

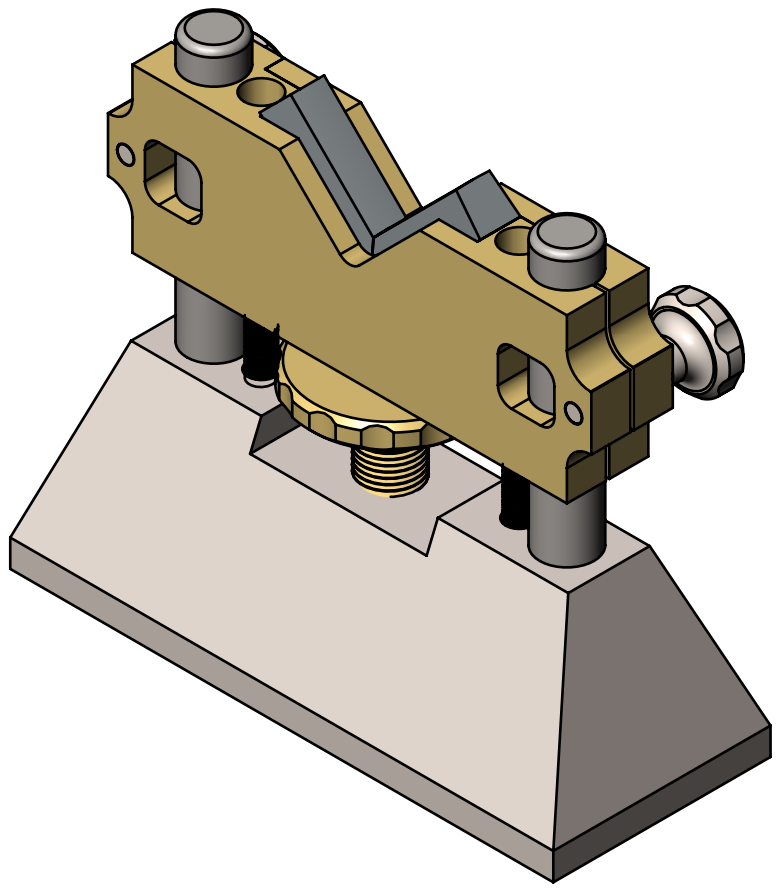
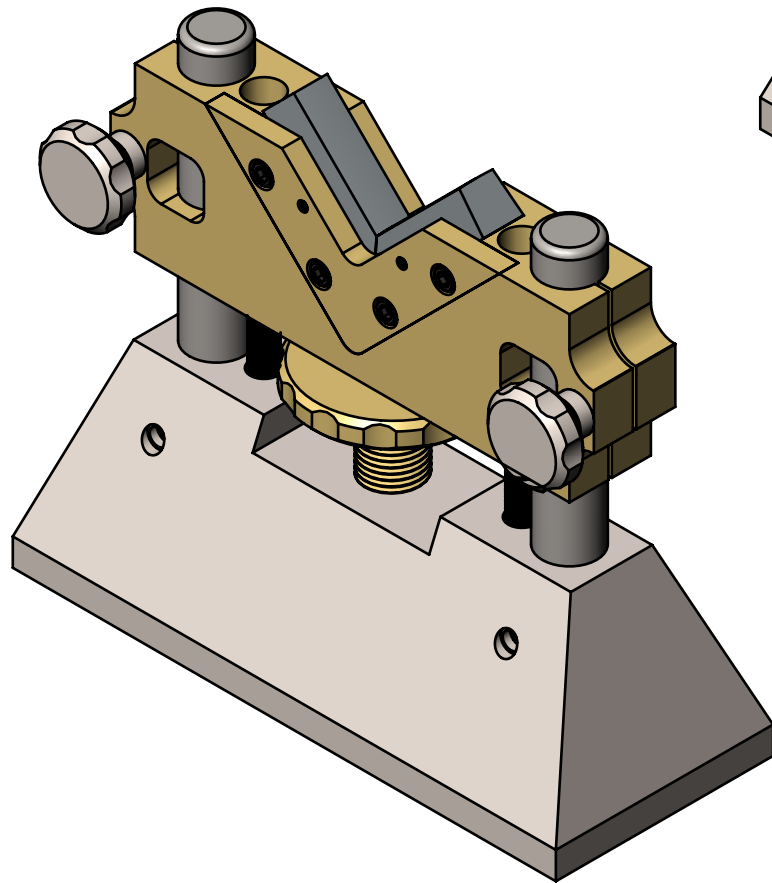
2

1

# BAL-BLOCK

B

B



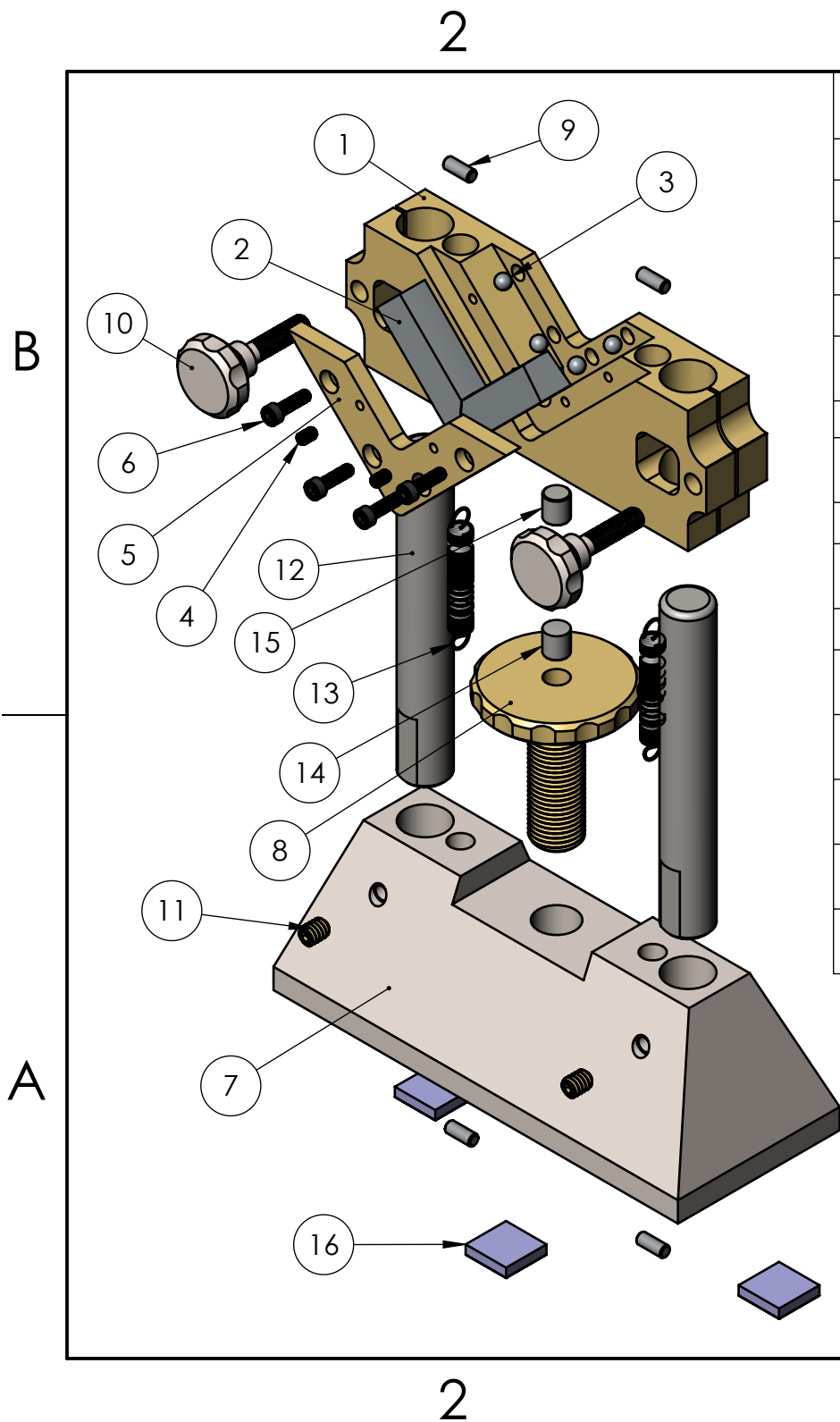
A

A

ADJUSTABLE HEIGHT VEE BLOCK  
FOR PRECISION RUNOUT INSPECTION

2

1

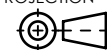


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	VEE CARRIER	SEE DRAWING	1
2	VEE INSERT	SEE DRAWING	2
3	BALL	MCMaster #9528K12	4
4	SET SCREW	MCMaster #92765A005	2
5	FRONT PLATE	SEE DRAWING	1
6	SOCKET HEAD CAP SCREW	MCMaster #91251A108	4
7	BASE	SEE DRAWING	1
8	ADJUSTMENT SCREW	SEE DRAWING	1
9	DOWEL PIN	MCMaster #98381A216	4
10	CLAMPING SCREW	SEE DRAWING	2
11	SET SCREW	MCMaster #92991A238	2
12	VERTICAL GUIDE PIN	MCMaster #98381A726 (MODIFICATION - SEE DRAWING)	2
13	EXTENSION SPRING	MCMaster #5108N213	2
14	SPHERICAL CONTACT	SEE DRAWING	1
15	FLAT CONTACT	SEE DRAWING	1
16	CARBIDE PAD	SEE DRAWING	3



	NAME	DATE
DRAWN	A. BALOGH	11/16/21
CHECKED		
APPROVED		
MATERIAL		
FINISH	PROJECTION	

TITLE: <b>Adjustable Height Vee Block</b>		
SIZE <b>A</b>	DWG. NO. <b>AHVB-0</b>	REV <b>-</b>
SCALE: 1:4	WEIGHT:	SHEET 1 OF 1

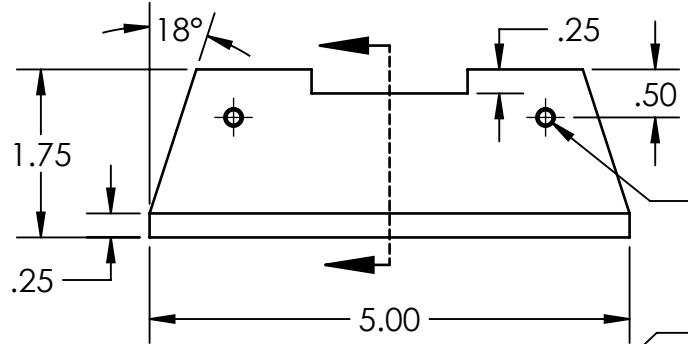
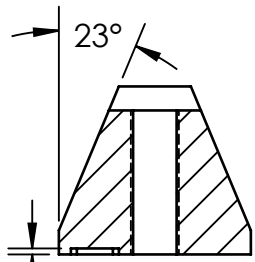
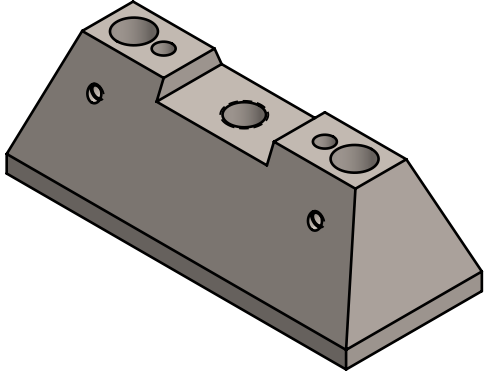
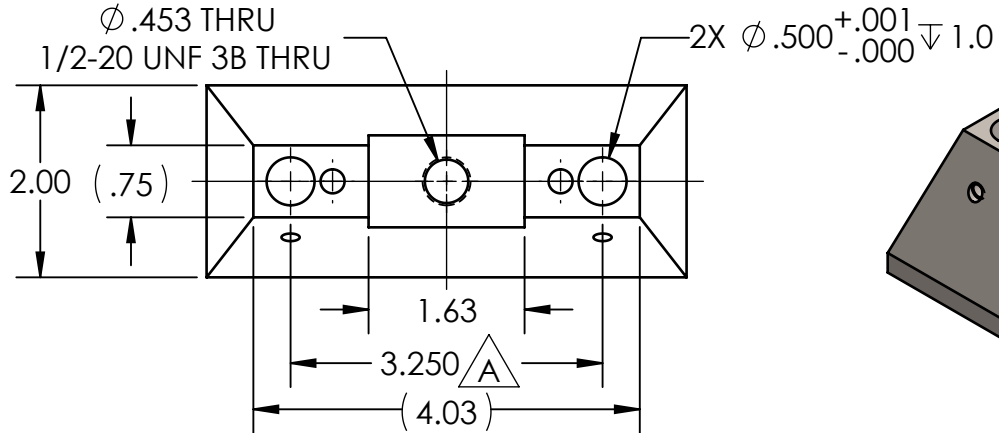


2

1

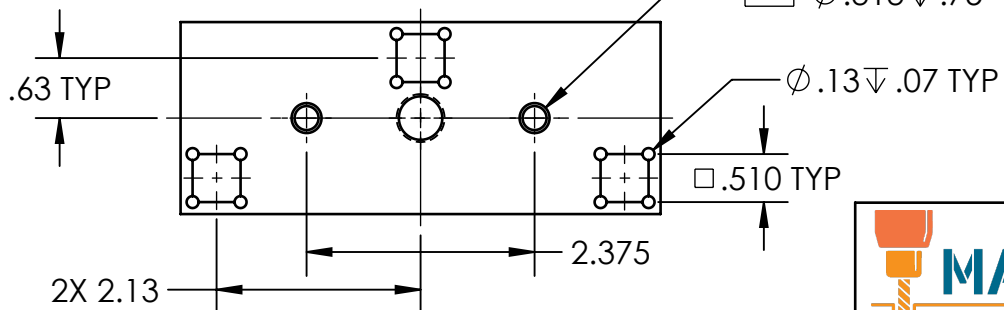
B

B



2X  $\phi .150$   
10-24 UNC 2B  
THRU ONE SIDE

2X  $\phi .250$  THRU  
 $\square \phi .313 \nabla .75$



A

A

NOTES:

- 1) DEBURR ALL EDGES .03 MAX
- 2) MATCH HOLE SPACING ON VEE CARRIER WITHIN .001"



UNLESS OTHERWISE SPECIFIED:	NAME	DATE
DIMENSIONS ARE IN INCHES	DRAWN	A. BALOGH 11/16/21
TOLERANCES: 1/X or .X $\pm$ 1/16 (.0156) .XX $\pm$ .010 .XXX $\pm$ .005 X $\pm$ 1°	CHECKED	
	APPROVED	
	MATERIAL	STAINLESS STEEL
ALL SURFACES $\sqrt{63}$	FINISH	PROJECTION
INTERPRET PER ASME Y14.5-2018		

TITLE:		
Base		
SIZE	DWG. NO.	REV
A	AHVB-1	-
SCALE: 1:2	WEIGHT:	SHEET 1 OF 1

2

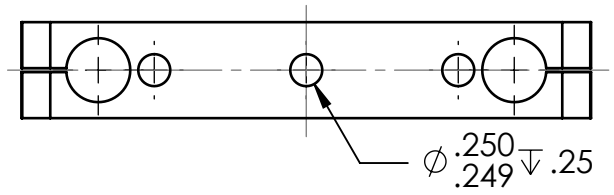
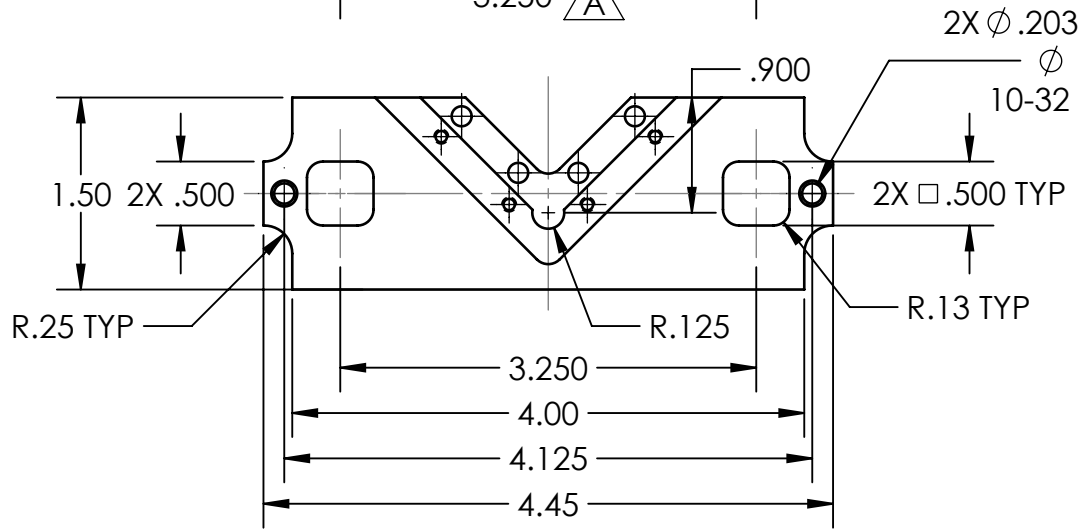
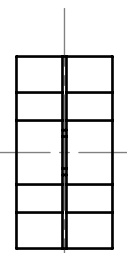
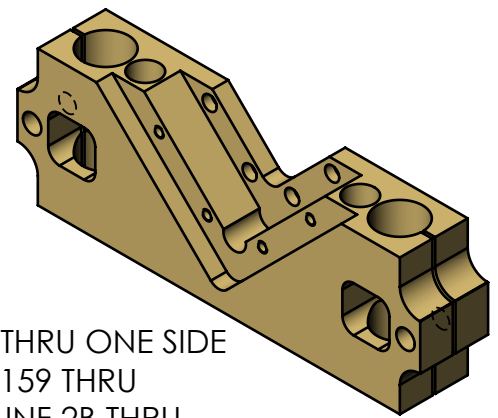
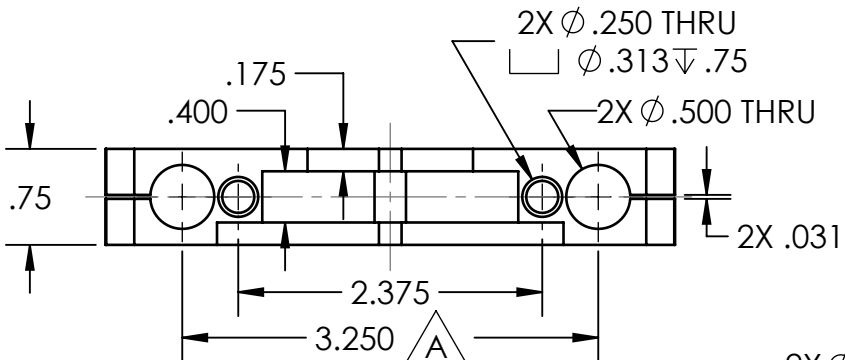
1

2

1

B

B



NOTES:

- 1) DEBURR ALL EDGES .03 MAX
- 2) MATCH HOLE SPACING ON BASE WITHIN .001"  $\triangle$  A

UNLESS OTHERWISE SPECIFIED:	NAME	DATE
DIMENSIONS ARE IN INCHES	DRAWN	A. BALOGH 11/16/21
TOLERANCES: 1/X or .X $\pm$ 1/16 (.0156) .XX $\pm$ .010 .XXX $\pm$ .005 X $\pm$ 1°	CHECKED	
	APPROVED	
	MATERIAL	ALUMINUM BRONZE
ALL SURFACES $\checkmark$ 63/	FINISH	PROJECTION
INTERPRET PER ASME Y14.5-2018		



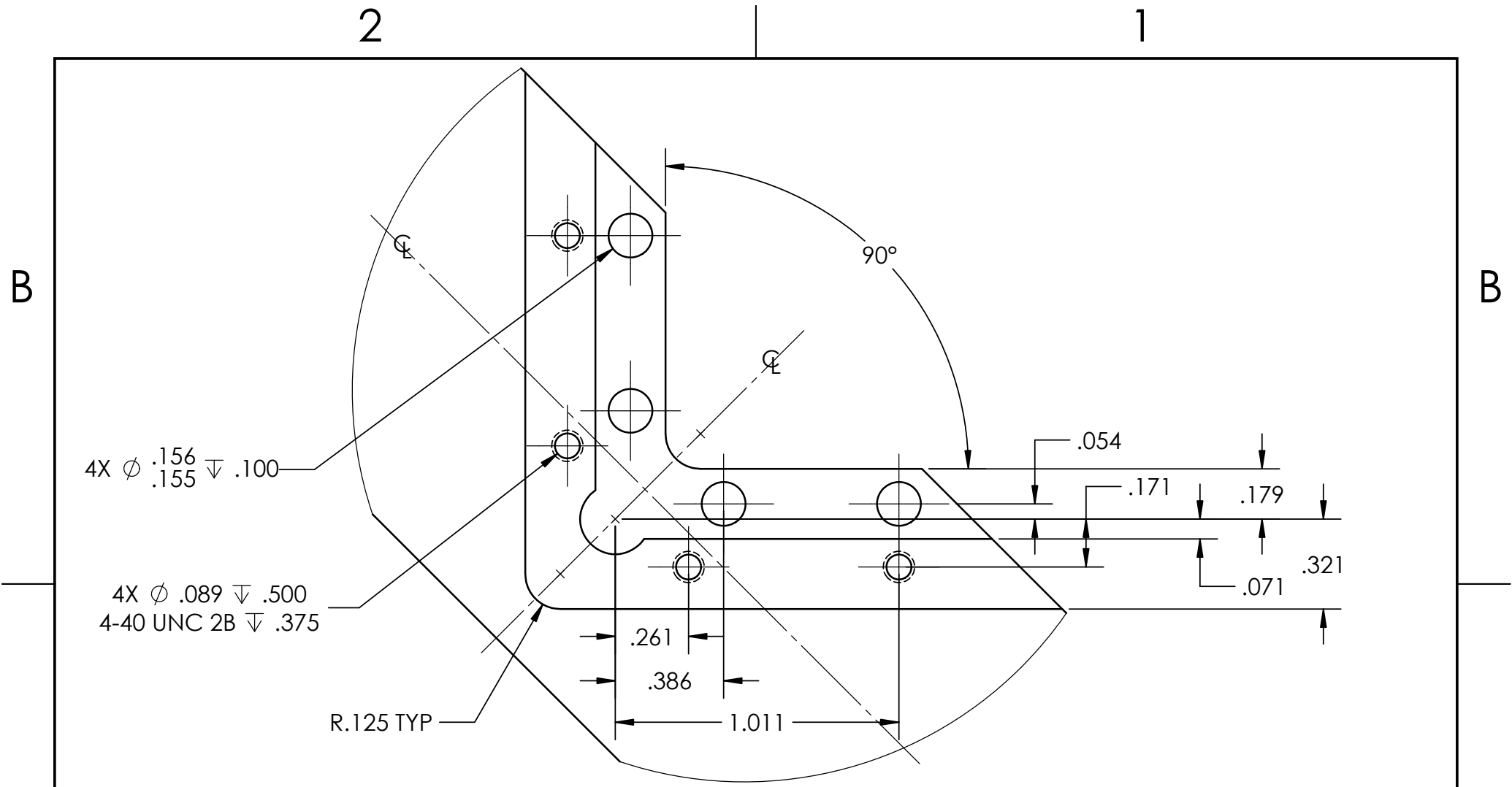
TITLE: <h1>Vee Carrier</h1>		
SIZE <b>A</b>	DWG. NO. <b>AHVB-2</b>	REV -
SCALE: 2:3	WEIGHT:	SHEET 1 OF 2

2

1

A

A



4X  $\phi$  .156  $\nabla$  .100  
 4X  $\phi$  .089  $\nabla$  .500  
 4-40 UNC 2B  $\nabla$  .375

R.125 TYP

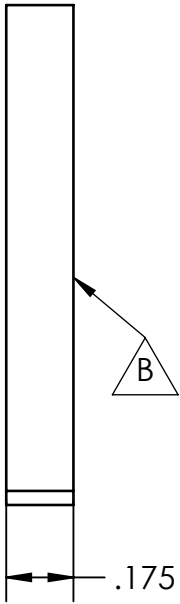
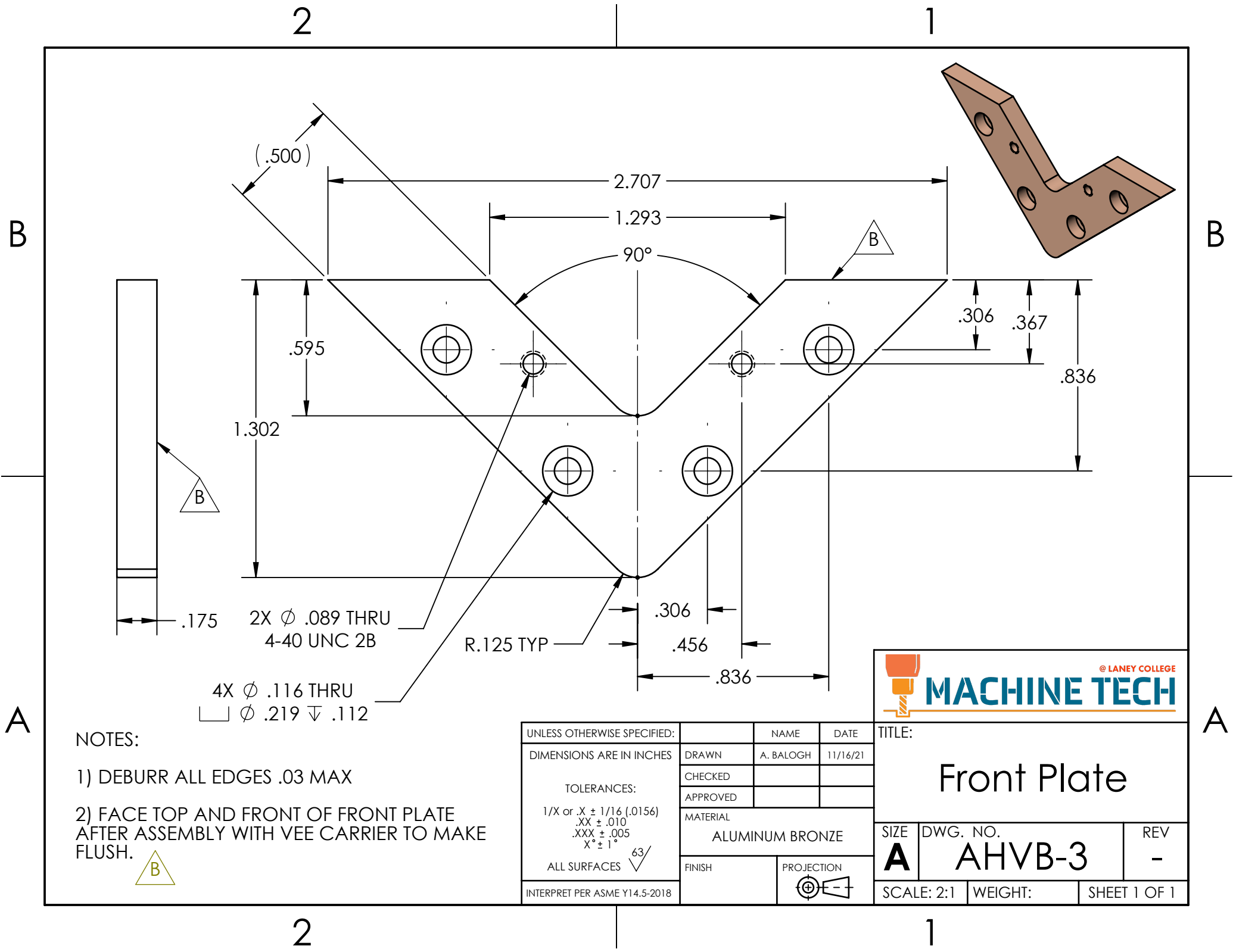
VEE FEATURES DETAIL  
 45 DEG ROTATION

NOTES:



UNLESS OTHERWISE SPECIFIED:	NAME	DATE
DIMENSIONS ARE IN INCHES	DRAWN A. BALOGH	11/16/21
TOLERANCES: 1/X or .X $\pm$ 1/16 (.0156) .XX $\pm$ .010 .XXX $\pm$ .005 X $\pm$ 1°	CHECKED	
	APPROVED	
	MATERIAL ALUMINUM BRONZE	
ALL SURFACES $\sqrt{63}$	FINISH	PROJECTION
INTERPRET PER ASME Y14.5-2018		

TITLE: <b>Vee Carrier</b>		
SIZE <b>A</b>	DWG. NO. <b>AHVB-2</b>	REV -
SCALE: 2:1	WEIGHT:	SHEET 2 OF 2



2X  $\phi$  .089 THRU  
4-40 UNC 2B

4X  $\phi$  .116 THRU  
 $\square$   $\phi$  .219  $\nabla$  .112

R.125 TYP

NOTES:

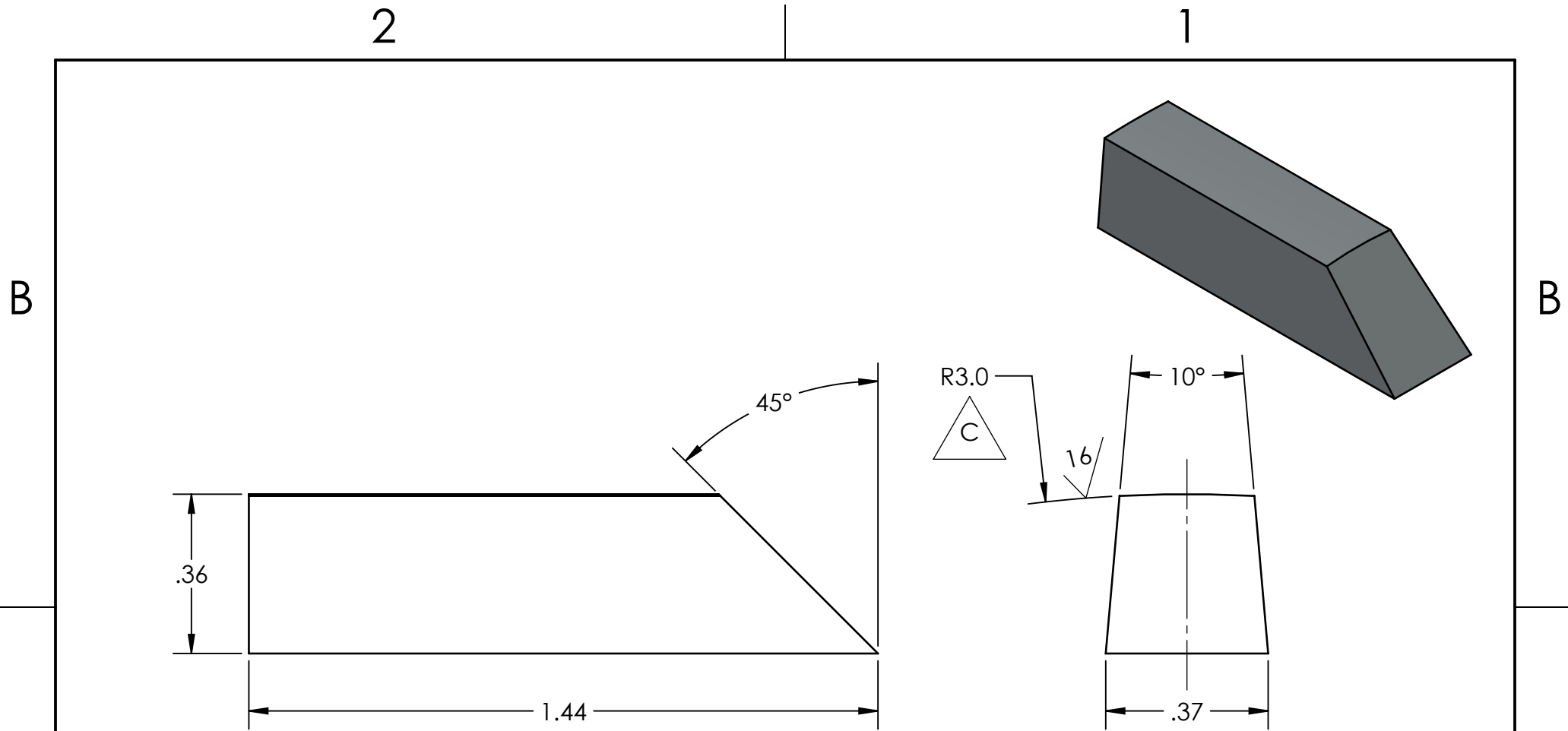
- 1) DEBURR ALL EDGES .03 MAX
- 2) FACE TOP AND FRONT OF FRONT PLATE AFTER ASSEMBLY WITH VEE CARRIER TO MAKE FLUSH.



UNLESS OTHERWISE SPECIFIED:	NAME	DATE
DIMENSIONS ARE IN INCHES	DRAWN	A. BALOGH 11/16/21
TOLERANCES: 1/X or .X $\pm$ 1/16 (.0156) .XX $\pm$ .010 .XXX $\pm$ .005 X $^{\circ}$ $\pm$ 1 $^{\circ}$	CHECKED	
	APPROVED	
	MATERIAL	ALUMINUM BRONZE
ALL SURFACES $\sqrt{63}$	FINISH	PROJECTION
INTERPRET PER ASME Y14.5-2018		

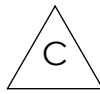


TITLE:		
Front Plate		
SIZE	DWG. NO.	REV
<b>A</b>	AHVB-3	-
SCALE: 2:1	WEIGHT:	SHEET 1 OF 1



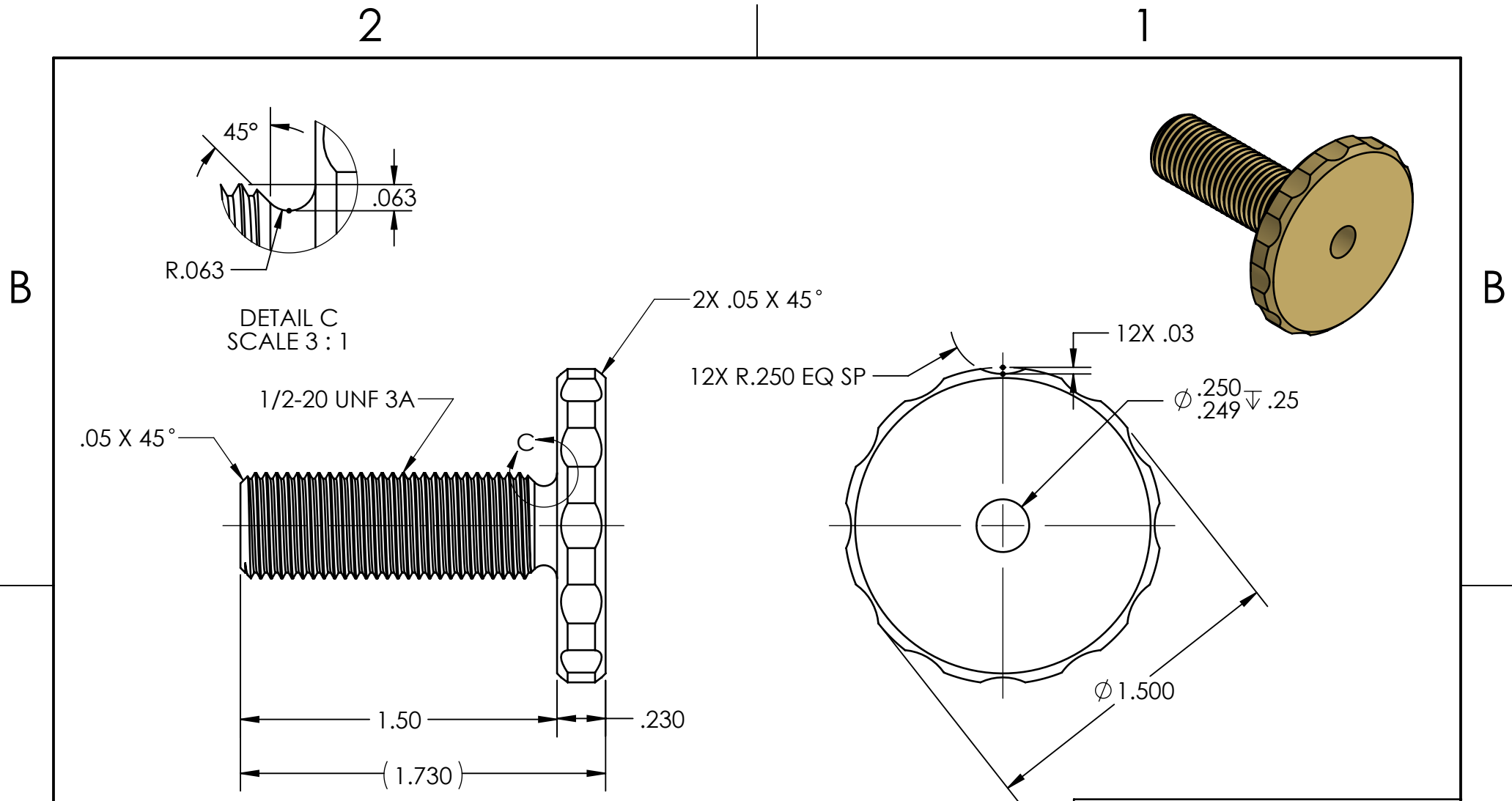
NOTES:

- 1) BREAK ALL EDGES
- 2) CROWN RADIUS IS AN ADJUSTABLE PARAMETER. LARGER RADIUS HAS HIGHER LOAD CAPACITY. SMALLER RADIUS ACCEPTS MORE MISALIGNMENT.



UNLESS OTHERWISE SPECIFIED:		NAME	DATE	TITLE:	
DIMENSIONS ARE IN INCHES		DRAWN	A. BALOGH	Vee Insert	
TOLERANCES:		CHECKED		SIZE <b>A</b>	
1/X or .X ± 1/16 (.0156)		APPROVED		DWG. NO. <b>AHVB-4</b>	
.XX ± .010		MATERIAL <b>3/8" SQUARE HSS TOOL BLANK</b>		REV <b>-</b>	
.XXX ± .005		FINISH		SCALE: 3:1	
X° ± 1°		PROJECTION		WEIGHT:	
ALL SURFACES $\sqrt{63}$				SHEET 1 OF 1	
INTERPRET PER ASME Y14.5-2018					





B

B

A

A

NOTES:  
1) DEBURR ALL EDGES .015 MAX

UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN INCHES	DRAWN	A. BALOGH	11/16/21
TOLERANCES: 1/X or .X ± 1/16 (.0156) .XX ± .010 .XXX ± .005 X° ± 1°	CHECKED		
	APPROVED		
	MATERIAL	ALUMINUM BRONZE	
ALL SURFACES $\sqrt{63}$	FINISH	PROJECTION	
INTERPRET PER ASME Y14.5-2018			

			© LANEY COLLEGE <b>MACHINE TECH</b>
TITLE: Adjustment Screw			
SIZE <b>A</b>	DWG. NO. AHVB-5	REV -	
SCALE: 3:2	WEIGHT:	SHEET 1 OF 1	

2

1

2

1

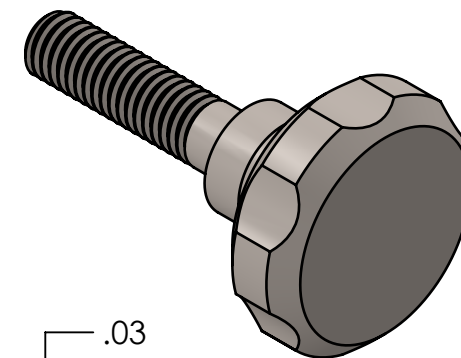
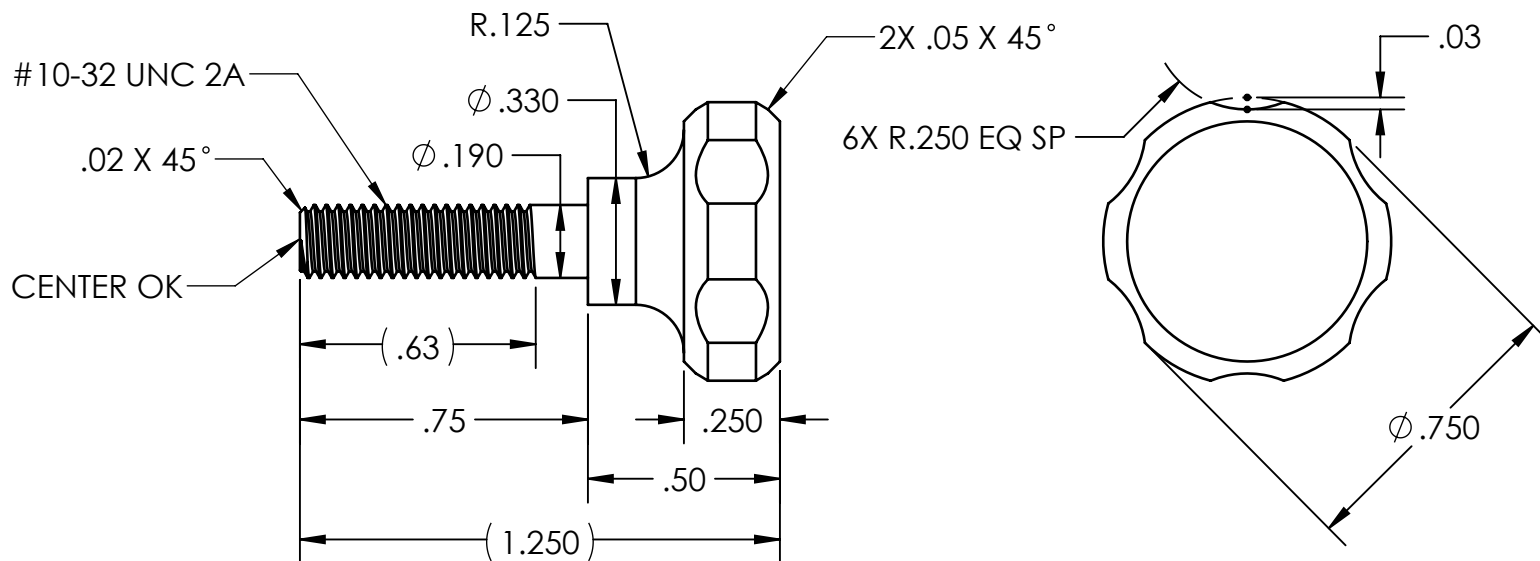


2

1

B

B



NOTES:

1) DEBURR ALL EDGES .015 MAX

UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN INCHES	DRAWN	A. BALOGH	11/16/21
TOLERANCES:	CHECKED		
1/X or .X $\pm 1/16$ (.0156)	APPROVED		
.XX $\pm .010$	MATERIAL	304 STAINLESS STEEL	
.XXX $\pm .005$	FINISH		
X $\pm 1^\circ$	PROJECTION		
ALL SURFACES $\sqrt{63}$			
INTERPRET PER ASME Y14.5-2018			



TITLE:		
Clamping Screw		
SIZE	DWG. NO.	REV
A	AHVB-6	-
SCALE: 2:1	WEIGHT:	SHEET 1 OF 1

A

A

2

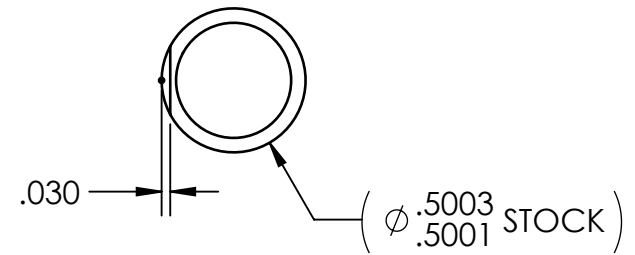
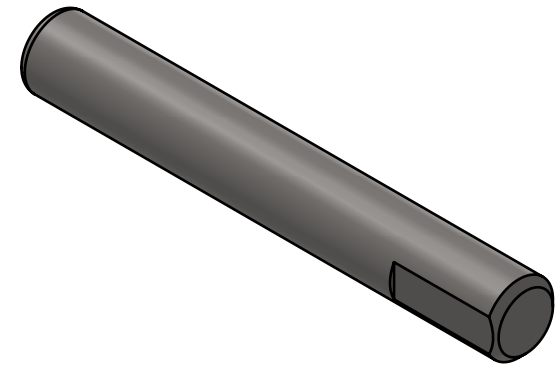
1

2

1

B

B



A

A

NOTES:

1) BREAK ALL EDGES



UNLESS OTHERWISE SPECIFIED:		NAME	DATE	TITLE:	
DIMENSIONS ARE IN INCHES		DRAWN	A. BALOGH	Vertical Guide Pin	
TOLERANCES:		CHECKED		SIZE	
1/X or .X ± 1/16 (.0156)		APPROVED		A	
.XX ± .010		MATERIAL		DWG. NO.	
.XXX ± .005		MMC #98381A726		AHVB-7	
X° ± 1°		FINISH		REV	
ALL SURFACES $\sqrt{63}$		PROJECTION		-	
INTERPRET PER ASME Y14.5-2018				SCALE: 3:2	
				WEIGHT:	
				SHEET 1 OF 1	

2

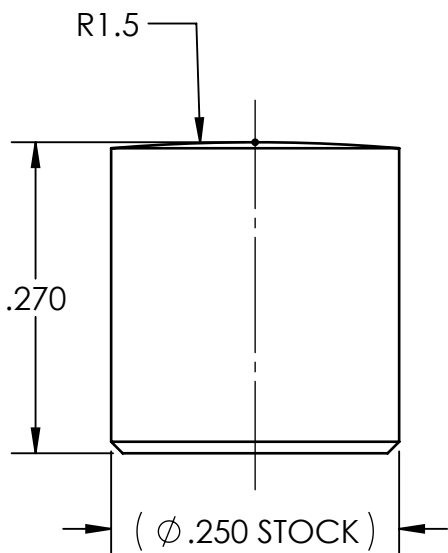
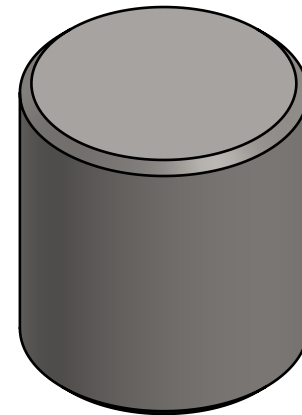
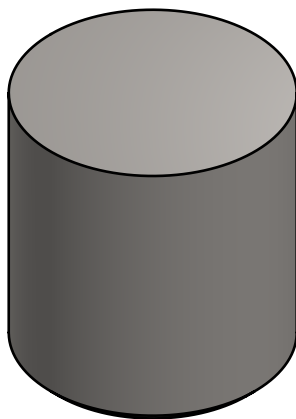
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2

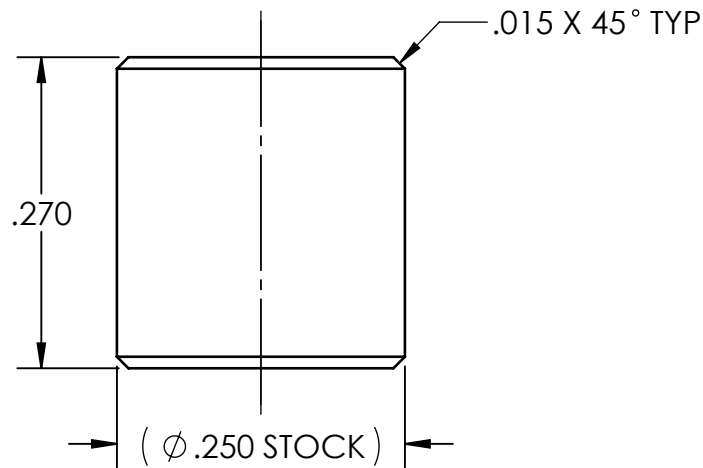
1

B

B



SPHERICAL CONTACT



FLAT CONTACT

NOTES:

- 1) BREAK ALL EDGES
- 2) MANUFACTURE FROM STANDARD HARDENED STEEL DOWEL PIN



UNLESS OTHERWISE SPECIFIED:		NAME	DATE	TITLE:  <h1>Contacts</h1>		
DIMENSIONS ARE IN INCHES	DRAWN	A. BALOGH	11/16/21			
TOLERANCES: 1/X or .X ± 1/16 (.0156) .XX ± .010 .XXX ± .005 X° ± 1°	CHECKED					
	APPROVED					
ALL SURFACES $\sqrt{63}$	MATERIAL MMC #98381A542		SIZE <b>A</b>	DWG. NO. <b>AHVB-8</b>	REV -	
INTERPRET PER ASME Y14.5-2018	FINISH	PROJECTION	SCALE: 6:1		WEIGHT:	SHEET 1 OF 1

A

A

2

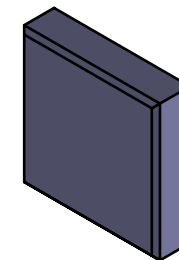
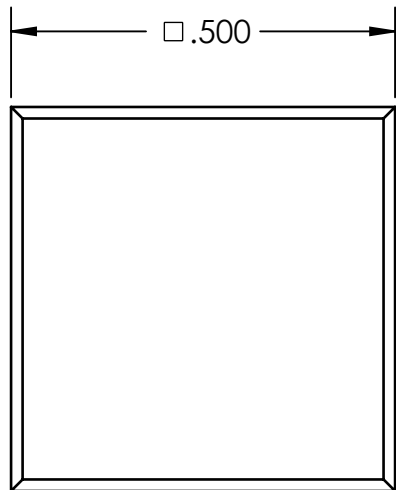
1

2

1

B

B



.015 X 45°

∞

ADHERE THIS SIDE TO  
POCKETS IN BASE  
WITH EPOXY

LAP AND POLISH  
BOTTOMS OF  
CARBIDE PADS  
FLAT AFTER ADHERING

.125

A

A

NOTES:

1) BREAK ALL EDGES

2) POSSIBLE STOCK ITEM IS ULTRA-MET  
SNR420-Z22



UNLESS OTHERWISE SPECIFIED:		NAME	DATE	TITLE:	
DIMENSIONS ARE IN INCHES		DRAWN	A. BALOGH	11/16/21	
TOLERANCES:		CHECKED			
1/X or .X ± 1/16 (.0156)		APPROVED			
.XX ± .010		MATERIAL		SIZE	
.XXX ± .005		TUNGSTEN CARBIDE		DWG. NO.	
X° ± 1°		FINISH		REV	
ALL SURFACES $\sqrt{63}$		PROJECTION		A AHVB-9 -	
INTERPRET PER ASME Y14.5-2018				SCALE: 4:1   WEIGHT:   SHEET 1 OF 1	

2

1