



Zero Waste in Plastic Manufacturing

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2021 extern at Accumold



Overview of Accumold

- Accumold was started in 1985
- Specialize in creating plastic parts at extremely small scale
- Parts are used in:
 - Micro Electronics
 - Automotive Electronics
 - Fiber/Micro-Optics
 - Medical
 - Emerging Technologies



Workplace focus

- Quality is essential when creating items on micro level
- In the department that spear heading quality there are several quality engineers
- The individuals are working to ensure that products that go to customers are meeting their needs
- This includes inspecting parts, plans for parts, and problem-solving issues that come up when creating parts



Introduction to problem

- Accumold would like to work towards being a zero-waste plant.
- There are several parts to this problem that students can choose to explore:
 - When they create plastic parts there are small parts that are waste, and other parts are scraped for various reasons. What can be done with these parts?
 - What can be done to reduce the amount of paper that is used?
 - What are ways that the company can reduce the amount of energy that they are utilizing?

Standards, driving/essential questions

- Employability Skills from 21st century
- What are the best ways to communicate this with employees?
- How to get buy in from employees?
- How is the company going to pay for upgrades? Services?

Extern Host Role

- The problem will be presented to students and the host can take questions from students about the situation
- The business can listen and review student final products virtually
- Give feedback on final products
- Potentially have students tour the facility to see what they do currently

Student Role

- Students will be able to select the area that they would like to focus on for the problem
- Students will be able to research and decide how to best tackle the problem
- Near the half way point the students will be able to submit a rough draft of their learning and ideas for the business to review