



# SysCAD

Design | Operate | Optimise

## A comprehensive process modelling platform is essential to get the best out of a plant or design.

- SysCAD is a robust and versatile process simulation platform, ideal for use in the design, operation and optimisation of the simplest process circuit through to complex full-scale plant operations.
- A SysCAD model forms an all-inclusive knowledge base for your plant, adding significant value to your organisation.
- Generate detailed mass and energy balances in both Steady State and Dynamic solution modes.
- SysCAD Dynamic can be used for detailed evaluation of plant behaviour, control system optimisation, transient analysis, startup and shutdown.
- Comprehensive chemistry and thermodynamic calculation engine options – including AQSol, OLI, ChemApp FactSage and PHREEQC.
- Applications throughout the full project lifecycle – from feasibility studies and process and control system design to commissioning, operations, planning, optimisation and expansion studies.

## Owner Operators

- Evaluate and justify plant improvements
- Minimise risk of varying plant conditions
- Production and maintenance planning
- Generate reports for production loss, inventory, and metallurgical accounting
- Optimise energy and raw material usage
- Improve environmental performance

## Engineers and Consultants

- Mass and energy balances for design
- Assess alternative flowsheet layouts
- Interface to project engineering systems
- 'What If?' scenario analysis
- Control system design and testing
- Surge and availability studies



## R&D and Academic

- Incorporate specialist knowledge
- Full control of intellectual property
- Interface with laboratory systems and plant data software via custom APIs
- Educational resource for university engineering courses and PhD studies

## Client Satisfaction

*"SysCAD is one of the reasons I love leaping out of bed in the morning. Flexible yet powerful; forever developing and improving yet consistently reliable with rock-solid stability. I couldn't imagine doing my job without it."*

**Simon Willis (Simulus)**

*"I have had the pleasure of working with the Kenwalt team as an end user of their toolset for 20 years. They have a deep understanding of how these tools can best be applied for value creation within our industry. They are proactive in expanding and improving their software to best meet client needs and always provide rapid and comprehensive support."*

**Brett Garner (Rio Tinto)**

## About Us

Established in 1983, Kenwalt are the developers of SysCAD. Pioneers in process modelling, we are an Australian-based company with global offices offering support and training across all time zones. In addition to software development, our team of experienced process engineers provide specialist modelling services.



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## Different SysCAD Users

### Modellers

Develop process plant models



### End Users

Review models and run scenarios



### Specialists

Develop integrated solutions



### Consumers

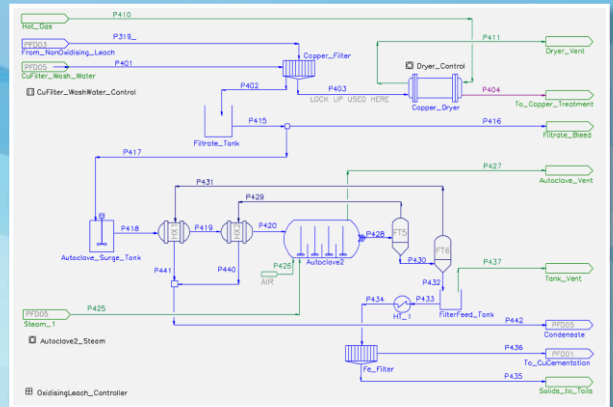
Receive detailed reports



## Industry Experience

Alumina  
Lithium  
Copper  
Nickel  
Uranium  
Zinc  
Iron Ore  
Potash  
Ammonium Nitrate  
Precious Metals  
Base Metals

Critical Minerals  
Rare Earths  
Mineral Sands  
Bulk Material Handling  
Foundries & Smelters  
Crushing & Screening  
Water Treatment  
Battery Recycling  
Sugar Factories  
Power Plants  
R&D Organisations



*SysCAD provides a Process Digital Twin as a key component of your digital transformation strategy and ensures that analysis is readily available to make and prioritise decisions in an operating process plant.*



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