Mold Design

Overview
The goal of our project was to design a fixture that will allow Tafco to mold refrigerator walls at any desired angle in one process step.

Objectives
Our team has decided that in order to design the fixture we would have to select a design that meets all the needed criterion. Once selected the goal was to draw it and then model it on Solidworks.

Approach
- Analysed the problem and created a criteria matrix
- Met with our sponsor and visited the facility to fully understand the problem
- Selected a concept to begin designing
- Created a Pert chart to keep our efforts on track
- We then drew the design on paper
- Transferred hand drawn to a Solidworks CAD model
- Build a prototype fixture out of foam
- Presented project to the sponsor

Outcomes
As of right now Tafco can create angled walls but it takes a lot of time. They have to create two flat walls place them together and hand foam them at an angle. The main goal of our team was to just come up with a design for the fixture that could do all of this in the molding phase. This new process will eliminate work from the situation saving them time and money. Since Tafco’s largest expense is their man power this design project will really be furthering their satellite goals.