

About AlPrg

AlPrg is a PC computer program that runs with the Microsoft Windows XP or Vista operating the system. The user of AlPrg learns or teaches the basic principles of aluminum production, for instance, in connection with an aluminum electrolysis seminar. When the user is responsible for operating electrolytic cells AlPrg helps to execute the theoretic part of every days tasks or to solve more complex problems.

AlPrg answers basic questions like

- how much aluminum, carbon dioxide, carbon tetrafluoride and cryolite the electrolytic cell is producing?
- what is the liquidus temperature of the electrolytic bath?
- what are the components of the cell voltage?

In addition Alprg

- determines the setting of the alumina or aluminum fluoride feeder,
- calculates the cell parameter if the current intensity, for instance, is increased at constant heat loss to boost production of the electrolytic cells,
- assesses the influence of the cell operation on the economic performance of the plant.

Modules of AlPrg

AlPrg contains several modules. The user combines these modules according to his tasks and intentions.

Basic Modules:

User Interface: arranges the program pages and diagrams on the computer screen (tabbed and docked/floating arrangement).

Production, Consumptions: determines aluminum, gas production (carbon dioxide, monoxide, fluoride species) and consumptions (alumina, carbon anodes, aluminum fluoride).

Cell Voltage: calculates the optimal cell parameter setting to control the cell heat balance.

Advanced Modules:

Alumina Feeding: calculates optimal feeding parameters to control the alumina concentration in the electrolyte.

Aluminum Fluoride Feeding: investigates how to control the aluminum fluoride concentration and the electrolyte temperature.

Profitability Analysis: compares the financial performance of several cell operation methods.

Prices

Module	Prices (US\$)	minimal options				
User Interface	900	●	●	●	●	●
Productions, Consumptions	1300 ¹⁾	●		●	●	●
Basic Cell Voltage	1500 ¹⁾		●	●	●	○
Sum		2200	2400	3700		
Advanced Cell Voltage	500 ¹⁾		●	●	●	○
Alumina Feeding	1600			●		
Aluminum Fluoride Feeding	1500				●	
Profitability Analysis	1800 ¹⁾					●
Sum	9100		2900	5800	5700	6000

¹⁾ to include evaluations for cells with Inert Anodes: add once 1500 US\$.

Contacts

For more information, please contact:

Dr. Marc Dupuis, P. Eng., GéniSim Inc.

Tel. : +01 418 548 1541

Fax : +01 418 548 4215

E-mail : marc.dupuis@genisim.com,

Internet: <http://www.genisim.com>

Or

E-mail : pme@peter-entner.com,

Internet: <http://www.peter-entner.com>