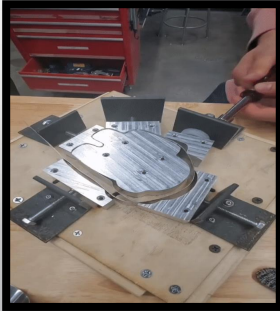




Industry method



Custom Design

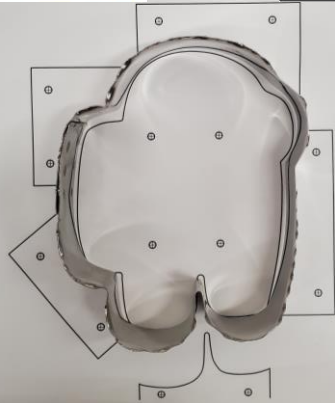
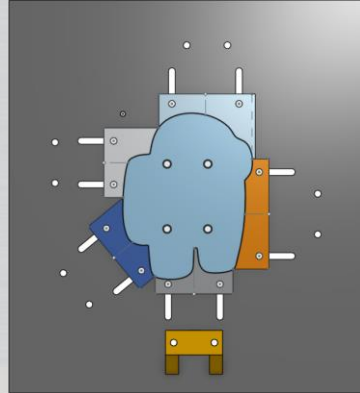
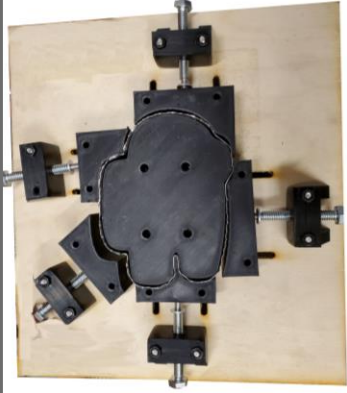
# **MANUFACTURING ENGINEERING**

## ***Project 1 Cookie Cutter***

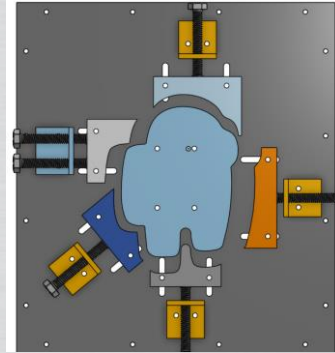
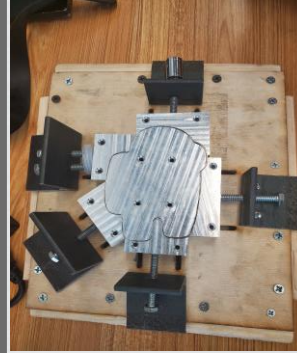
DANIIL T., RICKY L., PETER S.

# Product Development

## Iteration 1: 3D Print



## Iteration 2: Robust Machining



# Process for Final Design

## Phase 1: Design and Planning

- CAD model of cutter, mold, and press dies; no convex curves.

## Phase 2: Manufacturing Components

- CNC-cut aluminum mold and press dies.
- Use pilot holes for the tap and die manual threading

## Phase 3: Assembling

- Drill tight-clearance holes in steel L-brackets.
- Stake washers on worm screws for even load.
- Use hex bit socket and wrench for tightening.

## Phase 4: Reinforcing

- Counter high bending forces with epoxy and screw-held wooden beams.

