Design Project II

For this project, I was able to work with the same three people. The goal of our project was to redesign the steel drums in manufacturing to be more efficient.

We decided that the best way to be more efficient would be to create a cylindrical drum that had two faucets attached on either side to properly dispense of the chemicals inside by transporting them into a truck that would take them elsewhere, that would leave the environment and surrounding areas clean.

Once again, we used the same processes such as concept generation and the analytical hierarchy process. Below you can find our Mission Statement for this project:
Mission Statement

Product Description:
- We will be redesigning drums or totes used in manufacturing to be more efficient for the company. We will be doing this by either altering the capacity (shape, flow design), prioritizing their uses, or make the material more recyclable. Our motive is to create a sustainable way to get chemicals into the facility without leaving behind plastic or metal drums that are coated with potentially poisonous chemicals.

Primary Market:
- The company ArcelorMittal and their employees in the manufacturing process.

Secondary Market:
- Other manufacturing companies.
- Consumers who may adopt these practices to be more sustainable.

Assumptions:
- The drum or tote will be made of either metal or plastic (unless a better alternative is discovered) and will have a relatively large capacity.

Ideas:
- Currently, we are researching different uses and opportunities for manufacturing drums.
- Also researching the chemicals that will be placed in the drums to make re-use more environmentally friendly.