

Partners in Pollution Prevention Intern: Adam Joseph

Major: Mechanical Engineering

School: University of Nebraska – Lincoln

Business Background

Orthman Manufacturing is based out of Lexington, NE. They are primarily an agricultural equipment manufacturer. The company was founded by Henry Orthman fifty years ago. Mr. Orthman originally started his company in a barn on his original homestead. The north plant is the headquarters of the company. It is located on the original acreage. The main item that Orthman produces is agricultural tool bars. Another product for Orthman is their 1tRIPr. This device is named for having the ability to do multiple operations in a single pass of a field. This allows farmers to save time, money, and soil.

Project Overview

Adam Joseph, a P3 intern, worked with Orthman to find possible pollution prevention practices. Specific management reports have been done for general pollution prevention recommendations, update on end cap process, and switching from hexavalent to trivalent plating.

Pollution Prevention Benefits

The recommendations will allow Orthman to become a better company in the eyes of the community, its employees and the environment. Keeping the environment and the safety of operators in mind will allow Orthman to achieve a new level of excellence. More process updates like the end cap project will improve the efficiency of production and a more comfortable work environment for its employees.

Results

The cost savings and other benefits of the projects listed above are summarized in the table below.

Description	Potential Annual Cost Savings	Other Benefits
End Cap	\$80,187	Increase in safety and comfortability
Rotating Hitch Fixture	\$7,249	Increased Safety and Better Welds
Plating Switch	\$0	Stopped usage of hexavalent chromium
Total	\$87,436	

