



Model Portfolio of Qingbiao Li from the University of Edinburgh

Only for interview.

Confidential information has been removed.

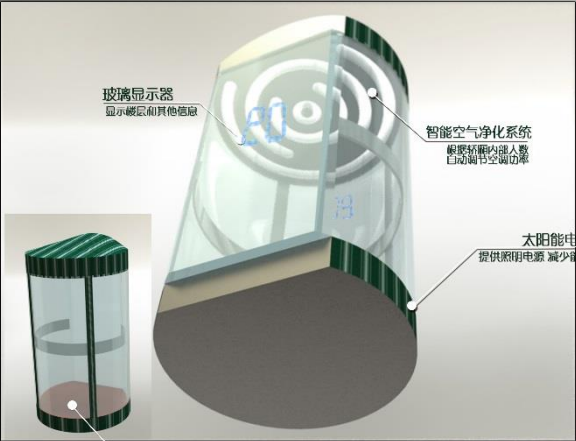
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1. Elevator concept design

- First Prize of "ThyssenKrupp" Elevator Cab Design Competition
College of Automation Science and Engineering, in SCUT

1.1 3D Model and concept description



玻璃显示器
显示楼层和其他信息

智能空气净化系统
根据轿厢内人数
自动调节空气浓度

太阳能电池
提供照明电源 减少能耗

重量感应地毯
为其他系统提供重量数据


Greenshade ByTeam1

“绿影”观光电梯——创新，只为让生活更美好。

用户友好，为乘客设计出合适的电梯尺寸，根据“人体基本尺寸”体贴地电梯扶手在您最合适的高度，方便按键，放大的楼层显示，让乘客直观知晓楼层变更，避免进出电梯的失误。

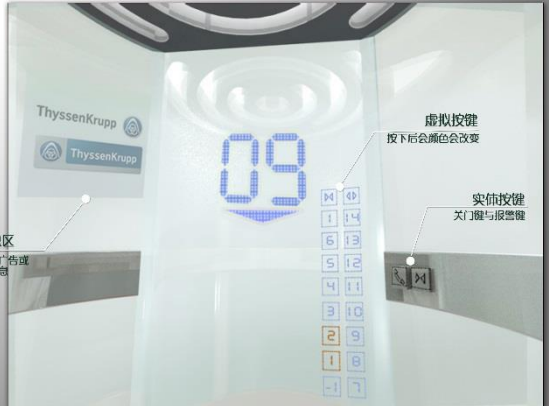
环保绿色，利用太阳能电池板吸收太阳能化为己用，同时感知外在太阳光，改变玻璃透光率，天花板灯的亮度及楼层显示屏亮度，使得乘客在更舒适的合适亮度环境。

崇尚简约，采用光电玻璃，去掉大部分实体按键，采用触摸屏技术，充分节约空间，扩大乘客观景视野，打破常规的设计，只为与您分享电梯新理念，让你享受直登云霄的乐趣。



在环境光线改变时，电梯会自动调整内部灯光和显示的颜色，以达到最佳识别效果。

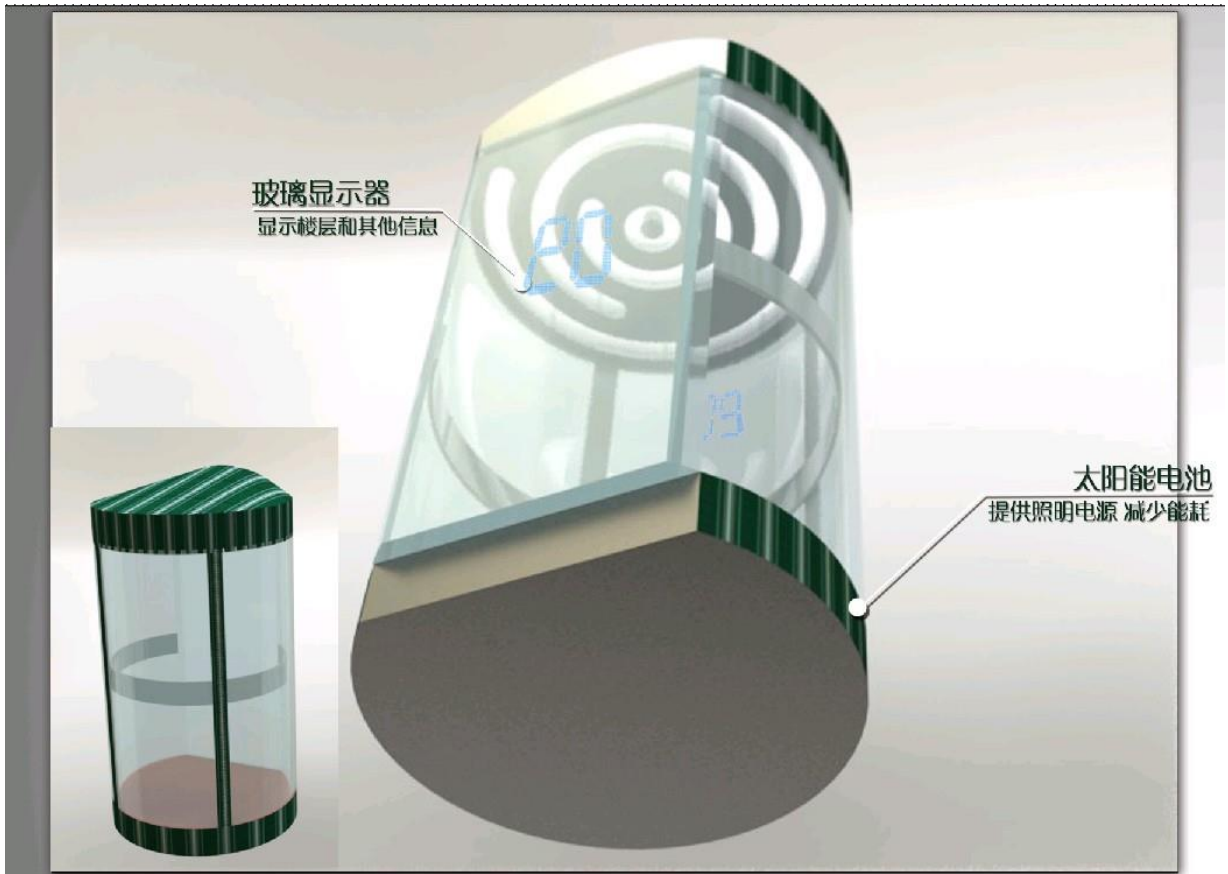
环境亮度变暗 自动提高灯光亮度 提高数字对比度



广告信息区
可滚动播放广告或提供楼层信息

虚拟按键
按下后会颜色会改变

实体按键
关门键与报警键



1.2 2D Technical Drawing

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED

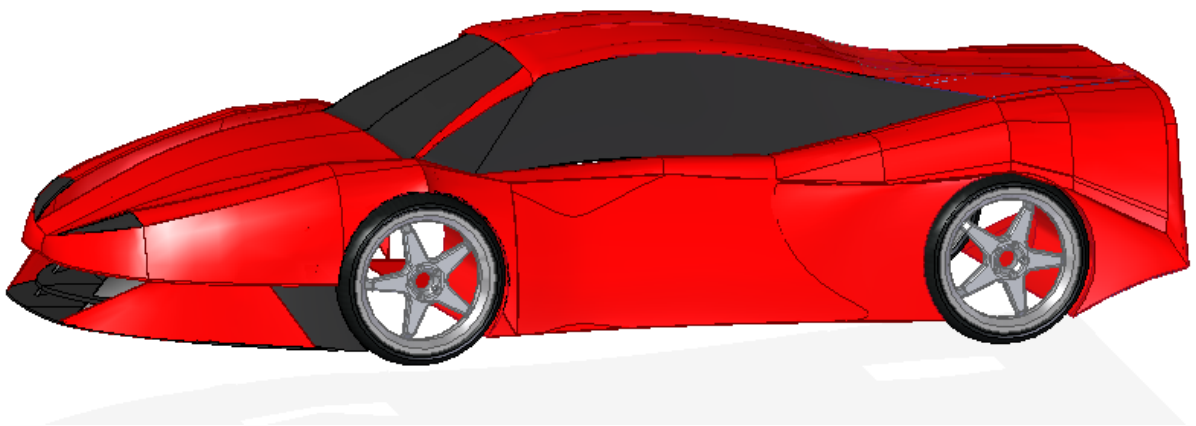
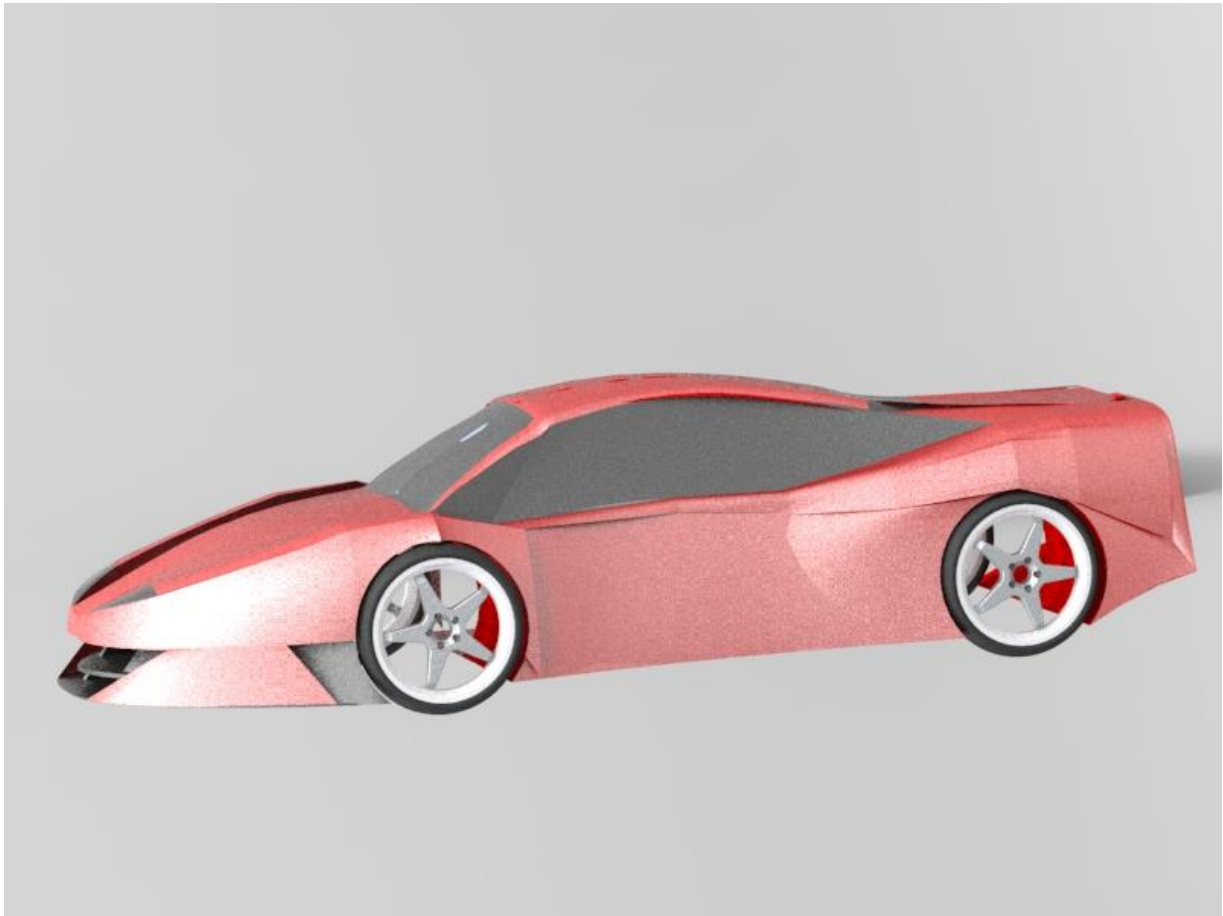
DRAWN		NAME	DATE	School of Engineering Edinburgh University	
Qingbiao Li		Qingbiao Li	11/27/14	TITLE	
Elevators		Elevators		Elevator Concept design-ceiling	
SIZE	DWG NO	FILE NAME: EdinburgUnitemplate.dft		REV	
A4		SCALE		WEIGHT: SHEET 1 OF 1	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS ANGLES ±1° DISTANCES ±0.1MM					

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED

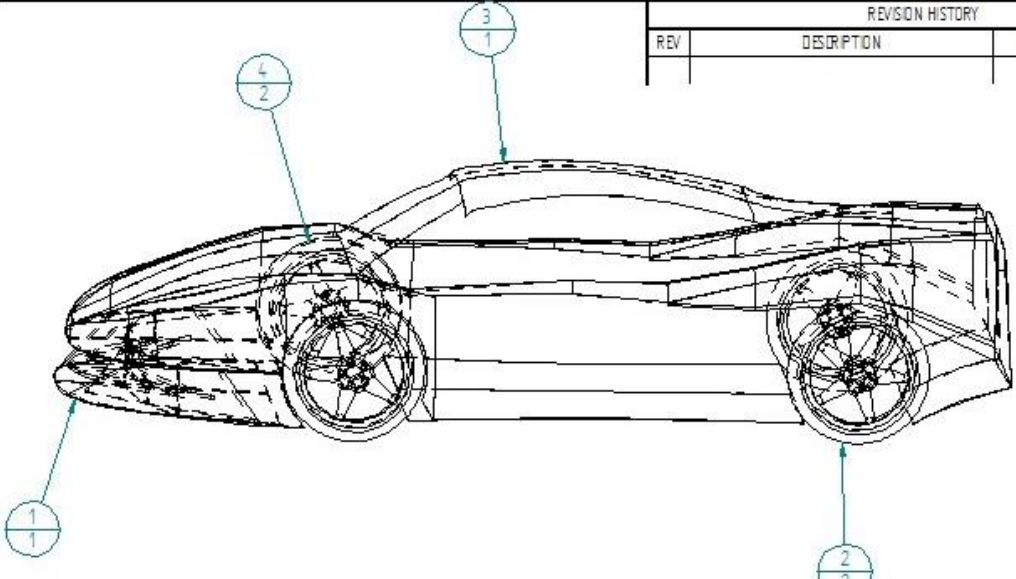
DRAWN		NAME	DATE	School of Engineering Edinburgh University	
Qingbiao Li		Qingbiao Li	11/27/14	TITLE	
Elevators		Elevators		Elevator Concept design-Button	
SIZE	DWG NO	FILE NAME: EdinburgUnitemplate.dft		REV	
A4		SCALE		WEIGHT: SHEET 1 OF 1	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS ANGLES ±1° DISTANCES ±0.1MM					

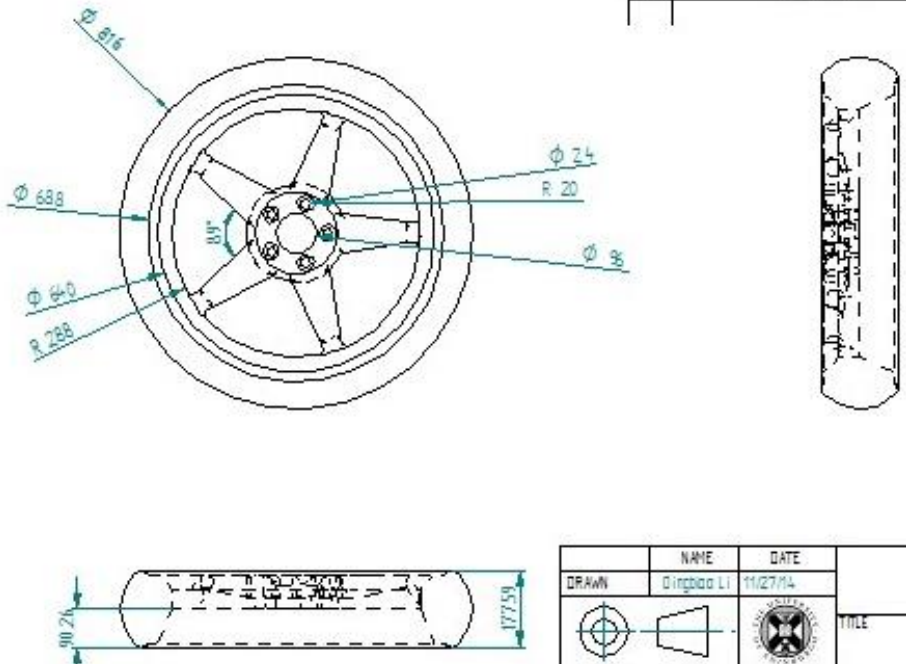
2. Concept Car Design

2.1 3D Model



2.2 2 D Technical Drawing

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Item Number	File Name (no extension)	Author	Quantity	DRAWN	NAME	DATE	
1	model	s B65698	1		Dingbiao Li	11/27/14	School of Engineering Edinburgh University
2	EN-V wheel 16	s B65698	2				TITLE Concept Car Design
3	model_mir3	s B65698	1				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS ANGLES ±1° DISTANCES ±0.1MM
4	EN-V wheel 16_mir2	s B65698	2				SCALE: DWG NO: REV: FILE NAME: EdinburghTemplate.dft
				SCALE:	WEIGHT:	SHEET 1 OF 1	

				REVISION HISTORY			
				REV	DESCRIPTION	DATE	APPROVED
							
DRAWN	NAME	DATE		DRAWN	NAME	DATE	
	Dingbiao Li	11/27/14					School of Engineering Edinburgh University
							TITLE Concept Car Design - wheel
							UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS ANGLES ±1° DISTANCES ±0.1MM
				SCALE:	WEIGHT:	SHEET 1 OF 1	

3. Steering Wheel

3.1 3D Model



3.2 2D Technical Drawing

REV	DESCRIPTION	DATE	APPROVED

Item Number	File Name (no extension)	Author	Quantity
1	Hand_Hy 12	Students	1
2	Outer Housing	Students	1
3	Display Unit	Students	1
4	Button	Students	1
5	Other Parts	Students	1
6	Other Part 02	Students	1
7	Other Part 03	Students	1
8	Yes	Students	2

DATE	
SCALE	
DWG NO	
FILE NAME	

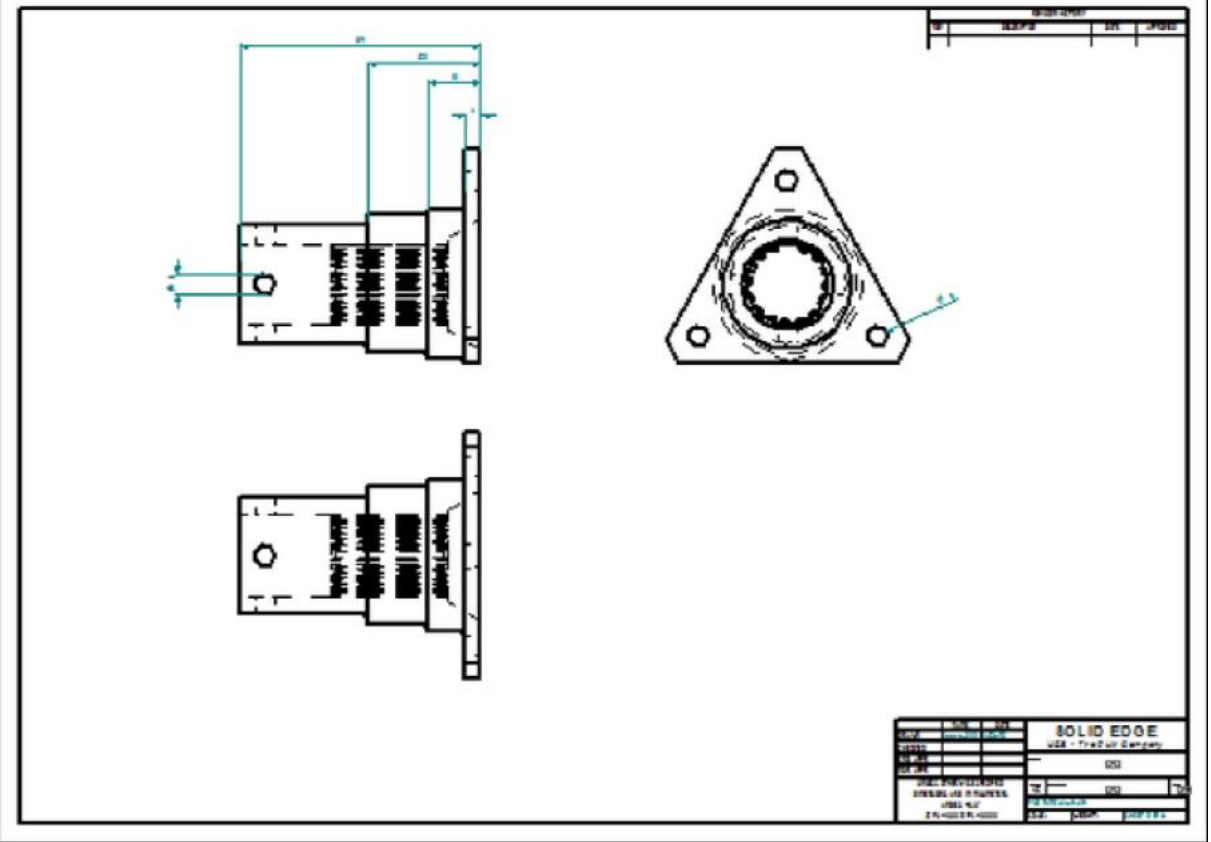
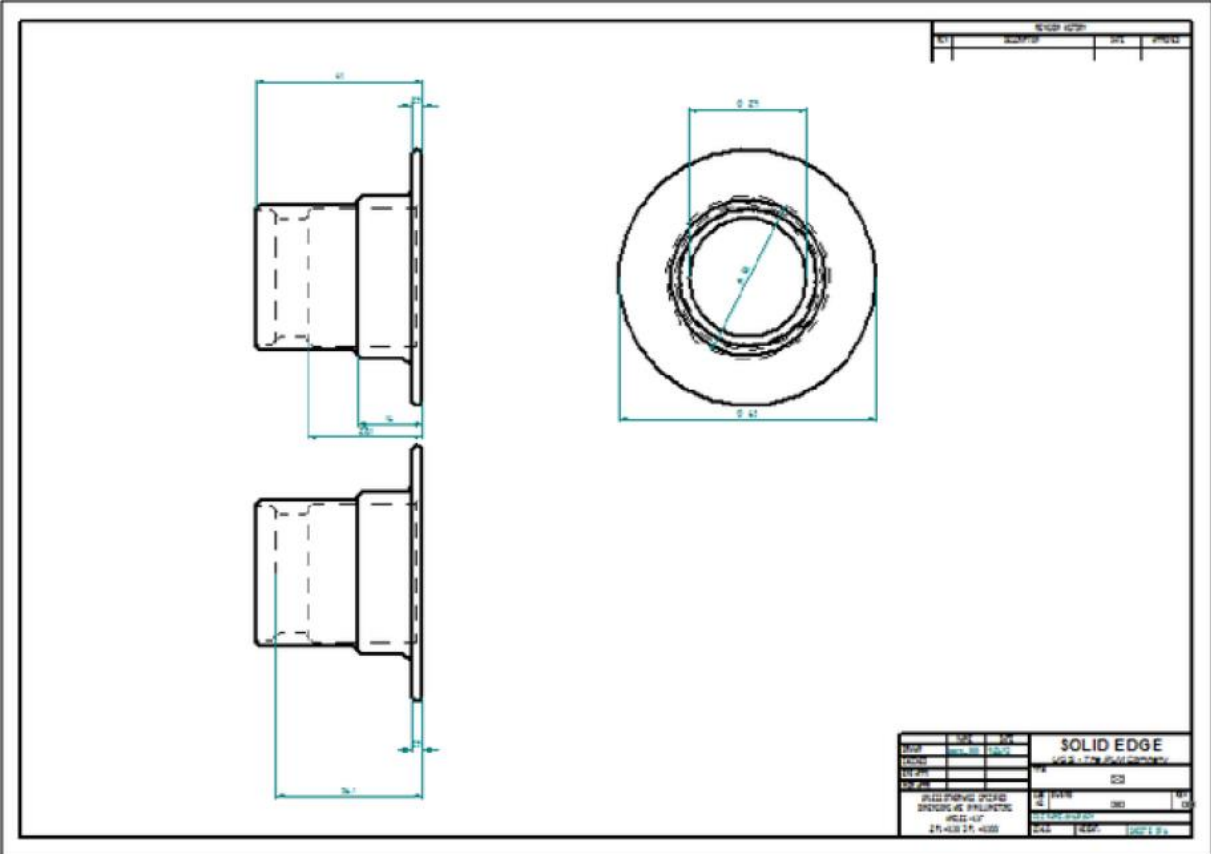
SOLID EDGE
USER - The Pupil Company

REV	DESCRIPTION	DATE	APPROVED

Item Number	File Name (no extension)	Author	Quantity
1	Spindle	s/B65698	1
2	Boss	s/B65698	1
3	Ballbearing	s/B65698	4
4	pull	s/B65698	1
5	Spring-aa0	s/B65698	1

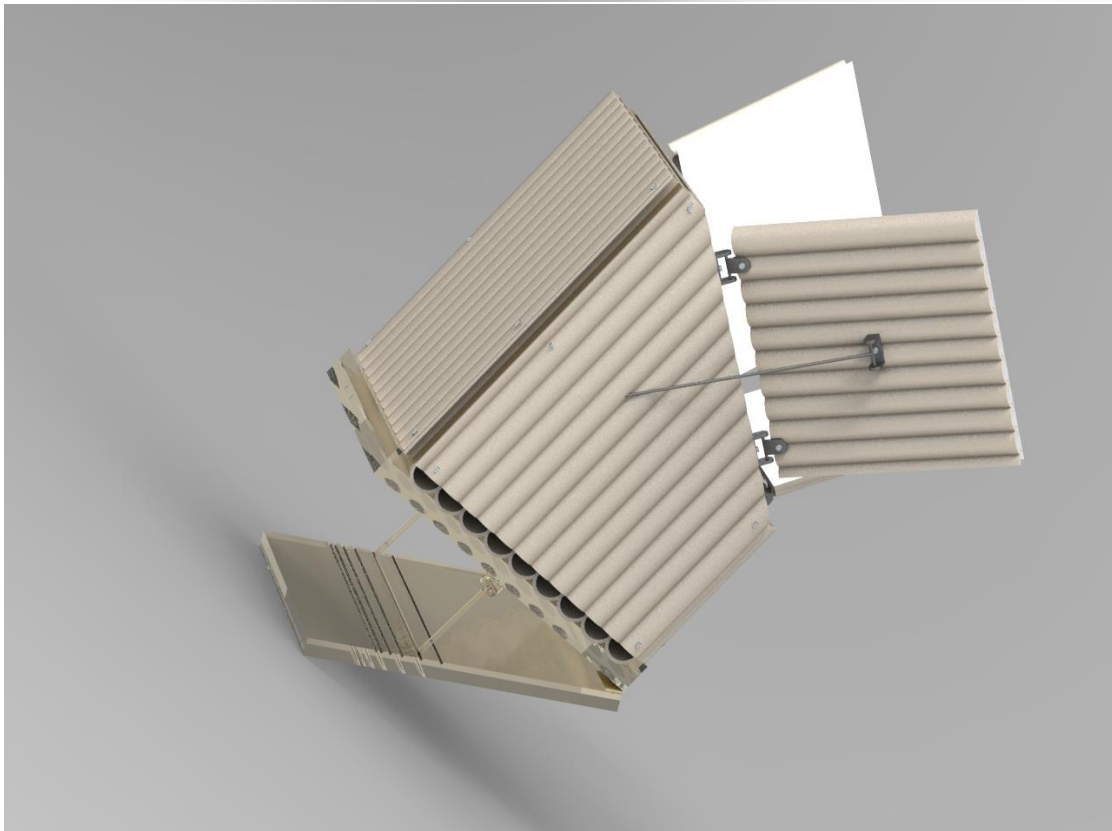
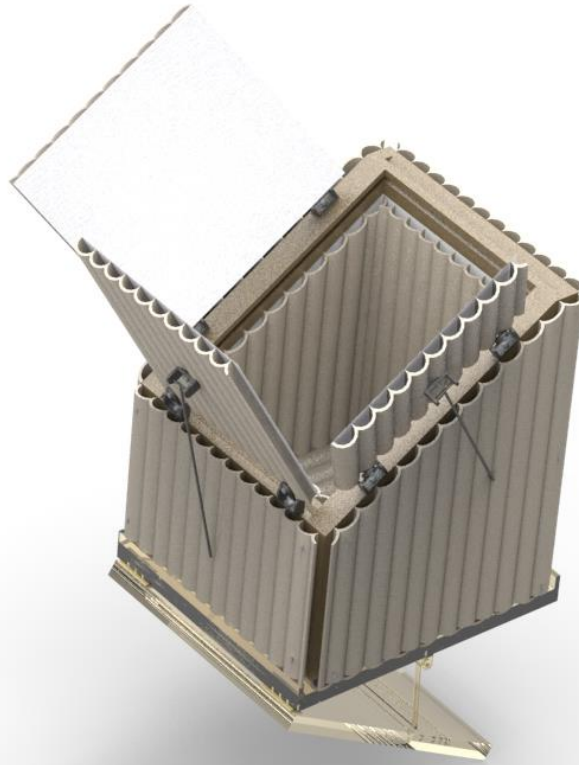
DATE	
DRAWN	singbaoli 26/11/2013
SCHOOL	School of Engineering Edinburgh University
TYPE	
SCALE	
WEIGHT	
SHEET 1 OF 1	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN MILLIMETERS
ANGLES 45°
DISTANCES 40:1MM



4. Solar Cooker

4.1 3D Model – video link: <http://youtu.be/I2ejgwxFpro>



4.2 2D Technical Drawing

REVISION HISTORY			
REV	DESCRIPTION	DATE	BY/PROJ

Cooker Holder Support

TYPE	DATE	
Drawn	12/25/21	10/10/21
Checked		
Rev. App.		
Rev. App.		

Solid Edge

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN MILLIMETERS
ANGLES IN DEGREES
Z PL. 4000 X PL. 400000

SCALE: 1:1
SHEET 1 OF 1

REVISION HISTORY			
REV	DESCRIPTION	DATE	BY/PROJ

Bamboo Sheet External Walls (x2)

TYPE	DATE	
Drawn	12/25/21	10/10/21
Checked		
Rev. App.		
Rev. App.		

Solid Edge

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN MILLIMETERS
ANGLES IN DEGREES
Z PL. 4000 X PL. 400000

SCALE: 1:1
SHEET 1 OF 1

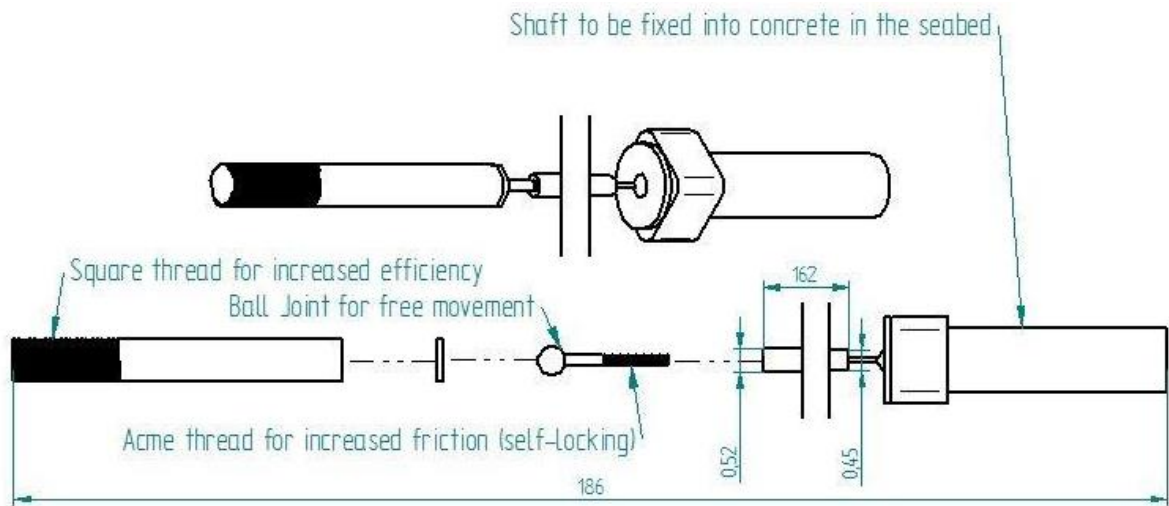
5. Mooring System for the Seastar Platform

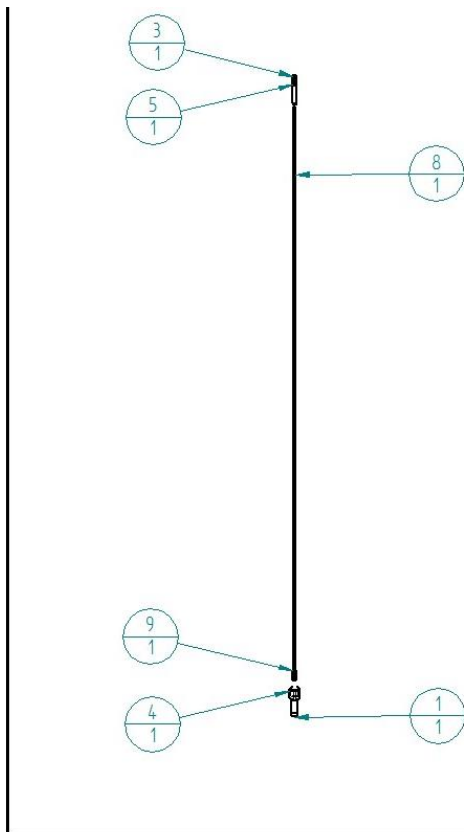
5.1 3D Model





5.2 2D Technical Drawing

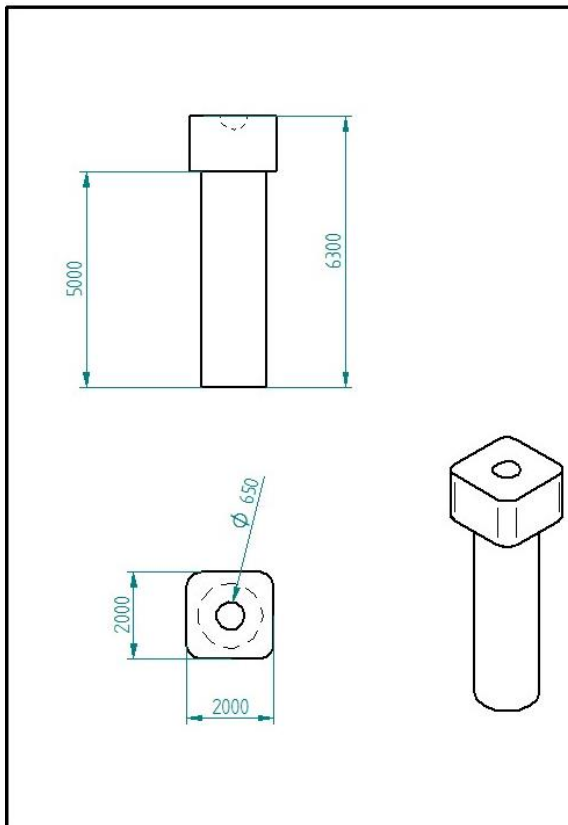




REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED

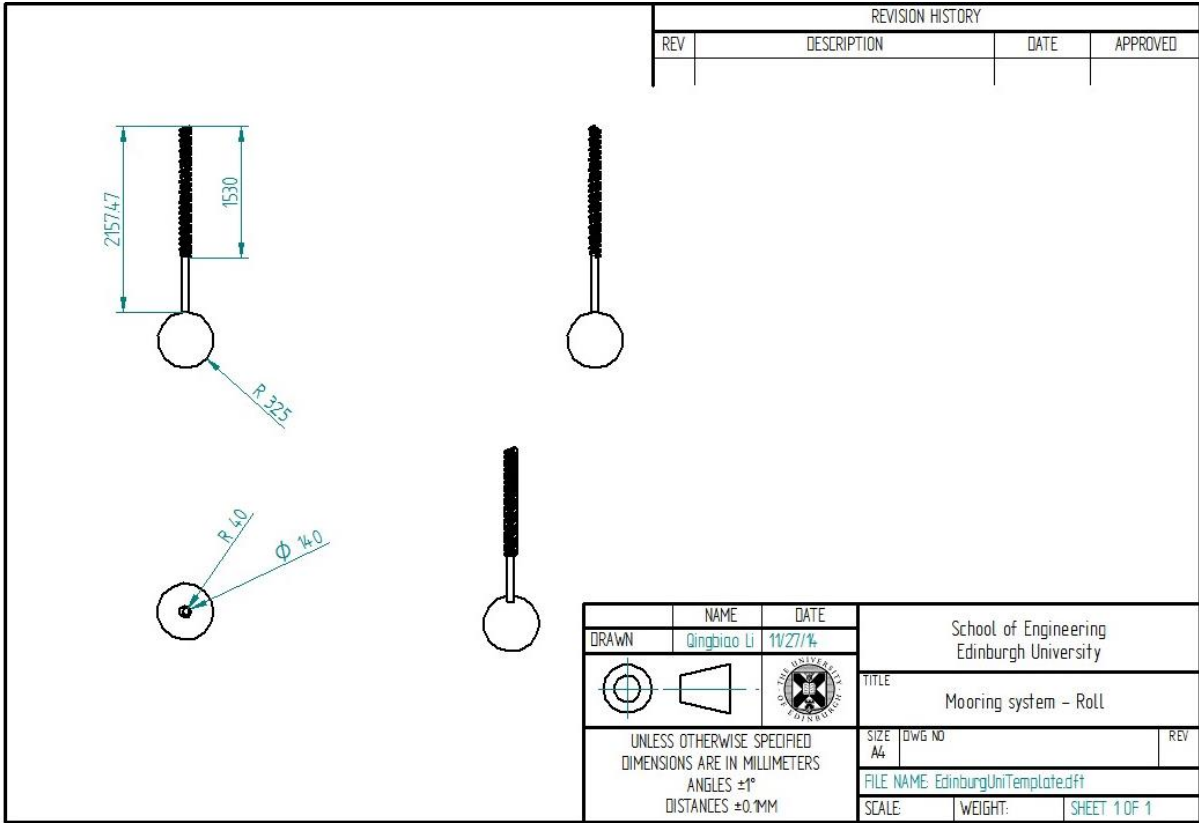
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1	achor_upper	leeco_000	1
2*	ball	Robbie Scott-Larsen	1
3	mooring Assembly	Robbie Scott-Larsen	1
4	Mooring Base	Robbie Scott-Larsen	1
5	Mooring Cap	Robbie Scott-Larsen	1
6*	Mooring Fastener	Robbie Scott-Larsen	1
7*	roll	leeco_000	1
8	Tension Legs	Robbie Scott-Larsen	1
9	Top of Mooring	Robbie Scott-Larsen	1
10*	up_c	Robbie Scott-Larsen	1

	NAME	DATE		
DRAWN	Qingbiao Li	11/27/14	School of Engineering Edinburgh University	
	TITLE Mooring system			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS ANGLES ±1° DISTANCES ±0.1MM		SIZE A4	DWG NO	REV
FILE NAME: EdinburgUniTemplate.dft				
SCALE:	WEIGHT:	SHEET 1 OF 1		



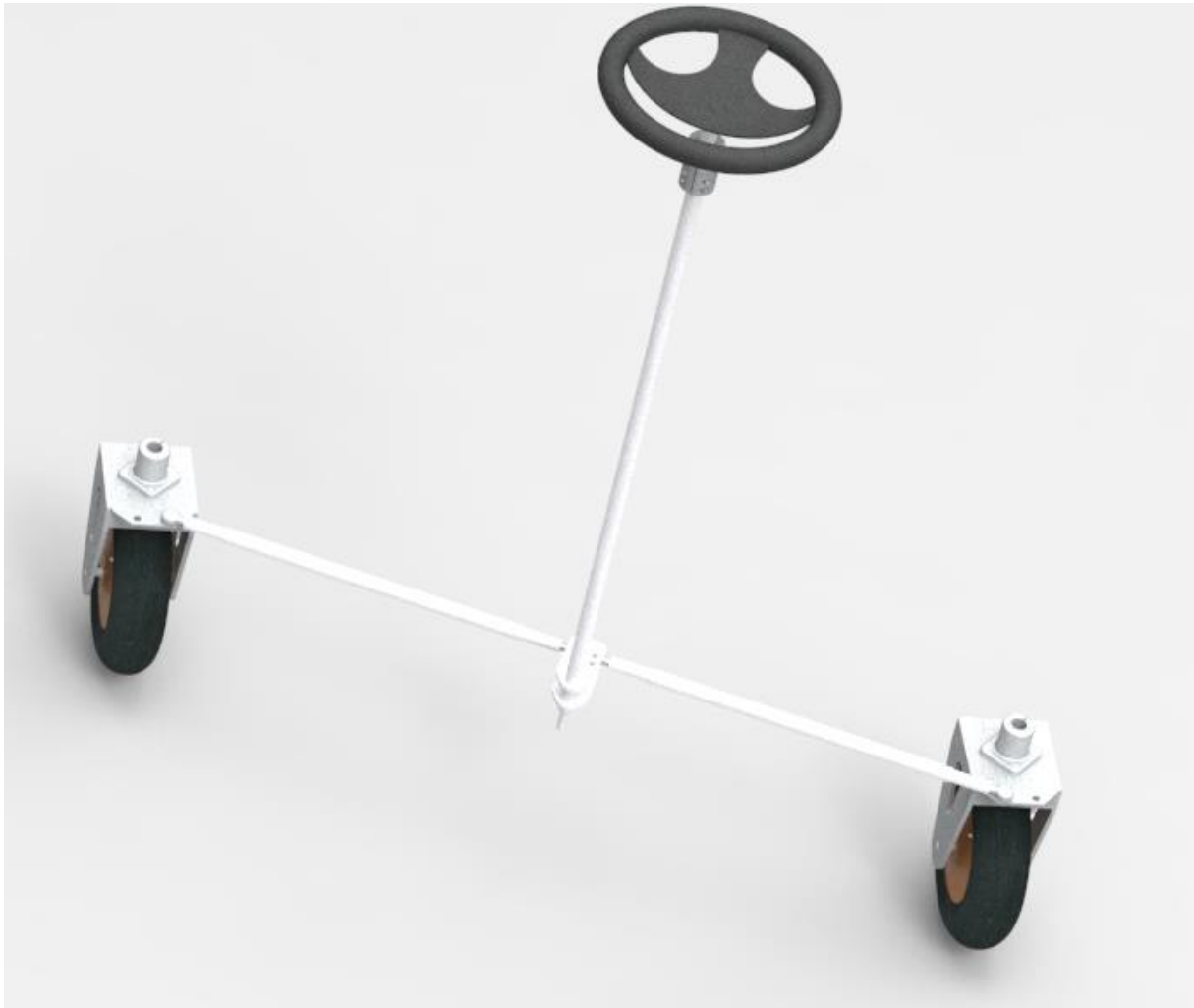
REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED

	NAME	DATE		
DRAWN	Qingbiao Li	11/27/14	School of Engineering Edinburgh University	
	TITLE Mooring system -achor upper			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS ANGLES ±1° DISTANCES ±0.1MM		SIZE A4	DWG NO	REV
FILE NAME: EdinburgUniTemplate.dft				
SCALE:	WEIGHT:	SHEET 1 OF 1		



6. Ackerman-Steering

6.1 3D Model

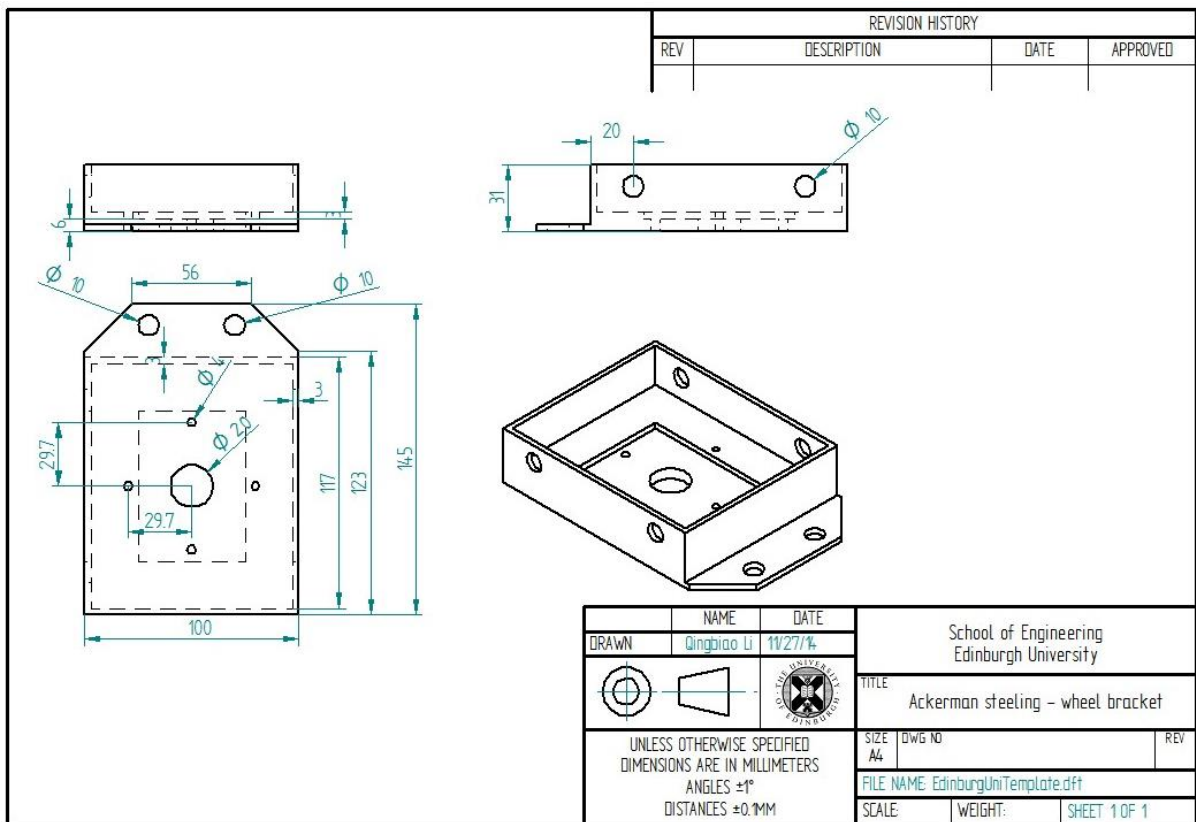
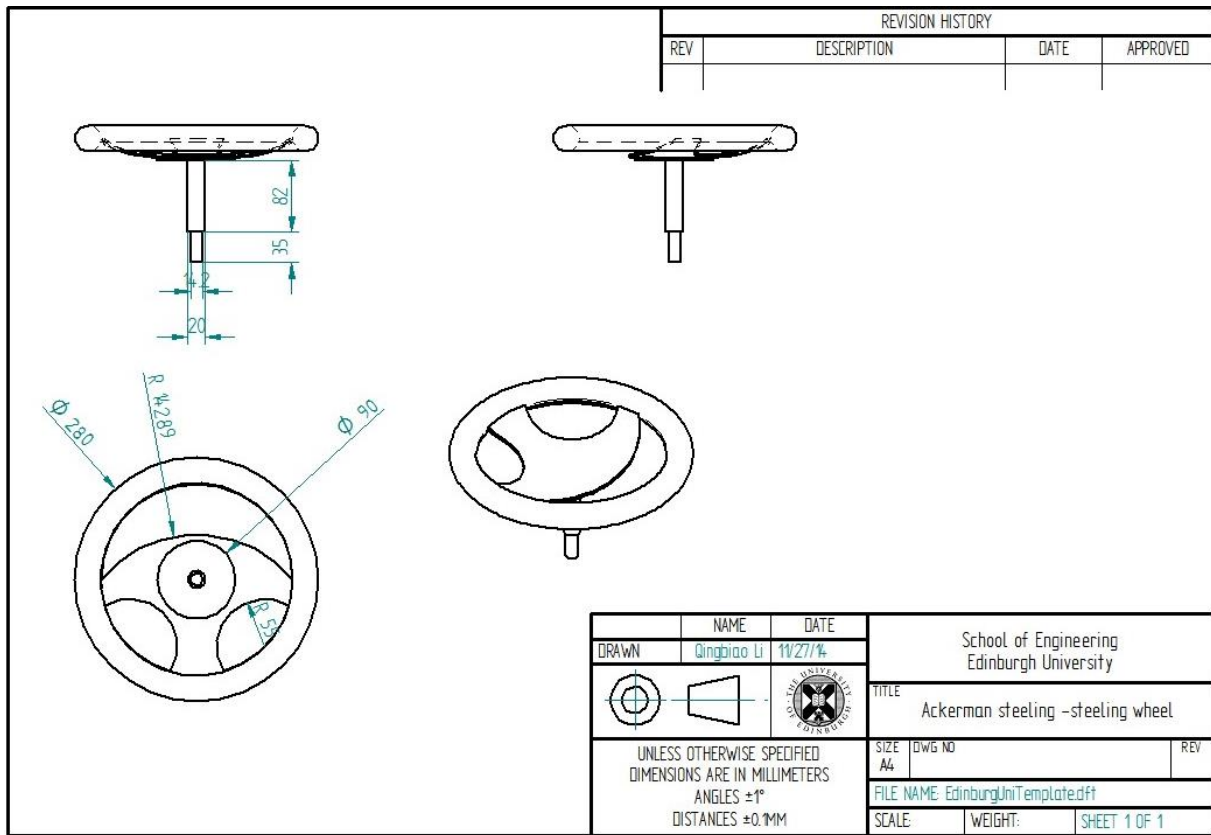


REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED

Item Number	File Name (no extension)	Author	Quantity
1	manual steering column ackerman	sB65698	1
2	steering wheel	sB65698	1
3	shaft connector	sB65698	1
4	Track rod	sB65698	2
5	screw36x10	sB65698	2
6	wheel	sB65698	2
7	screw8x10	sB65698	2

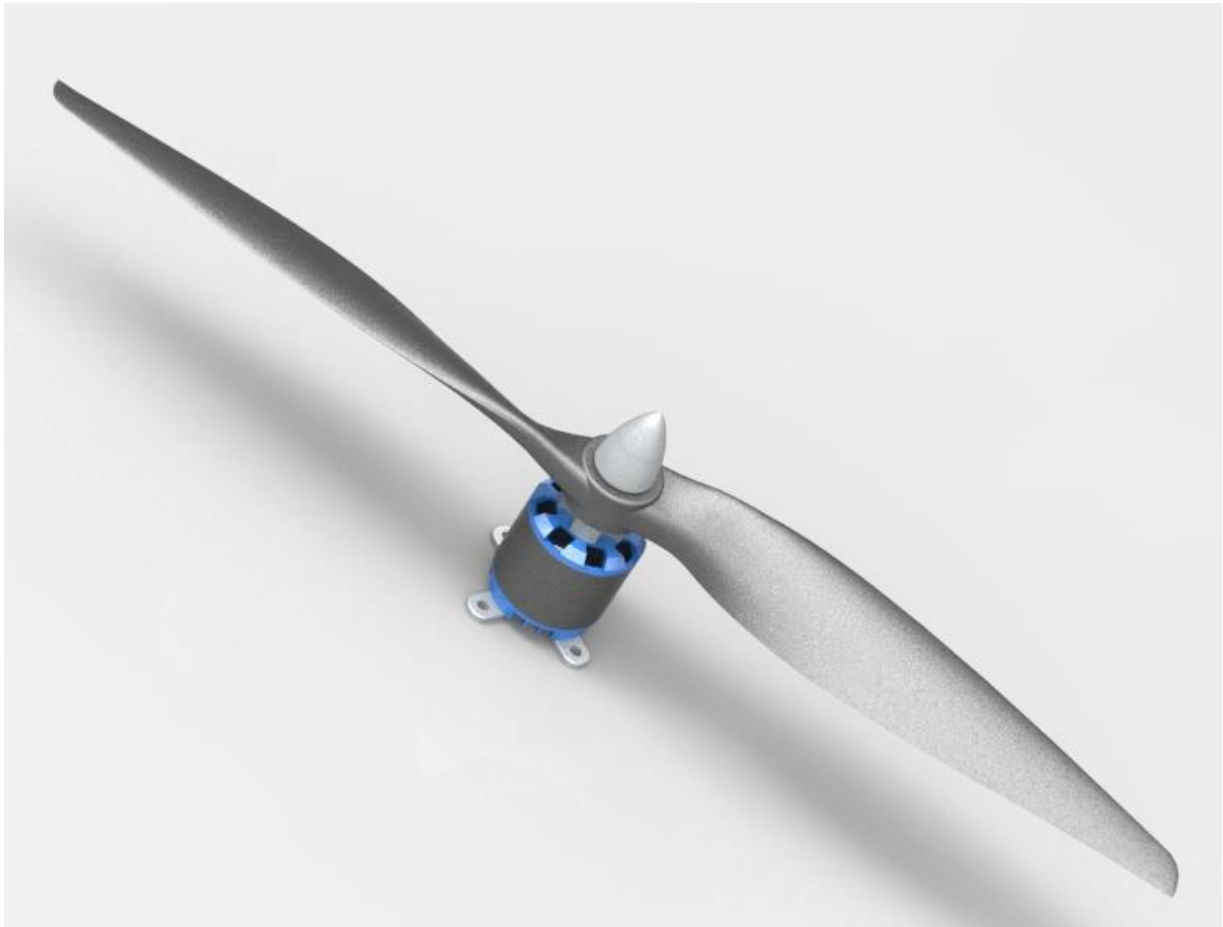
DRAWN	NAME	DATE	School of Engineering Edinburgh University		
	Qingbiao Li	11/27/14	TITLE		
			Ackerman steering		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS ANGLES = ° DISTANCES = 0.1MM			SIZE A4	DWG NO	REV
			FILE NAME: EdinburgJmTemplate.dft		
			SCALE:	WEIGHT:	SHEET 1 OF 1

6.2 2D Technical Drawing

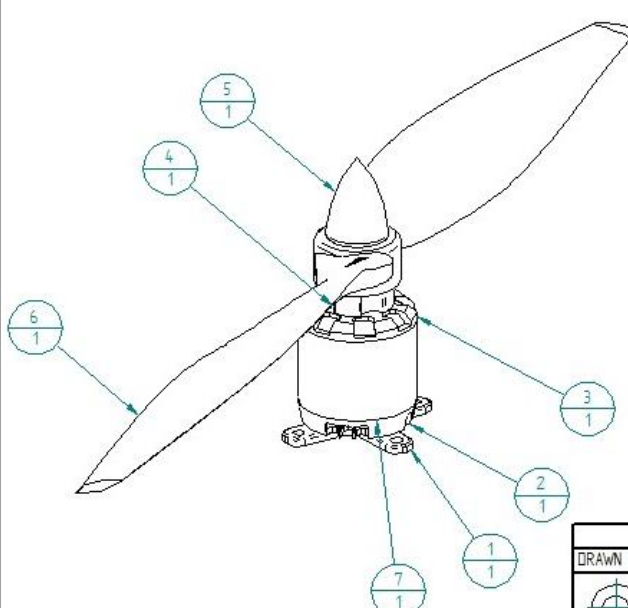


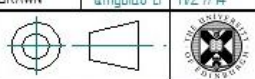
7. Brushless Motor

7.1 3D Model

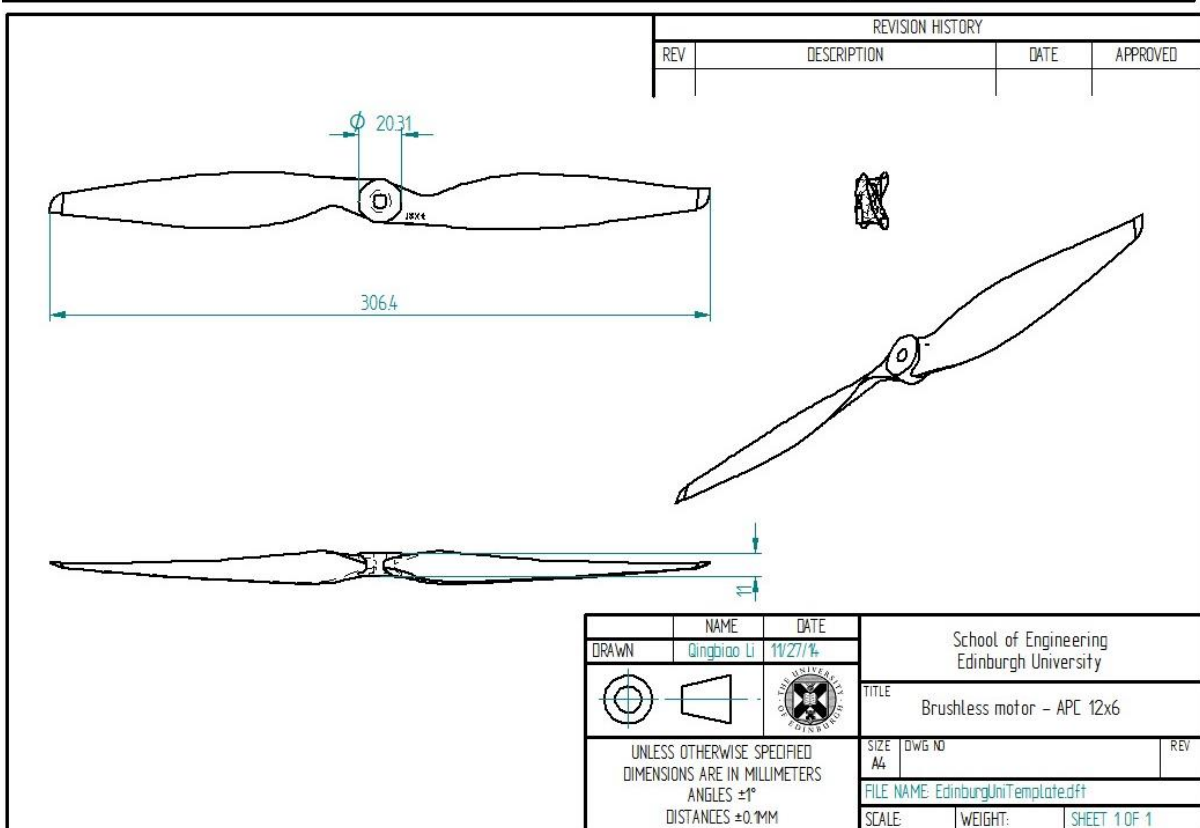
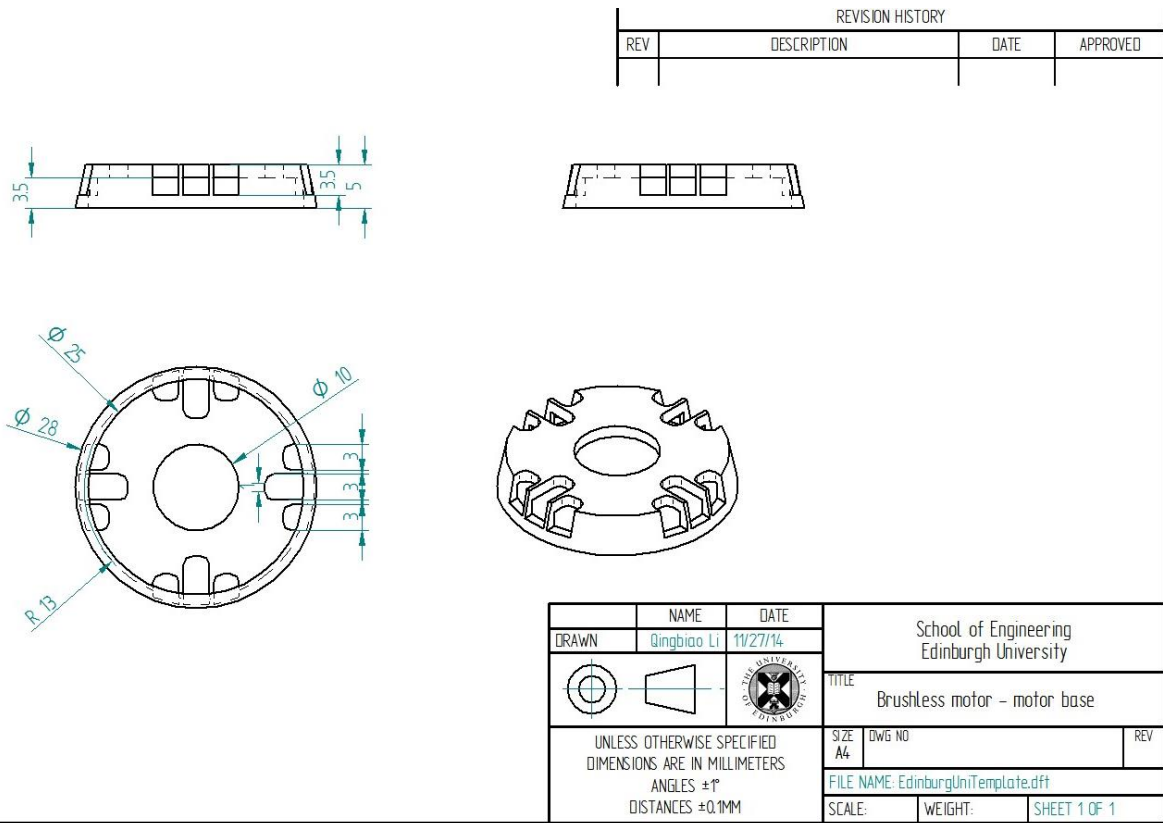


REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
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1	mount	sB65698	1
2	motor base	sB65698	1
3	motor top	sB65698	1
4	spool_for_prop	sB65698	1
5	top	sB65698	1
6	APC 12x6 2.0		1
7	cylinder	sB65698	1



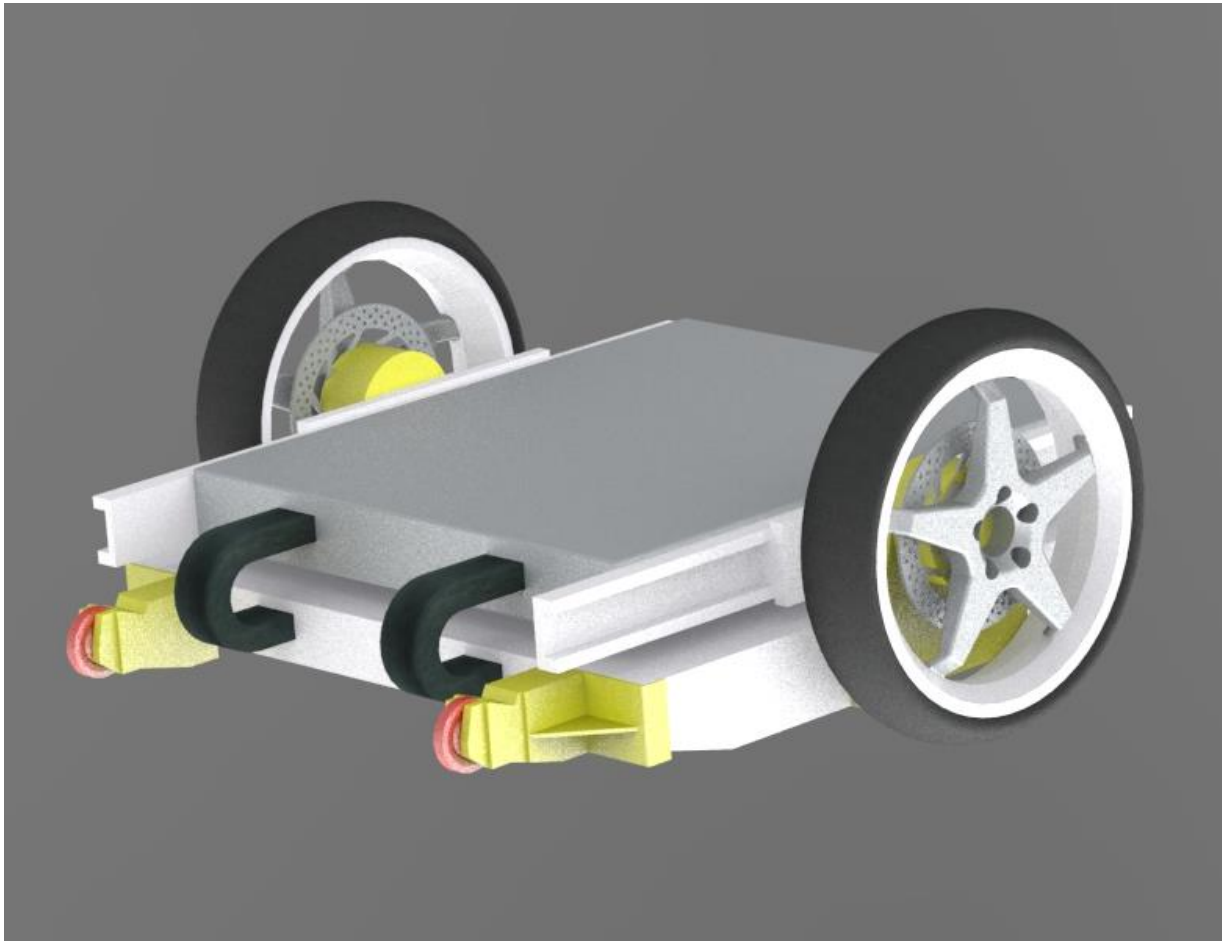
	NAME	DATE		
DRAWN	Qingbiao Li	11/27/14	School of Engineering Edinburgh University	
			TITLE Brushless motor	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS ANGLES ±° DISTANCES ±0.1MM			SEE A4	DWG NO REV
			FILE NAME: EdinburgJniTemplate.dft	
SCALE:		WEIGHT:	SHEET 1 OF 1	

7.2 2D Technical Drawing



8. Segway

8.1 3D Model

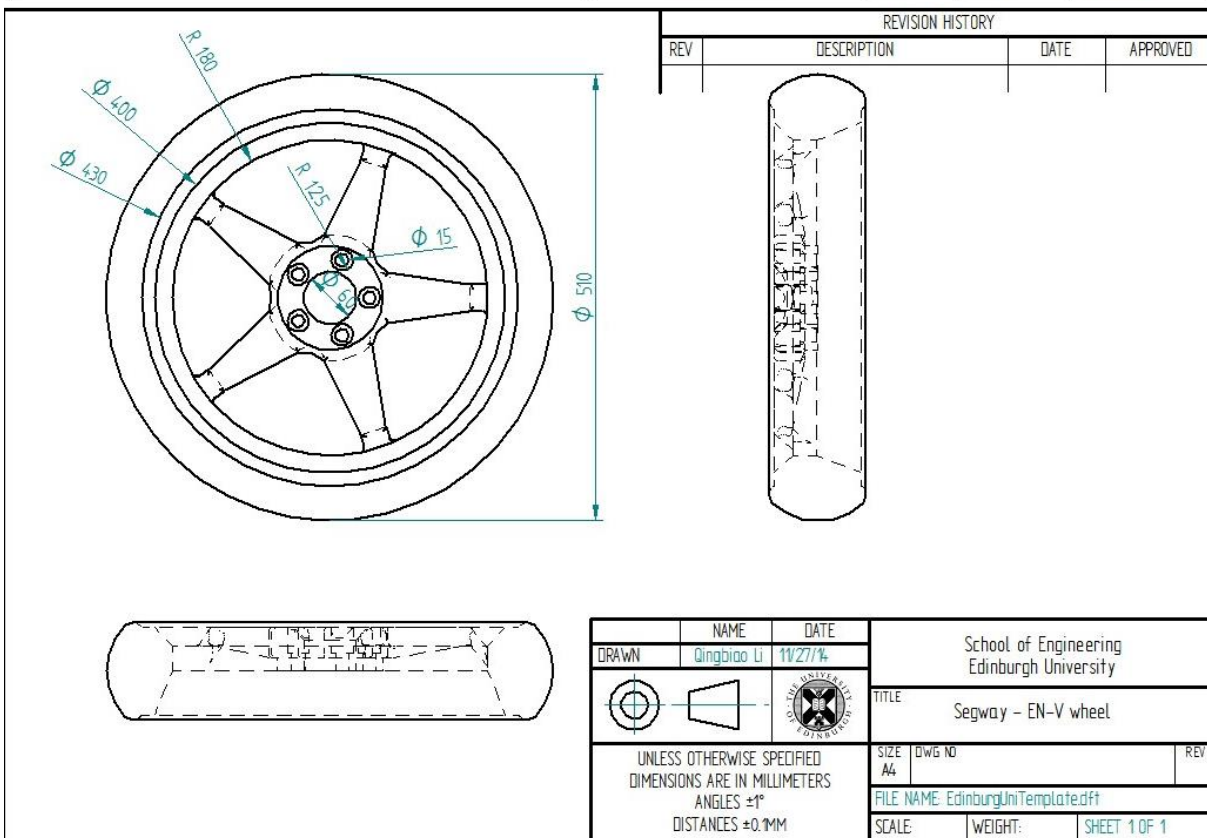
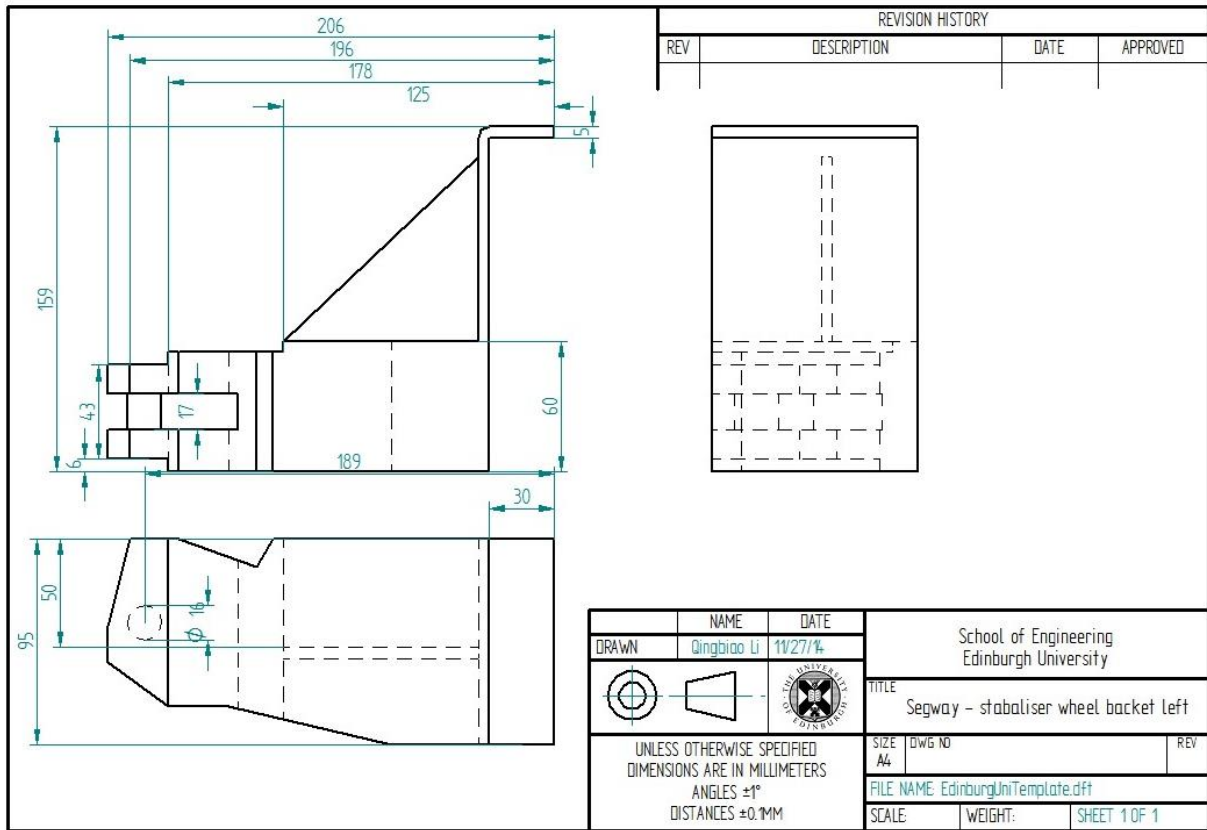


REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
1	drive unit top	s1365698	1
2	EN-V motor	s1365698	2
3	brake	s1365698	2
4	EN-V wheel	s1365698	1
5	drive unit bottom	s1365698	1
6	stabaliser wheel bucket left	s1365698	1
7	stabaliser wheel	s1365698	2
8	cable track	s1365698	2
9	stabaliser wheel bucket left_mir	s1365698	1
10	EN-V wheel_mir	s1365698	1

NAME	DATE
DRAWN Qingbiao Li	11/27/14

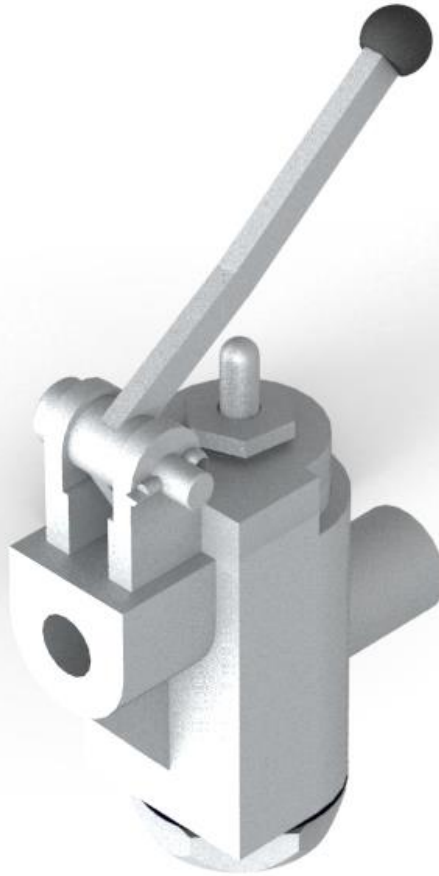
		School of Engineering Edinburgh University	
TITLE Segway			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS ANGLES ±1° DISTANCES ±0.1MM	SIZE A4	DWG NO	REV
FILE NAME: EdinburgUniTemplate.dft		SCALE	WEIGHT:
		SHEET 1 OF 1	

8.2 2D Technical Drawing



9. Pressure Regulating Valve

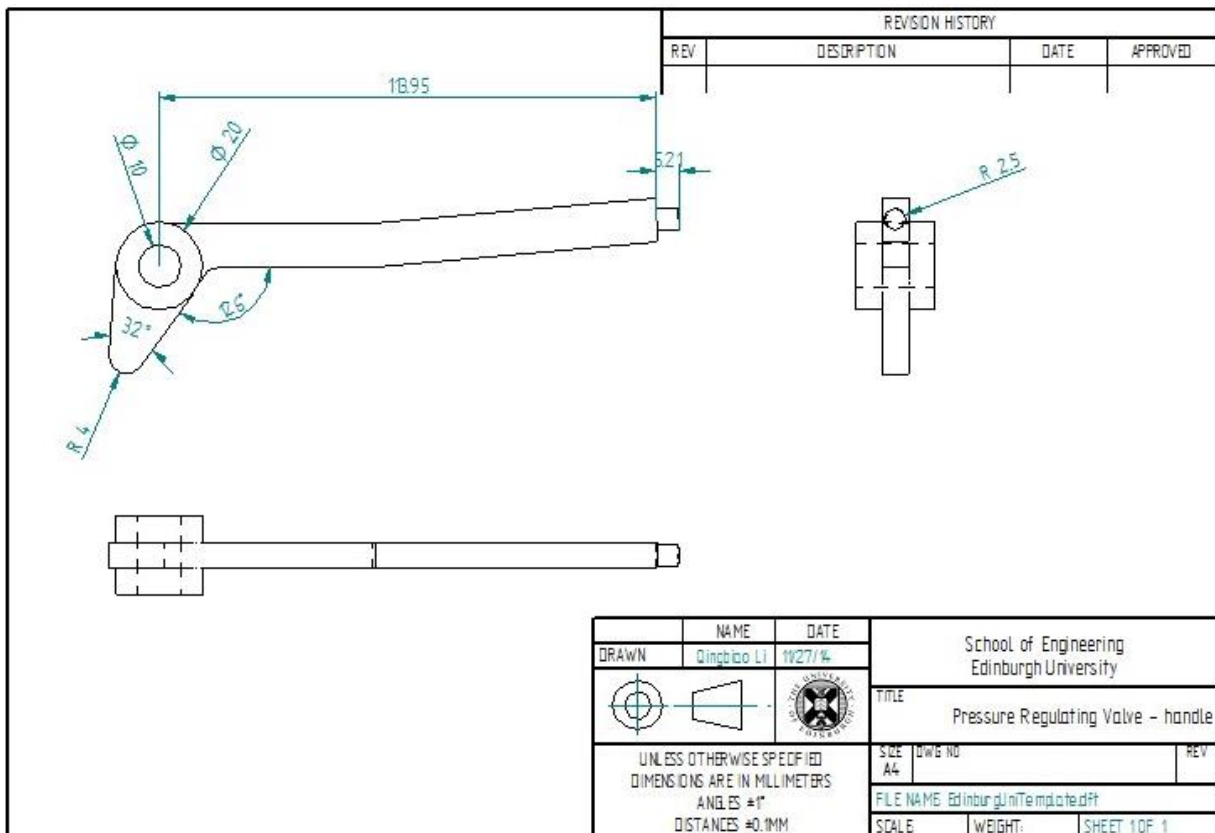
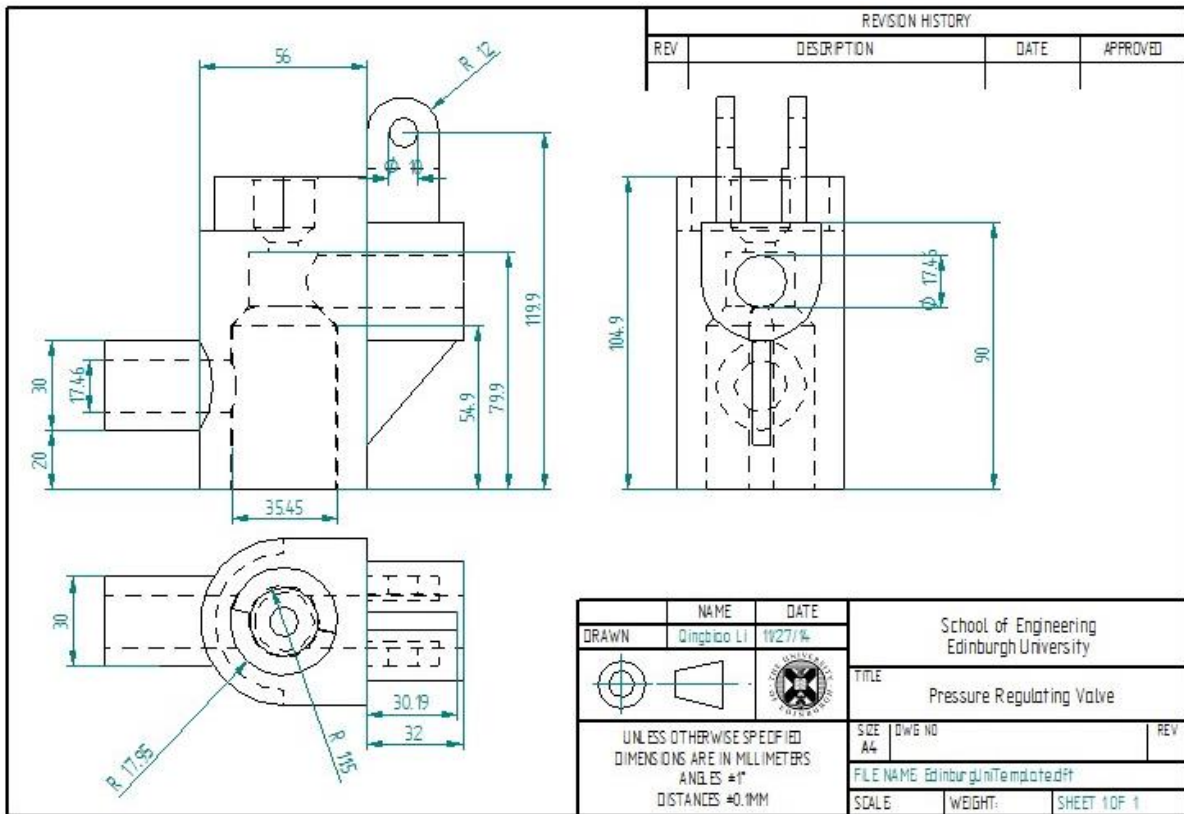
9.1 3D Model



REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
Item Number	File Name (no extension)	Author	Quantity
1	Cushion	Qingbiao Li	1
2	Spring	Qingbiao Li	1
3	Valve Handle	Qingbiao Li	1
4	Threaded Sleeve	Qingbiao Li	1
5	cotter pin 4x14	Qingbiao Li	1
6	Filling	Qingbiao Li	1
7	Nail	Qingbiao Li	1
8	Bulb	Qingbiao Li	1
9	Handle	Qingbiao Li	1
10	Adjusting Screw (rod)	Qingbiao Li	1
11	Valve Body	Qingbiao Li	1

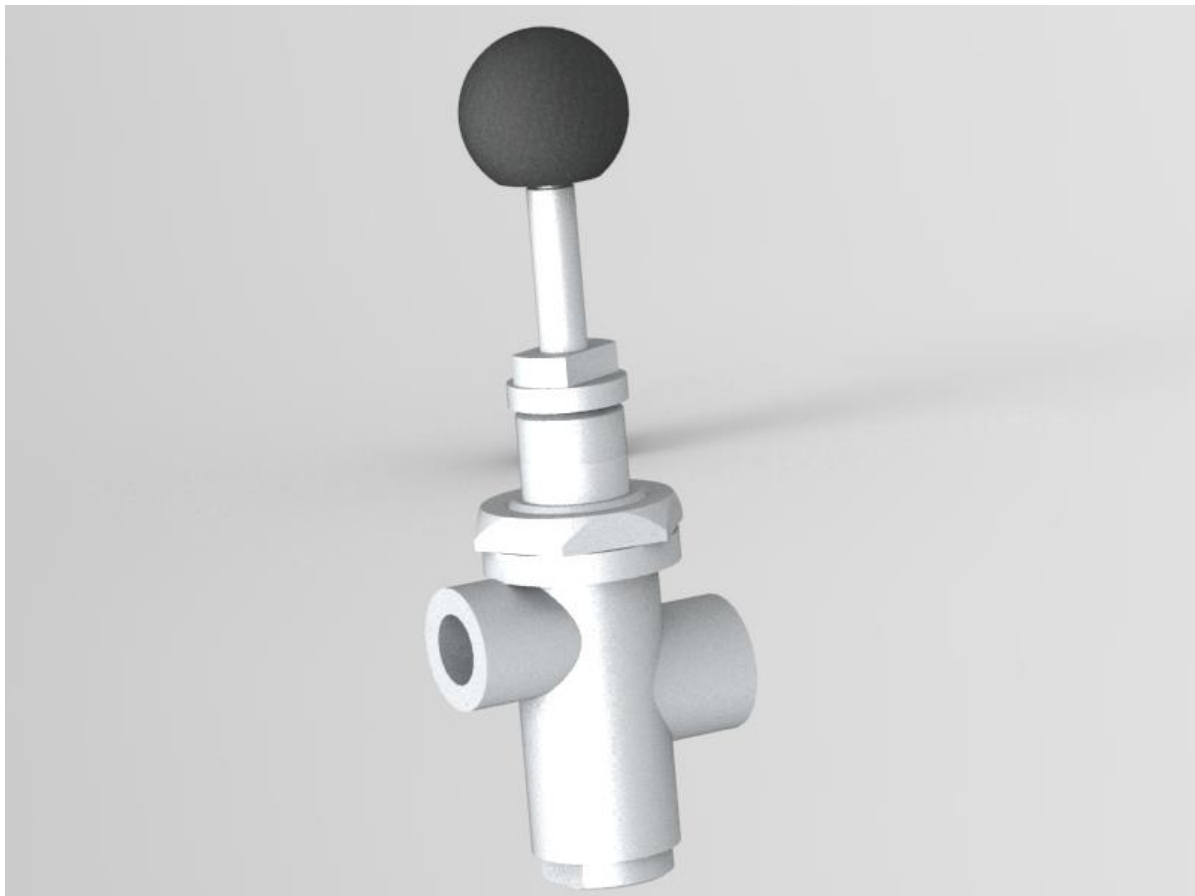
DRAWN	NAME Qingbiao Li	DATE 11/27/14	School of Engineering Edinburgh University
		TITLE Pressure Regulating Valve	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS ANGLES = 1° DISTANCES = 0.1MM			SIZE DWG NO REV AA FILE NAME: Edinburgh\intem\data\edf SCALE: WEIGHT: SHEET 1 OF 1

9.2 2D Technical Drawing



10. Hand-operated Air Valve

10.1 3D Model

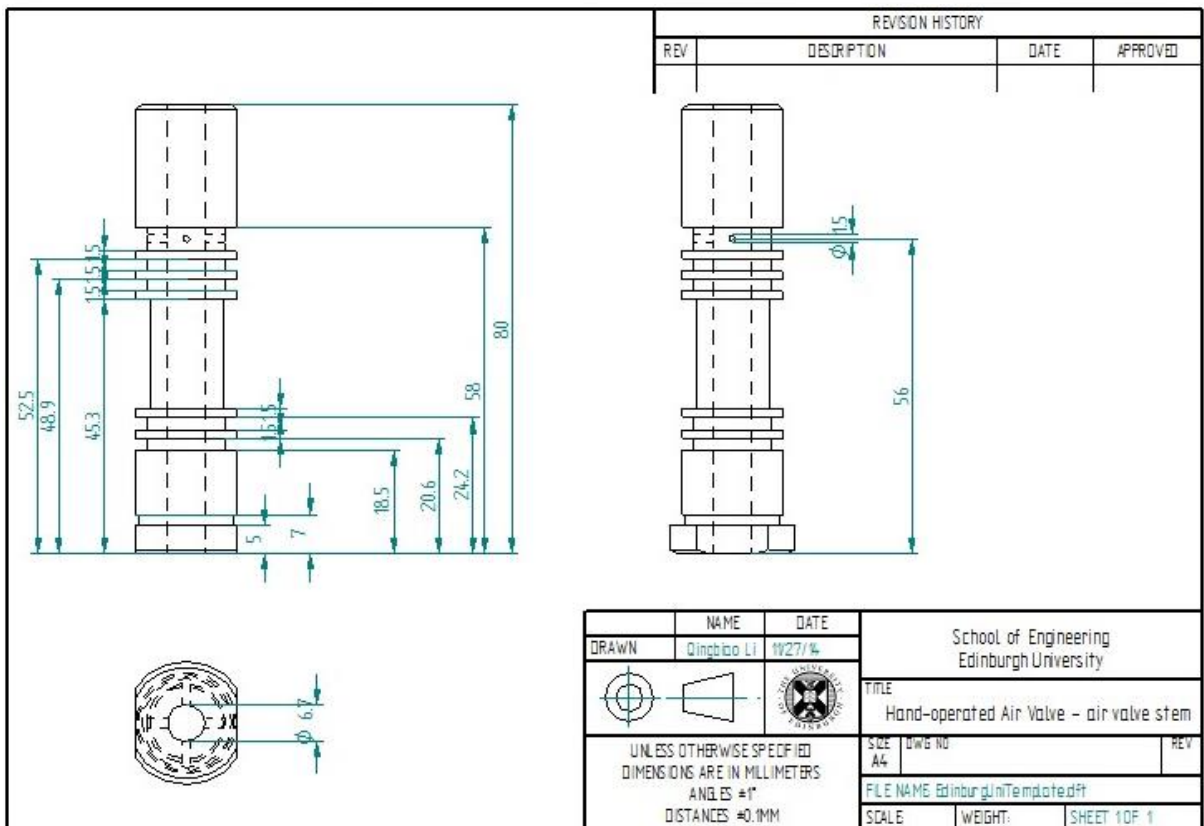
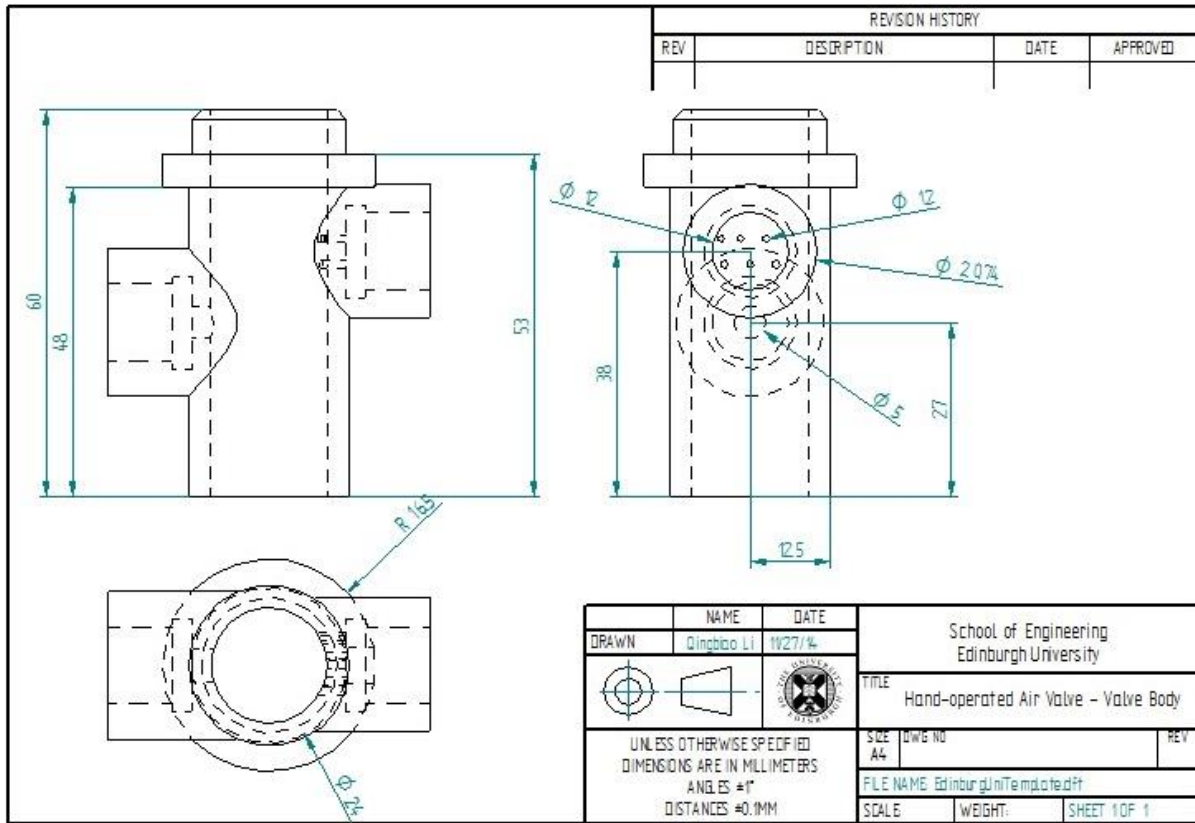


REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
Item Number	File Name (no extension)	Author	Quantity
1	O-rings	Qingbiao Li	4
2	Nut	Qingbiao Li	1
3	Air Valve Stem	Qingbiao Li	1
4	Handle	Qingbiao Li	1
5	Core Bar	Qingbiao Li	1
6	Valve Body	Qingbiao Li	1

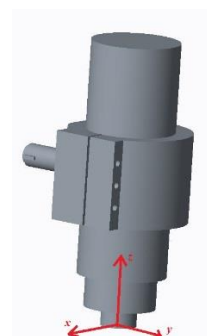
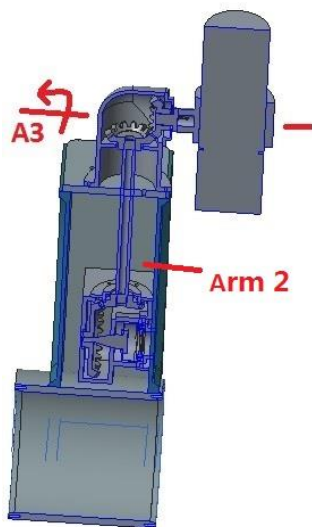
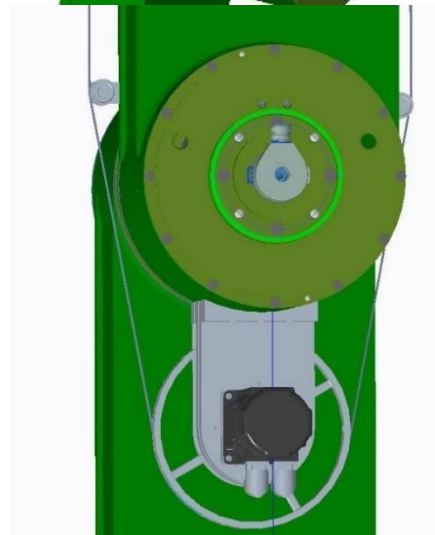
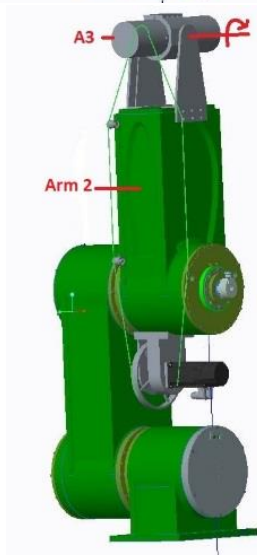
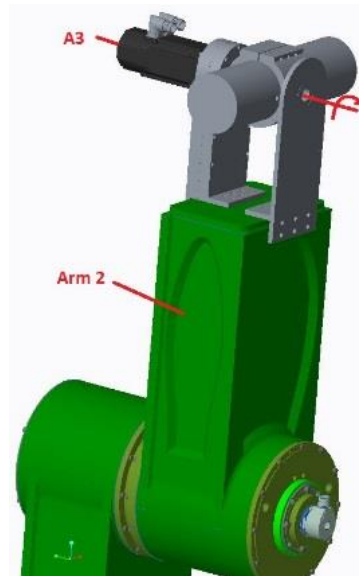
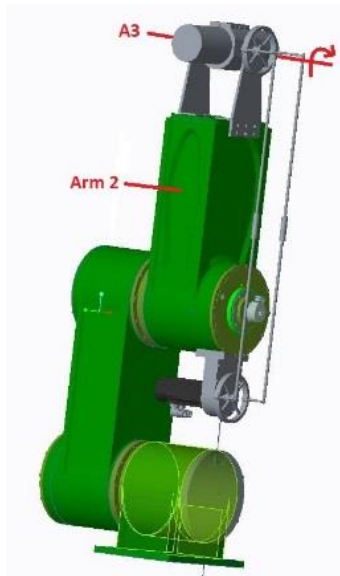
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN MILLIMETERS
ANGLES #1°
DISTANCES #0.1MM

DRAWN	NAME	DATE	School of Engineering Edinburgh University	
	Qingbiao Li	19/27/14	TITLE	
			Hand-operated Air Valve	
SIZE	DWG NO.	REV	FILE NAME: Edinburgh/10/10/14/valve.dwg	
A4			SCALE	WEIGHT: SHEET 1 OF 1

10.2 2D Technical Drawing

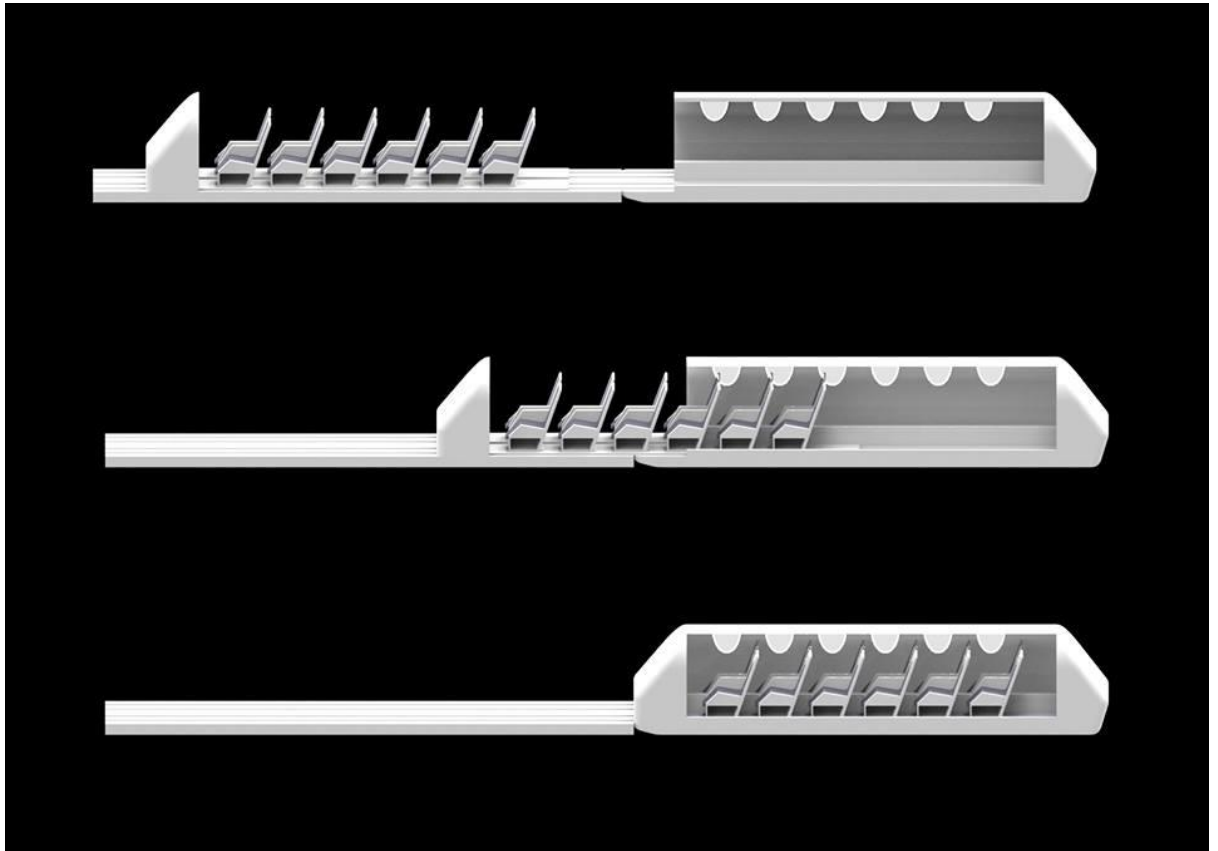


11. 3 DOF Industrial robot



12. Hyperloop design

- **Subsystem Excellence Award** Hyperloop Pod Competition
Space Exploration Technologies Corporation



Suspension system:

