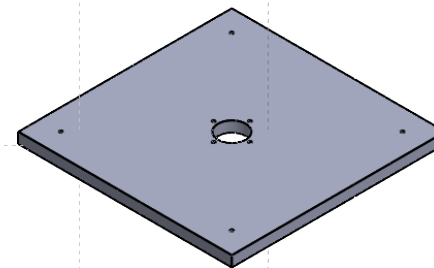
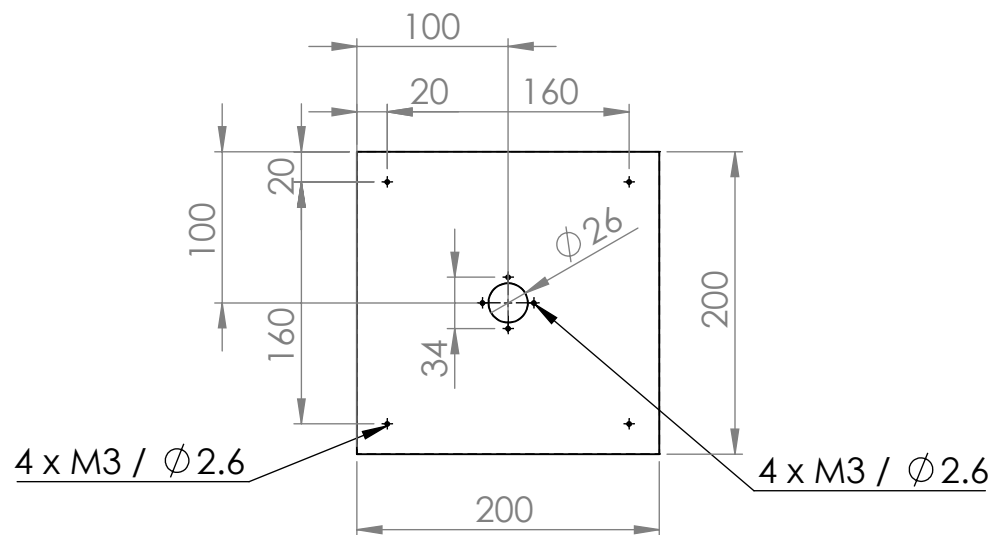


B

A



B

A

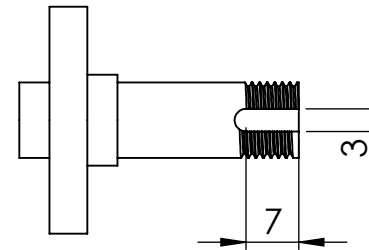
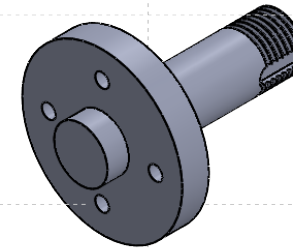
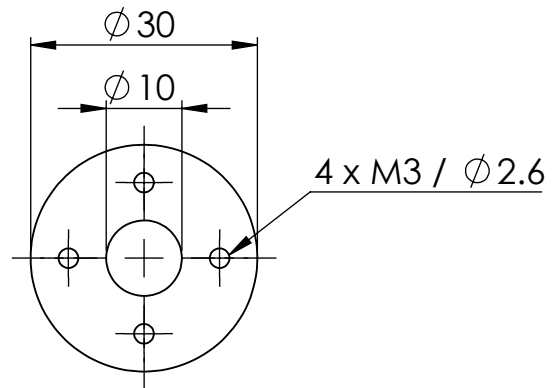
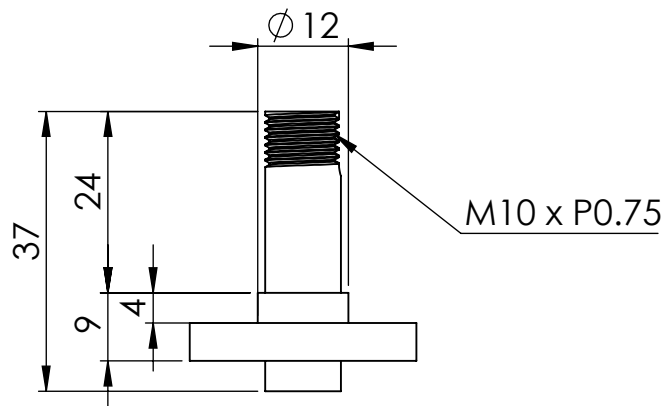
**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm$
		ANGULAR: MACH $\pm$ BEND $\pm$
		TWO PLACE DECIMAL $\pm$
		THREE PLACE DECIMAL $\pm$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

Tohoku University		
TITLE:		
Adriel Imaran Santoso		
C2TB1701		
SIZE	DWG. NO.	REV
<b>A</b>	101	
SCALE: 1:5	WEIGHT:	SHEET 1 OF 52

B



B

A

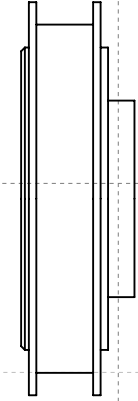
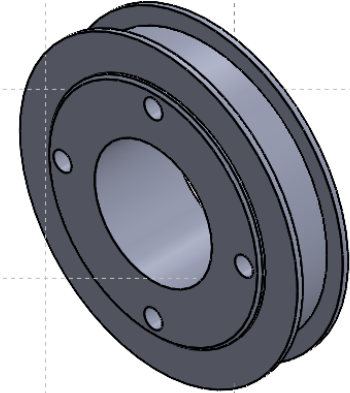
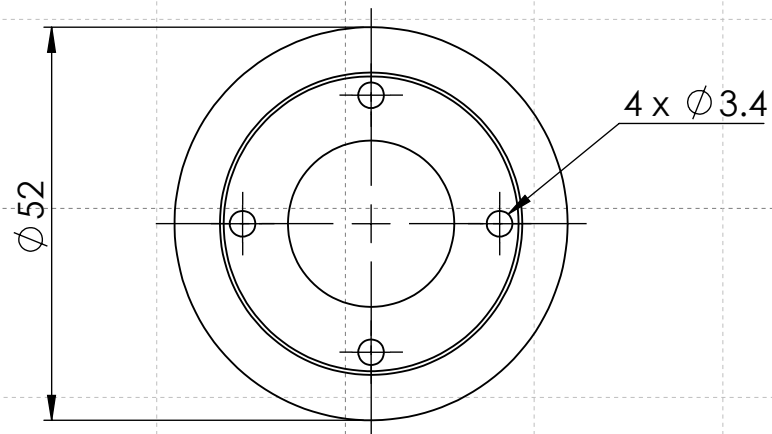
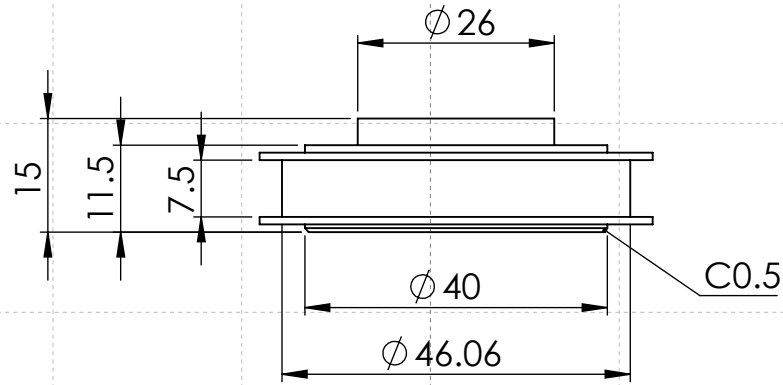
# PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Tohoku University		
		DIMENSIONS ARE IN INCHES	DRAWN			TITLE: Adriel Imaran Santos C2TB1701		
		TOLERANCES:	CHECKED					
		FRACTIONAL $\pm$	ENG APPR.					
		ANGULAR: MACH $\pm$ BEND $\pm$	MFG APPR.			SIZE DWG. NO. REV		
		TWO PLACE DECIMAL $\pm$	Q.A.					
		THREE PLACE DECIMAL $\pm$	COMMENTS:			102		
		INTERPRET GEOMETRIC TOLERANCING PER:						
		MATERIAL				SHEET 2 OF 52		
		FINISH				SCALE: 1:1	WEIGHT:	
NEXT ASSY	USED ON							
APPLICATION		DO NOT SCALE DRAWING						

B

A



B

A

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

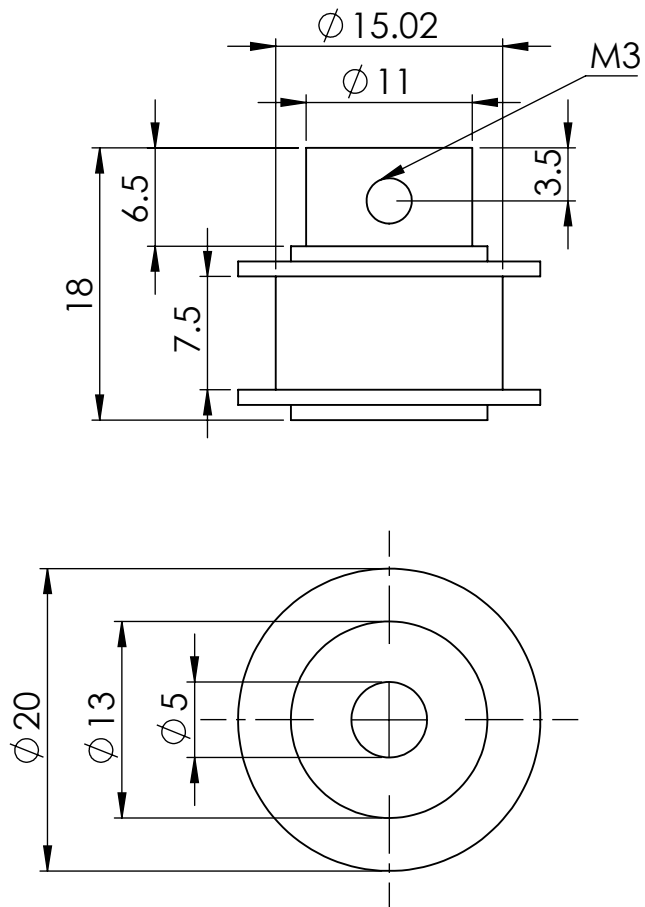
		UNLESS OTHERWISE SPECIFIED:	
		DIMENSIONS ARE IN INCHES	
		TOLERANCES:	
		FRACTIONAL ±	
		ANGULAR: MACH ± BEND ±	
		TWO PLACE DECIMAL ±	
		THREE PLACE DECIMAL ±	
		INTERPRET GEOMETRIC TOLERANCING PER:	
		MATERIAL	
		FINISH	
NEXT ASSY		USED ON	
APPLICATION		DO NOT SCALE DRAWING	

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

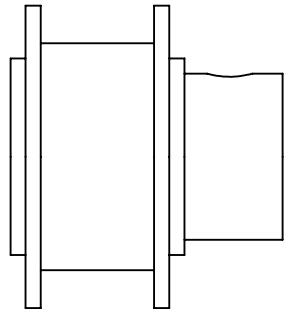
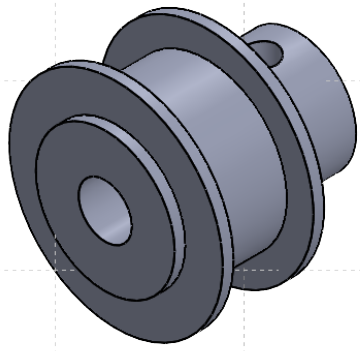
Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
A	103	
SCALE: 1:1	WEIGHT:	SHEET 3 OF 52

B

A



1



B

A

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

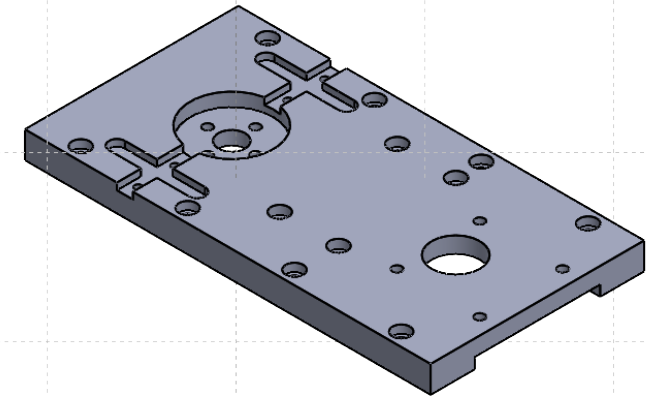
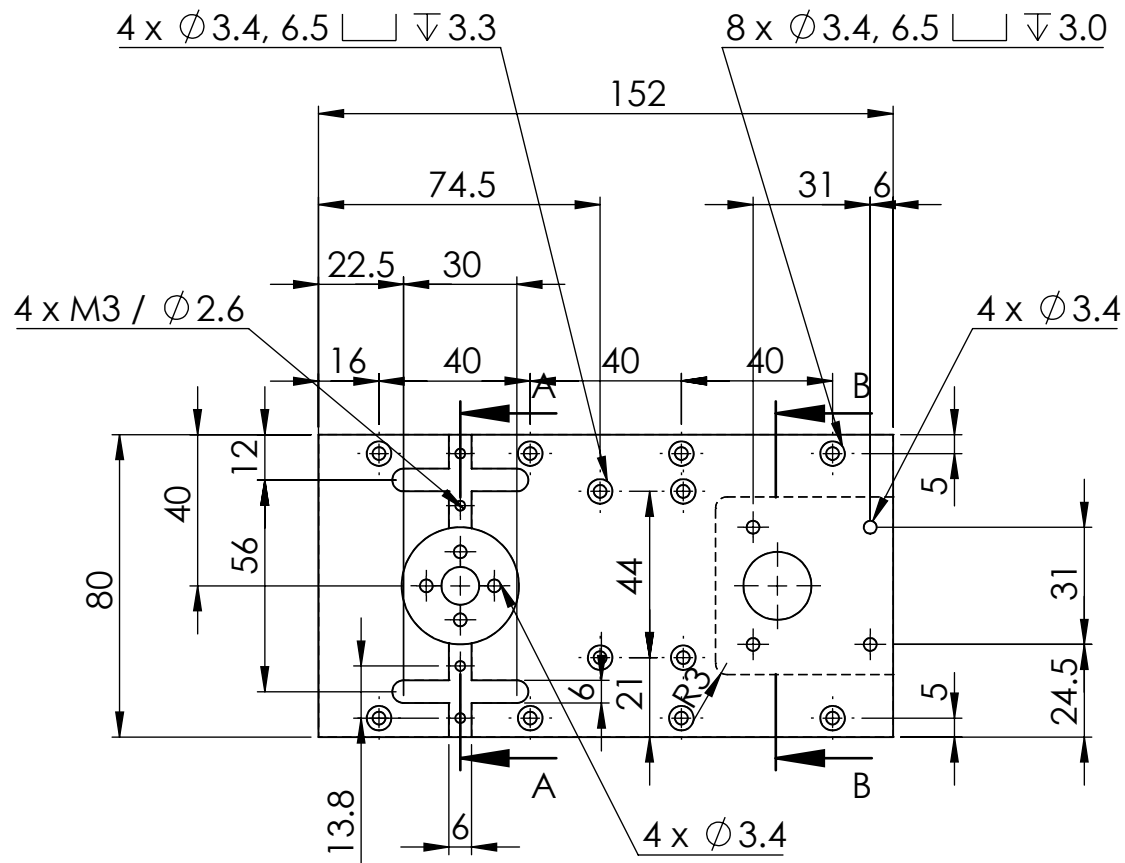
		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES	DRAWN		
		TOLERANCES:	CHECKED		
		FRACTIONAL ±	ENG APPR.		
		ANGULAR: MACH ±      BEND ±	MFG APPR.		
		TWO PLACE DECIMAL ±	Q.A.		
		THREE PLACE DECIMAL ±	COMMENTS:		
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
		FINISH			
NEXT ASSY	USED ON				
APPLICATION		DO NOT SCALE DRAWING			

Tohoku University		
TITLE: Adriel Imaran Santos C2TB1701		
SIZE <b>A</b>	DWG. NO. 104	REV
SCALE: 2:1	WEIGHT:	SHEET 4 OF 52

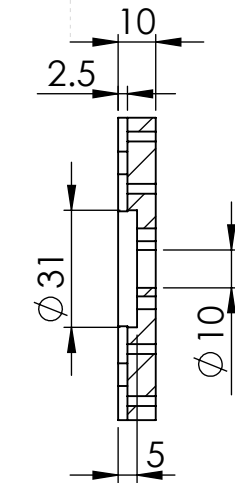
2

1

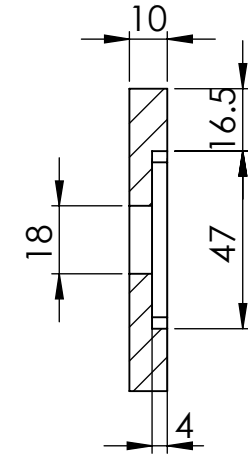
B



B



SECTION A-A



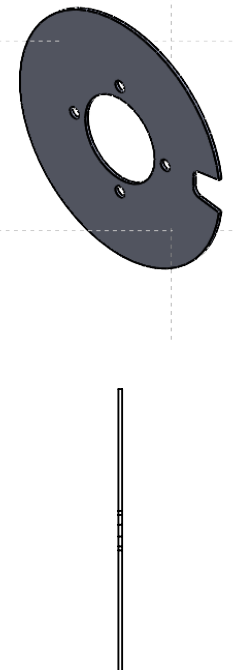
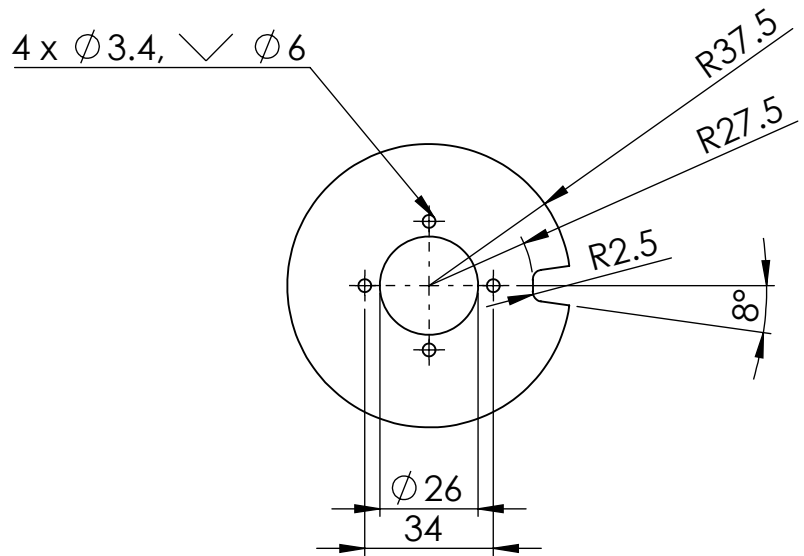
SECTION B-B

A

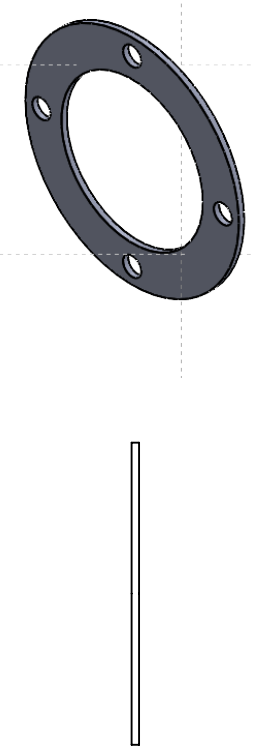
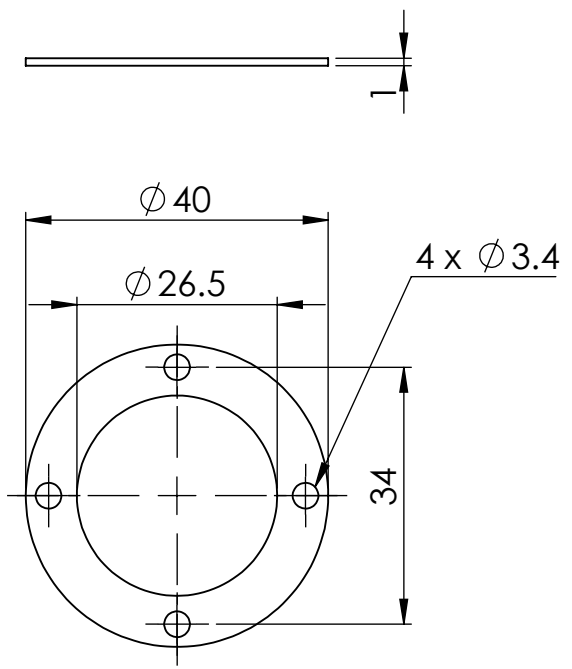
**PROPRIETARY AND CONFIDENTIAL**

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Tohoku University			
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH±    BEND ± TWO PLACE DECIMAL    ± THREE PLACE DECIMAL    ±	DRAWN			TITLE:  Adriel Imaran Santoso C2TB1701			
			CHECKED						
			ENG APPR.						
			MFG APPR.						
			Q.A.						
		INTERPRET GEOMETRIC TOLERANCING PER:	COMMENTS:			SIZE    DWG. NO.    REV  A    105			
		MATERIAL							
		FINISH							
NEXT ASSY	USED ON								
APPLICATION		DO NOT SCALE DRAWING				SCALE: 1:2		WEIGHT:	SHEET 5 OF 52



			UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Tohoku University		
			DIMENSIONS ARE IN INCHES	DRAWN			TITLE: Adriel Imaran Santos C2TB1701		
			TOLERANCES:	CHECKED					
			FRACTIONAL ±	ENG APPR.					
			ANGULAR: MACH ±    BEND ±	MFG APPR.					
			TWO PLACE DECIMAL ±	Q.A.					
<b>PROPRIETARY AND CONFIDENTIAL</b>  THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.			INTERPRET GEOMETRIC TOLERANCING PER:	COMMENTS:			SIZE	DWG. NO.	REV
			MATERIAL				<b>A</b>	106	
	NEXT ASSY	USED ON	FINISH						
	APPLICATION		DO NOT SCALE DRAWING				SCALE: 1:2	WEIGHT:	SHEET 6 OF 52

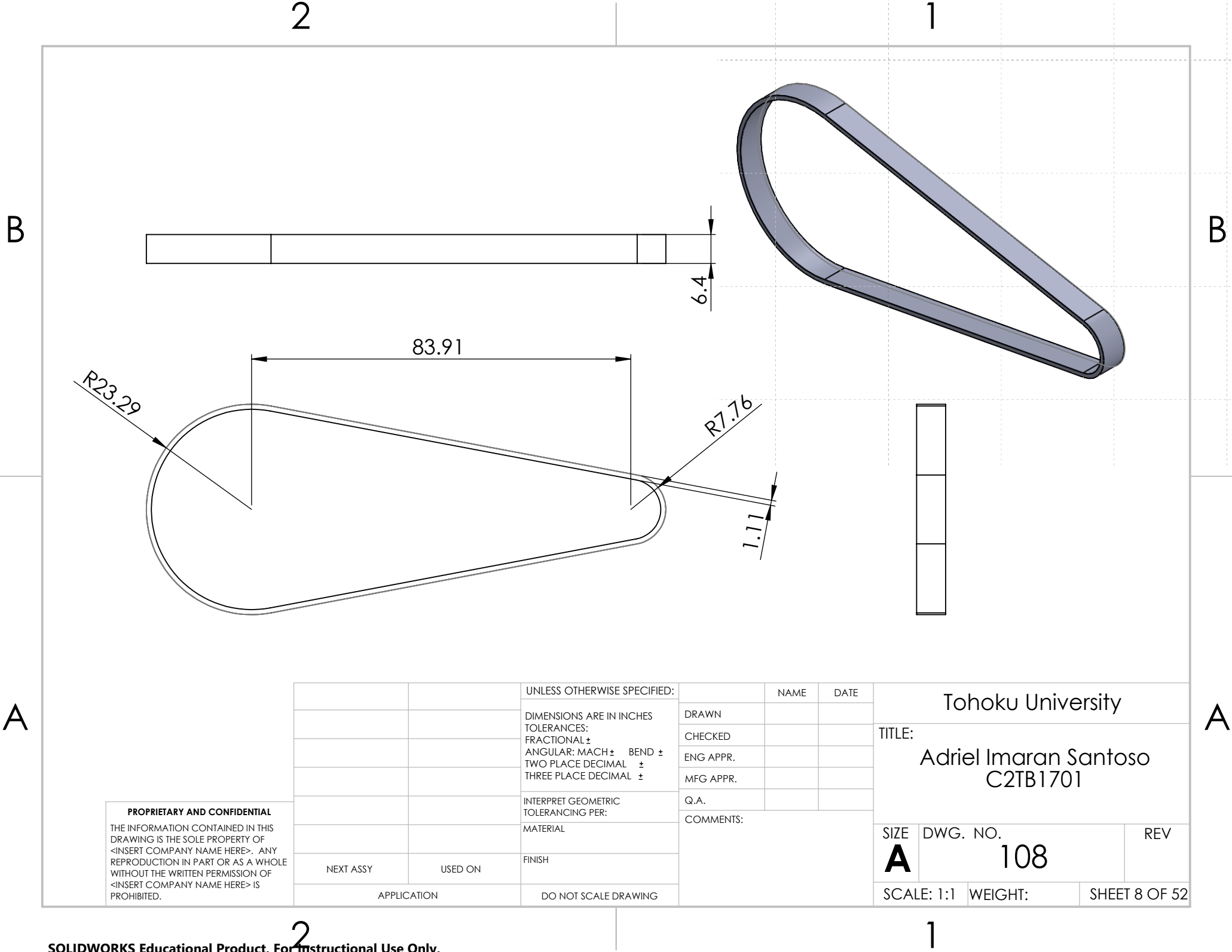


**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL ±
		ANGULAR: MACH ± BEND ±
		TWO PLACE DECIMAL ±
		THREE PLACE DECIMAL ±
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
A	107	
SCALE: 1:1	WEIGHT:	SHEET 7 OF 52



**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

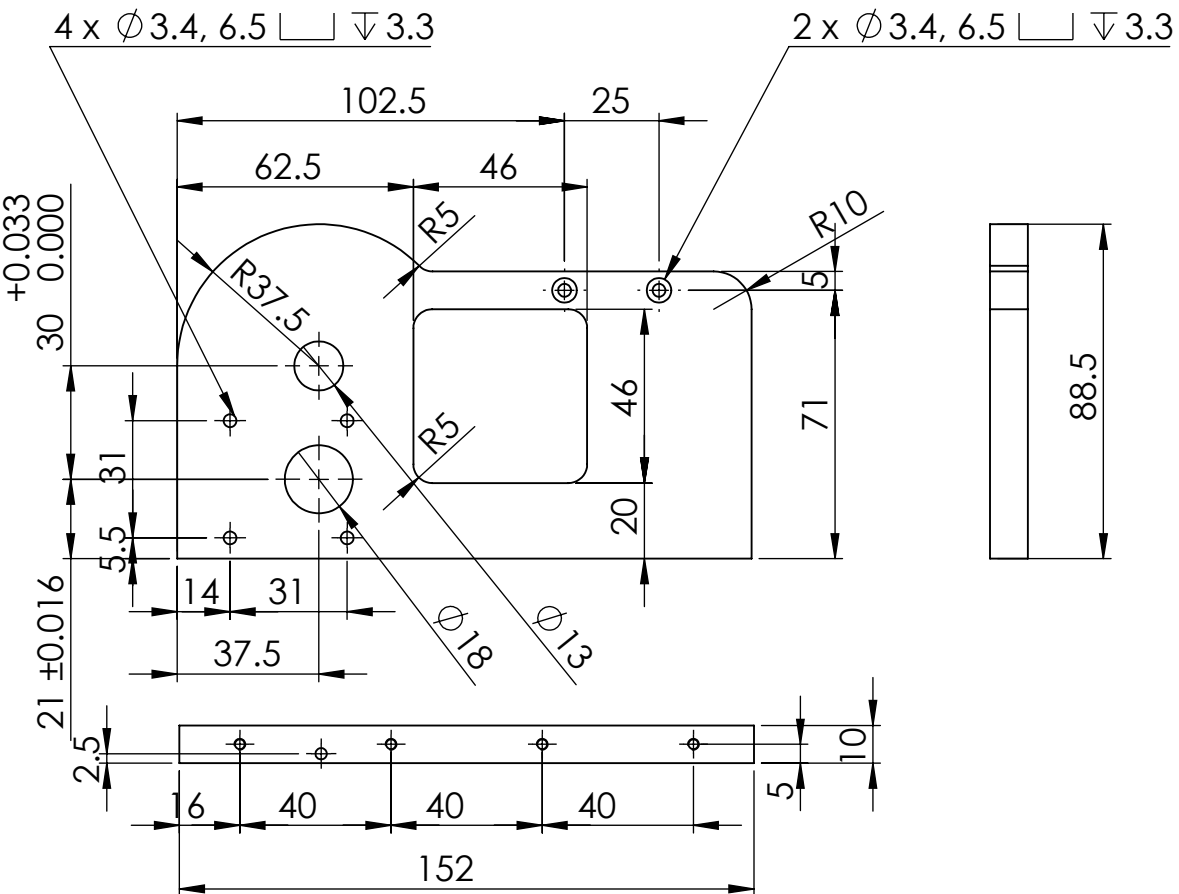
		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm$
		ANGULAR: MACH $\pm$ BEND $\pm$
		TWO PLACE DECIMAL $\pm$
		THREE PLACE DECIMAL $\pm$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

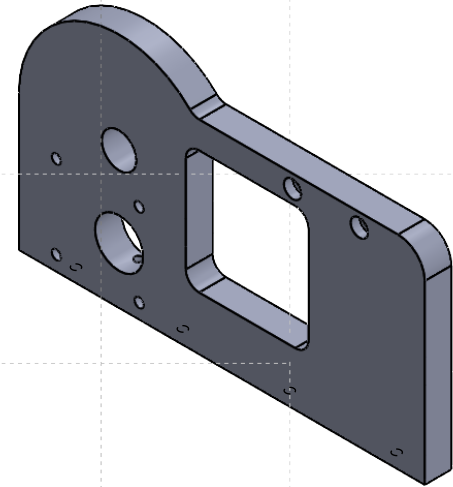
Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
<b>A</b>	108	
SCALE: 1:1	WEIGHT:	SHEET 8 OF 52



B



B



A

# PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

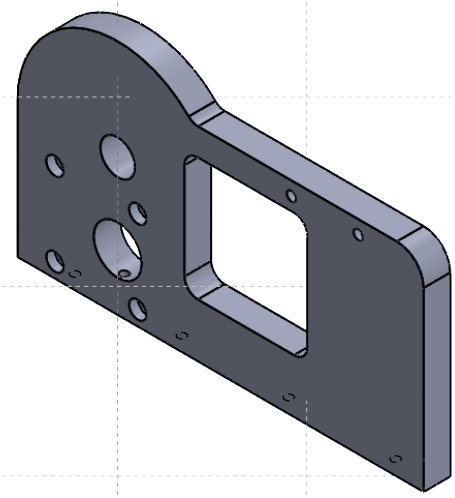
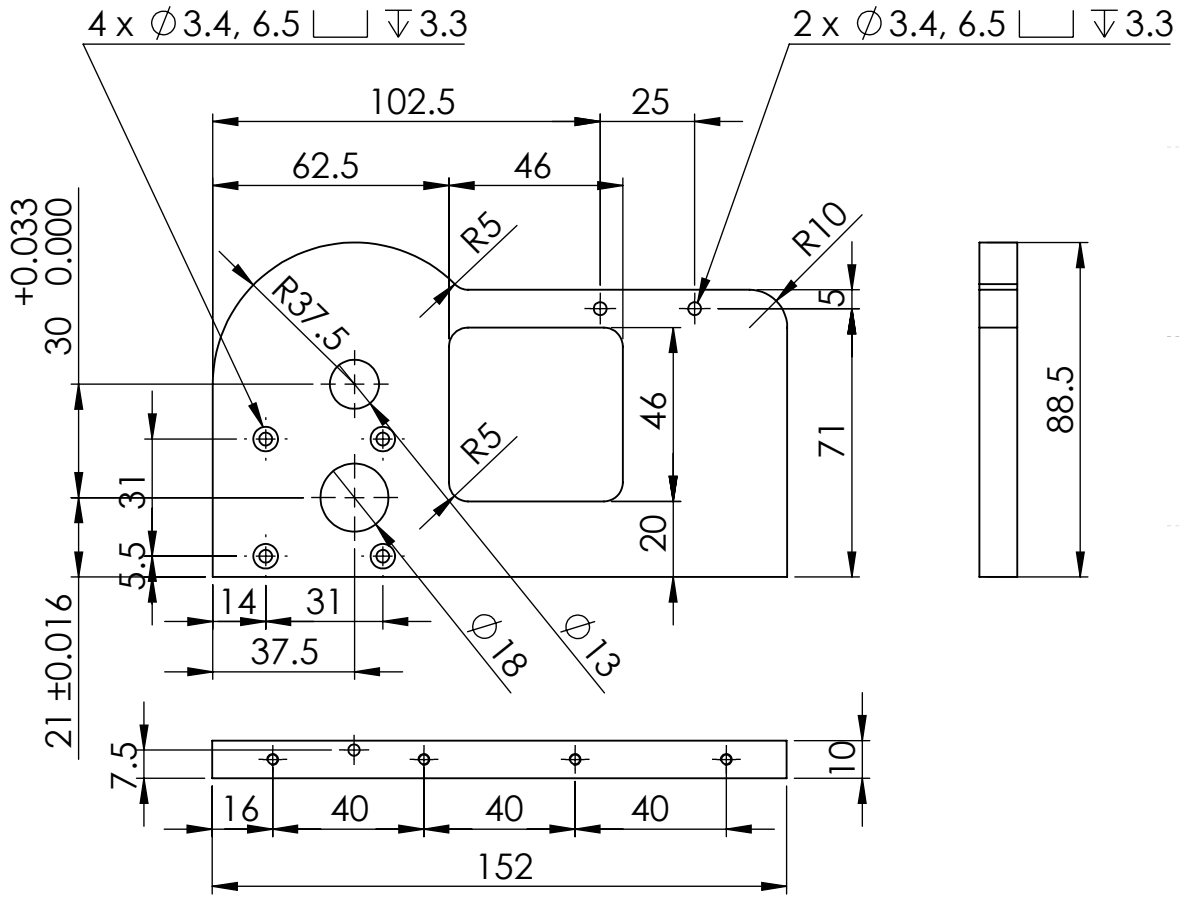
		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES		DRAWN	
		TOLERANCES:		CHECKED	
		FRACTIONAL $\pm$		ENG APPR.	
		ANGULAR: MACH $\pm$ BEND $\pm$		MFG APPR.	
		TWO PLACE DECIMAL $\pm$		Q.A.	
		THREE PLACE DECIMAL $\pm$		COMMENTS:	
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
		FINISH			
NEXT ASSY	USED ON				
APPLICATION		DO NOT SCALE DRAWING			

Tohoku University

TITLE:

Adriel Imaran Santos  
C2TB1701

SIZE	DWG. NO.	REV
<b>A</b>	201	
SCALE: 1:2	WEIGHT:	SHEET 9 OF 52

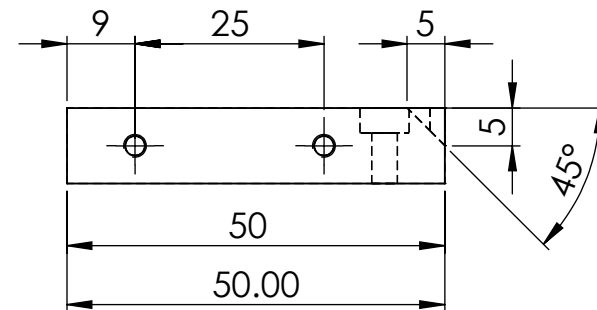
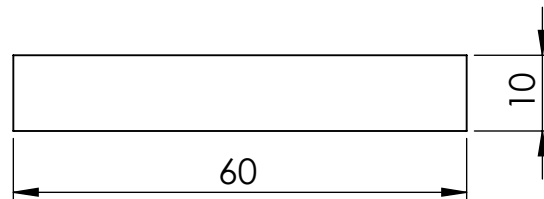
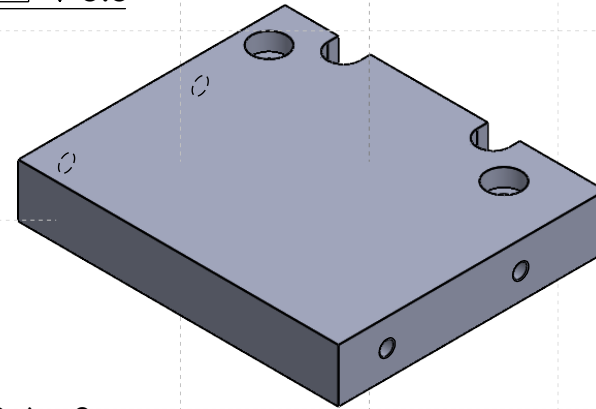
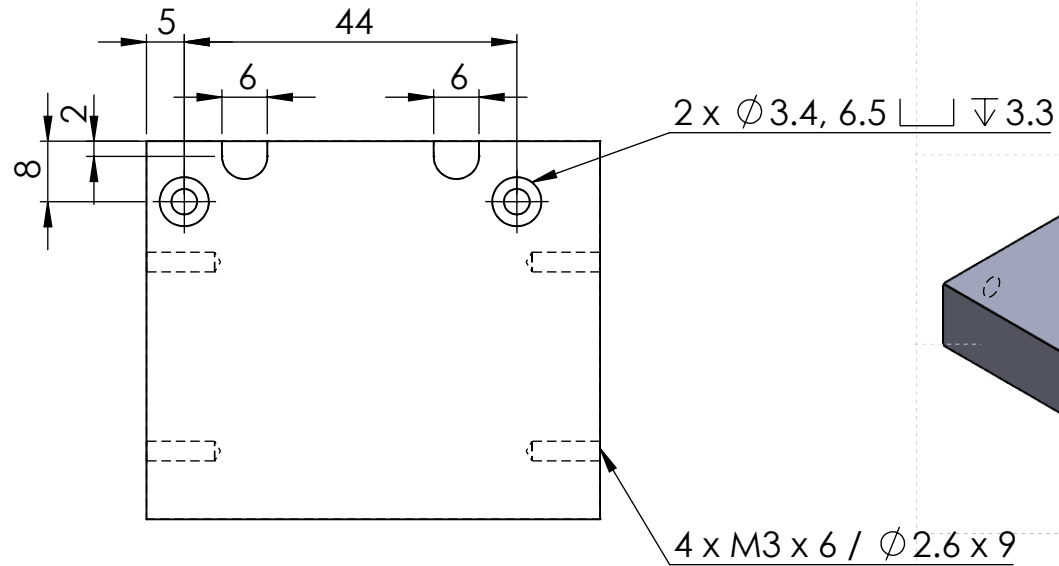


			UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Tohoku University		
			DIMENSIONS ARE IN INCHES	DRAWN			TITLE: Adriel Imaran Santoso C2TB1701		
			TOLERANCES:	CHECKED					
			FRACTIONAL ±	ENG APPR.					
			ANGULAR: MACH ±    BEND ±	MFG APPR.					
		TWO PLACE DECIMAL ±	Q.A.						
<b>PROPRIETARY AND CONFIDENTIAL</b>  THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.			INTERPRET GEOMETRIC TOLERANCING PER:	COMMENTS:			SIZE <b>A</b>	DWG. NO. <b>202</b>	REV
			MATERIAL						
	NEXT ASSY	USED ON	FINISH						
	APPLICATION		DO NOT SCALE DRAWING						

SCALE: 1:2		WEIGHT:	SHEET 10 OF 5
------------	--	---------	---------------

B

B



A

A

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

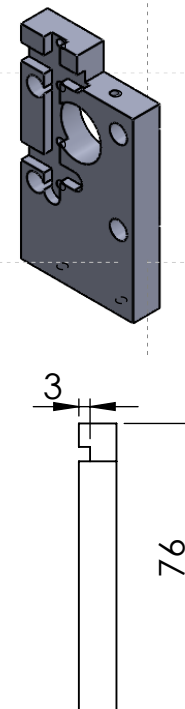
		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm$
		ANGULAR: MACH $\pm$ BEND $\pm$
		TWO PLACE DECIMAL $\pm$
		THREE PLACE DECIMAL $\pm$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
<b>A</b>	203	
SCALE: 1:1	WEIGHT:	SHEET 11 OF 52

1

B



A

SHEET 12 OF 52

B

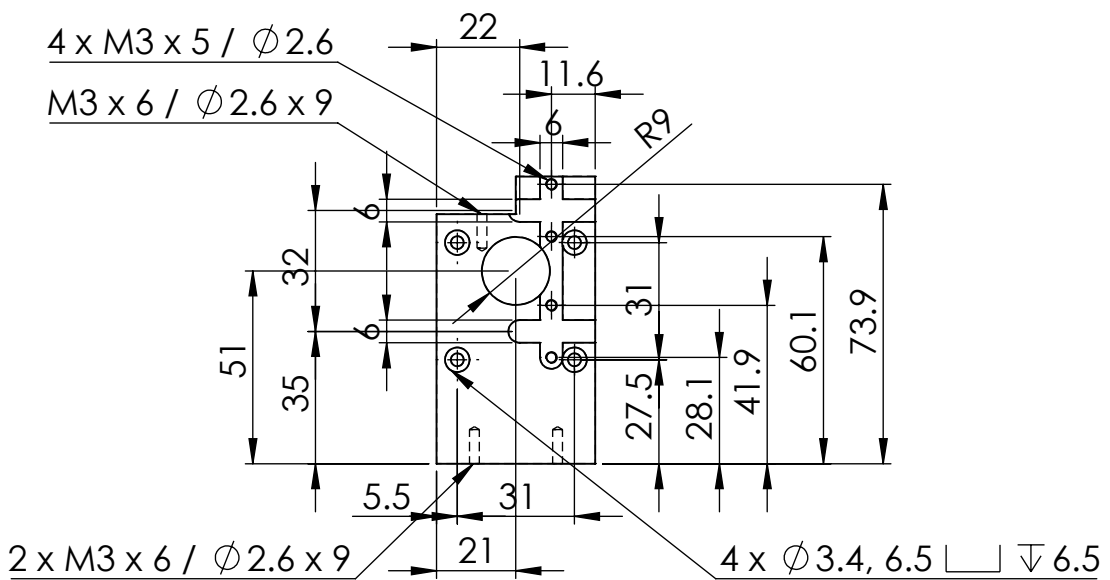
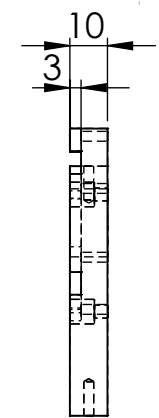
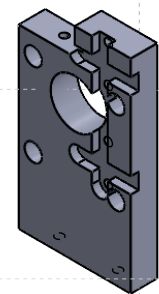
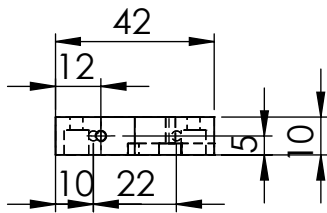
A

2

1

B

A

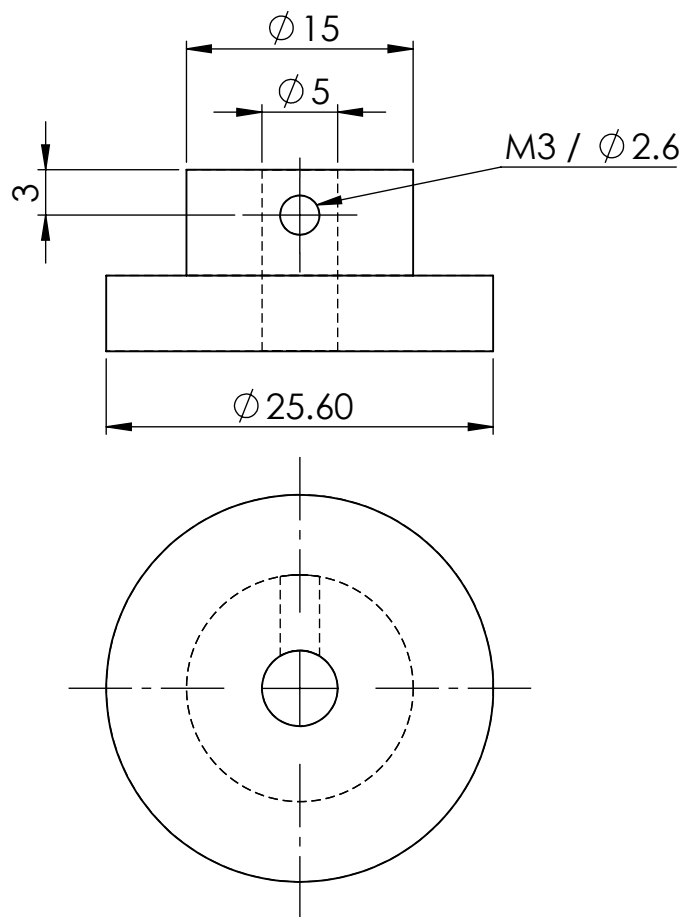


**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

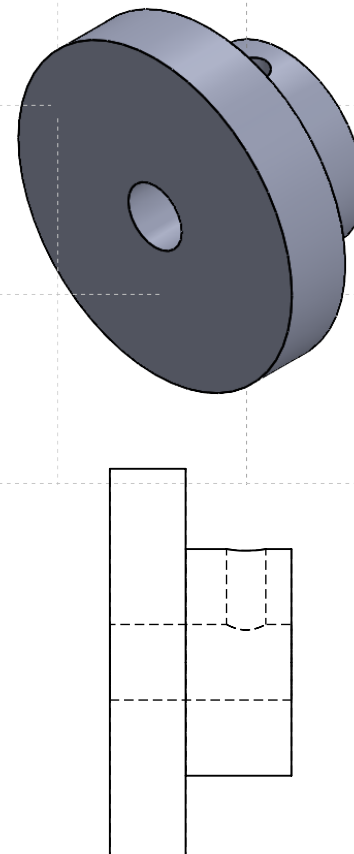
		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES	DRAWN		
		TOLERANCES:	CHECKED		
		FRACTIONAL $\pm$	ENG APPR.		
		ANGULAR: MACH $\pm$ BEND $\pm$	MFG APPR.		
		TWO PLACE DECIMAL $\pm$	Q.A.		
		THREE PLACE DECIMAL $\pm$	COMMENTS:		
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
		FINISH			
NEXT ASSY	USED ON				
APPLICATION		DO NOT SCALE DRAWING			

Tohoku University		
TITLE:		
Adriel Imaran Santos C2TB1701		
SIZE	DWG. NO.	REV
<b>A</b>	205	
SCALE: 1:2	WEIGHT:	SHEET 13 OF 52

B



1



B

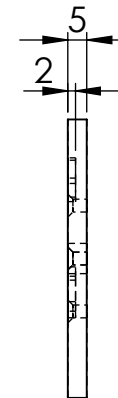
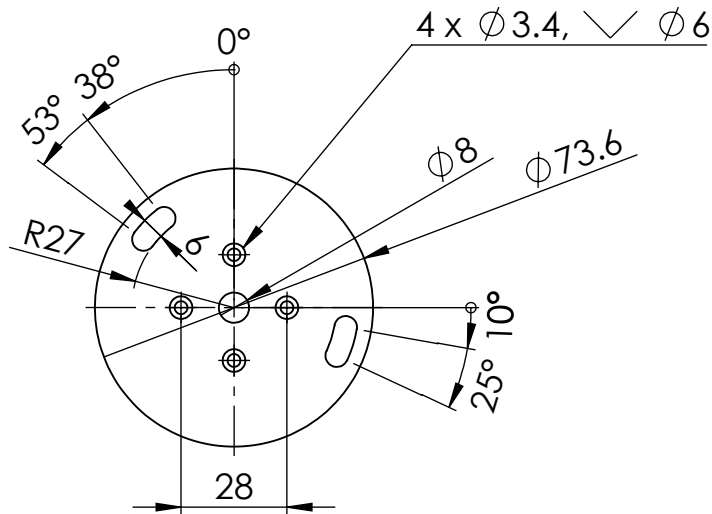
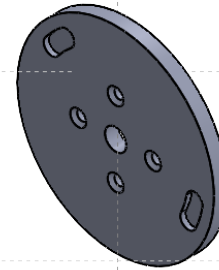
A

A

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Tohoku University		
		DIMENSIONS ARE IN INCHES	DRAWN			TITLE: Adriel Imaran Santos C2TB1701		
		TOLERANCES:	CHECKED					
		FRACTIONAL $\pm$	ENG APPR.					
		ANGULAR: MACH $\pm$ BEND $\pm$	MFG APPR.					
		TWO PLACE DECIMAL $\pm$	Q.A.			SIZE DWG. NO. REV		
		THREE PLACE DECIMAL $\pm$	COMMENTS:					
		INTERPRET GEOMETRIC TOLERANCING PER:				SCALE: 2:1 WEIGHT: SHEET 14 OF 52		
		MATERIAL						
		FINISH				206		
NEXT ASSY	USED ON							
APPLICATION		DO NOT SCALE DRAWING						

1

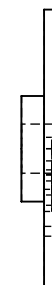
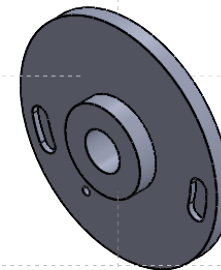
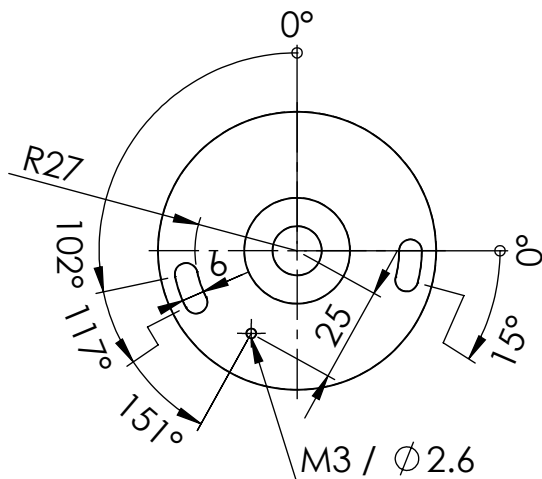
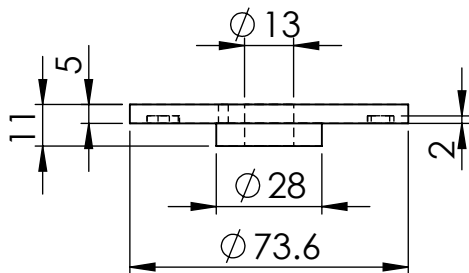


**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm$
		ANGULAR: MACH $\pm$ BEND $\pm$
		TWO PLACE DECIMAL $\pm$
		THREE PLACE DECIMAL $\pm$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

Tohoku University		
TITLE: Adriel Imaran Santos C2TB1701		
SIZE <b>A</b>	DWG. NO. 207	REV
SCALE: 1:2	WEIGHT:	SHEET 15 OF 52

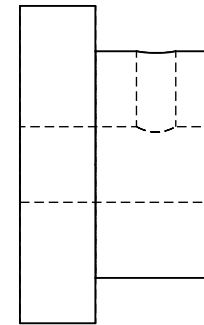
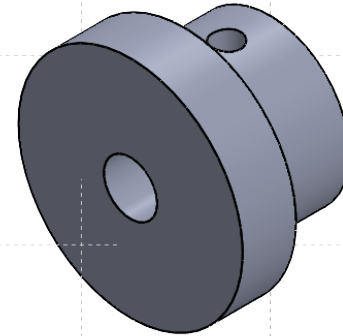
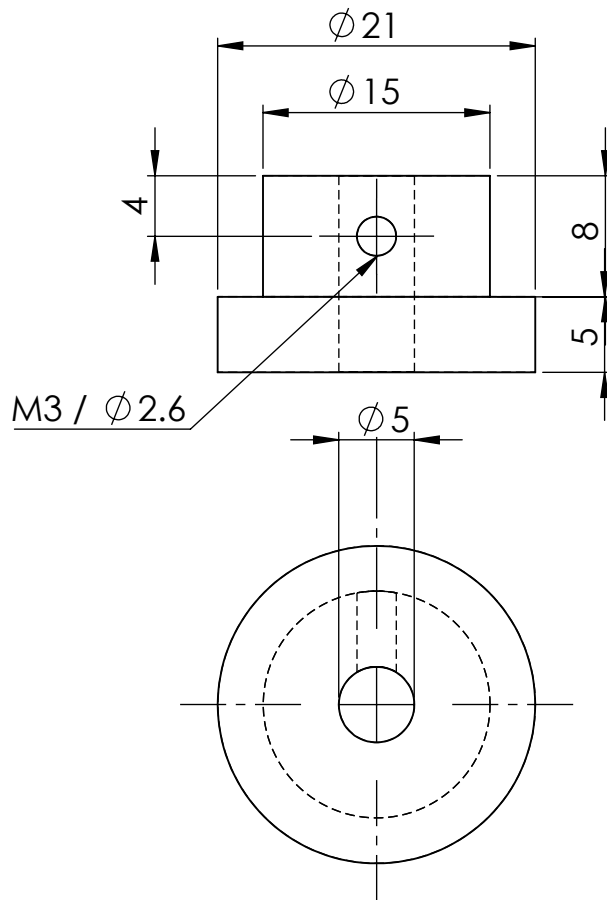


**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Tohoku University		
		DIMENSIONS ARE IN INCHES	DRAWN			TITLE: Adriel Imaran Santos C2TB1701		
		TOLERANCES:	CHECKED					
		FRACTIONAL ±	ENG APPR.					
		ANGULAR: MACH ±    BEND ±	MFG APPR.					
		TWO PLACE DECIMAL ±				SIZE    DWG. NO.    REV <b>A</b> 208		
		THREE PLACE DECIMAL ±						
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.			SCALE: 1:2    WEIGHT:    SHEET 16 OF 5		
		MATERIAL	COMMENTS:					
NEXT ASSY	USED ON	FINISH						
APPLICATION		DO NOT SCALE DRAWING						

SCALE: 1:2 WEIGHT: SHEET 16 OF 52





**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

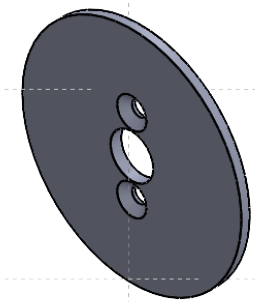
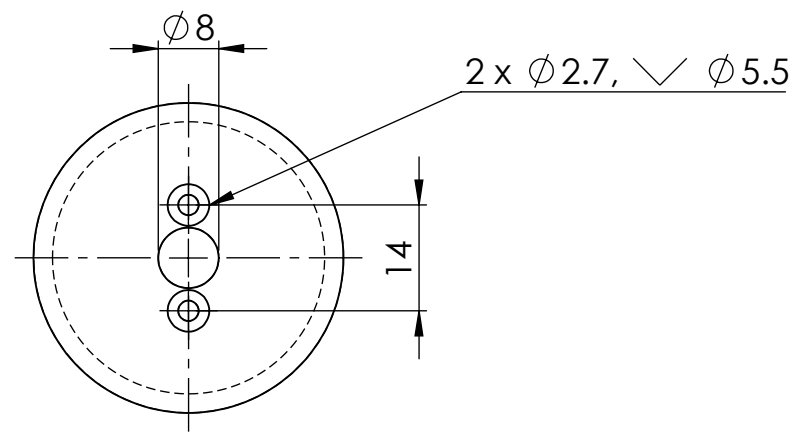
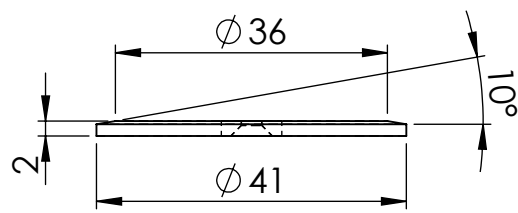
		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm$
		ANGULAR: MACH $\pm$ BEND $\pm$
		TWO PLACE DECIMAL $\pm$
		THREE PLACE DECIMAL $\pm$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
<b>A</b>	209	
SCALE: 2:1	WEIGHT:	SHEET 17 OF 52

B

A



B

A

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES	DRAWN		
		TOLERANCES:	CHECKED		
		FRACTIONAL ±	ENG APPR.		
		ANGULAR: MACH ± BEND ±	MFG APPR.		
		TWO PLACE DECIMAL ±	Q.A.		
		THREE PLACE DECIMAL ±	COMMENTS:		
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
NEXT ASSY	USED ON	FINISH			
	APPLICATION	DO NOT SCALE DRAWING			

Tohoku University		
TITLE: Adriel Imaran Santos C2TB1701		
SIZE	DWG. NO.	REV
A	210	
SCALE: 1:1	WEIGHT:	SHEET 18 OF 52

B

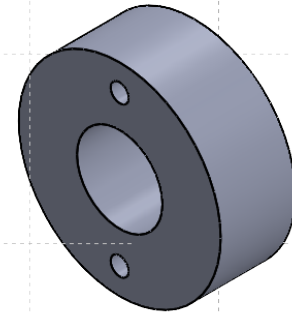
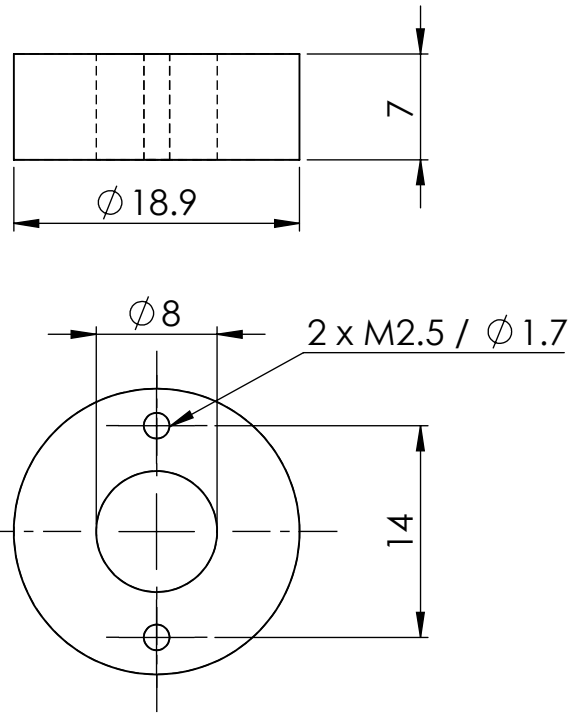
A

2

1

B

A



**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm$
		ANGULAR: MACH $\pm$ BEND $\pm$
		TWO PLACE DECIMAL $\pm$
		THREE PLACE DECIMAL $\pm$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

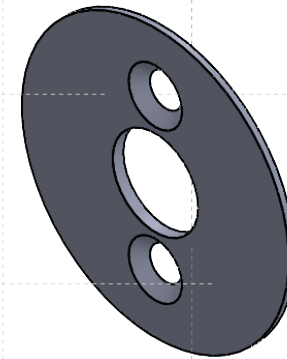
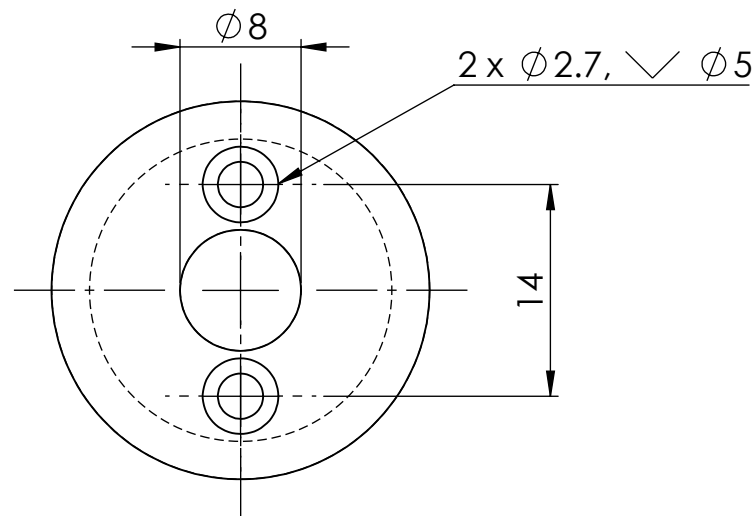
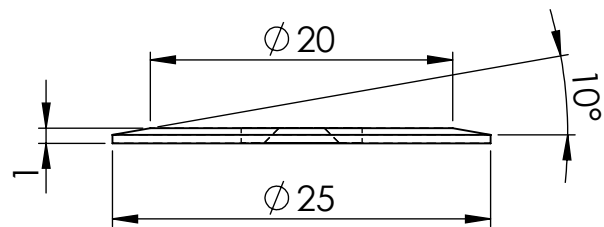
Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
A	211	
SCALE: 2:1	WEIGHT:	SHEET 19 OF 52

2

1

B

B



A

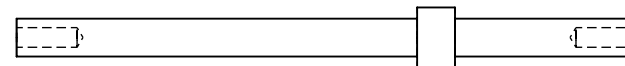
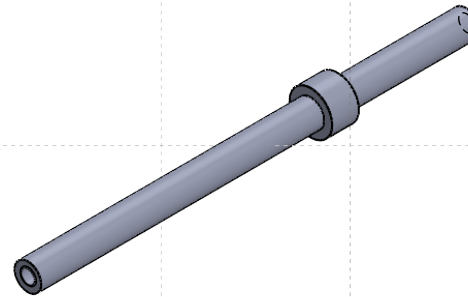
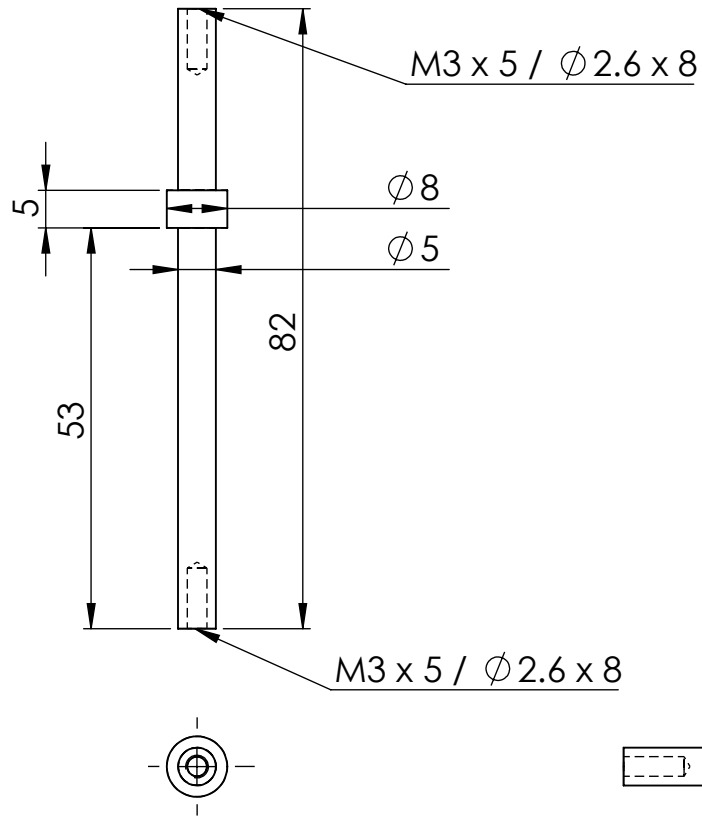
A

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS  
DRAWING IS THE SOLE PROPERTY OF  
<INSERT COMPANY NAME HERE>. ANY  
REPRODUCTION IN PART OR AS A WHOLE  
WITHOUT THE WRITTEN PERMISSION OF  
<INSERT COMPANY NAME HERE> IS  
PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Tohoku University		
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH±    BEND ± TWO PLACE DECIMAL    ± THREE PLACE DECIMAL    ±	DRAWN			TITLE: Adriel Imaran Santos C2TB1701		
			CHECKED					
			ENG APPR.					
			MFG APPR.					
			Q.A.					
		INTERPRET GEOMETRIC TOLERANCING PER:	COMMENTS:			SIZE	DWG. NO.	REV
		MATERIAL				A	212	
		FINISH						
NEXT ASSY	USED ON					SCALE: 2:1	WEIGHT:	SHEET 20 OF 52
APPLICATION		DO NOT SCALE DRAWING						

B

B



A

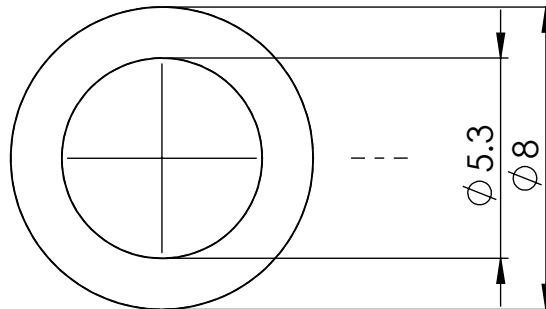
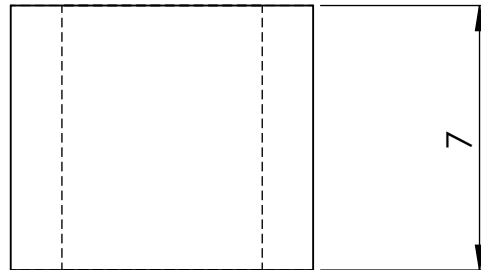
A

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

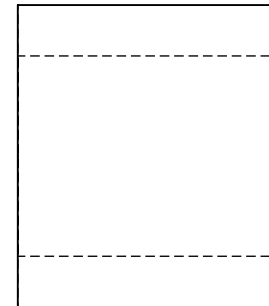
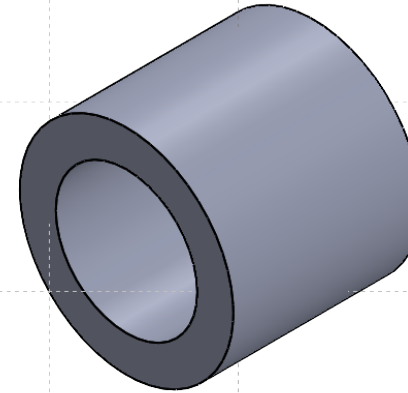
		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Tohoku University		
		DIMENSIONS ARE IN INCHES	DRAWN			TITLE: Adriel Imaran Santos C2TB1701		
		TOLERANCES:	CHECKED					
		FRACTIONAL $\pm$	ENG APPR.					
		ANGULAR: MACH $\pm$ BEND $\pm$	MFG APPR.					
		TWO PLACE DECIMAL $\pm$	Q.A.					
		THREE PLACE DECIMAL $\pm$	COMMENTS:			SIZE	DWG. NO.	REV
		INTERPRET GEOMETRIC TOLERANCING PER:				<b>A</b>	213	
		MATERIAL				SCALE: 1:1	WEIGHT:	SHEET 21 OF 52
NEXT ASSY	USED ON	FINISH						
APPLICATION		DO NOT SCALE DRAWING						

B

2



1



B

A

A

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS  
DRAWING IS THE SOLE PROPERTY OF  
<INSERT COMPANY NAME HERE>. ANY  
REPRODUCTION IN PART OR AS A WHOLE  
WITHOUT THE WRITTEN PERMISSION OF  
<INSERT COMPANY NAME HERE> IS  
PROHIBITED.

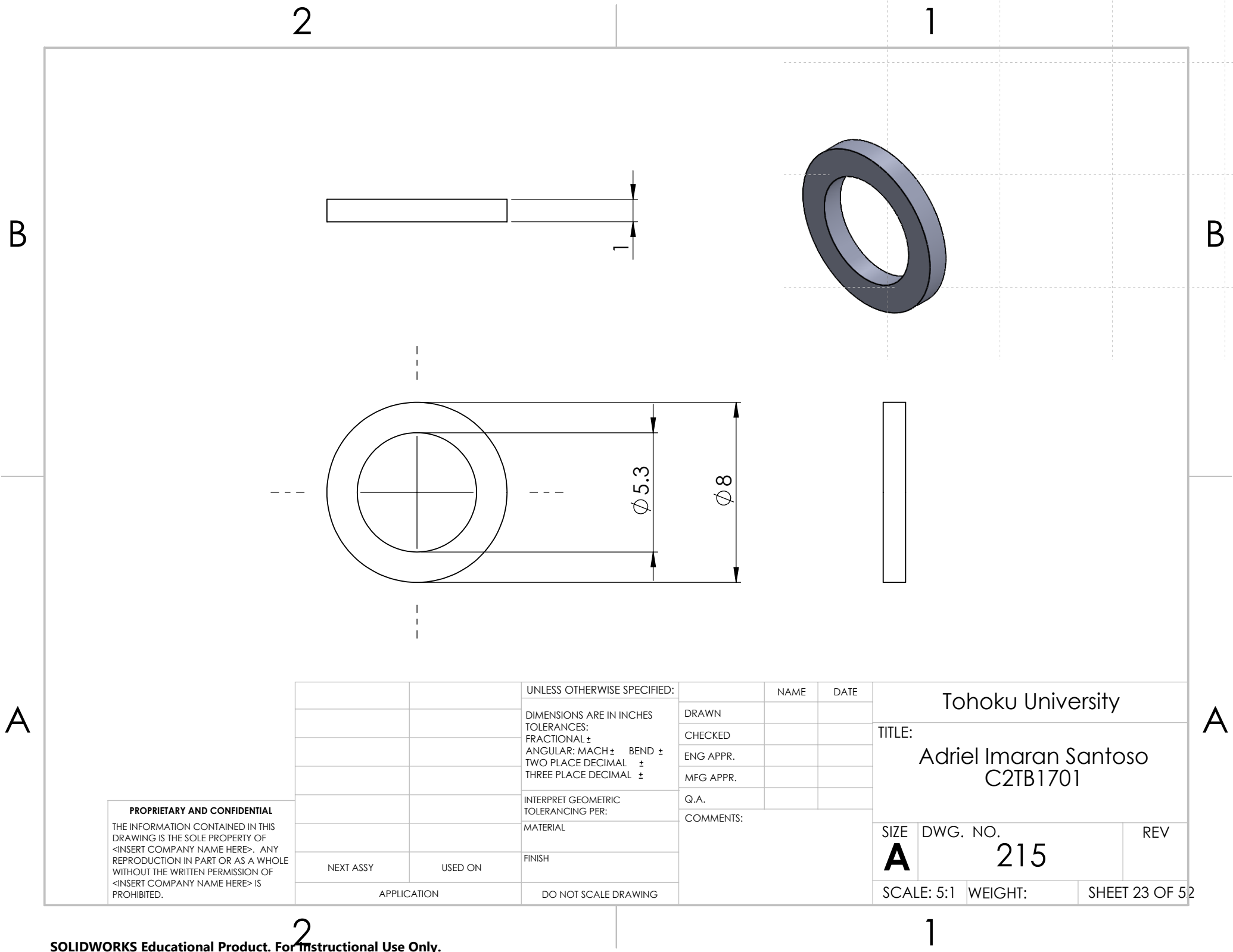
		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm$
		ANGULAR: MACH $\pm$ BEND $\pm$
		TWO PLACE DECIMAL $\pm$
		THREE PLACE DECIMAL $\pm$
		INTERPRET GEOMETRIC
		TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

Tohoku University		
TITLE:		
Adriel Imaran Santos C2TB1701		
SIZE	DWG. NO.	REV
<b>A</b>	214	
SCALE: 5:1	WEIGHT:	SHEET 22 OF 52

2

1



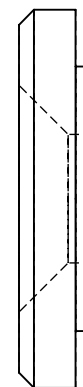
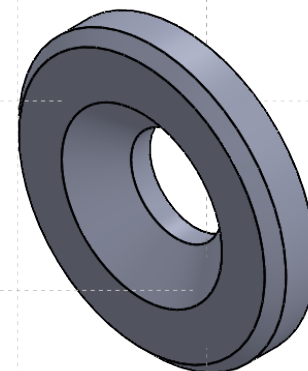
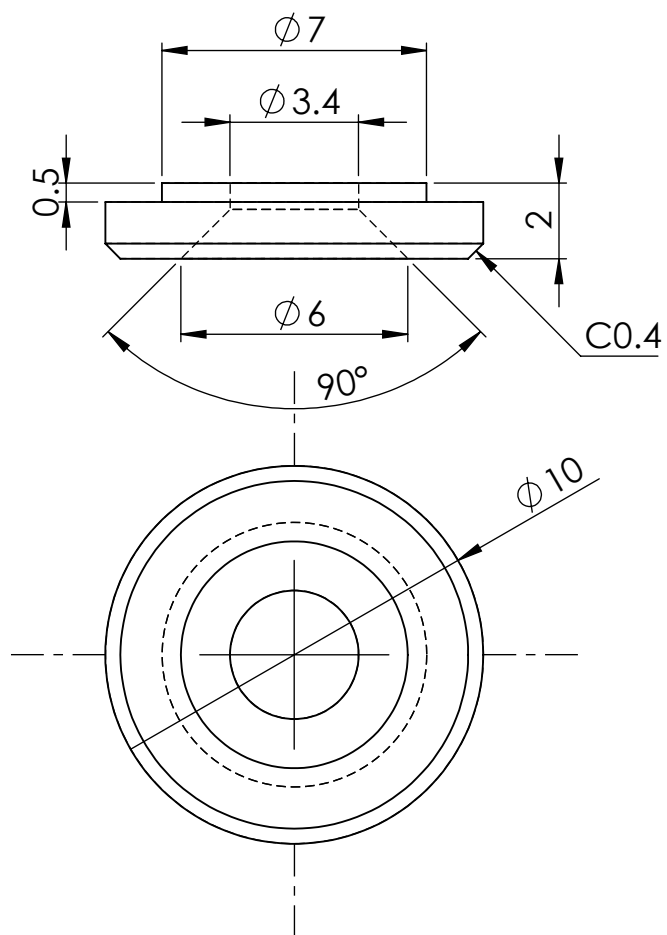
**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS  
DRAWING IS THE SOLE PROPERTY OF  
<INSERT COMPANY NAME HERE>. ANY  
REPRODUCTION IN PART OR AS A WHOLE  
WITHOUT THE WRITTEN PERMISSION OF  
<INSERT COMPANY NAME HERE> IS  
PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES	DRAWN		
		TOLERANCES:	CHECKED		
		FRACTIONAL ±	ENG APPR.		
		ANGULAR: MACH ± BEND ±	MFG APPR.		
		TWO PLACE DECIMAL ±	Q.A.		
		THREE PLACE DECIMAL ±	COMMENTS:		
		INTERPRET GEOMETRIC			
		TOLERANCING PER:			
		MATERIAL			
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
A	215	
SCALE: 5:1	WEIGHT:	SHEET 23 OF 52

B

B



A

A

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Tohoku University		
		DIMENSIONS ARE IN INCHES	DRAWN			TITLE: Adriel Imaran Santos C2TB1701		
		TOLERANCES:	CHECKED					
		FRACTIONAL $\pm$	ENG APPR.					
		ANGULAR: MACH $\pm$ BEND $\pm$	MFG APPR.			SIZE DWG. NO. REV		
		TWO PLACE DECIMAL $\pm$	Q.A.					
		THREE PLACE DECIMAL $\pm$	COMMENTS:			216		
		INTERPRET GEOMETRIC TOLERANCING PER:						
		MATERIAL						
		FINISH				SCALE: 5:1 WEIGHT: SHEET 24 OF 52		
NEXT ASSY	USED ON							
APPLICATION		DO NOT SCALE DRAWING						



B

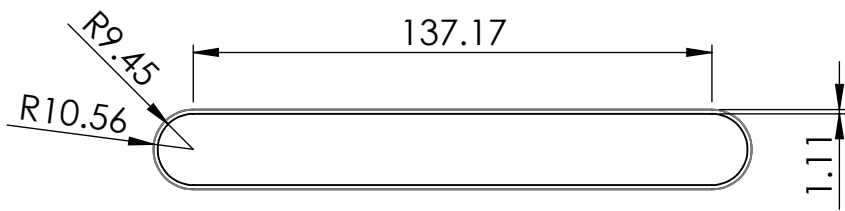
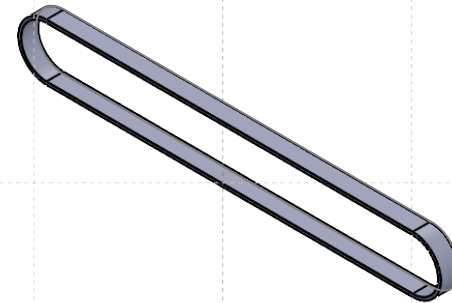
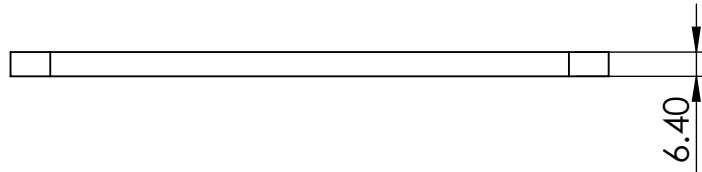
A

2

1

B

A



**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS  
DRAWING IS THE SOLE PROPERTY OF  
<INSERT COMPANY NAME HERE>. ANY  
REPRODUCTION IN PART OR AS A WHOLE  
WITHOUT THE WRITTEN PERMISSION OF  
<INSERT COMPANY NAME HERE> IS  
PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm$
		ANGULAR: MACH $\pm$ BEND $\pm$
		TWO PLACE DECIMAL $\pm$
		THREE PLACE DECIMAL $\pm$
		INTERPRET GEOMETRIC
		TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

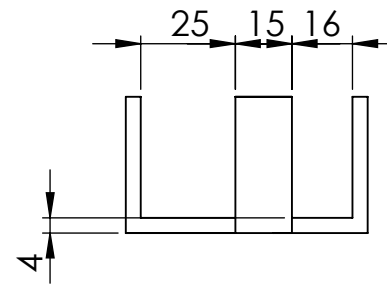
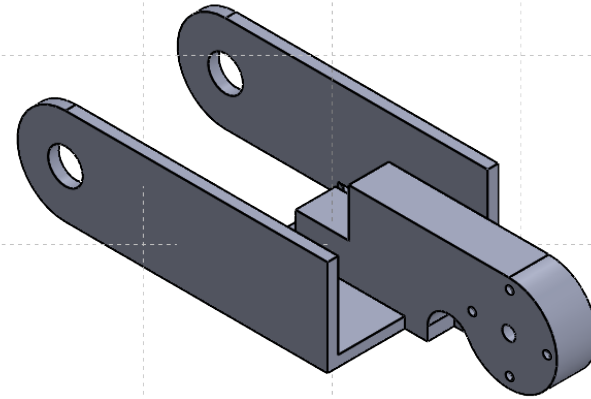
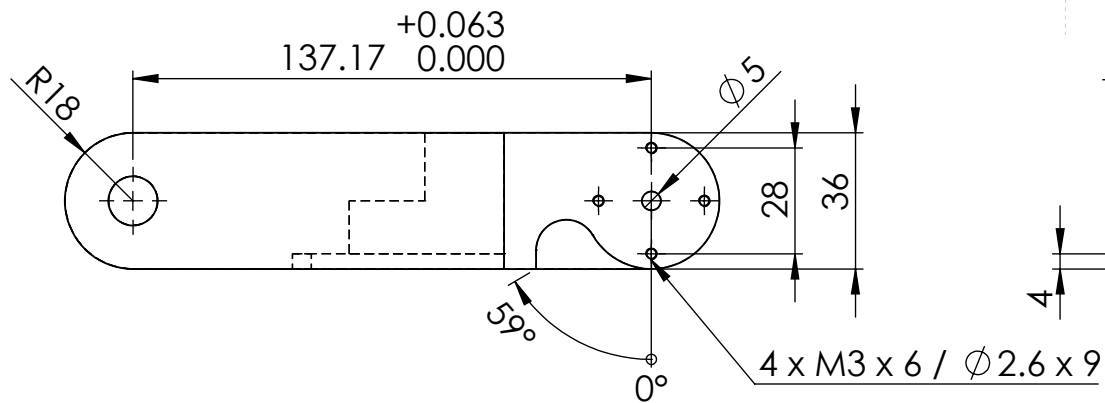
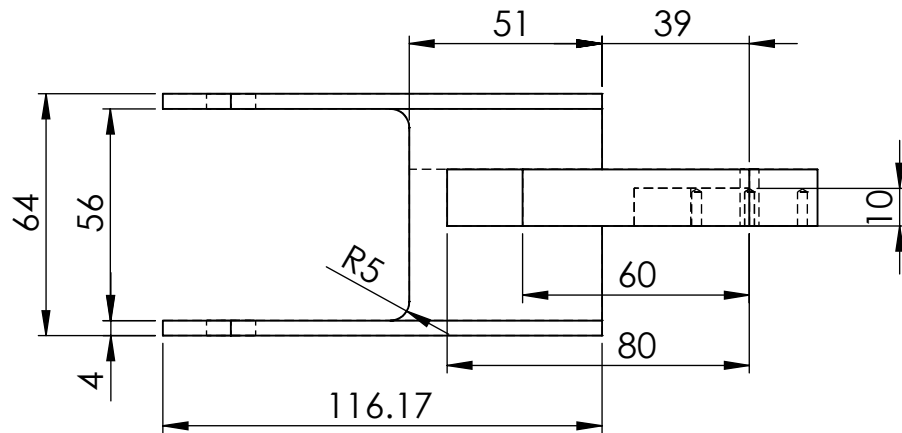
	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
<b>A</b>	217	
SCALE: 1:2	WEIGHT:	SHEET 25 OF 52

2

1

B



B

A

A

# **PROPRIETARY AND CONFIDENTIAL**

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES		DRAWN	
		TOLERANCES:		CHECKED	
		FRACTIONAL ±		ENG APPR.	
		ANGULAR: MACH ± BEND ±		MFG APPR.	
		TWO PLACE DECIMAL ±		Q.A.	
		THREE PLACE DECIMAL ±		COMMENTS:	
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
		FINISH			
NEXT ASSY	USED ON				
APPLICATION		DO NOT SCALE DRAWING			

Tohoku University

TITLE:

Adriel Imaran Santos  
C2TB1701

SIZE

**A**

DWG. NO.

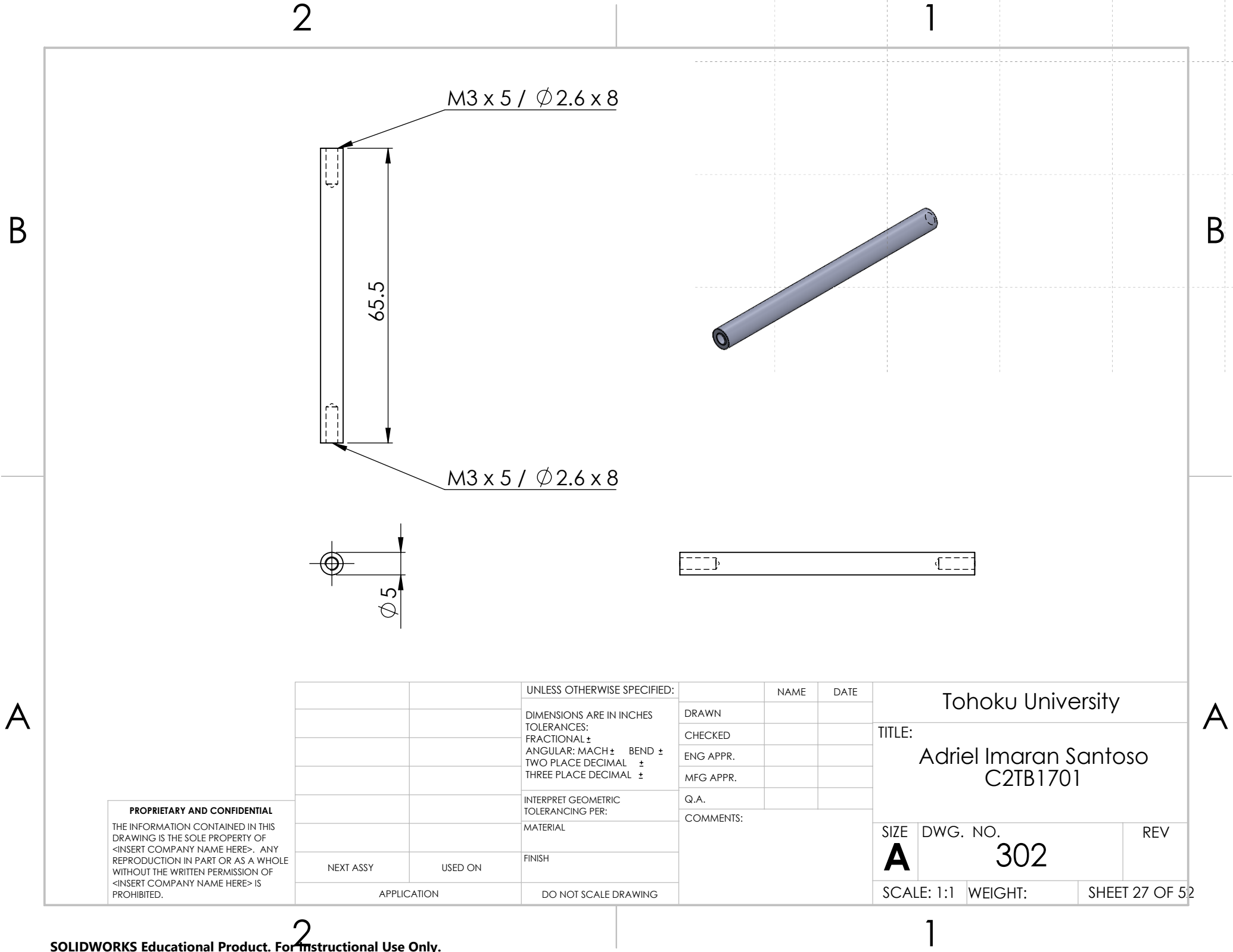
301

REV

SCALE: 1:2

WEIGHT:

SHEET 26 OF 52



A

A

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

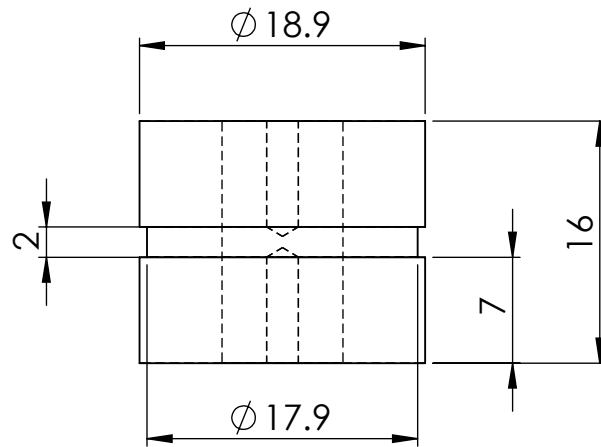
		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm$
		ANGULAR: MACH $\pm$ BEND $\pm$
		TWO PLACE DECIMAL $\pm$
		THREE PLACE DECIMAL $\pm$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

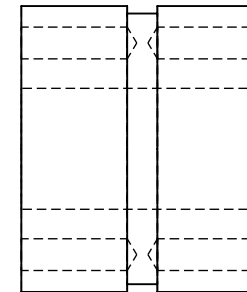
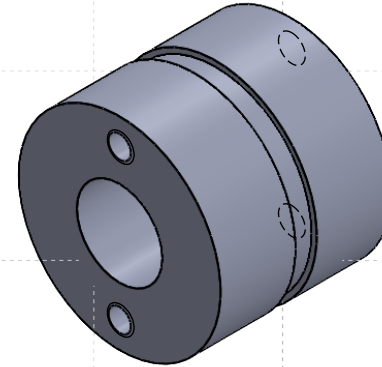
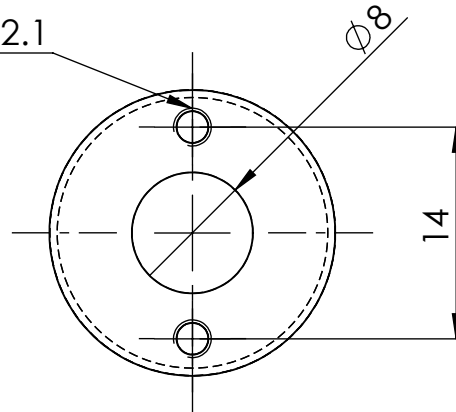
Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
A	302	
SCALE: 1:1	WEIGHT:	SHEET 27 OF 52

B

A



2 x M2.5 x 4 /  $\phi$  2.1

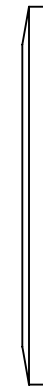
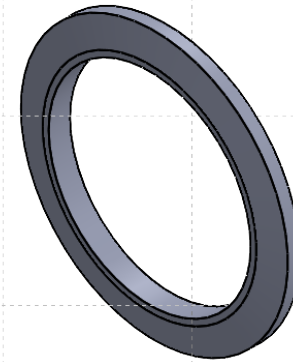
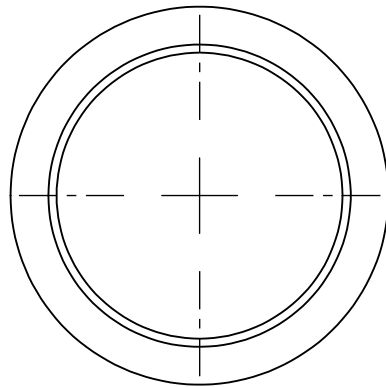
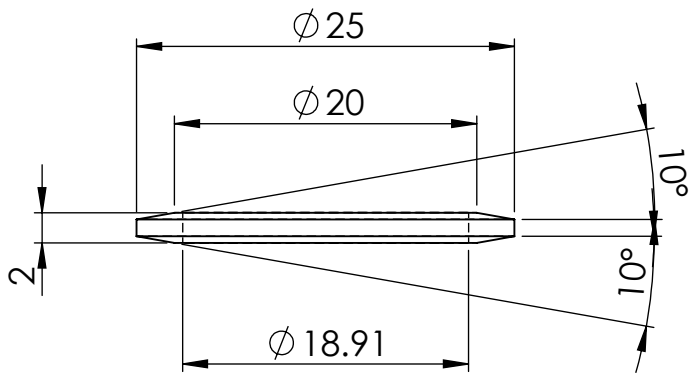


B

A

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Tohoku University		
		DIMENSIONS ARE IN INCHES	DRAWN			TITLE: Adriel Imaran Santos C2TB1701		
		TOLERANCES:	CHECKED					
		FRACTIONAL $\pm$	ENG APPR.					
		ANGULAR: MACH $\pm$ BEND $\pm$	MFG APPR.					
		TWO PLACE DECIMAL $\pm$	Q.A.			SIZE	DWG. NO.	REV
		THREE PLACE DECIMAL $\pm$	COMMENTS:			<b>A</b>	303	
		INTERPRET GEOMETRIC TOLERANCING PER:				SCALE: 2:1 WEIGHT: SHEET 28 OF 52		
		MATERIAL						
NEXT ASSY	USED ON	FINISH						
APPLICATION		DO NOT SCALE DRAWING						



**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

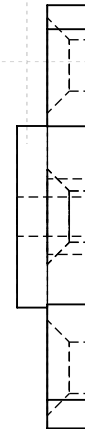
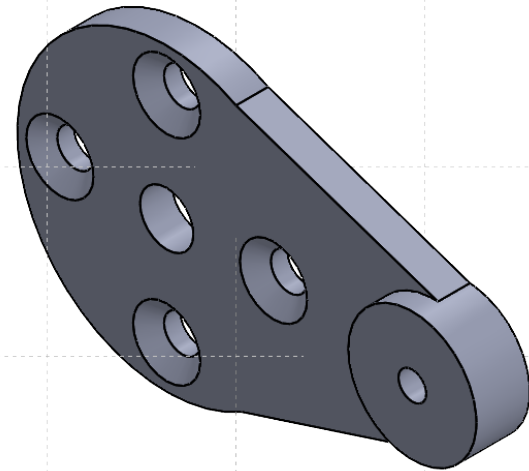
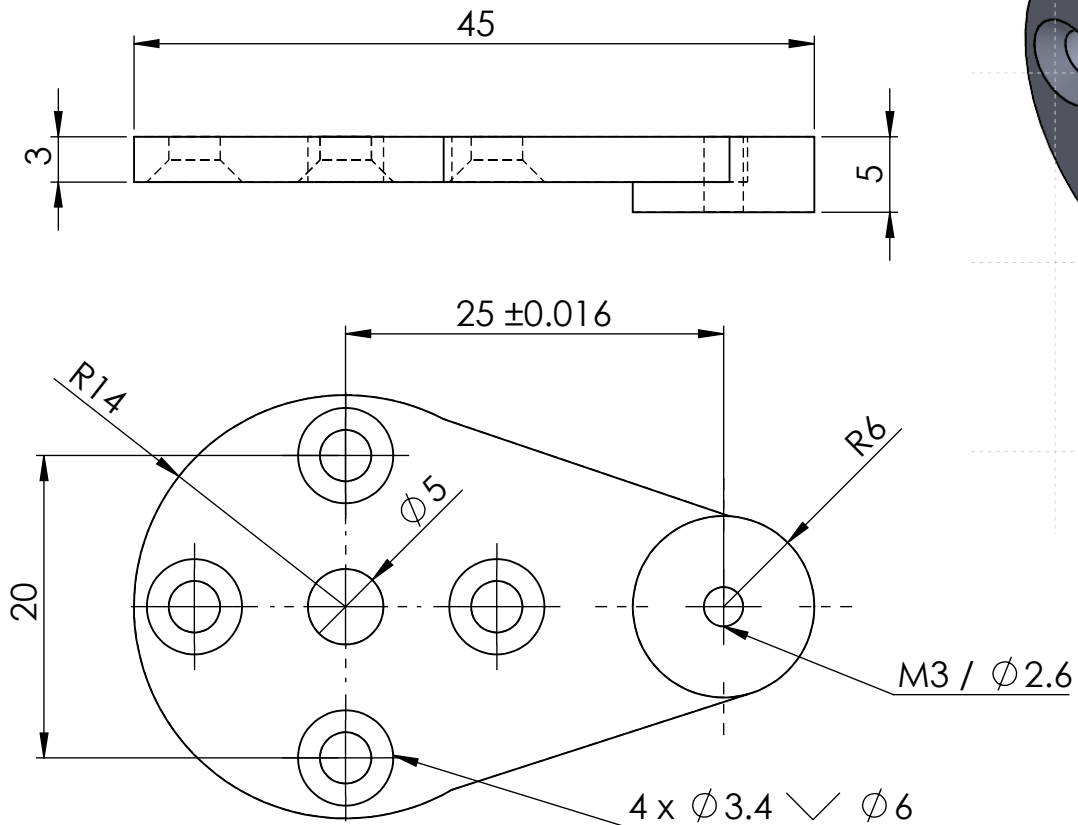
		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm$
		ANGULAR: MACH $\pm$ BEND $\pm$
		TWO PLACE DECIMAL $\pm$
		THREE PLACE DECIMAL $\pm$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
<b>A</b>	304	
SCALE: 2:1	WEIGHT:	SHEET 29 OF 52

B

A

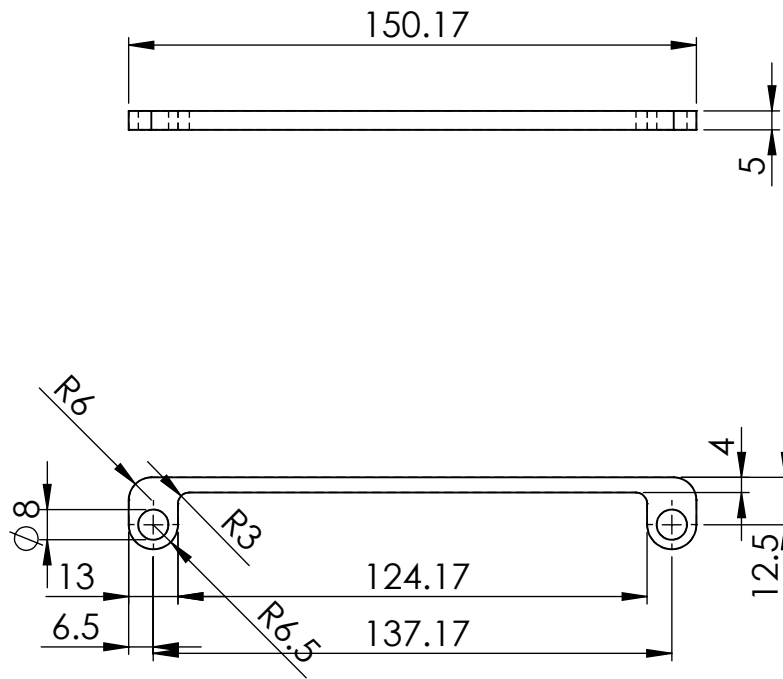


**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Tohoku University		
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH±    BEND ± TWO PLACE DECIMAL    ± THREE PLACE DECIMAL    ±	DRAWN			TITLE:  Adriel Imaran Santos C2TB1701		
			CHECKED					
			ENG APPR.					
			MFG APPR.					
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.			SIZE    DWG. NO.    REV  <b>A</b> 305		
		MATERIAL	COMMENTS:					
		FINISH						
NEXT ASSY	USED ON							
APPLICATION		DO NOT SCALE DRAWING	SCALE: 2:1			WEIGHT:	SHEET 30 OF 52	

B

A



**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm$
		ANGULAR: MACH $\pm$ BEND $\pm$
		TWO PLACE DECIMAL $\pm$
		THREE PLACE DECIMAL $\pm$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

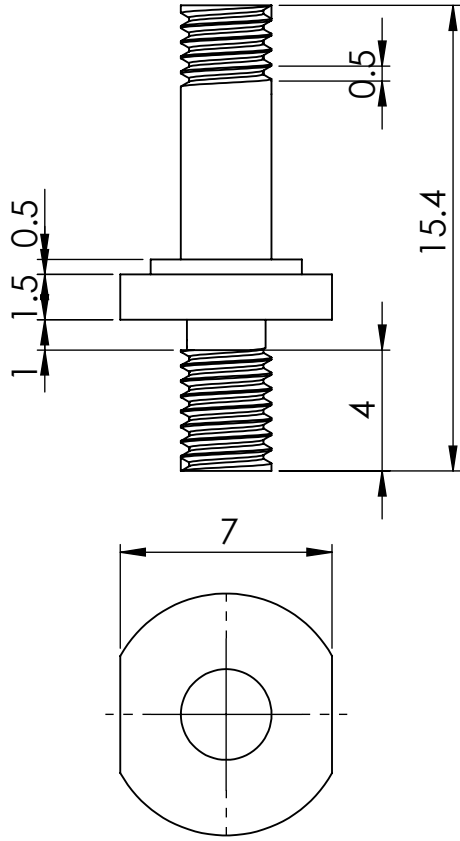
Tohoku University		
TITLE:		
Adriel Imaran Santos C2TB1701		
SIZE	DWG. NO.	REV
A	306	
SCALE: 1:2	WEIGHT:	SHEET 31 OF 52

B

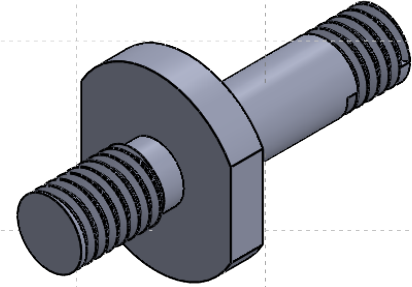
A

B

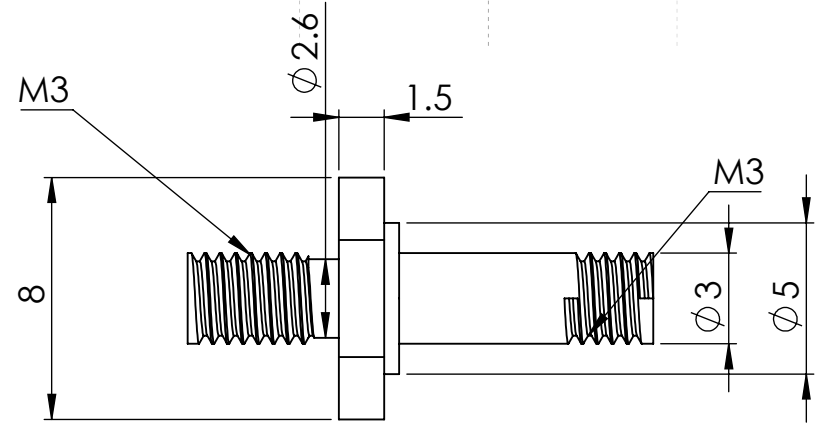
A



1



B



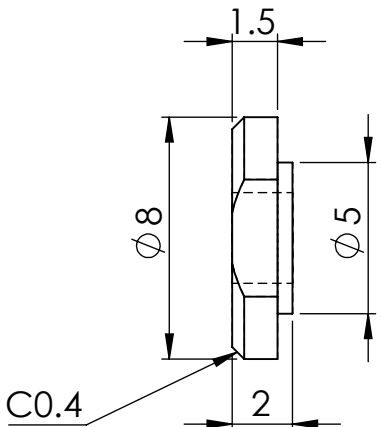
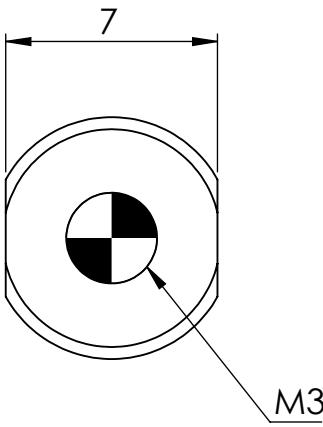
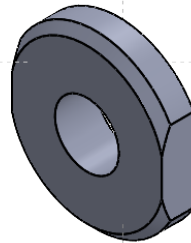
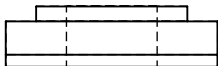
A

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES	DRAWN		
		TOLERANCES:	CHECKED		
		FRACTIONAL ±	ENG APPR.		
		ANGULAR: MACH ± BEND ±	MFG APPR.		
		TWO PLACE DECIMAL ±	Q.A.		
		THREE PLACE DECIMAL ±	COMMENTS:		
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
		FINISH			
NEXT ASSY	USED ON				
	APPLICATION	DO NOT SCALE DRAWING			

Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
A	307	
SCALE: 4:1	WEIGHT:	SHEET 32 OF 52

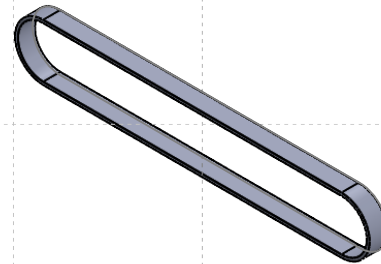
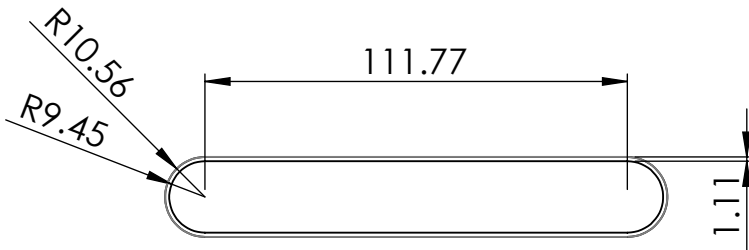
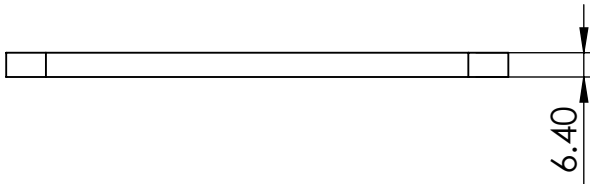




**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES	DRAWN		
		TOLERANCES:	CHECKED		
		FRACTIONAL $\pm$	ENG APPR.		
		ANGULAR: MACH $\pm$ BEND $\pm$	MFG APPR.		
		TWO PLACE DECIMAL $\pm$	Q.A.		
		THREE PLACE DECIMAL $\pm$	COMMENTS:		
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
<b>A</b>	308	
SCALE: 4:1	WEIGHT:	SHEET 33 OF 52



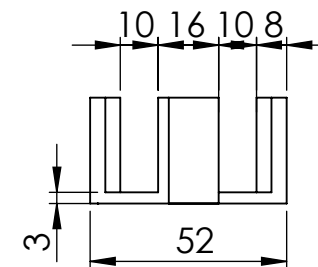
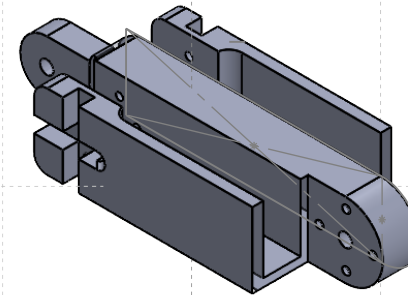
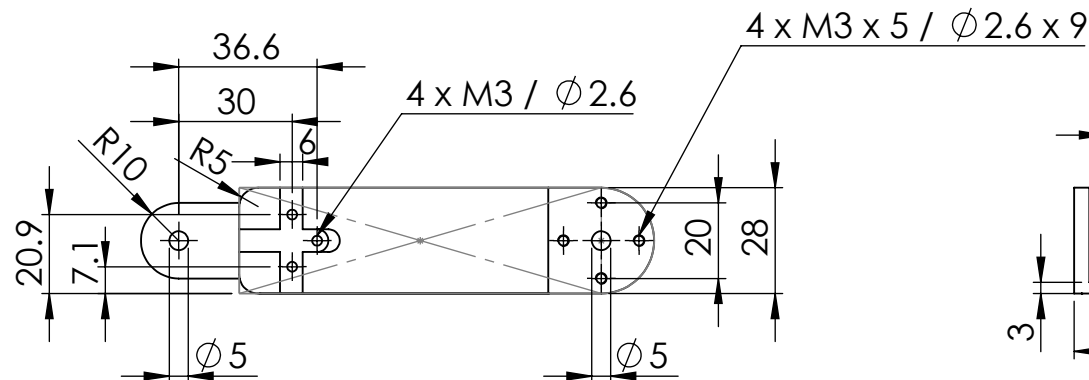
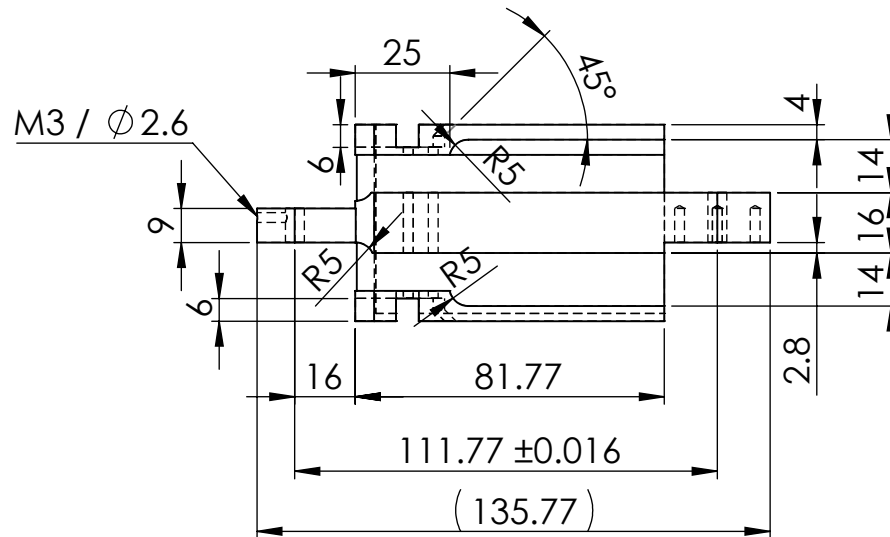
**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm$
		ANGULAR: MACH $\pm$ BEND $\pm$
		TWO PLACE DECIMAL $\pm$
		THREE PLACE DECIMAL $\pm$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
A	309	
SCALE: 1:2	WEIGHT:	SHEET 34 OF 52

B

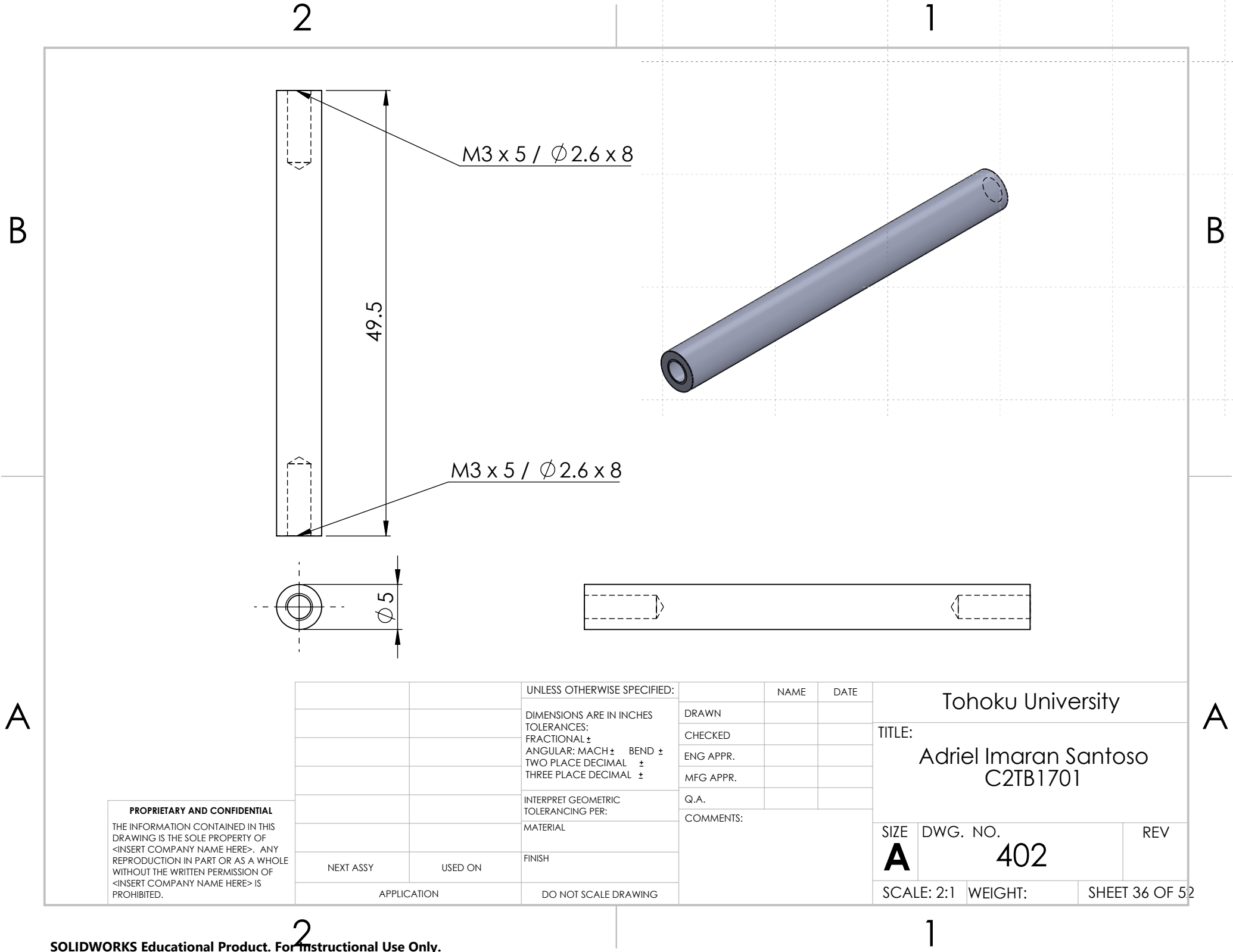


B

A

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Tohoku University		
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ±    BEND ± TWO PLACE DECIMAL    ± THREE PLACE DECIMAL    ±	DRAWN			TITLE:  Adriel Imaran Santos C2TB1701		
			CHECKED					
			ENG APPR.					
			MFG APPR.					
			Q.A.					
		INTERPRET GEOMETRIC TOLERANCING PER:	COMMENTS:			SIZE    DWG. NO.    REV  A                    401		
		MATERIAL						
		FINISH						
NEXT ASSY	USED ON		SCALE: 1:2    WEIGHT:    SHEET 35 OF 52					
APPLICATION		DO NOT SCALE DRAWING						



A

A

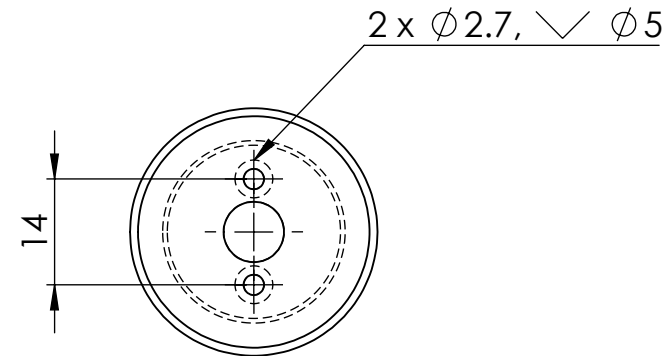
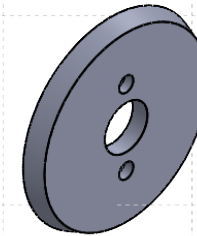
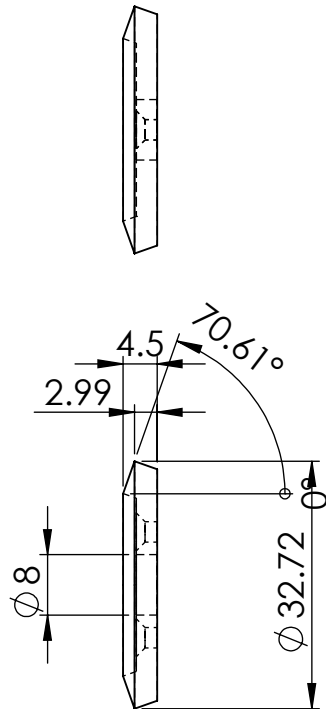
**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES	DRAWN		
		TOLERANCES:	CHECKED		
		FRACTIONAL ±	ENG APPR.		
		ANGULAR: MACH ± BEND ±	MFG APPR.		
		TWO PLACE DECIMAL ±	Q.A.		
		THREE PLACE DECIMAL ±	COMMENTS:		
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			

Tohoku University		
TITLE:		
Adriel Imaran Santos C2TB1701		
SIZE	DWG. NO.	REV
A	402	
SCALE: 2:1	WEIGHT:	SHEET 36 OF 52

B

B



A

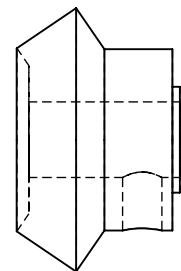
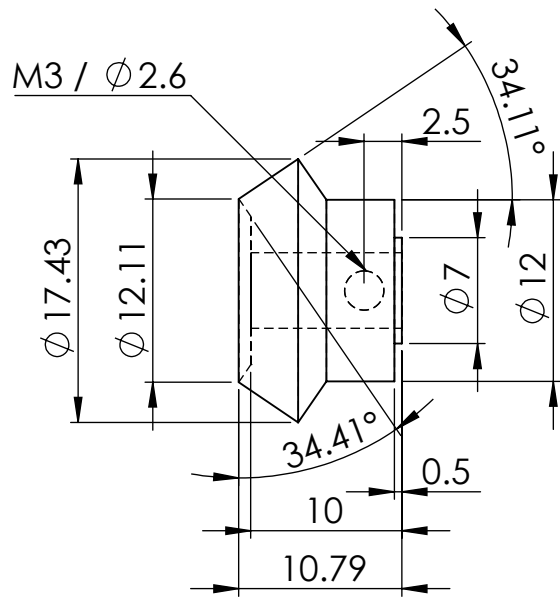
A

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

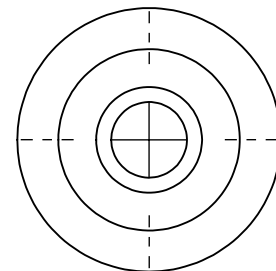
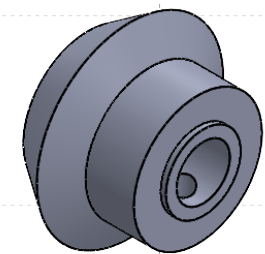
		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Tohoku University		
		DIMENSIONS ARE IN INCHES	DRAWN			TITLE: Adriel Imaran Santos C2TB1701		
		TOLERANCES:	CHECKED					
		FRACTIONAL $\pm$	ENG APPR.					
		ANGULAR: MACH $\pm$ BEND $\pm$	MFG APPR.					
		TWO PLACE DECIMAL $\pm$	Q.A.					
		THREE PLACE DECIMAL $\pm$	COMMENTS:			SIZE	DWG. NO.	REV
		INTERPRET GEOMETRIC TOLERANCING PER:				<b>A</b>	403	
		MATERIAL				SCALE: 1:1	WEIGHT:	SHEET 37 OF 52
		FINISH						
NEXT ASSY	USED ON							
APPLICATION		DO NOT SCALE DRAWING						

B

A



1



B

A

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

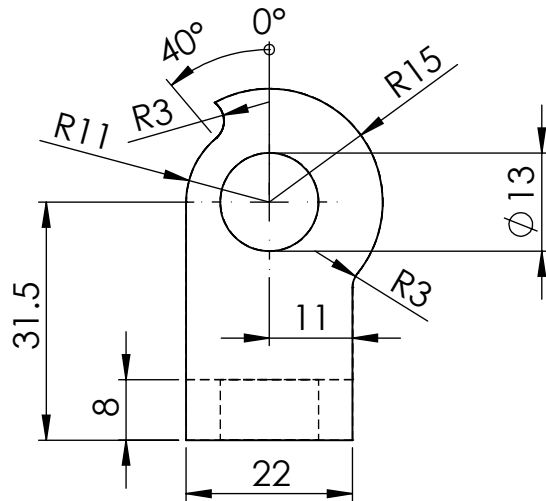
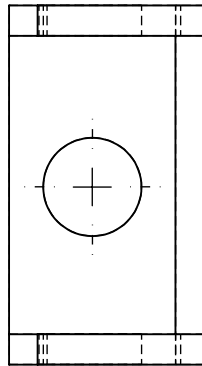
		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm$
		ANGULAR: MACH $\pm$ BEND $\pm$
		TWO PLACE DECIMAL $\pm$
		THREE PLACE DECIMAL $\pm$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

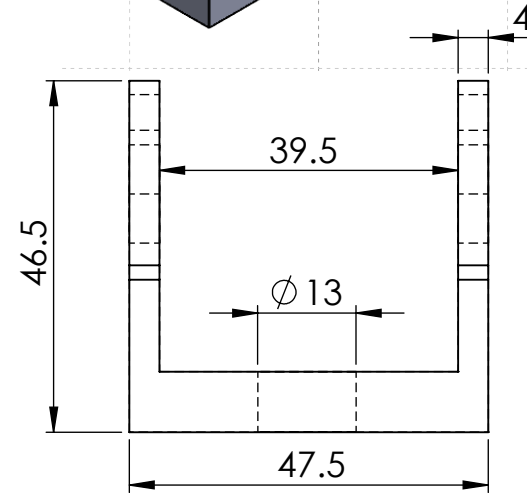
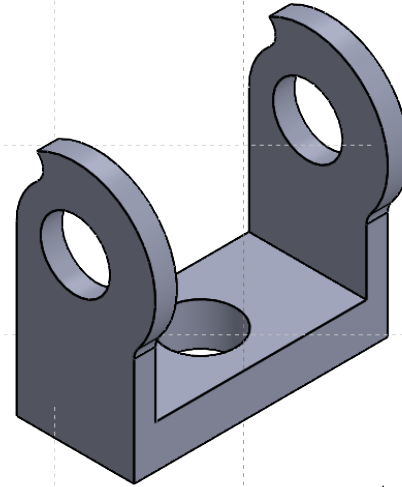
Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
A	404	
SCALE: 2:1	WEIGHT:	SHEET 38 OF 52

B

2



1



B

A

A

# PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm$
		ANGULAR: MACH $\pm$ BEND $\pm$
		TWO PLACE DECIMAL $\pm$
		THREE PLACE DECIMAL $\pm$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
<b>A</b>	501	
SCALE: 1:1	WEIGHT:	SHEET 39 OF 52

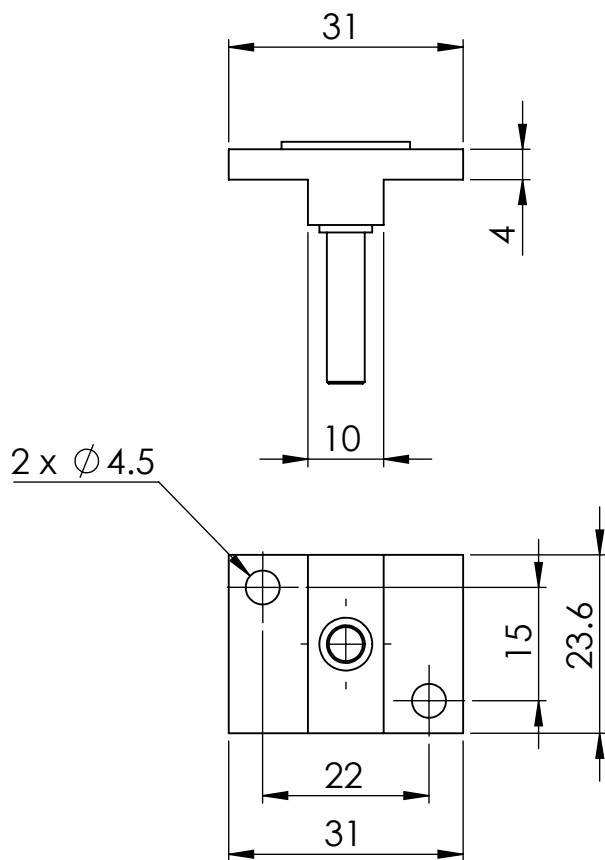
2

1

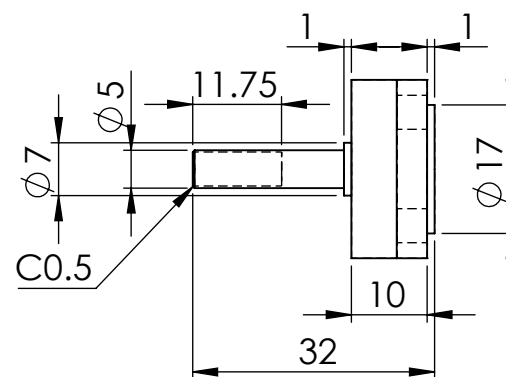
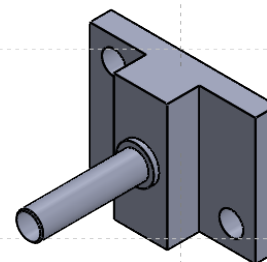
B

A

2



1



B

A

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm$
		ANGULAR: MACH $\pm$ BEND $\pm$
		TWO PLACE DECIMAL $\pm$
		THREE PLACE DECIMAL $\pm$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

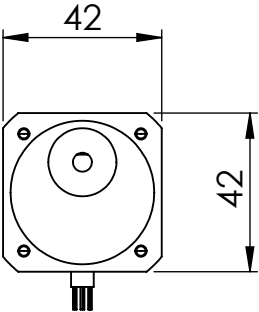
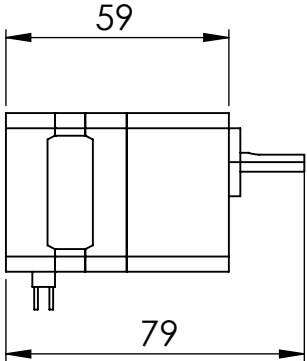
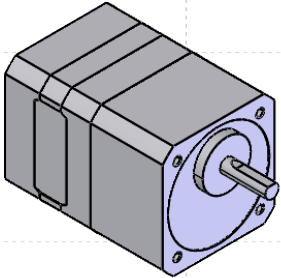
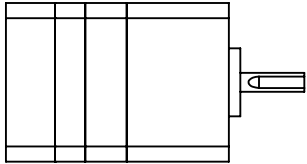
	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
A	502	
SCALE: 1:1	WEIGHT:	SHEET 40 OF 52

2

1





**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES	DRAWN		
		TOLERANCES:	CHECKED		
		FRACTIONAL $\pm$	ENG APPR.		
		ANGULAR: MACH $\pm$ BEND $\pm$	MFG APPR.		
		TWO PLACE DECIMAL $\pm$	Q.A.		
		THREE PLACE DECIMAL $\pm$	COMMENTS:		
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
NEXT ASSY	USED ON	FINISH			
	APPLICATION	DO NOT SCALE DRAWING			

Tohoku University		
TITLE:		
Adriel Imaran Santoso		
C2TB1701		
SIZE	DWG. NO.	REV
A	601	
SCALE: 1:2	WEIGHT:	SHEET 41 OF 52

B

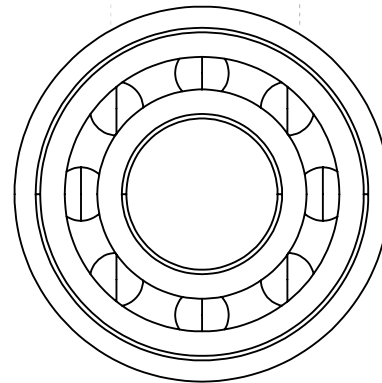
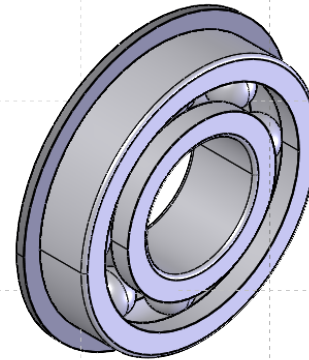
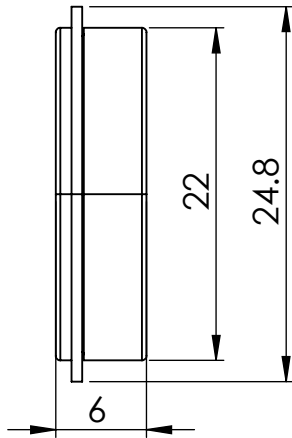
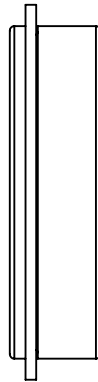
A

2

1

B

A



**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS  
DRAWING IS THE SOLE PROPERTY OF  
<INSERT COMPANY NAME HERE>. ANY  
REPRODUCTION IN PART OR AS A WHOLE  
WITHOUT THE WRITTEN PERMISSION OF  
<INSERT COMPANY NAME HERE> IS  
PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm$
		ANGULAR: MACH $\pm$ BEND $\pm$
		TWO PLACE DECIMAL $\pm$
		THREE PLACE DECIMAL $\pm$
		INTERPRET GEOMETRIC
		TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
A	701	
SCALE: 2:1	WEIGHT:	SHEET 42 OF 52

2

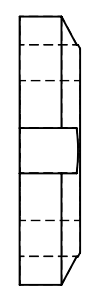
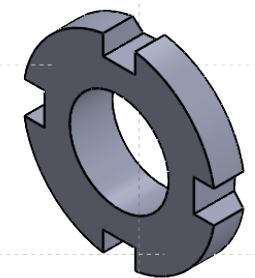
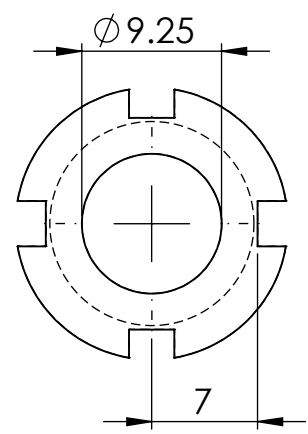
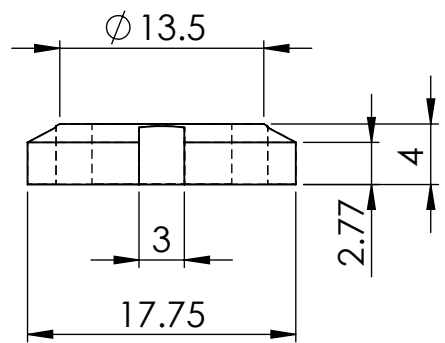
1

B

A

2

1



B

A

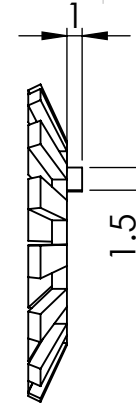
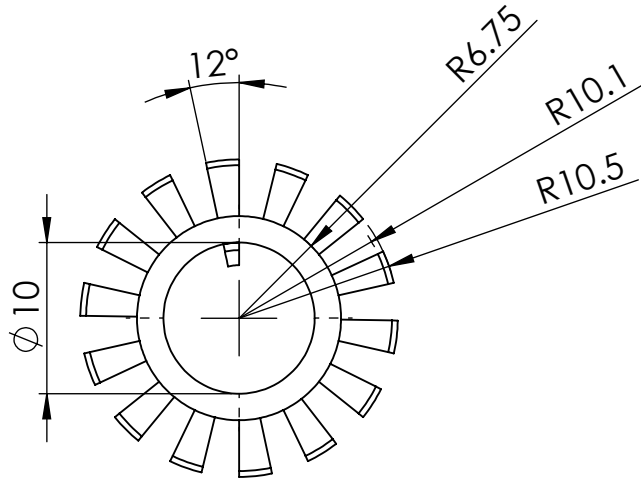
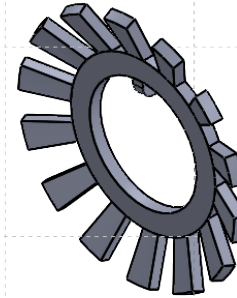
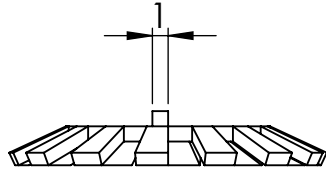
**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES	DRAWN		
		TOLERANCES:	CHECKED		
		FRACTIONAL ±	ENG APPR.		
		ANGULAR: MACH ± BEND ±	MFG APPR.		
		TWO PLACE DECIMAL ±	Q.A.		
		THREE PLACE DECIMAL ±	COMMENTS:		
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
NEXT ASSY	USED ON	FINISH			
	APPLICATION	DO NOT SCALE DRAWING			

Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
A	702	
SCALE: 2:1	WEIGHT:	SHEET 43 OF 52

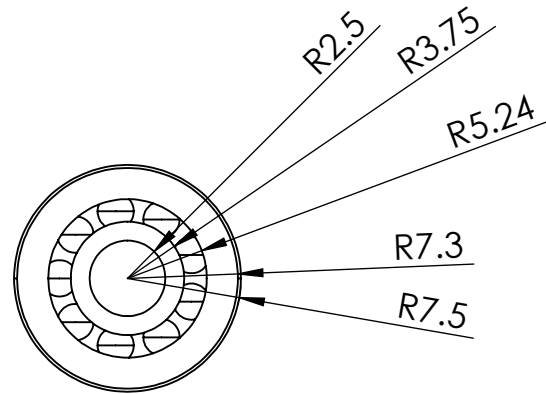
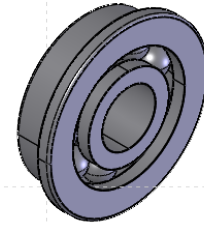
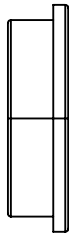
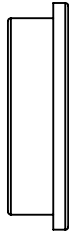
2

1



**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS  
DRAWING IS THE SOLE PROPERTY OF  
<INSERT COMPANY NAME HERE>. ANY  
REPRODUCTION IN PART OR AS A WHOLE  
WITHOUT THE WRITTEN PERMISSION OF  
<INSERT COMPANY NAME HERE> IS  
PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Tohoku University							
		DIMENSIONS ARE IN INCHES	DRAWN			TITLE: Adriel Imaran Santos C2TB1701							
		TOLERANCES:	CHECKED										
		FRACTIONAL ±	ENG APPR.										
		ANGULAR: MACH ±    BEND ±	MFG APPR.										
		TWO PLACE DECIMAL ±	Q.A.										
		THREE PLACE DECIMAL ±	COMMENTS:			SIZE	DWG. NO.	REV					
		INTERPRET GEOMETRIC				A	703						
		TOLERANCING PER:											
		MATERIAL				SCALE: 2:1    WEIGHT:    SHEET 44 OF 52							
NEXT ASSY	USED ON	FINISH											
APPLICATION		DO NOT SCALE DRAWING											



**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS  
DRAWING IS THE SOLE PROPERTY OF  
<INSERT COMPANY NAME HERE>. ANY  
REPRODUCTION IN PART OR AS A WHOLE  
WITHOUT THE WRITTEN PERMISSION OF  
<INSERT COMPANY NAME HERE> IS  
PROHIBITED.

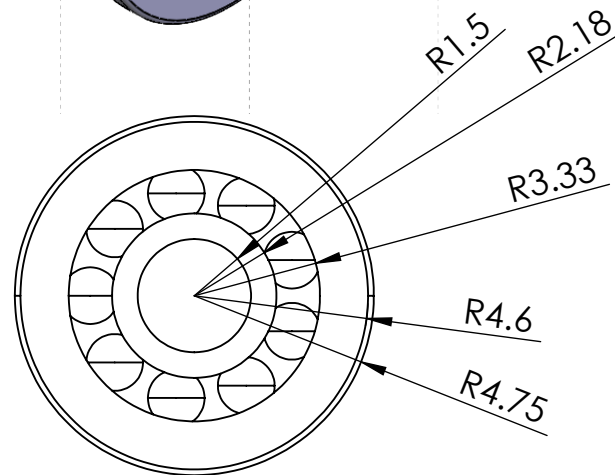
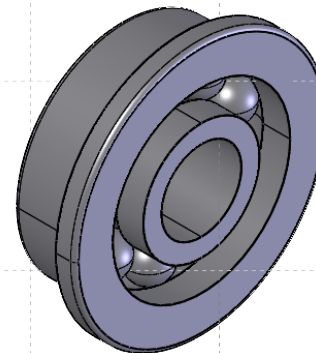
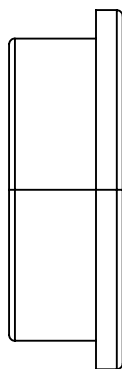
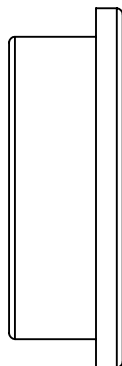
		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm$
		ANGULAR: MACH $\pm$ BEND $\pm$
		TWO PLACE DECIMAL $\pm$
		THREE PLACE DECIMAL $\pm$
		INTERPRET GEOMETRIC
		TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
A	704	
SCALE: 2:1	WEIGHT:	SHEET 45 OF 52

B

A



B

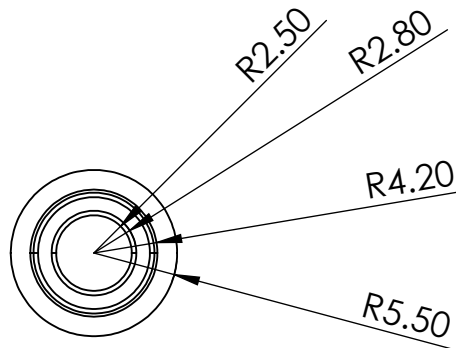
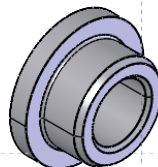
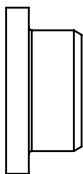
A

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS  
DRAWING IS THE SOLE PROPERTY OF  
<INSERT COMPANY NAME HERE>. ANY  
REPRODUCTION IN PART OR AS A WHOLE  
WITHOUT THE WRITTEN PERMISSION OF  
<INSERT COMPANY NAME HERE> IS  
PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm$
		ANGULAR: MACH $\pm$ BEND $\pm$
		TWO PLACE DECIMAL $\pm$
		THREE PLACE DECIMAL $\pm$
		INTERPRET GEOMETRIC
		TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
<b>A</b>	705	
SCALE: 5:1	WEIGHT:	SHEET 46 OF 52

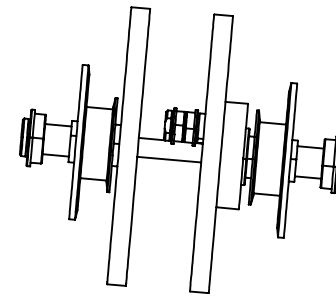
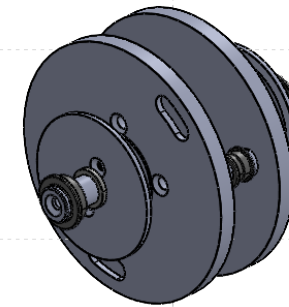
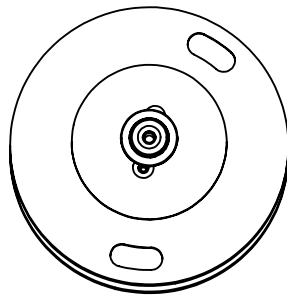
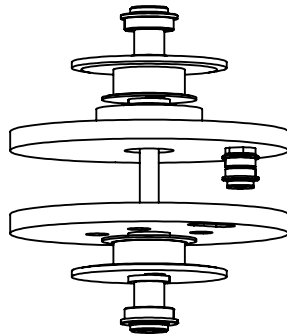


**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Tohoku University		
		DIMENSIONS ARE IN INCHES	DRAWN			TITLE: Adriel Imaran Santos C2TB1701		
		TOLERANCES:	CHECKED					
		FRACTIONAL ±	ENG APPR.					
		ANGULAR: MACH ±    BEND ±	MFG APPR.					
		TWO PLACE DECIMAL ±	Q.A.					
		THREE PLACE DECIMAL ±	COMMENTS:			SIZE	DWG. NO.	REV
		INTERPRET GEOMETRIC TOLERANCING PER:				<b>A</b>	706	
		MATERIAL						
NEXT ASSY	USED ON	FINISH				SCALE: 2:1    WEIGHT:    SHEET 47 OF 52		
APPLICATION		DO NOT SCALE DRAWING						

B

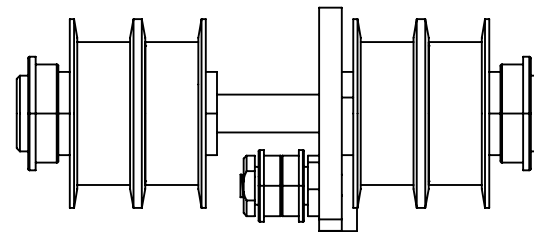
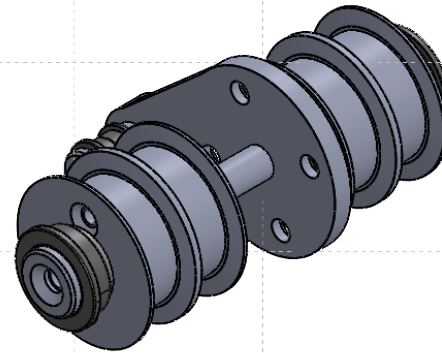
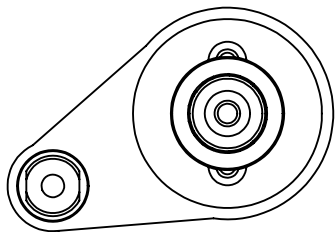
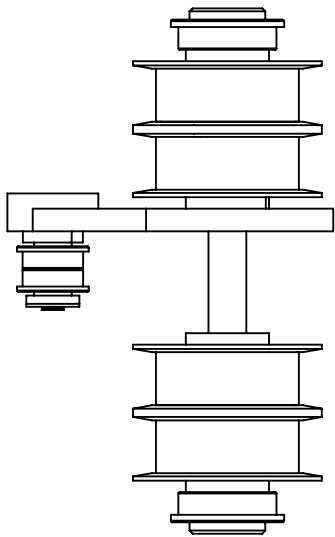
A



**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	Tohoku University		
		DIMENSIONS ARE IN INCHES		DRAWN		TITLE: Adriel Imaran Santos C2TB1701		
		TOLERANCES:		CHECKED				
		FRACTIONAL $\pm$		ENG APPR.				
		ANGULAR: MACH $\pm$ BEND $\pm$		MFG APPR.				
		TWO PLACE DECIMAL $\pm$		Q.A.				
		THREE PLACE DECIMAL $\pm$		COMMENTS:				
		INTERPRET GEOMETRIC TOLERANCING PER:				SIZE	DWG. NO.	REV
		MATERIAL				<b>A</b>	<b>A</b>	
NEXT ASSY	USED ON	FINISH				SCALE: 1:2	WEIGHT:	SHEET 48 OF 52
	APPLICATION	DO NOT SCALE DRAWING						





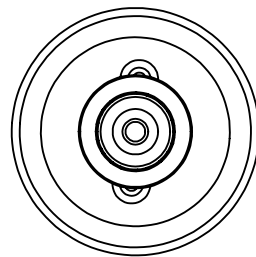
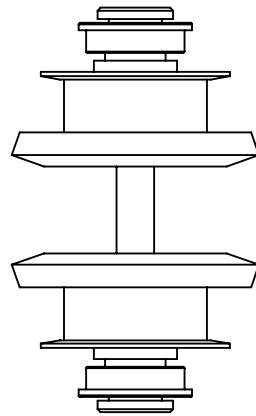
**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm$
		ANGULAR: MACH $\pm$ BEND $\pm$
		TWO PLACE DECIMAL $\pm$
		THREE PLACE DECIMAL $\pm$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
<b>A</b>	<b>B</b>	
SCALE: 1:1	WEIGHT:	SHEET 49 OF 52

B

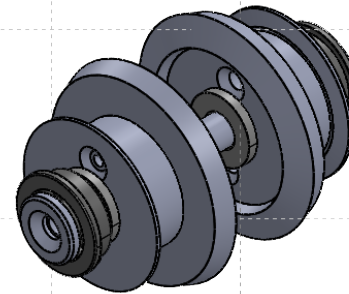


A

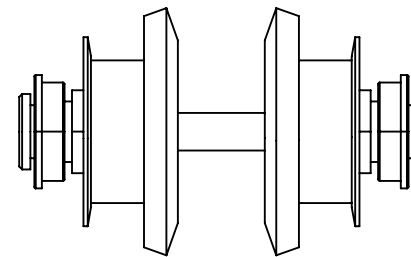
**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS  
DRAWING IS THE SOLE PROPERTY OF  
<INSERT COMPANY NAME HERE>. ANY  
REPRODUCTION IN PART OR AS A WHOLE  
WITHOUT THE WRITTEN PERMISSION OF  
<INSERT COMPANY NAME HERE> IS  
PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm$
		ANGULAR: MACH $\pm$ BEND $\pm$
		TWO PLACE DECIMAL $\pm$
		THREE PLACE DECIMAL $\pm$
		INTERPRET GEOMETRIC
		TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

1



B



A

Tohoku University		
TITLE:		
Adriel Imaran Santoso		
C2TB1701		
SIZE	DWG. NO.	REV
A	C	
SCALE: 1:1	WEIGHT:	SHEET 50 OF 52

2

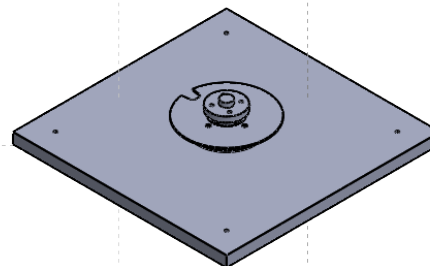
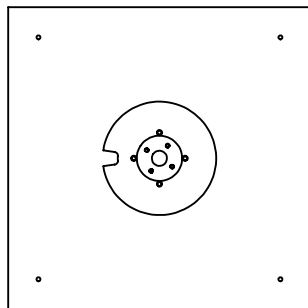
1

2

1

B

B



A

A

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS  
DRAWING IS THE SOLE PROPERTY OF  
<INSERT COMPANY NAME HERE>. ANY  
REPRODUCTION IN PART OR AS A WHOLE  
WITHOUT THE WRITTEN PERMISSION OF  
<INSERT COMPANY NAME HERE> IS  
PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:
		DIMENSIONS ARE IN INCHES
		TOLERANCES:
		FRACTIONAL $\pm$
		ANGULAR: MACH $\pm$ BEND $\pm$
		TWO PLACE DECIMAL $\pm$
		THREE PLACE DECIMAL $\pm$
		INTERPRET GEOMETRIC
		TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

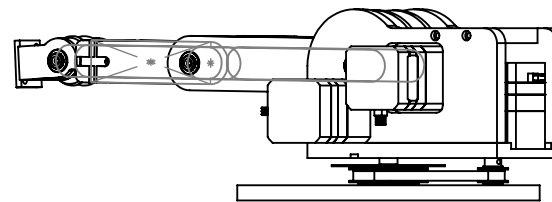
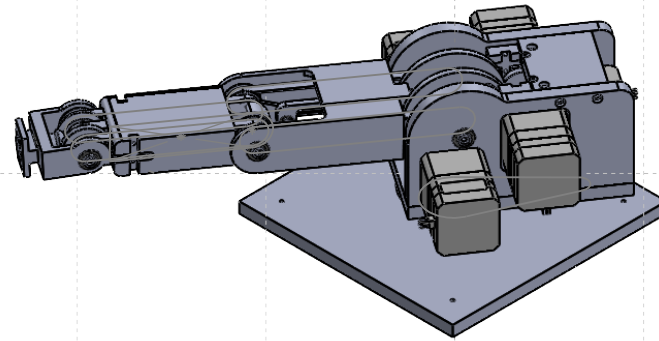
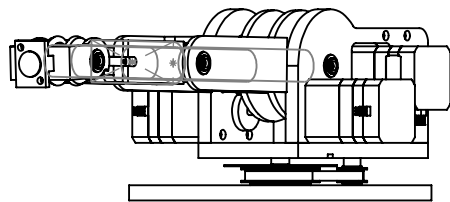
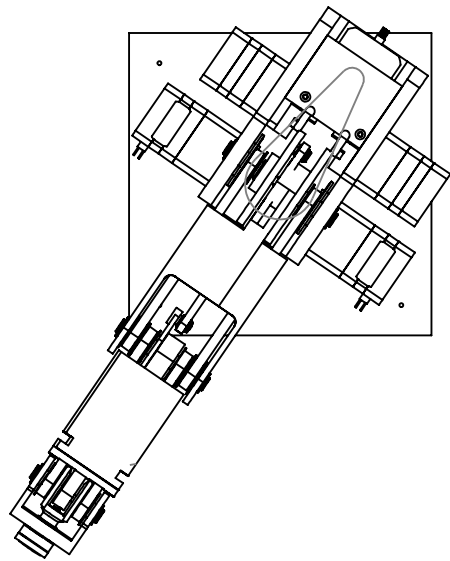
Tohoku University		
TITLE:		
Adriel Imaran Santos		
C2TB1701		
SIZE	DWG. NO.	REV
A	X-X	
SCALE: 1:5	WEIGHT:	SHEET 51 OF 52

2

1

B

A



B

A

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF <INSERT COMPANY NAME HERE>. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF <INSERT COMPANY NAME HERE> IS PROHIBITED.

		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES	DRAWN		
		TOLERANCES:	CHECKED		
		FRACTIONAL $\pm$	ENG APPR.		
		ANGULAR: MACH $\pm$ BEND $\pm$	MFG APPR.		
		TWO PLACE DECIMAL $\pm$	Q.A.		
		THREE PLACE DECIMAL $\pm$	COMMENTS:		
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
NEXT ASSY	USED ON	FINISH			
	APPLICATION	DO NOT SCALE DRAWING			

Tohoku University		
TITLE:		
Adriel Imaran Santos C2TB1701		
SIZE	DWG. NO.	REV
A	assembly	
SCALE: 1:5	WEIGHT:	SHEET 52 OF 52