LEVERAGE THE POWER OF CHEMCAD

Amplify your organization’s chemical engineering expertise to increase your productivity and profitability.
Broaden your capabilities and maximize your workflow.

CHEMCAD is an integrated suite of intuitive chemical process simulation software that fits into the chemical engineering workflow and supercharges an engineer’s efficiency. Whether you’re facing the toughest chemical process models or just addressing day-to-day tasks, CHEMCAD is flexible enough to handle virtually any challenge that comes your way.

CHEMCAD has a variety of applications, including:
- Research and Development
- Project/Process Design
- Project/Process Redesign and Optimization
- Operations/Maintenance
- Safety and Hazard Analysis
- Environmental Study and Analysis
- Project and Product Sales
- Education

CHEMCAD is commonly used in such industries as:
- Exploration and Production
- Refining
- Commodity Chemicals
- Fine and Specialty Chemicals
- Pharmaceuticals
- Custom and Toll Manufacturing
- Engineering and Construction
- Consulting
- Process Equipment Manufacturing
- Power Plants
- Carbon Capture and Storage
- Alternative Fuels (Bioethanol, Biodiesel)
- Academic University Programs
Designed to **INSPIRE.**

→ And inspired by you.

This is *your* product. As advanced and intuitive as CHEMCAD is, perhaps its most significant benefit is that it continues to evolve to meet the ever-expanding needs of chemical engineers.
TAKE ADVANTAGE OF THE IDEAL TOOL AND UNMATCHED SUPPORT.

CHEMCAD is designed to be the most useful and intuitive software tool for chemical engineers. It is easy to use, works seamlessly with other programs, scales easily to handle your simplest or most complex jobs, and makes for beautiful presentations.

And that’s just the tool itself.

A key differentiator for CHEMCAD is the group of people behind the software. We have outstanding technical support engineers, people who understand chemical engineers’ challenges and are happy to help you use the software to address every task, every project, every job. Take advantage of:

- Phone and email access to high-level customer support engineers
- Customer portal with robust knowledgebase
- Ticketing system to track feature requests and software improvements
- Training

We’re waiting to hear from you.

- Easily connect CHEMCAD to spreadsheets to exchange data or execute simulations.
- Switch from steady state to dynamics and back again at the push of a button.
- Add hydraulic balances to your heat and mass balance for pressure/flow calculations.
Maximize your ability to **CREATE**.

→ Expand your ideas, not your number of programs.

CHEMCAD operates within a single graphical user interface. You won’t need to jump back and forth between programs and features. CHEMCAD provides seamless interaction, something unique in the industry.
INTUITIVE, CUSTOMIZABLE GRAPHIC INTERFACE FITS YOUR WORKFLOW.

Whether you prefer a wireframe (P&ID style), grayscale, color enhanced, or custom look, CHEMCAD has you covered.

→ CHEMCAD provides an explorer pane to quickly access flowsheet settings and items. Very useful for large flowsheets.

→ Extensive set of unit operations with multiple icon options. Fully customizable for adding your own icons or even your own unit operations.

→ CHEMCAD guides you intuitively through building, specifying, running and creating reports for simulations. Toolbar buttons are available for the most often used functions.

1. Wireframe-look exports nicely to P&ID
2. Grayscale shading makes for easy viewing on screen
3. Jewel-toned color palette yields maximum impact in presentations
CALCULATE and recalculate with ease.

→ CHEMCAD adapts to however you approach engineering challenges.

One of the most significant benefits of this powerful tool is how much it assists the chemical engineer across the entire spectrum of work, from the simplest daily tasks to the most complex, integrated projects.
CHEMCADE CAN GUIDE AND IMPROVE THE ENGINEER’S PROCESS.

Once you build something, validate it and check it against real world data, possibilities emerge. “What if” calculations become more attractive. Adding complexity – different chemicals, additional equipment, environmental factors, etc. – is less taxing and time-consuming. The software allows you to be creative on the way to your ultimate goal. It can even play a role in helping to identify new goals.

- 2500 chemical components, 40 different K-value calculation methods, 53 different unit operations, and options to customize or add your own. It all adds up to endless opportunities to create value for your organization.
COMMUNICATE
more effectively.

→ CHEMCAD makes presenting your work easier, too.

As much as we respect the knowledge and creativity required to solve the complex problems you tackle every day, we know you need to look good, too. That’s why we made our graphics and reports appealing, customizable and easy to export to 3rd party software.
CHALLENGE...

CS₂ Removal From BTS Mixture

...SOLVED!

POLISHED AND PROFESSIONAL FOR ALL OF YOUR AUDIENCES.

Whether proposing ideas to your team, publishing a paper or presenting at a conference, flowsheets are simple to produce, and reports look professional.
ADVANCE the state of engineering.

CHEMCAD’s potential impact has yet to be experienced.

With you and your chemical engineering peers as our partners, we believe CHEMCAD has already significantly enhanced the processes and productivity of the industry. But there is still so much more we can do together.
FLEXIBLE, CUSTOMIZABLE, SCALABLE SOFTWARE CREATES SIGNIFICANT VALUE.

CHEMCAD’s most experienced users can incorporate their own learning and knowledge into the program to have an even greater impact on their work. Since it uses industry standard protocols for communication, CHEMCAD integrates into the chemical engineering computing environment with ease.

Drive CHEMCAD from programs like Excel®, MATLAB®, and others.

Connect CHEMCAD’s 1st principles simulation engine to your other engineering tools.

Use C++ or VBA to build:
- Custom Unit Operations
- Custom Thermodynamics
- Custom Physical Properties
- Custom Menus

Use CHEMCAD as a virtual plant for:
- Soft Sensors
- Plant Performance Monitoring
- Advanced Process Control
- Operator Training

Excel® is a registered trademark of Microsoft Corporation.
MATLAB® is a registered trademark of The MathWorks, Inc.
CHEMCAD is scalable to allow users to purchase only the features they need. The CHEMCAD suite includes six products that can be purchased individually or bundled as needed to accommodate specific industries, projects and processes.

**CC-STEADY STATE**

Chemical process simulation software that includes libraries of chemical components, thermodynamic methods, and unit operations to allow steady-state simulation of continuous chemical processes from lab scale to full scale.

→ **Ideal for:** Users who want to design processes, or rate existing processes, in steady state.

**CC-DYNAMICS**

Process simulation software that takes steady-state simulations to the next level of fidelity to allow dynamic analysis of flowsheets. The possibilities are endless: operability check-out, PID loop tuning, operator training, even online process control and soft sensor functionality.

→ **Ideal for:** Users who want to design or rate dynamic processes.

**CC-THERM**

Heat exchanger design and rating software available as an add-on or stand-alone program. CC-THERM makes use of multiple international standards for design and materials to make sizing a heat exchanger faster and more accurate. The program covers shell-and-tube, plate-and-frame, air-cooled, and double-pipe exchangers. Rigorous designs are based on CHEMCAD’s foundation of physical property and phase equilibria data.

→ **Ideal for:** Users who want to design or vet a design by a vendor of a heat exchanger (single unit at a time), and those who want to rate existing exchangers in new service or perform “what if” calculations.

**CC-SAFETY NET**

Piping and safety relief network simulation software that allows rigorous analysis of any piping network. CC-SAFETY NET combines the latest in two-phase relief device calculation, rigorous pressure drop calculation, rigorous physical property calculation, and rigorous phase equilibrium calculation to deliver fast, accurate answers.

→ **Ideal for:** Users who need to design or rate piping networks or safety relief devices/systems.

**CC-BATCH**

Batch distillation simulation software that, when used as an add-on or stand-alone program, makes batch distillation simulation and design easy with intuitive, operation step-based input. CC-BATCH is extremely flexible, with many operating modes and the capability to model any number of operating steps and conditions. CC-BATCH optimizes batch operation, minimizes intermediate “slop” cuts, and increases productivity.

→ **Ideal for:** Users who want to design or rate a batch distillation column.

**CC-FLASH**

Physical properties and phase equilibrium calculation software that is a subset of the CHEMCAD suite (all of the CHEMCAD suite products include CC-FLASH capabilities). This program allows rigorous calculation of physical properties and phase equilibrium (VLE, LLE, VLLE) for pure components and mixtures.

→ **Ideal for:** Users who need physical property and phase equilibrium data, as well as users who need property prediction and regression.

→ Enjoy maximum flexibility. For the most up-to-date list of features, visit Chemstations.com/Features
To learn more about how CHEMCAD advances engineering, to request a free trial, or to find a distributor in your area, visit Chemstations.com or call us at 1.800.CHEMCAD (1.800.243.6223) or +1 713.978.7700.