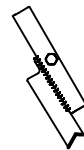
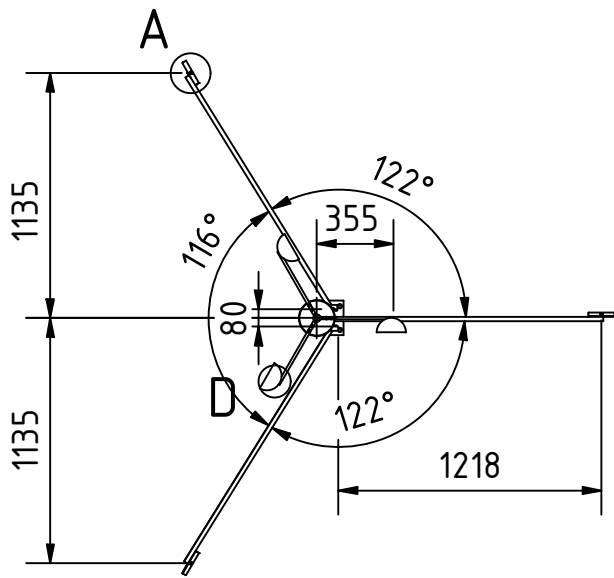
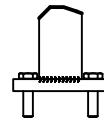


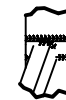
E (1:12)



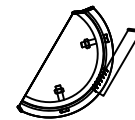
A (1:8)



B (1:8)



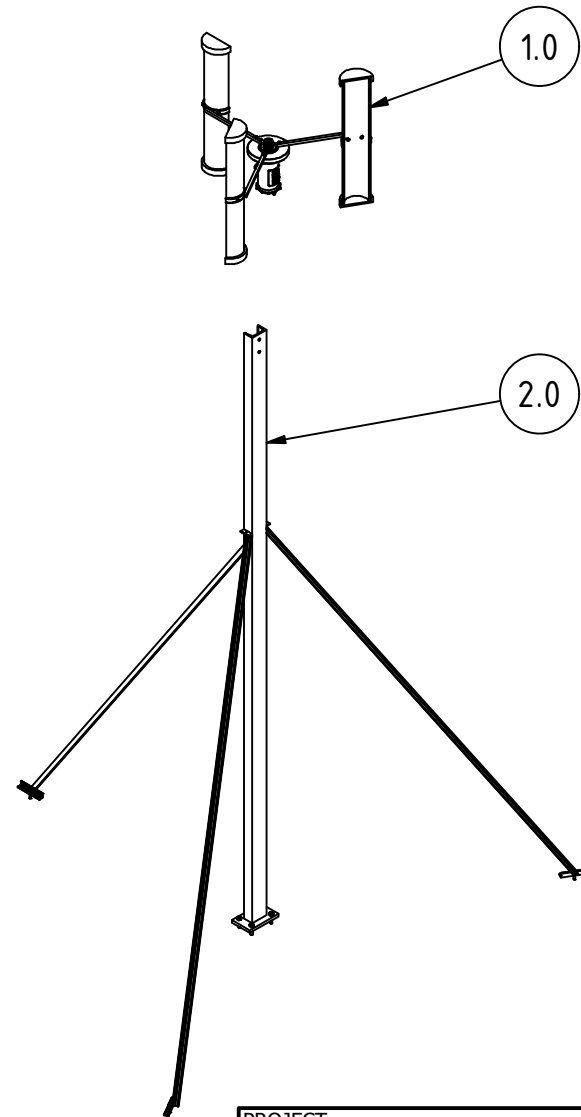
C (1:8)




D (1:8)

Note: all units in mm.


PROJECT Darrieus turbine made of pvc pipes		CREATED BY E. CEBALLOS		APPROVED BY A. MORILLO		DATE 28/11/2021		VERSION 1.0		
PART NAME 3D Views		FILE NAME ymm_dtp.iam								POS A1
DEVELOPED BY		REDESIGNED BY		DOC. TYPE Assembly		MATERIAL		QUANTITY 1		
		 OPEN SOURCE ECOLOGY GERMANY		LICENCE CC-BY-SA 4.0		SCALE 1:35		SHEET 1 / 13		
				OHO e.V.						



PROJECT Darrieus turbine made of pvc pipes		CREATED BY E. CEBALLOS	APPROVED BY A. MORILLO	DATE 28/11/2021	VERSION 1.0
PART NAME Exploded 3D views		FILE NAME ymm_dtp.ipn			POS A2
DEVELOPED BY	REDESIGNED BY	DOC. TYPE Assembly	MATERIAL	QUANTITY 1	
	 OPEN SOURCE ECOLOGY GERMANY	LICENCE	SCALE	SHEET	
		OHIO e.V.	CC-BY-SA 4.0	1:30	2 /13

Parts list


POS	QTY	PART NAME	FILE NAME	PART TYPE	SPECIFICATIONS	SHEET
A1	1	3D views	ymm_dtp.iam			1
A2	1	Exploded 3D view	ymm_dtp.ipn			2
B1		Parts list	part list. csv			3
C1		Technical notes	technical notes.csv			4
1.0	1	Darrieus turbine	ymm_dtp.iam	Production		5
1.1	1	Disk treadmill motor		Buy	Steel C45	
1.2	1	Treadmill motor		Buy	Treadmill Motor 40 W	
1.3	3	Rotor arm	rotor arm.ipt	Production	Steel A36	6
1.4	3	Clamp 110 mm		Buy	Clamp 110 mm, Steel C45	
1.5	3	Blade	blade.ipt	Production	Tube Dia. 4", Plastic PVC	7
1.6	6	Tap		Buy	Tap Dia. 4", Plastic PVC	
1.7	6	Screw M5x25		Standard	Screw M5x25, DIN 931	
1.8	6	Nut M5		Standard	Nut M5, DIN 934	
1.9	6	Screw M6x30		Standard	Screw M6x30, DIN 931	
1.10	6	Nut M6		Standard	Nut M6, DIN 934	
1.11	2	Screw M10x40		Standard	Screw M10x40, DIN 931	
2.0		Frame assembly	frame assembly.iam	Production		8
2.1	1	Frame Central C		Standard	Frame C 80x45mm, Steel A36	9
2.2	1	Base	base.ipt	Production	Steel A36	10
2.3	3	Frame Lateral L		Standard	Frame L 20x20x3 mm, Steel A36	11
2.4	3	Frame base L		Standard	Frame L 20x20x3 mm, Steel A36	12
2.5	2	Frame upper L		Standard	Frame L 20x20x3 mm, Steel A36	13
2.6	3	Screw M7x30		Standard	Screw M7x30, DIN 931	
2.7	4	Screw M10x40		Standard	Screw M10x40 , DIN 931	

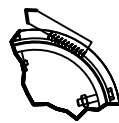
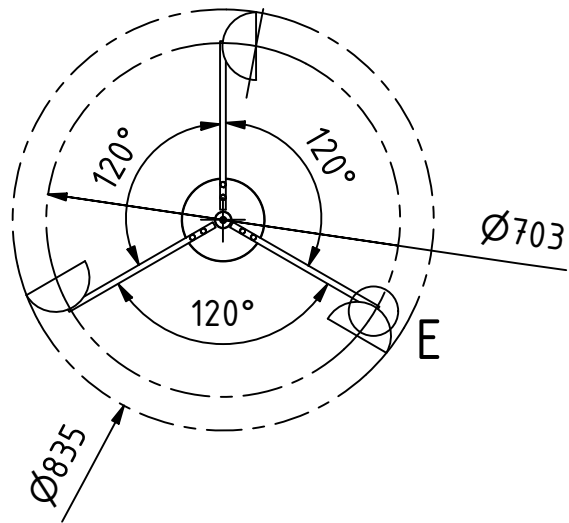
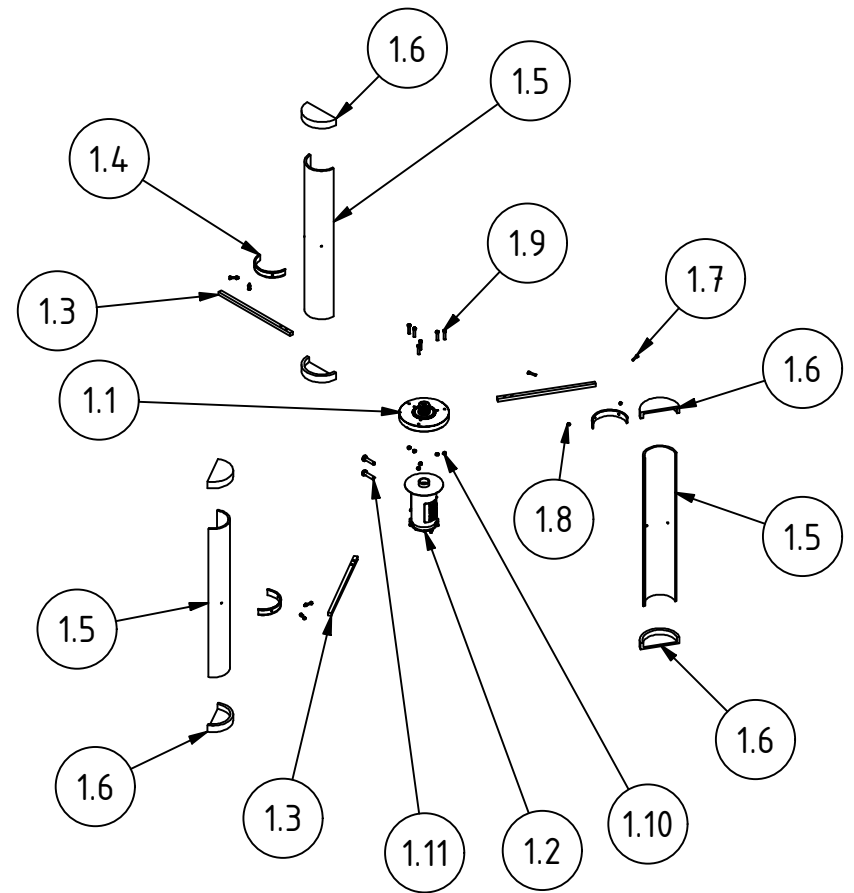
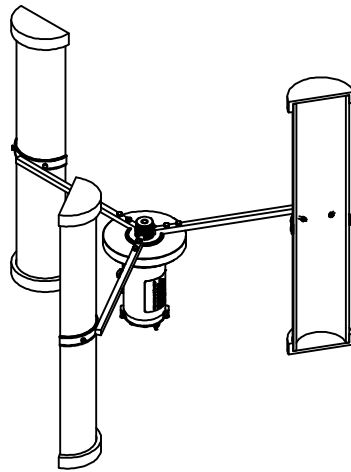
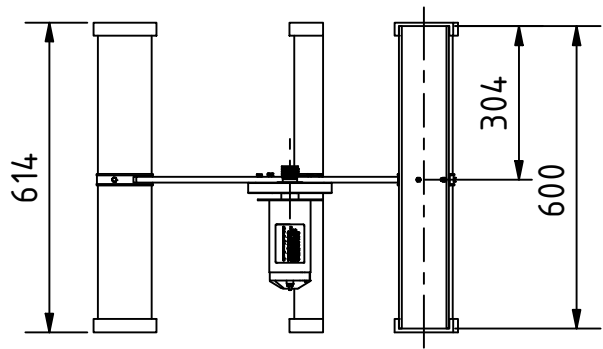
PROJECT Darrieus turbine made of pvc pipes		CREATED BY E. CEBALLOS	APPROVED BY A. MORILLO	DATE 28/11/2021	VERSION 1.0
PART NAME Part List		FILE NAME part list.csv			POS B1
DEVELOPED BY		REDESIGNED BY  OPEN SOURCE ECOLOGY GERMANY	DOC. TYPE Part List	MATERIAL	QUANTITY
		LICENCE CC-BY-SA 4.0		SCALE	SHEET 3 /13

OHO e.V.

TECHNICL NOTES


NOTES	CONTENT
GENERAL NOTES	
Treadmill motor	100-150watts 12v treadmill motor dc can prudus high voltage in low rpm 1-1.5 amps to charge 12v batteries, references: https://www.alibaba.com/product-detail/110V-3HP-4800RPM-High-torque-Low_1600290589251.html?spm=a2700.details.0.0.6a6c1fa4RlthEI

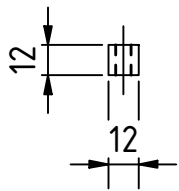
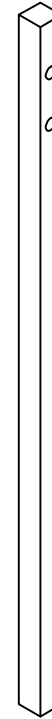
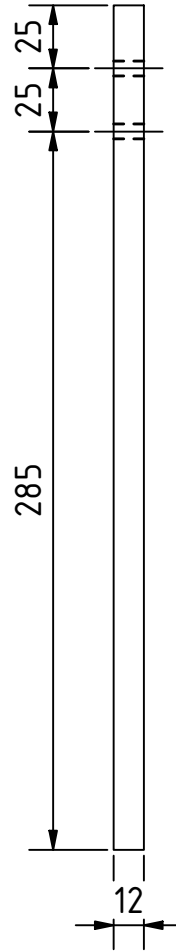
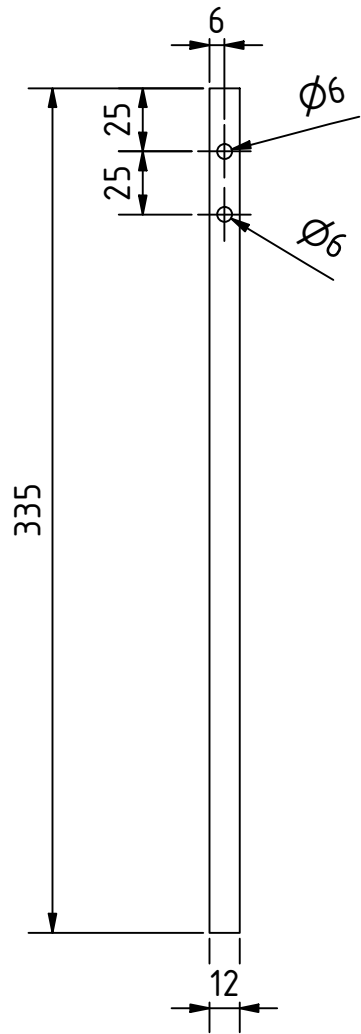
PROJECT Darrieus turbine made of pvc pipes	CREATED BY E. CEBALLOS	APPROVED BY A. MORILLO	DATE 28/11/2021	VERSION 1.0
PART NAME Technical Notes	FILE NAME			POS C1
DEVELOPED BY	REDESIGNED BY  OPEN SOURCE ECOLOGY GERMANY	DOC. TYPE Technical notes	MATERIAL	QUANTITY
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE	SHEET 4 /13




E (1:6)

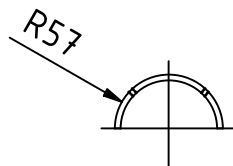
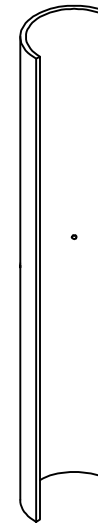
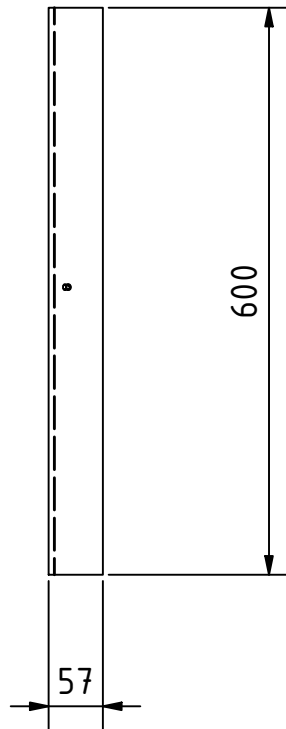
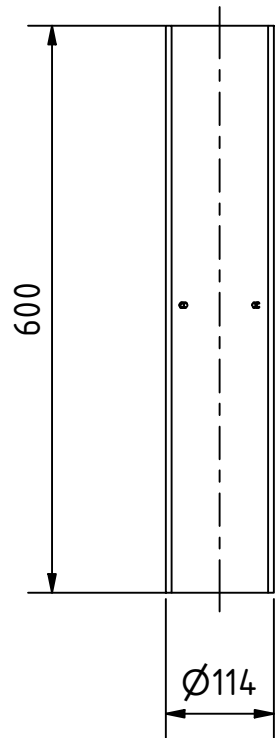
Note: all units in mm.

PROJECT Darrieus turbine made of pvc pipes		CREATED BY E. CEBALLOS		APPROVED BY A. MORILLO		DATE 28/11/2021		VERSION 1.0		
PART NAME Darrieus Turbine		FILE NAME ymm_dtp.iam								POS 1.0
DEVELOPED BY		REDESIGNED BY		DOC. TYPE Assembly		MATERIAL		QUANTITY 1		
		 OPEN SOURCE ECOLOGY GERMANY		OHO e.V.		LICENCE CC-BY-SA 4.0		SCALE 1:15		SHEET 5 /13




Note: all units in mm.

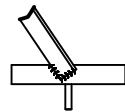
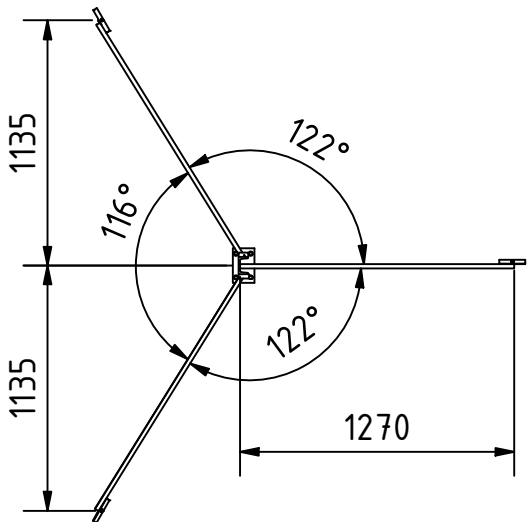
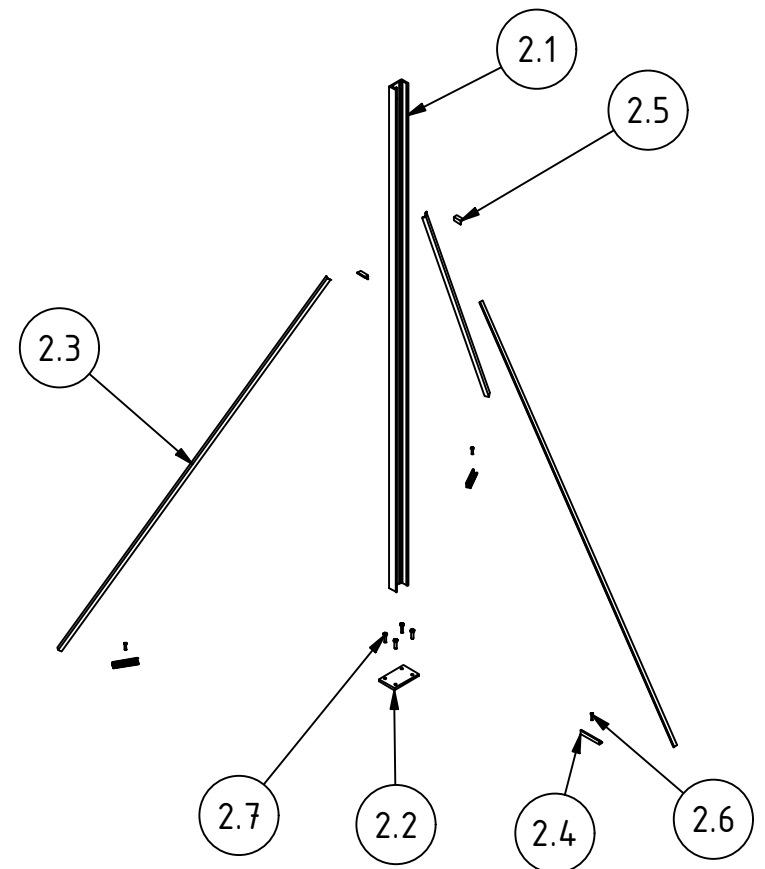
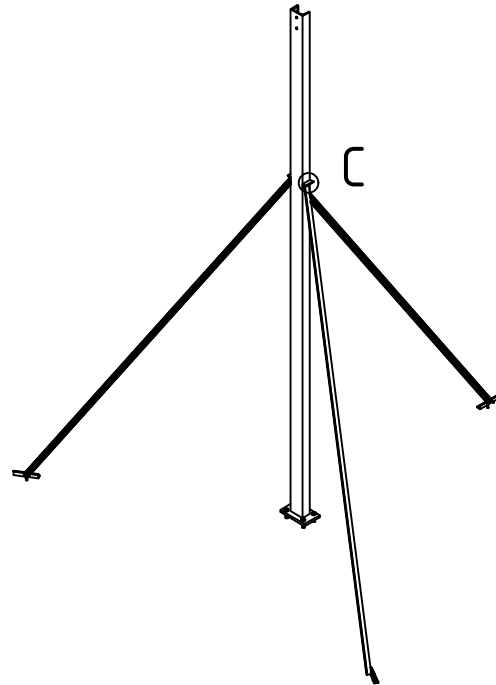
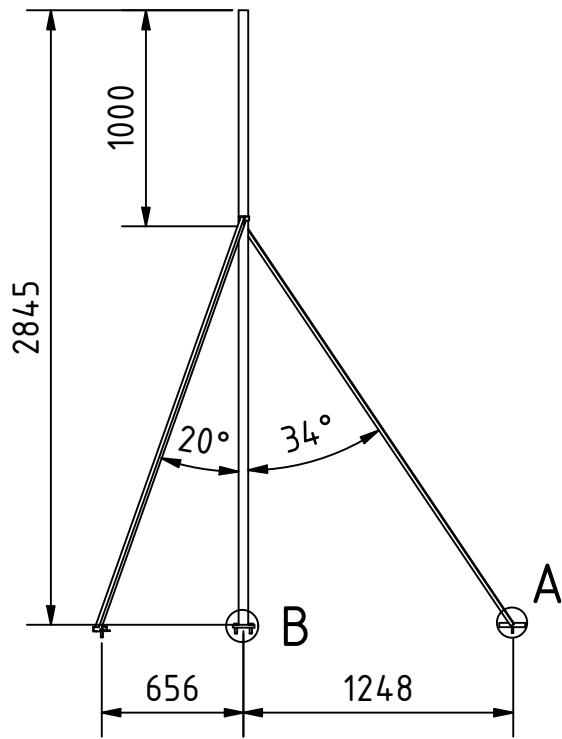
PROJECT Darrieus turbine made of pvc pipes		CREATED BY E. CEBALLOS	APPROVED BY A. MORILLO	DATE 28/11/2021	VERSION 1.0
PART NAME Rotor arm		FILE NAME frame rotor arm.ipt			POS 1.3
DEVELOPED BY		REDESIGNED BY	DOC. TYPE	MATERIAL	QUANTITY
		 OPEN SOURCE ECOLOGY GERMANY	Part	Steel A36	3
			LICENCE	SCALE	SHEET
			OHIO e.V. CC-BY-SA 4.0	1:3	6 /13



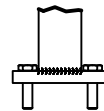
Note: all units in mm.

PROJECT Darrieus turbine made of pvc pipes		CREATED BY E. CEBALLOS	APPROVED BY A. MORILLO	DATE 28/11/2021	VERSION 1.0
PART NAME Blade		FILE NAME blade.ipt			POS 1.5
DEVELOPED BY		REDESIGNED BY	DOC. TYPE Part	MATERIAL PVC	QUANTITY 3
		 OPEN SOURCE ECOLOGY GERMANY	LICENCE CC-BY-SA 4.0		SHEET 7 /13
			SCALE 1:8		

OHO e.V.



A (1:8)



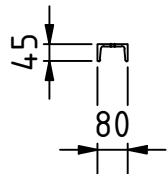
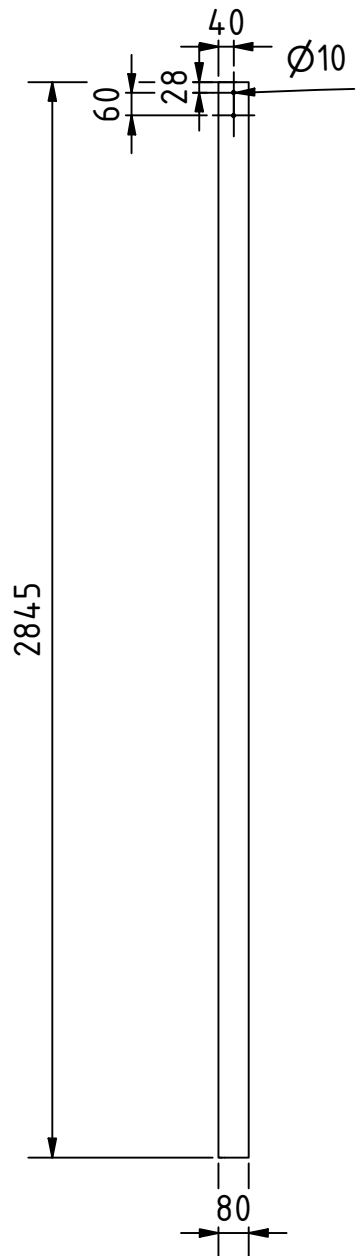
B (1:8)




C (1:8)

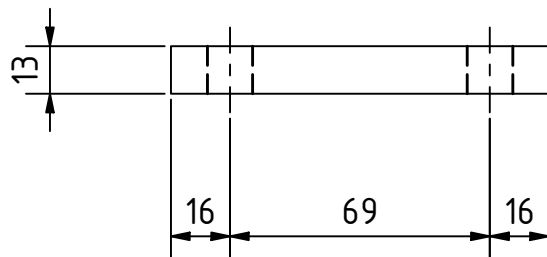
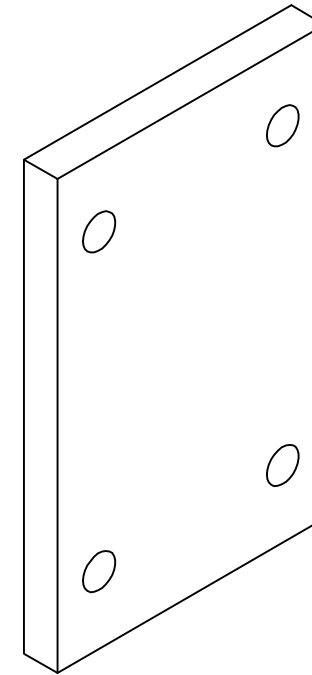
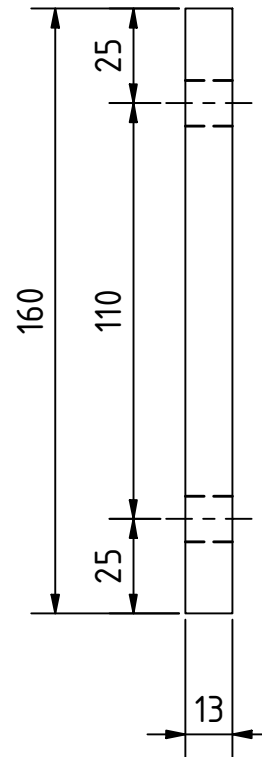
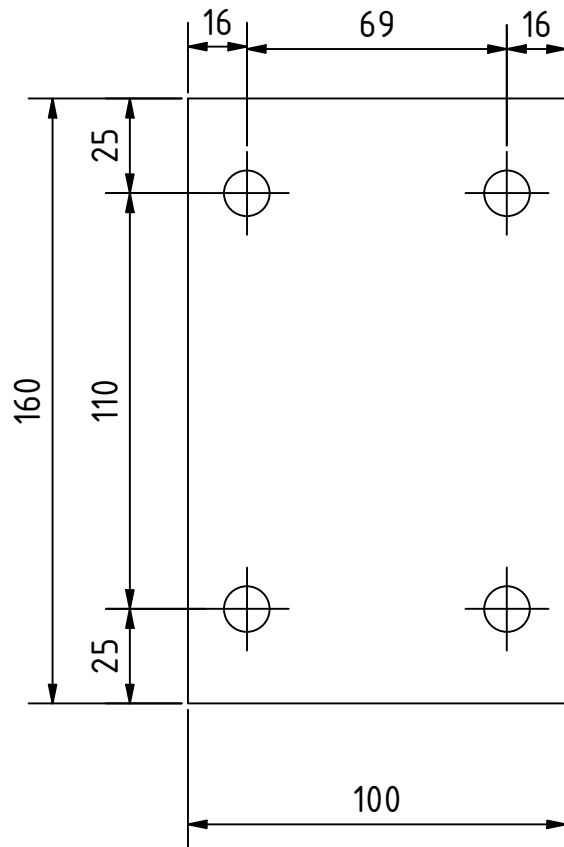
Note: all units in mm.

PROJECT Darrieus turbine made of pvc pipes		CREATED BY E. CEBALLOS	APPROVED BY A. MORILLO	DATE 28/11/2021	VERSION 1.0
PART NAME Frame assembly		FILE NAME frame assembly.iam			POS 2.0
DEVELOPED BY		REDESIGNED BY	DOC. TYPE Assembly	MATERIAL	QUANTITY 1
		 OPEN SOURCE ECOLOGY GERMANY	LICENCE CC-BY-SA 4.0		SCALE 1:35
			OHO e.V.		SHEET 8 / 13




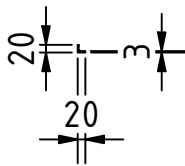
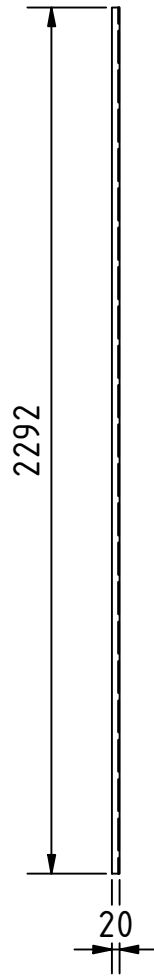
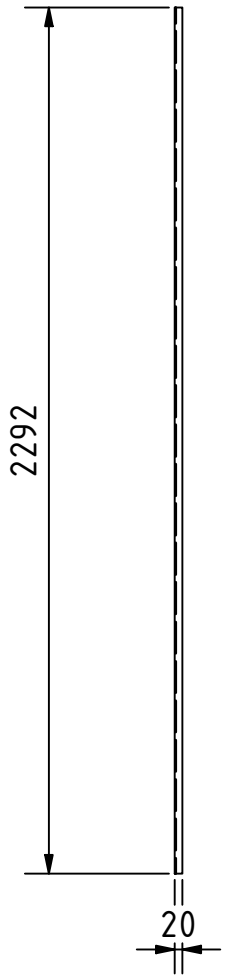
Note: all units in mm.

PROJECT Darrieus turbine made of pvc pipes		CREATED BY E. CEBALLOS		APPROVED BY A. MORILLO		DATE 28/11/2021		VERSION 1.0		
PART NAME Frame C			FILE NAME frame C.ipt						POS 2.1	
DEVELOPED BY			REDESIGNED BY			DOC. TYPE Part		MATERIAL Steel A36		QUANTITY 1
			 OPEN SOURCE ECOLOGY GERMANY			LICENCE CC-BY-SA 4.0		SCALE 1:20		SHEET 9 /13
						OHO e.V.				




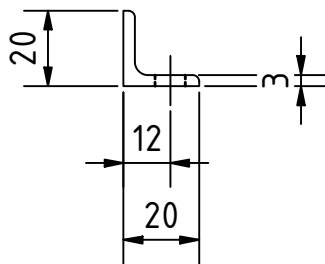
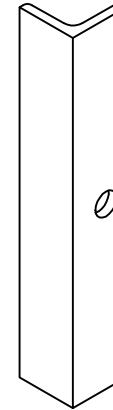
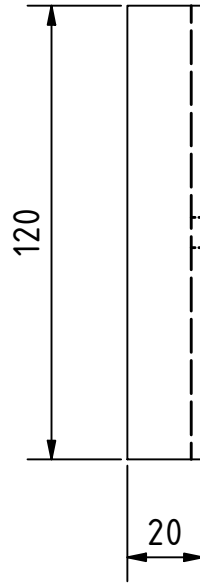
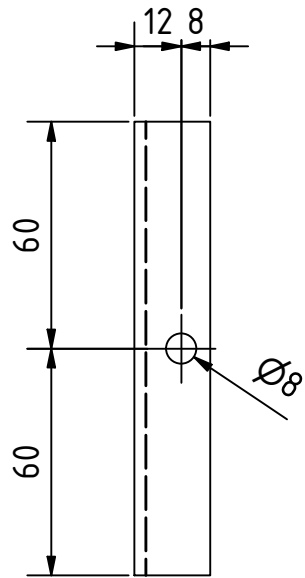
Note: all units in mm.

PROJECT Darrieus turbine made of pvc pipes		CREATED BY E. CEBALLOS	APPROVED BY A. MORILLO	DATE 28/11/2021	VERSION 1.0
PART NAME Base		FILE NAME base.ipt			POS 2.2
DEVELOPED BY	REDESIGNED BY	DOC. TYPE Part	MATERIAL Steel A36	QUANTITY 1	
 OPEN SOURCE ECOLOGY GERMANY		LICENCE CC-BY-SA 4.0		SCALE 1:2	SHEET 10 /13
		OHO e.V.			



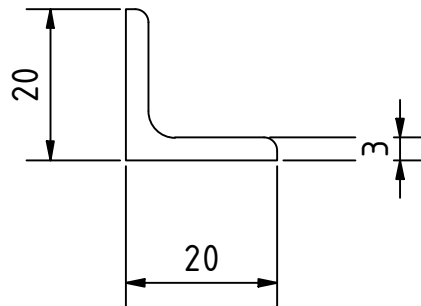
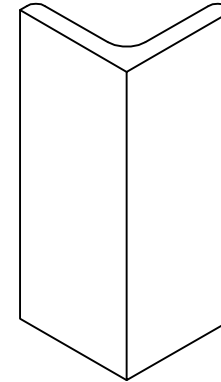
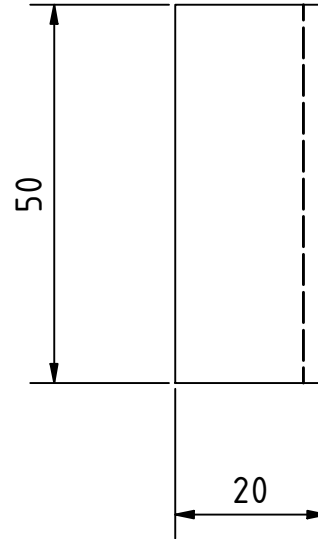
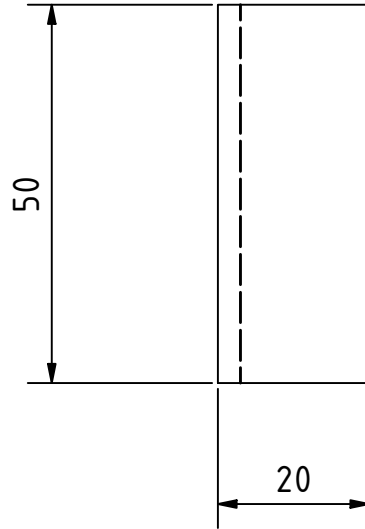
Note: all units in mm.

PROJECT Darrieus turbine made of pvc pipes		CREATED BY E. CEBALLOS	APPROVED BY A. MORILLO	DATE 28/11/2021	VERSION 1.0
PART NAME Frame Lateral L		FILE NAME frame lateral.ipt			POS 2.3
DEVELOPED BY	REDESIGNED BY	DOC. TYPE Part	MATERIAL Steel A36	QUANTITY 3	
	 OPEN SOURCE ECOLOGY GERMANY	LICENCE CC-BY-SA 4.0		SCALE 1:20	SHEET 11 /13
		OHO e.V.			




Note: all units in mm.

PROJECT Darrieus turbine made of pvc pipes		CREATED BY E. CEBALLOS	APPROVED BY A. MORILLO	DATE 28/11/2021	VERSION 1.0
PART NAME Frame base L		FILE NAME frame base.ipt			POS 2.4
DEVELOPED BY		REDESIGNED BY	DOC. TYPE Part	MATERIAL Steel A36	QUANTITY 3
		 OPEN SOURCE ECOLOGY GERMANY	LICENCE CC-BY-SA 4.0	SCALE 1:2	SHEET 12 /13
			OHO e.V.		



Note: all units in mm.

PROJECT Darrieus turbine made of pvc pipes		CREATED BY E. CEBALLOS	APPROVED BY A. MORILLO	DATE 28/11/2021	VERSION 1.0
PART NAME Frame upper L		FILE NAME frame upper.ipt			POS 2.5
DEVELOPED BY	REDESIGNED BY	DOC. TYPE Part	MATERIAL Steel A36	QUANTITY 2	
	 OPEN SOURCE ECOLOGY GERMANY	LICENCE CC-BY-SA 4.0		SCALE 1:1	SHEET 13 /13
		OHO e.V.			