SPECIAL FEATURES OF CADSIM PLUS

**New! Drawing Interface**
- Visual Object Inspectors.
- Visual Equation Editors.
- The power of CAD with easy drawing tools.

**Special Components**
- Track components which do not participate in normal mass, energy, and momentum balances - such as dollars, [H\(^+\)], COD, viscosity, strength and brightness.

**Runtime Interactivity**
- Run the drawing with full animation capabilities.
- Graphical PID controllers are automatically created for all controllers.
- Watch variable activity with trend charts, gauges and numeric displays.
- Change any parameter on the fly and watch the results.

**Connectivity**
- Run your process simulation from current values downloaded from the plant DCS, using a formatted flat file or live links.

**Expandability**
OSSA guarantees that you will be able to find a solution to your unique model requirements.

- **Add-on libraries.** Check out the optional add-on libraries, such as the Power and Fibre libraries.

- **Calculation building blocks.** Use basic logic, signal and math building blocks to enhance existing units without programming. Use the neural net package to predict multi-variable relationships.

- **Programming options.** We can provide source code for all Cadsim Plus modules so you can write your own modules to augment Cadsim Plus, or have us write one for you.

**Design Capabilities**
- Produce complete P&ID and P&FC drawings that are also process simulations - complete with live logic.
- Benefit from stringent heat and material balances to insure the accuracy of your simulation.
- Powerful stream based specifications and equations.
- Export to AutoCAD®.
- Annotate AutoCAD® drawings with simulation results.

**Program Performance**
- SmartCalc™ gives Cadsim Plus unparalleled performance on standard PC’s running all 32 bit versions of Windows®.

**Compatibility**
- Cadsim Plus allows you to do both steady state and dynamic simulation with the same drawing.
- Runs on current Windows platforms.

**Program Versions**
- Cadsim Plus is available in full and runtime versions.

**SERVICES**
Aurel Systems has been providing quality products and services for more than 25 years. Some of these services include:
- Immediate response to support questions
- Training
- Application/model development
- Custom module development
- Conversion of drawings from AutoCAD to Cadsim drawing format
- Conversion of other simulation platforms to Cadsim Plus

"... Cadsim Plus is an excellent mass balance simulation program that is very easy to learn and use."

Thomas Baerenwald, Process Engineer, Marathon Engineers/Architects/Planners, LLC.

*Cadsim® is a registered trademark of Aurel Systems Inc.*

**Cadsim Plus**

**TM**

**Open Simulation Systems Architecture**
**TM**

**SmartCalc**
**TM**

**Living Drawings**
**TM**

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Everything you see is familiar because it can be identical to your plant drawings. A single click of the mouse is all you need to display the process information that is linked to each drawing object.

2. Fast Calculation
Cadsim Plus uses SmartCalc™, a new technology designed to accelerate both simulation calculations and results display. SmartCalc manages flowsheet calculations to speed up runtime performance. The result - calculation times that can be an order of magnitude faster than any other simulator.

3. Open Architecture
Cadsim Plus can never become obsolete because the Open Simulation Systems Architecture™ (OSSA™) means that it can be expanded to cover any plant or process, no matter how specialized - now or in the future. Standardized libraries of process modules and physical properties data are linked to Cadsim Plus at runtime. There is a wide variety of options that you can use to extend Cadsim Plus.

FAST TO SET UP
Cadsim Plus allows you to quickly develop a process model by working with a flowsheet drawing. The Cadsim Plus expert systems help you to define process chemistry and specify process flows. Cadsim Plus automates many set up tasks, so you can focus on improving your process. Start from a saved set of conditions, or simply load current data from your plant DCS system.

PROFIT FROM CADSIM PLUS PROCESS IMPROVEMENT
There are many ways that Cadsim Plus can help your operation save money. Here are just a few...

Reduce chemical consumption
Assign a dollar value to chemicals and then track them through your process.

Reduce power consumption
Find ways to reduce energy consumption or use cooling more effectively.

Reduce downtime
Schedule maintenance procedures and manage inventories to minimize the effects on mill operation.

Improve product quality
Track quality variables and watch the impact of a furnish or process change on product quality.

Avoid environmental overload
Plan to stay within environmental targets, load current data and predict future operation.

Plan and design changes
Try it before you build it. Build with the certainty that it will work.

PROCESS MODULES
Available Cadsim Plus libraries include 73 equipment units, 8 kinds of controllers, 3 kinds of integration, 32 signal and math units, and 21 logic building blocks. More are being added all the time!