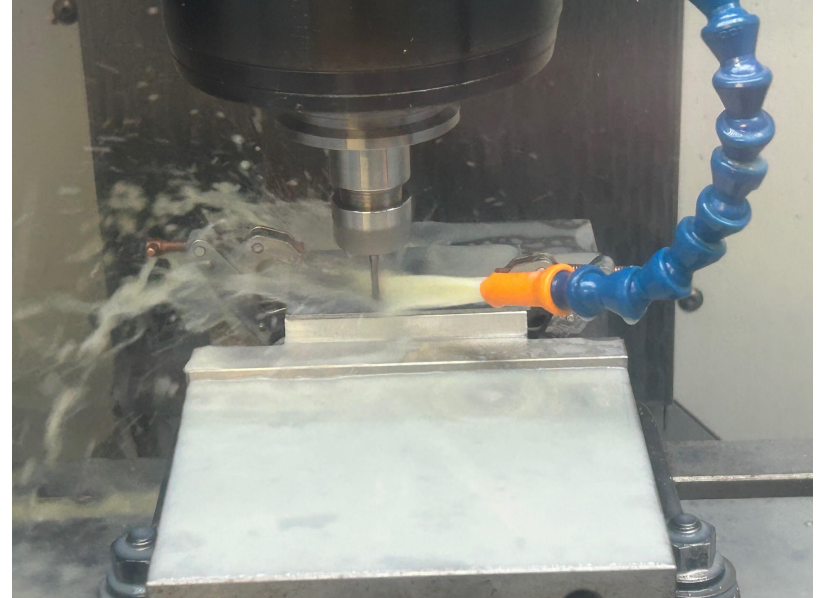


Tool - Chicken Joe

Adam Laycock



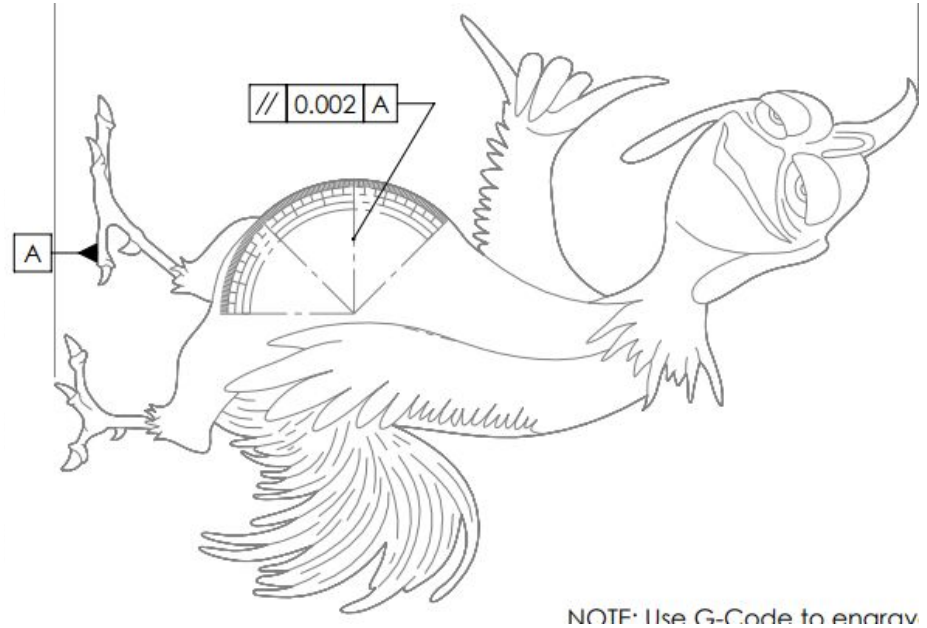
Outline of Functions

- Box Cutter Comb
- Protractor Belly
 - 135 degree range
- Bottle Opener Tail Feather
 - Tail hooks onto cap, back foot presses down
 - No edits to geometry were needed



Design and Tolerancing

- Belly was a great opportunity for a protractor
- Originally wanted the bottle opener between the legs, but was too small
- Serious lack of datums in my design
 - Flattened an edge on front foot
 - Added a parallelism callout so the edge could be used as a “zero” reference



Challenges/Learnings

- Splines did not import correctly into Mastercam
- Legs were extremely thin
- Forgot to add break through
 - Had to be patient and careful deburring
 - “Let the tool do the work” - Big Z
- Runtime was very long
 - Lowered feed/retract planes, edited parameters to optimize time efficiency while maintaining safety
- Learned about mini mill
 - Similarities and differences to Prototrak

