Specialized in Numerical Simulation applications related to the Hall-Héroult process

Model of the behavior of the air circulation in the potroom of an aluminum smelter.

For more information, see ‘Turbulence modelling of the air circulation in an enclosure with multiple openings and local heat sources’, Proceedings of the 32nd annual conference of CIM, Computer Software section, 229-236, (1993).

Model of the thermo-electric behavior of the potline (cells and busbar interconnections).


Model of the interaction between the potshell and the lining due to sodium swelling.

For more information, see ‘Shell design technique considering the sodium swelling phenomena of carbon cathode blocks’, Proceedings of the 32nd annual conference of CIM, Light Metals section, 125-130, (1993).
Transient model of the pot preheat.


Model of the thermo-electrical behavior of the cathode lining including freeze profile prediction.


Model of the thermo-electrical behavior of an Electrical Arc furnace (including convection effect from the material circulation).


Model of the plastic deformation of the potshell.