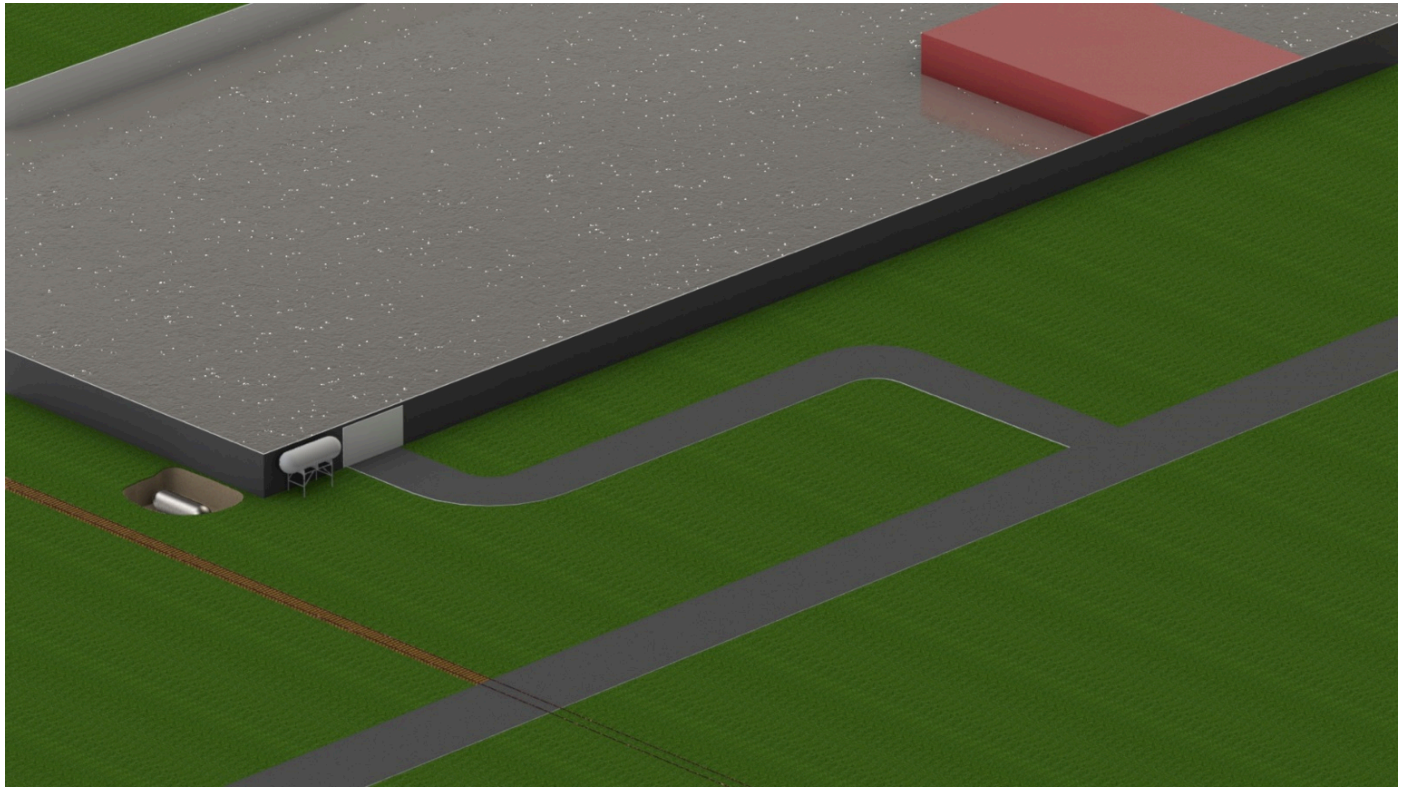
Continental AG
Site Proposal



Isometric View

Site plan

Developed by: ***Ryan Melick, Frank Nguyen and Brandon Lukert***

Topics

Site Planning

- Coolant Storage and Waster Removal Overview
- Clean Coolant Storage Tank 1
- Shop Coolant Tank 2
- Dirty Coolant Tanks 3

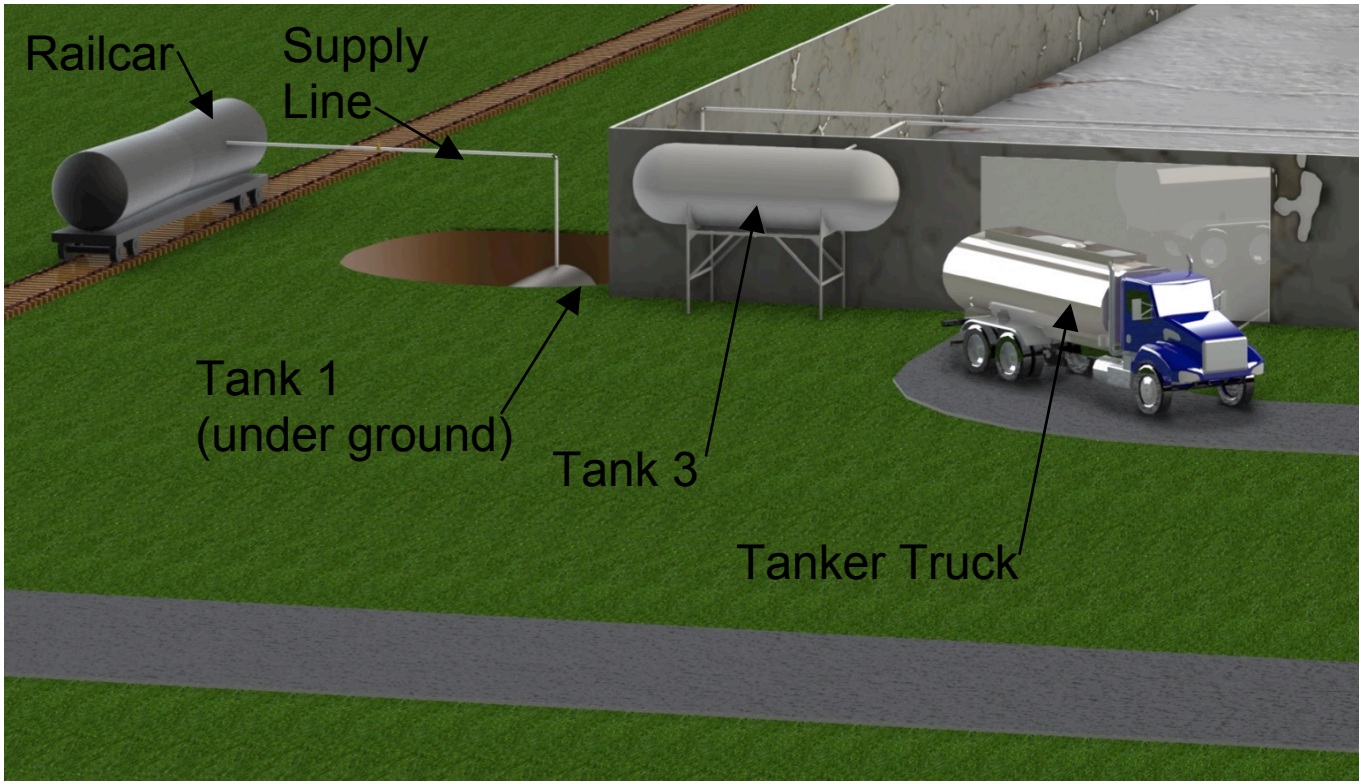
Pumps

- Details on Pumps and Location

Why our Design is Great !

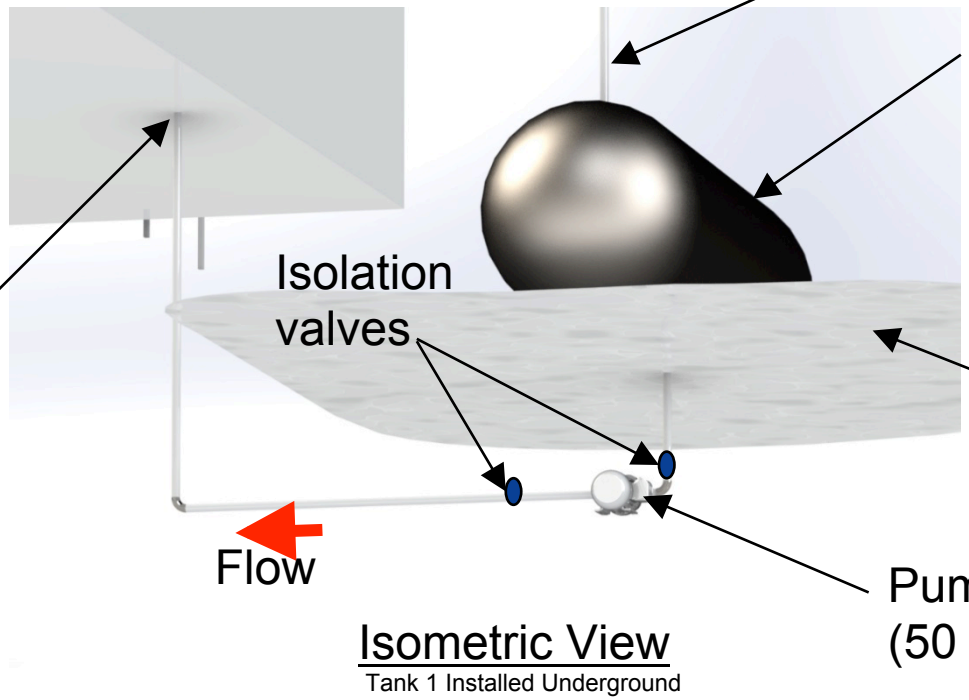
- Reasons we chose location of tanks
- Reasons we chose location of pumps
- What this team believes in !

Site Planning



- **Coolant Storage and Waste Removal Overview**
  - **Clean supply to be provided by railcar tanker**
  - **Tank 1 will store clean coolant that will be delivered from the rail car(estimated delivery time is 38 minuts)**
  - **Tank 3 will store dirty coolant**
  - **The waste coolant will be removed from site via Truck**

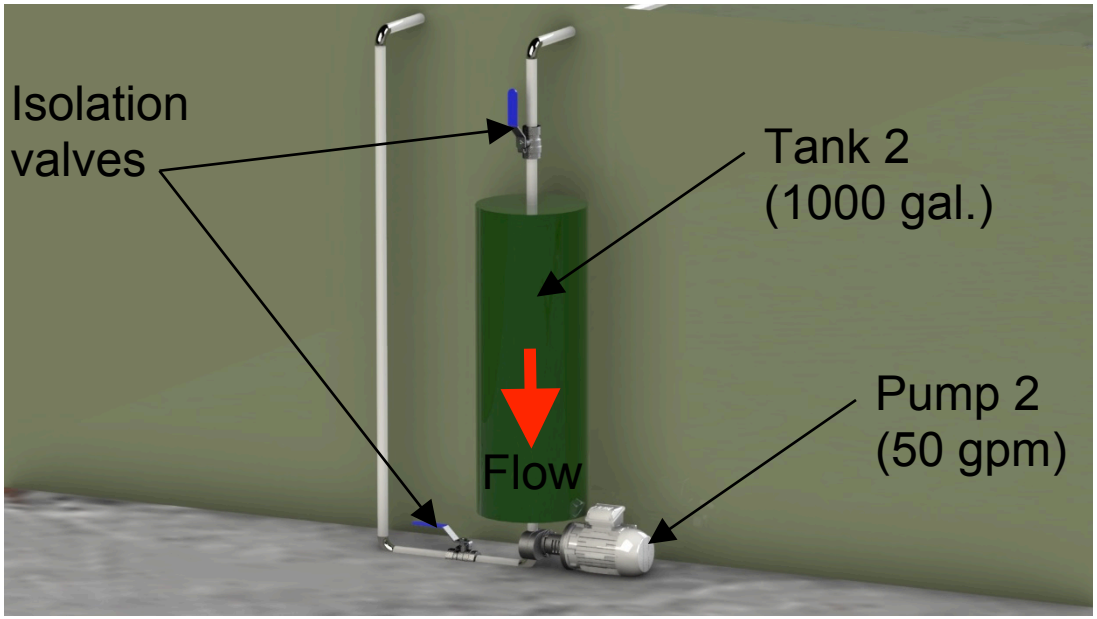
Site Planning



Isometric View
Tank 1 Installed Underground

- **Tank 1 Arrangement**
  - **This tank will be located under the frost line.**
  - **Capacity will be 15000 gallons.**
  - **There will be isolation valves for servicing.**
  - **There will be a pump located below for coolant transfer.**

Site Planning



Isometric View

Tank 2 Installed in shop

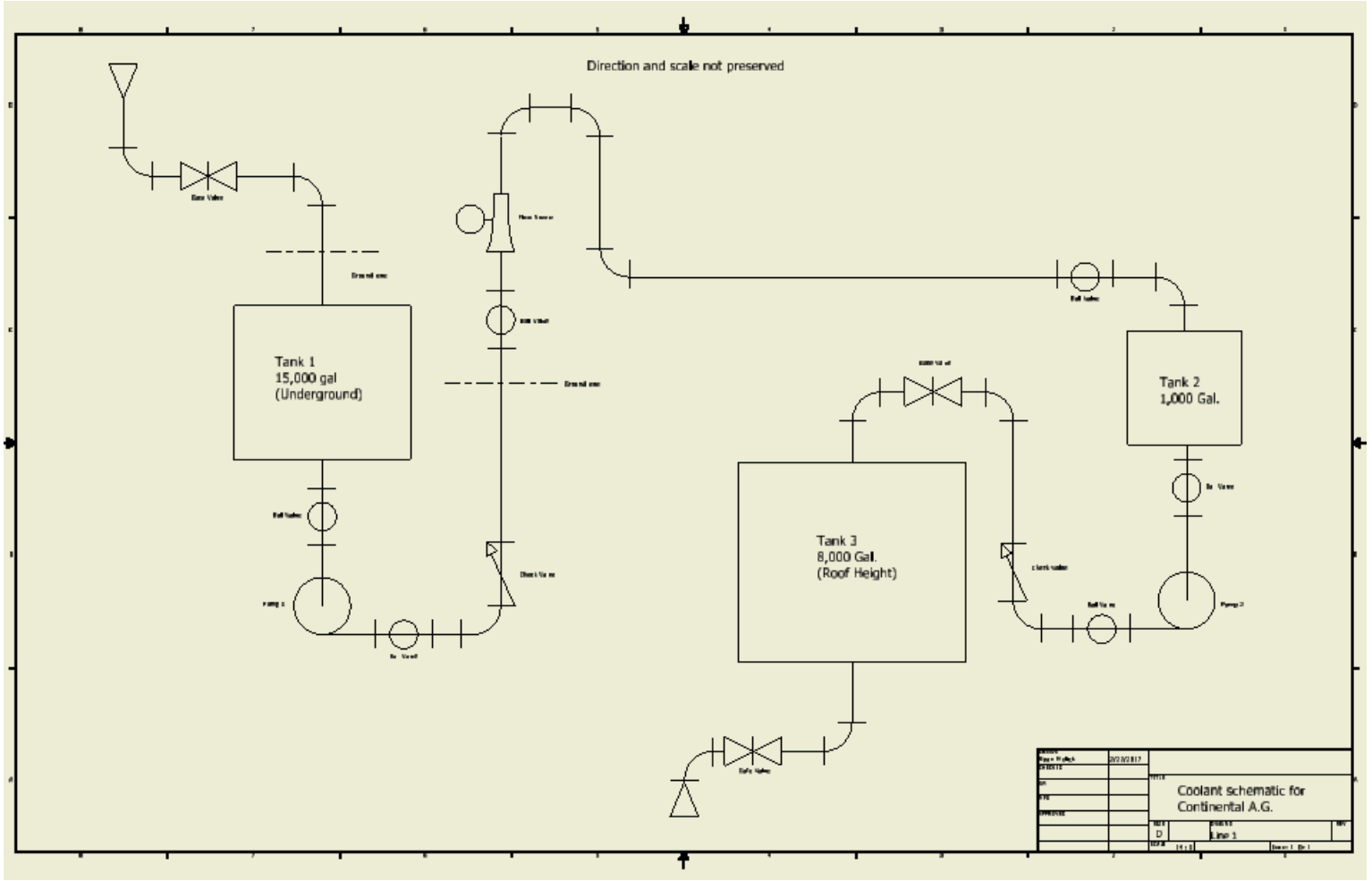
- **Shop Coolant Tank 2**
  - **This tank will be located in the machine shop to provide coolant to machinery in the space.**
  - **Capacity will be 1000 gallons.**
  - **There will be isolation valves for servicing.**
  - **There will be a pump located below for coolant removal.**
  - **There will be a coolant supply line coming from tank 1.**
  - **There will be a coolant removal line which plums the used coolant to tank 3.**

Site Planning

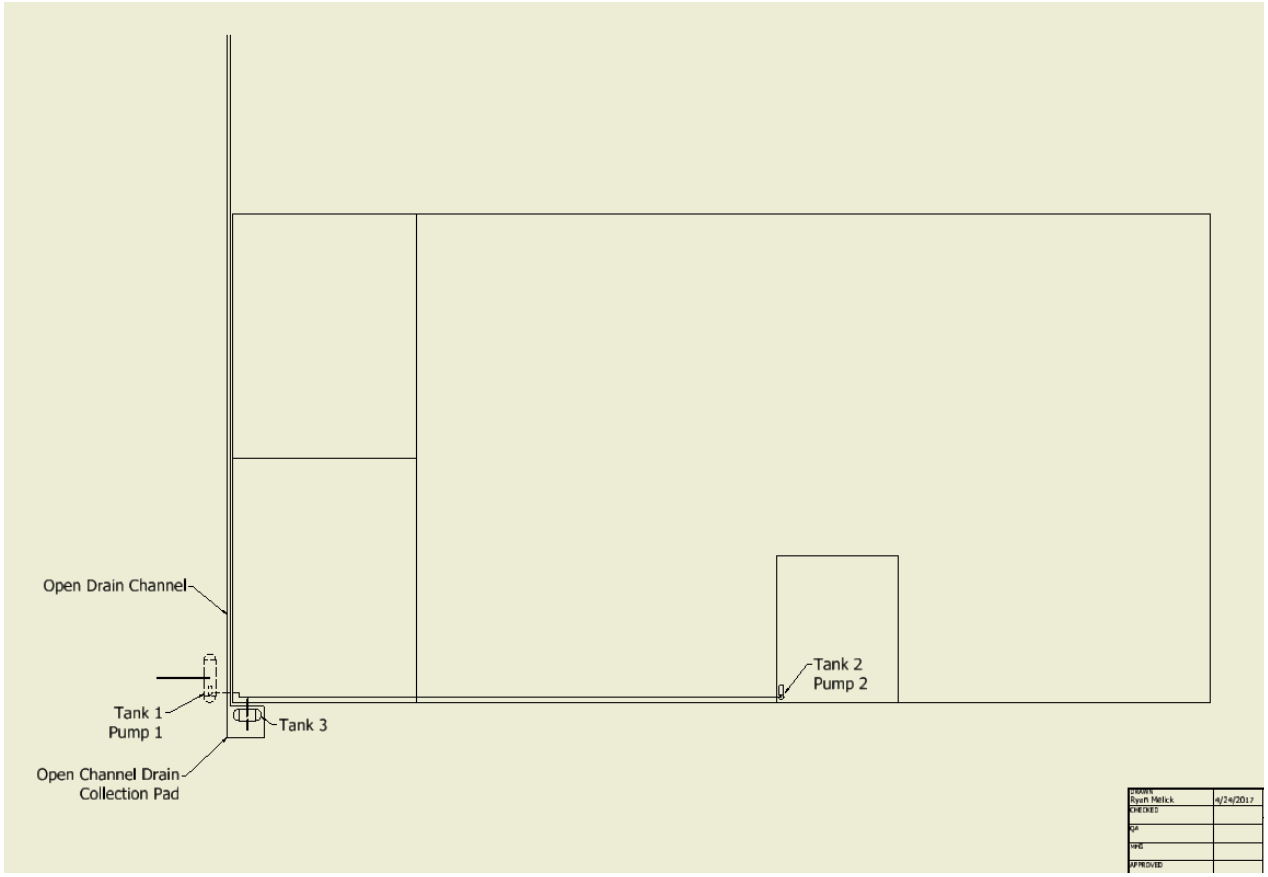
●Dirty Coolant Tank 3

- Dirty Coolant Tank will be 8,000 Gallons
- Located at Outside the Building
- Will be at Roof Height

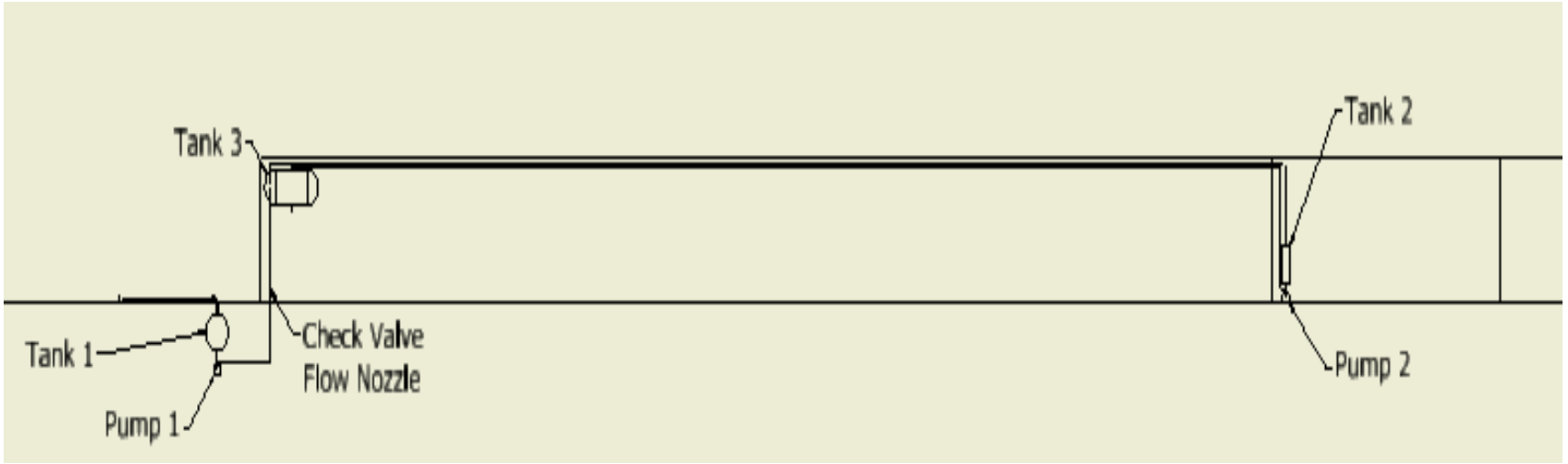
Schematic View of Continental AG (line diagram)



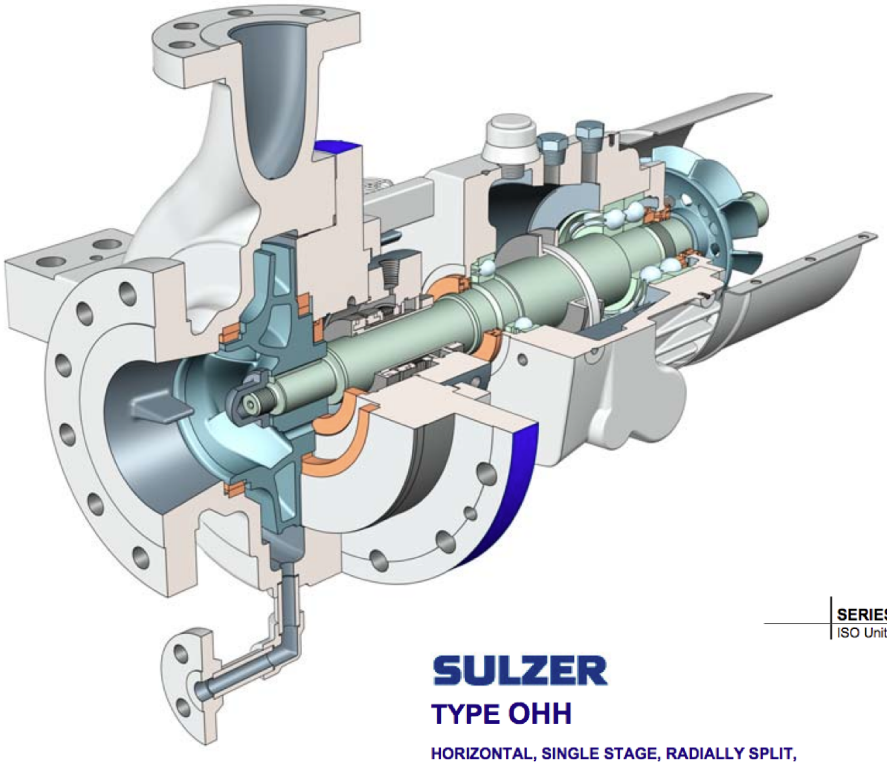
Schematic View of Continental AG (Top down View)



Schematic View of Continental AG(Front View)



Pump Details



SERIES 2.00
ISO Units

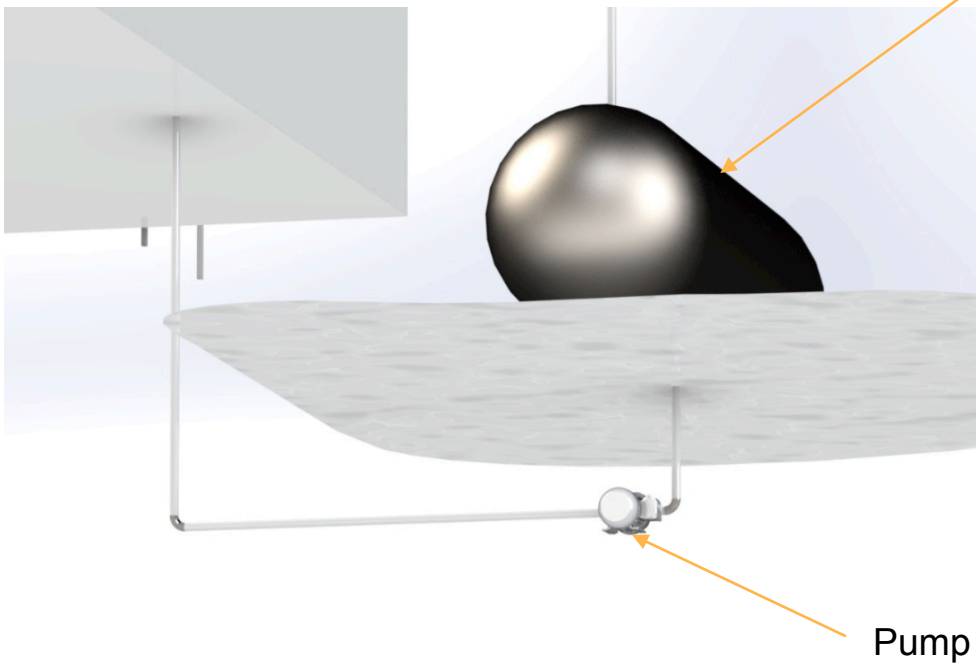
SULZER

TYPE OHH

HORIZONTAL, SINGLE STAGE, RADIALLY SPLIT,
CENTERLINE MOUNTED ISO 13709 (API 610) TYPE OH2 PROCESS PUMP

Location Of Pumps

- **Pump 1**



The pump will be located right after the Clean Storage Tank 1

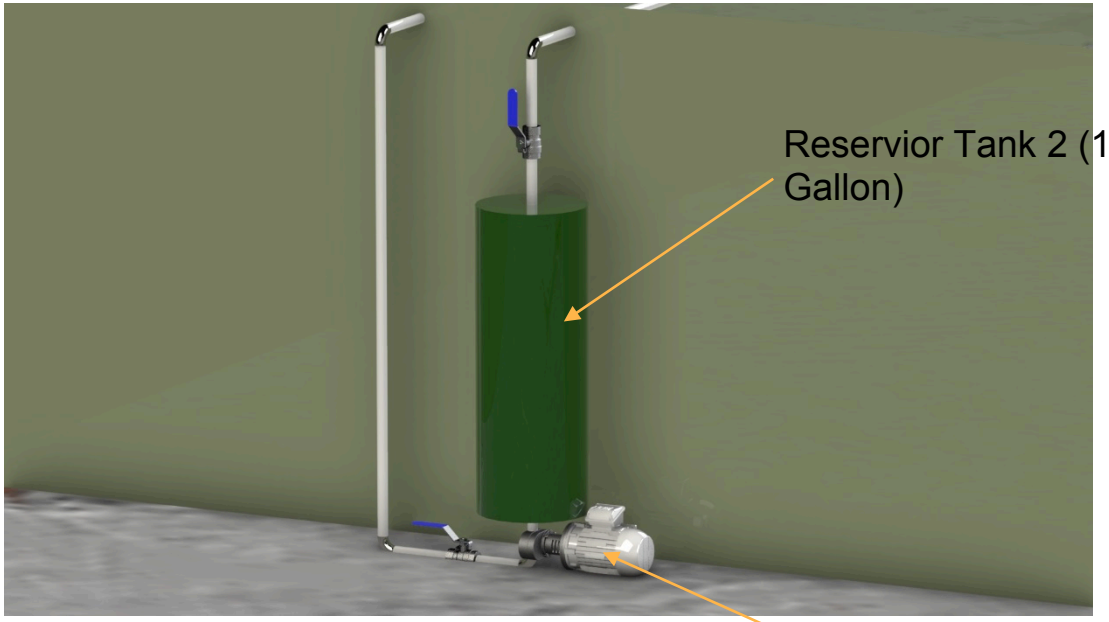
Pump 1 Details

- **All pumps selected in SULZER catalog**

	Pump 1
Type:	1.5 x 4 x 14B-1 OHH SULZER pump. Speed= 1800 RPM and 60Hz
Flow Capacities:	50.27gpm
Head Requirements:	124.2 ft
Power required:	1.57hp

Location of Pumps

- **Pump 2**



The Pump will be located after the reservoir tank (tank 2).

Pump 2 Details

- **All pumps picked from SULZER catalog**

	Pump 2
Type:	1.5 X 3 X 11.5-1 OHH SULZER pump. Speed = 1800RPM and 60Hz
Flow Capacities:	50.27gpm
Head Requirements:	133.1 ft
Power required:	1.69hp

Why Our Design is Great !

- **We keep our design simple. Simple for the Continental AG plant is beneficial because**
  - Simple is about clarity and gets to point.
- **Our location of tanks and pumps chosen make it simple for maintenance and easy for employees.**
  - Clean Storage Tank 1 located underground for easy and quick delivery for the railroad tank cars.
  - Dirty Coolant Tank 3 located outside for easy access to drain for the trucks and is closer to the driveway and highway.
  - SULZER pumps chose us ! They trust this team to promote the leading pump provider in the industry !
- **This team takes great pride in our work, let us know if you have any questions !**