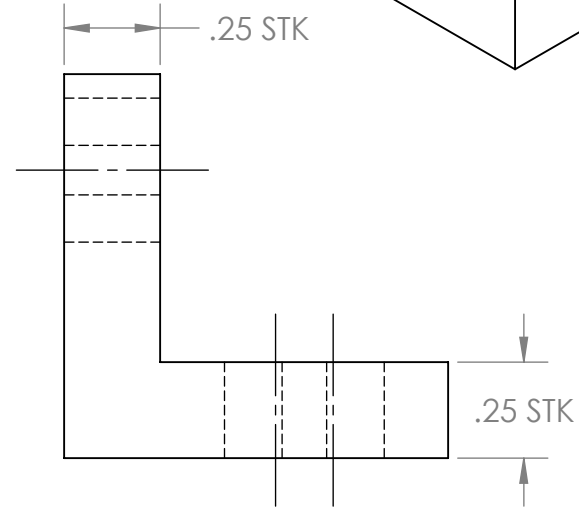
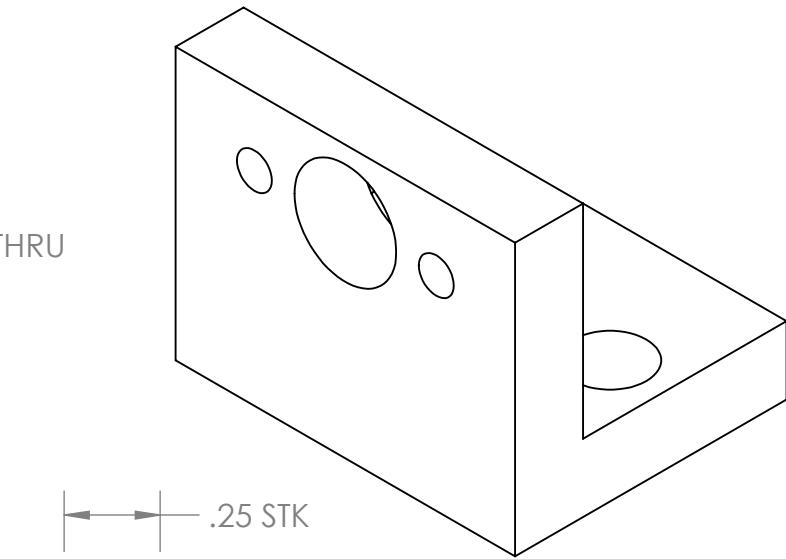
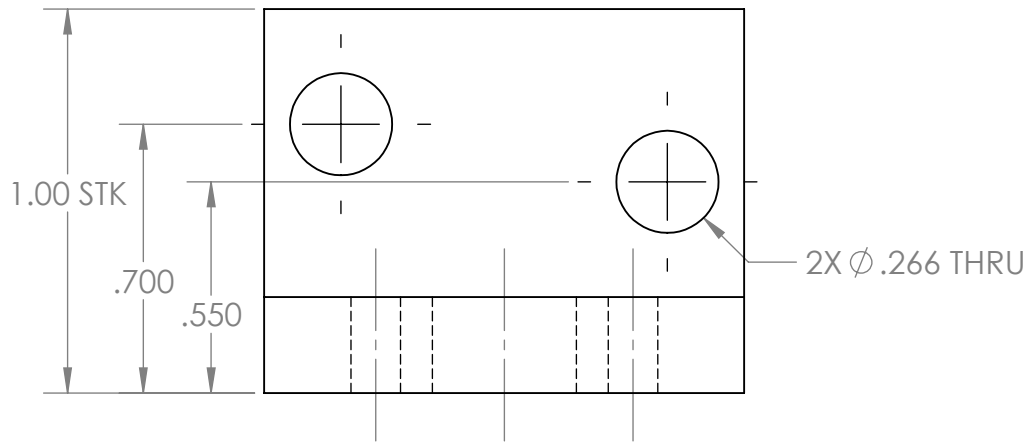


B

B



A

A

DRAWING & MANUF. PLAN CHECKS:

- PART FULLY DIMENSIONED
- APPROPRIATE DATUM LINES
- TOLERANCES SPECIFIED
- MATERIAL/QUANTITY SPECIFIED
- IF APPLICABLE, REAMER CALLED OUT
- APPROPRIATE TOOL SPEEDS
- APPROPRIATE DRILL/TAP SIZES
- SPECIFIED ALL NECESSARY TOOLS/SIZES NECESSARY
- RAW STOCK CUT OVERSIZED
- STEPS TO GET ALL ALL MACHINED/STOCK SURFACES

REV 1

INITIAL RELEASE

REV 2

FIXED DIMENTIONS

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES

TOLERANCES:

MACHINED ANGULAR: $\pm 1^\circ$
 BENT ANGULAR: $\pm 3^\circ$
 TWO PLACE DECIMAL: ± 0.01
 THREE PLACE DECIMAL: ± 0.005

INTERPRET GEOMETRIC
 TOLERANCES PER: ASME Y14.5-2009

MATERIAL
 1" x 1" x 1/4" Aluminum

FINISH

BURR FREE

REVISION BLOCK

DO NOT SCALE DRAWING

NAME DATE

DRAWN

DKFREELA 10/26/21

CHECKED

CRENZ 10/27/21

GSI/IA APPR.

SHOP APPR.

INSPECTED

COMMENTS:

ME 250 TEAM 103

TITLE:

MOTOR BRACKET

SIZE

A

DWG. NO.

P103_07

REV

2

SCALE: 2:1

QUANTITY: 2

SHEET 1 OF 2

MANUFACTURING PLAN

RAW MATERIAL STOCK: 1" x 1" x 1/4" Aluminum Angle Stock

| STEP | PROCESS DESCRIPTION | MACHINE | FIXTURE | TOOL(S) | SPEED (RPM) |
|------|--|---------|----------------------|---------------------------|-------------|
| 1 | Cut Raw Stock 1.250" | Bandsaw | Bandsaw Vise | --- | --- |
| 2 | Deburr part | File | | File | |
| | Face off both sides and measure with caliper | Mill | Vise L - stock Block | 1/4" endmill with chuck | 1000 |
| 3 | Secure Angle stock in mill with the back edge on top and other edge on the outside of the parallels around .25" away from vice and use vice stop to constrain in X direction | Mill | Vise L - stock Block | | |
| 4 | Find Center using the edge where the 90 degree angle occurs and the top edge | Mill | Vise L - stock Block | Edge Finder with Chuck | 1000 |
| 5 | centerdrill | Mill | Vise L - stock Block | Centerdrill with chuck | 800 |
| 6 | Drill center .375" clearance hole through the material | Mill | Vise L - stock Block | 3/8 Drill Bit with chuck | 800 |
| 7 | centerdrill | Mill | Vise L - stock Block | Centerdrill with chuck | 1600 |
| 8 | Drill the left .129" clearance hole through the material | Mill | Vise L - stock Block | #30 Drill Bit with chuck | 1600 |
| 9 | centerdrill | Mill | Vise L - stock Block | Centerdrill with chuck | 1600 |
| 10 | Drill the right .129" clearance hole through the material | Mill | Vise L - stock Block | #30 Drill Bit with chuck | 1600 |
| 11 | Rotate Part | | | | |
| 12 | Part is already centered using the same vice stop location | Mill | Vise L - stock Block | Edge Finder | 1000 |
| 13 | centerdrill | Mill | Vise L - stock Block | Centerdrill with chuck | 1400 |
| 14 | Drill the left .266" clearance hole through the material | Mill | Vise L - stock Block | .266 Drill Bit with chuck | 1400 |
| 15 | centerdrill | Mill | Vise L - stock Block | Centerdrill with chuck | 1400 |
| 16 | Drill the right .266" clearance hole through the material | Mill | Vise L - stock Block | .266 Drill Bit with chuck | 1400 |
| 17 | Deburr part | file | | file | |