



## Capstone Design Project Abstract

**Project Title: Automated Polyethylene Flange Machining Table**

**Sponsor: Polytech Industries**

**Team Members: Garrett McCullough, Reid Milford, Sameer Mohammed, John Nelson, Joseph Olivares**

**Faculty Mentor: Dr. Yao**

This project aims to design and develop a machine for creating precise grooves on polyethylene sheets, which can be used in farming equipment. The proposed machine consists of a sturdy metal table with a cutting tool attached to a laterally moving arm. The primary objective of the project is to automate the process of creating grooves on polyethylene sheets, reducing the need for manual labor and increasing productivity. The machine will be designed to be user-friendly, easy to operate, and will have a sturdier design to prevent any impurities in the cuts. This will lead to increased productivity and cost savings, contributing to the sustainability of the industry.

