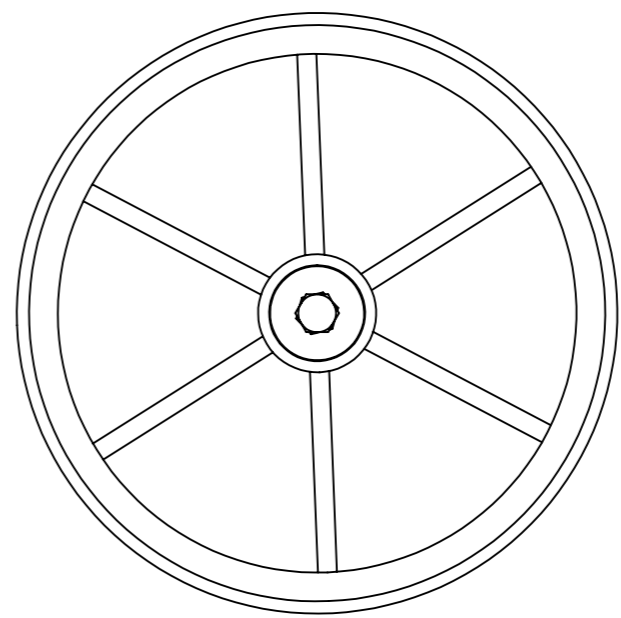
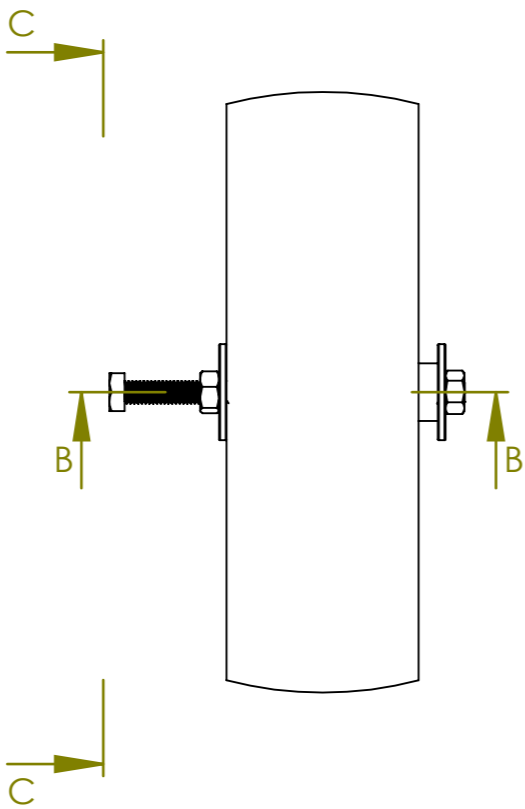
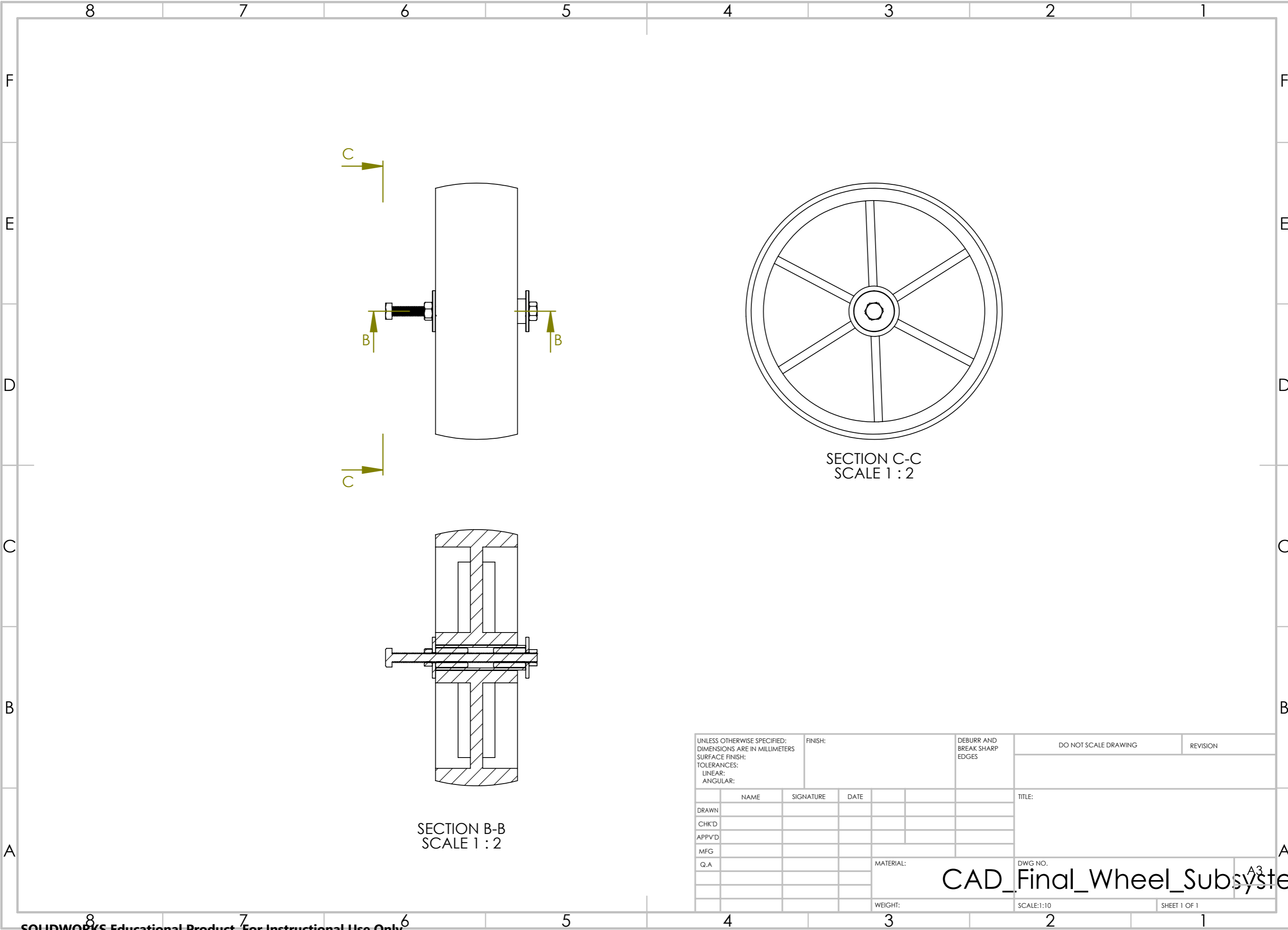


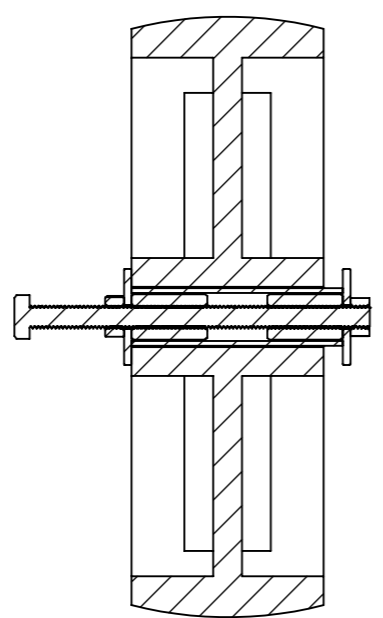
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES: LINEAR: ANGULAR:		FINISH:		DEBURR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
DRAWN		NAME		SIGNATURE		DATE		TITLE:	
CHK'D									
APPV'D									
MFG									
Q.A						MATERIAL:		DWG NO.	
						WEIGHT:		SCALE:1:10	
								SHEET 1 OF 1	

CAD_Final

A3



SECTION C-C
SCALE 1 : 2



SECTION B-B
SCALE 1 : 2

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS		FINISH:		DEBURR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
SURFACE FINISH:									
TOLERANCES:									
LINEAR:									
ANGULAR:									
DRAWN		NAME	SIGNATURE	DATE			TITLE:		
CHK'D									
APPV'D									
MFG									
Q.A					MATERIAL:		DWG NO.		A3
					WEIGHT:		SCALE:1:10		SHEET 1 OF 1

CAD_Final_Wheel_Subsystem

4 3 2 1

F

F

E

E

D

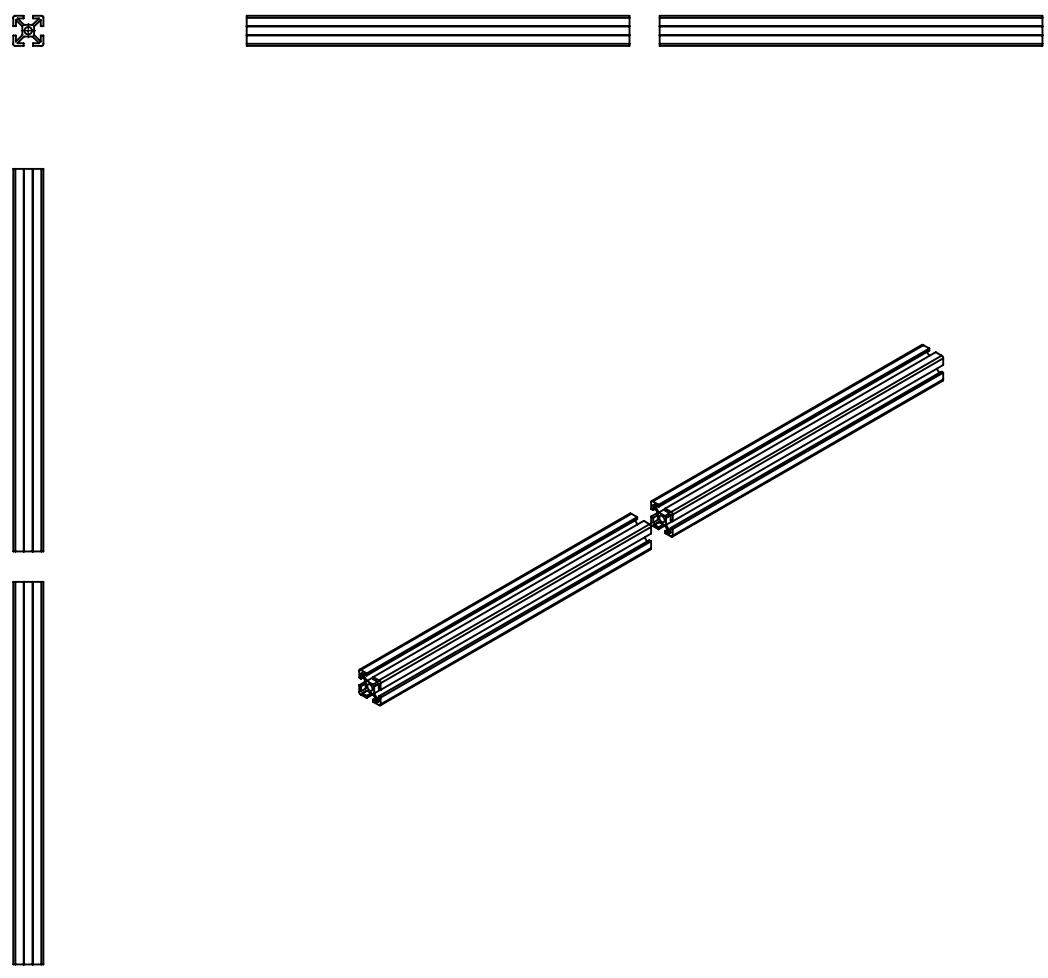
D

C

C

B

B



UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN MILLIMETERS
 SURFACE FINISH:
 TOLERANCES:
 LINEAR:
 ANGULAR:

FINISH:

DEBURR AND
 BREAK SHARP
 EDGES

DO NOT SCALE DRAWING

REVISION

	NAME	SIGNATURE	DATE
DRAWN			
CHK'D			
APPV'D			
MFG			
Q.A			

TITLE:
**Framing of
 different sizes**

DWG NO.
2020_Aluminum_Extention_20.7

SCALE:1:5

SHEET 1 OF 1

4 3 2 1

4 3 2 1

F

F

E

E

D

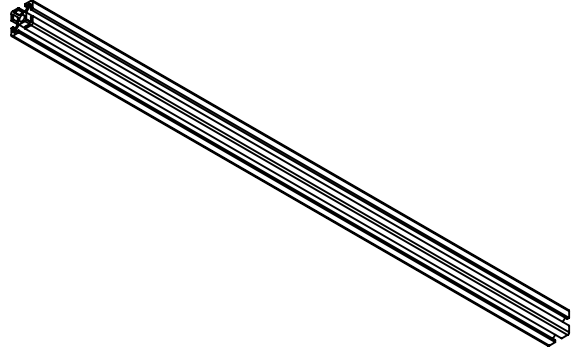
D

C

C

B

B



UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS
SURFACE FINISH:
TOLERANCES:
LINEAR:
ANGULAR:

FINISH:

DEBURR AND
BREAK SHARP
EDGES

DO NOT SCALE DRAWING

REVISION

	NAME	SIGNATURE	DATE
DRAWN			
CHK'D			
APPV'D			
MFG			
Q.A			

TITLE:
**Framing of
different sizes**

MATERIAL:
2020_Aluminum_Extention_Ends

DWG NO.
SCALE:1:5
SHEET 1 OF 1

4 3 2 1

A

A

4 3 2 1

F

F

E

E

D

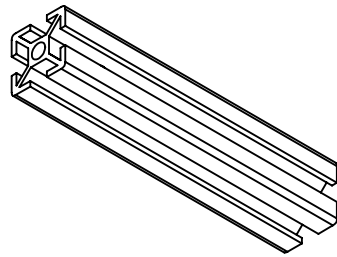
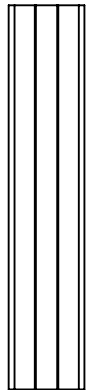
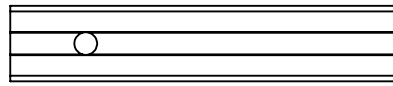
D

C

C

B

B



UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS
SURFACE FINISH:
TOLERANCES:
LINEAR:
ANGULAR:

FINISH:

DEBURR AND
BREAK SHARP
EDGES

DO NOT SCALE DRAWING

REVISION

	NAME	SIGNATURE	DATE		
DRAWN					
CHK'D					
APPV'D					
MFG					
Q.A					

TITLE:

Framing of different sizes

MATERIAL:

2020_Aluminum_Extention_Hole

DWG NO.

A4

WEIGHT:

SCALE:1:2

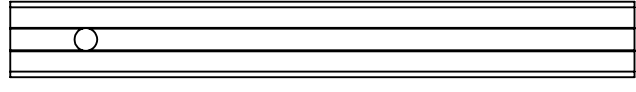
SHEET 1 OF 1

4 3 2 1

4 3 2 1

F

F

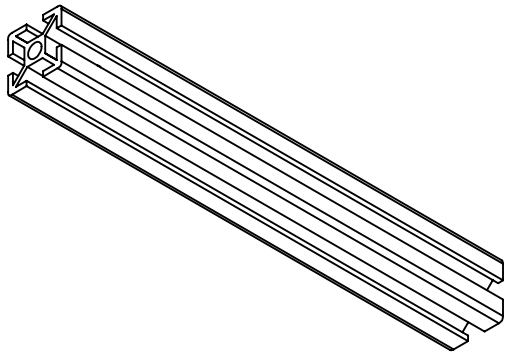
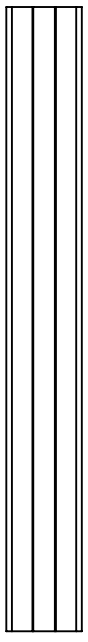


E

E

D

D



C

C

B

B

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS
SURFACE FINISH:
TOLERANCES:
LINEAR:
ANGULAR:

FINISH:

DEBURR AND
BREAK SHARP
EDGES

DO NOT SCALE DRAWING

REVISION

	NAME	SIGNATURE	DATE	
DRAWN				
CHK'D				
APPV'D				
MFG				
Q.A				

TITLE:
**Framing of
different sizes**

MATERIAL:
2020_Aluminum_Extention_Hole

DWG NO.
SCALE:1:2

SHEET 1 OF 1

4 3 2 1

4

3

2

1

F

F

E

E

D

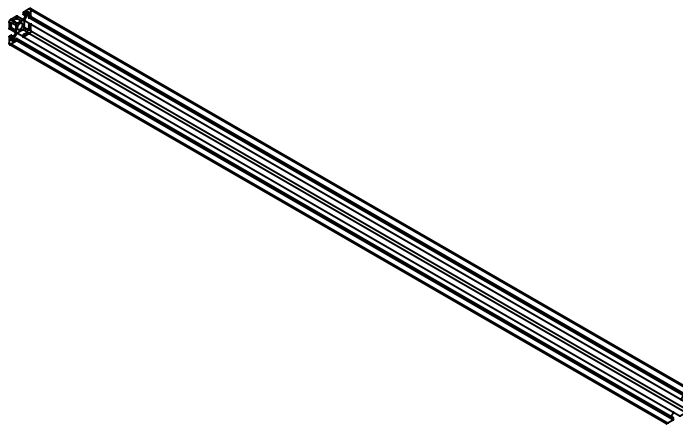
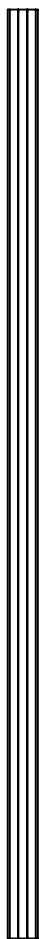
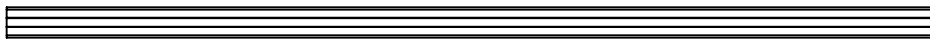
D

C

C

B

B



UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS
SURFACE FINISH:
TOLERANCES:
LINEAR:
ANGULAR:

FINISH:

DEBURR AND
BREAK SHARP
EDGES

DO NOT SCALE DRAWING

REVISION

	NAME	SIGNATURE	DATE
DRAWN			
CHK'D			
APPV'D			
MFG			
Q.A			

TITLE:

Framing of different sizes

MATERIAL:

2020_Aluminum_Extention_Middle

DWG NO.

WEIGHT:

SCALE:1:10

SHEET 1 OF 1

4

3

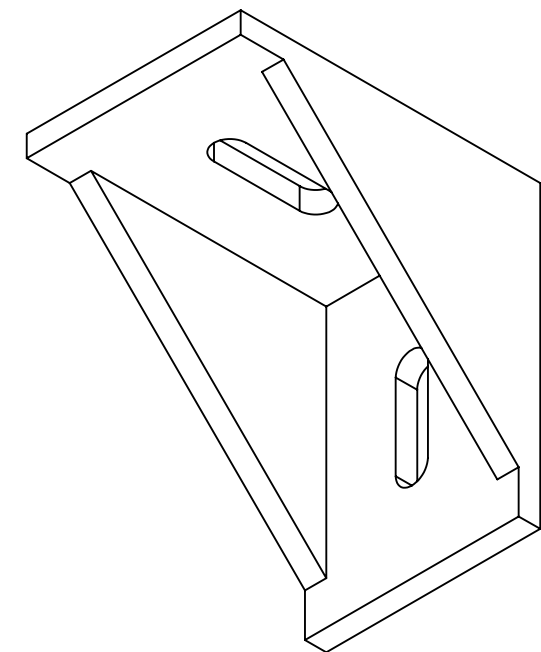
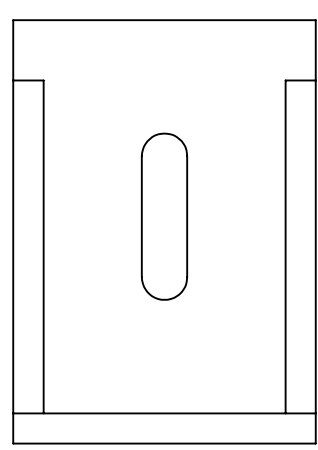
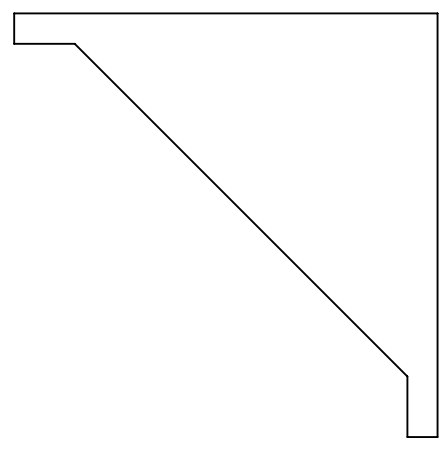
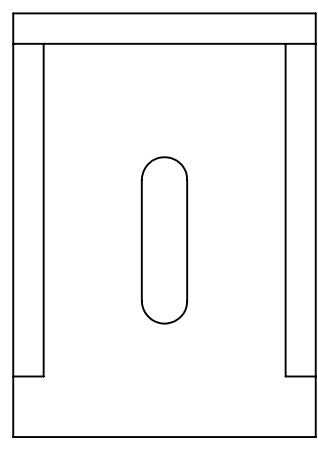
2

1

A

A

A1



UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN MILLIMETERS
 SURFACE FINISH:
 TOLERANCES:
 LINEAR:
 ANGULAR:

FINISH:

DEBURR AND
 BREAK SHARP
 EDGES

DO NOT SCALE DRAWING

REVISION

	NAME	SIGNATURE	DATE
DRAWN			
CHK'D			
APPV'D			
MFG			
Q.A			

TITLE:
**Commercial
 connection for
 2020 extrusions
 2020_Bracket**

DWG NO. **A4**

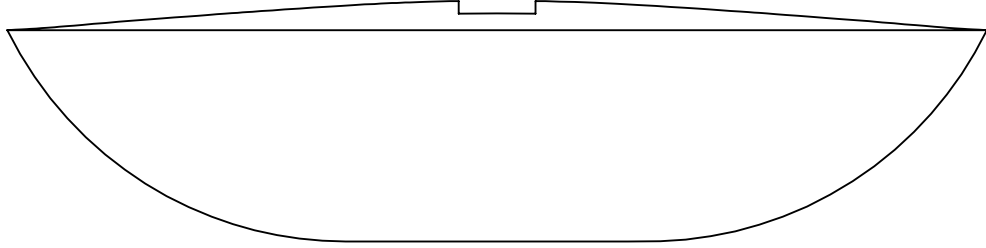
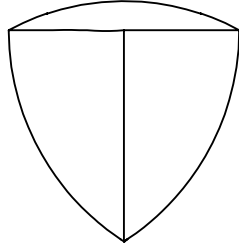
SCALE:2:1

SHEET 1 OF 1

4 3 2 1

F

F

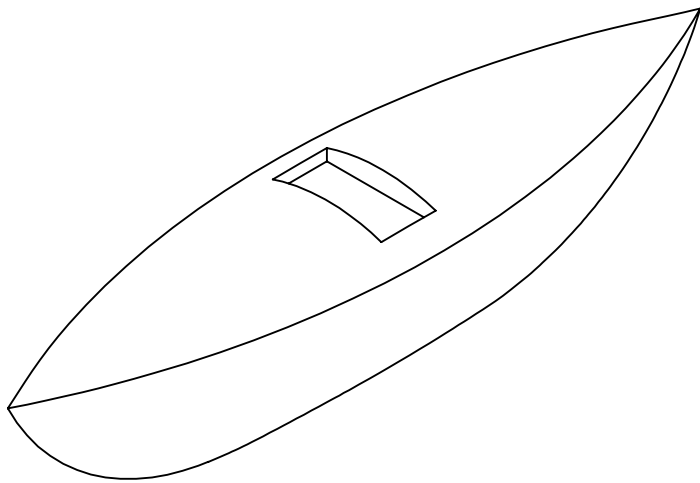
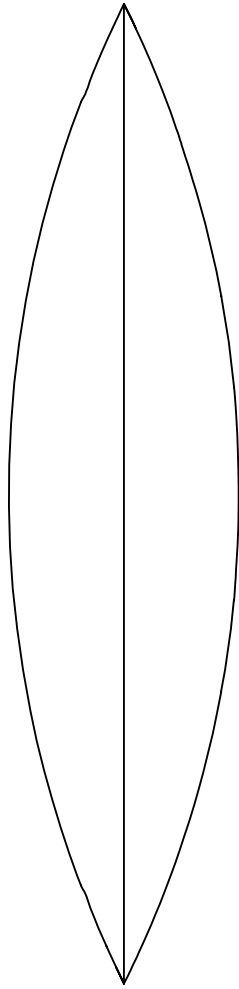


E

E

D

D



C

C

B

B

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS
SURFACE FINISH:
TOLERANCES:
LINEAR:
ANGULAR:

FINISH:

DEBURR AND
BREAK SHARP
EDGES

DO NOT SCALE DRAWING

REVISION

	NAME	SIGNATURE	DATE
DRAWN			
CHK'D			
APPV'D			
MFG			
Q.A			

TITLE:
**The current sized
pontoon**

DWG NO.
BroCraft_Pontoon ^{A4}

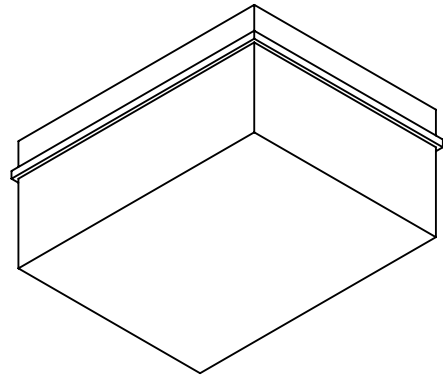
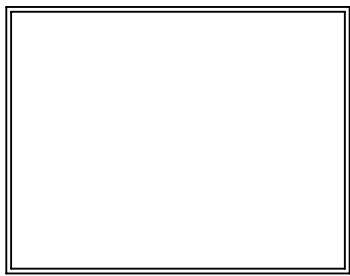
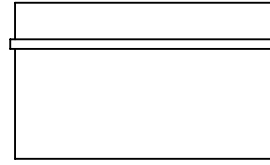
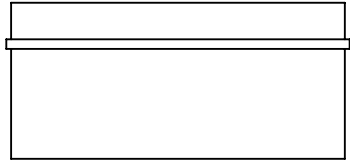
SCALE:1:10

SHEET 1 OF 1

A

A

4 3 2 1



UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN MILLIMETERS
 SURFACE FINISH:
 TOLERANCES:
 LINEAR:
 ANGULAR:

FINISH:

DEBURR AND
 BREAK SHARP
 EDGES

DO NOT SCALE DRAWING

REVISION

	NAME	SIGNATURE	DATE
DRAWN			
CHK'D			
APPV'D			
MFG			
Q.A			

TITLE:

Electrical box that
 holds all hardware

MATERIAL:

DWG NO.

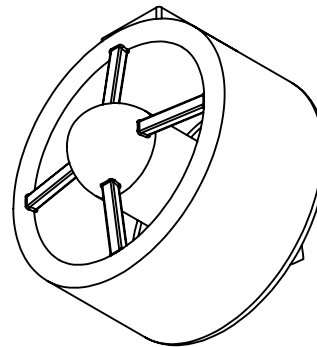
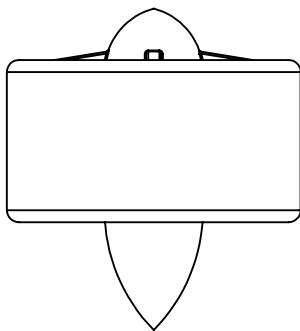
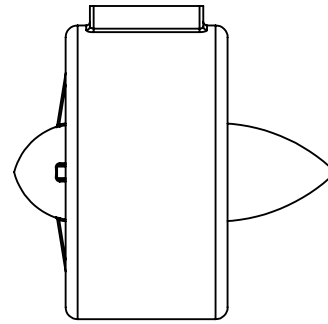
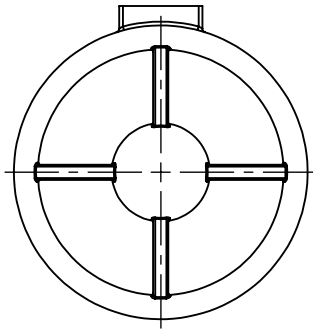
Case

A4

WEIGHT:

SCALE:1:10

SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN MILLIMETERS
 SURFACE FINISH:
 TOLERANCES:
 LINEAR:
 ANGULAR:

FINISH:

DEBURR AND
 BREAK SHARP
 EDGES

DO NOT SCALE DRAWING

REVISION

	NAME	SIGNATURE	DATE
DRAWN			
CHKD			
APPV'D			
MFG			
Q.A			

TITLE:

Small lateral
 correction thruster

DWG NO.

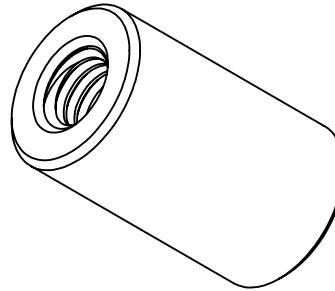
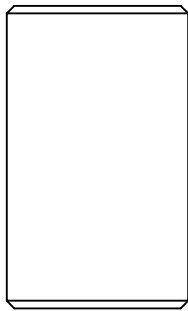
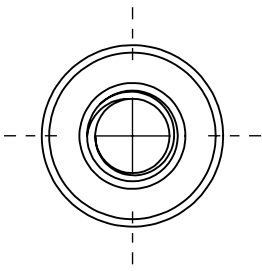
Final_Apis_Queen^{A4}

MATERIAL:

WEIGHT:

SCALE:1:2

SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN MILLIMETERS
 SURFACE FINISH:
 TOLERANCES:
 LINEAR:
 ANGULAR:

FINISH:

DEBURR AND
 BREAK SHARP
 EDGES

DO NOT SCALE DRAWING

REVISION

	NAME	SIGNATURE	DATE
DRAWN			
CHK'D			
APPV'D			
MFG			
Q.A			

TITLE:

M6x1 12x20mm

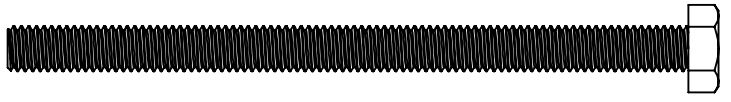
DWG NO. A4

SCALE:2:1 SHEET 1 OF 1

4 3 2 1

F

F

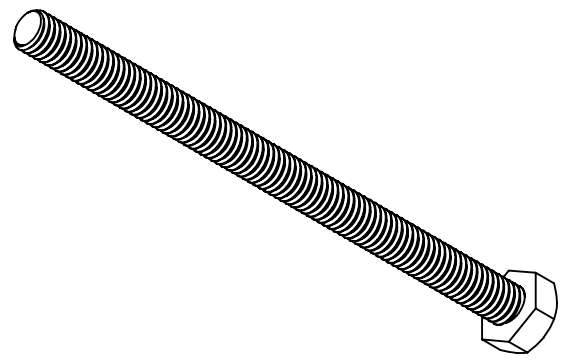


E

E

D

D



C

C

B

B

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS
SURFACE FINISH:
TOLERANCES:
LINEAR:
ANGULAR:

FINISH:

DEBURR AND
BREAK SHARP
EDGES

DO NOT SCALE DRAWING

REVISION

	NAME	SIGNATURE	DATE		
DRAWN					
CHK'D					
APPV'D					
MFG					
Q.A					

TITLE:

MATERIAL:

WEIGHT:

DWG NO. **M6x1 90mm**

SCALE:1:1

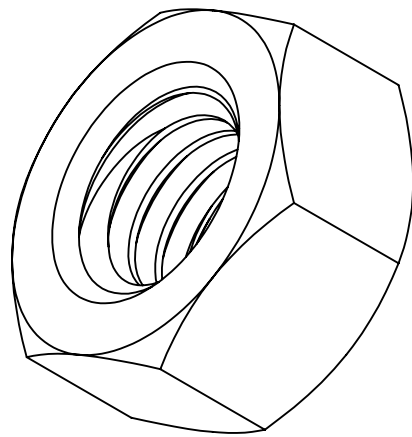
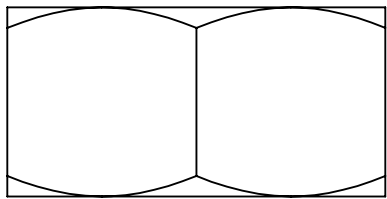
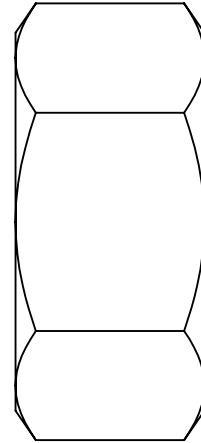
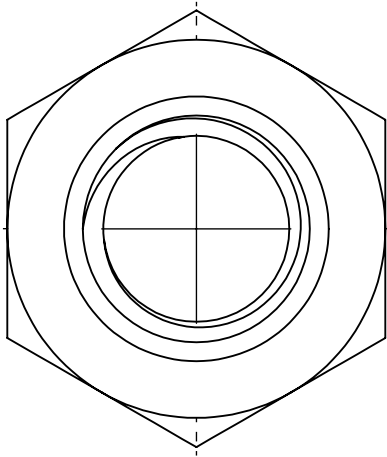
SHEET 1 OF 1

A4

A

A

4 3 2 1



UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN MILLIMETERS
 SURFACE FINISH:
 TOLERANCES:
 LINEAR:
 ANGULAR:

FINISH:

DEBURR AND
 BREAK SHARP
 EDGES

DO NOT SCALE DRAWING

REVISION

	NAME	SIGNATURE	DATE	
DRAWN				
CHK'D				
APPV'D				
MFG				
Q.A				

TITLE:

MATERIAL:

DWG NO.

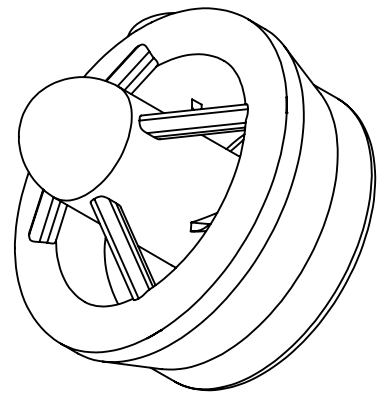
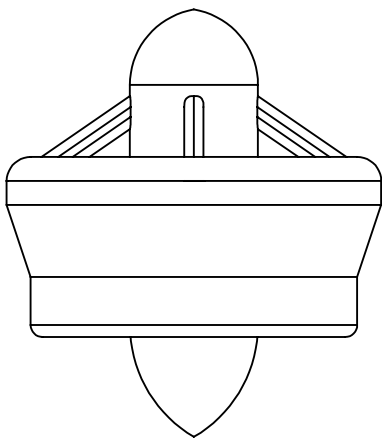
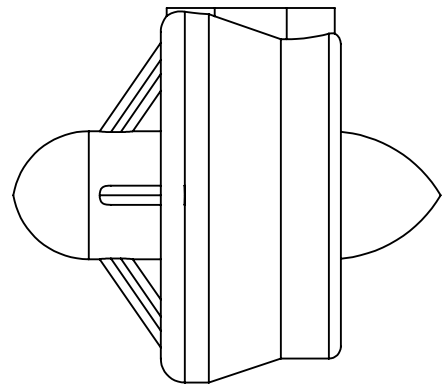
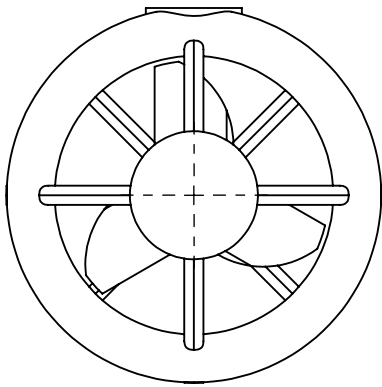
M6x1 Nut

A4

WEIGHT:

SCALE:5:1

SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN MILLIMETERS
 SURFACE FINISH:
 TOLERANCES:
 LINEAR:
 ANGULAR:

FINISH:

DEBURR AND
 BREAK SHARP
 EDGES

DO NOT SCALE DRAWING

REVISION

	NAME	SIGNATURE	DATE
DRAWN			
CHK'D			
APPV'D			
MFG			
Q.A			

TITLE:
**Two T200 main
 forward thrusters**

DWG NO.
Thruster_Final

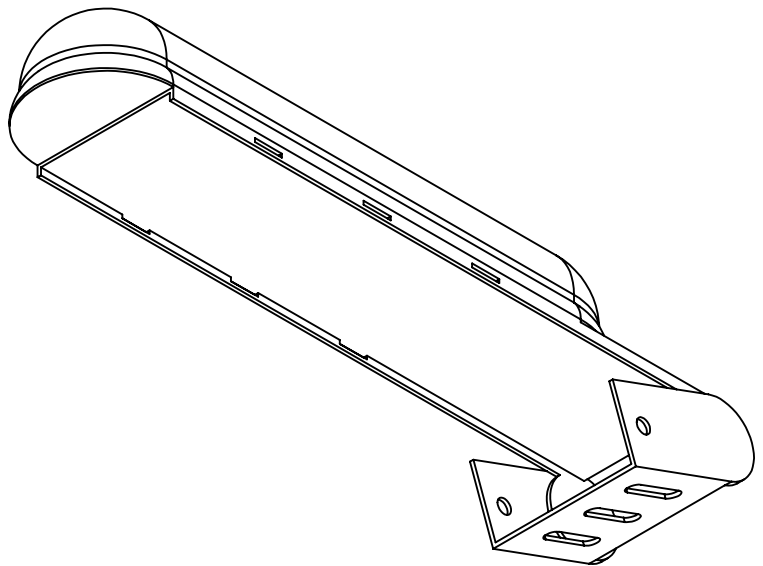
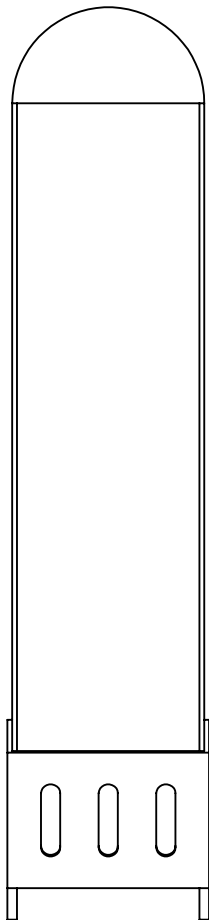
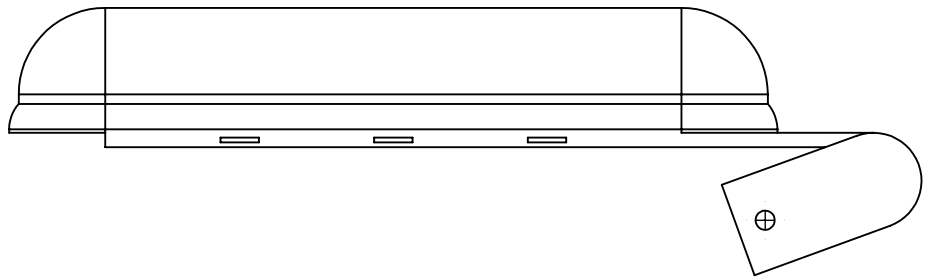
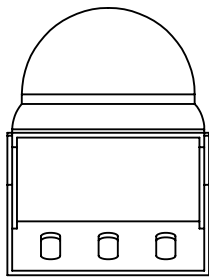
SCALE: 1:2

SHEET 1 OF 1

MATERIAL:

WEIGHT:

A4



UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN MILLIMETERS
 SURFACE FINISH:
 TOLERANCES:
 LINEAR:
 ANGULAR:

FINISH:

DEBURR AND
 BREAK SHARP
 EDGES

DO NOT SCALE DRAWING

REVISION

	NAME	SIGNATURE	DATE
DRAWN			
CHK'D			
APPV'D			
MFG			
Q.A			

TITLE:

Transducer Sonar
 for scanning

DWG NO.

Transducer

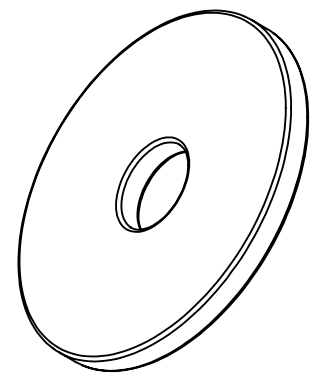
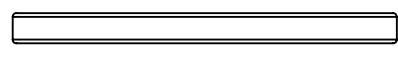
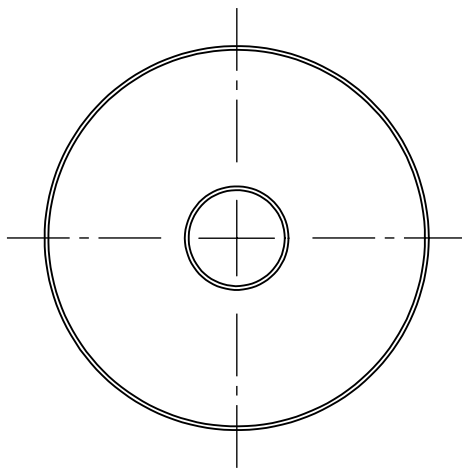
A4

MATERIAL:

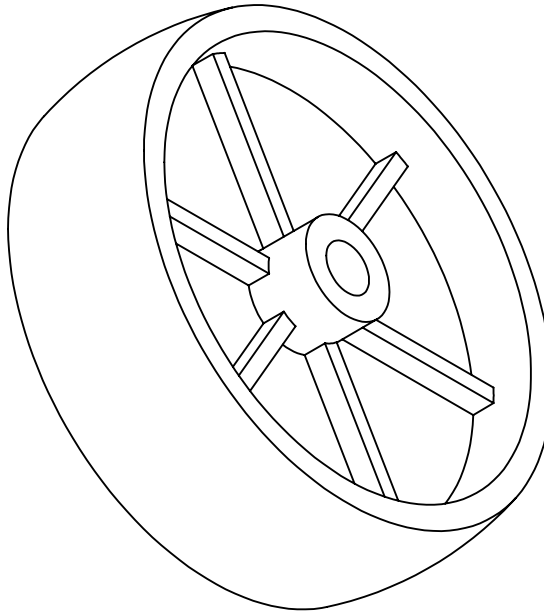
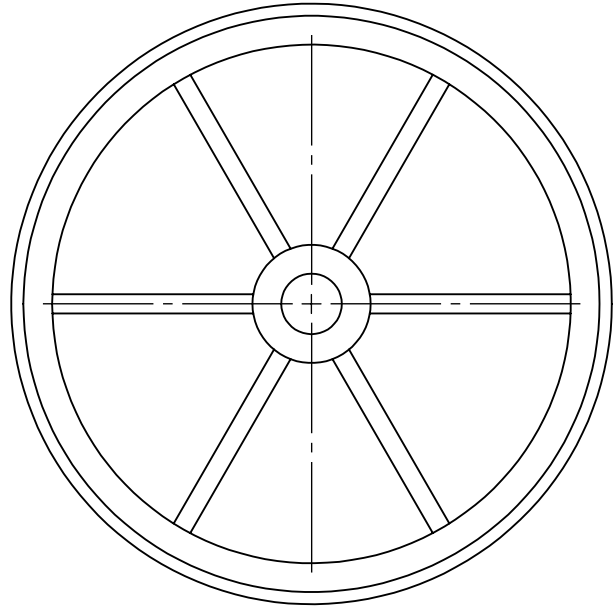
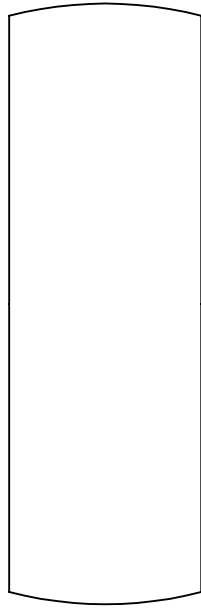
WEIGHT:

SCALE:1:5

SHEET 1 OF 1



UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES: LINEAR: ANGULAR:			FINISH:	DEBURR AND BREAK SHARP EDGES	DO NOT SCALE DRAWING	REVISION																														
<table border="1"> <thead> <tr> <th>NAME</th> <th>SIGNATURE</th> <th>DATE</th> <th></th> <th></th> </tr> </thead> <tbody> <tr><td>DRAWN</td><td></td><td></td><td></td><td></td></tr> <tr><td>CHK'D</td><td></td><td></td><td></td><td></td></tr> <tr><td>APPV'D</td><td></td><td></td><td></td><td></td></tr> <tr><td>MFG</td><td></td><td></td><td></td><td></td></tr> <tr><td>Q.A</td><td></td><td></td><td></td><td></td></tr> </tbody> </table>					NAME	SIGNATURE	DATE			DRAWN					CHK'D					APPV'D					MFG					Q.A					TITLE:	
NAME	SIGNATURE	DATE																																		
DRAWN																																				
CHK'D																																				
APPV'D																																				
MFG																																				
Q.A																																				
MATERIAL:				DWG NO.		A4																														
WEIGHT:				SCALE:2:1		SHEET 1 OF 1																														



UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN MILLIMETERS
 SURFACE FINISH:
 TOLERANCES:
 LINEAR:
 ANGULAR:

FINISH:

DEBURR AND
 BREAK SHARP
 EDGES

DO NOT SCALE DRAWING

REVISION

	NAME	SIGNATURE	DATE	
DRAWN				
CHK'D				
APPV'D				
MFG				
Q.A				

TITLE:

MATERIAL:

DWG NO.

Wheel_Final

A4

WEIGHT:

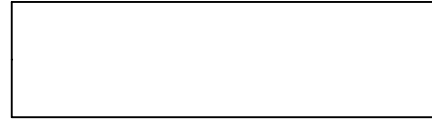
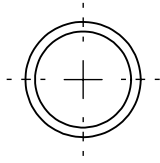
SCALE:1:2

SHEET 1 OF 1

4 3 2 1

F

F

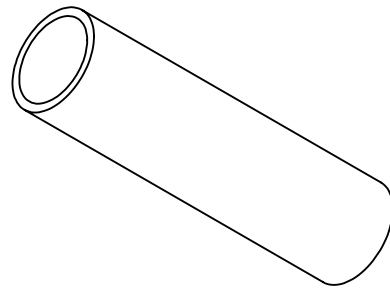


E

E

D

D



C

C

B

B

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS
SURFACE FINISH:
TOLERANCES:
LINEAR:
ANGULAR:

FINISH:

DEBURR AND
BREAK SHARP
EDGES

DO NOT SCALE DRAWING

REVISION

	NAME	SIGNATURE	DATE		
DRAWN					
CHK'D					
APPV'D					
MFG					
Q.A					

TITLE:

MATERIAL:

DWG NO.

Wheel_Tube

A4

WEIGHT:

SCALE:1:1

SHEET 1 OF 1

4 3 2 1