FAMU-FSU College of Engineering

Design Review 4

Team 504: Corning's Automated Pallet Topper

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Team Members

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FAMU-FSU College of Engineering

Sponsors and Advisors

CORNING

FAMU-FSU College of Engineering

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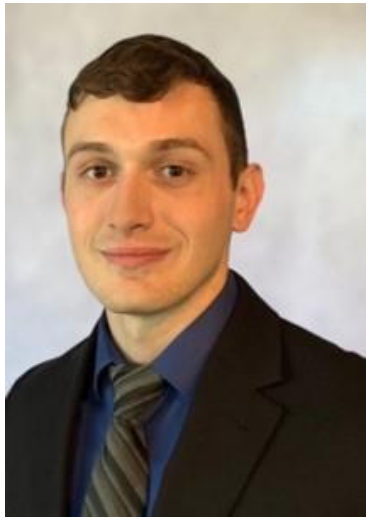
Project Manager



Trent Brush
Project Leader

Christian Hubicki, Ph.D.
Project Advisor

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Objective

The objective of this project is to design an automated system to assist in Corning's current palletization and depalletization process through the placement and removal of pallet toppers and embedded foam layers.

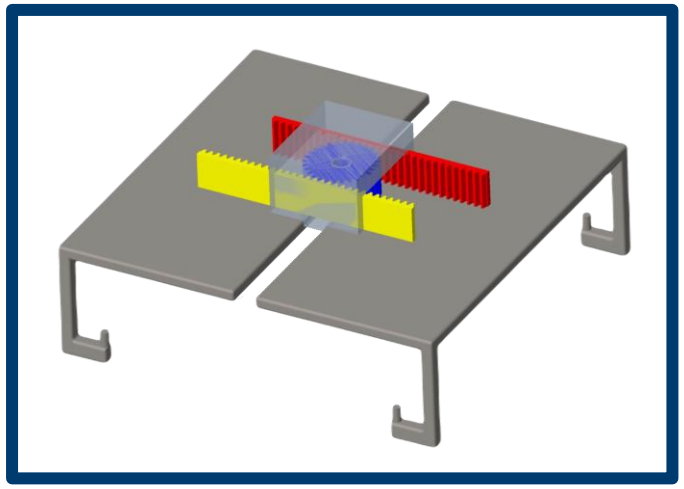
Project Overview

- Corning manufactures Diesel Particulate Filters
- Builds pallets for storage before further processing
- Pallets require employee's efforts for topper placement and removal
- Automated system to operate between these two cells

Preliminary Design

GUDEL 2-Axis Gantry

Tooling Concept



Rotary Clamps

Main Priorities

Carries Load

Determines Height

Cycle Times

Main Priorities

Carries Load

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Carries Load

Determines Height

Cycle Times

Main Priorities

Determines Height

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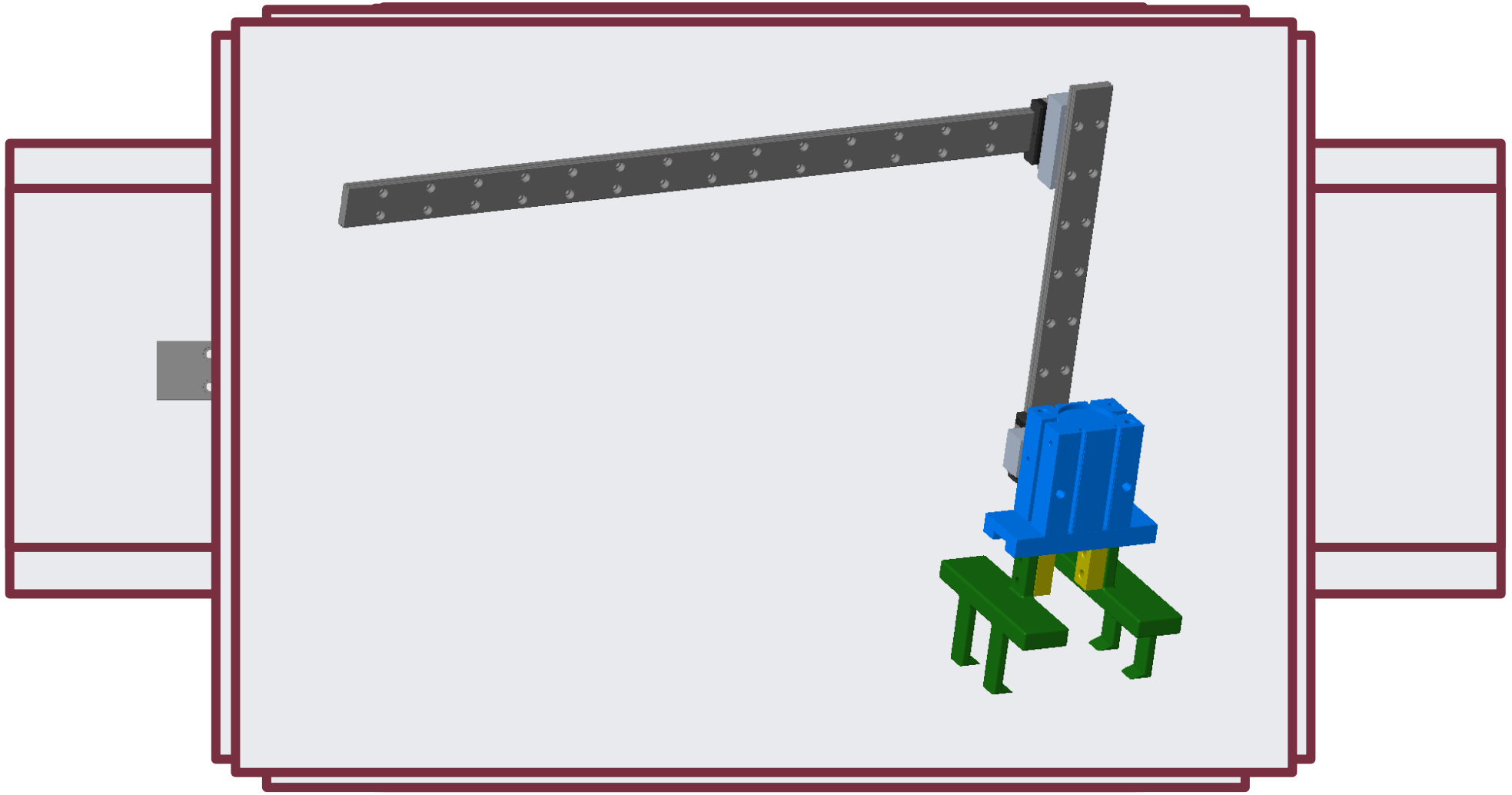
Concept Design



Current Budget

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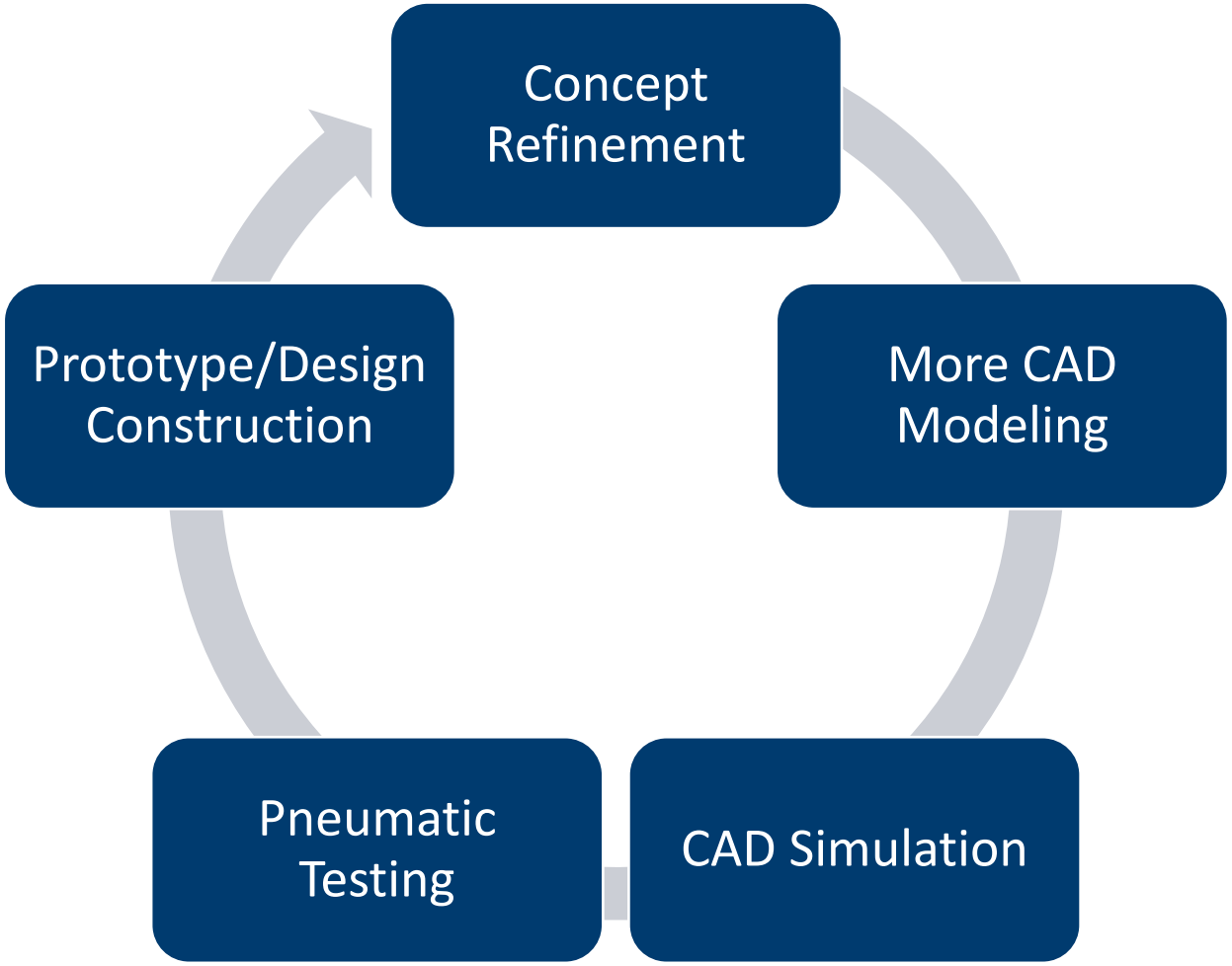
Future Work


Concept Refinement
More CAD Modeling
CAD Simulation
Pneumatic Testing
Prototype/Design Construction