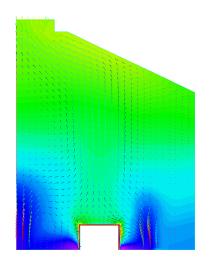
## GENISIM

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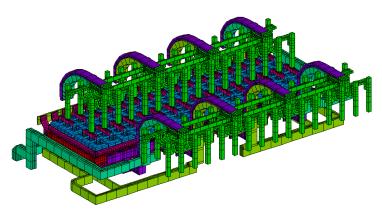


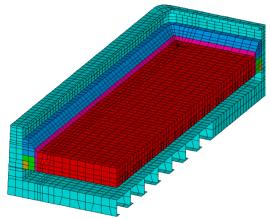
Model of the behavior of the air circulation in the potroom of an aluminum smelter.

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).

For more information, see 'Thermoelectro-magnetic modelling of the Hall-Héroult cell', Proceedings of the ANSYS sixth international conference, volume 4, 9.3-9.13, (1994).

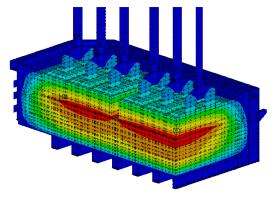




Model of the interaction between the potshell and the lining due to sodium swelling.

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).

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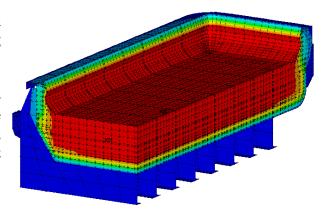


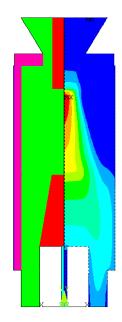
Transient model of the pot preheat.

For more information, see 'Evaluation of the thermal stresses due to coke preheat in a Hall-Héroult cell', Proceedings of the ANSYS sixth international conference, volume 1, 3.15-3.23, (1994).

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

For more information, see 'Thermoelectric analysis of the Grande-Baie Aluminium Reduction cell', Proceedings of the 123rd TMS Light Metals Conference, 339-343, (1994).



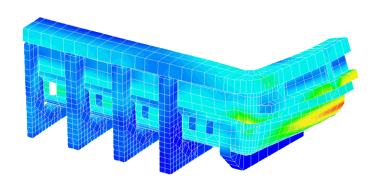


Model of the thermo-electrical behavior of an Electrical Arc furnace (including convection effect from the material circulation).

For more information, see 'Optimization of Anthracite Calcination Process in a Vertical Electrical Arc Furnace', Proceedings of the 125th TMS Light Metals Conference, (1996).

Model of the plastic deformation of the potshell.

For more information, see 'Cathode shell stress modelling', Proceedings of the 120th TMS Light Metals Conference, 427-430, (1991).



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