## Mold Final Presentation

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## **Design Challenges and Solutions**

- We had problems with Mini Mill operations but Ari and Daphnie helped us to troubleshoot those problems and we were able to complete the mold halves and molding on time.
- Morgan press stopped working after 3 molded parts. The reason was that the shoot/cover was not closed properly and thus the press stopped working as precautionary measure.
- Initially, the dowel pins were protruding out by a larger length resulting in difficulty while separating the two halves of the mold. We pushed the dowel pins inside the holes making it easy to separate the two halves.

## **Design and Manufacturing steps**

- Prepared the stock for two halves of the molds
- Performed plastic flow analysis in SolidWorks and prepared the CAM file
- Machining of the two halves on Mini Mill for 3 hours
- Post operations of making locating pin holes, sprue hole and bottom slot
- Insertion of the dowel pins inside the holes
- Plastic molding on Morgan press
- Post operation on molded parts like removing the web of battle axe and the extra part created due to sprue

















