

# PSO – SuperChems™

Design Tools for Relief Systems & Much More



## A Comprehensive Platform for Process Safety

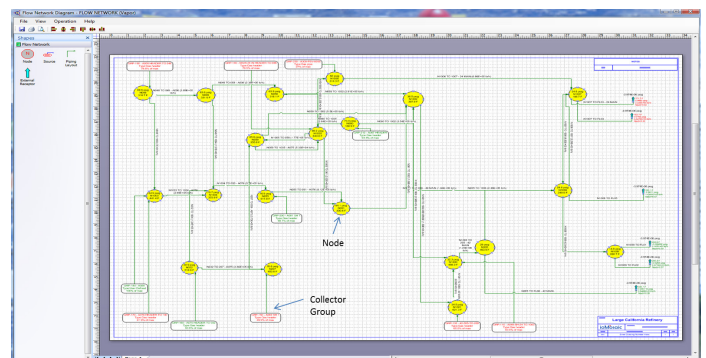
Process Safety Office® SuperChems™ is an industry-recognized, versatile software tool that provides an integrated platform for pressure relief and flare systems (PRFS) evaluation and design. This powerful tool can be used for simple and complex flow dynamics, pressure relief systems and vent containment design, chemical reactivity management, quantitative risk assessment, and consequence analysis.

### Relief System Design & Evaluation

- Design and evaluate your full scope of relief systems from simple pump systems, up to dynamic reactors with complex loading procedures.
- Define all equipment types, relief device isometrics, and complex mixtures.
- Choose calculation models built per common standards to evaluate your relief requirement, relief device capacity and stability.
- Generate concise yet in-depth reports for your relief systems, ready for any review or audit.

### Thermodynamics & Reactivity

- Model complex mixture interactions using the advanced thermodynamic package.
- Chemical reactions can be defined and used within dynamic models.



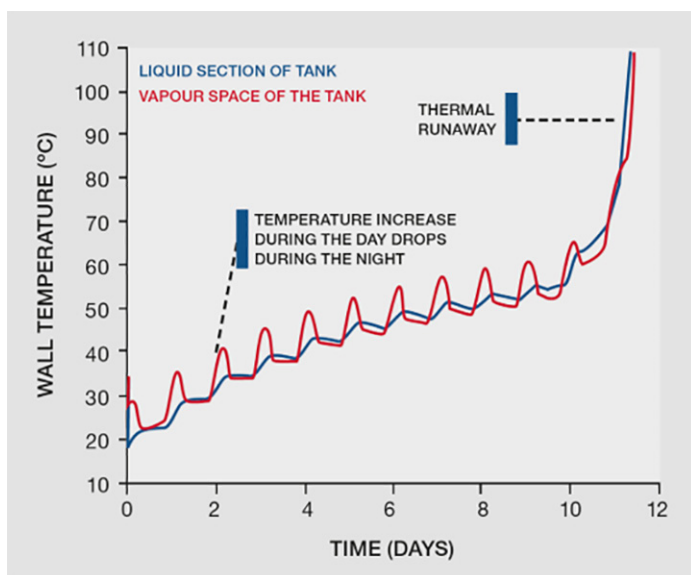
Our flare systems tools are robust and have been used to solve some of the most complex and challenging refinery flare system networks.

### Flare & Network Evaluation

- Evaluate the performance of your flare network, and the effect of its design on the functionality of your individual relief devices.
- Define your flare network isometric in separate nodes.
- Import your previously calculated individual relief device evaluations.
- Evaluate your flare, from simple converging flows to complex diverging flows.



“The modeling available in SuperChems™ software can't typically be found anywhere else and this is invaluable to us.”



An example of the dynamic modelling of a vessel under solar heating, which results in a thermal runaway reaction.

## REFINED MODELLING

Using broadstroke simplified modelling with assumptions can often lead to inadequacies. With the advanced models in SuperChems™ these simplified assumptions can be removed, leading to a potential removal of inadequacies.

## FAQs

### Who is the software intended for?

SuperChems™ was designed to help process safety and risk engineers with a variety of routine tasks and daily calculations. All components overcome shortcomings of simple relief design techniques, which can often lead to over-design, and more importantly, sometimes leading to under-design.

### How much training is typically involved?

SuperChems™ requires only a basic training for most ERS design work, but may require more advanced training depending on the use (e.g. flares and headers, advanced reactivity, or QRA projects).

### What are the licensing terms?

We offer flexible programs to fit your needs and budget, including the bundling of applications. Please contact our sales team to learn more.

### Technical and Customer Support

We provide technical support by phone or online. Visit our online support center anytime:

<https://support.iomosaic.com>

## HOW DO I GET STARTED?

See first-hand how this advanced calculation and design tool can improve compliance, risk management, and business efficiencies. Ask for a demo today!

Call **1.844.ioMosaic** or visit **www.ioMosaic.com**

