



Team 506: Corning Plugger Pallet Short Part Stabilization

CORNING

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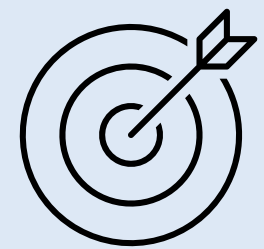
FAMU-FSU
 Engineering

The objective of this project is to produce a stabilization system to protect ceramics on Corning's conveyor while reducing the required manual labor.

Background

Corning's manufacturing plant is experiencing a problem on their ceramic conveyor line. Ceramic filters are breaking when they fall to the ground due to vibration and sudden acceleration. The solution in place requires two employees to monitor the line. Our project aims to automate this process by protecting the ceramic while reducing the required extra labor.

Targets



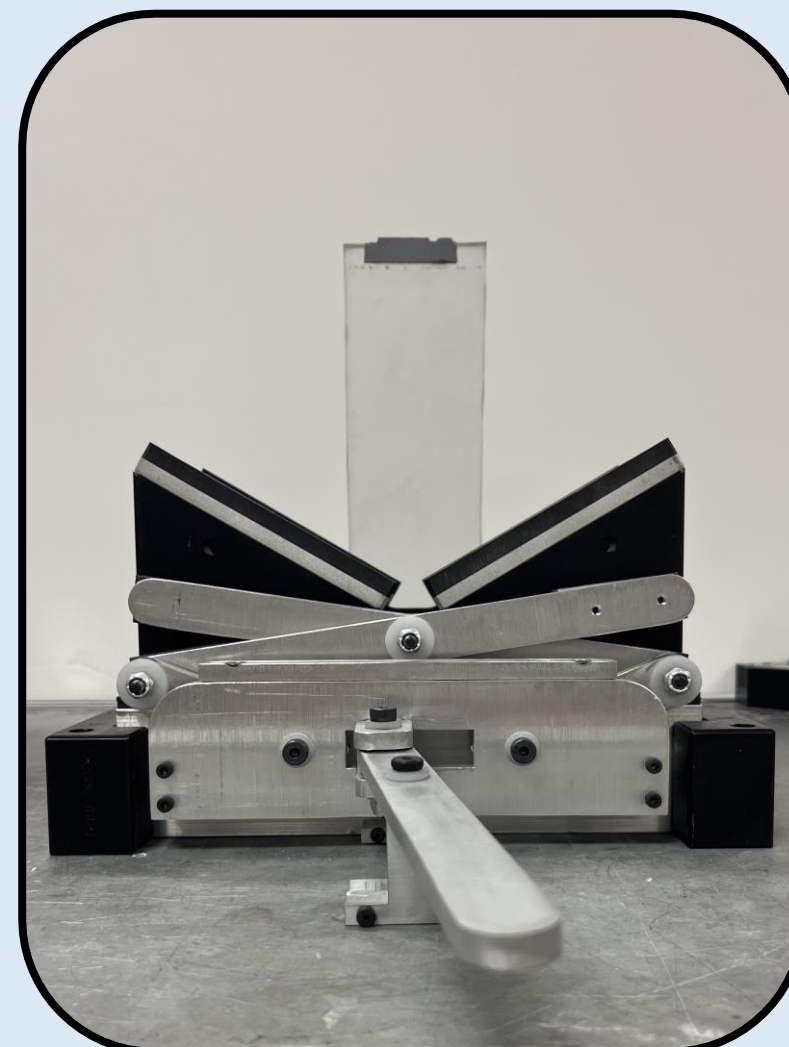
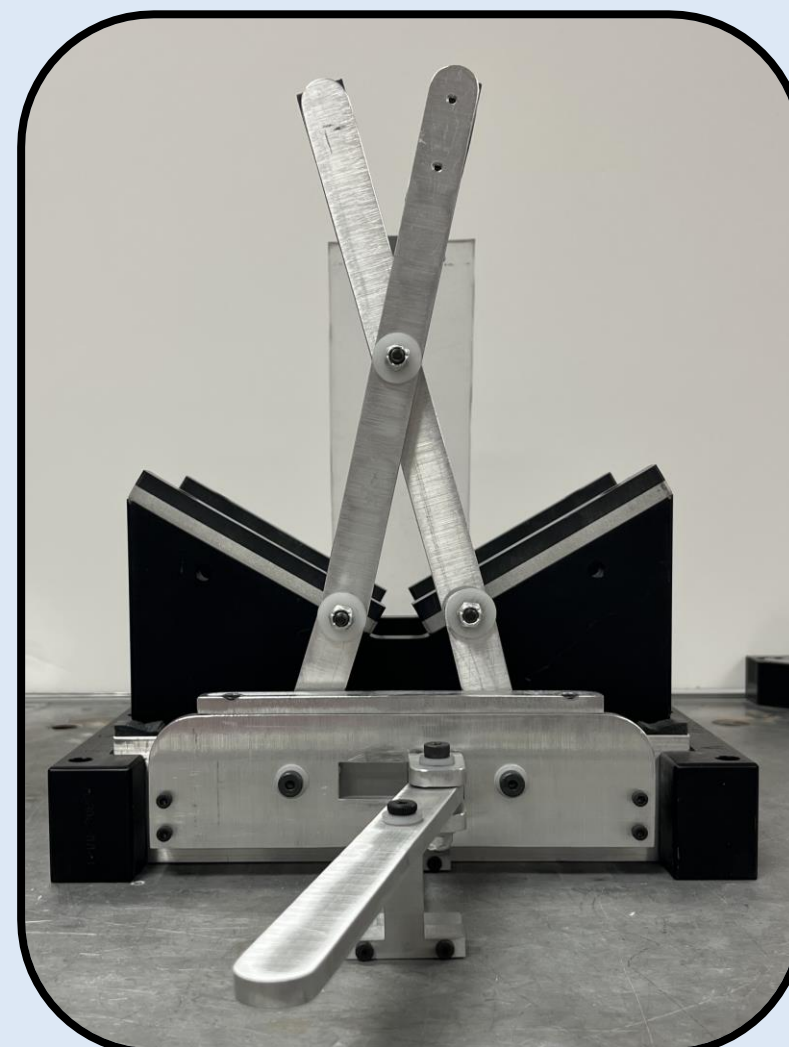
	Expansion height:	Retraction height:	Required interactions:
Current Solution:	11 in	N/A	2
Our Design:	12 in	4 in	None

Current Solution:

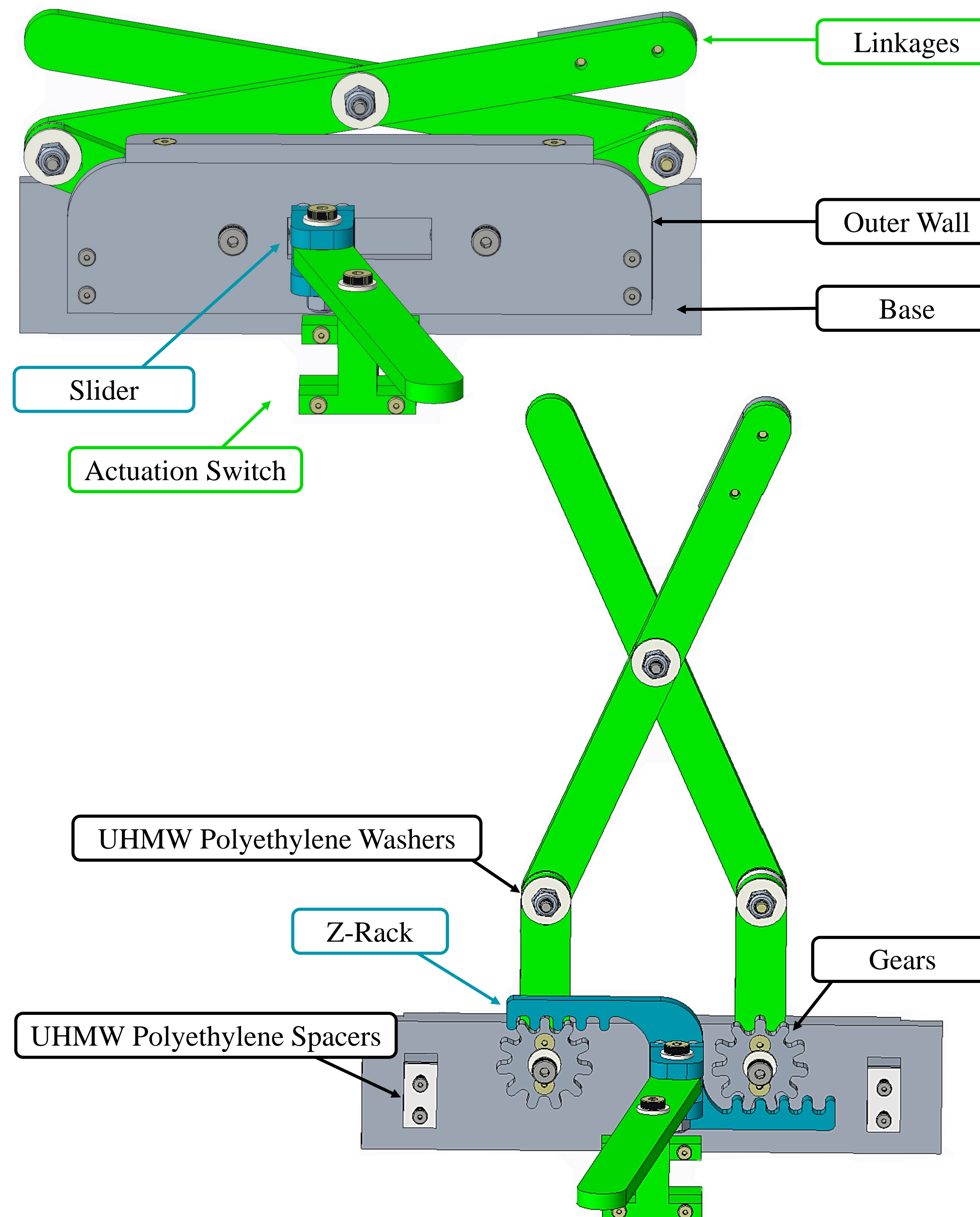
11 in	N/A	2
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Our Design:

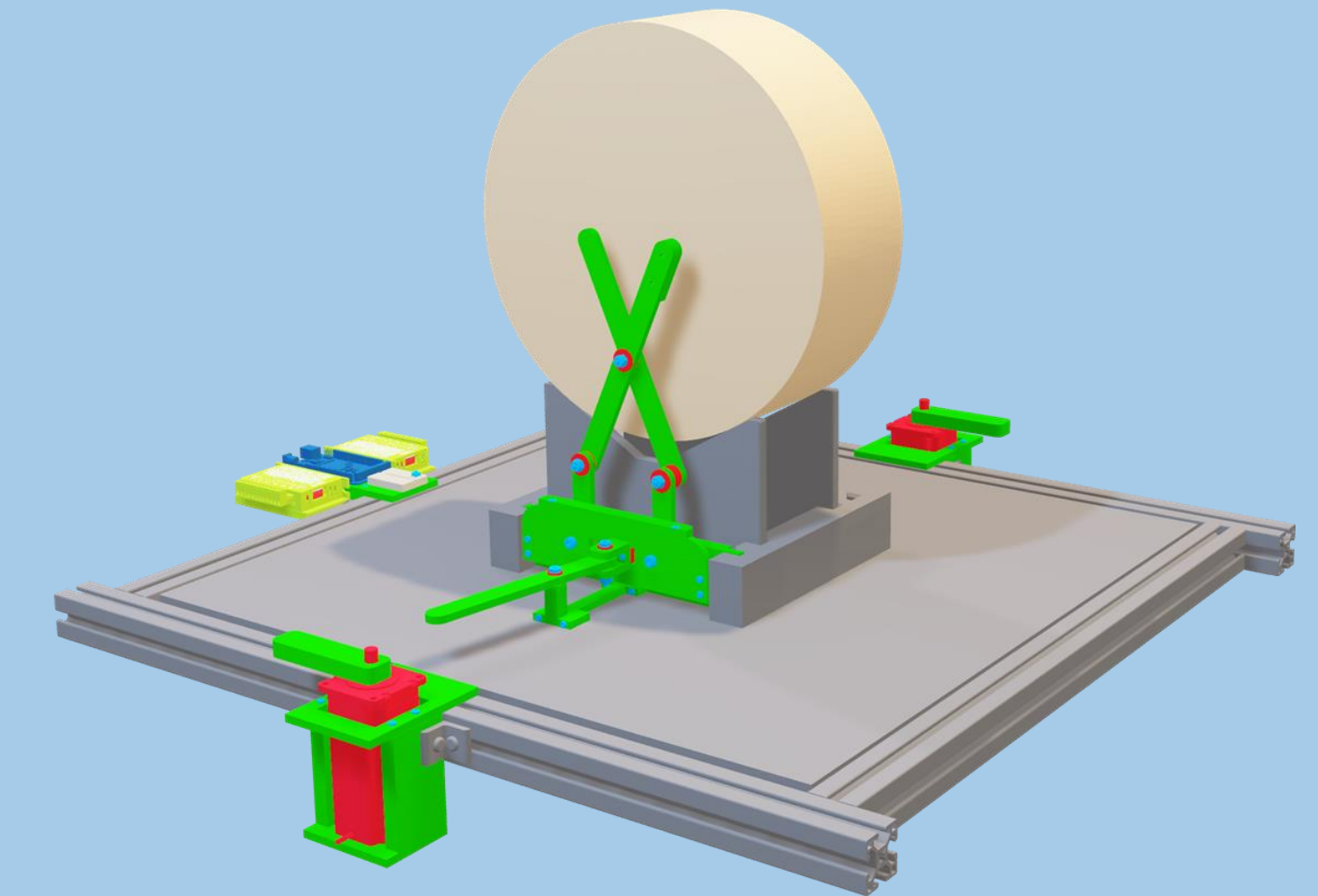
12 in	4 in	None
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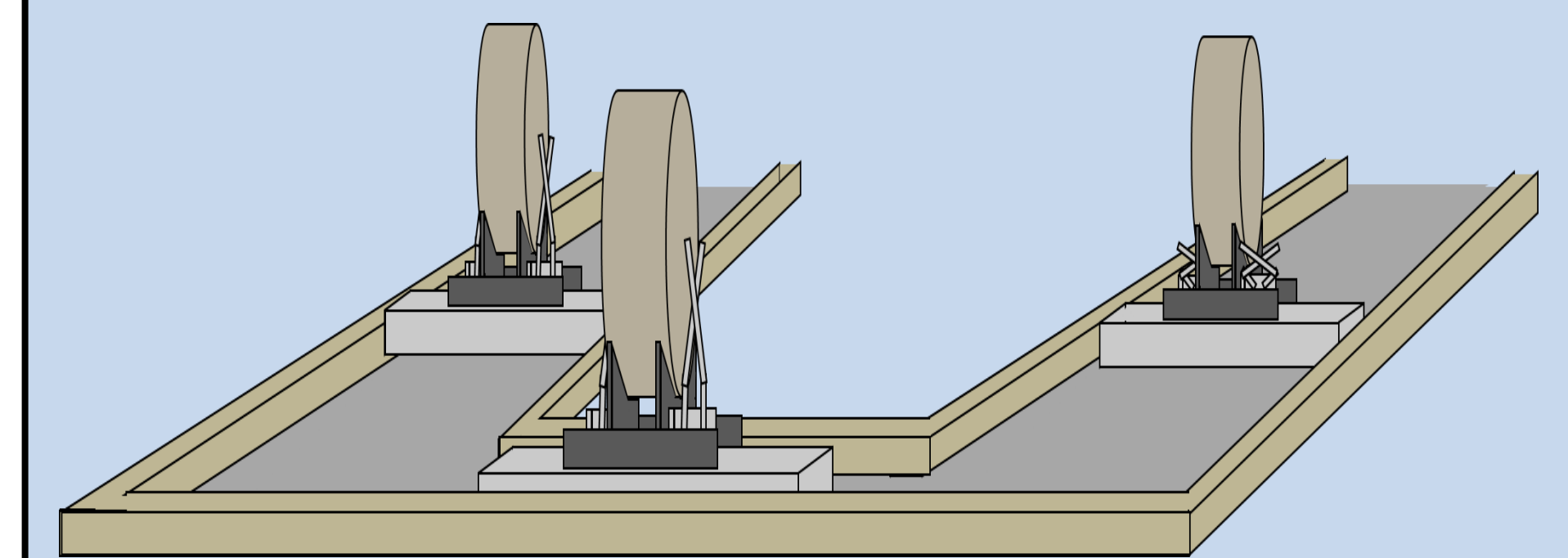
Self-Nesting T



Final Product



Conveyor Layout



Future Work

- Re-design the engagement method from the conveyor to the device
- Select better hardware, and use bolts with matching hex sizes
- Further evaluate the cycle life and resistance of the UHMW