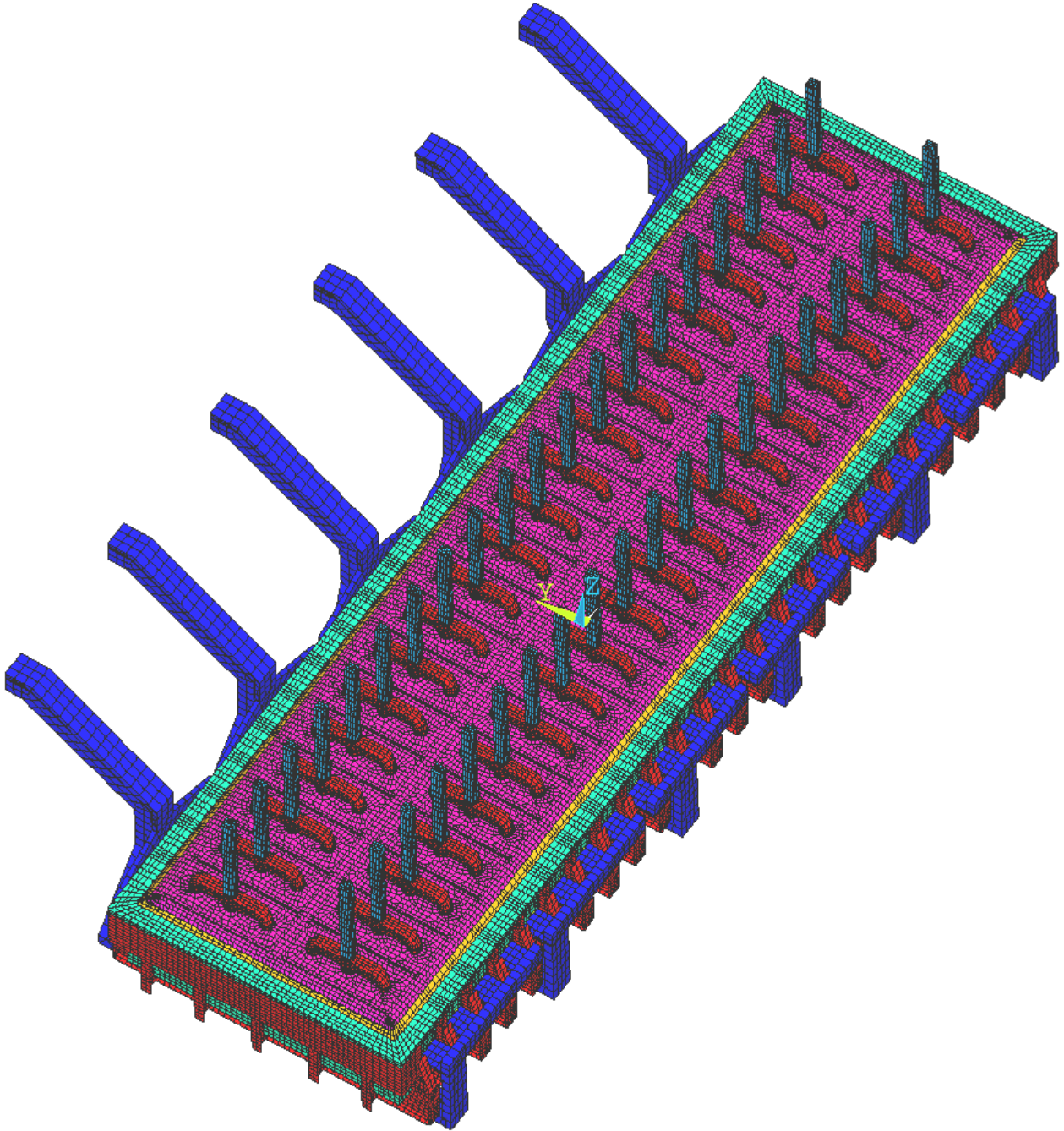


**ANSYS® BASED  
3D THERMO-ELECTRIC  
HEAT BALANCE MODELS**



**GENISIM**

# **ANSYS® THERMO-ELECTRIC HEAT BALANCE MODELS**

## **Price list**

- **3D HALF ANODE**  
\$5,000 US
- **3D CATHODE SIDE OR END SLICE**  
\$5,000 US
- **EROSION MACRO FOR 3D CATHODE SLICE**  
\$2,000 US
- **3D FULL CELL SIDE SLICE**  
\$10,000 US (including delivery of separate half anode and cathode side slice models)
- **PREHEAT 3D FULL CELL SIDE SLICE**  
\$1,000 US for the conversion from a 3D Full Cell Side Slice
- **3D ANODE PANEL QUARTER**  
\$6,000 US (including delivery of a separate half anode model)
- **3D CATHODE QUARTER**  
\$20,000 US (including delivery of a separate cathode side slice and cathode end slice models)
- **3D FULL CELL QUARTER**  
\$25,000 US (including delivery of separate half anode, cathode side slice, anode panel quarter and cathode quarter models)
- **PREHEAT 3D FULL CELL QUARTER**  
\$2,000 US for the conversion from a 3D Full Cell Quarter
- **2D+ FULL CELL SIDE SLICE**  
\$3,000 US
- **DYNAMIC MACRO FOR 2D+ FULL CELL SIDE SLICE**  
\$3,000 US

For all models, the price includes the construction of a fully parametric geometry of your own cell design and the APDL source code of all the required macros (ANSYS® APDL programs that perform tasks like converging the ledge thickness).

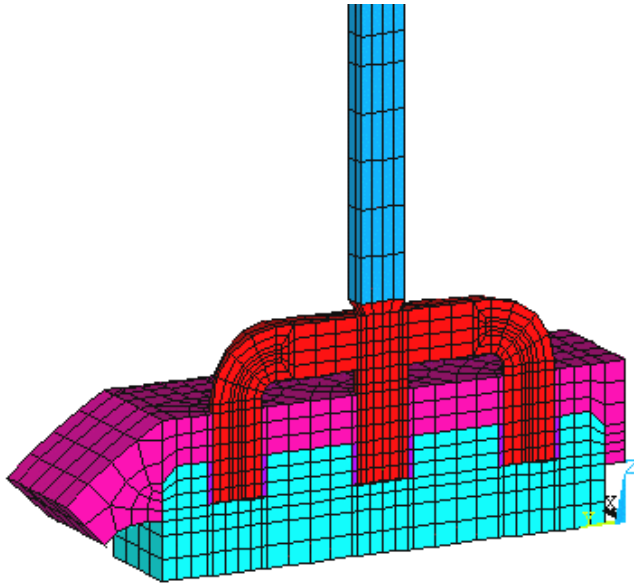
\$100 US per hour for support and model validation

For more information, contact:

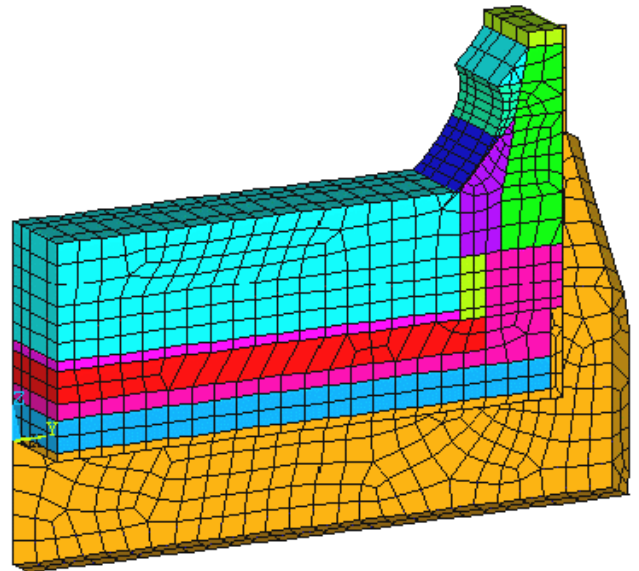
Dr. Marc Dupuis P. Eng., Génisim Inc.  
Phone : (418) 548-1541, Fax : (418) 548-4215  
E-mail : marc.dupuis@genisim.com  
Internet: <http://www.genisim.com>

# ANSYS® THERMO-ELECTRIC HEAT BALANCE MODELS

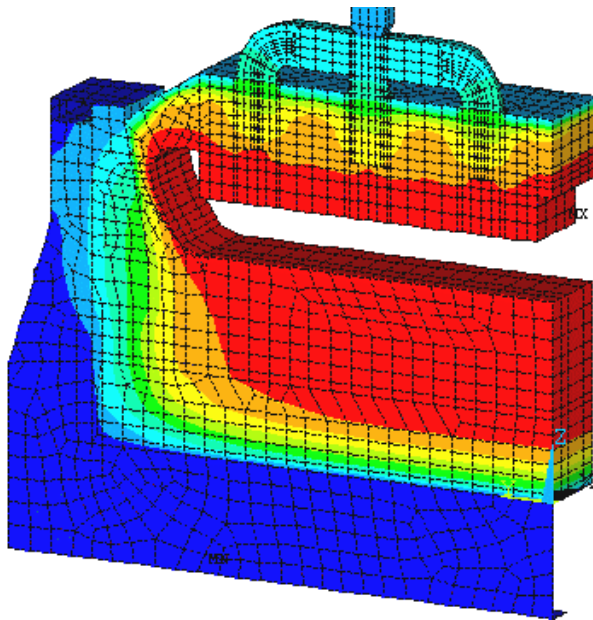
3D HALF ANODE



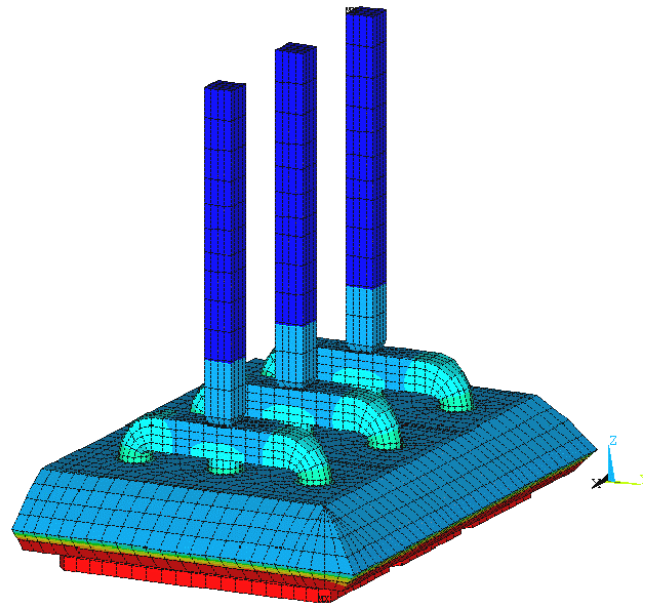
3D CATHODE SIDE SLICE



3D FULL CELL SIDE SLICE



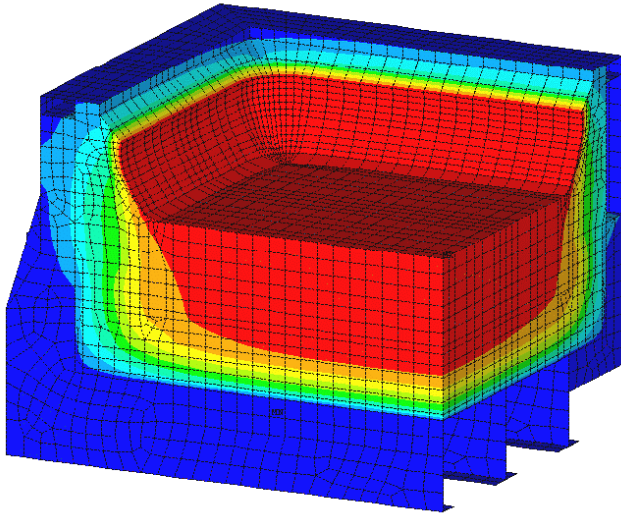
3D ANODE PANEL QUARTER



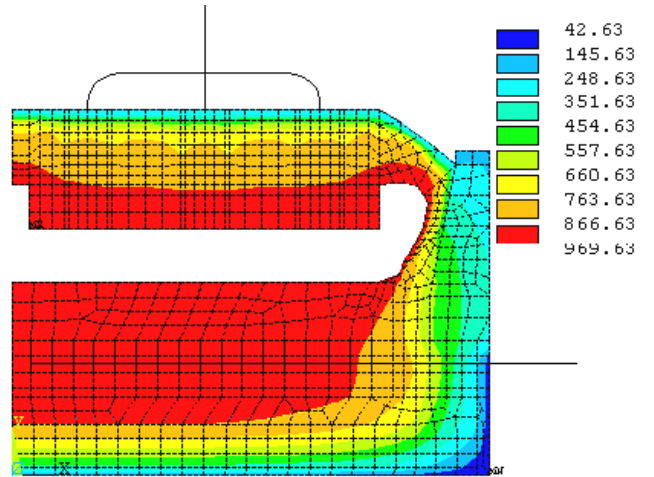
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# ANSYS® THERMO-ELECTRIC HEAT BALANCE MODELS

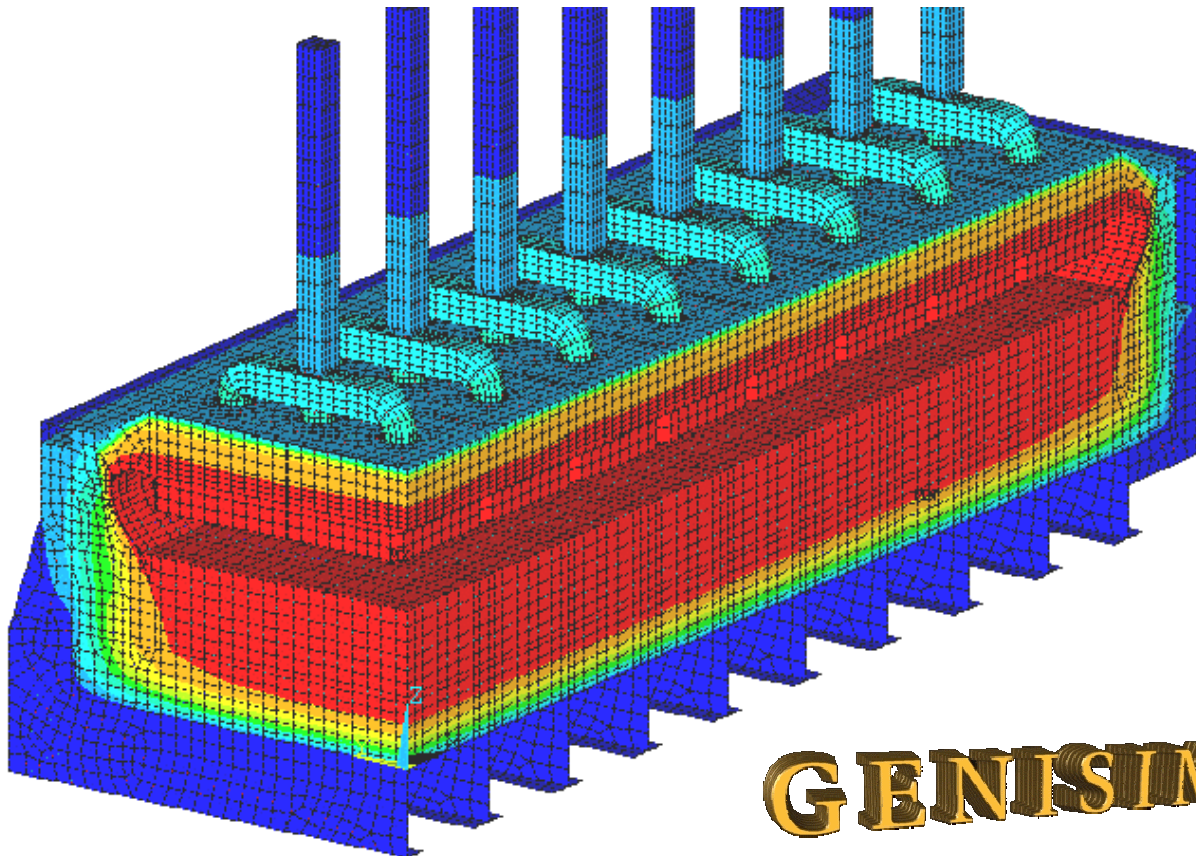
## 3D CATHODE QUARTER



## 2D+ FULL CELL SIDE SLICE



## 3D FULL CELL QUARTER

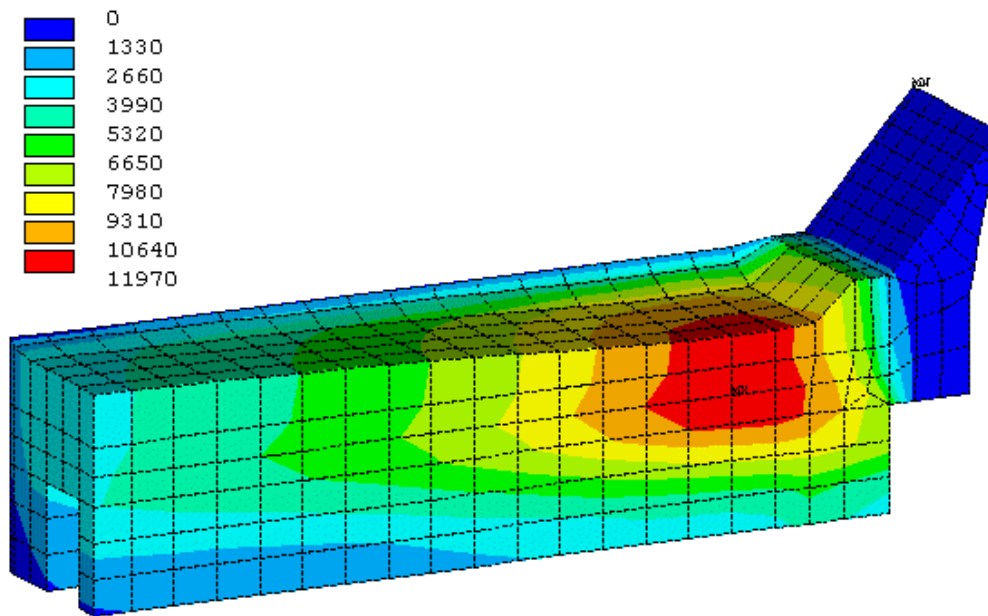


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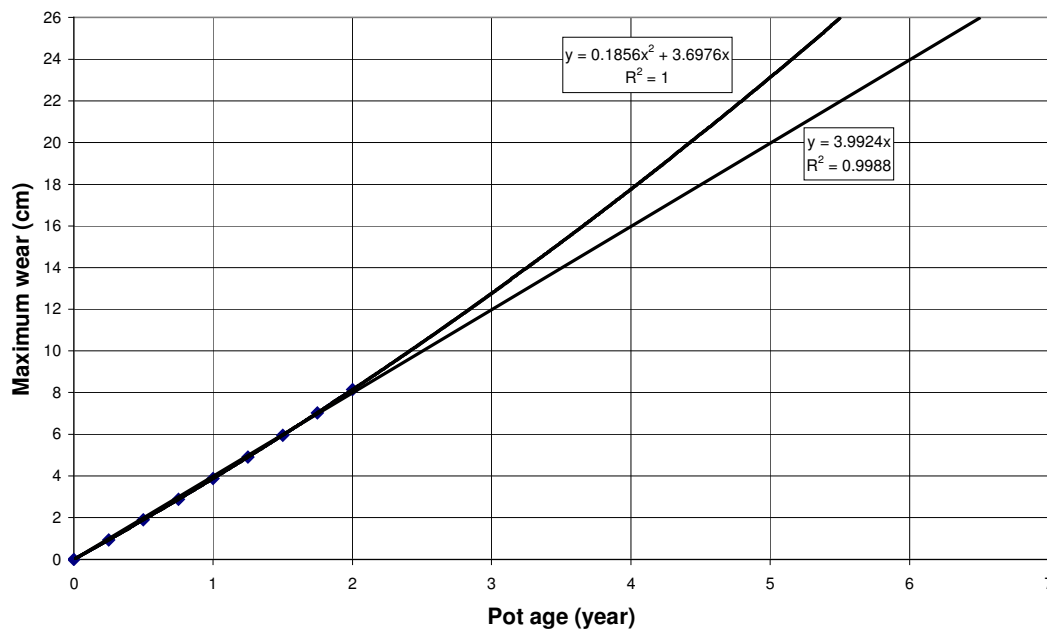
# ANSYS® CATHODE EROSION MODEL

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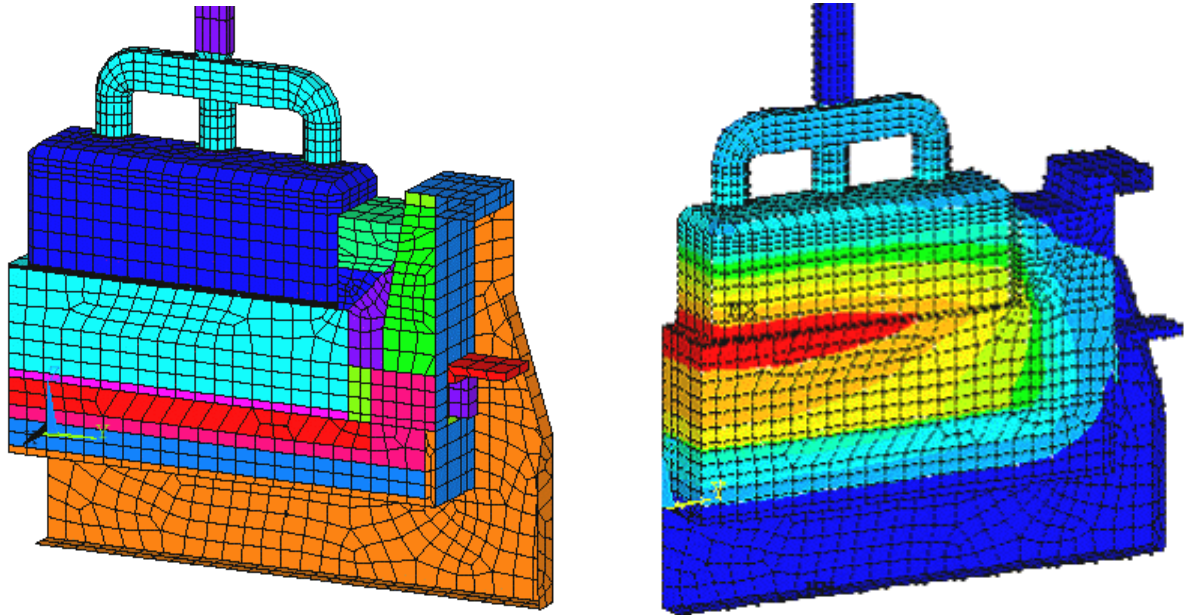
Erosion profile of the base case model after 2 years

### Cathode Wear Evolution

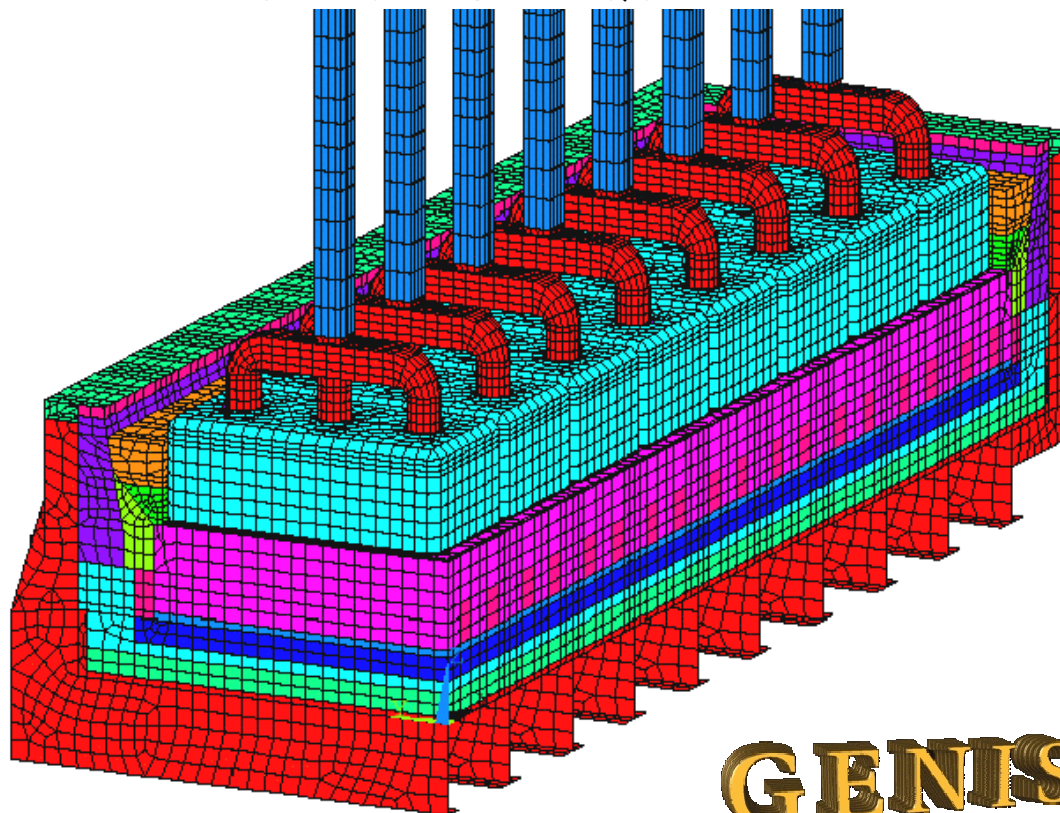


# ANSYS® THERMO-ELECTRIC TRANSIENT PREHEAT MODELS

3D FULL CELL SLICE



3D FULL CELL QUARTER



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