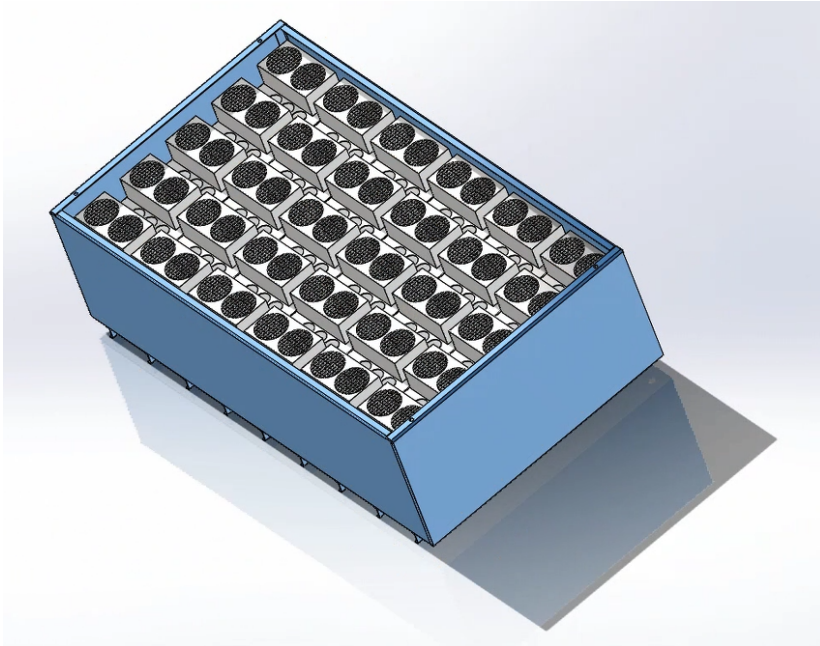


Crypto Mining



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.

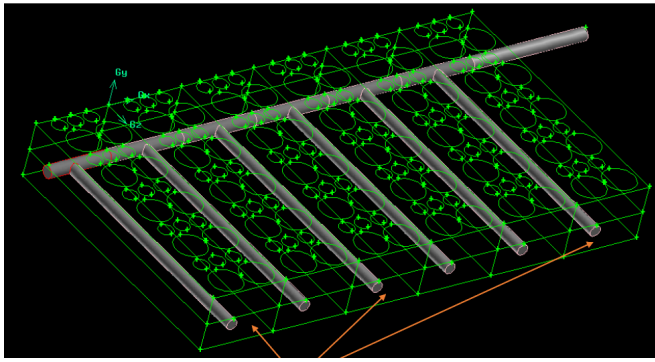


UNIQUE PROBLEMS / SOLUTIONS

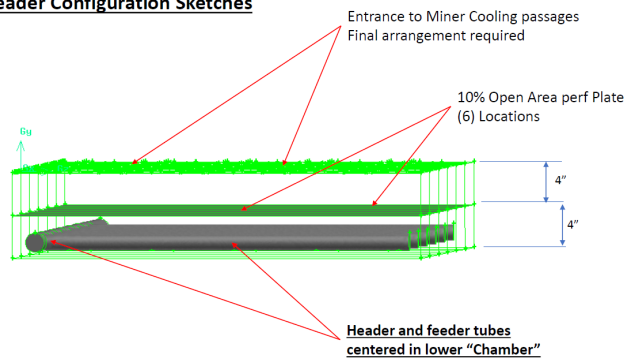
The base configuration has one or more bath for the miner cooling (30 miners per bath) using a heat transfer fluid, a pump, a dry-cooler to cool the fluid, and a filter.

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.



Tulsa Office

321 S. Boston Ave.
Suite 300
Tulsa, OK 74103

Denver Office

999 18th Street
Suite 3000
Denver, CO 80202

Houston Office

Pennzoil Place
700 Milam St, Ste 1300
Houston, TX 77002

Calgary Office

10 Floor Bankers Hall West
888 3rd Street South West
Suite 1000
Calgary, Alberta T2P 5C5
403-861-6302

North Dakota Office

Kenmare, ND



RESOLUTETM
ENGINEERING

(918) 505-7880

website @resolute-engineering.com

