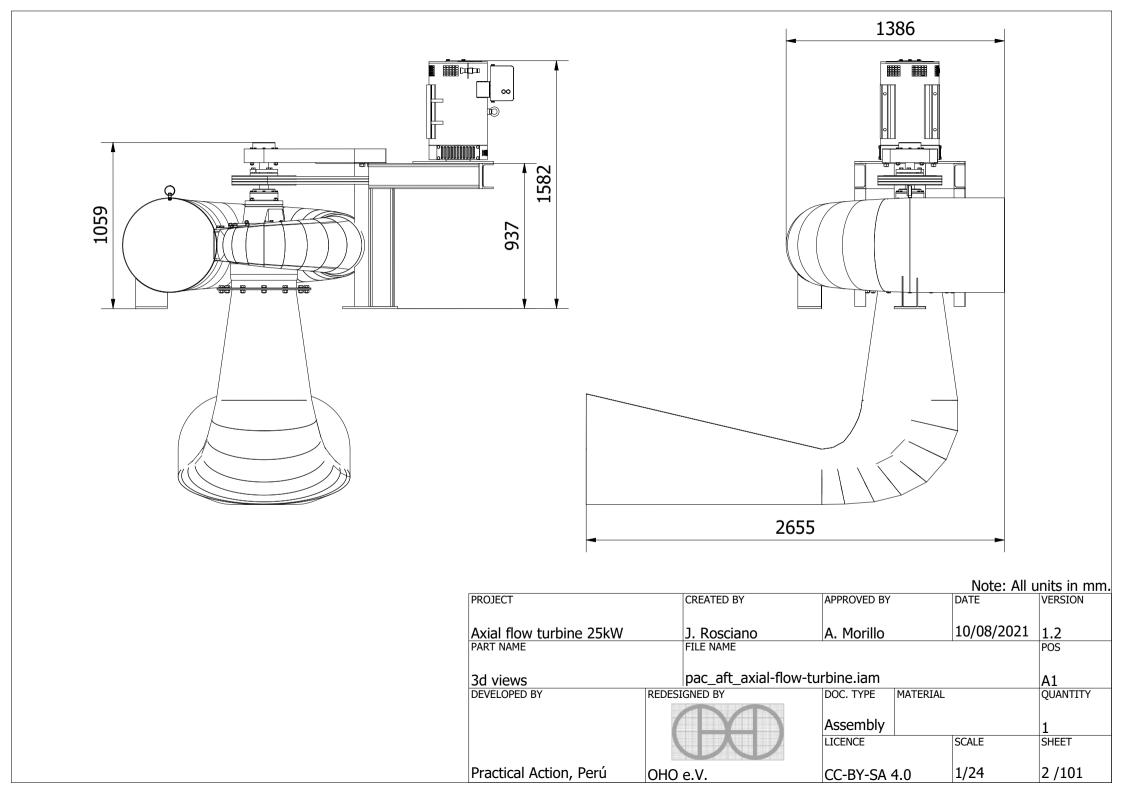
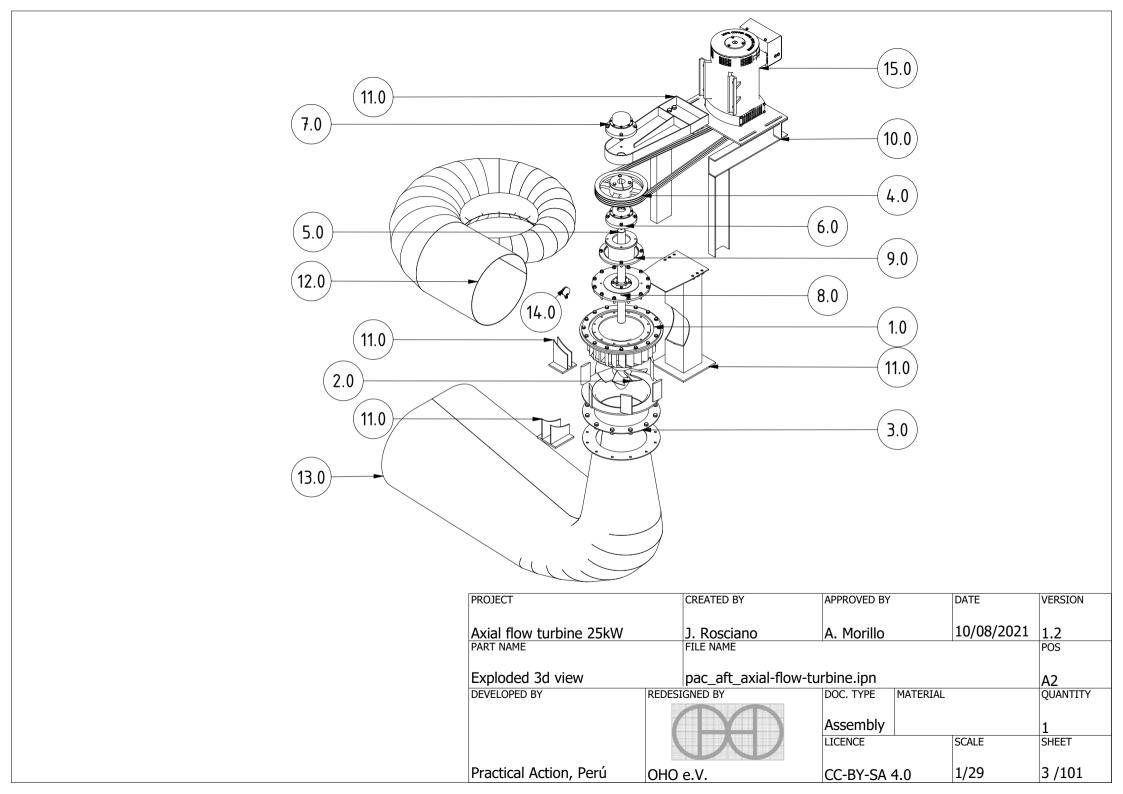


				Note: All ເ	ınits in mm.
PROJECT	CREATED BY	APPROVED BY		DATE	VERSION
Axial flow turbine 25kW	J. Rosciano	A. Morillo		10/08/2021	1.2
PART NAME	FILE NAME				POS
3d views	pac_aft_axial-flow-tu	rbine.iam			A1
DEVELOPED BY	REDESIGNED BY	DOC. TYPE	MATERIAL		QUANTITY
		Assembly			1
		LICENCE	•	SCALE	SHEET
Practical Action, Perú	OHO e.V.	CC-BY-SA	4.0	1/24	1 /101





			Parts list			
POS	QTY	PART NAME	FILE NAME	PART TYPE	SPECIFICATIONS	SHEET
A1	1	3d views	pac_aft_axial-flow-turbine.iam			1
A1	1	3d views	pac_aft_axial-flow-turbine.iam			2
A2	1	Exploded 3d view	pac_aft_axial-flow-turbine.ipn			3
B1	1	Parts list	pac_aft_axial-flow-turbine.csv			4
B2	1	Parts list	pac_aft_axial-flow-turbine.csv			5
В3	1	Parts list	pac_aft_axial-flow-turbine.csv			6
B4	1	Parts list	pac_aft_axial-flow-turbine.csv			7
C1	1	Technical notes				8
1.0	1	Alignment of vanes assembly	Alignment of vanes assembly.iam			9-10
1.1	1	Alignment of vanes	Alignment of vanes.ipt	Production	DIN C45	11
1.2	1	Alignment of vanes 1	Alignment of vanes 1.ipt	Production	DIN C45	12
1.3	1	Alignment of vanes 2	Alignment of vanes 2.ipt	Production	DIN C45	13
1.4	1	Inlet cone	Inlet cone.ipt	Production	DIN C45	14
1.5	1	Ring	Ring.ipt	Production	DIN C45	15
1.6	24	Vane	Vane.ipt	Production	DIN C45	16
1.7	16	Alignment of vanes bolt M14		Standard	DIN 933 M14x28x1.5	
1.8	16	Alignment of vanes washer		Standard	DIN 125-1 A A 15	
2.0	1	Propeller assembly	Propeller assembly.iam			17-18
2.1	1	Propeller	Propeller.ipt	Production	DIN C45	19
2.2	1	Cone	Cone.ipt	Production	DIN C45	20
2.3	3	Hexagon Socket Set Screw		Standard	Hexagonal 6.35"x22.225"	
3.0	1	Propeller cover assembly	Propeller cover assembly.iam			21-22
3.1	1	Propeller cover	Propeller cover.ipt	Production	DIN C45	23
3.2	1	Propeller cover top	Propeller cover top.ipt	Production	DIN C45	24
3.3	6	Fixed vane	Fixed vane.ipt	Production	DIN C45	25
3.4	1	Flange cover	Flange cover.ipt	Production	DIN C45	26
3.5	12	Cover bolt M18		Standard	DIN 933 M18X35x1.5	
3.6	12	Cover nut M18		Standard	DIN 555 M18	
3.7	24	Cover washer		Standard	DIN 433-1 A 19	
4.0	1	Drive pulley assembly	Drive pulley assembly.iam			27-28
4.1	1	Drive pulley	Drive pulley.ipt	Production	DIN C45	29

	1				1	1
PROJECT	CREA	TED BY	APPROVED BY	<i>(</i>	DATE	VERSION
Axial flow turbine 25kW	1 R	osciano	A. Morillo		10/08/2021	1.2
PART NAME		NAME	741 1 1011110		-,,	POS
7.4.1.1.4.1.						. 00
<b>5</b>		oft ovial fla	u turbina anu			
Parts list	pac	_art_axiai-no	w-turbine.csv			B1
DEVELOPED BY	REDESIGNED	BY	DOC. TYPE	MATERIAL		QUANTITY
	/ 1	VIII	Parts list			
			LICENCE		SCALE	SHEET
			LICENCE		SCALE	SHEET
_						
Practical Action, Perú	OHO e.V.		CC-BY-SA	4.0		4 /101

			Parts list			
POS	QTY	PART NAME	FILE NAME	PART TYPE	SPECIFICATIONS	SHEET
4.2	1	Drive pulley 1	Drive pulley 1.ipt	Production	DIN C45	30
4.3	1	Adjusting cone	Adjusting cone.ipt	Production	DIN C45	31
4.4	3	V-Belt transmision		Buy	ANSI/RMA IP-22 5VX500	
4.5	3	Drive pulley bolt M14		Standard	DIN 933 M14x45x15	
5.0	1	Shaft	Shaft.ipt	Production	0D 60 DIN C45	32
6.0	1	Bearings bottom	Bearings bottom.iam			33-34
6.1	1	Bearings	Bearings.ipt	Production	DIN C45	35
6.2	1	Bearing 1	Bearing 1.ipt	Production	DIN C45	36
6.3	1	Bearing 60		Buy	SKF 22313	
6.4	8	Bearing bolt M8		Standard	DIN 933 M8x25x1.5	
6.5	4	Bearing stud M14		Standard	UNI 5910 M14x35x1.5	
6.6	4	Bearing nut M14		Standard	DIN 555 M14	
6.7	4	Bearing washer		Standard	DIN 433-1 A 15	
7.0	1	Bearing top assembly	Bearing top assembly.iam			37-38
7.1	1	Bearings	Bearings.ipt	Production	DIN C45	39
7.2	1	Bearings 2	Bearings 2.ipt	Production	DIN C45	40
7.3	1	Bearing 60		Buy	SKF 22313	
7.4	8	Bearing bolt M8		Standard	DIN 933 M8x25x1.5	
7.5	4	Bearing bolt M14		Standard	DIN 933 M14x50x1.5	
7.6	4	Bearing nut M14		Standard	DIN 555 M14	
7.7	8	Bearing washer		Standard	DIN 433-1 A 15	
8.0	1	Seal housing assembly	Seal housing assembly.iam			41-42
8.1	1	Seal housing	Seal housing.ipt	Production	DIN C45	43
8.2	1	Seal housing out	Seal housing out.ipt	Production	DIN C45	44
8.3	1	Seal housing support 155	Seal housing support 155.ipt	Production	DIN C45	45
8.4	1	Seal housing support 450	Seal housing support 450.ipt	Production	DIN C45	46
8.5	4	Seal housing bolt M10x25		Standard	DIN 933 M10x28x1.5	
8.6	4	Seal housing bolt M10x40		Standard	DIN 933 M10x40x1.5	
8.7	12	Seal housing stud M14		Standard	UNI 5910 Mx14x35x1.5	
8.8	12	Seal housing nut M14		Standard	DIN 934 M14x1.5	
8.9	12	Seal housing washer		Standard	DIN 125-1 A A 15	

	Stariuaru		D1N 123 .	1 // // 13			
PROJECT	CREA	TED BY	APPROVED BY		DATE	VERSION	
Axial flow turbine 25kW PART NAME	J. R	osciano NAME	A. Morillo		10/08/2021	1.2 POS	
Parts list DEVELOPED BY		pac_aft_axial-flow-turbine.csv					
	(F		Parts list		SCALE	SHEET	
Practical Action, Perú	OHO e.V.		CC-BY-SA	4.0		5 /101	

			Parts list			
POS	QTY	PART NAME	FILE NAME	PART TYPE	SPECIFICATIONS	SHEET
9.0	1	Bearing support assembly	Bearing support assembly.iam			47-48
9.1	1	Bearing support	Bearing support.ipt	Production	DIN C45	49
9.2	1	Bearing support 1	Bearing support 1.ipt	Production	DIN C45	50
9.3	1	Bearing support 2	Bearing support 2.ipt	Production	DIN C45	51
9.4	4	Bearing support stud		Standard	UNI 5910 Mx14x30x1.5	
9.5	4	Bearing support nut		Standard	DIN 555 M14	
9.6	4	Bearing support washer		Standard	DIN 125-1 A A 15	
10.0	1	Generator base assembly	Generator base assembly.iam			52-53
10.1	1	Generator base	Generator base.ipt	Production	Thk 13 ASTM A36	54
10.2	2	Generator base 747	Generator base 747.ipt	Production	160x6x7 ASTM A36	55
10.3	2	Generator base 720	Generator base 720.ipt	Production	160x6x7 ASTM A36	56
10.4	1	Generator base 700	Generator base 700.ipt	Production	160x6x7 ASTM A36	57
11.0	1	Frame assembly	Frame assembly.iam			58-59
11.1	1	Frame 150	Frame 150.ipt	Production	Thk 6 ASTM A36	60
11.2	1	Frame 200	Frame 200.ipt	Production	Thk 6 ASTM A36	61
11.3	1	Frame 340	Frame 340.ipt	Production	Thk 6 ASTM A36	62
11.4	1	Cantilever	Cantilever.ipt	Production	Thk 6 ASTM A36	63
11.5	1	Cantilever base	Cantilever base.ipt	Production	Thk 6 ASTM A36	64
11.6	6	Generator base bolt		Standard	DIN 933 M20x35	
11.7	6	Generator base nut		Standard	DIN 555 M20	
11.8	12	Generator base washer		Standard	DIN 433 A 21	
12.0	1	Spiral casing	Spiral casing.iam	Production		65-66
12.1	1	Segment 1-1	Segment 1-1.ipt	Production	Thk 3.175 ASTM A569	67
12.2	1	Segment 1-2	Segment 1-2.ipt	Production	Thk 3.175 ASTM A569	68
12.3	1	Segment 2-3	Segment 2-3.ipt	Production	Thk 3.175 ASTM A569	69
12.4	1	Segment 3-4	Segment 3-4.ipt	Production	Thk 3.175 ASTM A569	70
12.5	1	Segment 4-5	Segment 4-5.ipt	Production	Thk 3.175 ASTM A569	71
12.6	1	Segment 5-6	Segment 5-6.ipt	Production	Thk 3.175 ASTM A569	72
12.7	1	Segment 6-7	Segment 6-7.ipt	Production	Thk 3.175 ASTM A569	73
12.8	1	Segment 7-8	Segment 7-8.ipt	Production	Thk 3.175 ASTM A569	74
12.9	1	Segment 8-9	Segment 8-9.ipt	Production	Thk 3.175 ASTM A569	75

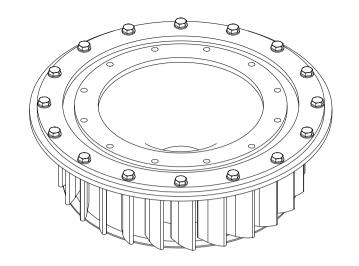
PROJECT  Axial flow turbine 25kW  J. Rosciano  A. Morillo  10/08/2021  1.2  PART NAME  POS  Parts list  DEVELOPED BY  REDESIGNED BY  Practical Action, Perú  CREATED BY  J. Rosciano  A. Morillo  10/08/2021  1.2  POS  B3  DOC. TYPE  MATERIAL  QUANTITY  Parts list  LICENCE  SCALE  SHEET  6 /101							
Axial flow turbine 25kW  PART NAME  Parts list  DEVELOPED BY  REDESIGNED BY  Parts list  Parts list  Parts list  Parts list  LICENCE  DOC. TYPE  MATERIAL  QUANTITY							
PART NAME    FILE NAME   POS	PROJECT		CREATED BY	APPROVED BY		DATE	VERSION
PART NAME    FILE NAME   POS							
PART NAME    FILE NAME   POS	A 1-1 (1- 1 1-1 2FL)A/		1 D	A		10/09/2021	1 2
Parts list pac_aft_axial-flow-turbine.csv  DEVELOPED BY REDESIGNED BY DOC. TYPE MATERIAL QUANTITY  Parts list LICENCE SCALE SHEET				A. Morillo		10/00/2021	1.2
DEVELOPED BY  REDESIGNED BY  DOC. TYPE MATERIAL QUANTITY  Parts list  LICENCE SCALE SHEET	PART NAME		FILE NAME				POS
DEVELOPED BY  REDESIGNED BY  DOC. TYPE MATERIAL QUANTITY  Parts list  LICENCE SCALE SHEET							
DEVELOPED BY  REDESIGNED BY  DOC. TYPE MATERIAL QUANTITY  Parts list  LICENCE SCALE SHEET	Da La Par		nac aft avial flow tu	rhino cov			D2
Parts list LICENCE SCALE SHEET	Parts list		pac_art_axiai-now-tu	i bii ie.csv			B3
LICENCE SCALE SHEET	DEVELOPED BY	REDESI	GNED BY	DOC. TYPE	MATERIAL		QUANTITY
LICENCE SCALE SHEET							
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				Parts list			
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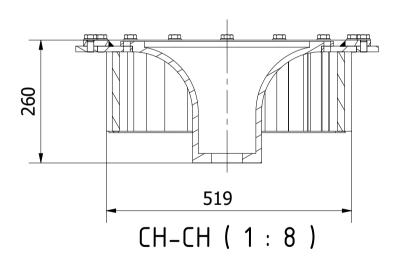
			Parts list			
POS	QTY	PART NAME	FILE NAME	PART TYPE	SPECIFICATIONS	SHEET
12.10	1	Segment 9-10	Segment 9-10.ipt	Production	Thk 3.175 ASTM A569	76
12.11	1	Segment 10-11	Segment 10-11.ipt	Production	Thk 3.175 ASTM A569	77
12.12	1	Segment 11-12	Segment 11-12.ipt	Production	Thk 3.175 ASTM A569	78
12.13	1	Segment 12-13	Segment 12-13.ipt	Production	Thk 3.175 ASTM A569	79
12.14	1	Segment 13-14	Segment 13-14.ipt	Production	Thk 3.175 ASTM A569	80
12.15	1	Segment 14-15	Segment 14-15.ipt	Production	Thk 3.175 ASTM A569	81
12.16	1	Segment 15-16	Segment 15-16.ipt	Production	Thk 3.175 ASTM A569	82
12.17	1	Segment 16-17	Segment 16-17.ipt	Production	Thk 3.175 ASTM A569	83
12.18	1	Segment 17-18	Segment 17-18.ipt	Production	Thk 3.175 ASTM A569	84
12.19	1	Segment 18-19	Segment 18-19.ipt	Production	Thk 3.175 ASTM A569	85
12.20	1	Segment 19-20	Segment 19-20.ipt	Production	Thk 3.175 ASTM A569	86
12.21	1	Segment 20-21	Segment 20-21.ipt	Production	Thk 3.175 ASTM A569	87
12.22	1	Segment 21-22	Segment 21-22.ipt	Production	Thk 3.175 ASTM A569	88
12.23	1	Segment 22-23	Segment 22-23.ipt	Production	Thk 3.175 ASTM A569	89
13.0		Diffuser tube	Diffuser tube.iam	Production		90-91
13.1	1	Segment diffuser 0-0	Segment diffuser 0-0.ipt	Production	Thk 3.175 ASTM A569	92
13.2	1	Segment diffuser 0-1	Segment diffuser 0-1.ipt	Production	Thk 3.175 ASTM A569	93
13.3	1	Segment diffuser 1-2	Segment diffuser 1-2.ipt	Production	Thk 3.175 ASTM A569	94
13.4	1	Segment diffuser 2-3	Segment diffuser 2-3.ipt	Production	Thk 3.175 ASTM A569	95
13.5	1	Segment diffuser 3-4	Segment diffuser 3-4.ipt	Production	Thk 3.175 ASTM A569	96
13.6	1	Segment diffuser 4-5	Segment diffuser 4-5.ipt	Production	Thk 3.175 ASTM A569	97
13.7	1	Segment diffuser 5-6	Segment diffuser 5-6.ipt	Production	Thk 3.175 ASTM A569	98
13.8	1	Segment diffuser 6-7	Segment diffuser 6-7.ipt	Production	Thk 3.175 ASTM A569	99
13.9	1	Segment diffuser 7-8	Segment diffuser 7-8.ipt	Production	Thk 3.175 ASTM A569	100
13.10	1	Segment diffuser 8-9	Segment diffuser 8-9.ipt	Production	Thk 3.175 ASTM A569	101
14.0	1	Manometer		Buy	Manometer type Bourdon	
15.0	1	Dynamo		Buy	Dynamo Matari 25kW	

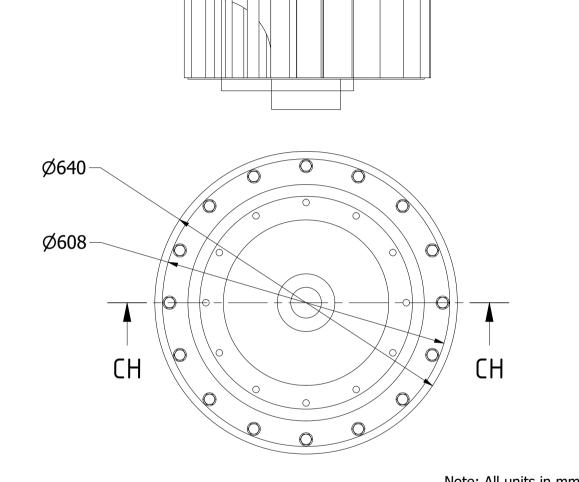
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Axial flow turbine 25kW	J. Rosciano	A. Morillo	10/08/2021	1.2
PART NAME	FILE NAME		•	POS
Parts list	pac_aft_axial-flow-tu	rbine.csv		
DEVELOPED BY	REDESIGNED BY	DOC. TYPE MATERIAL		QUANTITY
		Parts list		
		LICENCE	SCALE	SHEET
Practical Action, Perú	OHO e.V.	CC-BY-SA 4.0		7 /101

	TECHNICL NOTES					
NOTES	CONTENT					
GENERAL NOTES						
	Iron structures should be painted to prevent rust and improve equipment life.					
	- Remove loose rust with a wire brush, sandpaper or chemical rust remover.					
Metal structure treatment	- If applicable, sand areas where paint is chipping until surface is smooth.					
	- Remove dust or oil with a degreaser or denatured alcohol.					
	- Prime surface to protect against rust and corrosion					
	- The ground must be stable and have a low water table.					
Foundations fixing	- The structure must be fixed on firm oncrete soil or on poured footings with steel reinforcement.					
_	- The anchorage can be bolted with expansive ramplugs or welded.					
	- The parts named as: 1.6, 2.1, 2.2, 3.3, will be CNC machined.					
Fabrication special parts	- For large pieces such as 1.4, 3.1, the casting process could be used, considering that high quality surface finishes will not be					
· · ·	obtained, which would lead to power losses due to friction.					

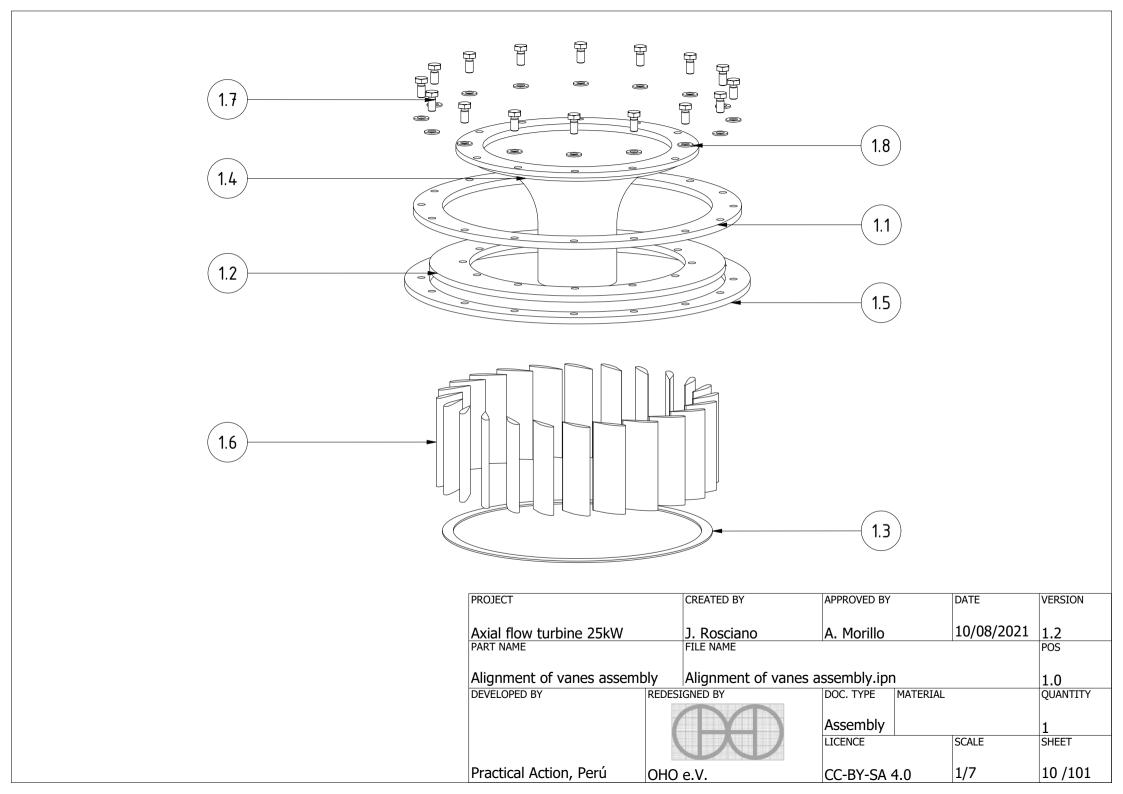
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Axial flow turbine 25kW PART NAME	J. Rosciano FILE NAME	A. Morillo	10/08/2021	1.2 POS
Technical notes DEVELOPED BY	REDESIGNED BY	DOC. TYPE MATERIAL Technical		C1 QUANTITY
		notes LICENCE	SCALE	SHEET
Practical Action, Perú	OHO e.V.	CC-BY-SA 4.0		8 /101

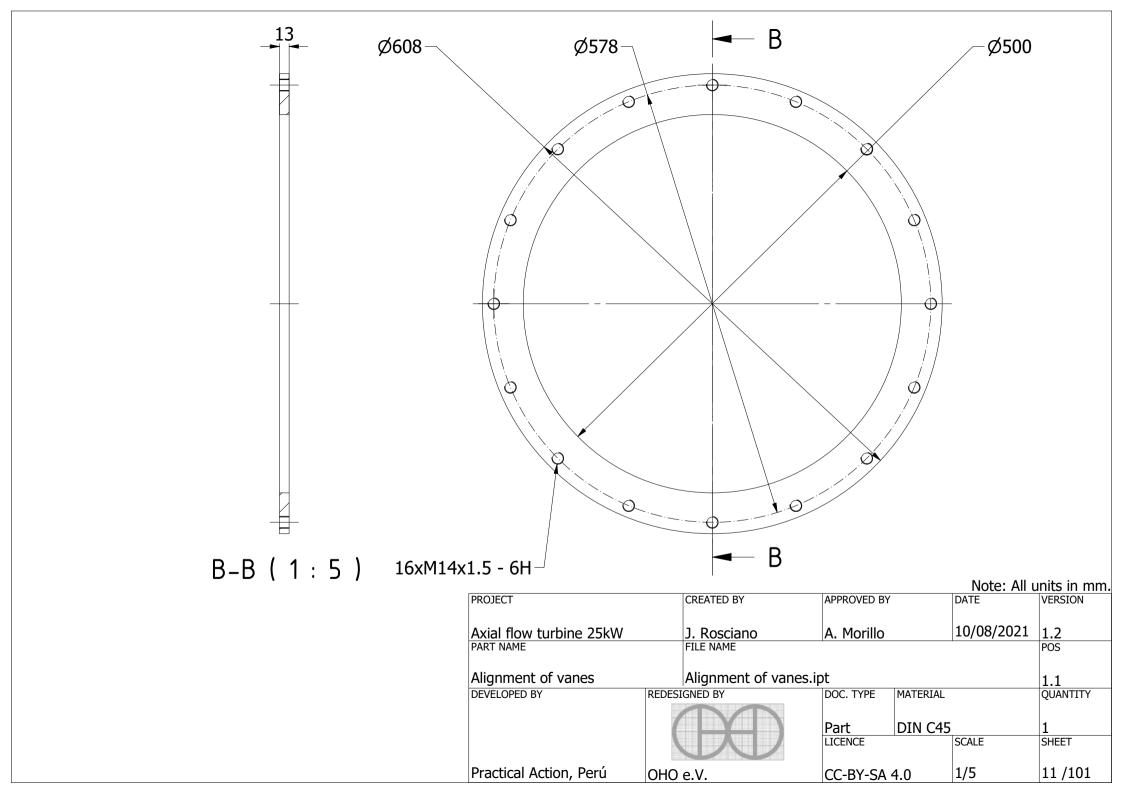


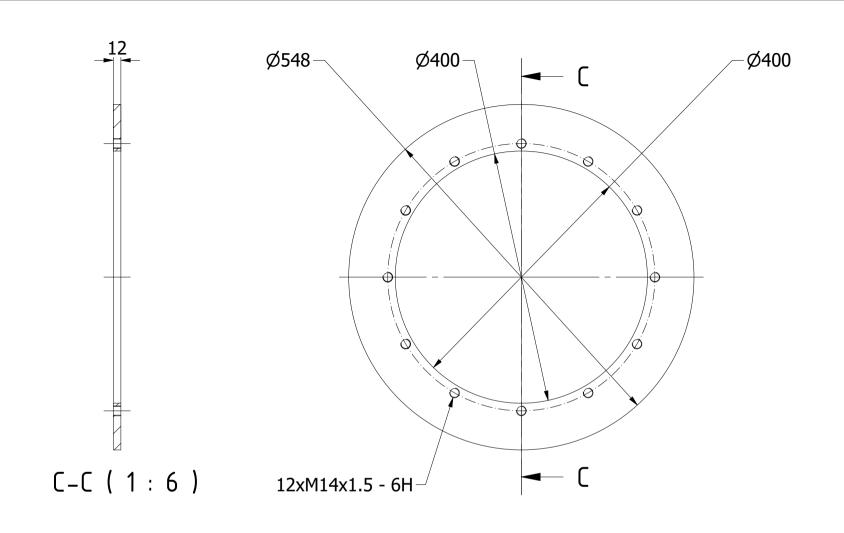




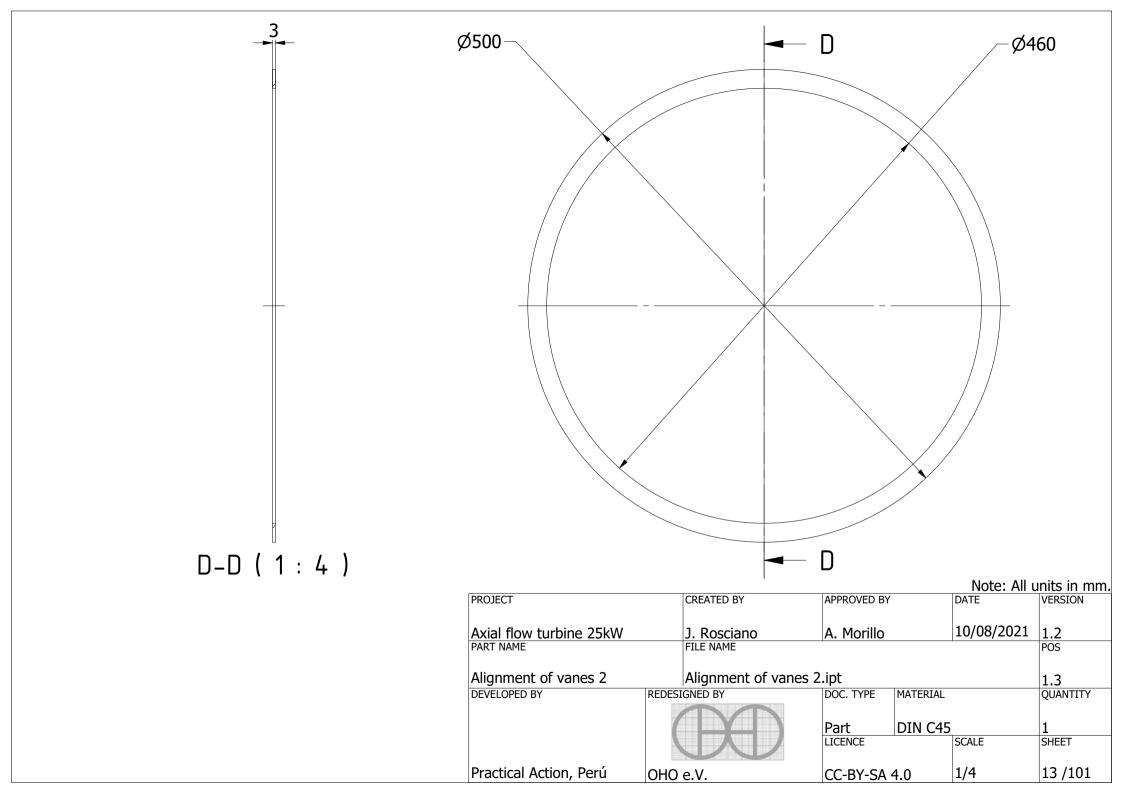
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	I	10/08/2021	1.2
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ssembly			1
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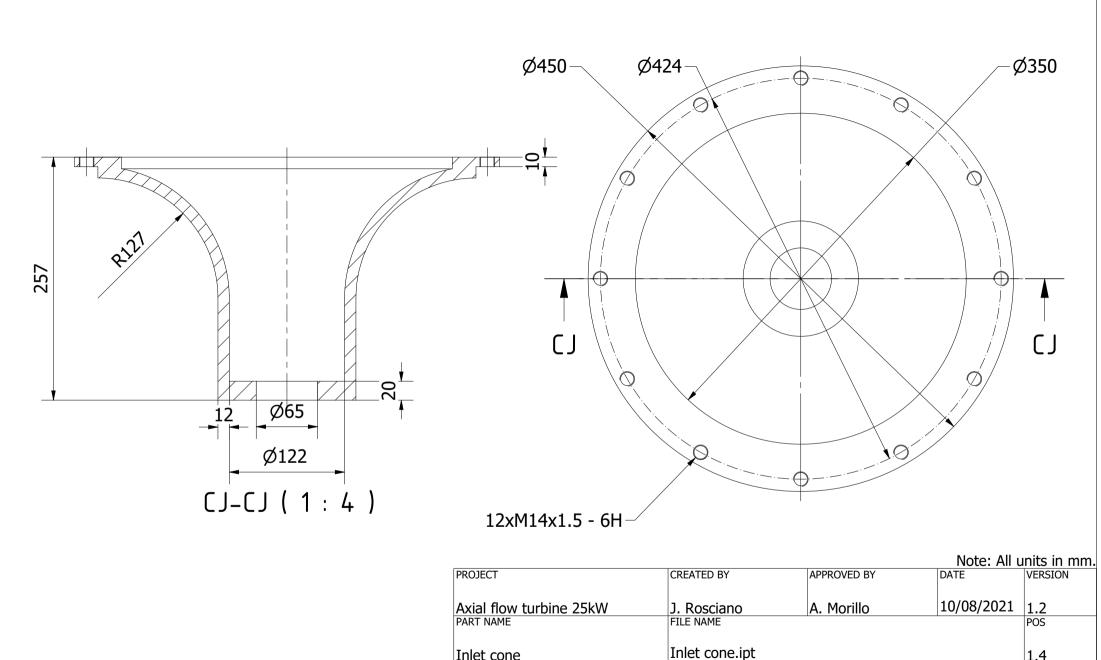




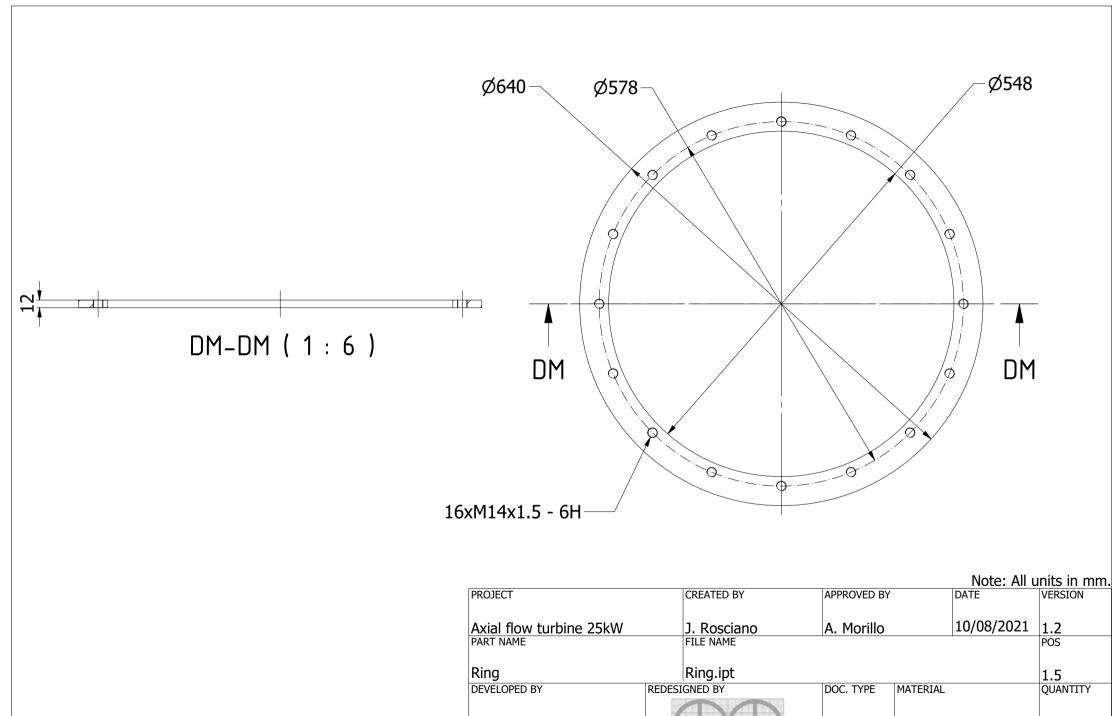


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PROJECT	CREATED BY	APPROVED BY		DATE	VERSION
Axial flow turbine 25kW	J. Rosciano	A. Morillo		10/08/2021	1.2
PART NAME	FILE NAME	•			POS
Alignment of vanes 1	Alignment of vanes	1.ipt			1.2
DEVELOPED BY	REDESIGNED BY	DOC. TYPE	MATERIAL		QUANTITY
		Part	DIN C45		1
		LICENCE	•	SCALE	SHEET
Practical Action, Perú	OHO e.V.	CC-BY-SA	4.0	1/6	12 /101

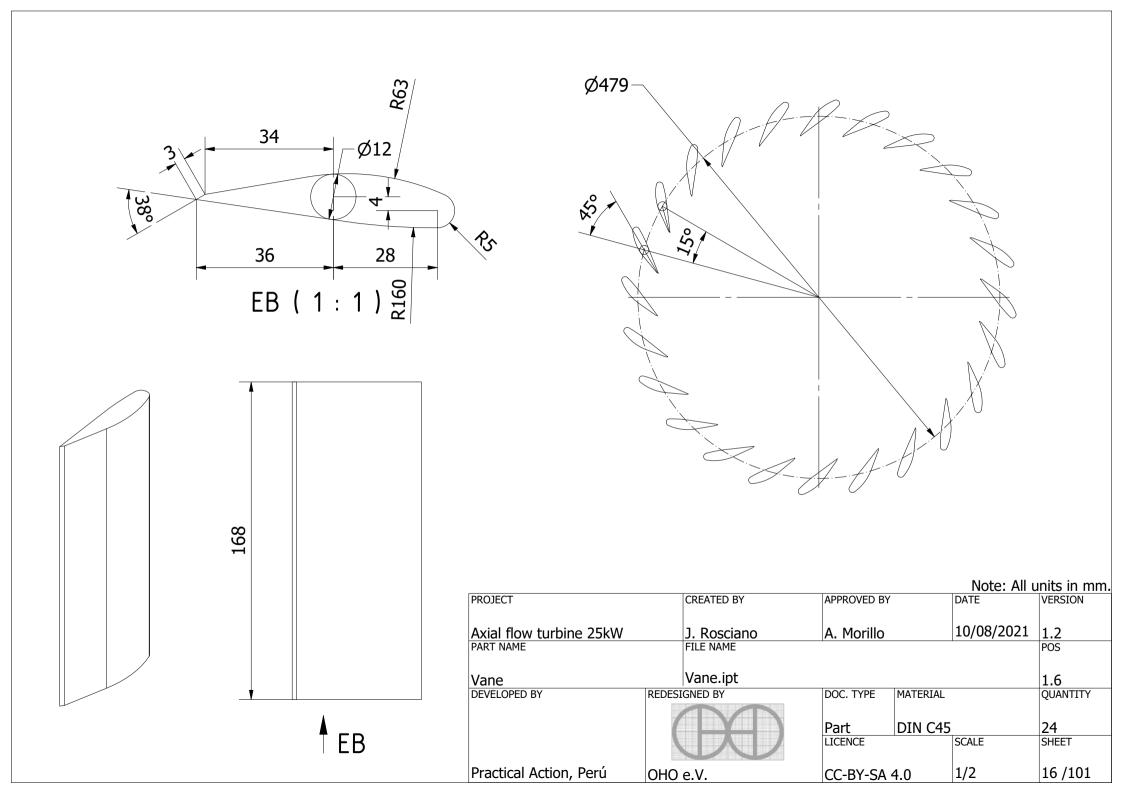


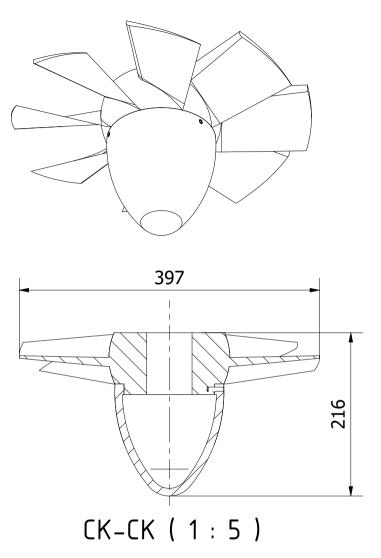


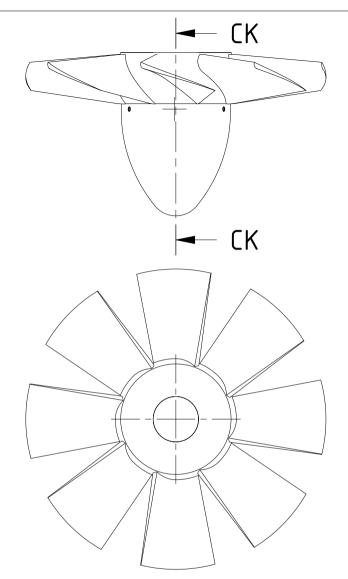
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CREATED BY	APPROVED BY		DATE	VERSION
			<i>.</i>	
J. Rosciano	A. Morillo		10/08/2021	1.2
FILE NAME	1			POS
Inlet cone.ipt				1.4
SIGNED BY	DOC TYPE	ΜΔΤΕΡΙΔΙ		QUANTITY
SIGNED DI	DOC. TITE	MATERIAL		QUANTITI
	Dart	DIN C45		1
				1
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N - 1/	CC DV CA	4.0	1/4	14 /101
Je.v.	CC-RA-2V	4.0	1/4	14 /101
		J. Rosciano  FILE NAME  Inlet cone.ipt  SIGNED BY  DOC. TYPE  Part  LICENCE	J. Rosciano  FILE NAME  Inlet cone.ipt  SIGNED BY  DOC. TYPE MATERIAL  Part DIN C45  LICENCE	CREATED BY  J. Rosciano A. Morillo FILE NAME  Inlet cone.ipt SIGNED BY  DOC. TYPE MATERIAL  Part DIN C45 LICENCE  SCALE



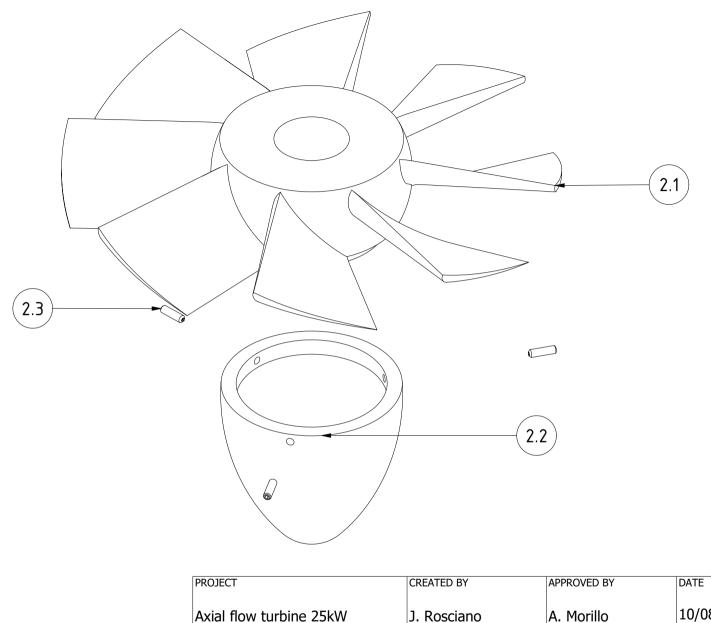
J. Rosciano	A. Morillo		10/08/2021	1.2
FILE NAME				POS
Ring.ipt				1.5
REDESIGNED BY	DOC. TYPE	MATERIAL		QUANTITY
	Part	DIN C45		1
	LICENCE		SCALE	SHEET
OHO e.V.	CC-BY-SA	4.0	1/6	15 /101
	FILE NAME Ring.ipt REDESIGNED BY	FILE NAME  Ring.ipt  REDESIGNED BY  DOC. TYPE  Part  LICENCE	FILE NAME  Ring.ipt  REDESIGNED BY  DOC. TYPE MATERIAL  Part DIN C45  LICENCE	REDESIGNED BY  Part DIN C45  LICENCE SCALE



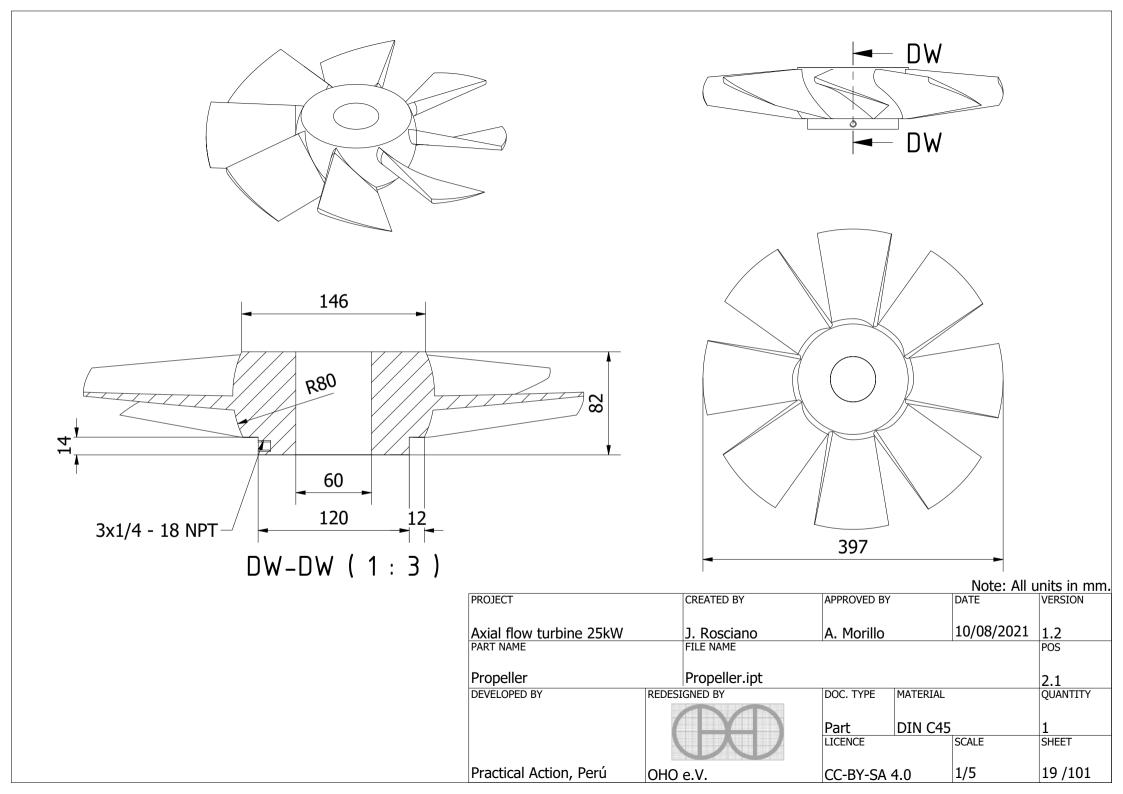


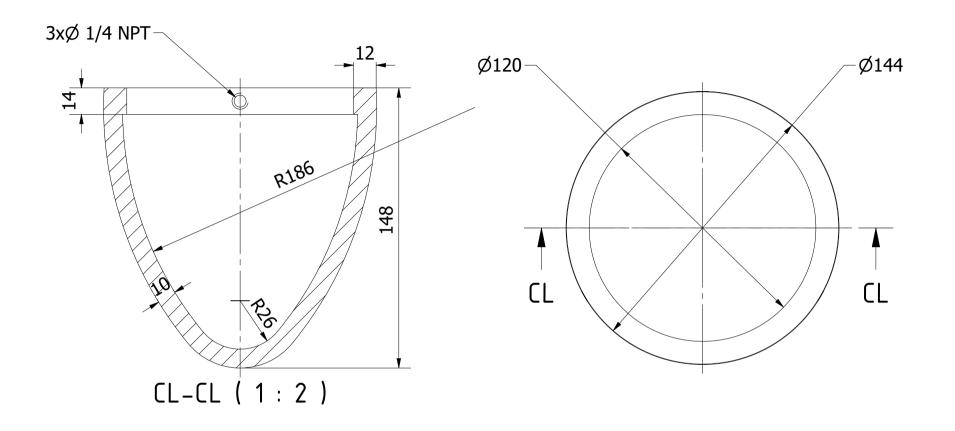


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PROJECT	CR	REATED BY	APPROVED BY		DATE	VERSION
Axial flow turbine 25kW	J.	Rosciano	A. Morillo		10/08/2021	1.2
PART NAME	FIL	LE NAME				POS
Propeller assembly	Pr	ropeller assembly.ia	m			2.0
DEVELOPED BY	REDESIGNI	IED BY	DOC. TYPE	MATERIAL		QUANTITY
			Assembly			1
			LICENCE SCALE			SHEET
Practical Action, Perú	OHO e.\	V.	CC-BY-SA 4.0 1/5		17 /101	
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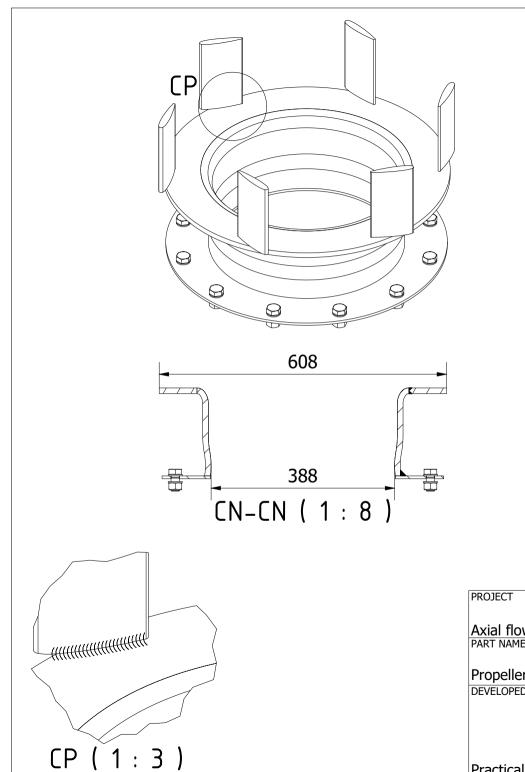


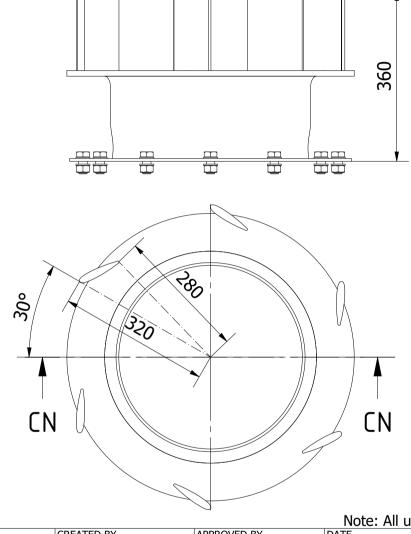
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Axial flow turbine 25kW PART NAME	J. Rosciano FILE NAME	A. Morillo		10/08/2021	1.2 POS
Propeller assembly DEVELOPED BY	Propeller assembly.ip	n Doc. Type	MATERIAL		2.0
DEVELOTED DI		Assembly	MATERIAL		1
		LICENCE		SCALE	SHEET
Practical Action, Perú	HO e.V.	CC-BY-SA	4.0	1/3	18 /101



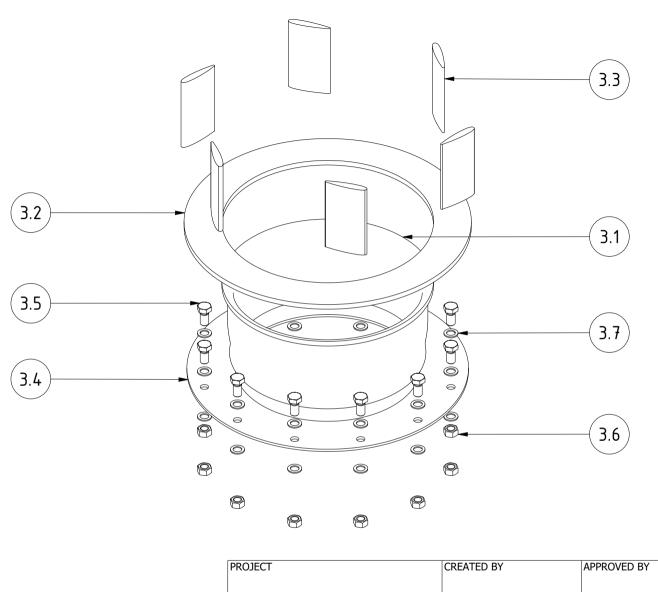


				Note: All ເ	ınits in mm.
PROJECT	CREATED BY	APPROVED BY	/	DATE	VERSION
Axial flow turbine 25kW	J. Rosciano	A. Morillo		10/08/2021	1.2
PART NAME	FILE NAME				POS
Cone	Cone.ipt				2.2
DEVELOPED BY	REDESIGNED BY	DOC. TYPE	MATERIAL		QUANTITY
		Part			1
		LICENCE		SCALE	SHEET
Practical Action, Perú	OHO e.V.	CC-BY-SA	4.0	1/2	20 /101

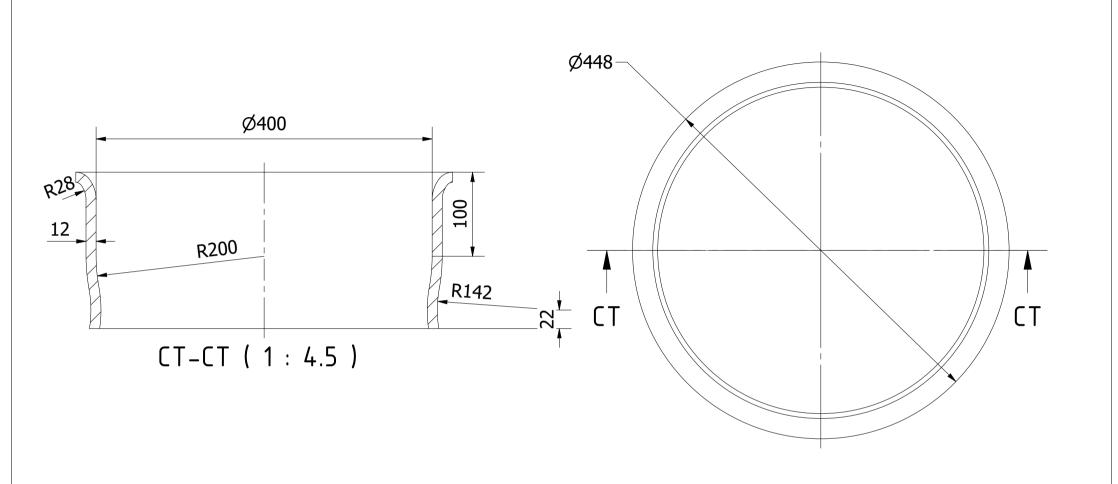




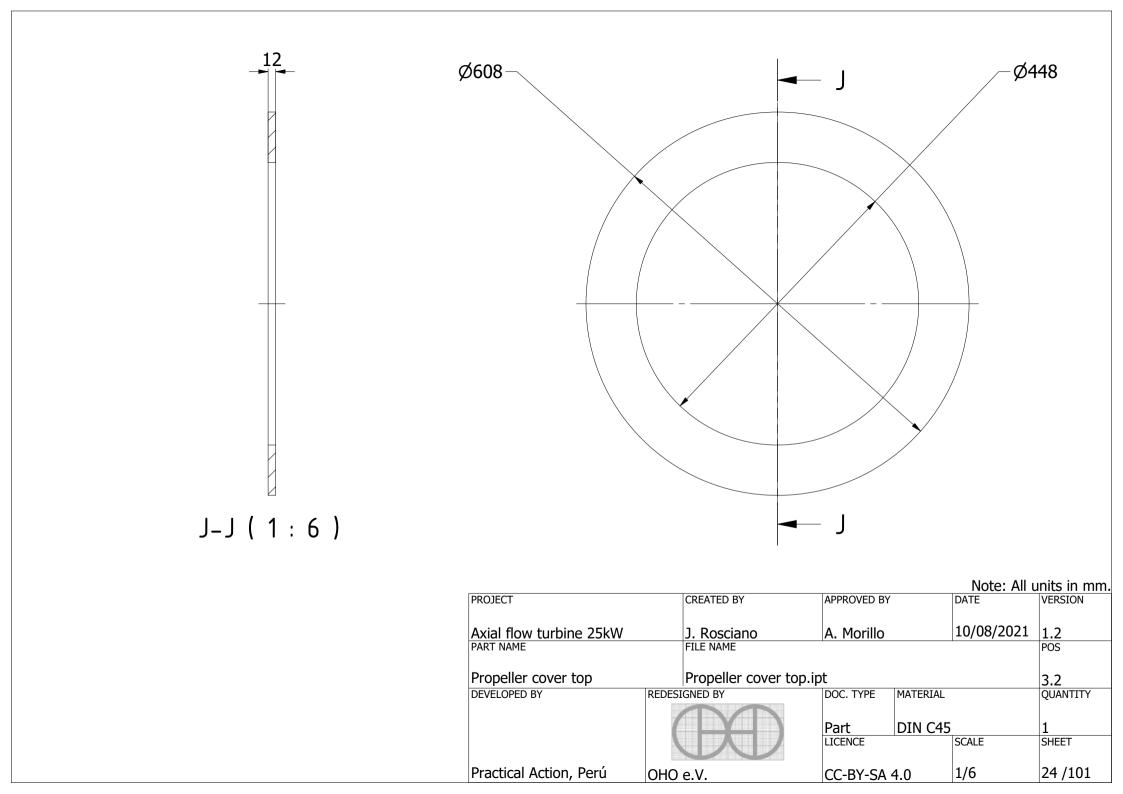
Note: All units in mm. CREATED BY APPROVED BY Axial flow turbine 25kW
PART NAME J. Rosciano 10/08/2021 1.2 POS A. Morillo Propeller cover assembly.iam 3.0 QUANTITY Propeller cover assembly MATERIAL DEVELOPED BY REDESIGNED BY DOC. TYPE Assembly LICENCE SCALE SHEET Practical Action, Perú 21 /101 OHO e.V. 1/8 CC-BY-SA 4.0

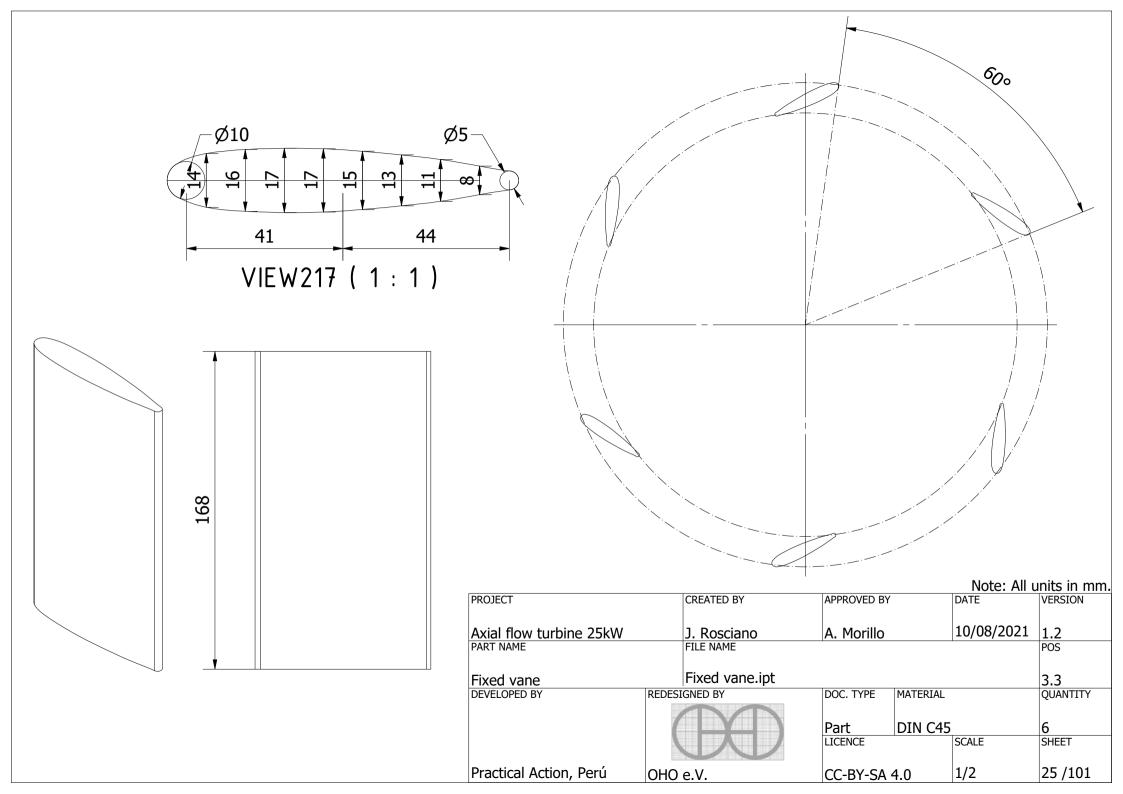


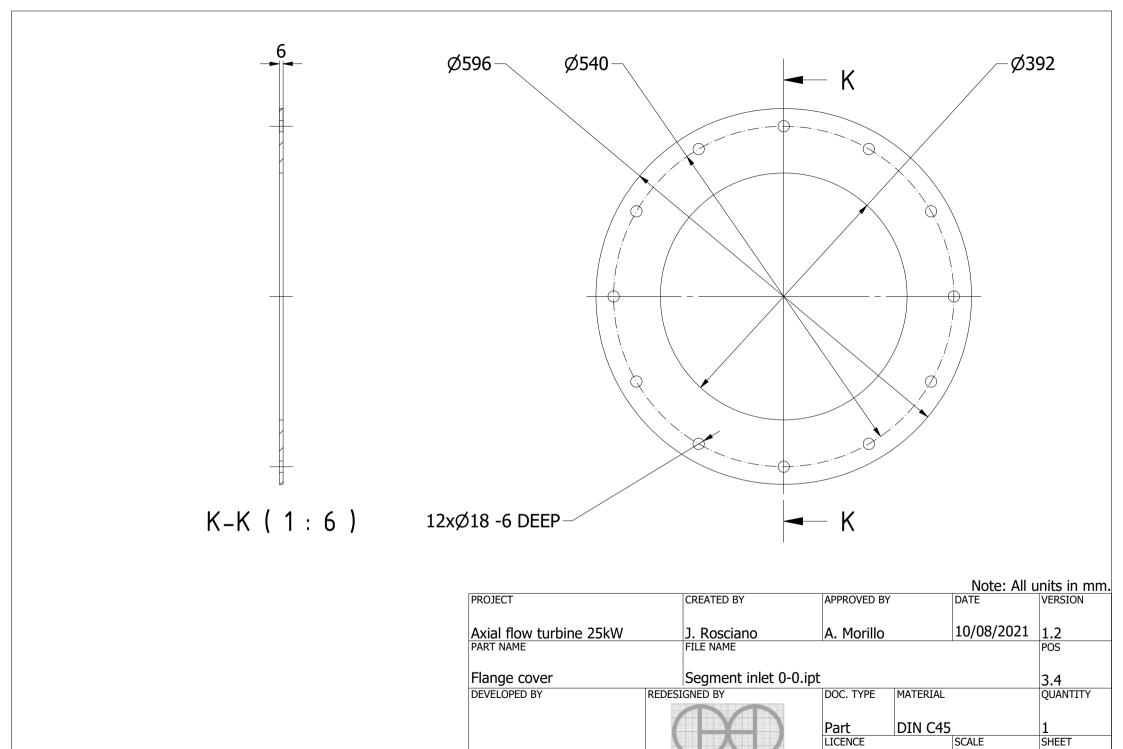
PROJECT	CREATED BY	APPROVED BY		DATE	VERSION
Axial flow turbine 25kW	J. Rosciano	A. Morillo		10/08/2021	1.2 POS
Propeller cover assembly					3.0
DEVELOPED BY	REDESIGNED BY		MATERIAL		QUANTITY
		Assembly			1
		LICENCE		SCALE	SHEET
Practical Action, Perú	OHO e.V.	CC-BY-SA 4	.0	1/8	22 /101



				Note: All ι	ınits in mm.
PROJECT	CREATED BY	APPROVED BY	,	DATE	VERSION
Axial flow turbine 25kW PART NAME	J. Rosciano FILE NAME	A. Morillo		10/08/2021	1.2 POS
Propeller cover	Propeller cover.ipt				3.1
DEVELOPED BY	REDESIGNED BY	DOC. TYPE	MATERIAL		QUANTITY
		Part	DIN C45		1
		LICENCE	•	SCALE	SHEET
Practical Action, Perú	OHO e.V.	CC-BY-SA	4.0	1/4.5	23 /101







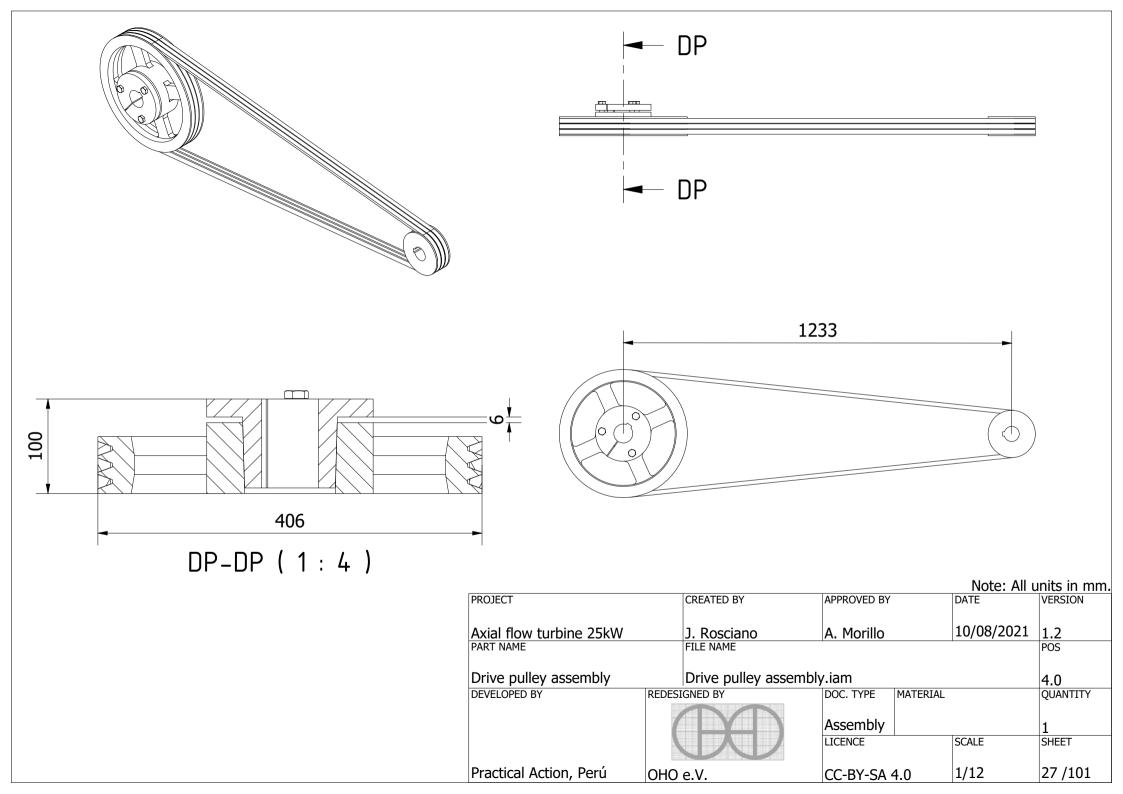
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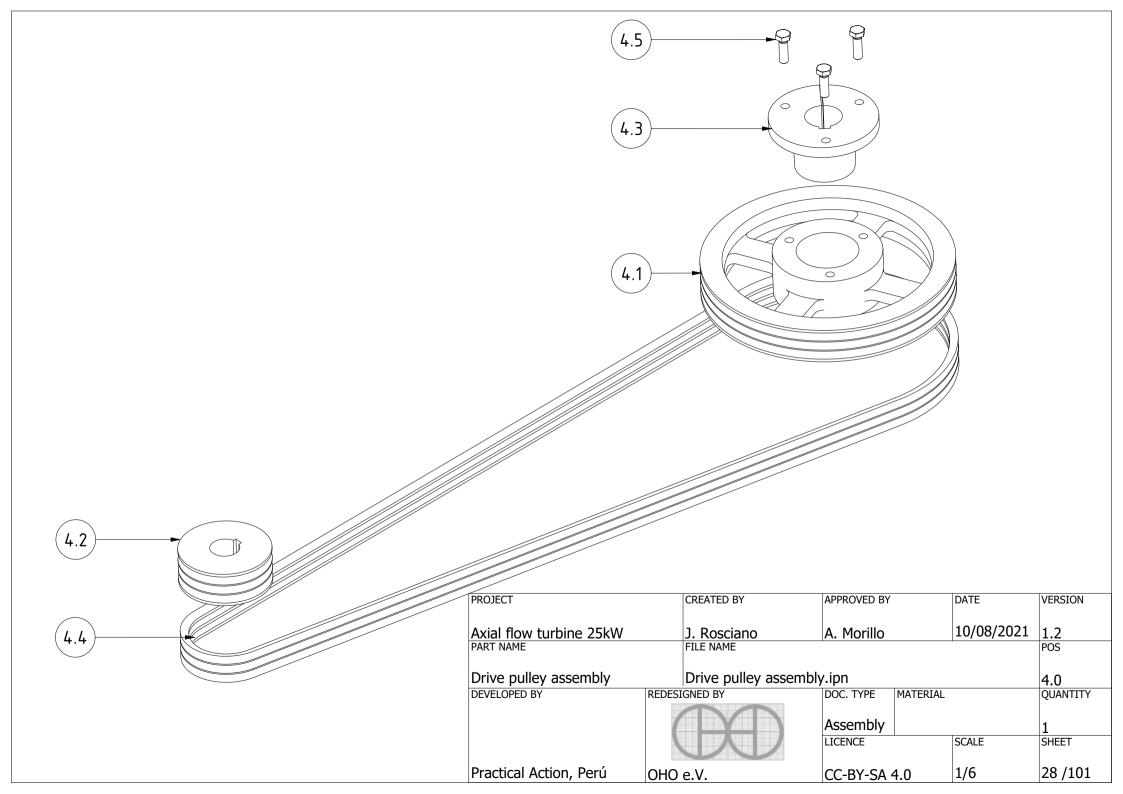
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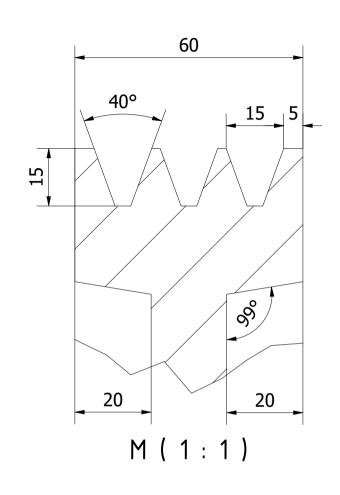
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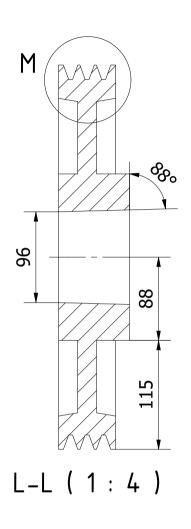
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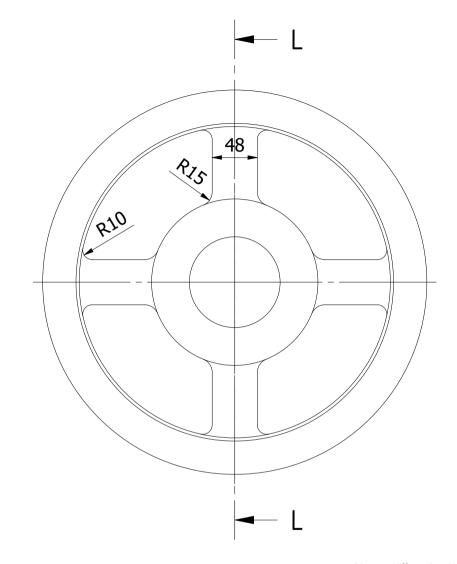
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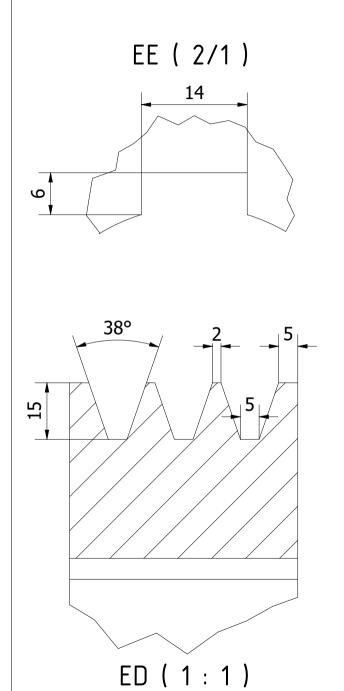


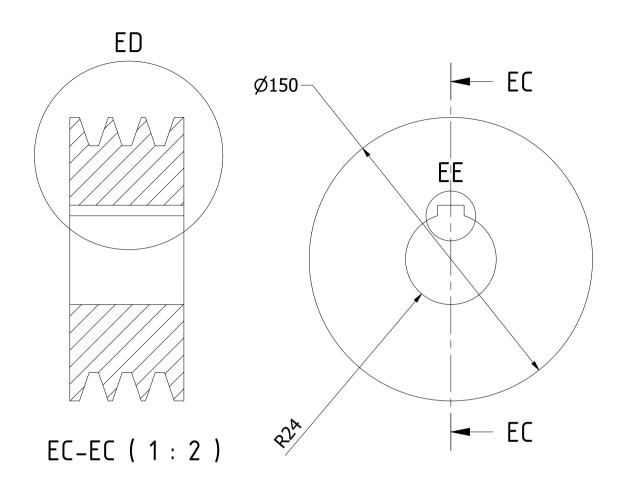




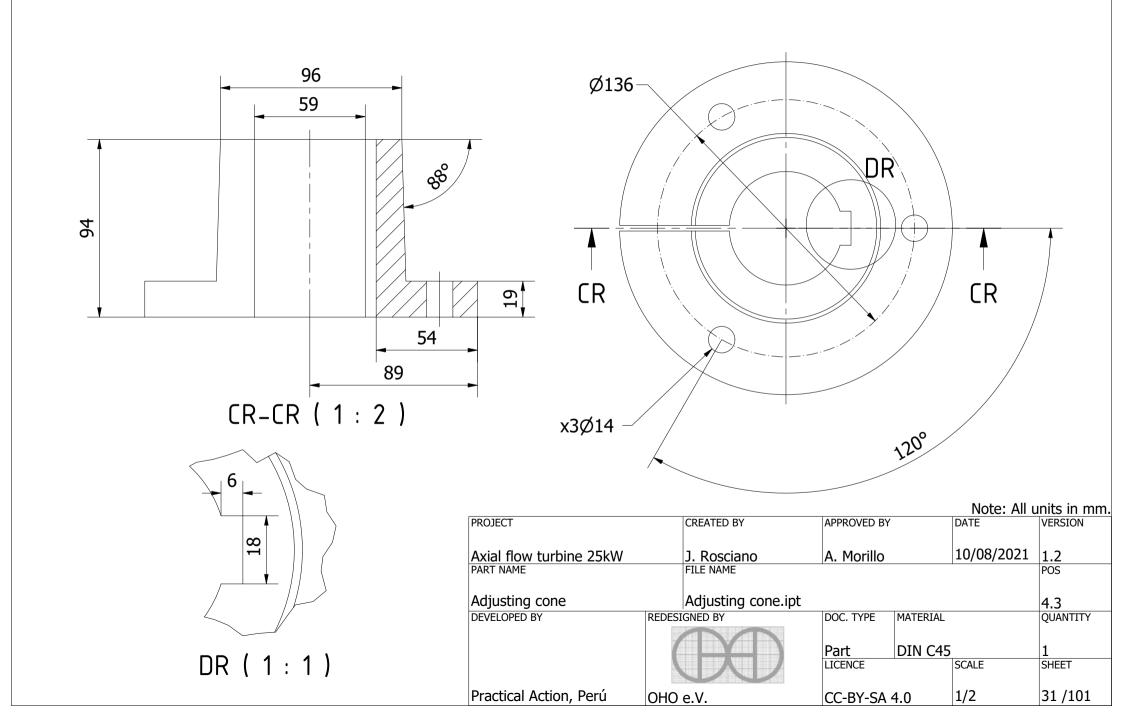


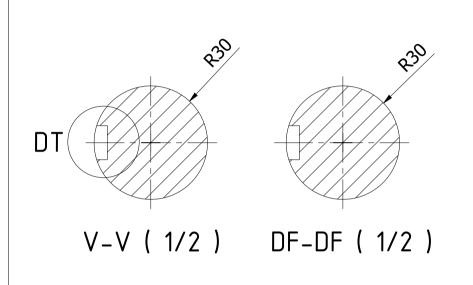
				Note: All ເ	ınits in mm.
PROJECT	CREATED BY	APPROVED BY		DATE	VERSION
Axial flow turbine 25kW	J. Rosciano	A. Morillo		10/08/2021	1.2
PART NAME	FILE NAME				POS
Drive Pulley	Drive Pulley.ipt				4.1
DEVELOPED BY	REDESIGNED BY	DOC. TYPE	MATERIAL		QUANTITY
		Part	DIN C45		1
		LICENCE	SCALE		SHEET
Practical Action, Perú	OHO e.V.	CC-BY-SA	4.0	1/4	29 /101

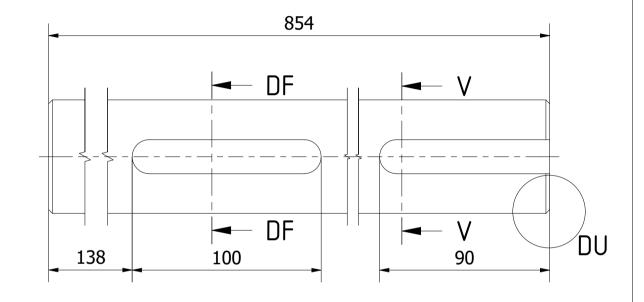


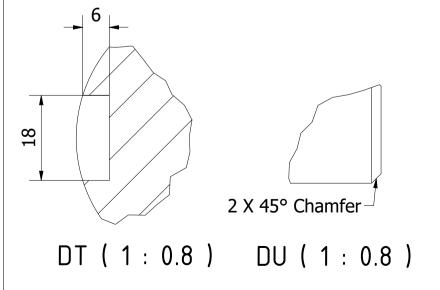


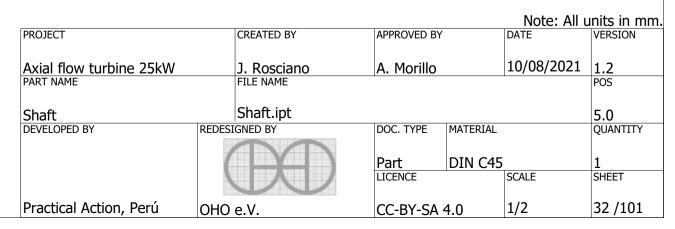
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PROJECT	CREATED BY	APPROVED BY	,	DATE	VERSION
Axial flow turbine 25kW PART NAME	J. Rosciano FILE NAME	A. Morillo		10/08/2021	1.2 POS
Drive Pulley 1	Drive Pulley 1.ipt				4.2
DEVELOPED BY	REDESIGNED BY	DOC. TYPE	MATERIAL		QUANTITY
		Part	DIN C45		1
		LICENCE		SCALE	SHEET
Practical Action, Perú	OHO e.V.	CC-BY-SA	4.0	1/2	30 /101

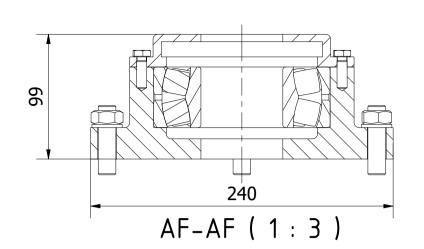


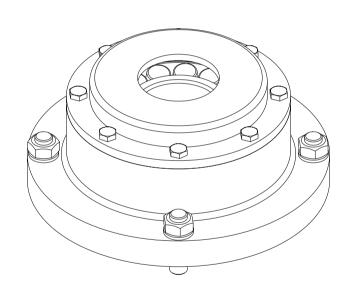


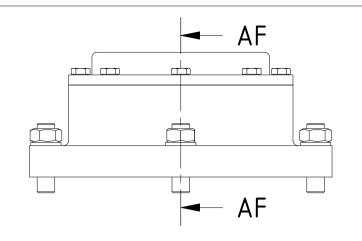


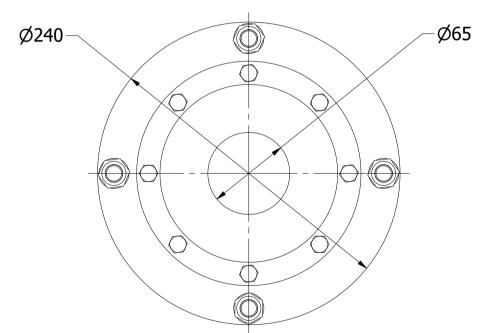




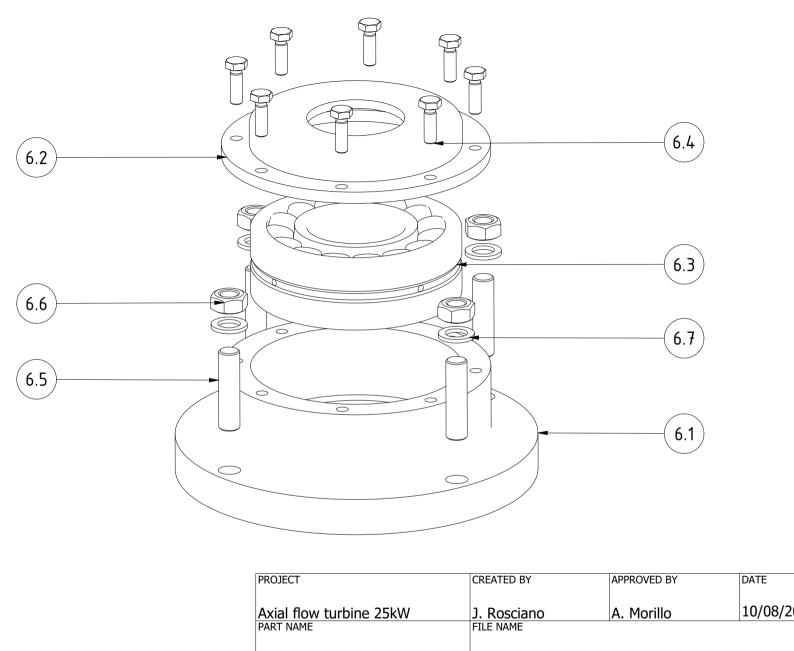




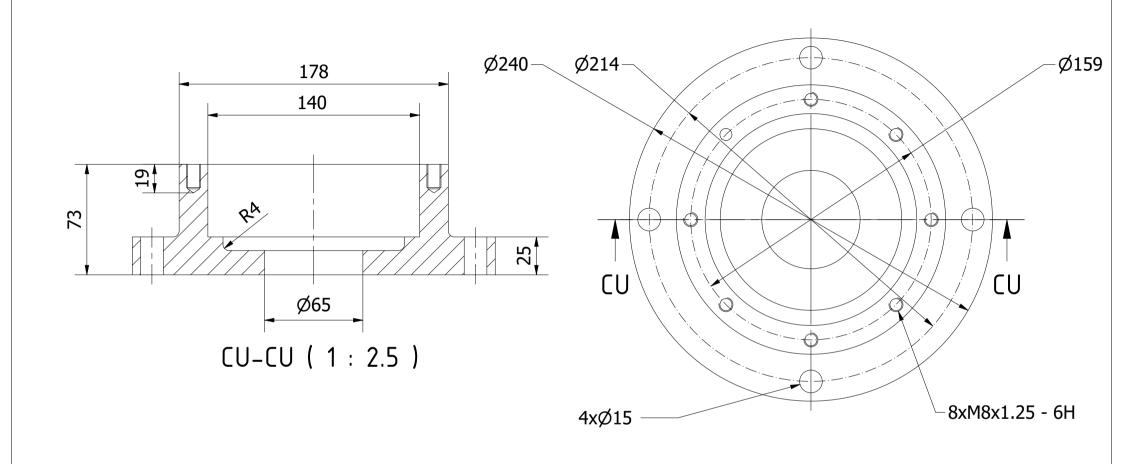




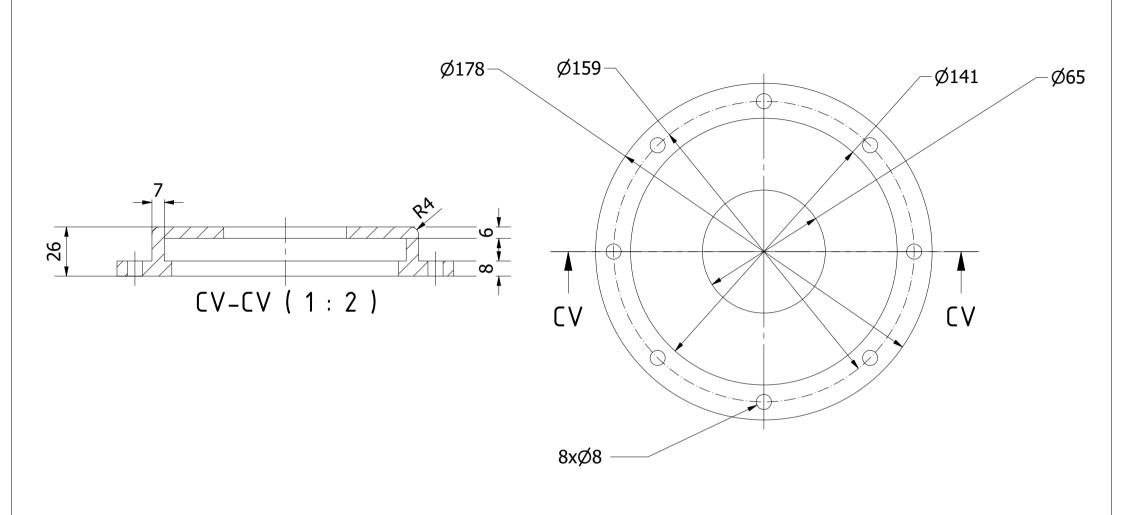
			Note: All ι	units in mm.
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Axial flow turbine 25kW	J. Rosciano	A. Morillo	10/08/2021	1.2
PART NAME	FILE NAME			POS
Bearing bottom	Bearing bottom.iam			6.0
DEVELOPED BY RI	EDESIGNED BY	DOC. TYPE MATERIAL	-	QUANTITY
		Assembly		1
		LICENCE	SCALE	SHEET
Practical Action, Perú	OHO e.V.	CC-BY-SA 4.0	1/3	33 /101



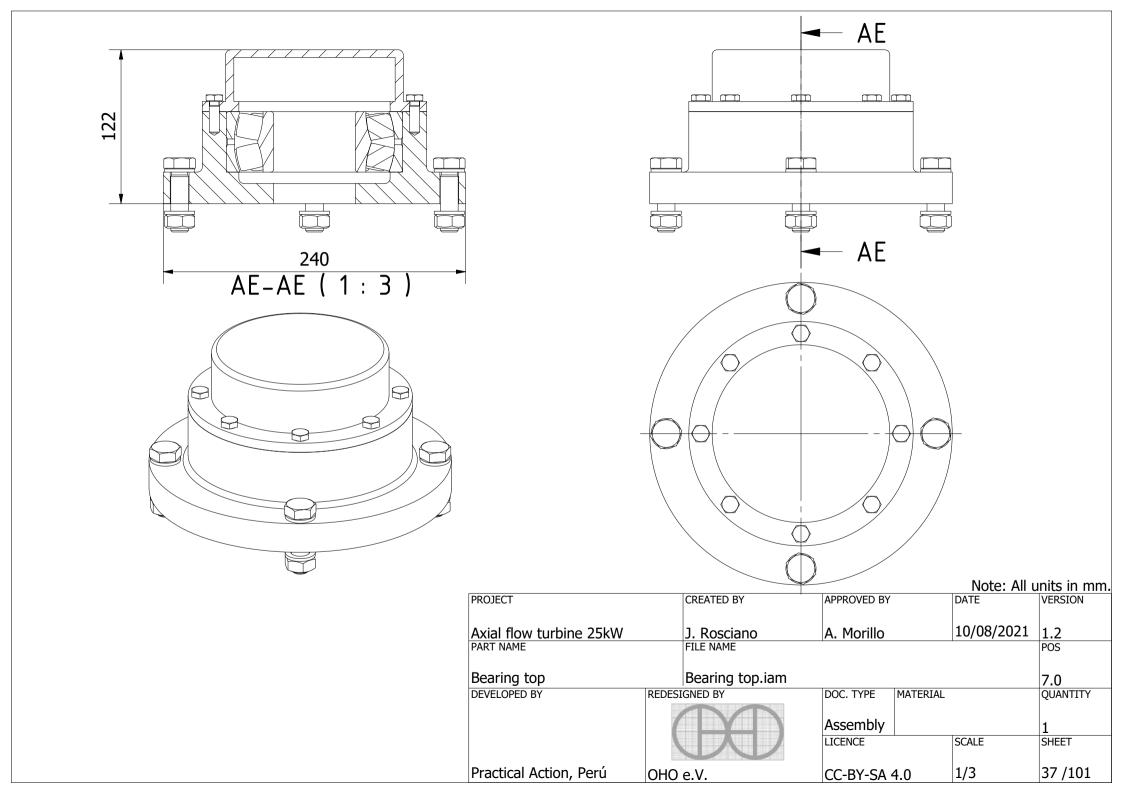
PROJECT		CREATED BY	APPROVED BY		DATE	VERSION
Axial flow turbine 25kW		J. Rosciano	A. Morillo		10/08/2021	1.2
PART NAME		FILE NAME				POS
Bearing bottom		Bearing bottom.ipn				6.0
DEVELOPED BY	REDESI	GNED BY	DOC. TYPE	MATERIAL		QUANTITY
	1		Assembly			1
	N		LICENCE		SCALE	SHEET
Practical Action, Perú	ОНО	e.V.	CC-BY-SA	4.0	1/2.5	34 /101

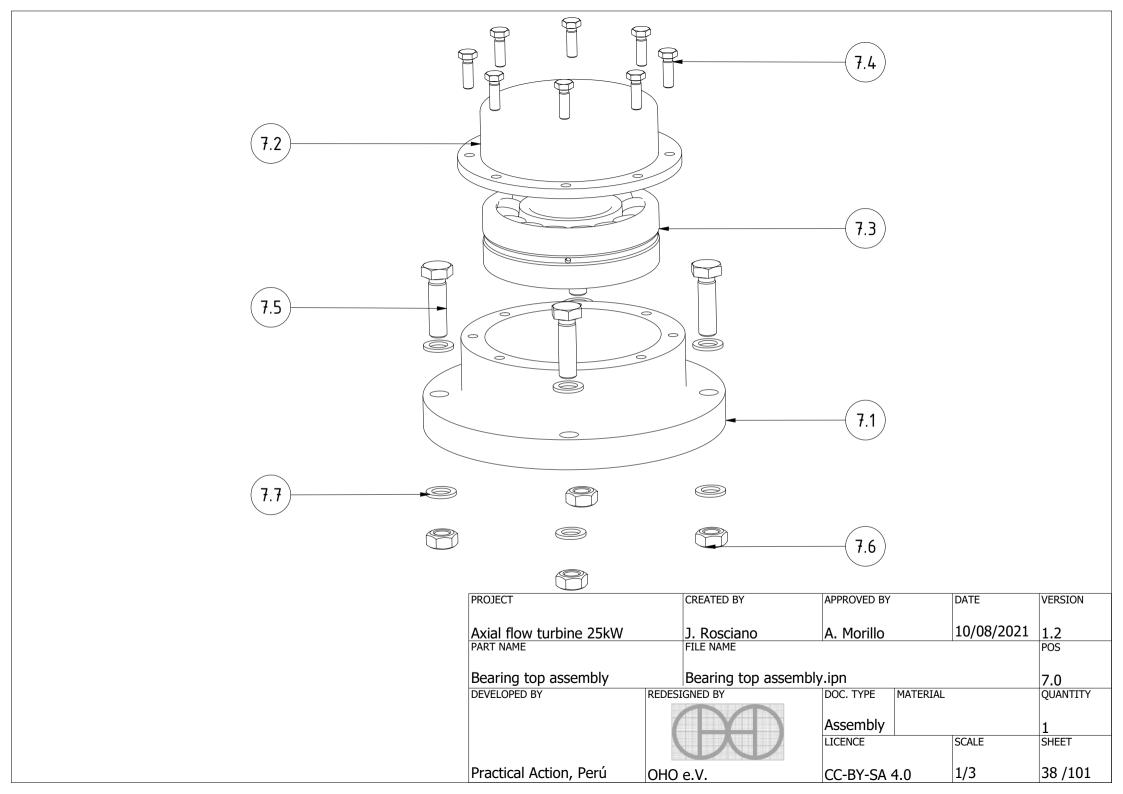


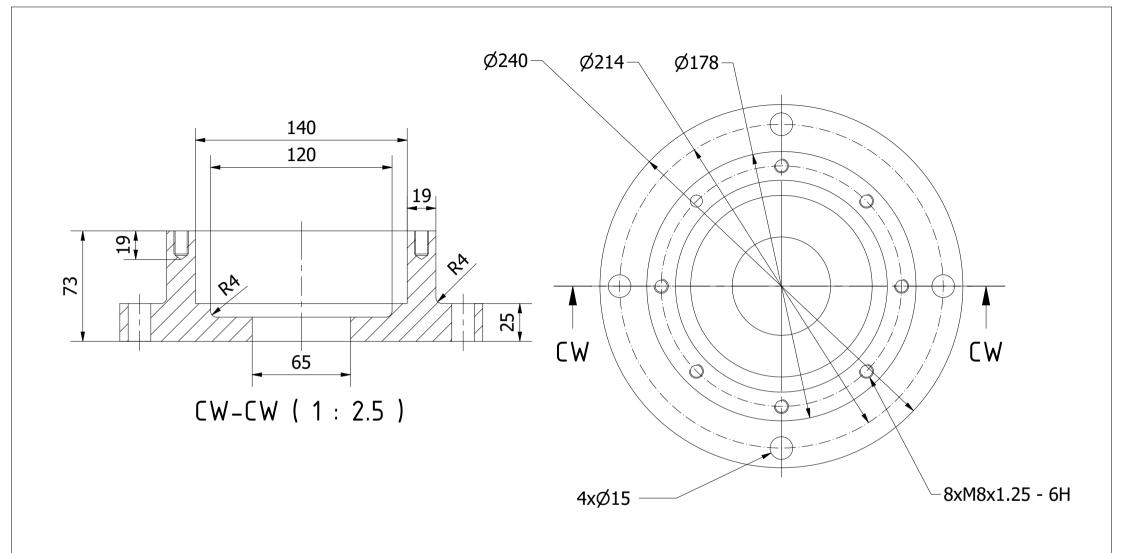
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PROJECT	CREATED BY	APPROVED BY	APPROVED BY		VERSION
				10/08/2021	
Axial flow turbine 25kW	J. Rosciano	A. Morillo	A. Morillo 1		1.2
PART NAME	FILE NAME	·			POS
Bearings	Bearings.ipt				6.1
DEVELOPED BY	REDESIGNED BY	DOC. TYPE	DOC. TYPE MATERIAL		
		Part	DIN C45		1
		LICENCE	LICENCE		SHEET
Practical Action, Perú	OHO e.V.	CC-BY-SA	CC-BY-SA 4.0 1		35 /101



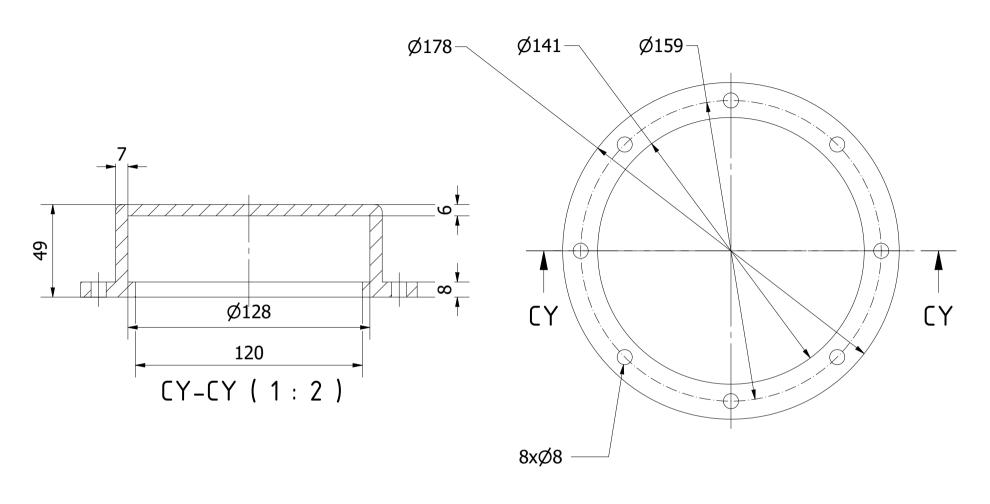
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PROJECT	CREATED BY	APPROVED BY	,	DATE	VERSION
Axial flow turbine 25kW	J. Rosciano	A. Morillo		10/08/2021	1.2
PART NAME	FILE NAME				POS
Bearings 1	Bearings 1.ipt				6.2
DEVELOPED BY	REDESIGNED BY	DOC. TYPE MATERIAL			QUANTITY
		Part	DIN C45		1
		LICENCE		SCALE	SHEET
Practical Action, Perú	OHO e.V.	CC-BY-SA 4.0		1/2.5	36 /101



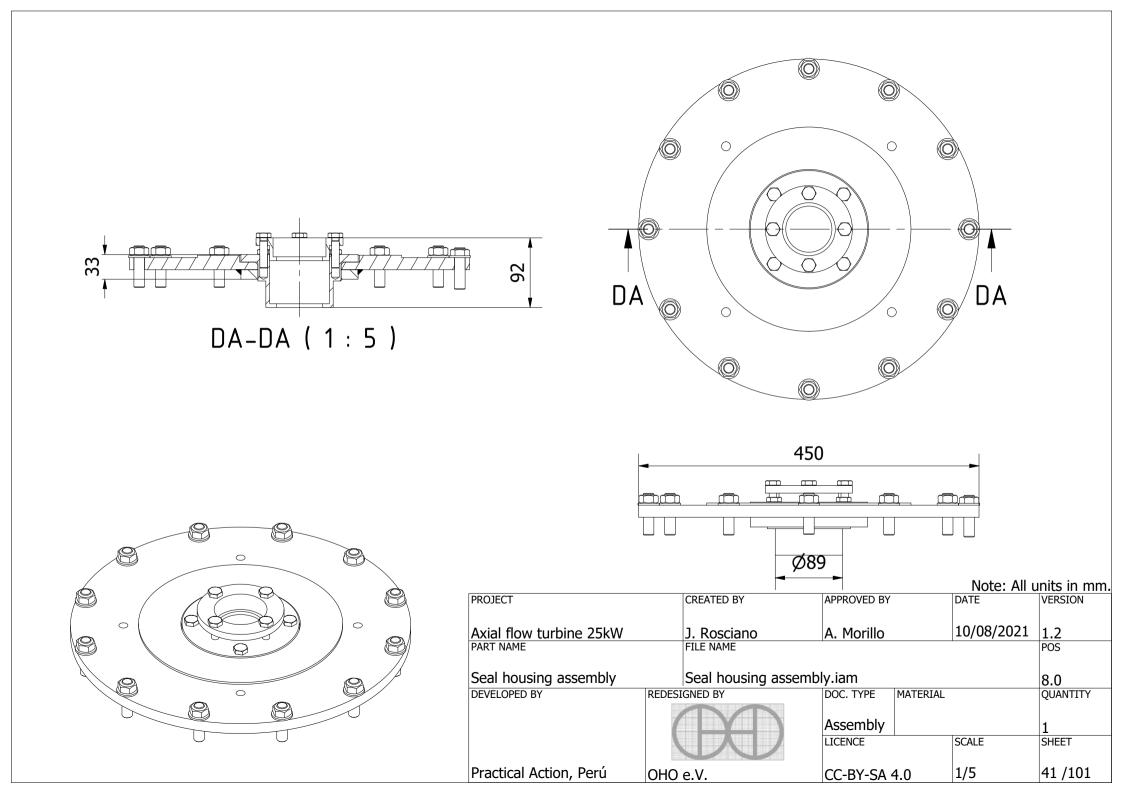


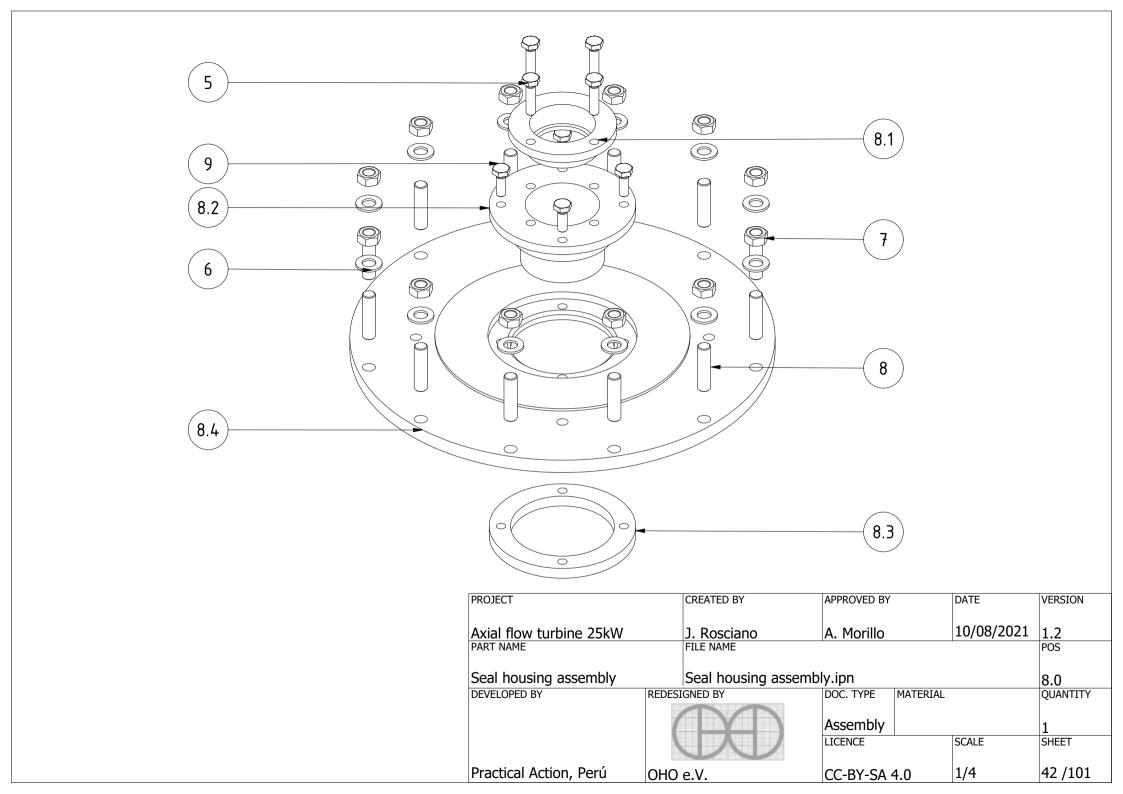


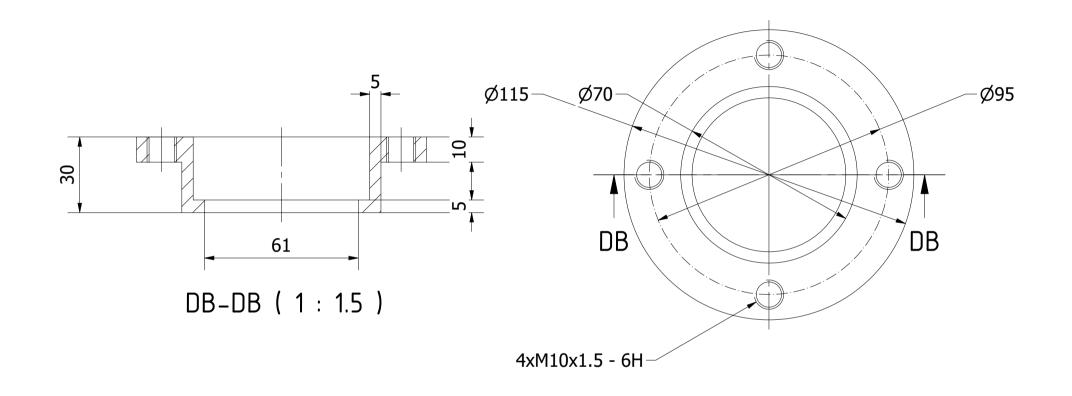
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PROJECT	CREATED BY	APPROVED BY	,	DATE	VERSION
Axial flow turbine 25kW PART NAME	J. Rosciano FILE NAME	A. Morillo		10/08/2021	1.2 POS
Bearings	Bearings.ipt	DOC TVDE	MATERIAL		7.1
DEVELOPED BY	REDESIGNED BY	DOC. TYPE	MATERIAL		QUANTITY
		Part	DIN C45		1
		LICENCE		SCALE	SHEET
Practical Action, Perú	OHO e.V.	CC-BY-SA	4.0	1/2.5	39 /101



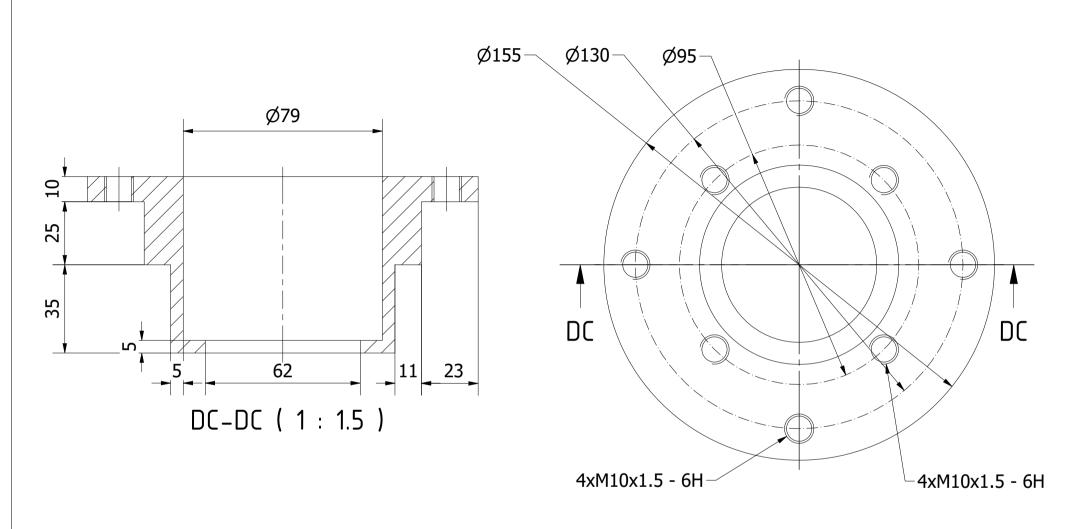
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PROJECT	CREATED BY	APPROVED BY	,	DATE	VERSION
Axial flow turbine 25kW	J. Rosciano	A. Morillo		10/08/2021	1.2
PART NAME	FILE NAME				POS
Bearings 2	Bearings 2.ipt				7.2
DEVELOPED BY	REDESIGNED BY	DOC. TYPE	MATERIAL		QUANTITY
		Part	DIN C45		1
		LICENCE		SCALE	SHEET
Practical Action, Perú	OHO e.V.	CC-BY-SA	4.0	1/2	40 /101



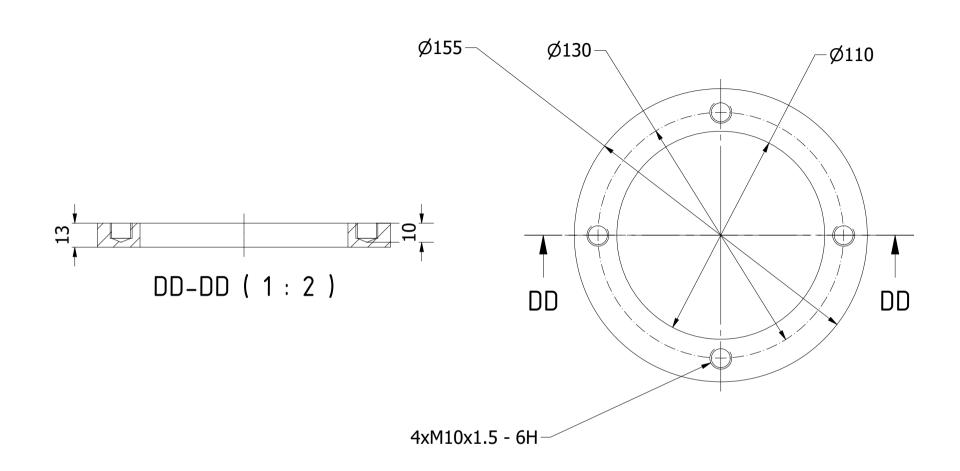




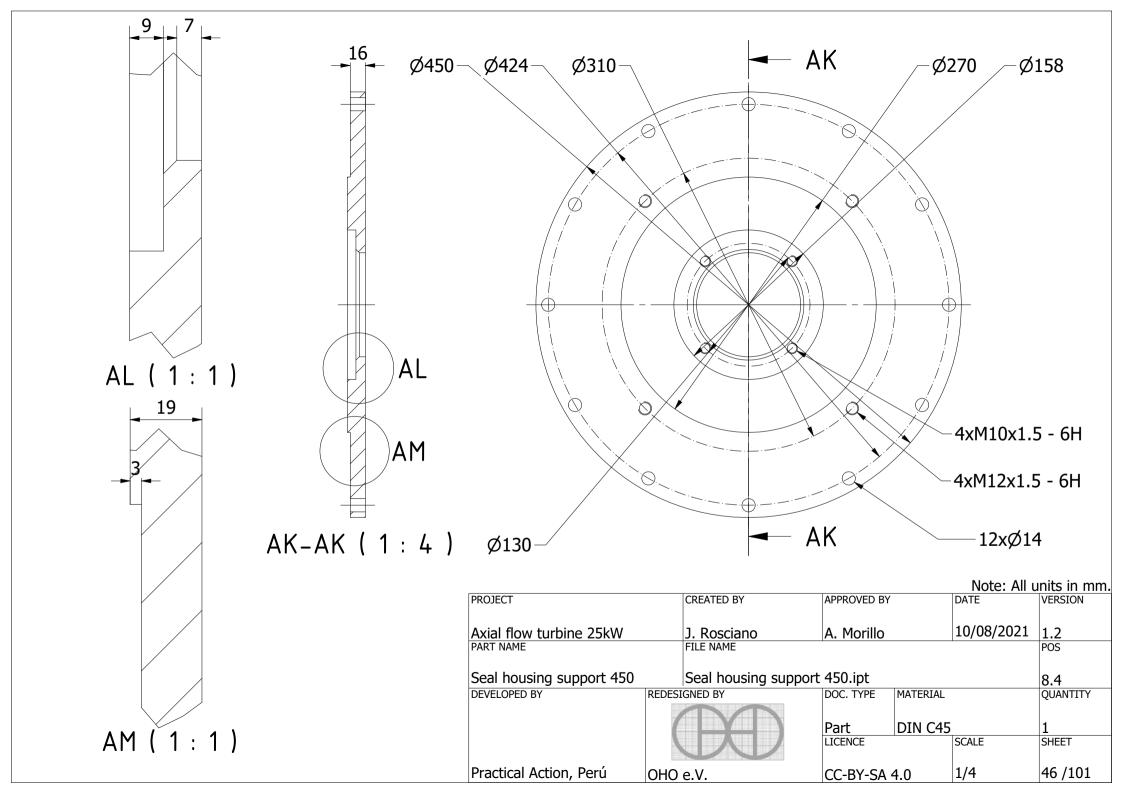
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PROJECT	CREATED BY	APPROVED BY	1	DATE	VERSION
Axial flow turbine 25kW	J. Rosciano	A. Morillo		10/08/2021	1.2
PART NAME	FILE NAME				POS
Seal housing	Seal housing.ipt				8.1
DEVELOPED BY	REDESIGNED BY	DOC. TYPE	MATERIAL		QUANTITY
		Part	DIN C45	!	1
		LICENCE		SCALE	SHEET
Practical Action, Perú	OHO e.V.	CC-BY-SA	4.0	1/1.5	43 /101

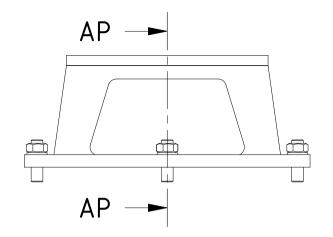


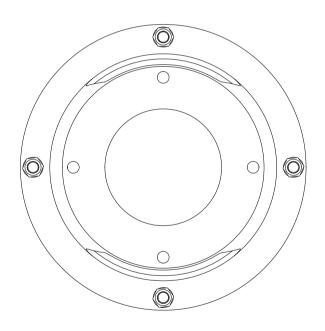
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PROJECT	CREATED BY	APPROVED BY		DATE	VERSION
Axial flow turbine 25kW	J. Rosciano	A. Morillo		10/08/2021	1.2
PART NAME	FILE NAME				POS
Seal housing out	Seal housing out.ipt				8.2
DEVELOPED BY	REDESIGNED BY	DOC. TYPE	MATERIAL		QUANTITY
		Part	DIN C45		1
		LICENCE		SCALE	SHEET
Practical Action, Perú	OHO e.V.	CC-BY-SA 4	4.0	1/1.5	44 /101

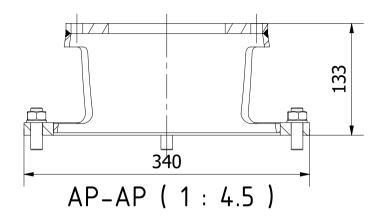


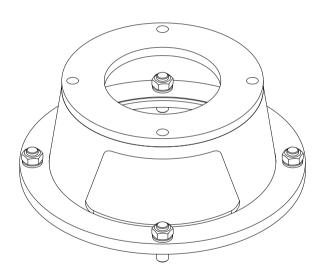
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PROJECT	CREATED BY	APPROVED BY	•	DATE	VERSION
Axial flow turbine 25kW	J. Rosciano	A. Morillo		10/08/2021	1.2
PART NAME	FILE NAME				POS
Seal housing support 155	Seal housing support	t 155.ipt			8.3
DEVELOPED BY	REDESIGNED BY	DOC. TYPE	MATERIAL		QUANTITY
		Part	DIN C45		1
		LICENCE		SCALE	SHEET
Practical Action, Perú	OHO e.V.	CC-BY-SA	4.0	1/2	45 /101



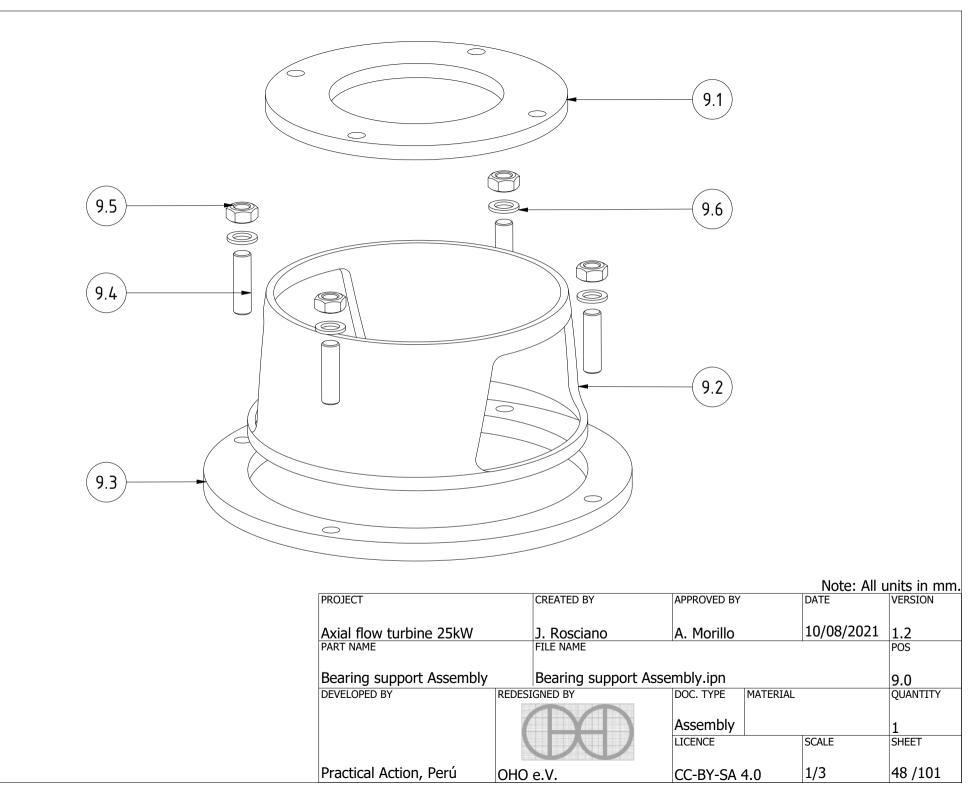


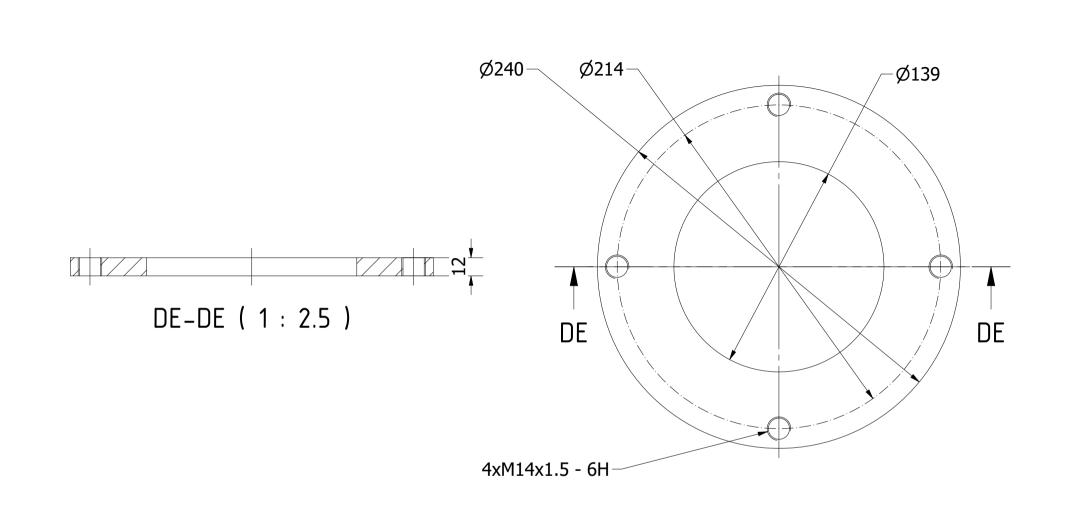




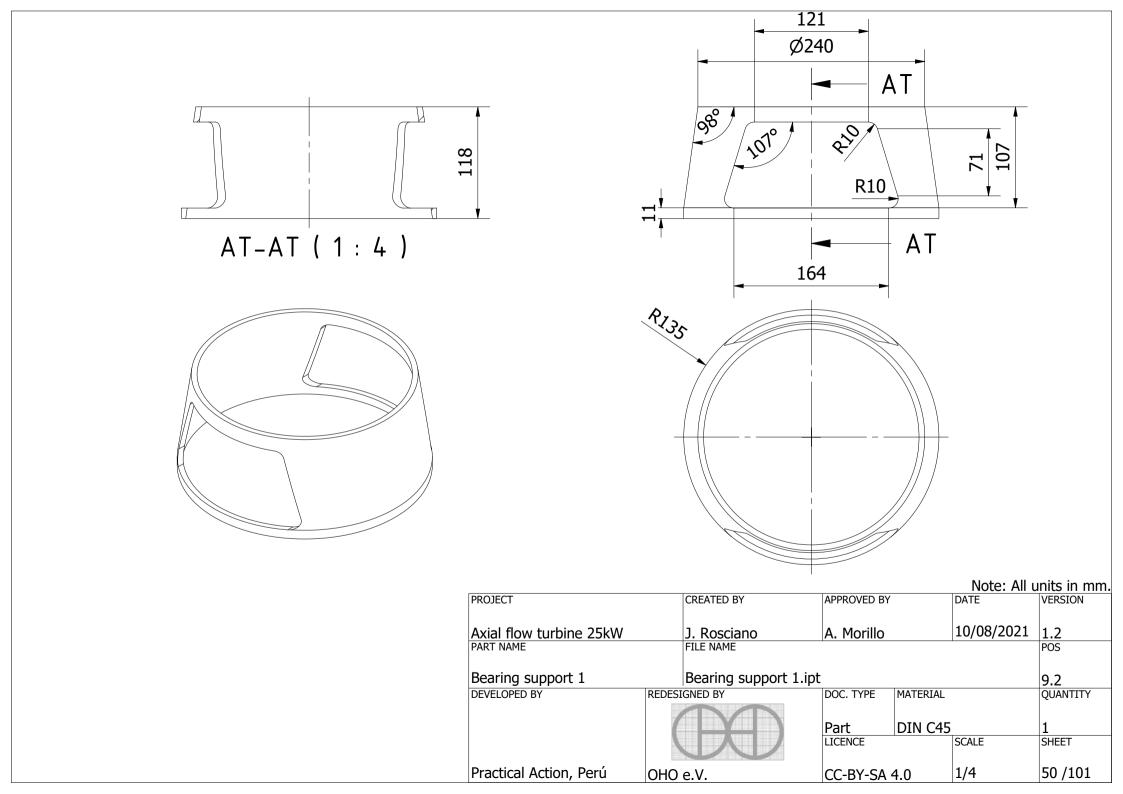


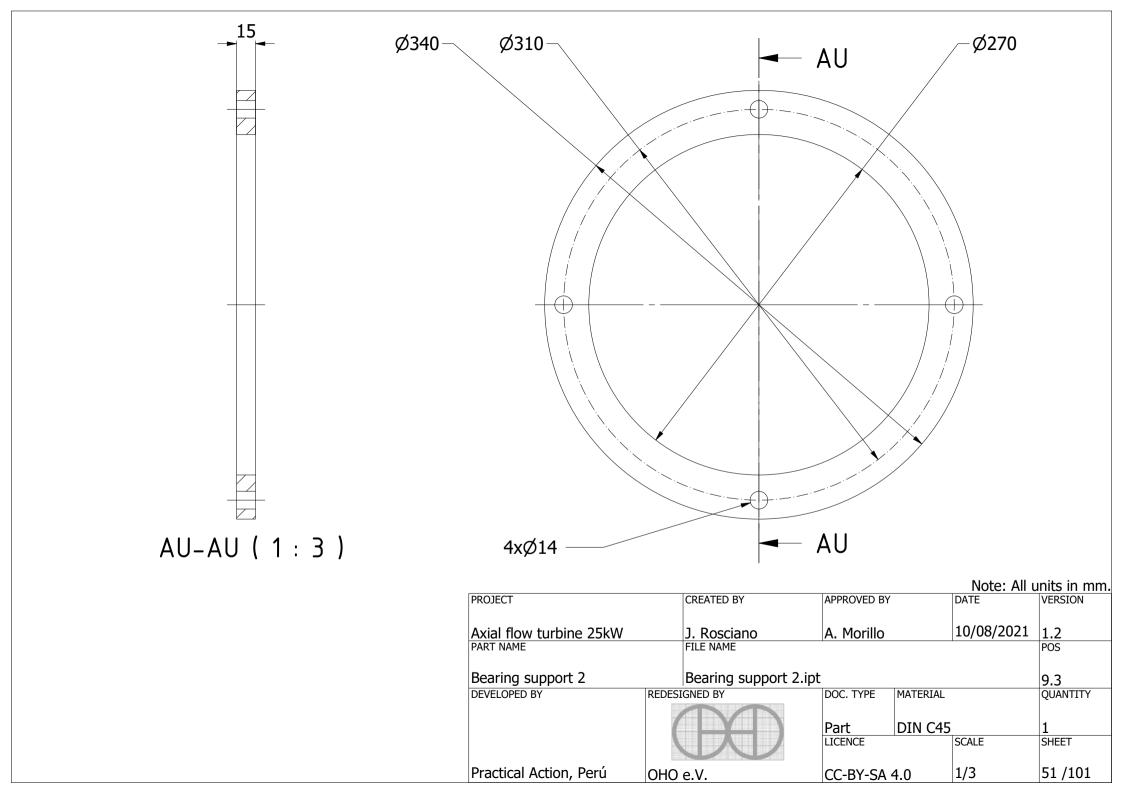
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PROJECT		CREATED BY	APPROVED BY		DATE	VERSION
Axial flow turbine 25kW		J. Rosciano	A. Morillo		10/08/2021	1.2
PART NAME		FILE NAME				POS
Bearing support assembly		Bearing support asse	embly.iam			9.0
DEVELOPED BY	REDESI	GNED BY	DOC. TYPE	MATERIAL		QUANTITY
			Assembly			1
	N.		LICENCE		SCALE	SHEET
Practical Action, Perú	ОНО	e.V.	CC-BY-SA	4.0	1/4.5	47 /101

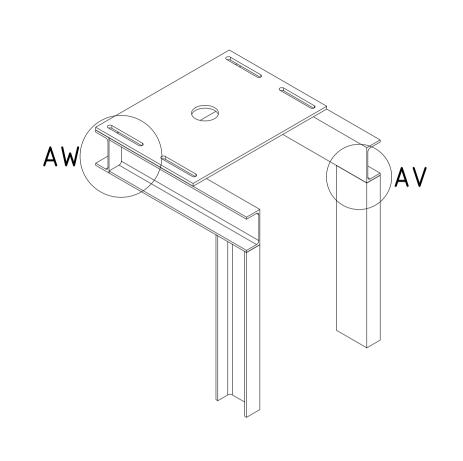


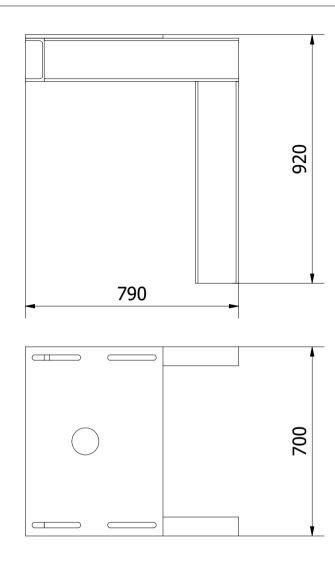


				Note: All ເ	ınits in mm.
PROJECT	CREATED BY	APPROVED BY	,	DATE	VERSION
A tal (la la lata a DELIM)	1 D	A N4 - 111 -		10/09/2021	1.2
Axial flow turbine 25kW	J. Rosciano	A. Morillo		10/08/2021	1.2
PART NAME	FILE NAME				POS
Bearing support	Bearing support.ipt				9.1
DEVELOPED BY	REDESIGNED BY	DOC. TYPE	MATERIAL		QUANTITY
		Part	DIN C45		1
		LICENCE	DINCIS	SCALE	SHEET
		LICENCE		SCALE	SHEET
Practical Action, Perú	OHO e.V.	CC-BY-SA	4 N	1/2.5	49 /101
	OHO C.V.	CC DI SA	1.0	-,	.5 / 101







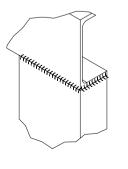


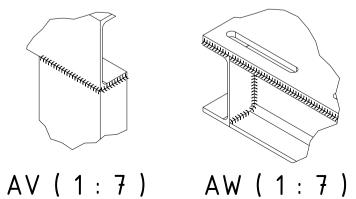
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10.0 QUANTITY

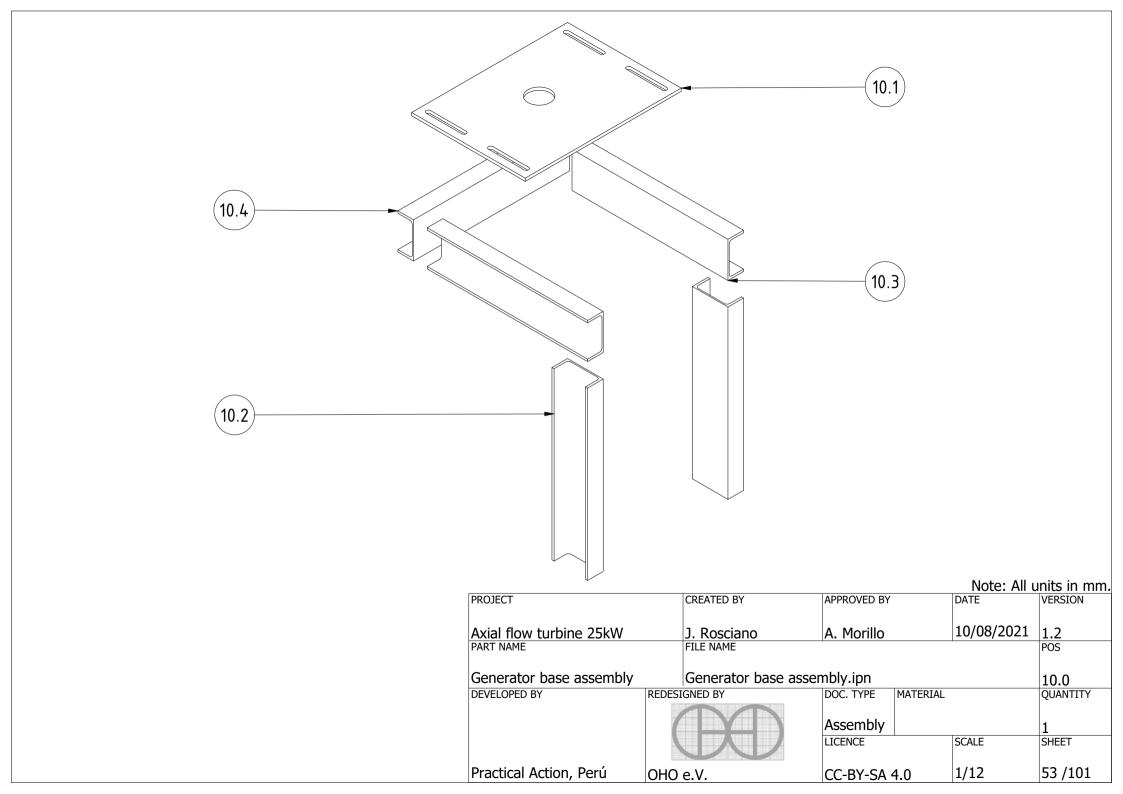
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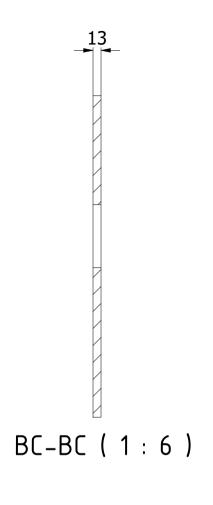
52 /101

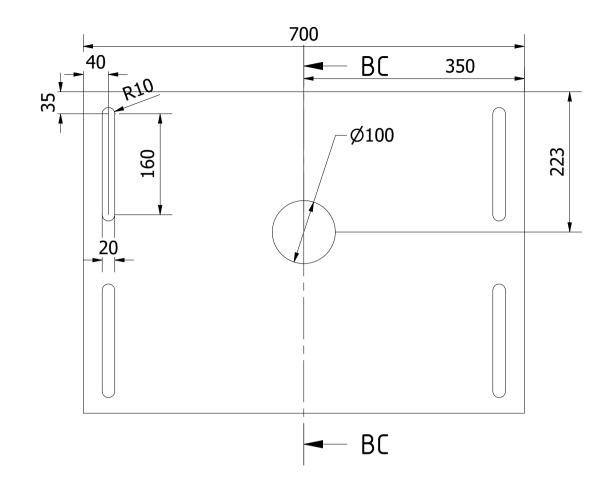




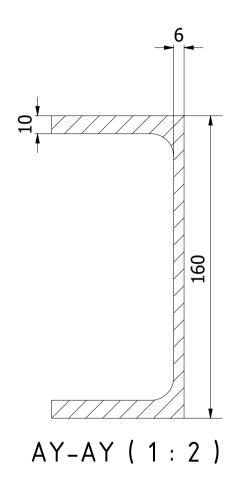
Note: All units in mm. CREATED BY APPROVED BY PROJECT Axial flow turbine 25kW
PART NAME 10/08/2021 J. Rosciano A. Morillo Generator base assembly.iam Generator base assembly MATERIAL DEVELOPED BY REDESIGNED BY DOC. TYPE Assembly LICENCE SCALE Practical Action, Perú OHO e.V. 1/7 CC-BY-SA 4.0

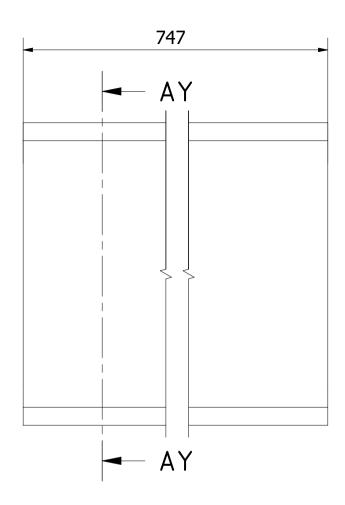




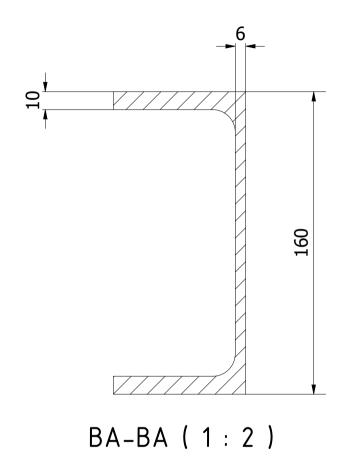


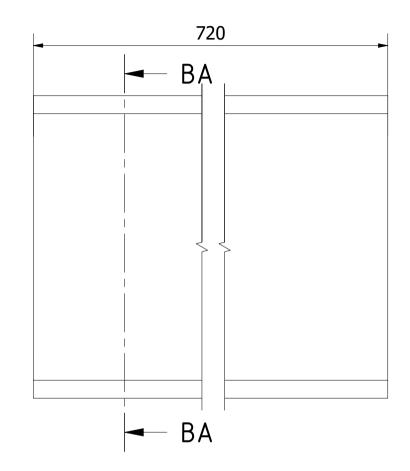
				Note: All ι	units in mm.
PROJECT	CREATED BY	APPROVED BY	′	DATE	VERSION
Axial flow turbine 25kW	J. Rosciano	A. Morillo		10/08/2021	1.2
PART NAME	FILE NAME	·			POS
Generator base	Generator base.ipt				10.1
DEVELOPED BY	REDESIGNED BY	DOC. TYPE	MATERIAL		QUANTITY
		Part	ASTM A	36	1
		LICENCE	'	SCALE	SHEET
Practical Action, Perú	OHO e.V.	CC-BY-SA	4.0	1/6	54 /101
	1				•



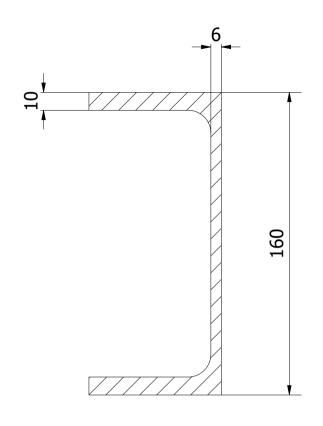


			Note: All u	ınits in mm.
CREATED BY	APPROVED BY		DATE	VERSION
J. Rosciano	A. Morillo		10/08/2021	1.2
FILE NAME				POS
Generator base 747.ip	ot			10.2
REDESIGNED BY	DOC. TYPE	MATERIAL		QUANTITY
	Part ASTM A36			
	LICENCE		SCALE	SHEET
OHO e.V.	CC-BY-SA 4	4.0	1/2	55 /101
	J. Rosciano FILE NAME  Generator base 747.ip  EDESIGNED BY	J. Rosciano FILE NAME  Generator base 747.ipt  EDESIGNED BY  DOC. TYPE  Part  LICENCE	J. Rosciano FILE NAME  Generator base 747.ipt  EDESIGNED BY  DOC. TYPE  MATERIAL  Part  LICENCE  ASTM A3	CREATED BY  J. Rosciano A. Morillo  FILE NAME  Generator base 747.ipt  EDESIGNED BY  DOC. TYPE  MATERIAL  Part  ASTM A36  LICENCE  SCALE

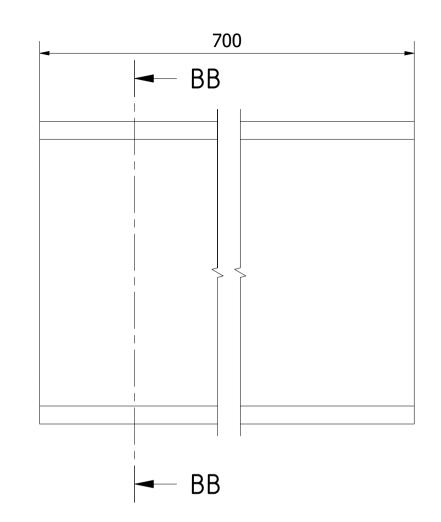




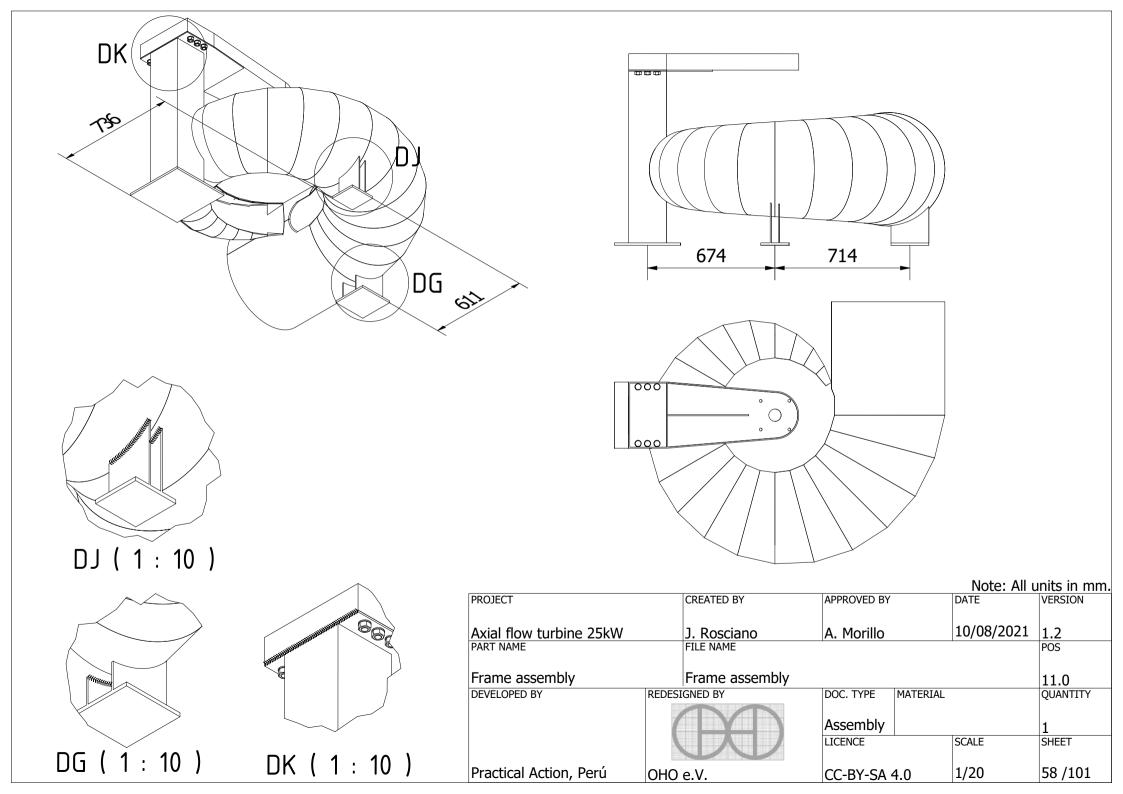
				Note: All u	ınits in mm.
PROJECT	CREATED BY	APPROVED BY		DATE	VERSION
Axial flow turbine 25kW	J. Rosciano	A. Morillo		10/08/2021	1.2
PART NAME	FILE NAME				POS
Generator base 720	Generator base 720.i	pt			10.3
DEVELOPED BY	REDESIGNED BY	DOC. TYPE MATERIAL			QUANTITY
		Part	ASTM A3	36	2
		LICENCE		SCALE	SHEET
Practical Action, Perú	OHO e.V.	CC-BY-SA	4.0	1/2	56 /101

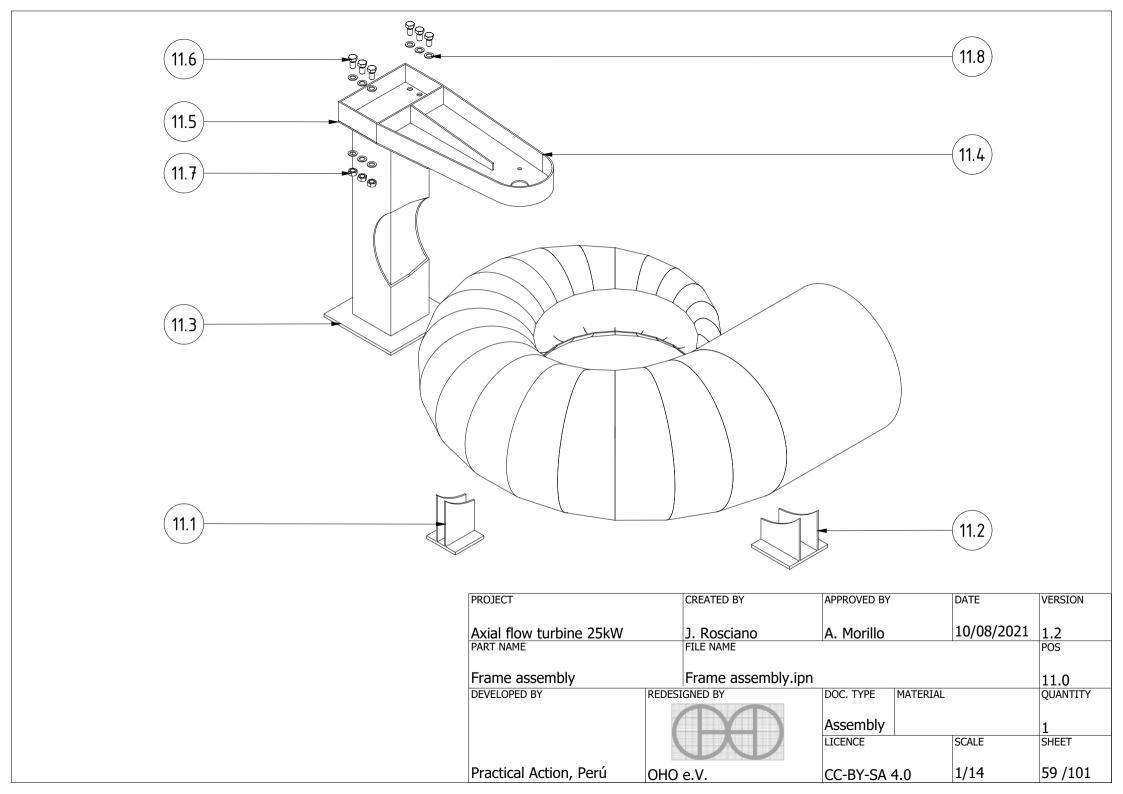


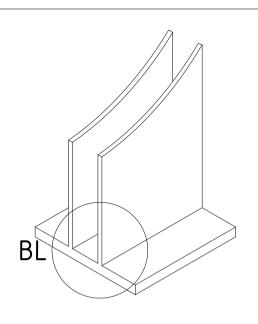
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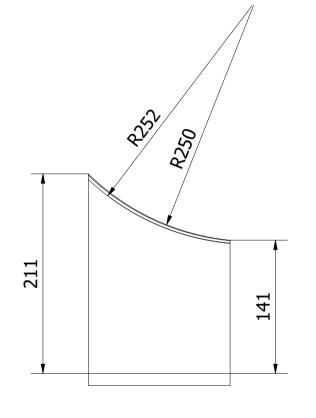


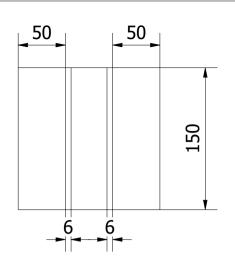
					Note: All ເ	ınits in mm.	
PROJECT		CREATED BY	APPROVED BY	<b>'</b>	DATE	VERSION	
Axial flow turbine 25kW	1	J. Rosciano	A. Morillo		10/08/2021	1.2	
PART NAME		FILE NAME	•		•	POS	
Generator base 700		Generator base 700	0.ipt			10.4	
DEVELOPED BY	REDESI	GNED BY	DOC. TYPE	MATERIAL		QUANTITY	
	//		Part ASTM A36				
	N.	LICENCE SCALE				SHEET	
Practical Action, Perú	ОНО	e.V.	CC-BY-SA	4.0	1/2	57 /101	
	10110	U	- CC D1 0/1		_ <b>,</b>	,	

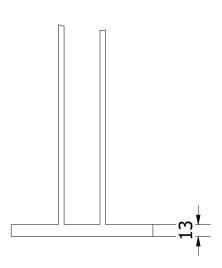


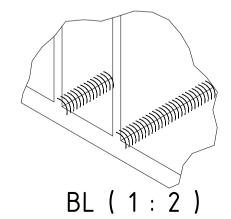




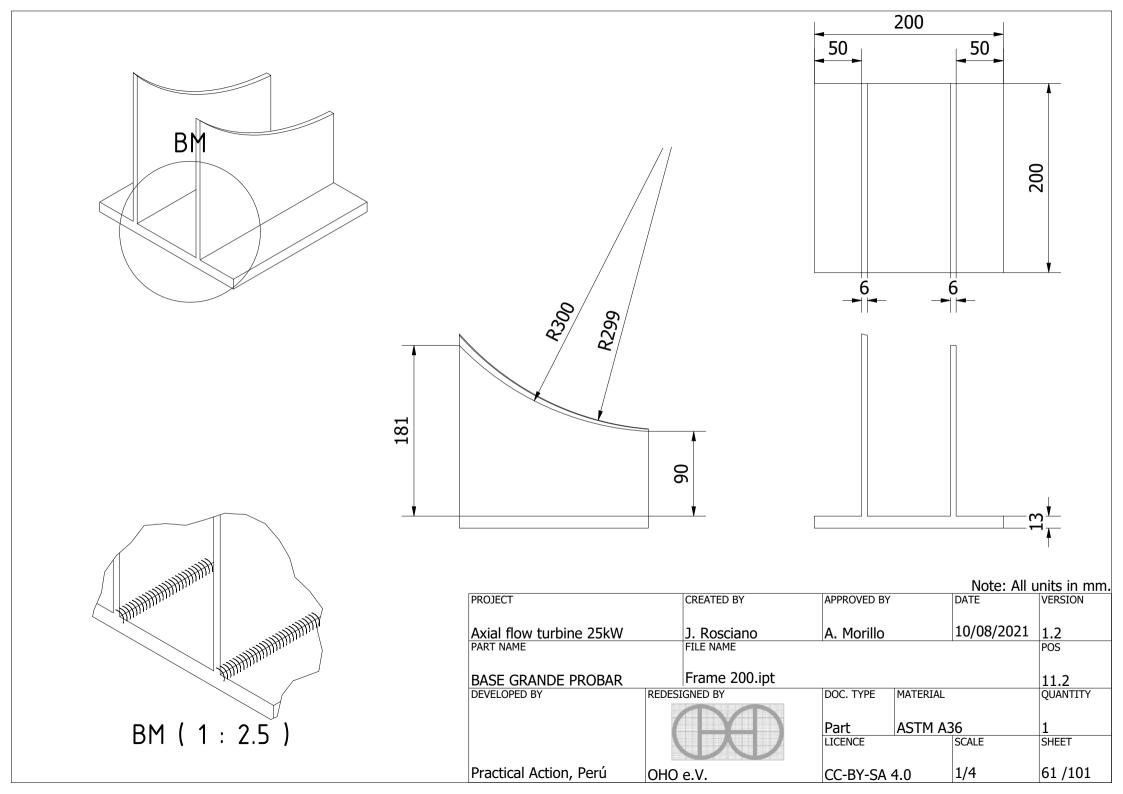


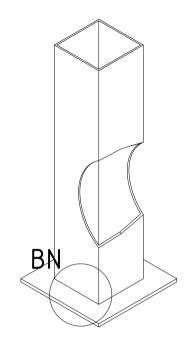


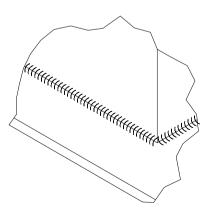




					Note: All u	nits in mm.
PROJECT	CREATED BY	APPRO	VED BY		DATE	VERSION
Axial flow turbine 25kW	J. Rosciano	A. M	orillo		10/08/2021	1.2
PART NAME	FILE NAME					POS
Frame 150	Frame 150.ip	ot				11.1
DEVELOPED BY	REDESIGNED BY	DOC.	ГҮРЕ	MATERIAL		QUANTITY
		Part		ASTM A3	6	1
		LICEN	CE		SCALE	SHEET
Practical Action, Perú	OHO e.V.	CC-B	Y-SA 4	1.0	1/4	60 /101



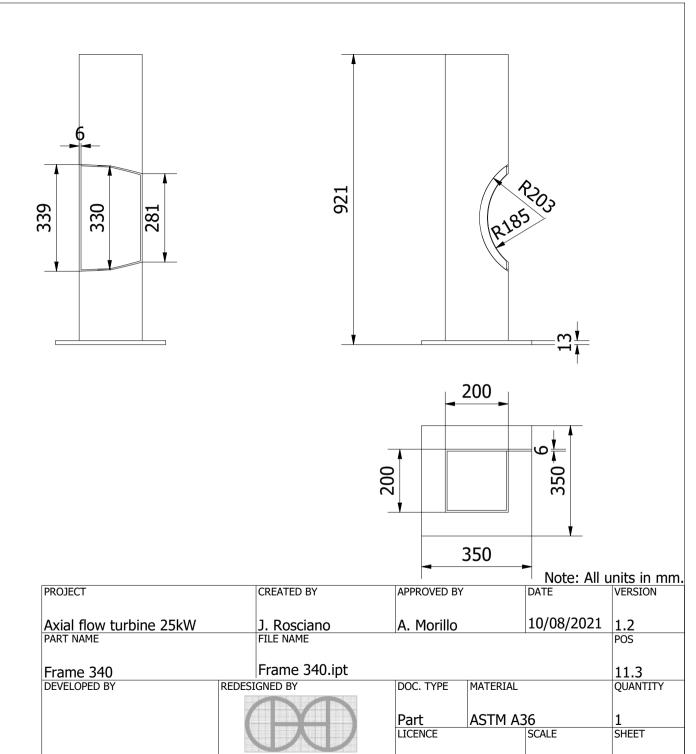




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Practical Action, Perú

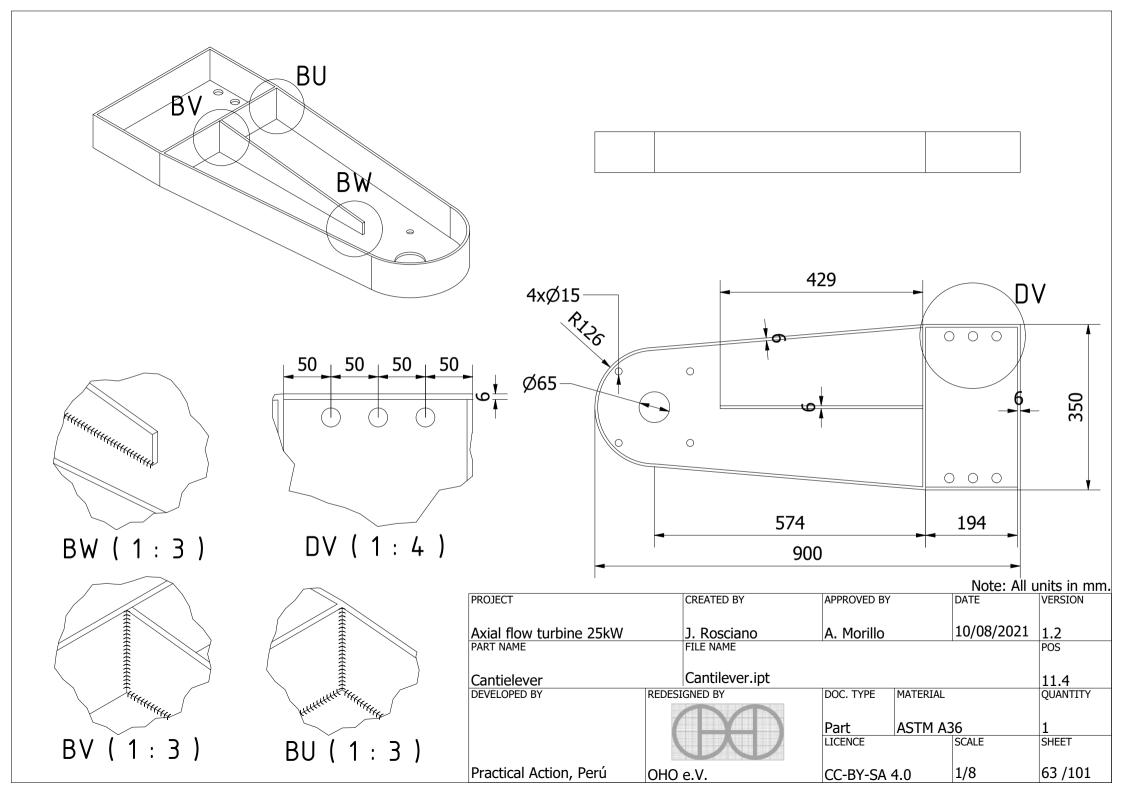
OHO e.V.

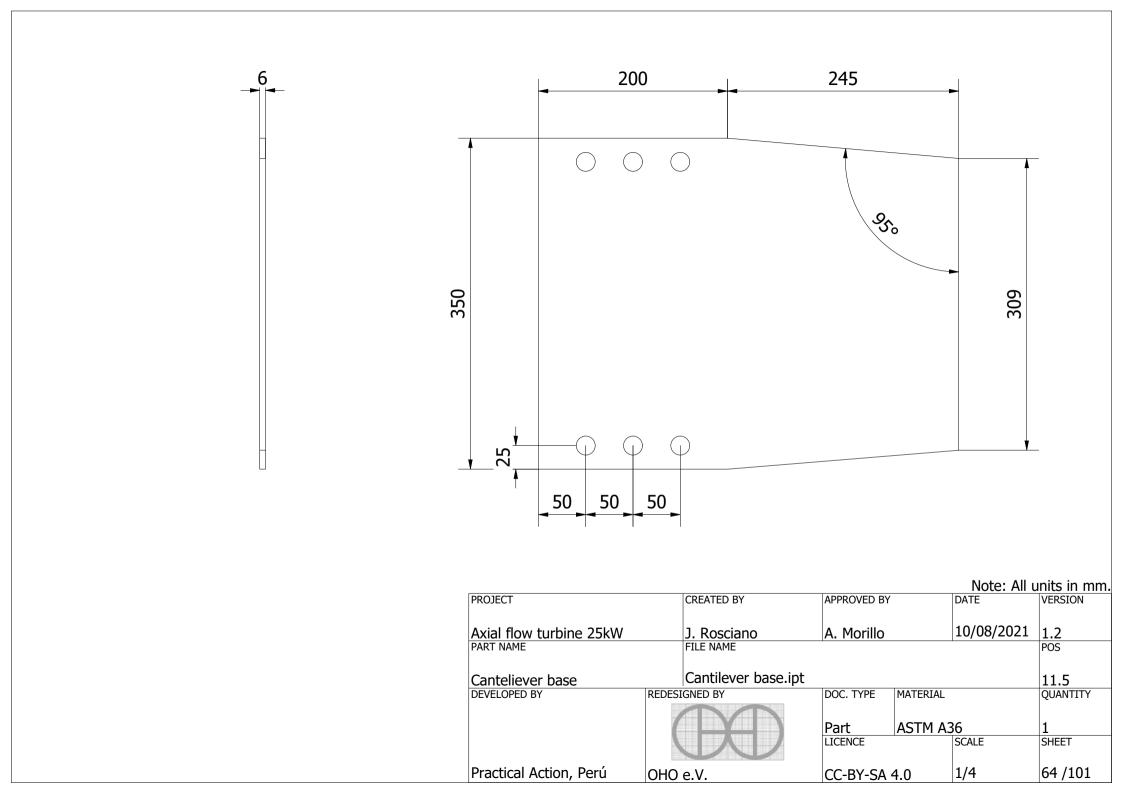


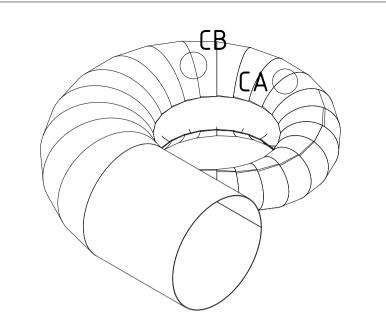
62 /101

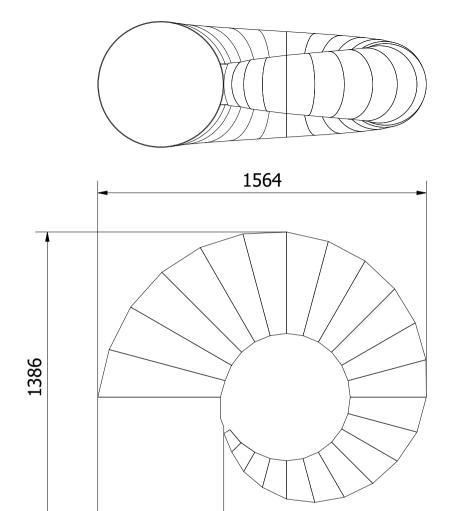
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CC-BY-SA 4.0





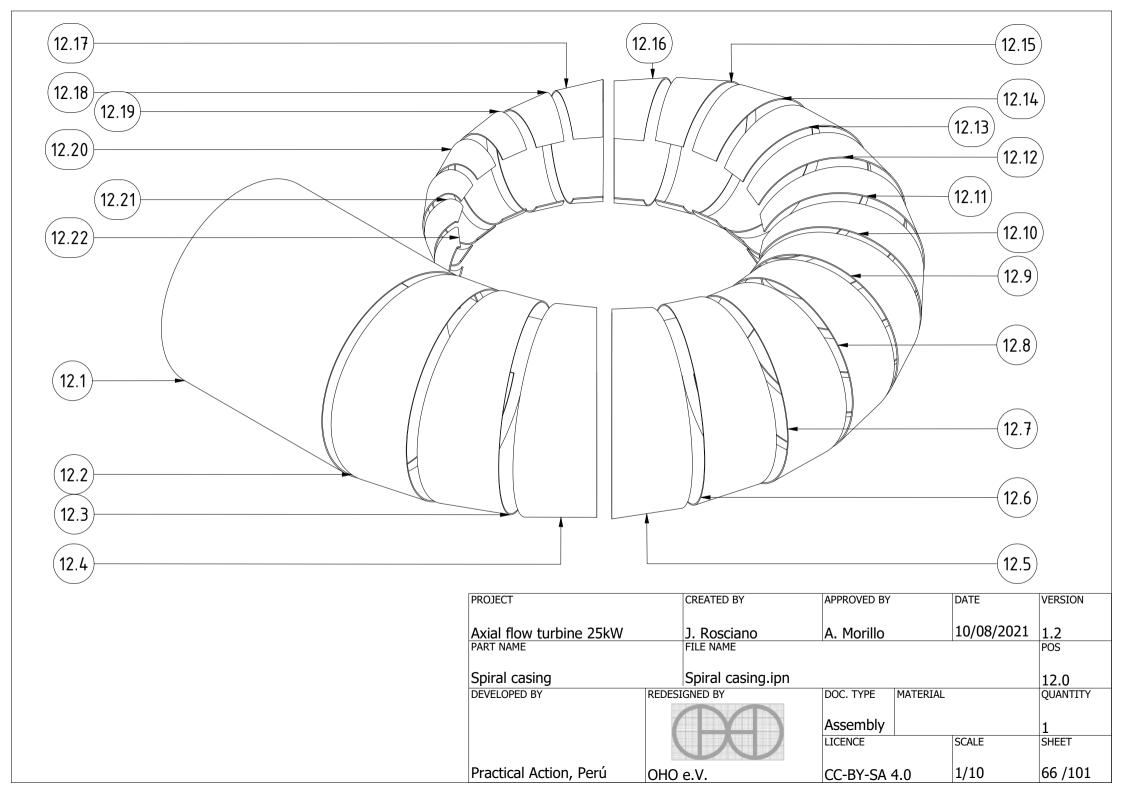


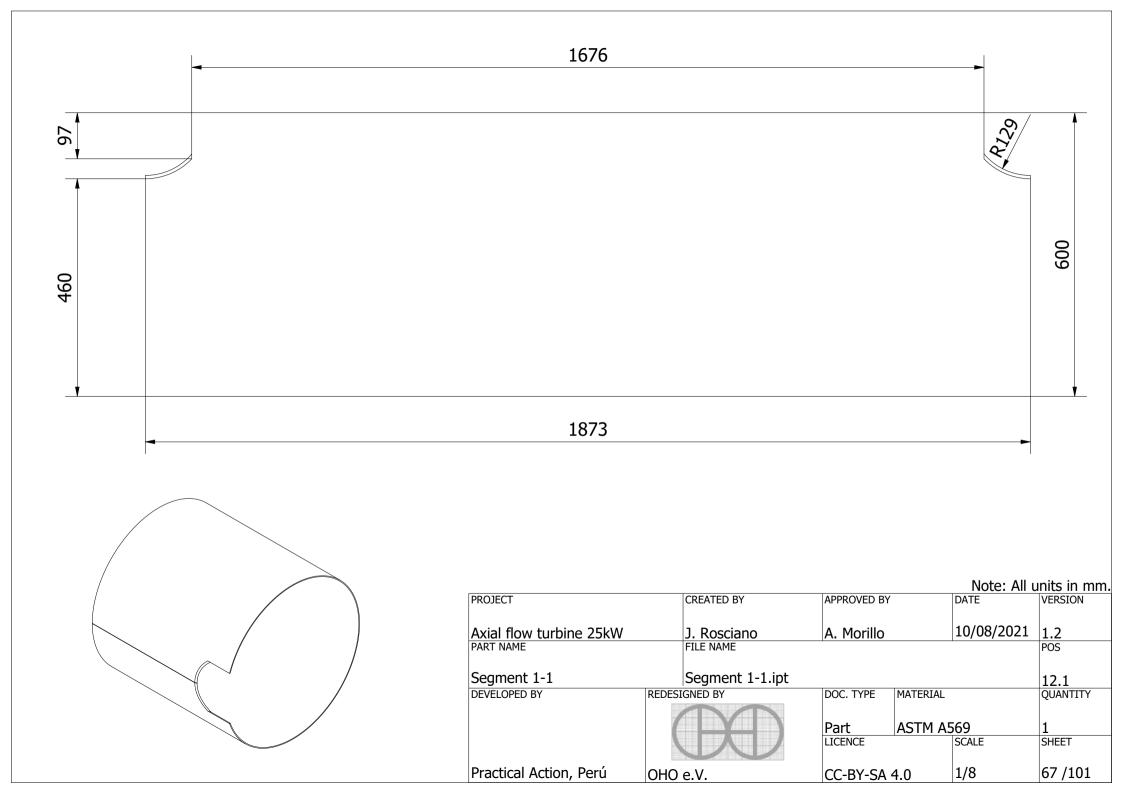


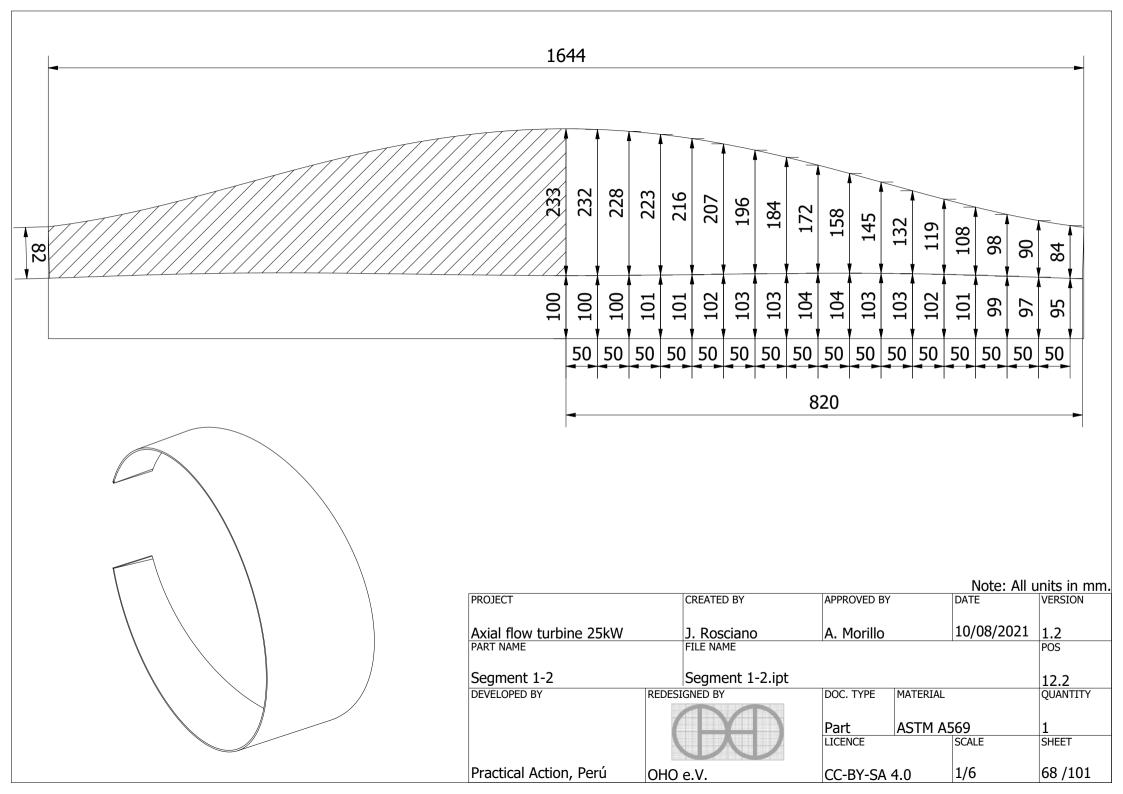


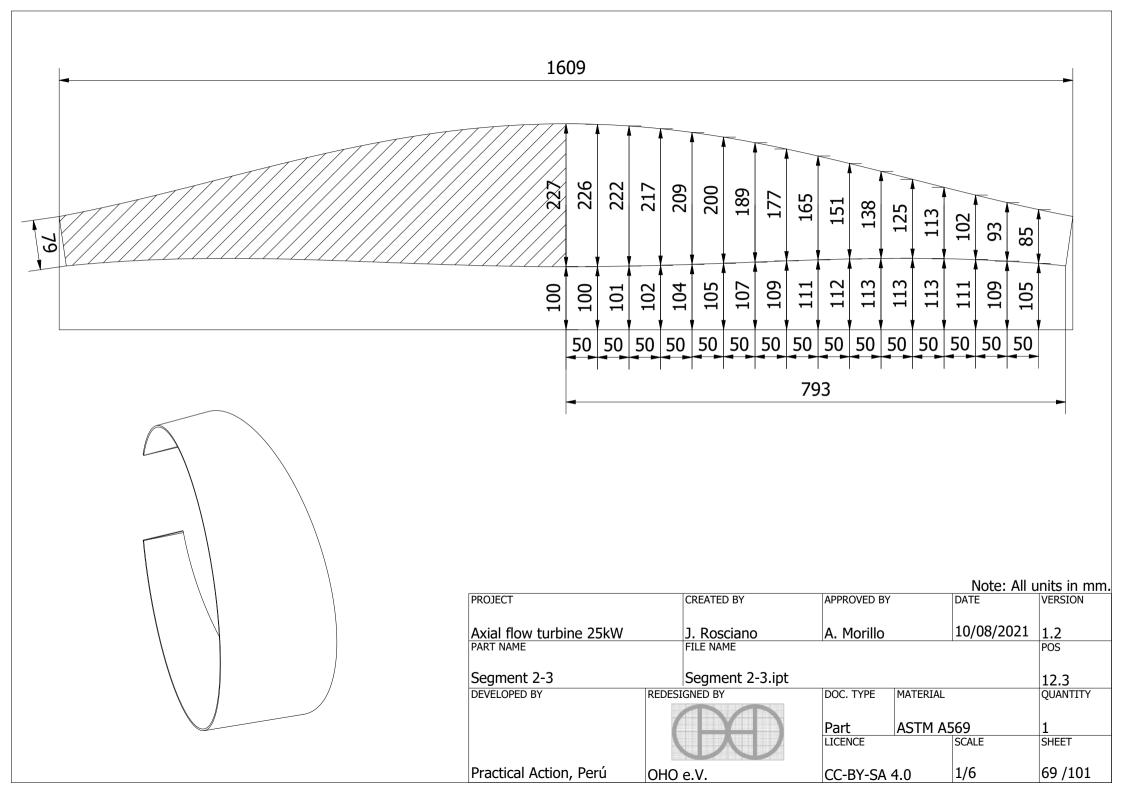
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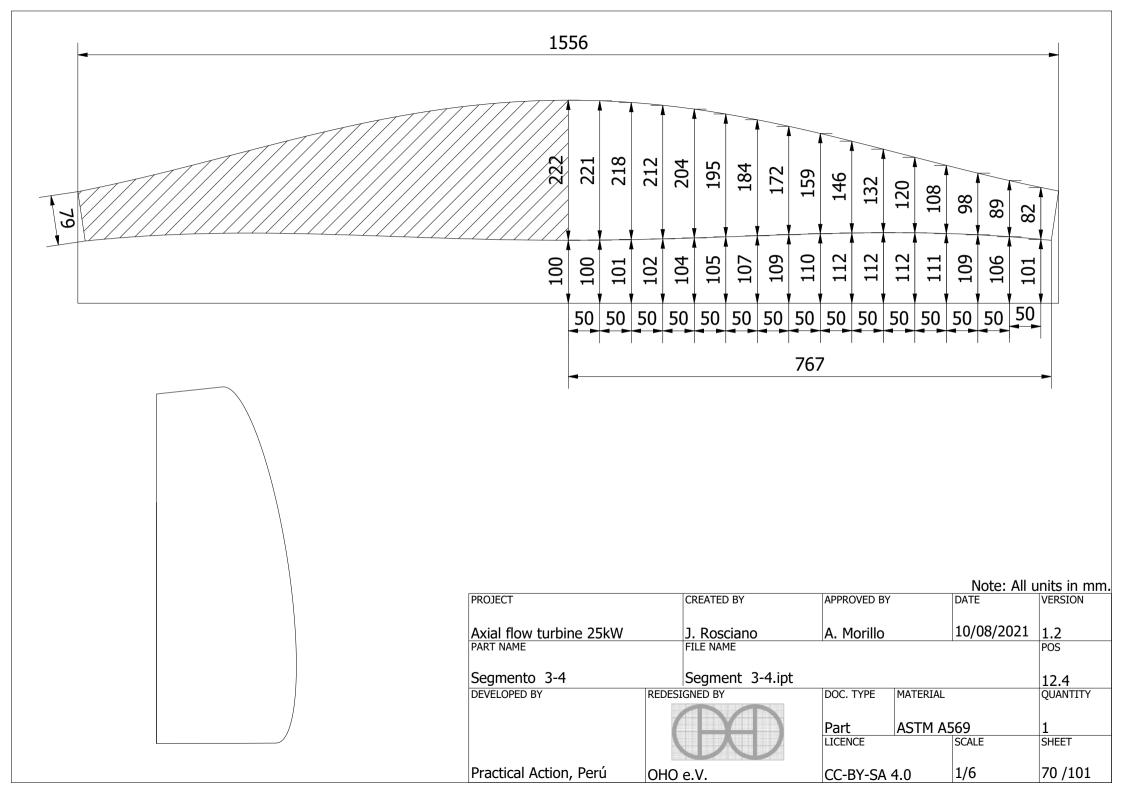
Note: All units in mm. PROJECT CREATED BY APPROVED BY Axial flow turbine 25kW
PART NAME 10/08/2021 J. Rosciano A. Morillo 1.2 POS Spiral casing.iam 12.0 QUANTITY Spiral casing REDESIGNED BY MATERIAL DEVELOPED BY DOC. TYPE Assembly LICENCE SCALE SHEET Practical Action, Perú 65 /101 OHO e.V. 1/18 CC-BY-SA 4.0

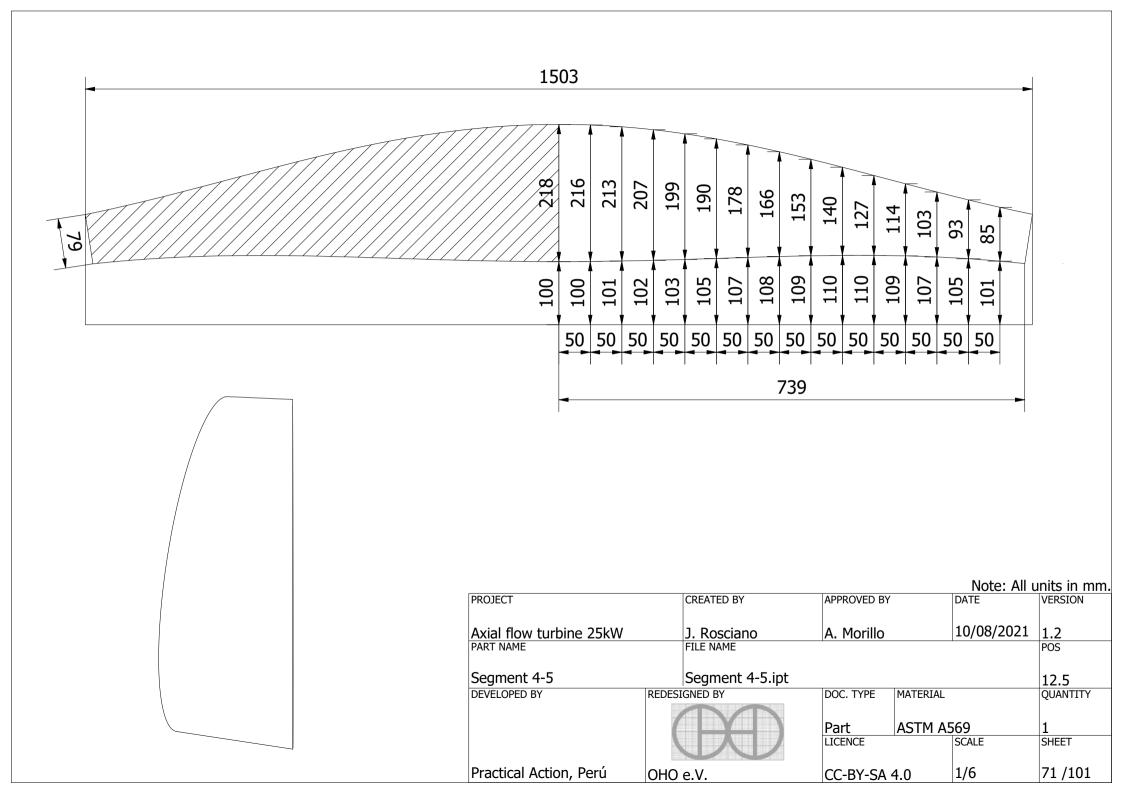


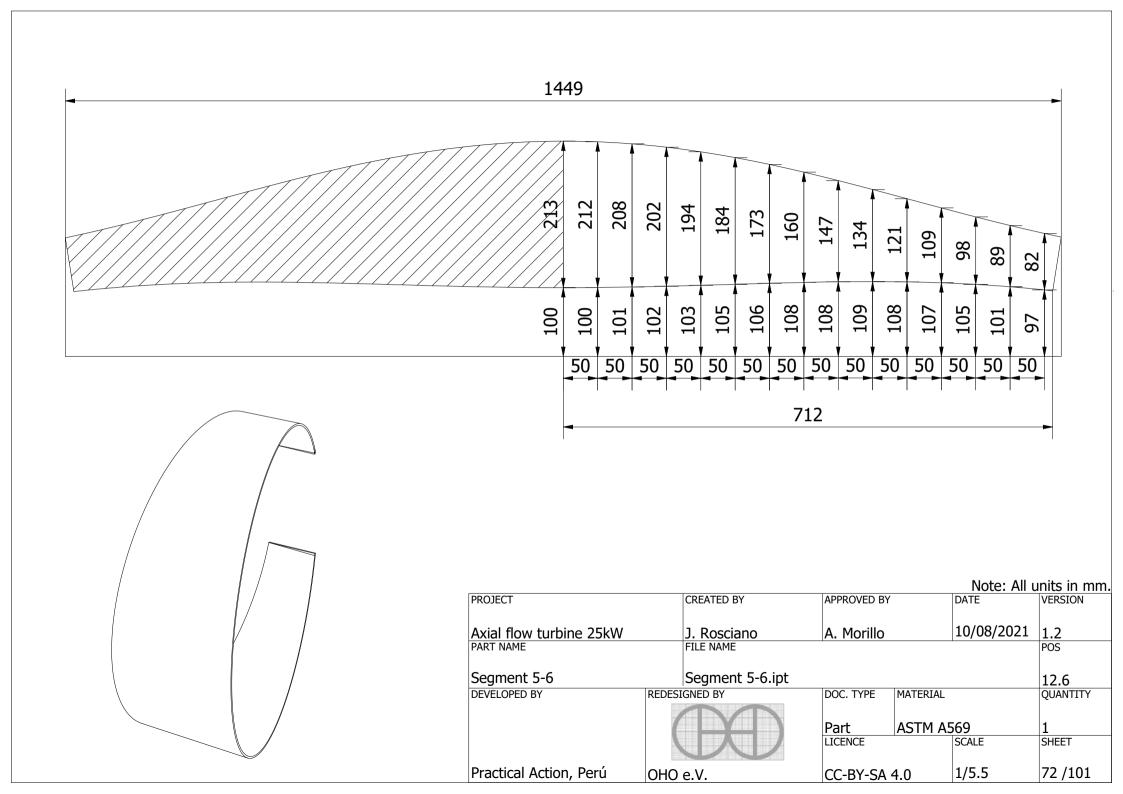


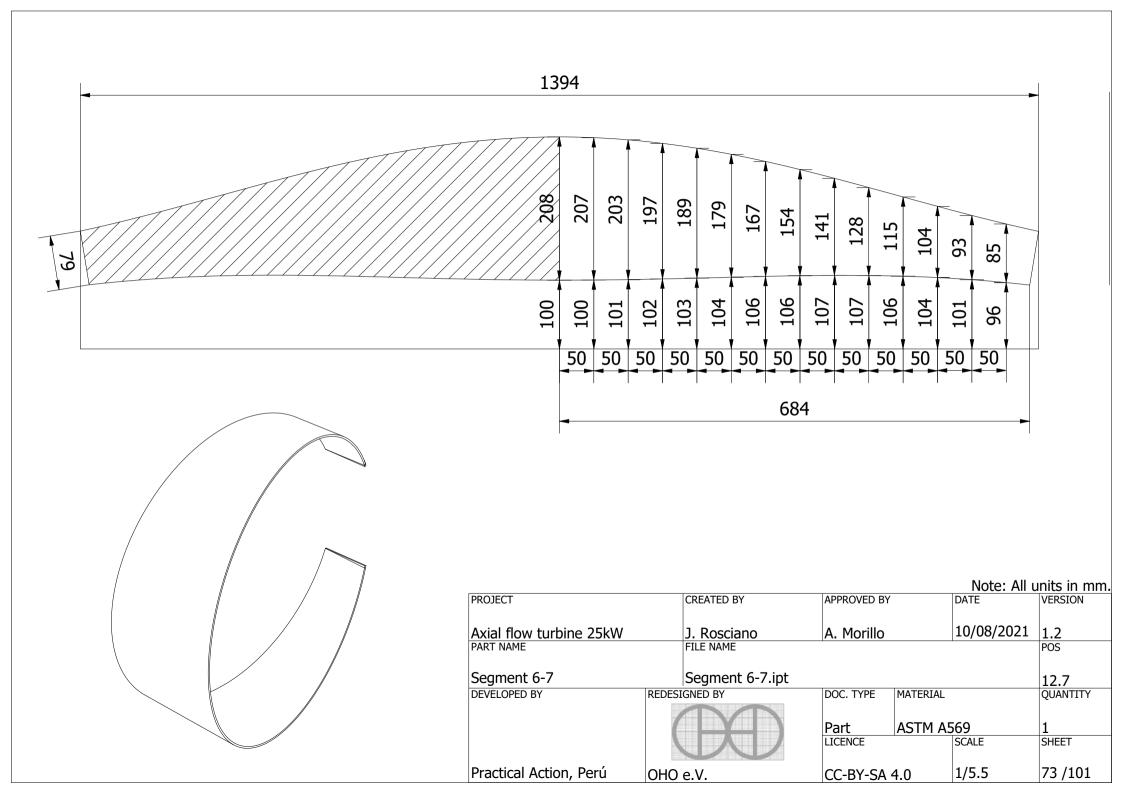


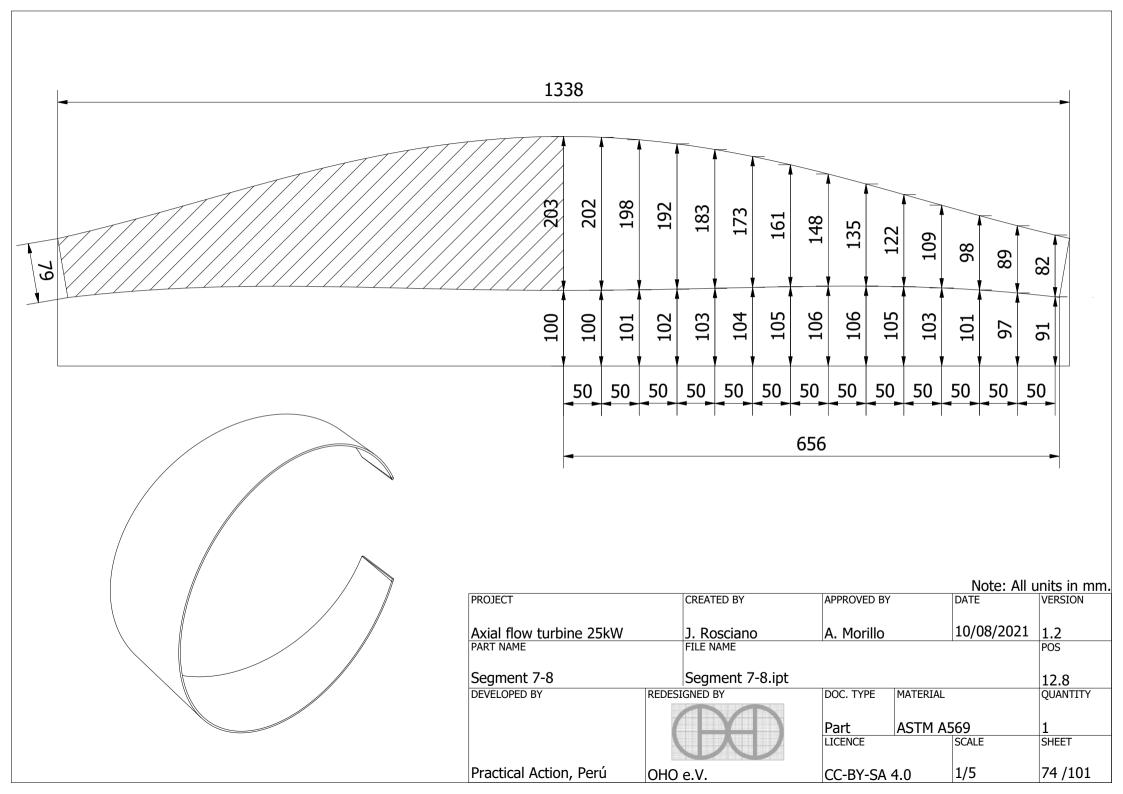


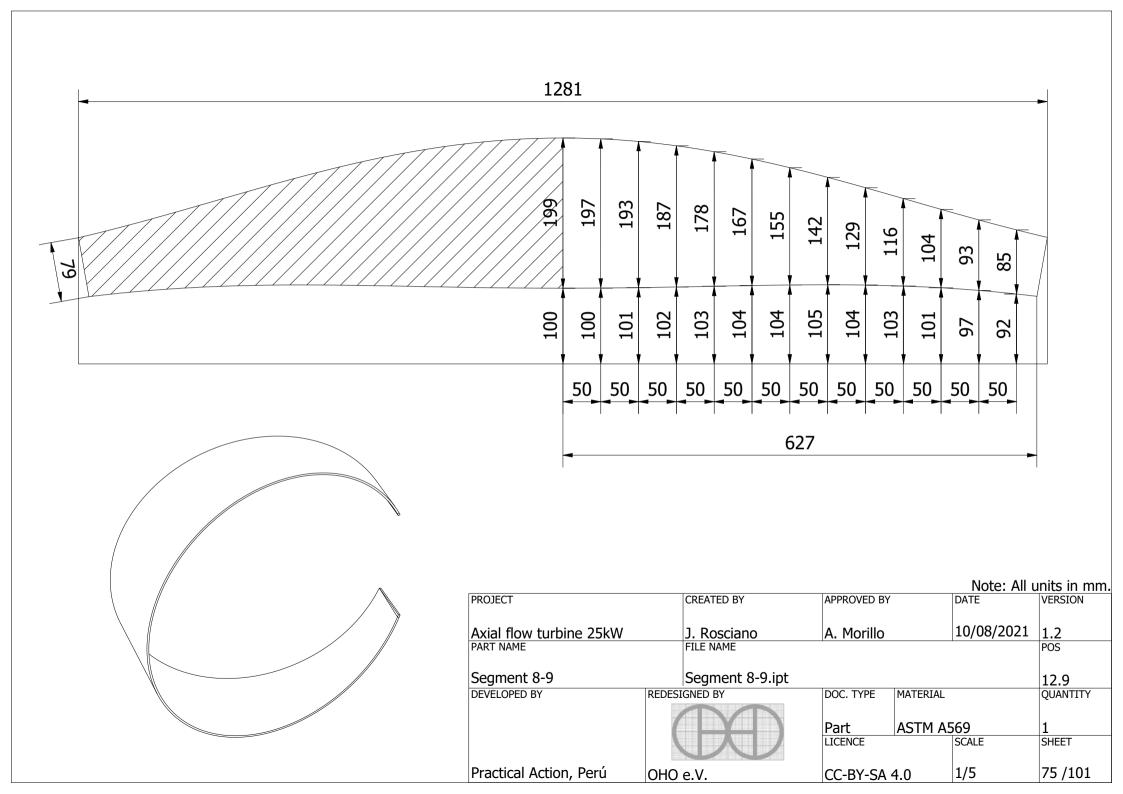


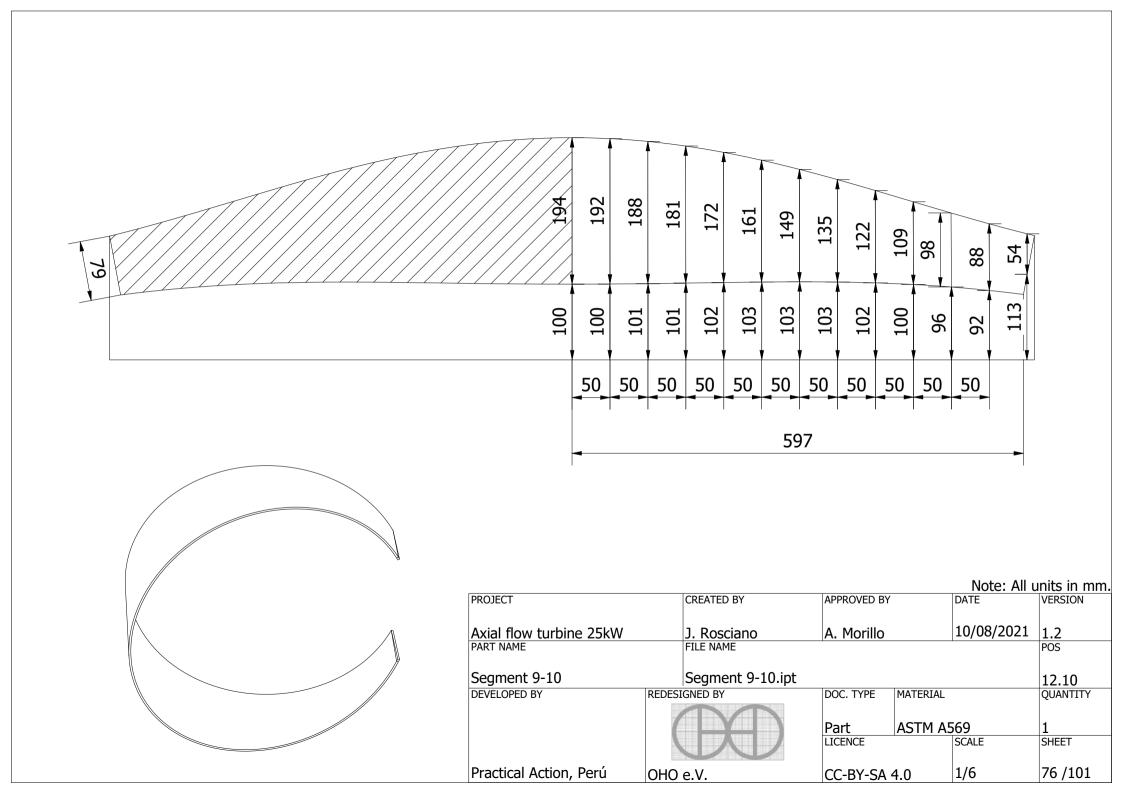


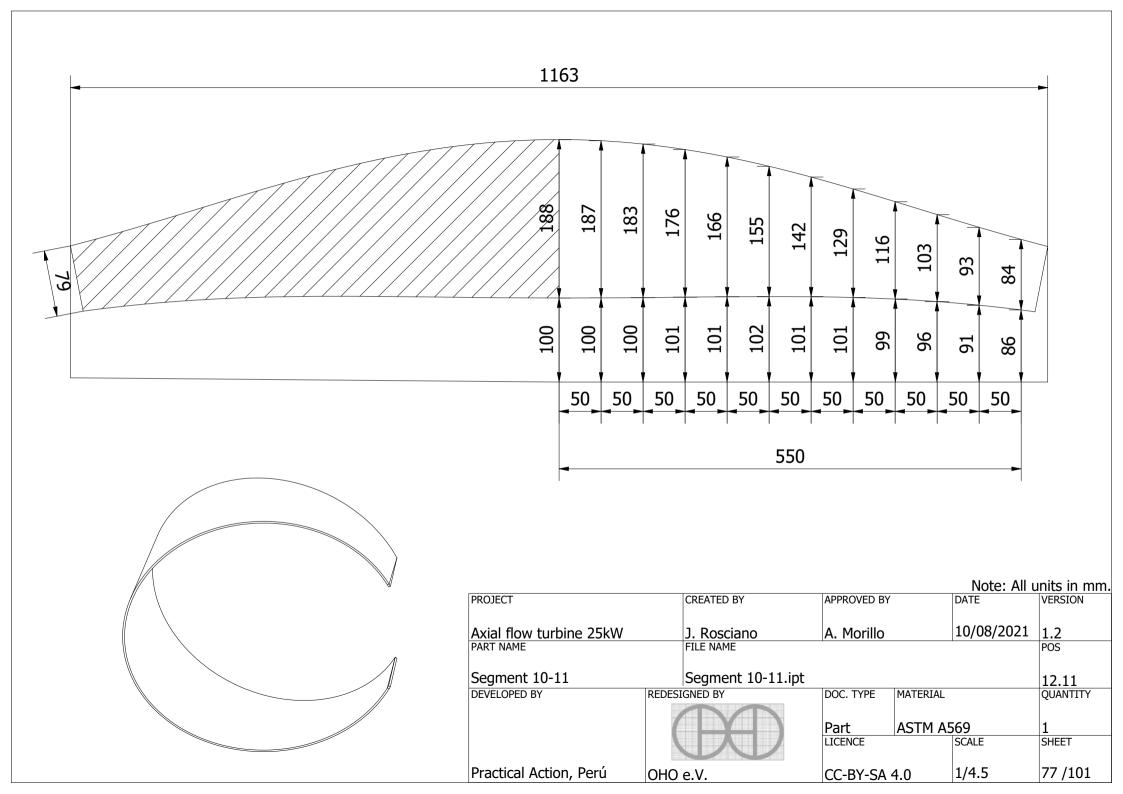


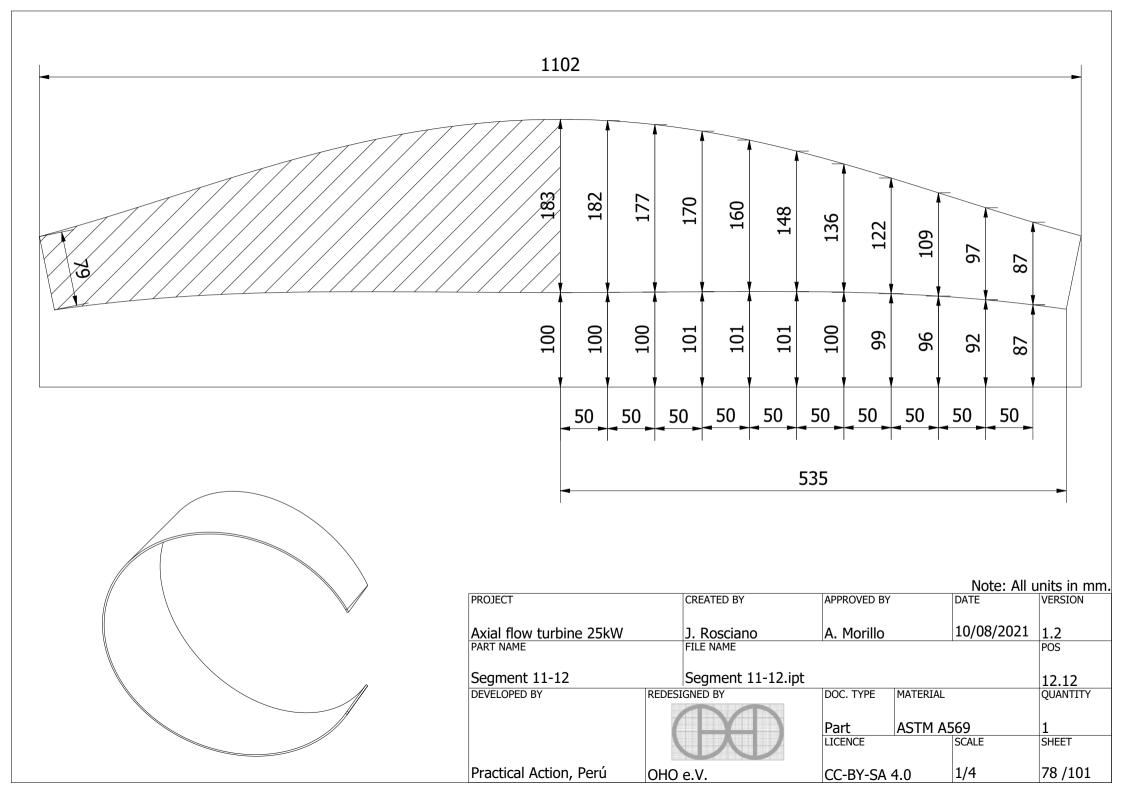


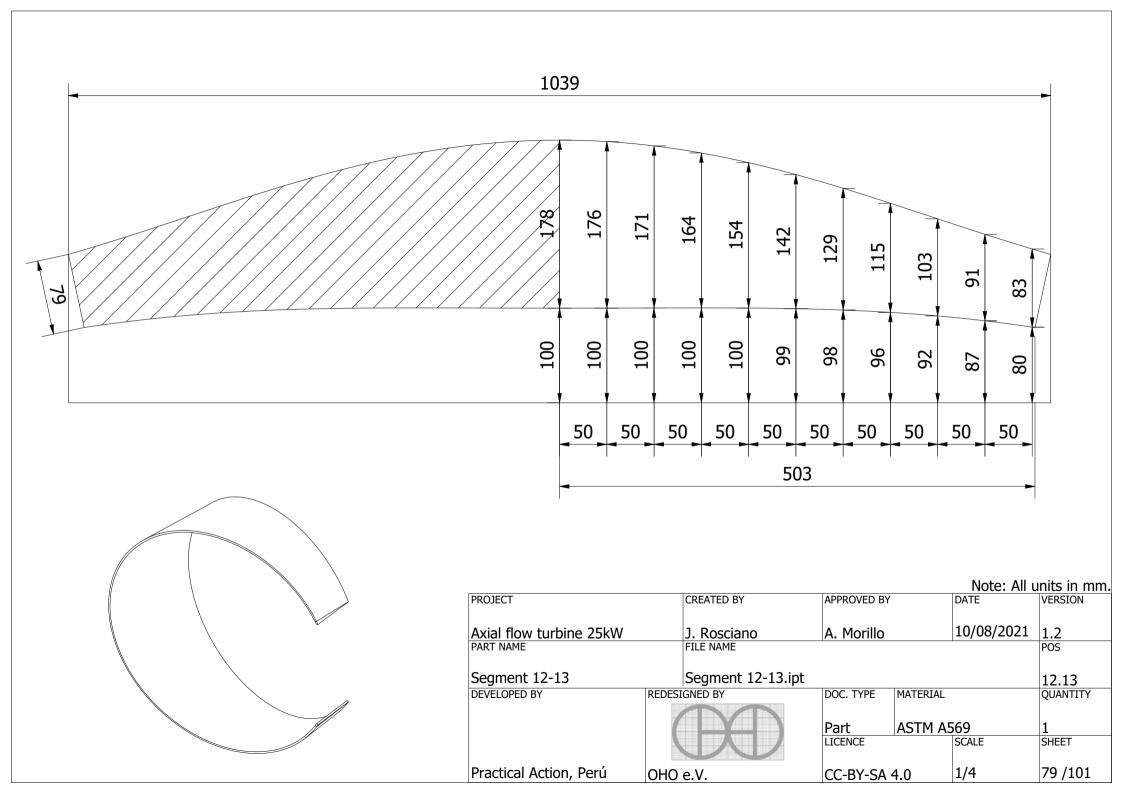


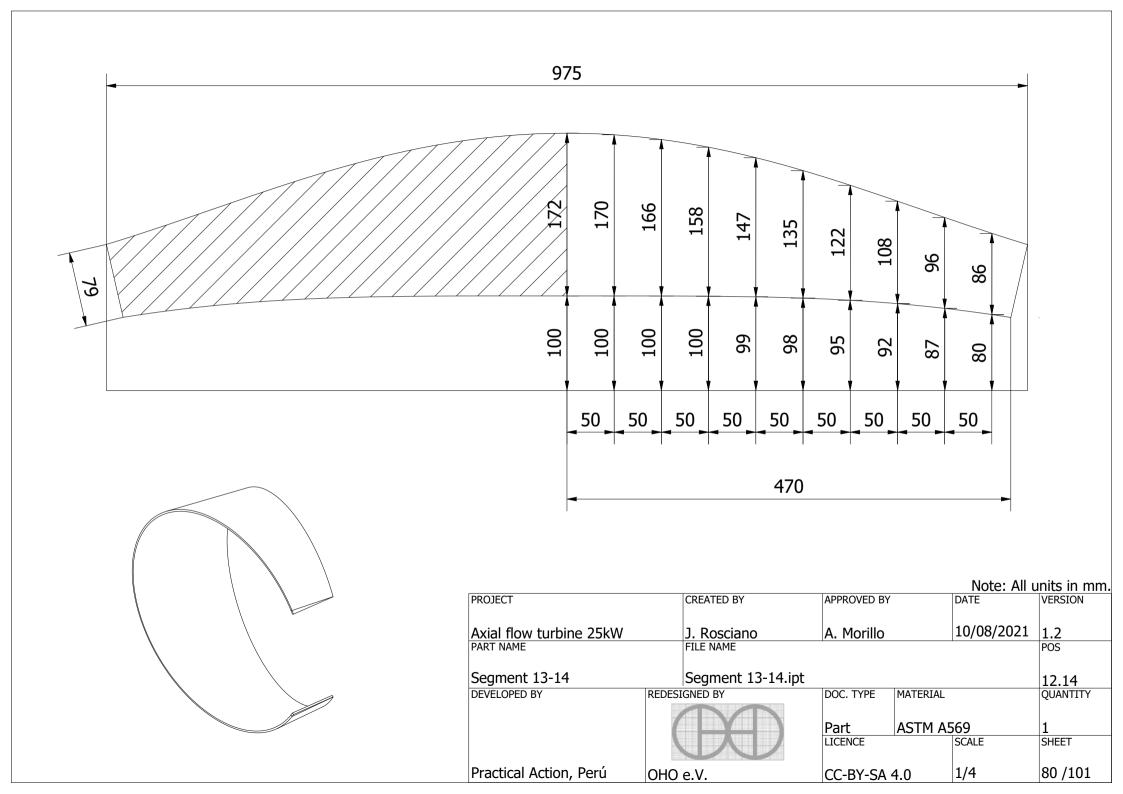


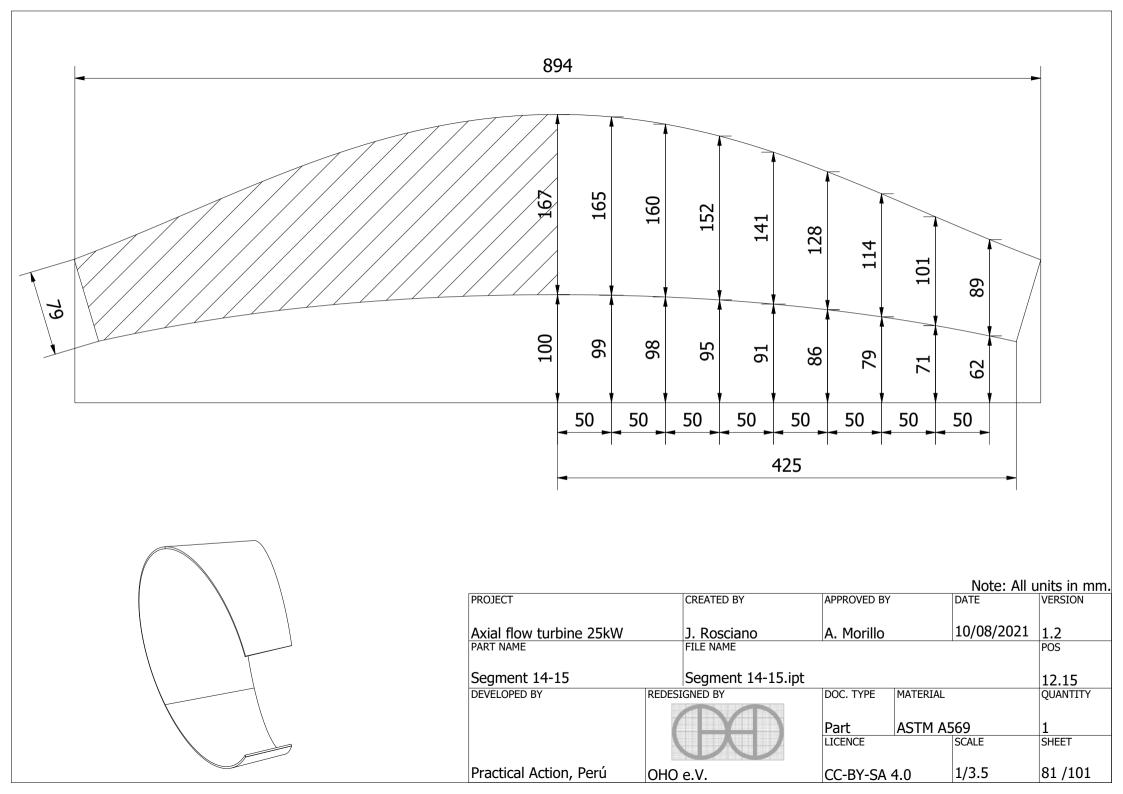


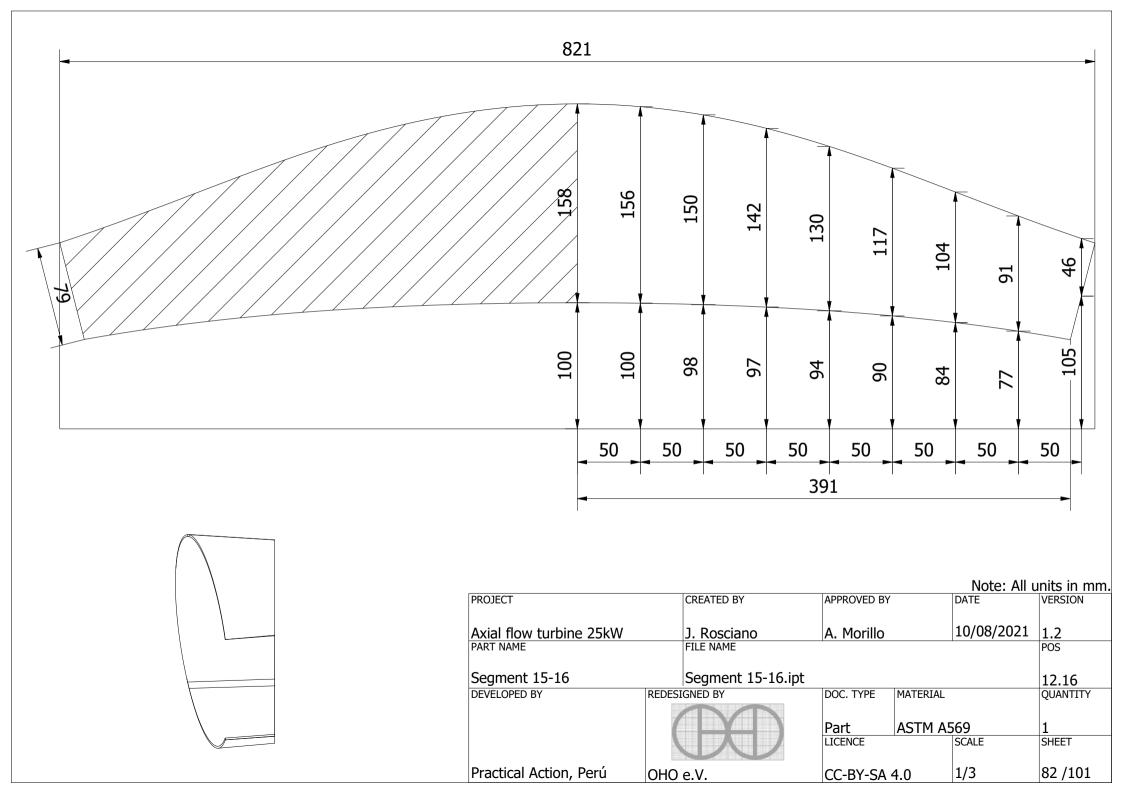


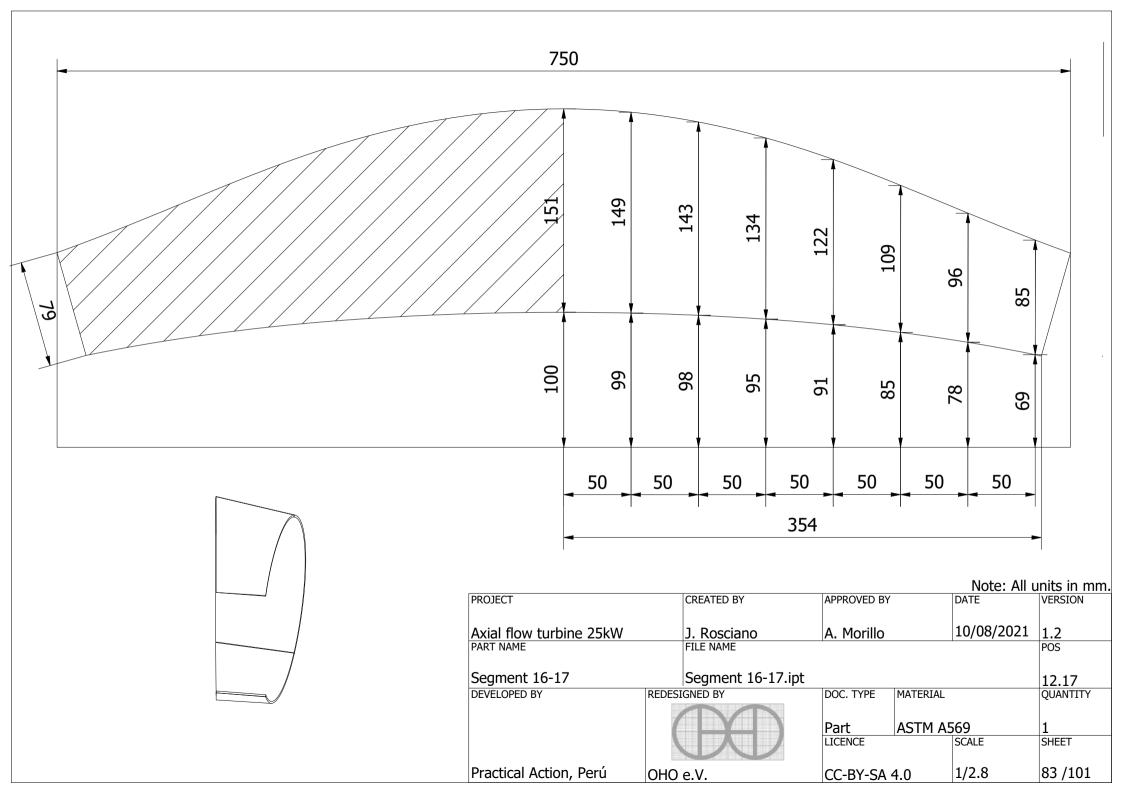


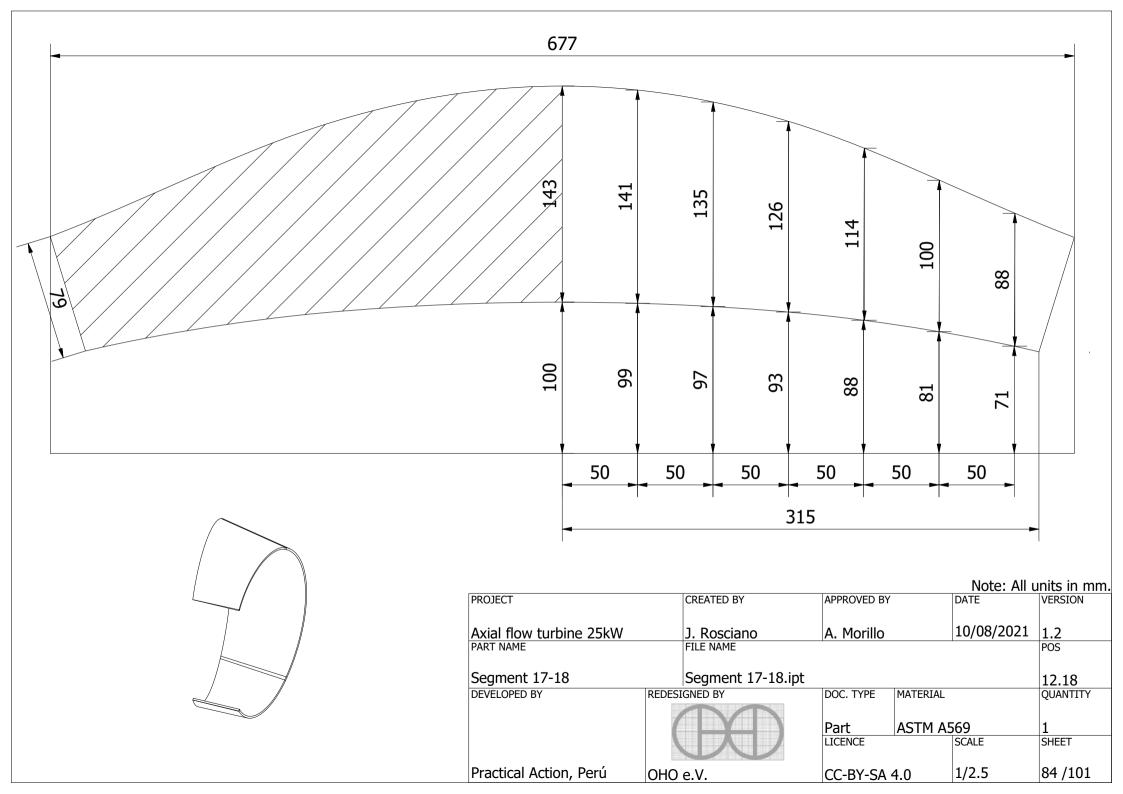


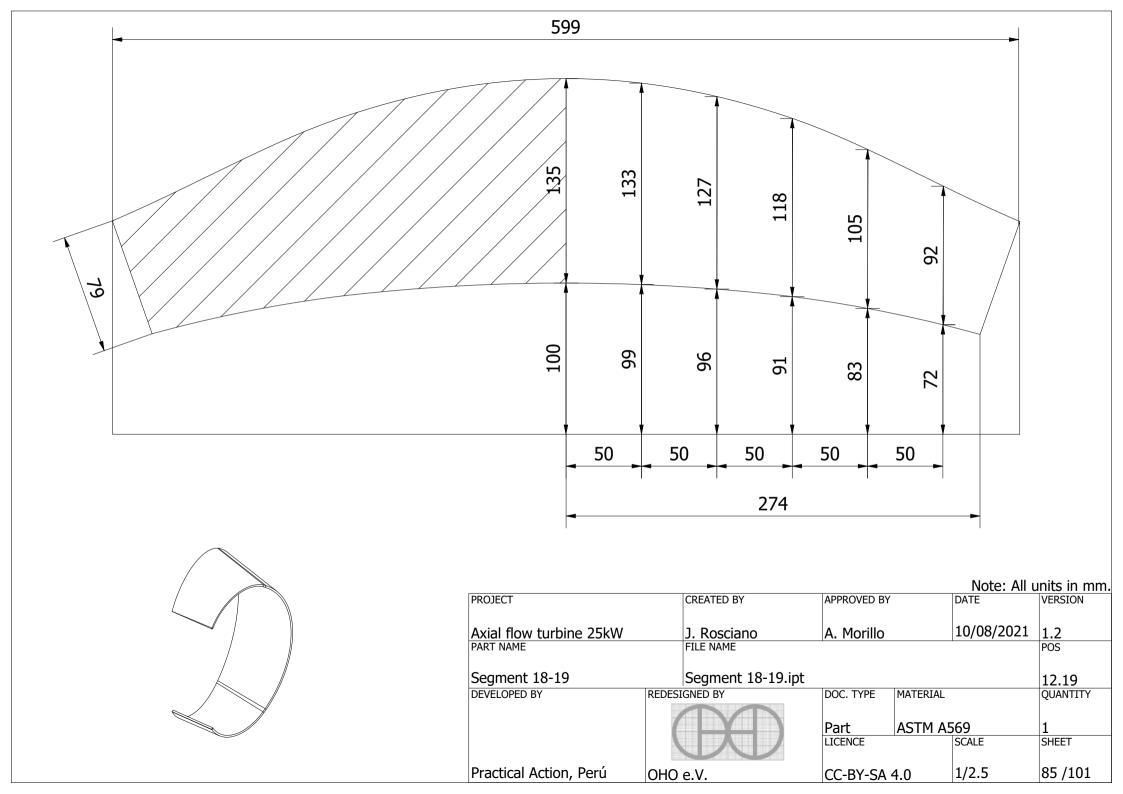


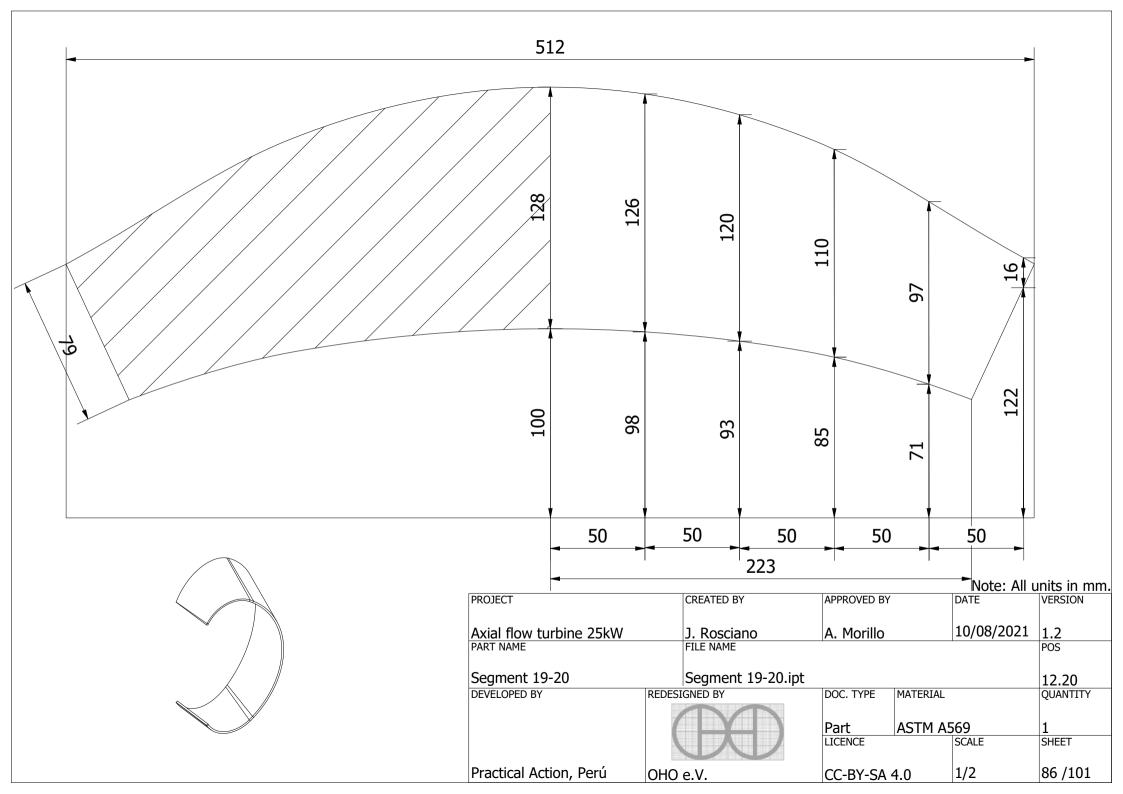


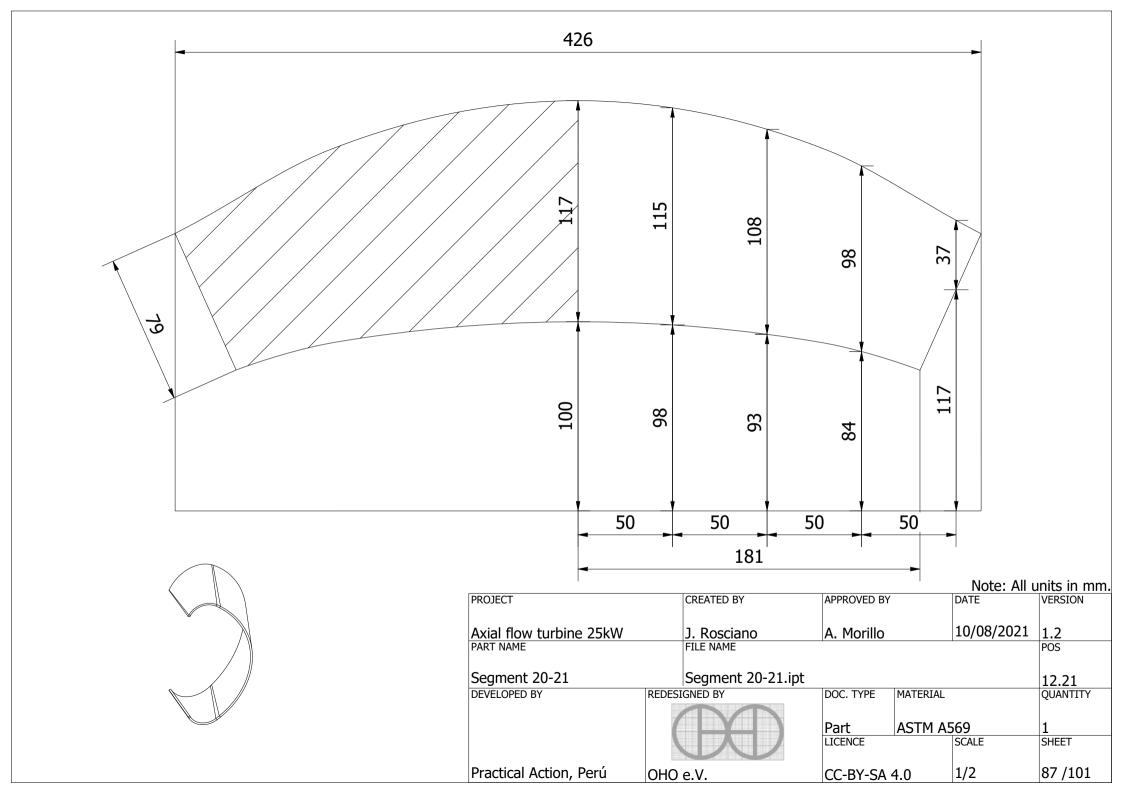


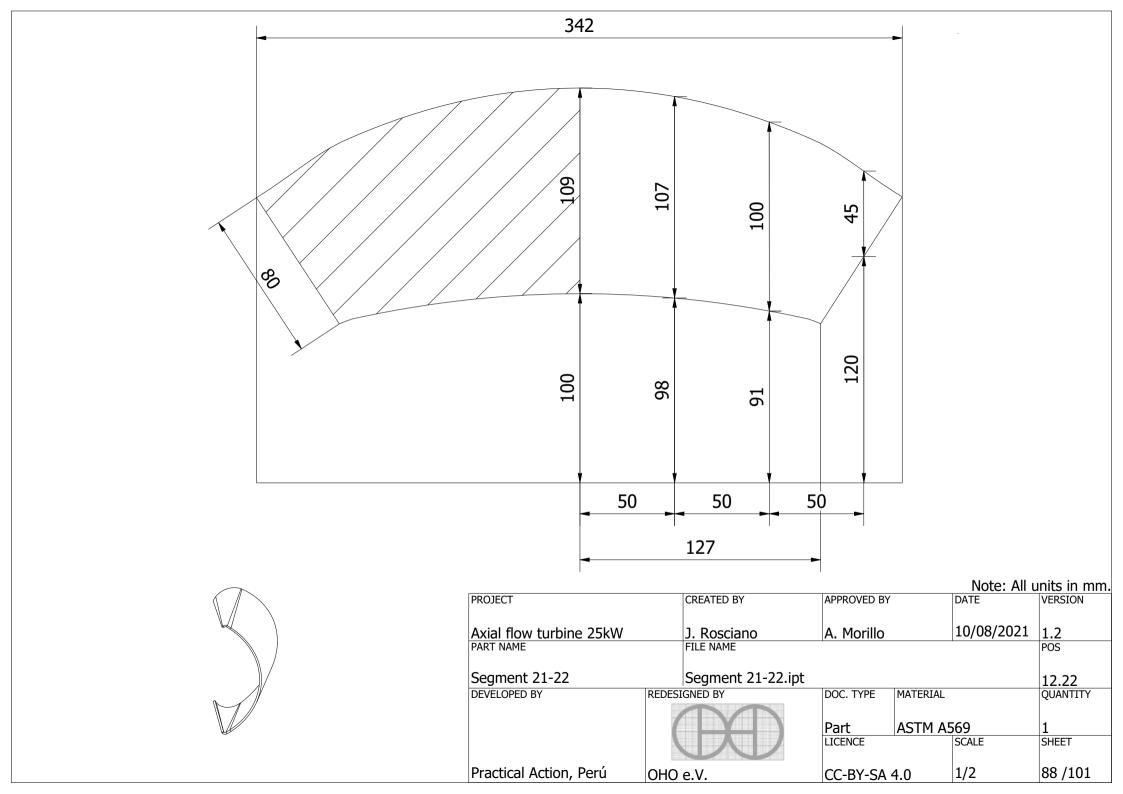


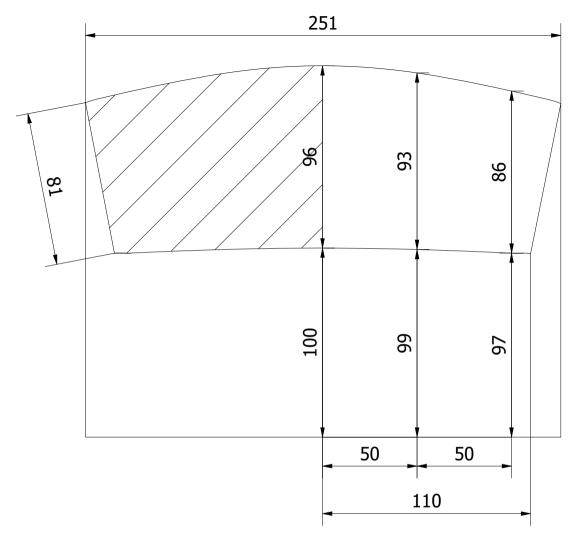






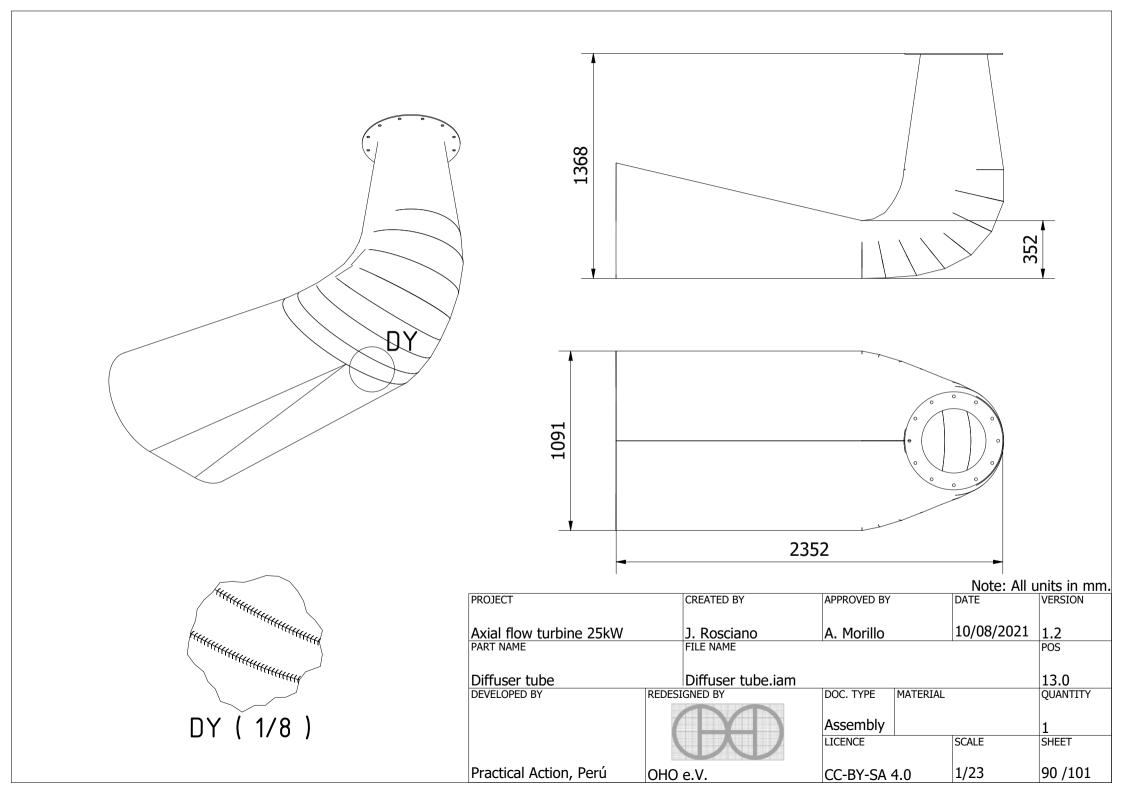


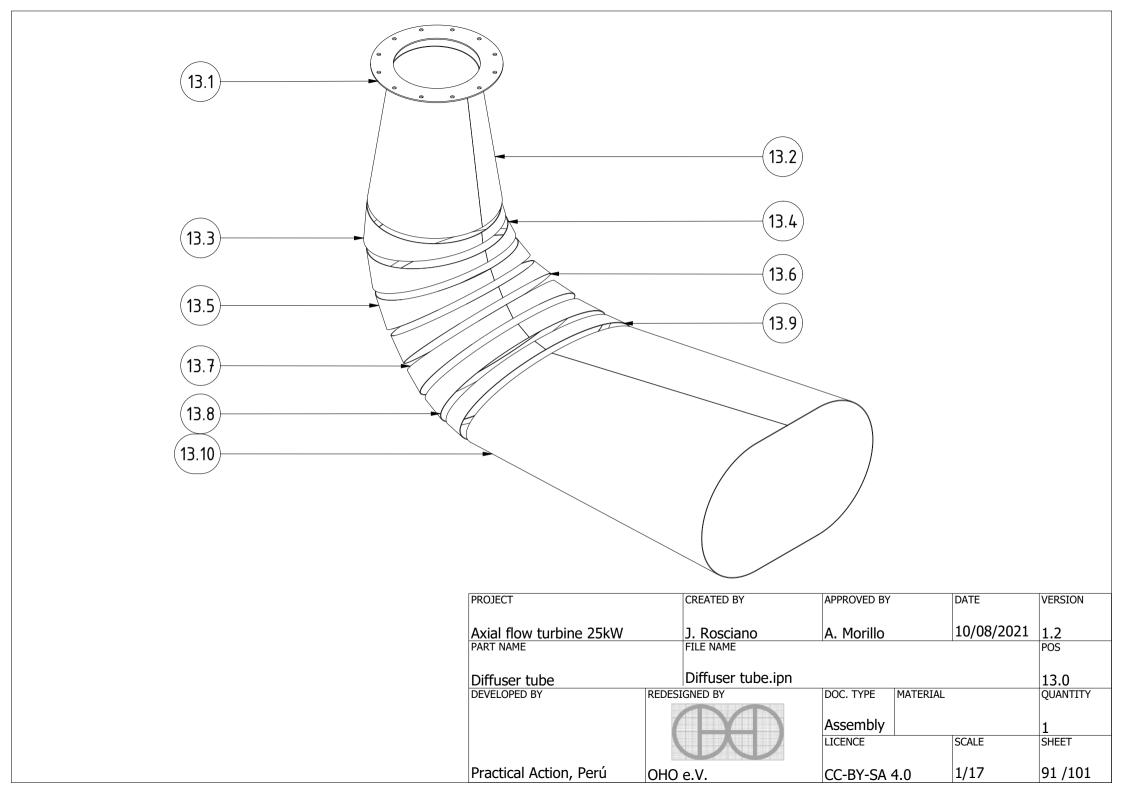


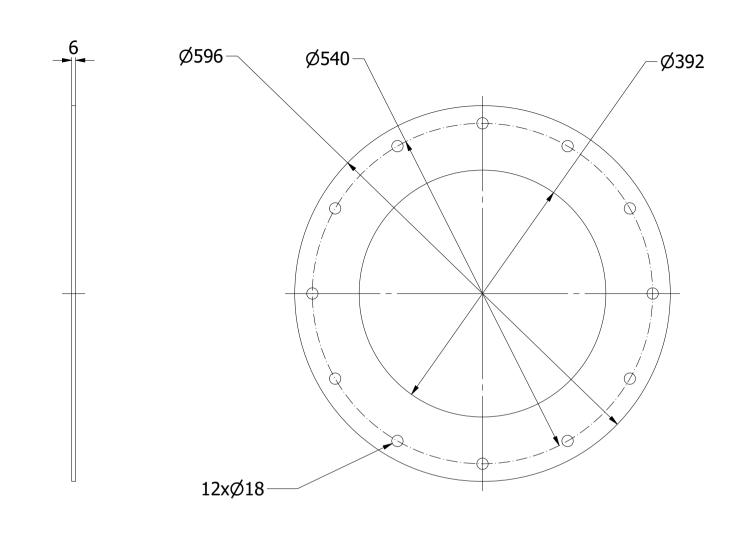




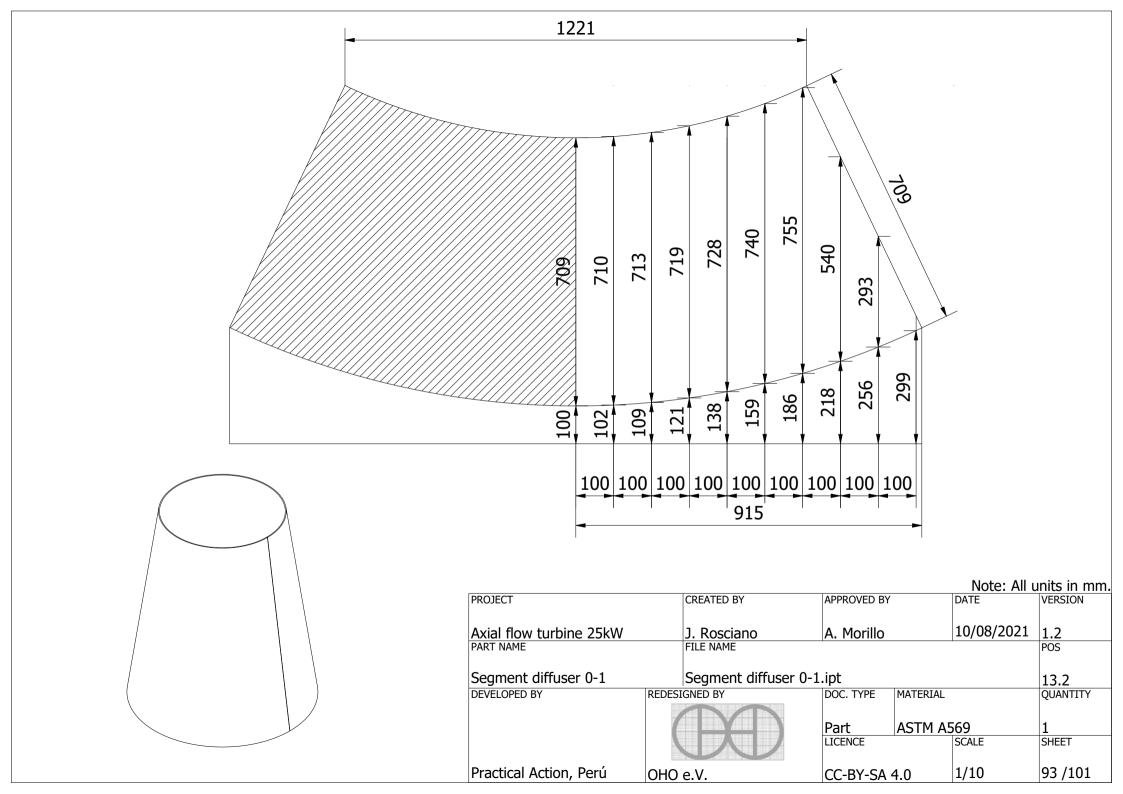
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PROJECT		CREATED BY	APPROVED BY	,	DATE	VERSION
Axial flow turbine 25kW		J. Rosciano	A. Morillo		10/08/2021	1.2
PART NAME	FILE NAME				POS	
Segment 22-23		Segment 22-23.ipt				12.23
DEVELOPED BY	REDESIGNED BY		DOC. TYPE MATERIAL			QUANTITY
			Part	ASTM AS	569	1
			LICENCE	CENCE SCALE		SHEET
Practical Action, Perú	ОНО	e.V.	CC-BY-SA	4.0	1/2	89 /101

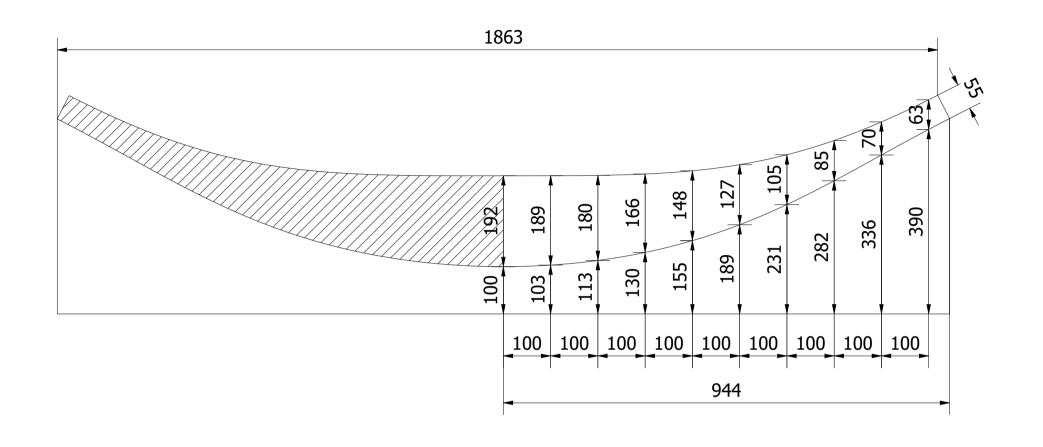


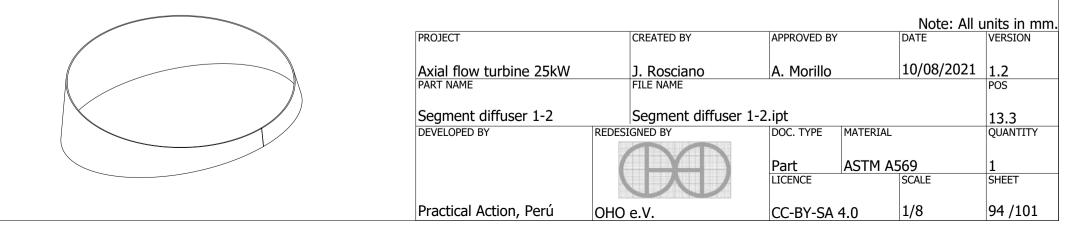


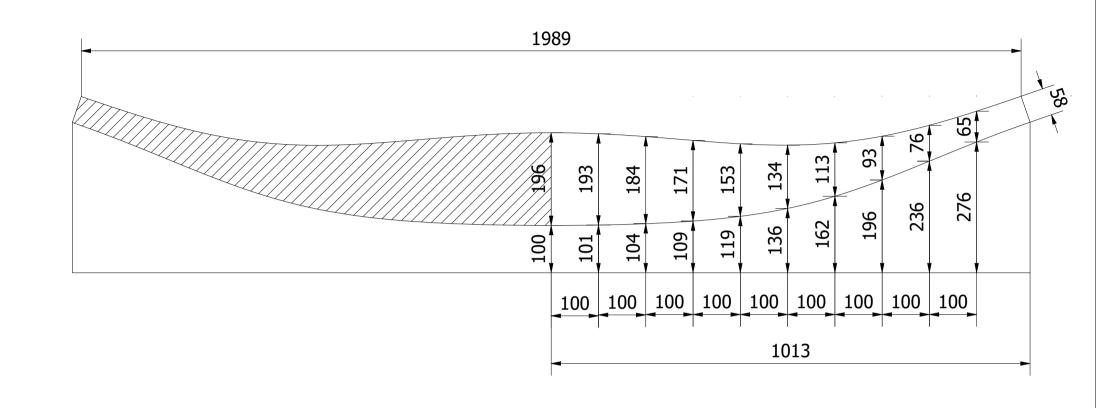


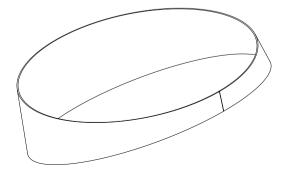
				Note: All ເ	ınits in mm.
PROJECT	CREATED BY	APPROVED BY		DATE	VERSION
Axial flow turbine 25kW	J. Rosciano	A. Morillo		10/08/2021	1.2
PART NAME	FILE NAME				POS
Carana di distra a 0.0	Comment difference	0.1-1			
Segment diffuser 0-0	Segment diffuser 0-	Segment diffuser 0-0.ipt			13.1
DEVELOPED BY	REDESIGNED BY	DOC. TYPE	MATERIAL		QUANTITY
		Part	ASTM AS	569	1
		LICENCE		SCALE	SHEET
Practical Action, Perú	OHO e.V.	CC-BY-SA	4.0	1/6	92 /101



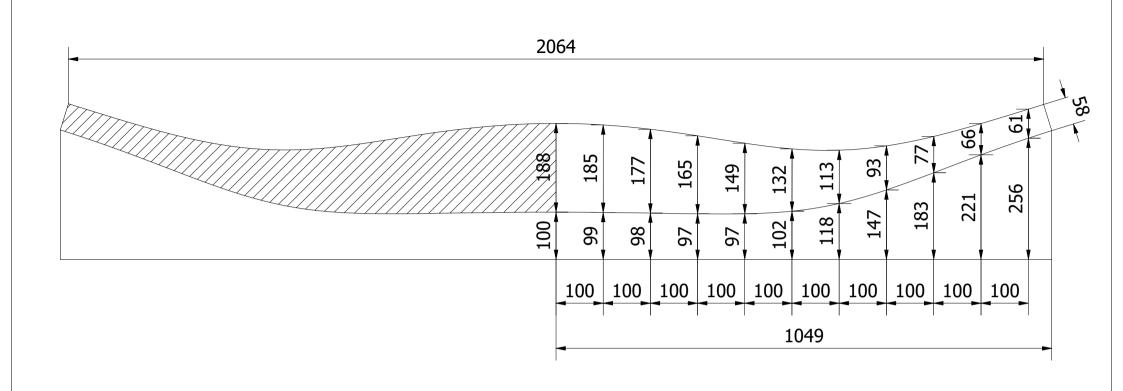


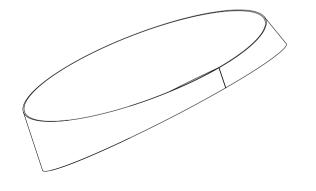




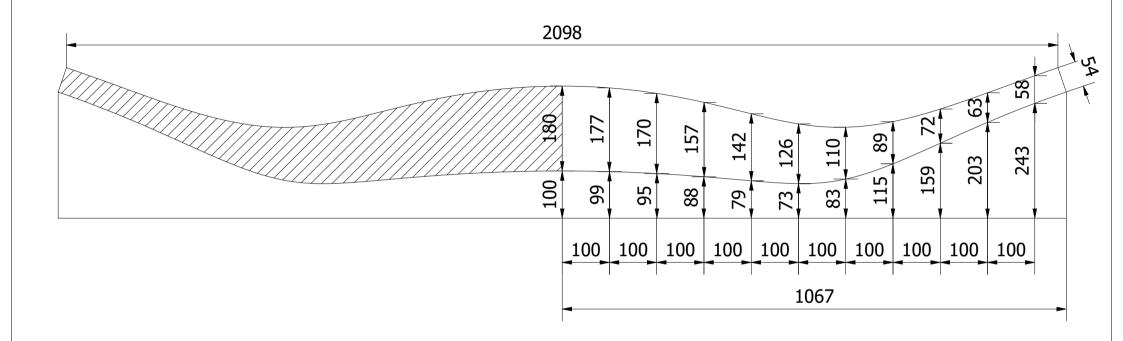


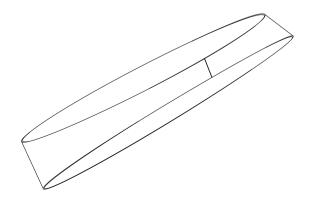
Note: All units in mm								
PROJECT	CREATED BY	APPROVED BY	APPROVED BY		VERSION			
Axial flow turbine 25kW	J. Rosciano	A. Morillo	A. Morillo		1.2			
PART NAME	PART NAME FILE NAME							
Segment diffuser 2-3	3.ipt			13.4				
DEVELOPED BY	REDESIGNED BY	DOC. TYPE MATERIAL			QUANTITY			
		Part	ASTM AS	569	1			
		LICENCE SCALI		SCALE	SHEET			
Practical Action, Perú	OHO e.V.	CC-BY-SA	4.0	1/8	95 /101			



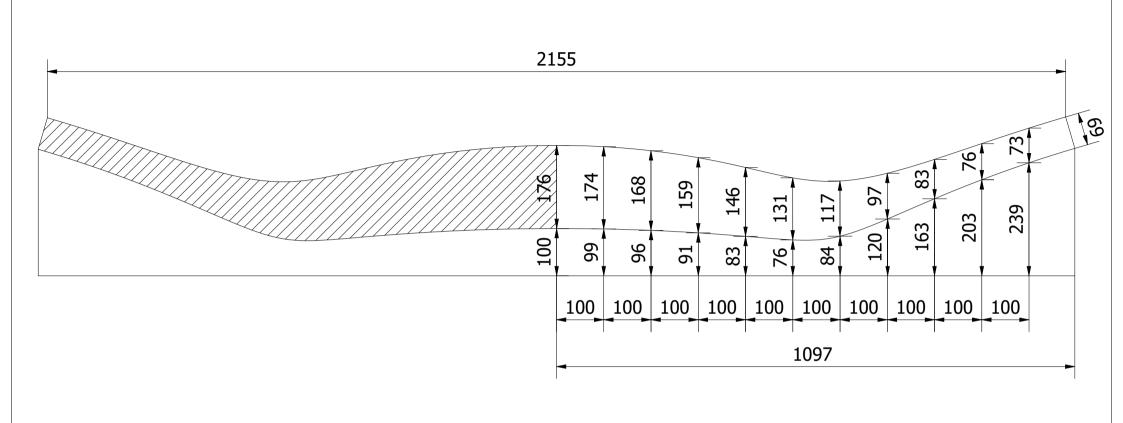


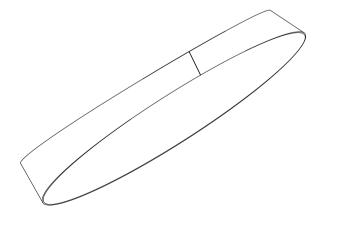
					Note: All u	ınits in mm.
PROJECT	CREA	ATED BY	APPROVED BY		DATE	VERSION
		osciano NAME	A. Morillo 10/08/2021		1.2 POS	
Segment diffuser 3-4 Segment diffuser 3-4.ipt						13.5
DEVELOPED BY				MATERIAL		QUANTITY
		Part	ASTM AS	569	1	
		LICENCE	SCALE		SHEET	
Practical Action, Perú	OHO e.V.	O e.V. CC-BY-SA 4.0 1/8		96 /101		



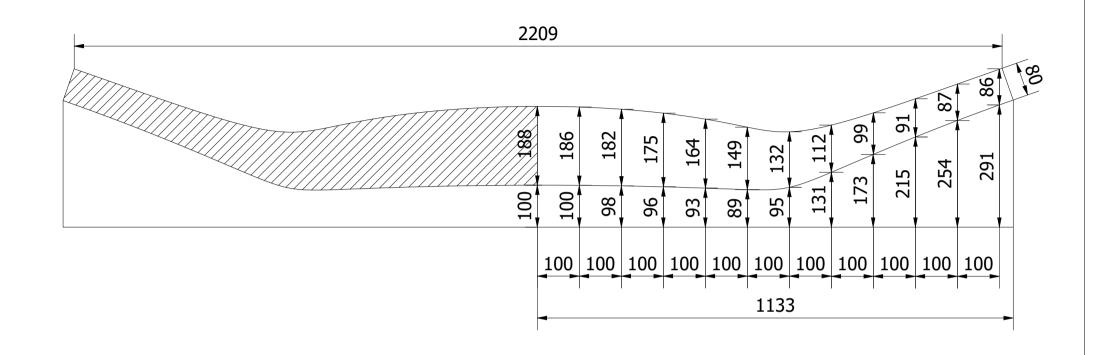


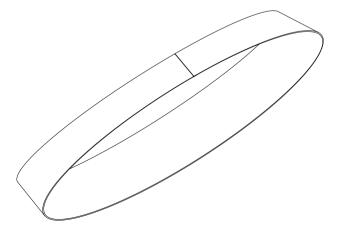
Note: All units in mm								
PROJECT		CREATED BY	APPROVED BY		DATE	VERSION		
Axial flow turbine 25kW		J. Rosciano	A. Morillo		10/08/2021	1.2		
PART NAME FILE NAME					POS			
Segment diffuser 4-5   Segment diffuser 4-5			.ipt			13.6		
DEVELOPED BY	REDESIGNED BY		DOC. TYPE MATERIAL			QUANTITY		
			Part	ASTM AS	69	1		
			LICENCE SCALE		SCALE	SHEET		
Practical Action, Perú	ОНО	CC-BY-SA 4.0 1/8		97 /101				
	Cilo	C. V.	CC DI JA	1.0	-, -	. , _ 0 _		



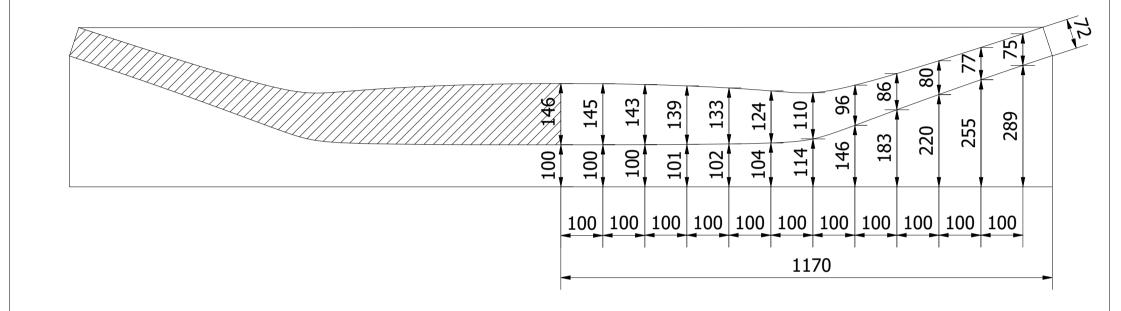


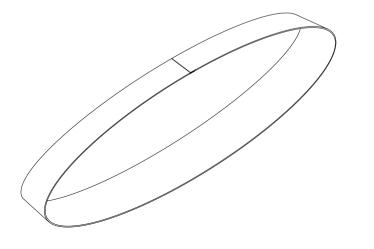
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PROJECT		CREATED BY	APPROVED BY		DATE	VERSION
Axial flow turbine 25kW		J. Rosciano	A. Morillo	A. Morillo 10/08		1.2
PART NAME		FILE NAME				POS
Segment diffuser 5-6   Segment diffuser 5-6			.ipt			13.7
DEVELOPED BY	REDESIGNED BY		DOC. TYPE	MATERIAL		QUANTITY
		Part	ASTM AS	569	1	
	N.	A + A + A	LICENCE SCALE		SCALE	SHEET
Practical Action, Perú	ОНО	CC-BY-SA 4.0 1/8		98 /101		
Practical Action, Perú	OHO e.V.		LICENCE		SCALE	SHEET 98 /101





			Note: All u	nits in mm.	
CREATED BY	APPROVED BY		DATE	VERSION	
			10/00/2021		
J. Rosciano	A. Morillo		10/08/2021	1.2	
FILE NAME				POS	
Segment diffuser 6-7 Segment diffuser 6-7				13.8	
REDESIGNED BY			MATERIAL		
	Part	ASTM AS	569	1	
	LICENCE	SCALE		SHEET	
O e.V.	CC-BY-SA 4.0		1/9	99 /101	
	J. Rosciano FILE NAME Segment diffuser 6-7	J. Rosciano FILE NAME  Segment diffuser 6-7.ipt  ESIGNED BY  DOC. TYPE  Part LICENCE	J. Rosciano FILE NAME  Segment diffuser 6-7.ipt ESIGNED BY  DOC. TYPE MATERIAL  Part LICENCE  ASTM ASTM	CREATED BY  J. Rosciano A. Morillo  FILE NAME  Segment diffuser 6-7.ipt  ESIGNED BY  DOC. TYPE  MATERIAL  Part  ASTM A569  LICENCE  SCALE	





Note: All units in mr								
PROJECT	CREATED BY	APPROVED BY		DATE	VERSION			
Axial flow turbine 25kW	J. Rosciano	A. Morillo		10/08/2021	1.2			
PART NAME	FILE NAME				POS			
Segment diffuser 7-8	ipt			13.9				
DEVELOPED BY REI	DESIGNED BY	DOC. TYPE MATERIAL			QUANTITY			
		Part	ASTM A5	69	1			
		LICENCE	SCALE		SHEET			
Practical Action, Perú OF	HO e.V.	CC-BY-SA 4.0		1/9	100 /101			

