

B

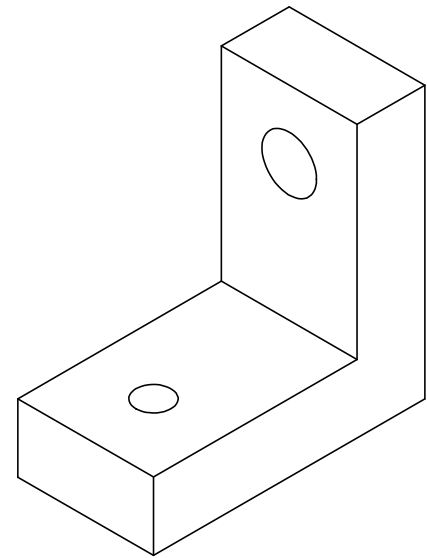
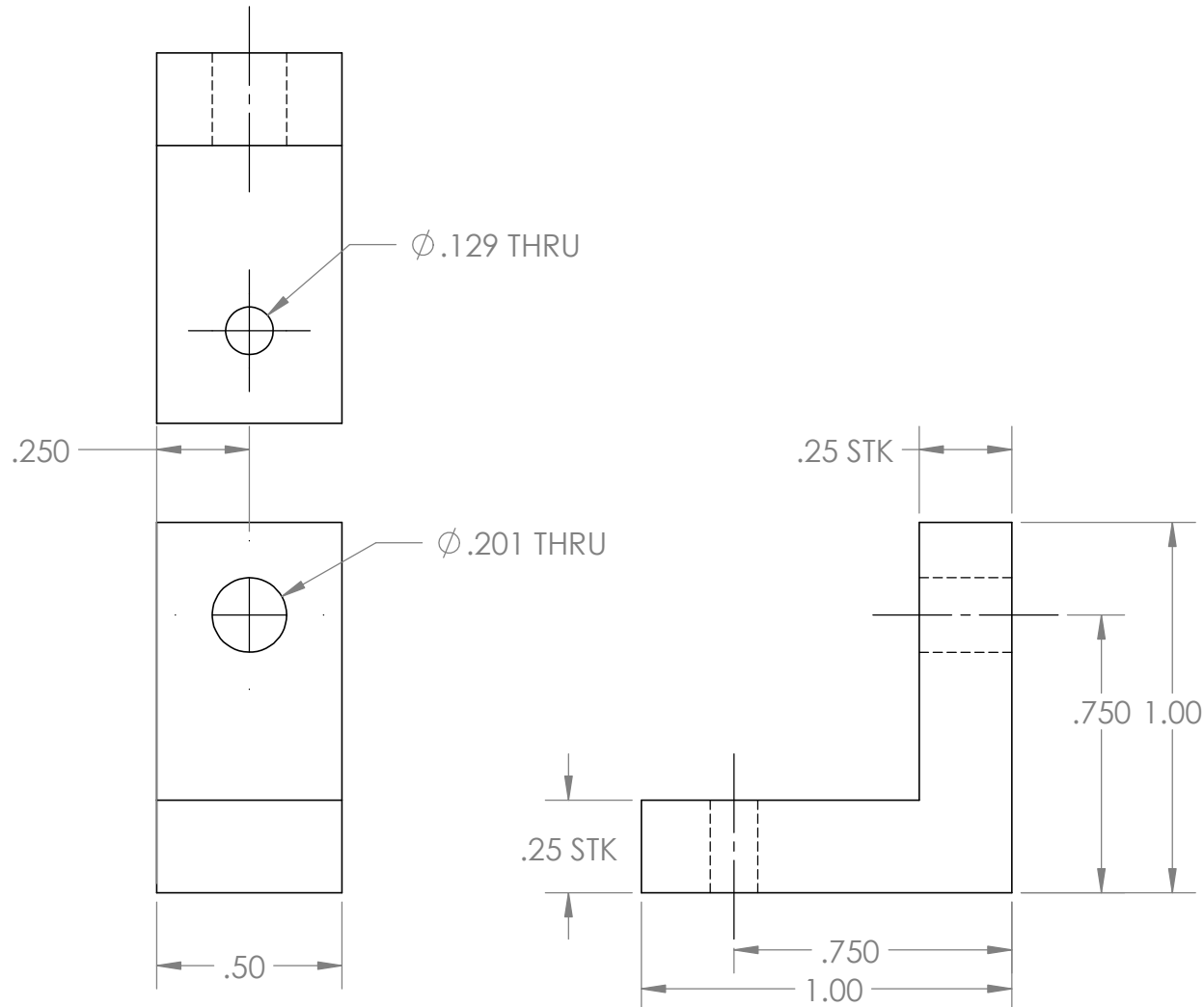
A

2

1

B

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

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

Aluminum

FINISH

BURR FREE

REVISION BLOCK

DO NOT SCALE DRAWING

DRAWN

NAME

DATE

DKFREELA

10/26/21

CHECKED

JHASTINGS

10/27/21

GSI/IA APPR.

SHOP APPR.

INSPECTED

COMMENTS:

ME 250 TEAM 103

TITLE:

SMALL L BRACKET

SIZE

DWG. NO.

REV

A

P103_006

1

SCALE: 2:1

QUANTITY: 1

SHEET 1 OF 2

MANUFACTURING PLAN

RAW MATERIAL STOCK: Aluminum 1"x1" Angle Stock

| STEP | PROCESS DESCRIPTION | MACHINE | FIXTURE | TOOL(S) | SPEED (RPM) |
|------|--|---------|---------------------|----------------------------|-------------|
| 1 | Cut Raw Stock .625" | Bandsaw | Bandsaw Vise | --- | --- |
| 2 | Deburr part | File | | File | |
| 3 | Secure Angle stock in mill with flat 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 1.5" parallels | | |
| 4 | Find Center using the edge where the 90 degree angle occurs and the top edge | Mill | Vise 1.5" parallels | Edge Finder with Chuck | 1000 |
| 5 | centerdrill first hole | Mill | Vise 1.5" parallels | Centerdrill with chuck | 700 |
| 6 | Drill .12" clearance hole through the material | Mill | Vise 1.5" parallels | #30 Drill Bit/ 1/4" Collet | 700 |
| 7 | Rotate Part | | | | |
| 8 | Part is already centered using the same vice stop location | Mill | Vise 1.5" parallels | Edge Finder | 1000 |
| 9 | centerdrill second hole | Mill | Vise 1.5" parallels | Centerdrill with chuck | 100 |
| 10 | Drill .2010" clearance hole through material | Mill | Vise 1.5" parallels | #7 Drill Bit, 3/8" Collet | 700 |
| 11 | Deburr part | file | | file | |