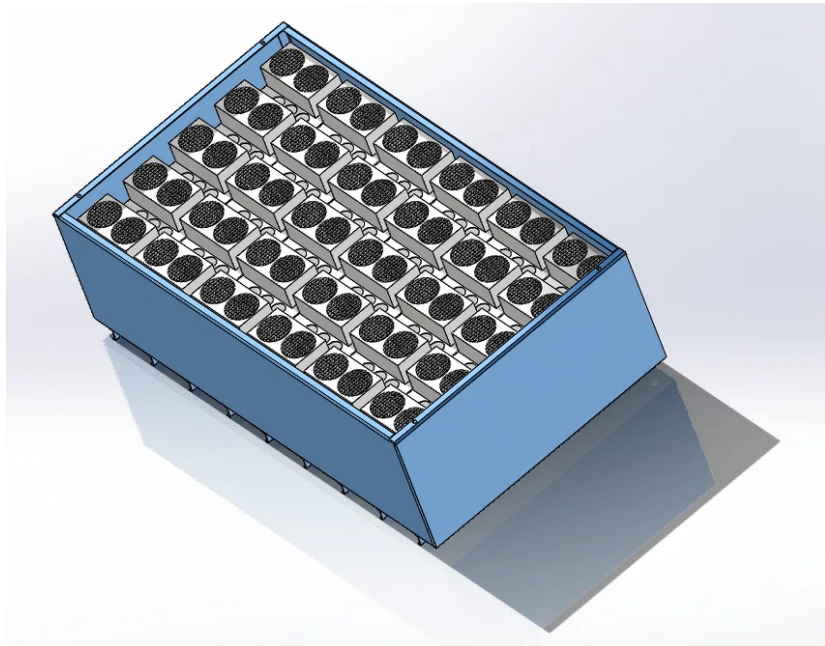


# Crypto Mining



**Client:** Moonshot

Location: Remote  
Start Date: March 2022  
Completion Date: March 2022

Resolute Engineering was tasked with designing two immersion fluid cooling process design system configurations. One 50 Megawatt and one 100 Megawatt mining facility.



## RELATED SERVICES AND TASKS

Prepared CFD (Computational Fluid Dynamics) Model using ANSYS Software and Process Modeling using Schlumberger Symmetry Software.

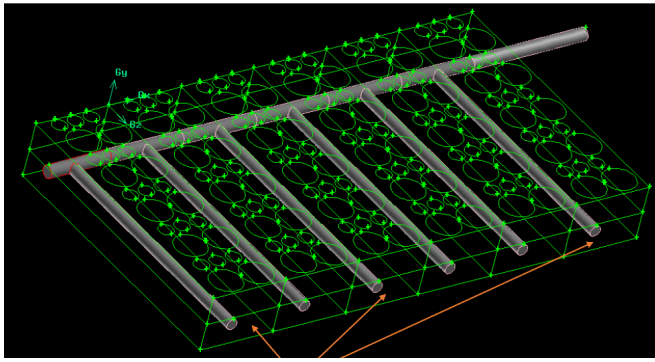


## UNIQUE PROBLEMS / SOLUTIONS

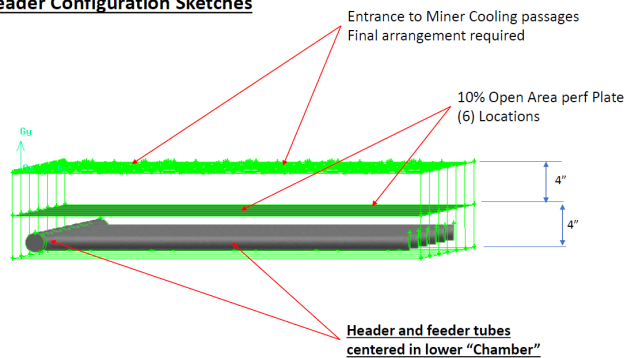
The base configuration has one or more bath for the miner cooling (30 miners per bath) using a heat transfer fluid, a pump, a dry-cooler to cool the fluid, and a filter.

ICE 1000 was used in the calculations for the heat transfer fluid.

Develop distribution header and redo manifolds to optimize mining rig capacity and minimize heat.



#### Header Configuration Sketches



The following three options are available when it is not possible to cool the fluid down to 95°F using ambient air:

- 1. Operate fewer miners so the exit bath temperature is kept below 135°F.
- 2. Enhanced design which includes a refrigeration unit to chill the fluid coming from the air-cooler.
- 3. Overdesign the system such that a entering bath fluid temperature of 115°F is acceptable.

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