

A photograph of two women in an office environment. They are both looking at a laptop screen. The woman on the left is pointing at the screen with her right hand. The woman on the right is looking at the screen with a focused expression. The background shows a window with light coming through. The overall color palette is a mix of purple, blue, and white.

AVEVA

Take the first step to the circular economy with AVEVA™ Process Simulation

Top 5 reasons to adopt a
transformational approach

[aveva.com](https://www.aveva.com)



It's a dynamic time in the chemicals industry

Plants are becoming more complex, larger, and more tightly integrated. Engineering departments stretch to bring new products to market quickly and sustainably. And a new generation of engineers brings different expectations for the workplace.

Process simulation is the first step to enable the circular economy. Now you have the chance to transform the way you solve engineering problems and be more productive, collaborative, creative and inspired.

AVEVA Process Simulation is the new chemical process simulation platform designed with the user in mind so that engineers at every experience level can benefit from true Digital Transformation.

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Enable the circular economy

Reduce simulation effort by 50%

Boost engagement and creativity in your team

Address challenges that you could not solve before

Integrate process behavior into the Digital Twin



Enable the circular economy

AVEVA Process Simulation increases agility to reach sustainability goals and remain competitive

Chemical companies need to speed up the engineering cycle to enable the development of new sustainable products and adapt processes for the circular economy. Legacy simulators lock in outdated workflows that can't keep up with today's increasing pace of change.

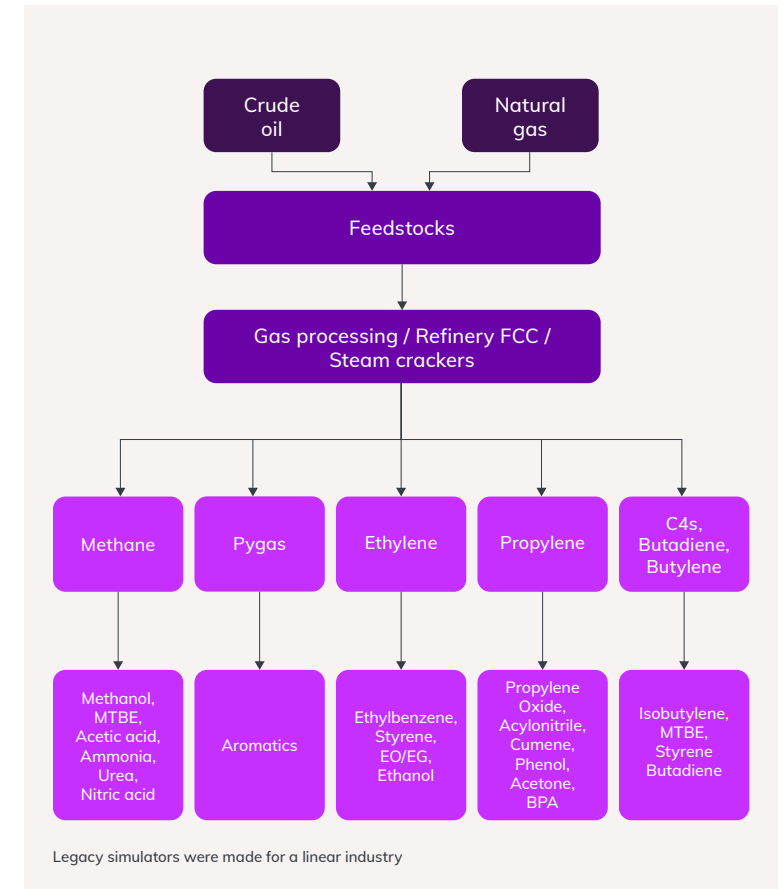
Leading Chemical companies like [Covestro](#) drive the vision and the development roadmap for AVEVA Process Simulation. We focus on the features you need to meet today's challenges and prepare for tomorrow's demands.

AVEVA Process Simulation dramatically accelerates your efforts to:

- Design sustainable processes
- Develop recycled products
- Evaluate new raw materials
- Adapt existing processes to reach sustainability goals



Watch the webinar to see how Covestro is pushing the boundaries of Digital Transformation with AVEVA Process Simulation



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Reduce simulation effort by 50%

AVEVA Process Simulation brings a transformational approach to process simulation

What if you could double the efficiency of your engineering team?

With legacy tools, even small projects require multiple, specialized simulators. Engineers waste time needlessly transferring data between tools, introducing errors along the way.

A unified modeling environment improves the user experience, IT accessibility, cross-tool integration, and time to proficiency, combined with a lower cost of ownership.

Like a smartphone for process engineers, [AVEVA Process Simulation](#) unifies many uses into a single, integrated platform to design and optimize a chemical plant.



To find out more about the transformative vision behind AVEVA Process Simulation, read our whitepaper on unified lifecycle simulation.

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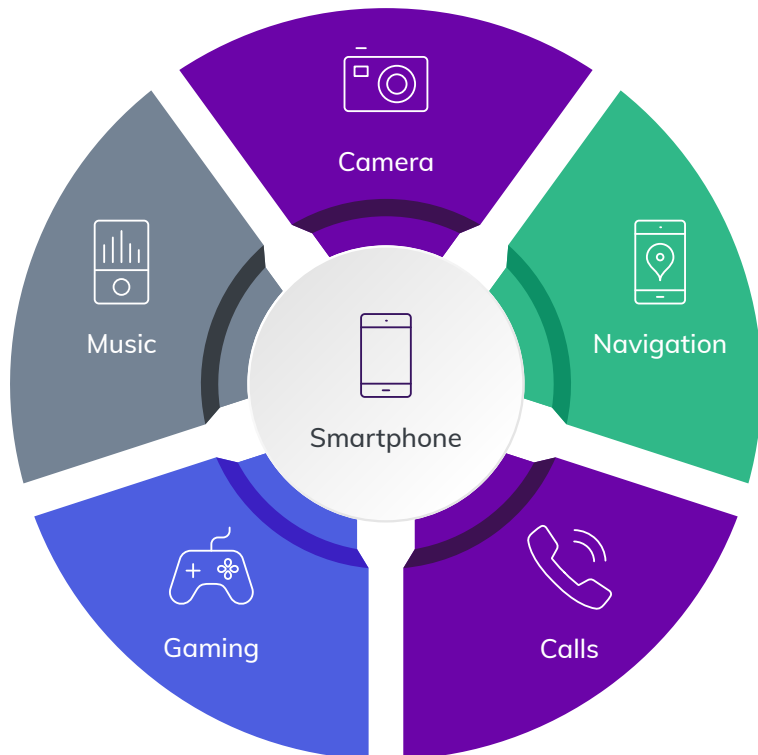
Integrate process behavior into the Digital Twin



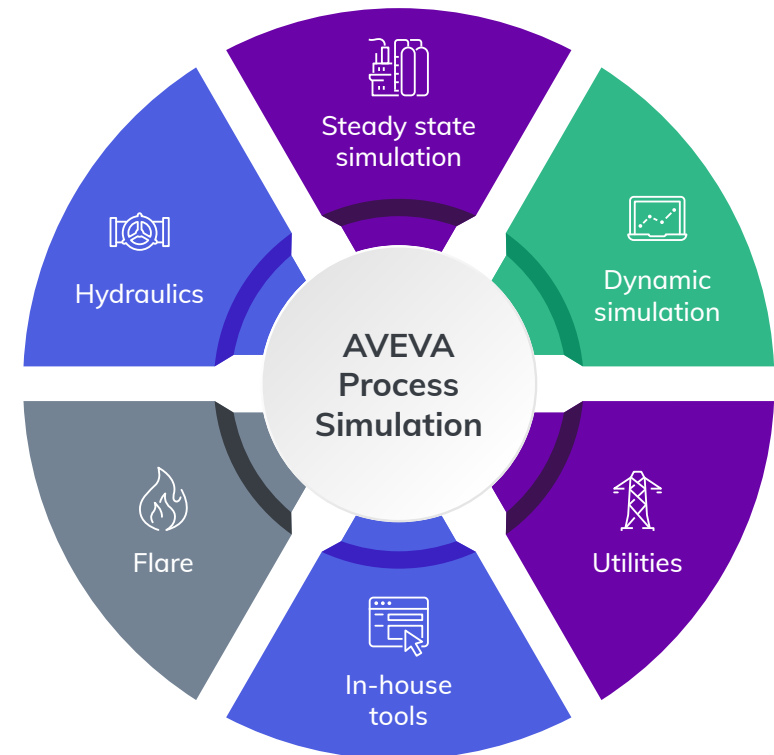
Reduce simulation effort by 50% (continued)

AVEVA Process Simulation brings a transformational approach to process simulation

As the value of a smartphone is greater than the sum of the separate devices...



...so too is a platform approach that can replace up to 50 applications used by different process departments



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Boost engagement and creativity in your team

Positively impact the daily work of your entire team



Process engineers

- Enjoy your work with modern UI features including undo/redo
- Better understand results with access to the equations behind every model
- Build skills quickly with only one tool to master



Engineering experts

- Model the entire system in design, rating, and dynamics modes
- Implement proprietary knowledge with open model writing and fast solvers
- Build robust integrations based on a modern software architecture



Engineering managers

- Get more done at a lower cost
- Build agile, resilient engineering teams instead of software experts
- Enable collaboration with control engineering and other disciplines

Highly interactive with instantaneous results

Collaborate across silos to solve problems

A single cloud-based platform for all your process simulation needs

Focus on engineering not software mechanics



Watch the webinar to see how Promon went from training to delivering results in less than 1 day

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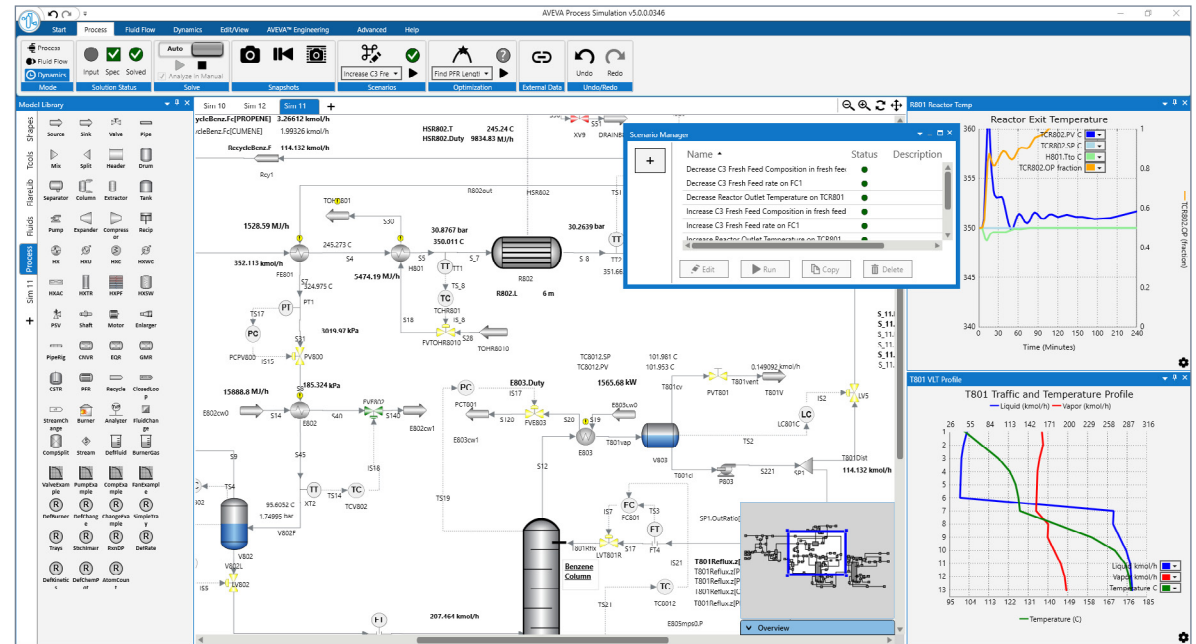



Address challenges that you could not solve before

AVEVA Process Simulation is revolutionizing the way to solve engineering problems

AVEVA Process Simulation's enhanced equation-oriented solver meets the challenges chemical engineers face — processes with multiple recycles, highly integrated plants, and new processes with numerous alternate configurations.

Unique features provide better control of simulations, more collaboration and agility. With a modern software architecture, it's possible to address difficult problems that legacy process simulators can't handle.



 Read our blog on Pressure Swing Adsorption to see how AVEVA Process Simulation tackles difficult problems

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Address challenges that you could not solve before

Integrate process behavior into the Digital Twin



Address challenges that you could not solve before (continued)

AVEVA Process Simulation is revolutionizing the way to solve engineering problems

- Steady state & dynamics**
Seamless switching between steady state, rating, and dynamic modes drives collaboration. Efficiently evaluate a problem from different perspectives.
- Open modeling**
Access to the mathematical equations enables engineers to customize. Add new equipment models with no programming required.
- Enhanced equation-oriented**
An enhanced equation-oriented solver using state-of-the-art numerics allows for efficient calculation, especially when there are lots of recycles.
- New applications**
The open platform extendable architecture allows expansion into new areas of simulation and integration with new technologies like AI.
- Real time data**
Automatically input real time data from operations to the process simulation through the native connection with OSI PI System.

Enable the circular economy

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Integrate process behavior into the Digital Twin



Integrate process behavior into the Digital Twin

Get insights throughout the lifecycle with AVEVA™ Unified Engineering

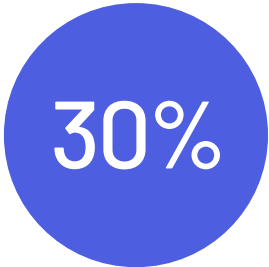
AVEVA Process Simulation brings process behavior into the Digital Twin through seamless integration with AVEVA Unified Engineering.

Operators, Process Licensors, and EPCs can expect efficient and flexible workflows with better end-to-end collaboration and project control.

Unified Engineering provides end-to-end integration of conceptual design, FEED and detailed design into an environment that handles all process simulation and engineering (1D, 2D and 3D) from one single data hub with bi-directional information flow.



Faster FEED stage




Increased engineering efficiency



Reduction in project schedule



Saved on total installed cost

 Watch our demo to see how AVEVA Unified Engineering empowers your teams

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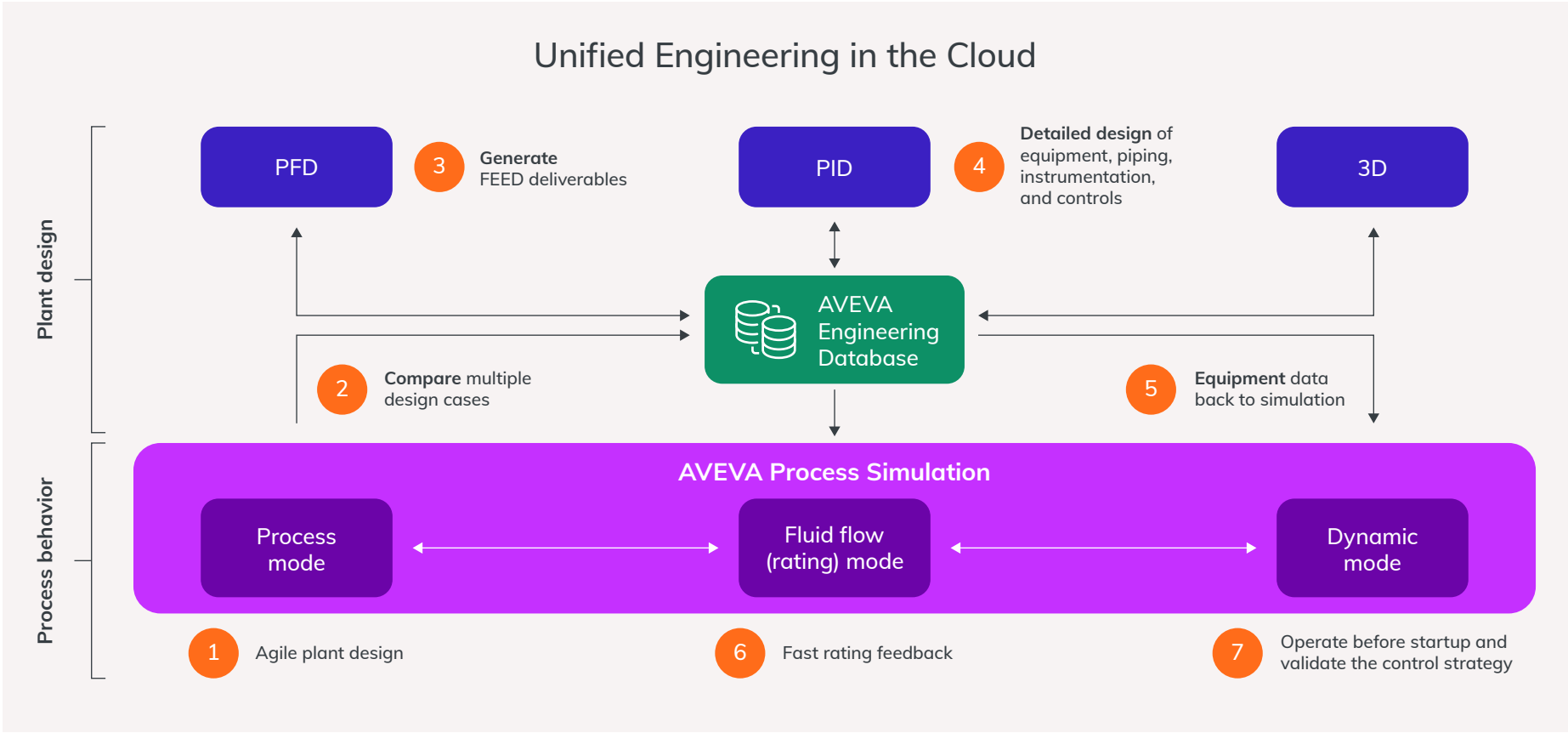
Address challenges that you could not solve before

Integrate process behavior into the Digital Twin



Integrate process behavior into the Digital Twin (continued)

Get insights throughout the lifecycle with AVEVA Unified Engineering



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Boost engagement and creativity in your team

Address challenges that you could not solve before

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Securing the circular economy

Take the first step by adopting a truly transformational approach with AVEVA Process Simulation

- Enable the circular economy through agile development of new products and processes
- Reduce simulation effort by 50% using a transformational platform
- Boost engagement and creativity in your team
- Address challenges that you could not solve before
- Integrate process behavior into the Digital Twin for insight throughout the lifecycle



Watch a 20-min demo video



Contact us to arrange a personalized evaluation

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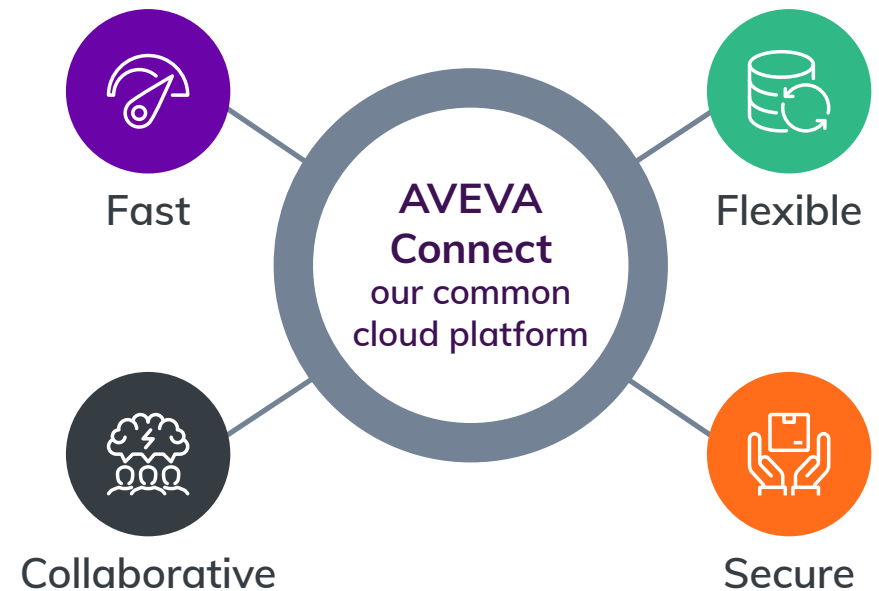
Why AVEVA?

Drive business resiliency. Transform faster, reduce costs and easily scale.

We create industrial software and intelligence that inspires you to shape a sustainable future.

We have over 50 years' experience in developing process simulation technology and building relationships throughout the Chemicals industry.

We provide the broadest and deepest industrial software portfolio with seamless collaboration in a single out-of-the-box cloud hub.



Download the eBook: Why Cloud and Why Now?

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AVEVA


We'll take you there™

For more information, please visit:

aveva.com/en/industries/chemicals and
aveva.com/en/products/process-simulation

 aveva.com

 linkedin.com/company/aveva

 [@avevagroup](https://twitter.com/avevagroup)

About AVEVA

AVEVA is a global leader in engineering and industrial software driving digital transformation across the entire asset and operational life cycle of capital-intensive industries. The company's engineering, planning and operations, asset performance, and monitoring and control solutions deliver proven results to over 16,000 customers across the globe. Its customers are supported by the largest industrial software ecosystem, including 4,200 partners and 5,700 certified developers. AVEVA is headquartered in Cambridge, UK, with over 4,400 employees at 80 locations in over 40 countries.

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