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# Wacker Chemie AG: The path to efficient and consistent processing of 3D plant models

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**AVEVA**

# WACKER Supplies Products and Solutions for Key Global Industries

## Wacker Chemie AG

- Is a technology leader in the chemical and semiconductor industries
- Forges ahead with technical innovations and the development of new products for the world's key industries
- Offers solutions and innovations for a broad range of sectors:



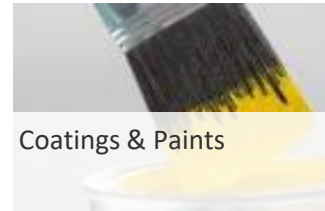
Automotive & Transport



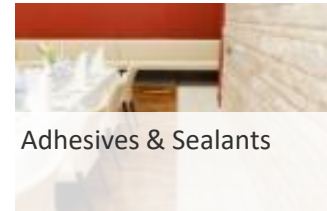
Construction



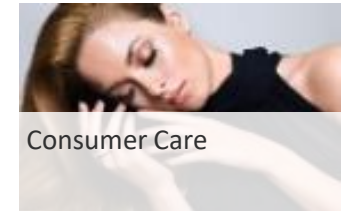
Energy, Electrical & Electronic Systems



Coatings & Paints



Adhesives & Sealants



Consumer Care



Elastomers & Plastics



Paper, Films & NIP



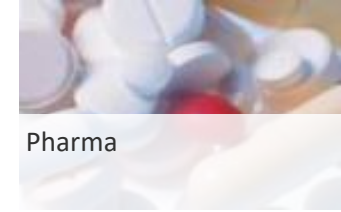
Renewable Energies



Textile, Leather & Nonwovens



Semiconductors



Pharma



Food



Healthcare



Composites



Agriculture



Chemical Industry



Industrial Biotechnology

# Over 100 Years of Success

## Wacker Chemie AG

- Founded in 1914 by Dr. Alexander Wacker
- Headquartered in Munich, Germany

## WACKER Group (2022)

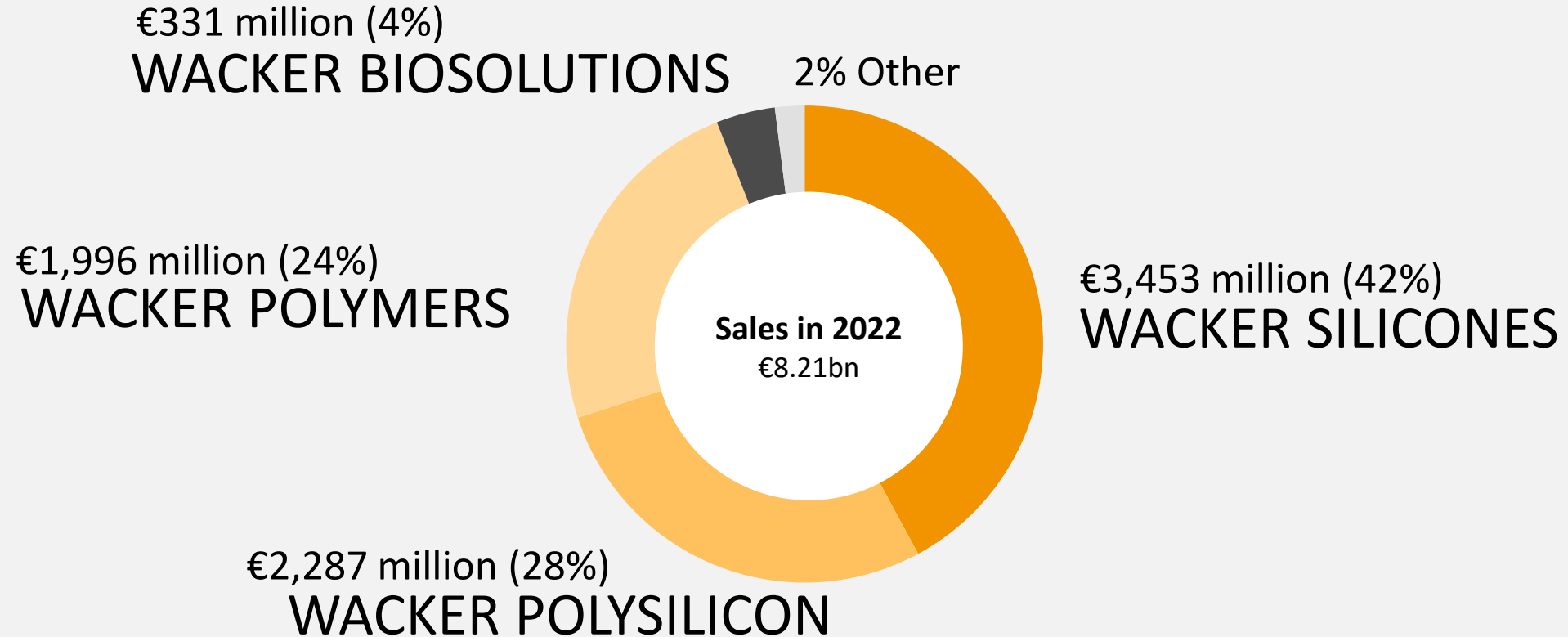
- Sales: €8.21 billion
- EBITDA: €2,081 million
- R&D: €178 million
- Investments: €547 million
- Employees: 15,725

## Presence in Growth Markets



- **Production sites**  
(Europe 10 | The Americas 8 | Asia 9)
- **Technical centers**  
as a basis for sales

# Attractive business portfolio with many growth opportunities



## Concurrent Engineering drives Wacker's Strategy - Growth & Sustainability

### Challenge

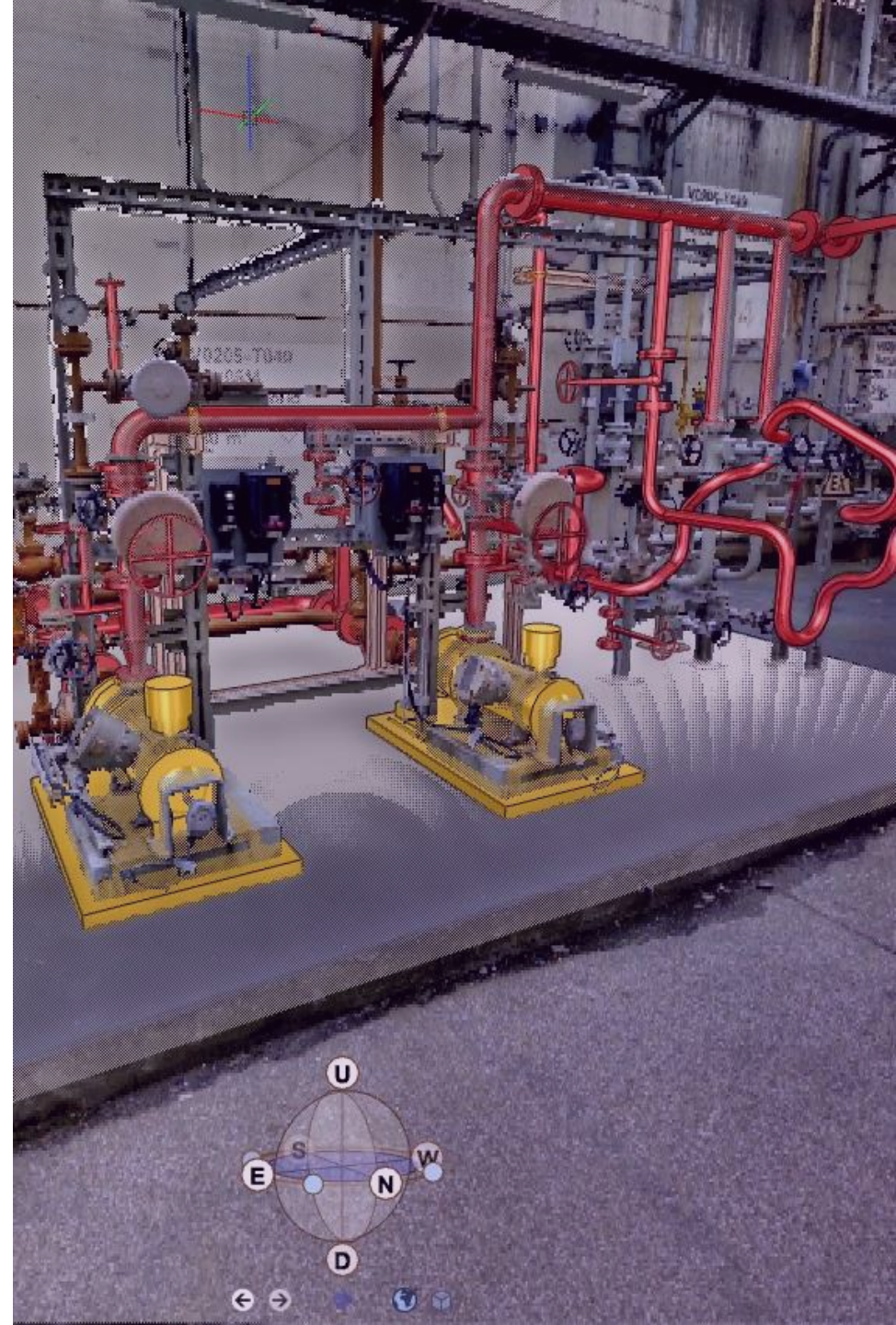
- Efficient and performant data sharing of 3D plant models with several contractors and internal stakeholders in the global engineering supply chain
- Not up-to-date 3D plant models impacts operational efficiency -> project and optimization duration, costs and risk's
- Decentral data hosting led to higher administration and engineering efforts

### Solution

- Deployed AVEVA™ Unified Engineering for 3D plant design to enable central data hosting, concurrent engineering, global access and flexible scaling -> We spent extra miles to get there!

### Results

- Implemented an environment to provide central hosted 3D plant models for investment projects and optimization measures – Rollout in Germany nearly completed, rollout for the US region started
- Created a prerequisite for evergreen 3d plant modeling – Digital Twin
- Reduced administration efforts significantly



# Main challenge and Requirements on 3D engineering environment



- Multiple Locations distributed globally
- Internal Project Core Team
- Detailed Engineering mainly by external Eng. Partners
- Parallel Eng. Activities (Optimization, Maintenance, Shutdown, Projects)
- Implement large capital investment projects quickly

- **Concurrent Engineering**
- **Global access**
- **Flexible scaling**
- **Competitive license model**

Complex Models including large point clouds

- **High Performance**

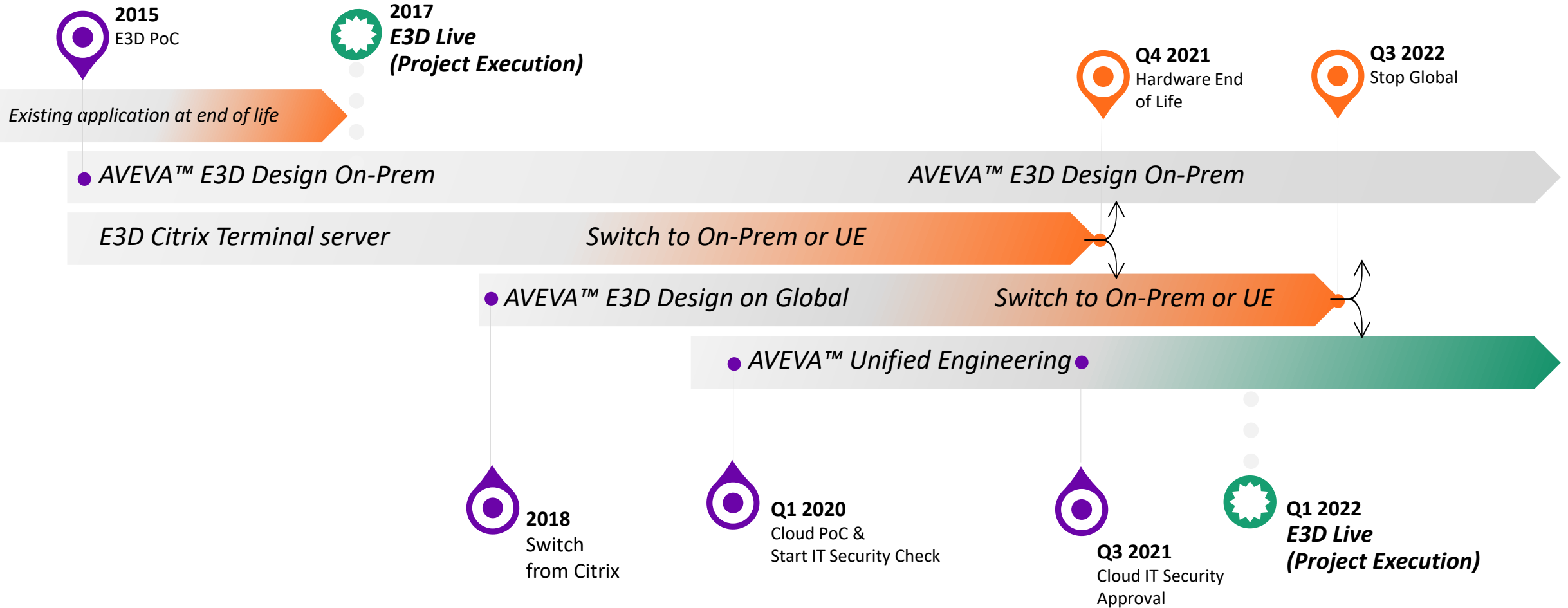


• Strict Requirements on

- **IT security**
- **Data Protection**

- **24/7 Availability & Support**
- **Low Administration Efforts**

# E3D Architecture Implementation



# AVEVA Unified Engineering as strong foundation to overcome our data-sharing challenge





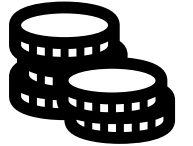
# Additional product capabilities and space for improvements



## Unified Engineering & Point Cloud Manager

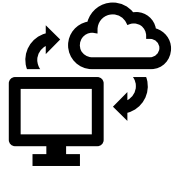
- UE: Centrally hosted 3D data (E3D + laser scan) to create a true, available and detailed “Digital Twin”.
- PCM: Laserscan can be referenced on-prem or within Unified Engineering with E3D
- PCM: No data leakage by distributing the data using portable hard drives “Need to Know”
- Project engineering and plant management access for simple monitoring and reviews

Contractors to bring & use their own credits



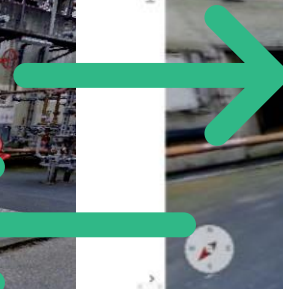
Improve connectivity with existing application environment

- Existing CAE Application
- Document Management



Global rollout

- EMEA: Progress 90%
- AMER: Started, currently only administrative tasks
- APAC: Focus on a solution for China



“AVEVA Unified Engineering is the right solution for efficient and performant data sharing with various stakeholders in the global engineering supply chain.

The solution is an important pillar for achieving our strategic goals -  
Growth & Sustainability”

# Questions?

Please wait for the microphone.  
State your name and company.



# Please remember to...

Navigate to this session in the mobile app to complete the survey.



# Thank you!



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AVEVA is a world leader in industrial software, providing engineering and operational solutions across multiple industries, including oil and gas, chemical, pharmaceutical, power and utilities, marine, renewables, and food and beverage. Our agnostic and open architecture helps organizations design, build, operate, maintain and optimize the complete lifecycle of complex industrial assets, from production plants and offshore platforms to manufactured consumer goods.

Over 20,000 enterprises in over 100 countries rely on AVEVA to help them deliver life's essentials: safe and reliable energy, food, medicines, infrastructure and more. By connecting people with trusted information and AI-enriched insights, AVEVA enables teams to engineer efficiently and optimize operations, driving growth and sustainability.

Named as one of the world's most innovative companies, AVEVA supports customers with open solutions and the expertise of more than 6,400 employees, 5,000 partners and 5,700 certified developers. The company is headquartered in Cambridge, UK.

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