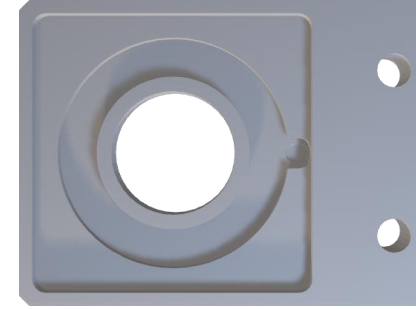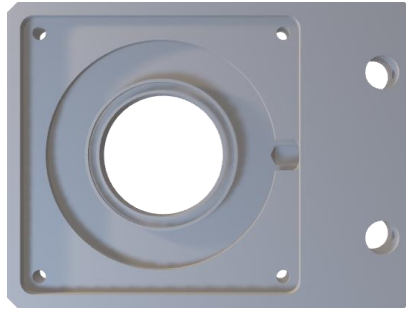IOWA STATE UNIVERSITY

Department of Industrial and Manufacturing Systems Engineering

Volumetric Accuracy of Automatic Toolpath Generation
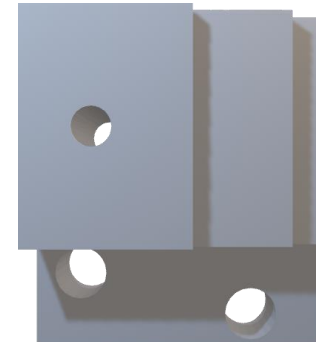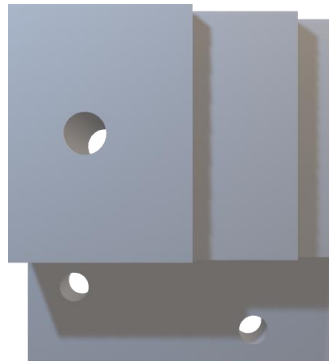
Josh Trimberger
Dr. Jakob Hamilton
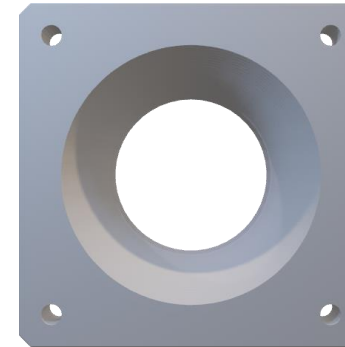
Simulation Results
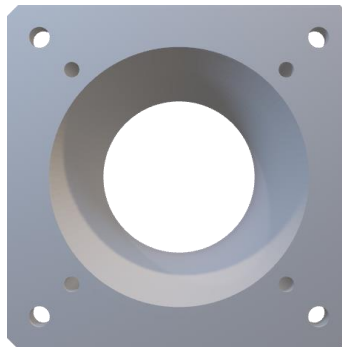

Volume Ratio: 96.10
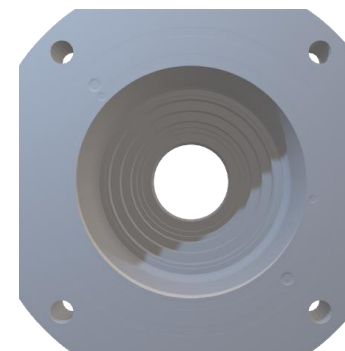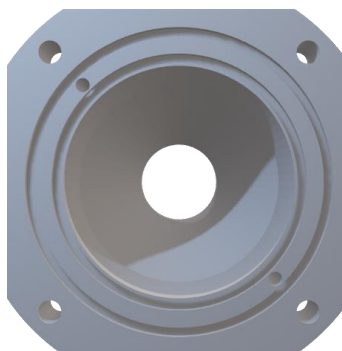Machined Stock Ratio: 96.24

Volume Ratio: 101.39
Machined Stock Ratio: 100.98

Simulation Results
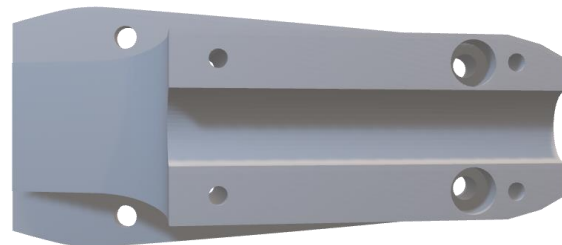

Volume Ratio: 94.77
Machined Stock Ratio: 96.02

Volume Ratio: 92.63
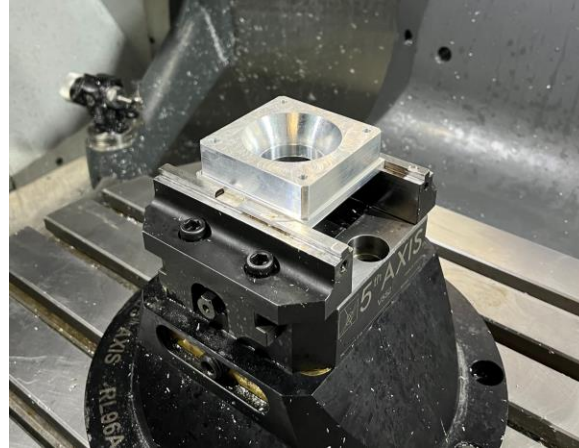Machined Stock Ratio: 96.01

Simulation Results
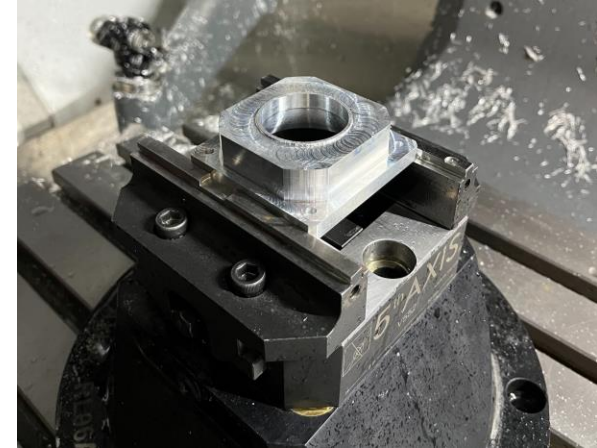

Volume Ratio: 98.89
Machined Stock Ratio: 99.61

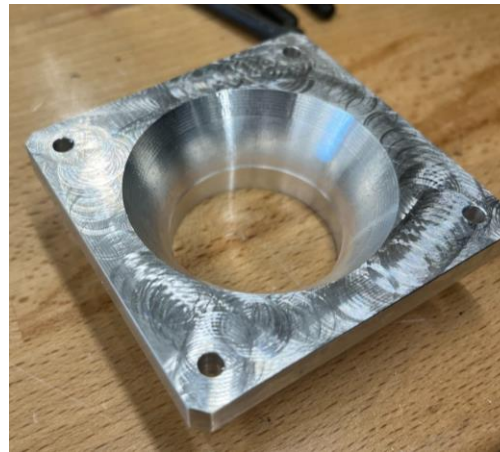Volume Ratio: 105.89
Machined Stock Ratio: 103.39
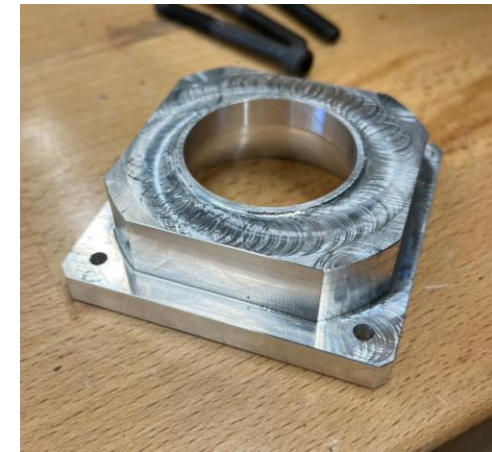
Empirical Results

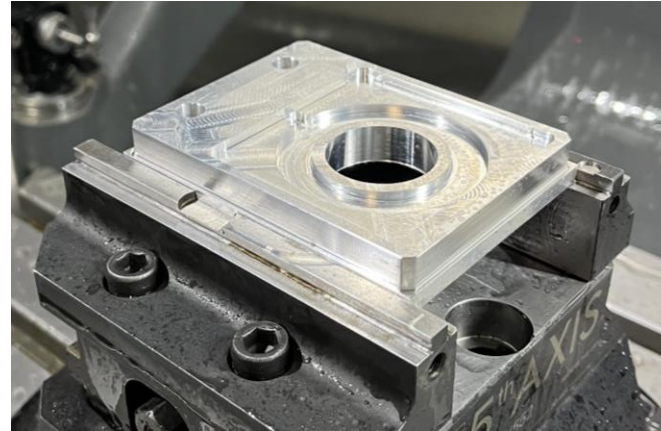

After first setup

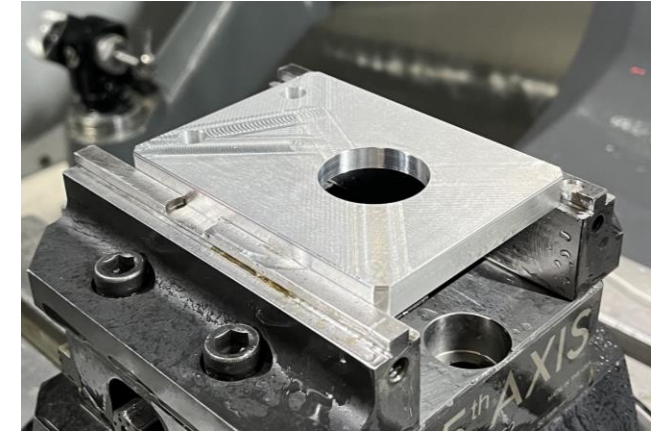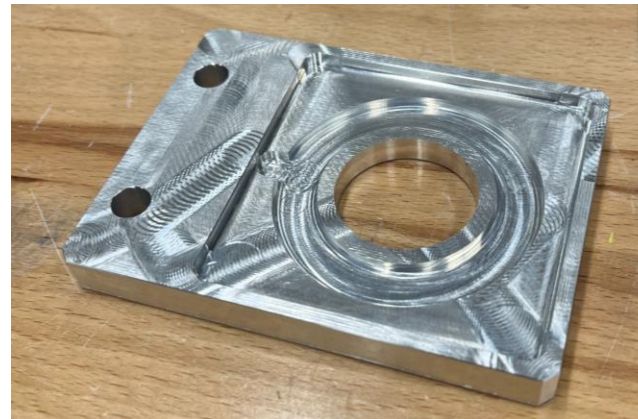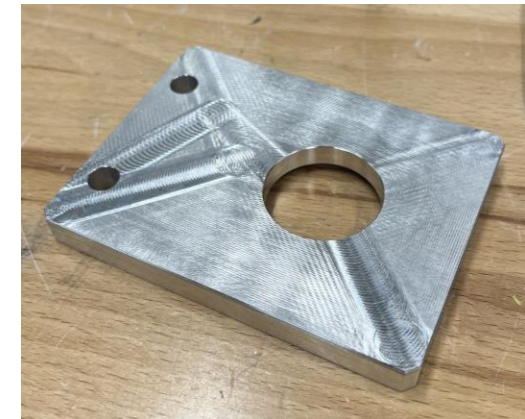After second setup

Completed part

Completed part

Empirical Results

After first setup

After second setup

Completed part

Completed part