

OLSON

ENGINEERING SOLUTIONS

Engineering & Design Services Overview

WRITTEN DATE: 01JAN2024

About Us

- **Established:** Founded by Andrew Olson in 2016. Started as a design engineer. Through his extensive career, he identified numerous industry needs which grew his company into what it is today.
- **Location:** We have offices in Florida, North Carolina, and Virginia but can travel to your job site at any location.
- **Values:** We pride ourselves in delving quality work on time. Integrity and honesty are our core values.

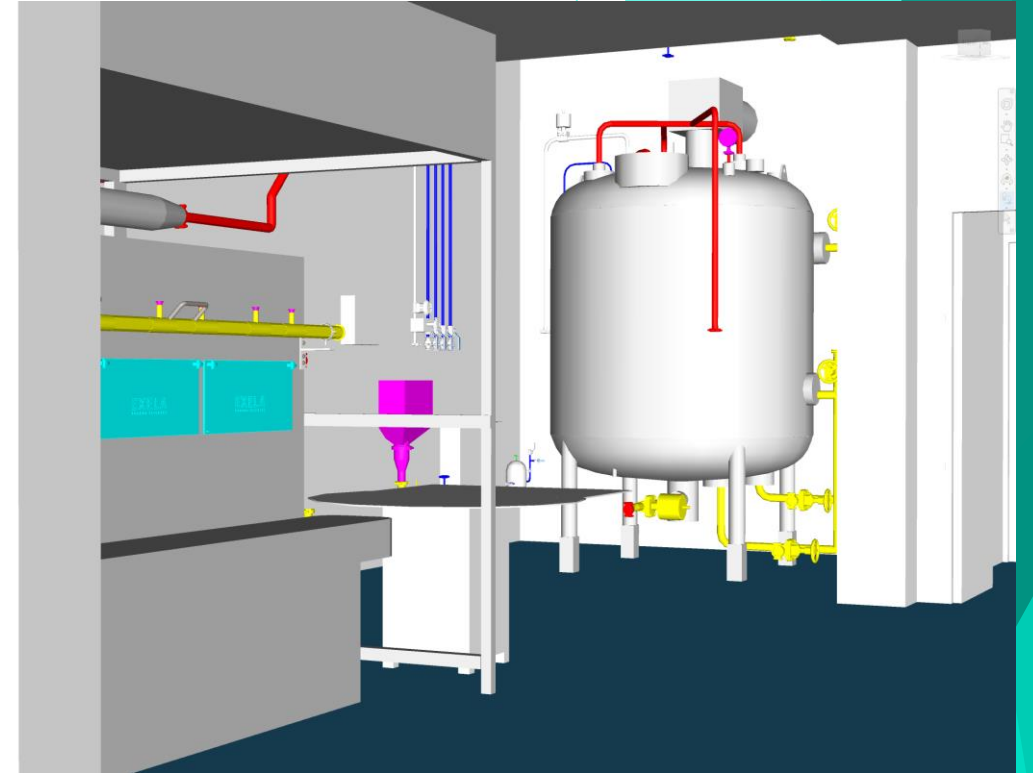
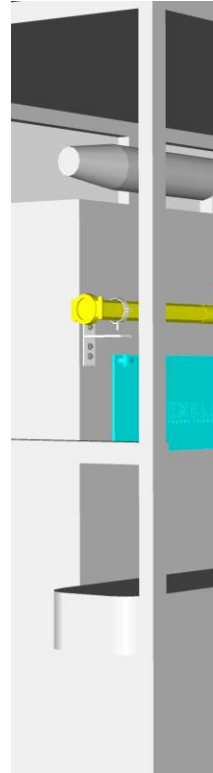
Typical Industries We Serve

- Experienced in the Semi-Conductor industry.
 - Worked with all utility systems. Specialize in bulk liquid and gas chemical delivery systems.
- Experienced in the Pharmaceutical industry.
 - Worked with all utility systems. Specialize in sterile systems.
- Other industries.
 - Chemical plants.
 - Food process/manufacturing.
- Any MEP utility systems, we are confident we have the expertise!

Typical Engineering & Design Services

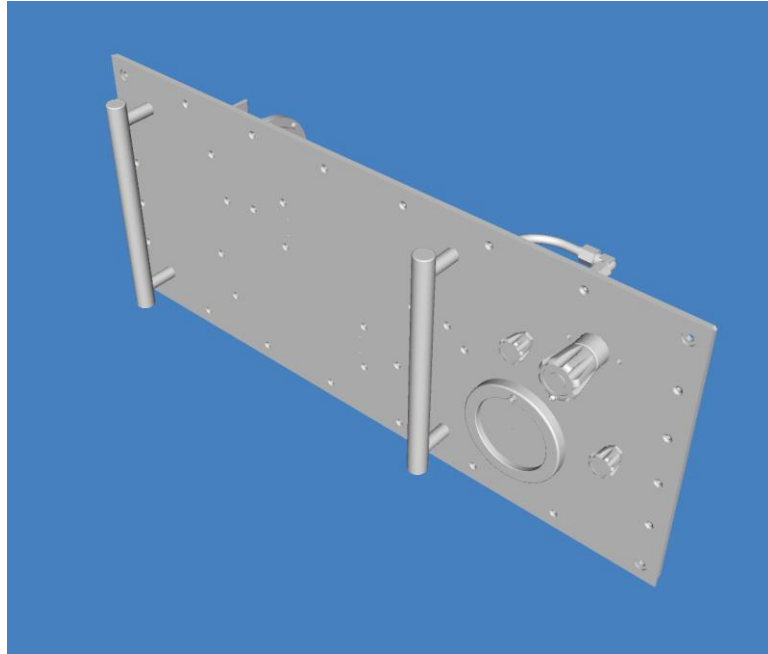
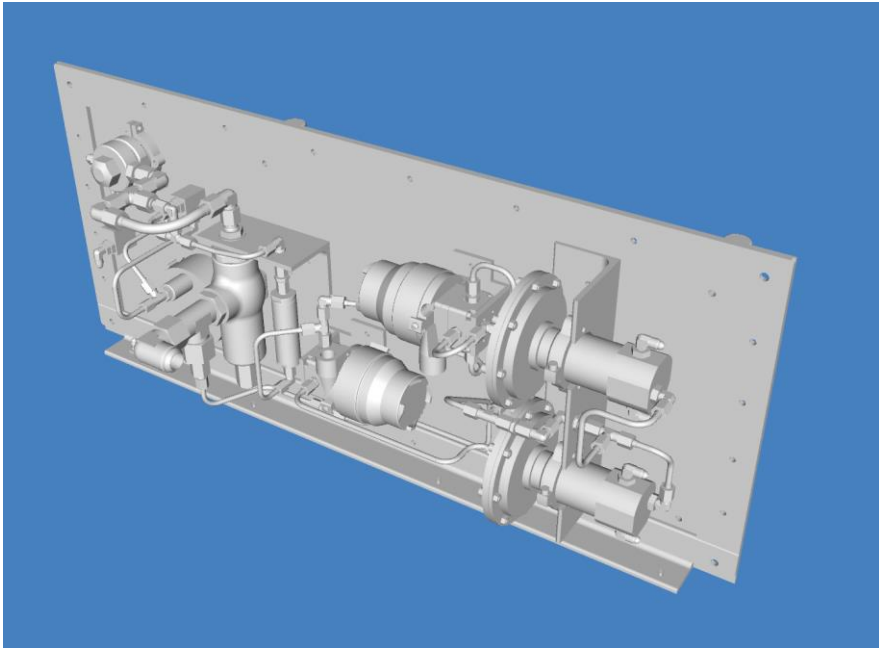
- Project engineering - Define the scope of work.
- Programming effort - Detailed document to scope engineering and design needed.
- Creation of P&ID - All your 2D cad needs.
- Creation of Plan Views - Create layout to plan detailed piping and equipment locations.
- Creation of 3D models - Helps coordinate with trades and other vendors.
- Creation of Spool Drawings - Detailed drawings that can be fabrication off site saving time and money.
- Equipment Specifications - Ensure the equipment meets your needs.
- Piping Specifications - Ensures consistency at your facility/plant.
- Bill of Materials - Budget before construction begins.
- Sequence of Operation - Can provide PFD and descriptive narrative to build automation scope.
- Engineering Calculations - Have confidence in your equipment and find the most efficient solutions.
- Engineering Review - Ensures you meet all code/standards/regulatory needs.
- Sealed/Stamped drawings - Have a professional engineering stamp streamlines the permitting process.
- Reverse Engineering - Save cost by manufacturing parts locally.

High Level Modeling



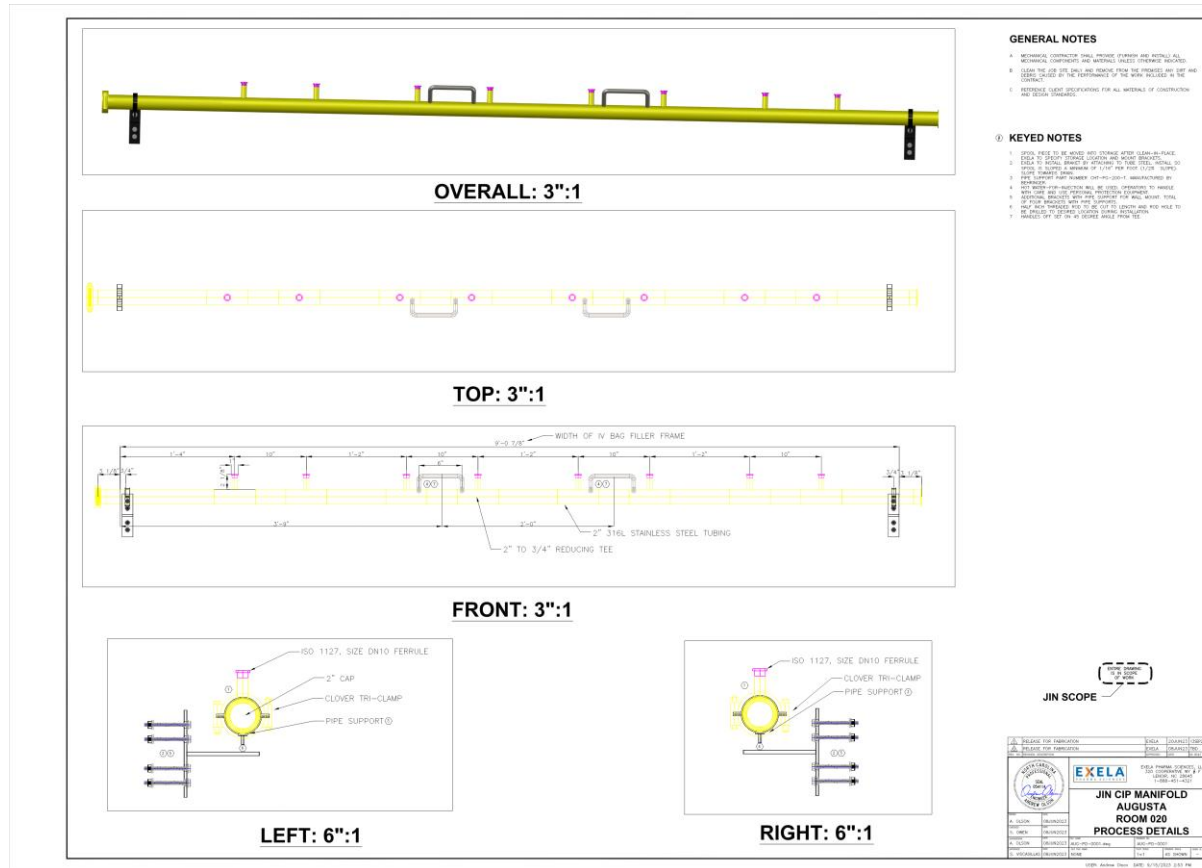
- Example of IV Bag filler process.
- We can work with small or large jobs. We will tailor to your needs.

Detailed Modeling



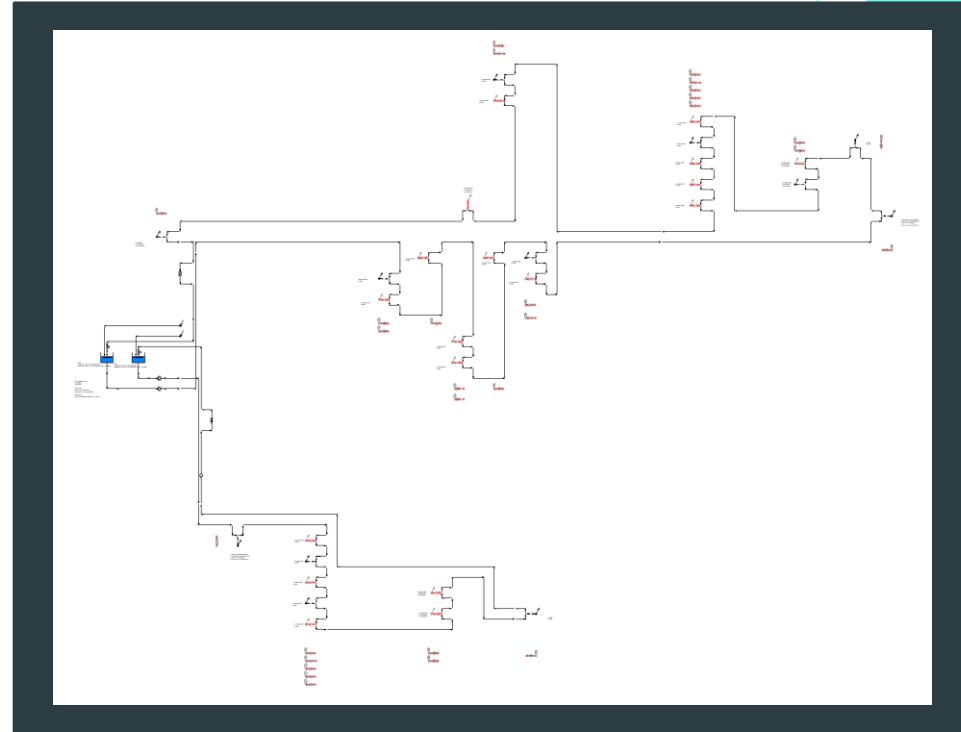
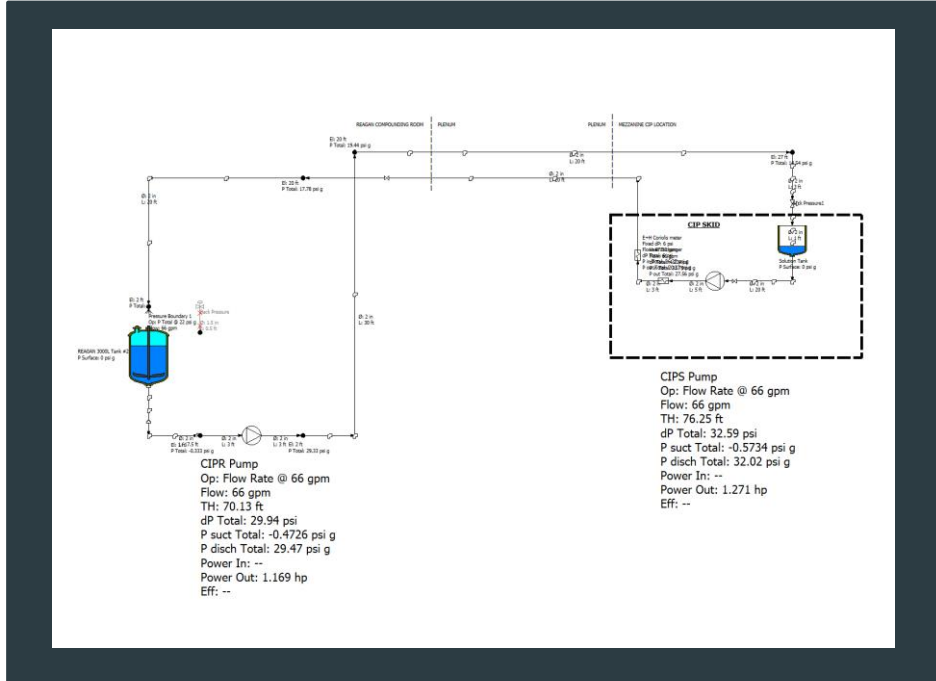
- Pneumatic panel used for the Artemis rocket.
- Detailed drawings which specify all parts needed and precise space planning.

Spool Drawing



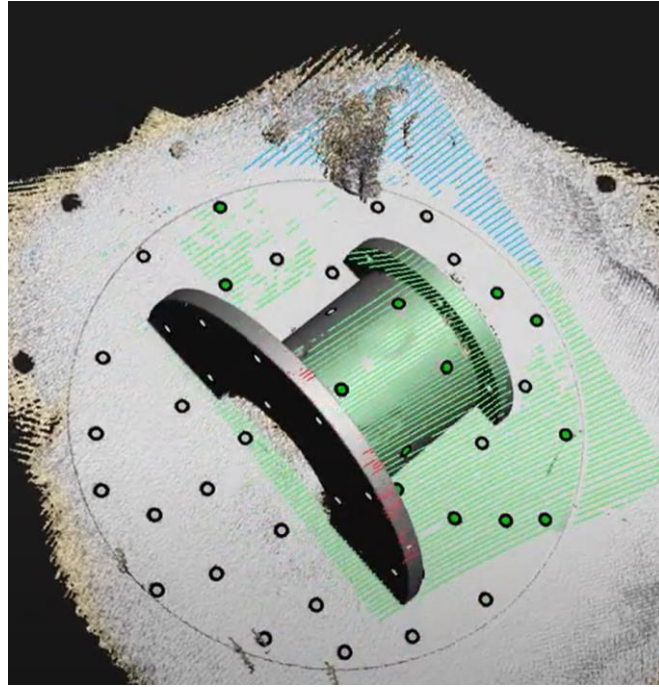
- Example of CIP manifold that could be moved out of place.
- Fabrication done off site and installed.

Engineering Calculations



- Example of a CIP and WFI system pipe flow analysis.
- We also can do hand calculations, pipe support modeling, chemical process modeling, and much more.

Reverse Engineering



- We can scan an existing part and break down with model.
- Specify the exact materials for fabrication.
- Bid at local shops for best pricing.

Questions

- Open for any questions. If interested in other service, can be found in the link below.

<https://www.olsonengineeringsolutions.com/services>