems are reconfigured several times with the help of extensive analog tests and are often oversized in the end for safety's sake.

### SOLUTION

ADVISIM<sup>3D</sup> simulates reliably industrial spray cleaning processes for the identification and realization of optimization potentials for design, construction and operation of professional cleaning environments. It allows an engineer to make valid statements about spray shadows, volume flow distribution and cleaning effect, but above all to quickly compare variants for best resource efficiency.

## Your benefit: What ADVISIM<sup>3D</sup> saves and improvessert

### TIME

- Design and layout cleaning systems faster
- Virtual comparison of variants
- More test runs in less time thanks to virtual simulation
- Bidirectional compatibility with CAD programs
- Shorter time to market
- Shorter downtime when changing products
- Competitive advantage

### ENVIRONMENT

- Save cleaning medium, water and waste water
- Less effort for assembly, elimination of assembly marks and model contamination thanks to virtual variant comparison
- Prevention of incorrect dimensioning thanks to optimal system design and resource-efficient layout
- Virtual troubleshooting outside the production environment saves set-up times and rejects

### TRANSPARENCY

- Keyword „glass tank“: the digitally visualized cleaning process gives the customer more transparency

### DOCUMENTATION

- Clean documentation of the optimal cleaning configuration and export as STEP file
- Faster and cheaper cleanability proofs for quality assurance and audits
- Automated report generation after each cleanability test

### DISTRIBUTION

- Use as demonstrator tool for sales support

### EXPERTISE

- Less engineering hours in plant design and layout
- Use ADVISIM<sup>3D</sup> efficiently as a sales tool
- Uninterrupted production

### CONTROL

- Optimized process and project control

### RELIABILITY

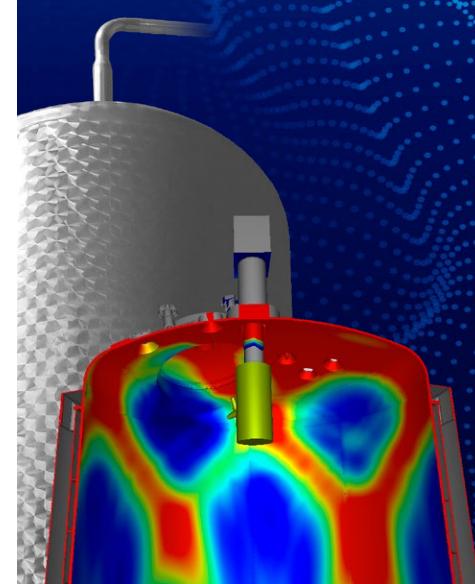
- Higher calculation and planning reliability in plant design and commissioning
- Early recognition and consideration of critical cleaning areas

## YOUR DIGITAL ASSISTENT

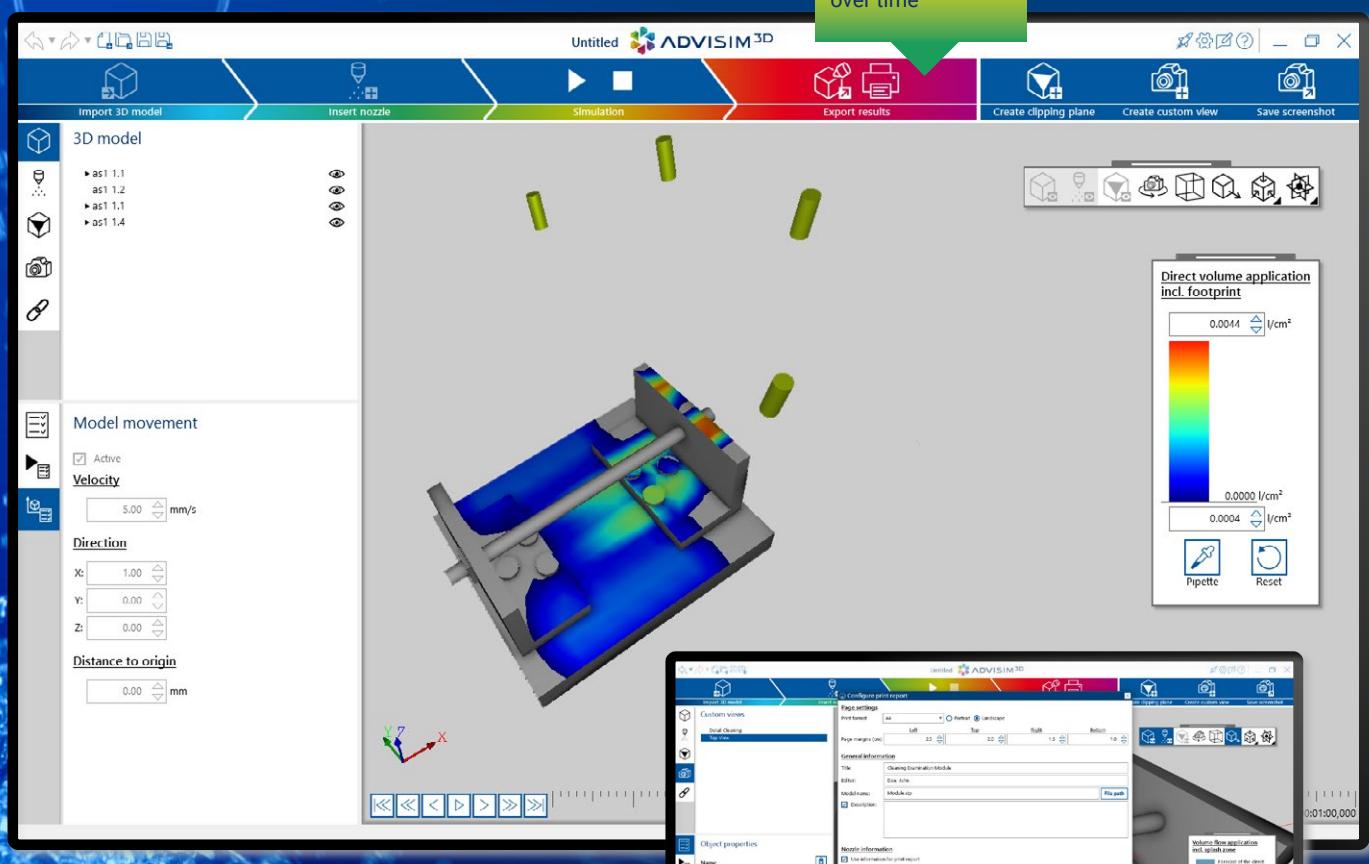
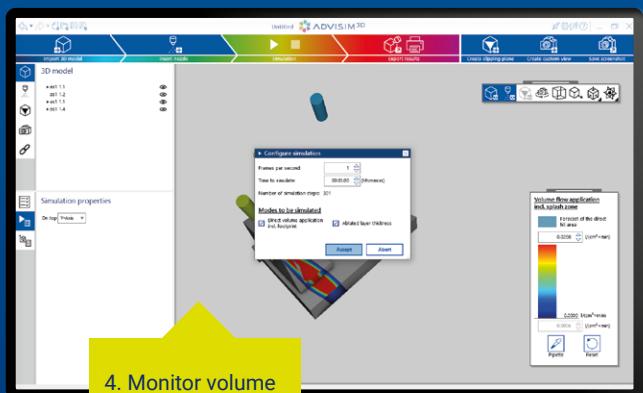
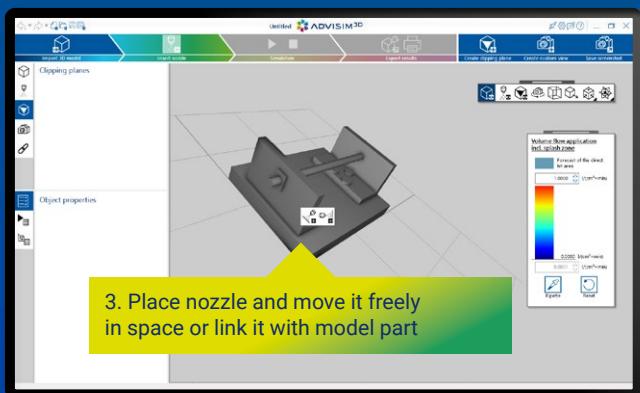
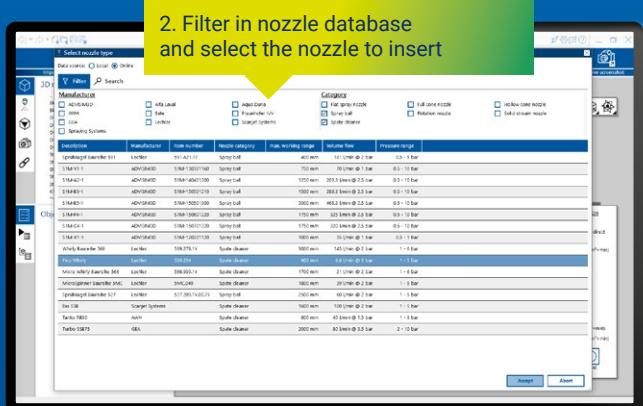
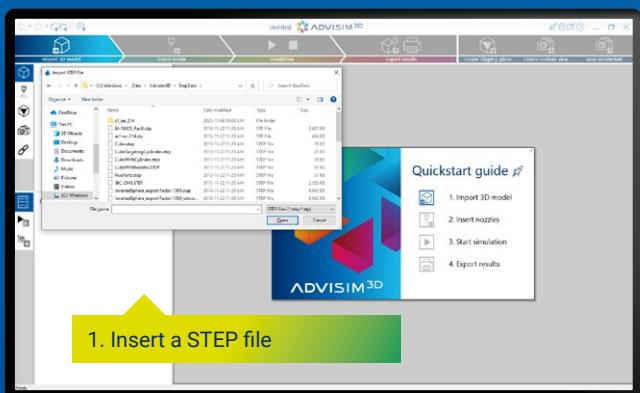
In the hands of an experienced engineer ADVISIM<sup>3D</sup> unfolds its full technical potential in the resource-efficient design, layout, validation and of course in the amortization of industrial spray cleaning systems.

Whether component manufacturing or internal cleaning of containers in the food, pharmaceutical, automotive or cosmetics industry - the advantages of virtual simulation with ADVISIM<sup>3D</sup> saves your analog business valuable personnel, time, financial and above all environmental resources.

And in productive operation, the avoidance of spray shadows and oversizing thanks to optimal nozzle configuration pays for itself with each new cleaning process over months and years.



# Insights into the ADVISIM3D software





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## Perspectives and potentials



"ADVISEM3D sets a previously unattained standard in the simulation of container interior cleaning. The 3D visualization and user-friendliness are inspiring. The results are precise and save costs for expensive test series and modifications."

Torsten Große

Design Manager | Standardization and Design Requirements (PADD/ENG-N) | Syntegon Technology GmbH



"ADVISEM3D is the first market-ready product of our strategic development offensive „Software for industrial cleaning“. Since 2015, ADVITEC has been building up in-depth expertise in the digitisation of cleaning processes, particularly in the areas of virtual simulation and robot control. We regularly contribute our expertise to research and funding projects with partners from science, industry and politics. Our common goal is to optimize resources through more efficient cleaning processes for the benefit of the environment, society and companies."

Norbert Ebersbach

Managing Director and Product Manager in the project ADVISEM3D | ADVITEC Informatik GmbH

## System requirements

- 64-bit Windows operating system, from Windows 10
- Graphics card and driver with OpenGL 4.0 or higher
- 32 GB RAM
- Internet connection
- CAD files in STEP file format

## Software subscription from 4.150 EUR net

annually per license

- Unlimited installations
- 1 active user
- Support and updates included



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ADVISEM3D is an industry solution from ADVITEC, which has been available with headquarters in Dresden for around 25 years of experience in managing and consulting complex IT projects and developing highly specialized software with its own engineering team. ADVISEM3D is based on the SIMKOR research project on software-supported virtual cleanability tests and the simulation of complex spray cleaning systems. It was funded by the BMBF and developed as a cooperation project with partners Fraunhofer Institute IVV Dresden and the Innovation and Simulation Service of Festenberg (ISF).



## HOW TO REACH US

You would like to learn more about ADVISEM3D and its various applications?

[WWW.ADVISEM3D.COM](http://WWW.ADVISEM3D.COM)

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