

The Proven Trusted Modelling Tool for the Alumina Industry

Understanding Your Process

A good modelling package is essential to get the best out of a process plant. SysCAD provides the platform to build a comprehensive, flexible model of an Alumina refinery, whether it is an operating plant or a proposed design.

Providing the Tools You Need for:

- Project Justification Use a consistent basis for evaluating proposed Process Changes, Projects and Feasibility studies. Easily linked to cost control models.
- Performance Evaluation Run any number of scenarios to evaluate sensitivity to plant changes, analyse deviations and prioritise resources to maximise return.
- **Training** Give new and existing employees a deeper understanding of refinery behavior.

- Planning Use as a basis for Annual Planning, effects of equipment availability, turnarounds, supply interruptions, etc.
- Evaluating Unsteady States Such as Relief Systems, level control or testing control strategies.
- Energy and Water Pinch studies, water quality, optimising steam and water use.



SysCAD Model Benefits for your Refinery

- A well maintained SysCAD model is an invaluable Knowledge Base for your plant.
- Use your own specific liquor properties and unit models within SysCAD.
- Include Bauxite mineralogy changes within SysCAD.
- Allows plant wide use and/or visibility with structured data entry and reporting tools in Excel.
- Significant commercial value for plant improvements and daily operation.

Extensive Use in Alumina Industry

Refineries:

- Almatis, USA
- Alpart, Jamaica
- Aluminium of Greece, Greece
- AOS, Germany
- · Aughinish, Ireland
- EGA, UAE
- EurAllumina, Italy
- Gramercy Alumina, USA
- Hindalco, India
- Hydro Alunorte, Brazil
- · Ma'aden, Saudi Arabia
- Nalco, India
- QAL, Australia
- RTA Vaudreuil, Canada
- RTA Yarwun, Australia
- Rusal Ashinsk, Russia
- Rusal BAZ, Russia
- Rusal UAZ. Russia
- Rusal Nikolaev, Ukraine
- Utkal, India
- Votorantim CBA. Brazil
- Windalco, Jamaica
- Worsley Alumina, Australia

Consultants:

- Aditya Birla Technology
- Bechtel
- GAMI China
- Hatch Associates
- HHMT China
- NEUI
- Outotec
- Rinalco
- RTA Technology
- Rusal FTC
- SAMI China
- Solvay
- Worley Parsons



SysCAD Features:

- · Available in Steady State and Dynamic Versions.
- · Robust, stable performance and accurate solutions.
- · Alumina species model for Bayer processing.
- Easily manage physical and thermodynamic species properties.
- · Detailed precipitation model with full population balance.
- Large range of unit models available.
- Custom models can be created for specific client needs.
- Manages client IP and protects proprietary information.
- · Easily interfaces with Excel and control systems.
- Comprehensive Web based documentation.
- · Continual product development and excellent support.

