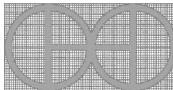
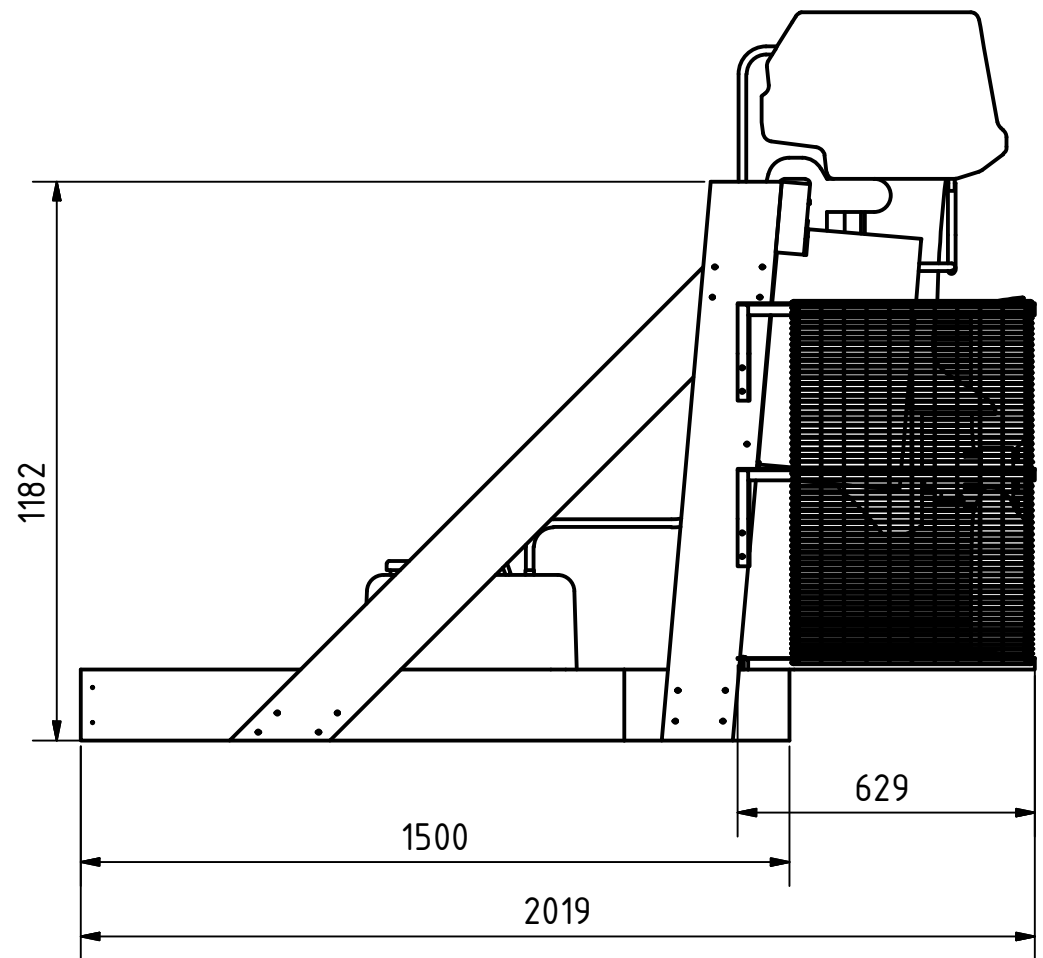
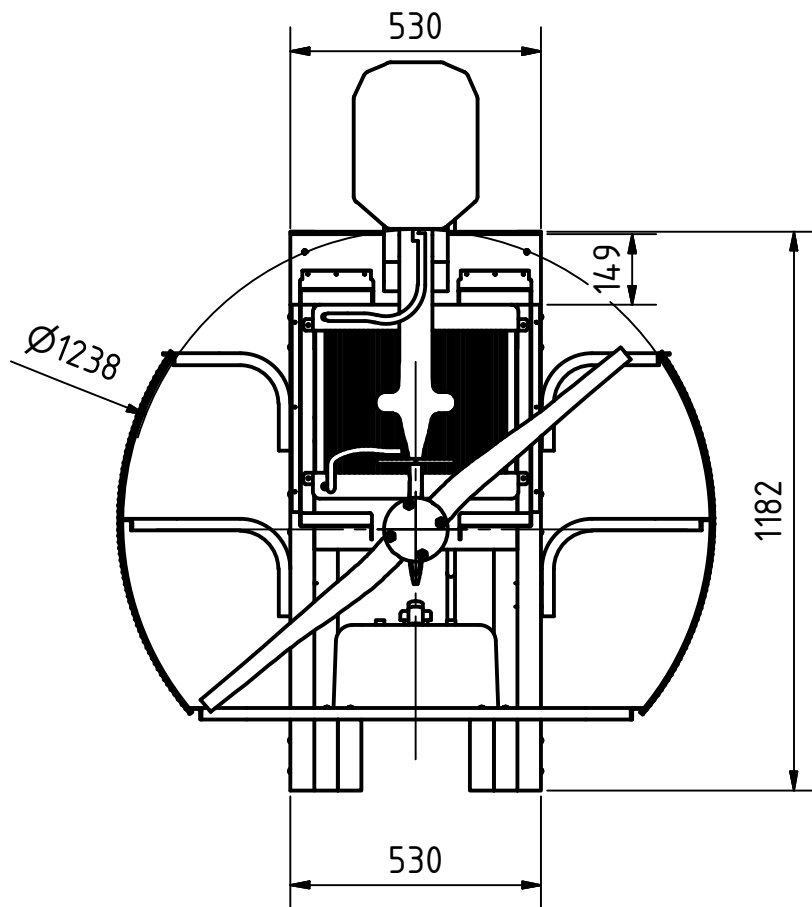


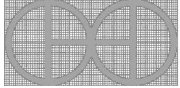
Note: All units in mm.

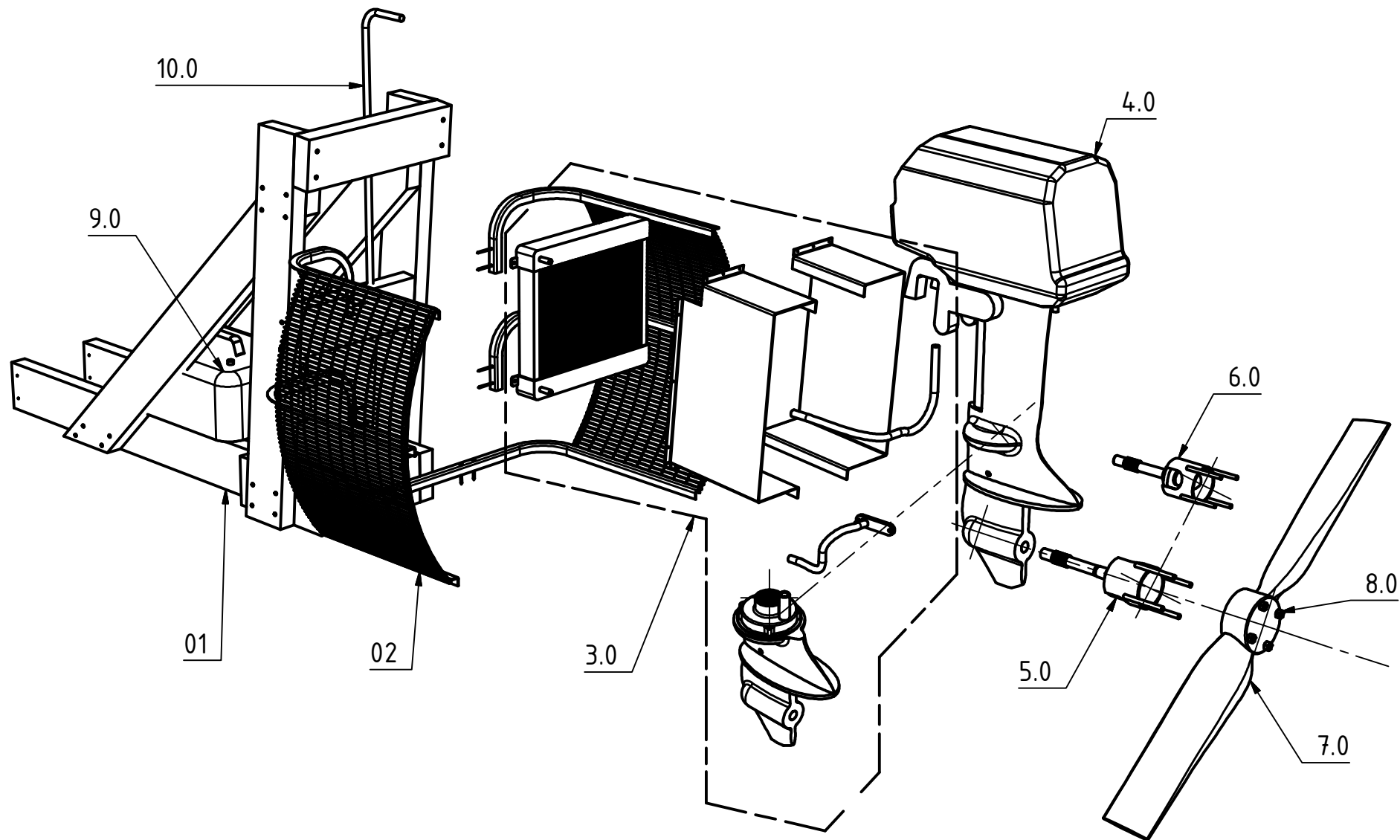
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME	POS		
3D views	oho_sso_A1-snow-sled-with-10-hp-outboard-motor.iam			A1
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Assembly		1	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:12	1 /46	

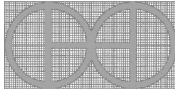
Based on drawings of Harold W. Grube,



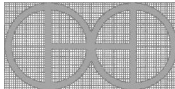
Note: All units in mm.

PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME	POS		
3D views	oho_sso_A1-snow-sled-with-10-hp-outboard-motor.iam			A1
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Assembly		1	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:20	2 /46	

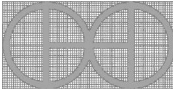


PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Exploded 3D view	oho_sso_A1-snow-sled-with-10-hp-outboard-motor.ipn			A2
PUBLISHED BY		DOC. TYPE	MATERIAL	QUANTITY
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development		Assembly		1
		LICENCE		SHEET
OHO e.V.		CC-BY-SA 4.0	1:15	3 /46

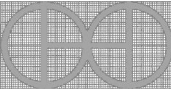
Parts list						
POS	QTY	PART NAME	FILE NAME	PART TYPE	SPECIFICATIONS	SHEET
A1	1	3D views	oho_sso_A1-snow-sled-with-10-hp-outboard-motor.iam			1
A1	1	3D views	oho_sso_A1-snow-sled-with-10-hp-outboard-motor.iam			2
A2	1	Exploded 3D view	oho_sso_A1-snow-sled-with-10-hp-outboard-motor.ipn			3
B1		Parts list				4
B2		Parts list				5
B3		Parts list				6
C1		Technical notes				7
C2		Technical notes				8
1.0	1	Support motor	oho_sso_support-motor.iam			9
1.0	1	Support motor	oho_sso_support-motor.ipn			10
1.1	1	Transom bolter	oho_sso_transom-bolter.ipt	Production	Wood	11
1.2	1	Vertical support	oho_sso_vertical-support.ipt	Production	Wood	12
1.3	2	Diagonal support	oho_sso_diagonal-support.ipt	Production	Woods	13
1.4	2	Frame base	oho_sso_frame-base.ipt	Production	Woods	14
1.5	2	Frame base2	oho_sso_frame-base2.ipt	Production	Wood	15
1.6	1	Transom inferior	oho_sso_transom-inferior.ipt	Production	Wood	16
1.7	24	Woodscrew 12	oho_sso_woodscrew12.ipt	Standard	Woodscrew 12, DIN96 6x80	
2.0	1	Guard	oho_sso_Guard.iam			17
2.0	1	Guard	oho_sso_Guard.ipn			18
2.1	1	Steel angle superior izq	oho_sso_steel-angle-sup-izq.ipt	Production	roller angle 25x25x3, ASTM A36	19
2.2	1	Steel angle superior derecho	oho_sso_steel-angle-sup-der.ipt	Production	roller angle 25x25x3, ASTM A36	20
2.3	1	Steel angle medio izquierdo	oho_sso_steel-angle-medio-izq.ipt	Production	roller angle 25x25x3, ASTM A36	21
2.4	1	Steel angle medio derecho	oho_sso_steel-angle-medio-der.ipt	Production	roller angle 25x25x3, ASTM A36	22
2.5	1	Steel angle inferior	oho_sso_steel-angle-inf.ipt	Production	roller angle 25x25x3, ASTM A36	23
2.6	4	rod frame	oho_sso_rod1.ipt	Production	A56	24
2.7	2	Cloth	oho_sso_cloth.ipt	Production	cloth 12x50x1,5, Steel C45	25
2.8	12	Woodscrew12	oho_sso_woodscrew12	Standard	Woodscrew12, DIN96 6x80	
3.0	1	Cooler outboard motor	oho_sso_cooler-outboard-motor1.iam			26
3.0	1	Cooler outboard motor	oho_sso_cooler-outboard-motor1.ipn			27
3.1	1	Radiator	oho_sso_radiator.ipt	Buy	Radiator, Crosley or other small-car radiator	
3.2	1	Sheetmetal duct izquierda	oho_sso_sheetmetal-duct.ipt	Production	sheet e=2,5, Steel C45	28

<div><div>PROJECT</div><div>Snow Sled with 10 hp outboard motor</div><div>PART NAME</div><div>Parts list</div><div>PUBLISHED BY</div><div><div><div></div><div><div>OPEN HARDWARE OBSERVATORY</div><div>Free Blueprints for Sustainable Development</div></div></div><div>OHO e.V.</div></div></div>	CREATED BY		APPROVED BY		DATE	VERSION
	D. Mosquera		A. Morillo		10/08/2021	1.0
	FILE NAME		POS			
			B1			
	DOC. TYPE		MATERIAL		QUANTITY	
Parts list						
LICENCE		SCALE		SHEET		
CC-BY-SA 4.0				4 /46		

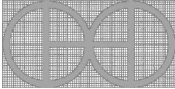
Parts list						
POS	QTY	PART NAME	FILE NAME	PART TYPE	SPECIFICATIONS	SHEET
3.3	1	Sheetmeta duct derecha	oho_sso_sheetmetal-duct-der.ipt	Production	Sheet e=2,5, Steel C45	29
3.4	1	Flexible hose	oho_sso_flexible-hose.ipt	Standard	Flexible hose, D.I.5/8 in. L:600mm, Rubber	
3.5	1	Steel plate	oho_sso_steel-plate.ipt	Production	Steel C45	30
3.6	1	Gasket	oho_sso_gasket.ipt	Production	Rubber	31
3.7	1	Flexible hose superior	oho_sso_flexible-hose2.ipt	Standard	Flexible hose, D.I.5/8 in. L:600mm, Rubber	
3.8	1	Bushing Seals	oho_sso_bushing40.ipt	Production	Aluminum	32
3.9	2	Seals pump	oho_sso_seals.ipt	Standard	Seals pump, No.41-62	
3.10	4	Hose clamp	oho_sso_1-2hose-clamp.ipt	Standard	Hose clamp, D:1/2 in.	
3.11	20	Woodscrew 6	oho_sso_woodscrew8.ipt	Standard	Woodscrew 6, DIN96 6x L:40	
3.12	4	Woodscrew 12	oho_sso_woodscrew12.ipt	Standard	Woodscrew 12, DIN96 6xL:80	
4.0	1	Outboard Jhonnson	oho_sso_outboard2.ipt	Standard	Outboard Jhonnson Motor 10HP-QD-13	
5.0	1	Propeller hub 1	oho_sso_propeller-hub-1.iam			33
5.0	1	Propeller hub1	oho_sso_propeller-hub-1.ipn			34
5.1	1	Threaded shaft	oho_sso_shaft.ipt	Production	Steel AISI-304	35
5.2	1	Cube	oho_sso_cube.ipt	Production	Steel C45	36
5.3	1	Plate cube	oho_sso_plate-cube.ipt	Production	Steel C45	37
5.4	1	Hub	oho_sso_hub.ipt	Production	Steel C45	38
5.5	1	Nut tope	oho_sso_nut-tope.ipt	Production	Steel C45	39
5.6	4	Bolt Propeller	oho_sso_bolt-M10.ipt	Standard	Bolt headless bolt-M10 L:110	
5.7	1	Shaft pin1	oho_sso_pin1.ipt	Standard	Shaft pin1, D:4 - L:35	
6.0	1	Propeller hub 2	oho_sso_propeller-hub-2.iam			40
6.0	1	Propeller hub 2	oho_sso_propeller-hub-2.ipn			41
6.1	1	Splined shaft	oho_sso_splined-shaft.ipt	Production	AISI C-304	42
6.2	1	Spline sleeved	oho_sso_spline-sleeved.ipt	Production	Steel C45	43
6.3	1	Cube 2	oho_sso_cube2.ipt	Production	Seel C45	44
6.4	1	Plate cube	oho_sso_plate-cube.ipt	Production	Steel C45	45
6.5	1	Hub	oho_sso_hub.ipt	Production	Steel C45	46
6.6	4	Bolt propeller	oho_sso_bolt-M10.ipt	Standard	Bolt headless bolt-M10 L:110	
6.7	1	Shaft pin	oho_sso_pin1.ipt	Standard	Shaft pin, D:4 - L:35	
6.8	1	Shaft pin2	oho_sso_pin2.ipt	Standard	Shaft pin2, D:4 - L:55	
6.7	1	Nut Cube	oho_sso_nut-25.ipt	Standard	Nut Hex, Machine hole pine lateral D:5	

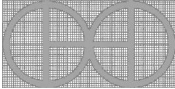
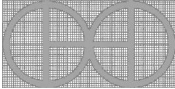
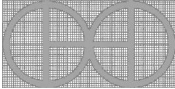
	PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
	Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
	PART NAME	FILE NAME			POS
	Parts list				B2
	PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
	 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development		Parts list		
			LICENCE	SCALE	SHEET
			OHO e.V.	CC-BY-SA 4.0	5 /46

Parts list						
POS	QTY	PART NAME	FILE NAME	PART TYPE	SPECIFICATIONS	SHEET
7.0	1	Propeller	oho_sso_propeller.ipt	Buy	Propeller, 48-in. prop, witch 16 in. pitch 2400 r.p.m. Banks-Maxwell Propeller Co.	
8.0	4	Nut propeller	oho_sso_nut-M10.ipt	Standard	Nut propeller, DIN 96 M10	
9.0	1	Gasoline tank	oho_sso_gasoline-tank.ipt	Buy	Gasoline tank, Cap. 12.0 Lts.	
10.0	1	Flexible hose	oho_sso_flexible-hose3.ipt	Standard	Flexible hose, 1/2 in. flexible hose - combustible	

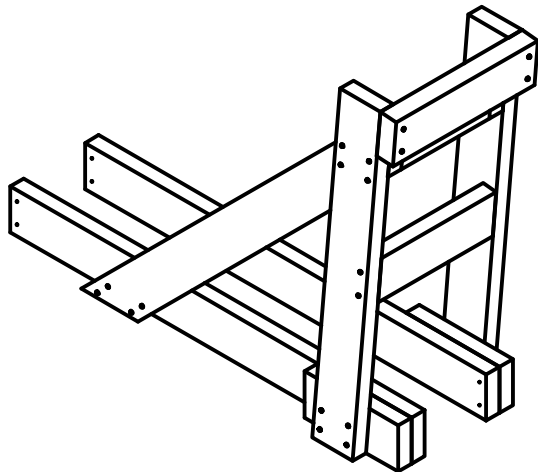
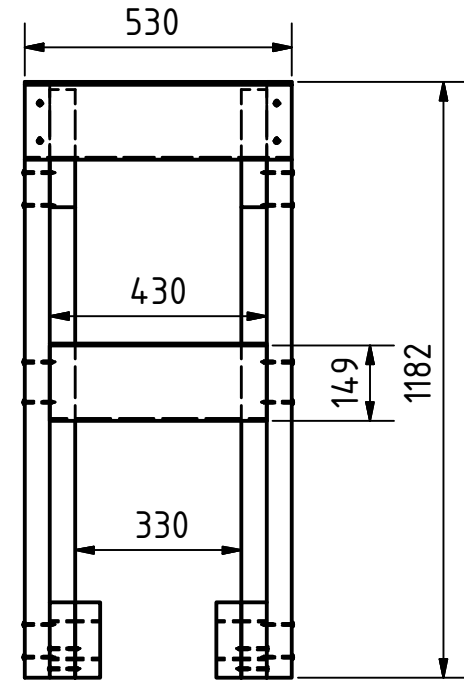
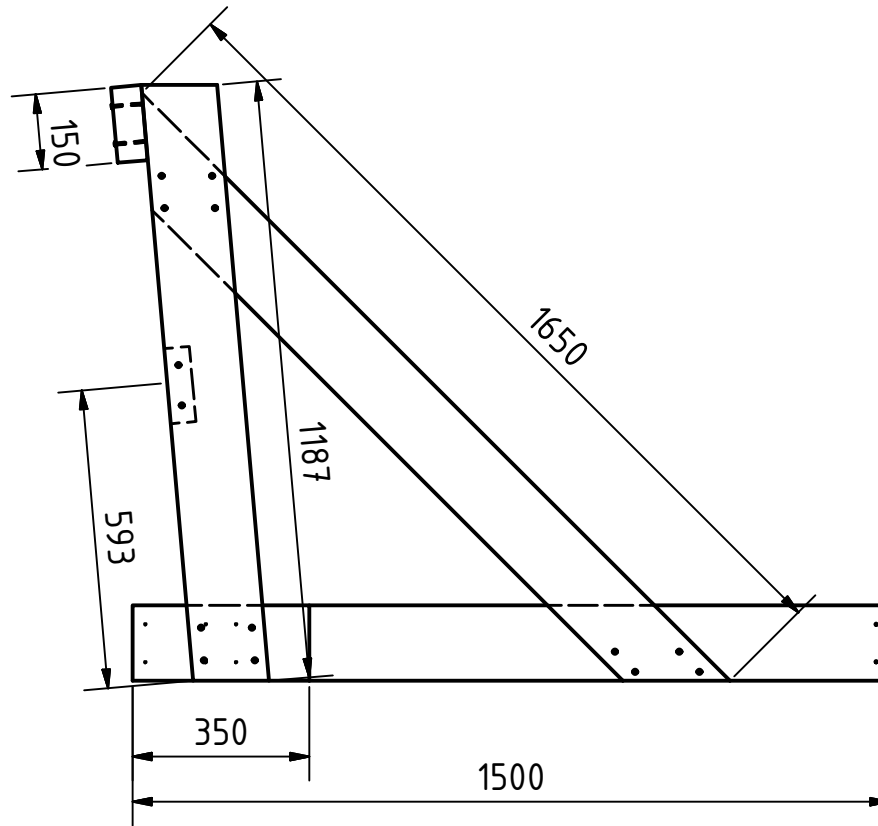
PROJECT		CREATED BY		APPROVED BY		DATE	VERSION
Snow Sled with 10 hp outboard motor		D. Mosquera		A. Morillo		10/08/2021	1.0
PART NAME		FILE NAME					POS
Parts list							B3
PUBLISHED BY				DOC. TYPE	MATERIAL		QUANTITY
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development				Parts list			
				LICENCE		SCALE	SHEET
OHO e.V.				CC-BY-SA 4.0			6 /46

TECHNICAL NOTES	
NOTES	CONTENT
GENERAL NOTES	
Metal structure treatment	Iron structures should be painted to prevent rust and improve equipment life. - Remove loose rust with a wire brush, sandpaper or chemical rust remover. - 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
Foundations fixing	- The ground must be stable and have a low water table. - 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.
Wood treatment	- The wood must be treated with pesticides and kiln-dried to ensure adequate humidity. - Wood sealer should be applied for later use.
...	...
...	...

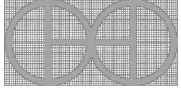
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Technical notes				C1
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Technical notes			
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0		7 /46	

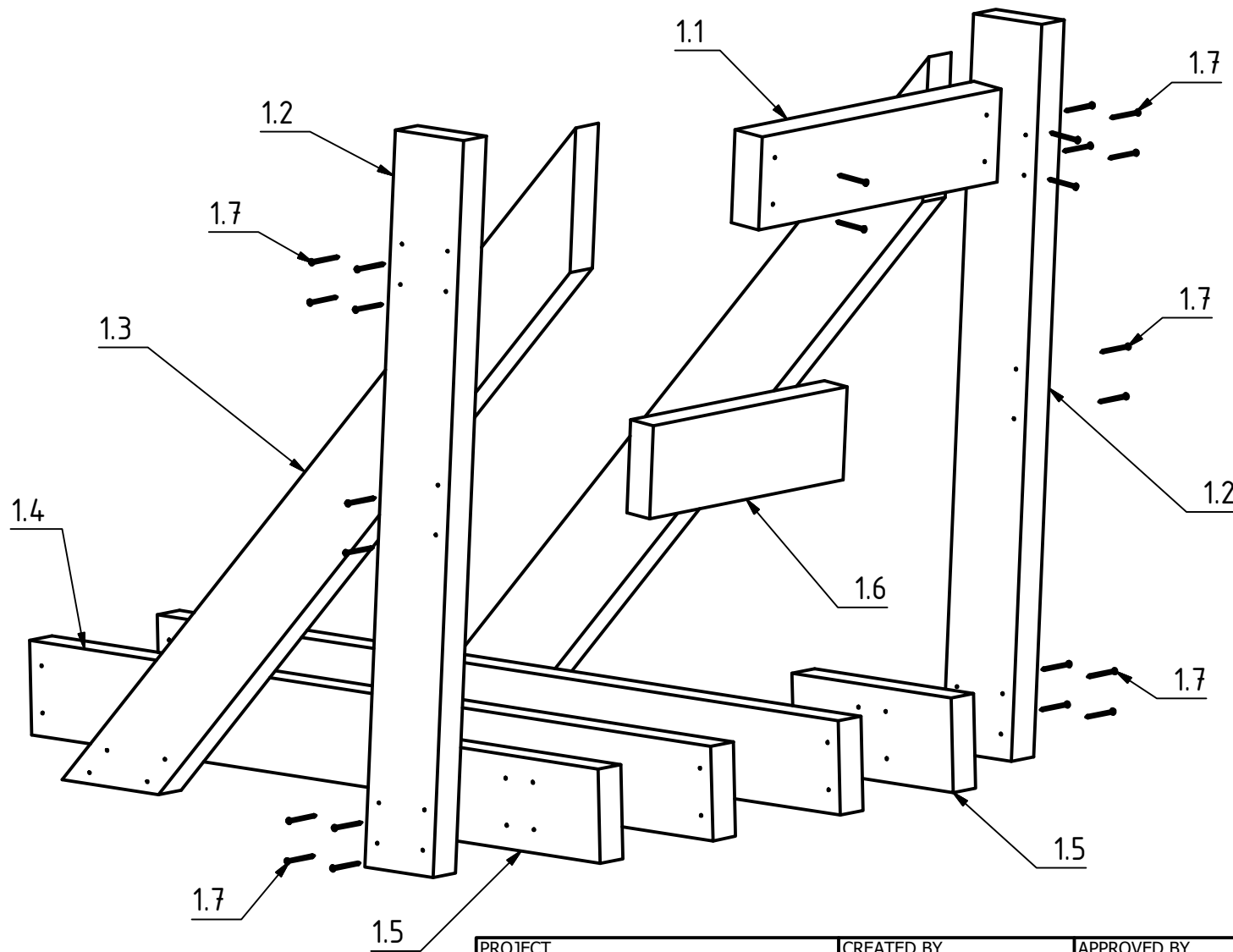
TECHNICAL NOTES																																								
NOTES	CONTENT																																							
DIAGRAM																																								
DESCRIPTION																																								
<table><tr><td>PROJECT</td><td>CREATED BY</td><td>APPROVED BY</td><td>DATE</td><td>VERSION</td></tr><tr><td>Snow Sled with 10 hp outboard motor</td><td>D. Mosquera</td><td>A. Morillo</td><td>10/08/2021</td><td>1.0</td></tr><tr><td>PART NAME</td><td colspan="3">FILE NAME</td><td>POS</td></tr><tr><td>Technical notes</td><td colspan="3"></td><td>C2</td></tr><tr><td>PUBLISHED BY</td><td>DOC. TYPE</td><td>MATERIAL</td><td colspan="2">QUANTITY</td></tr><tr><td rowspan="2"> OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development</td><td>Technical notes</td><td></td><td colspan="2"></td></tr><tr><td>LICENCE</td><td>SCALE</td><td colspan="2">SHEET</td></tr><tr><td>OHO e.V.</td><td>CC-BY-SA 4.0</td><td></td><td colspan="2">8 /46</td></tr></table>		PROJECT	CREATED BY	APPROVED BY	DATE	VERSION	Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0	PART NAME	FILE NAME			POS	Technical notes				C2	PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY		 OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development	Technical notes				LICENCE	SCALE	SHEET		OHO e.V.	CC-BY-SA 4.0		8 /46	
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION																																				
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0																																				
PART NAME	FILE NAME			POS																																				
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PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY																																					
 OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development	Technical notes																																							
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OHO e.V.	CC-BY-SA 4.0		8 /46																																					



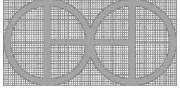


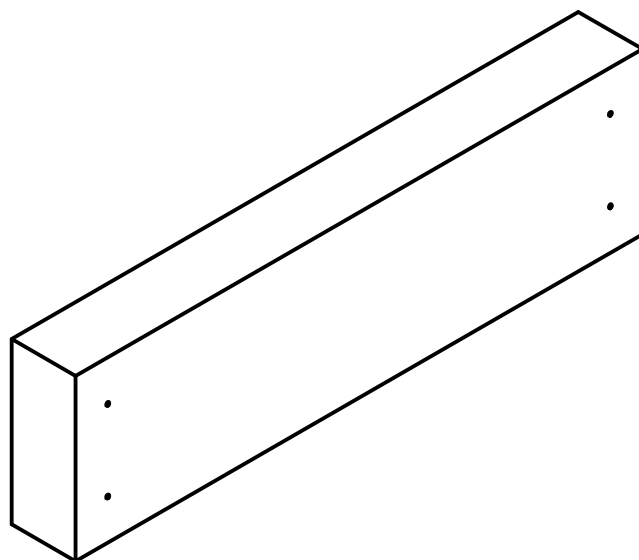
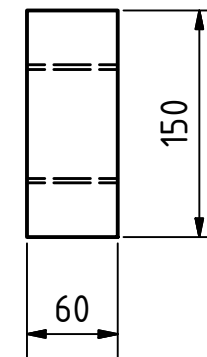
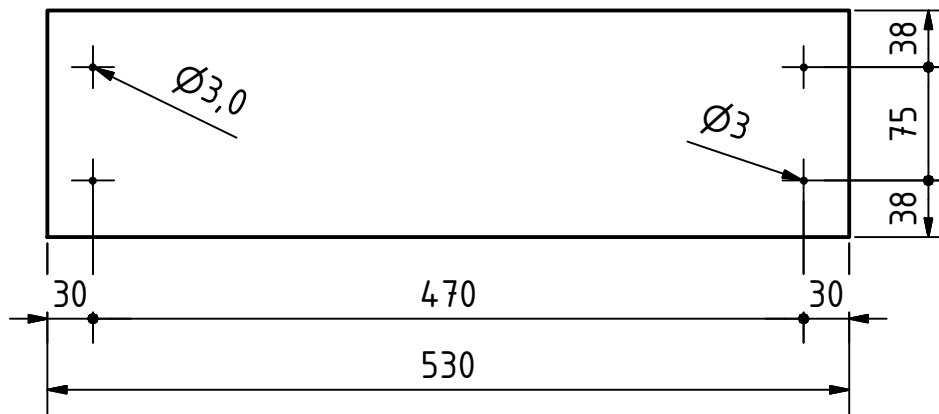
Note: All units in mm.

PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME	POS		
Support motor	oho_sso_support-motor.iam	1.0		
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Assembly		1	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:15	9 /46	

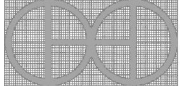


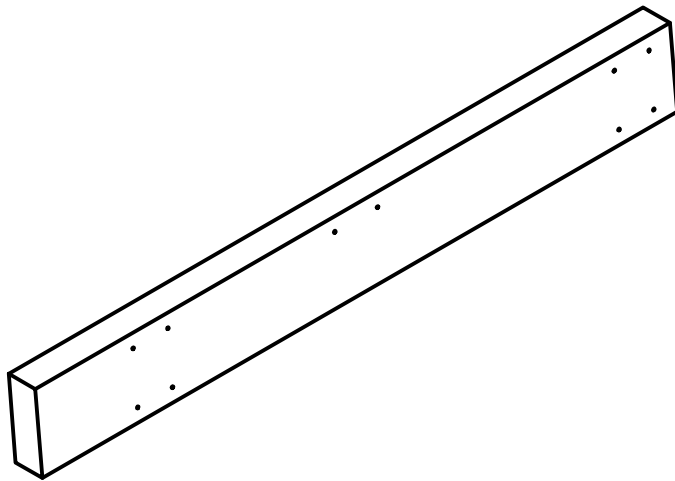
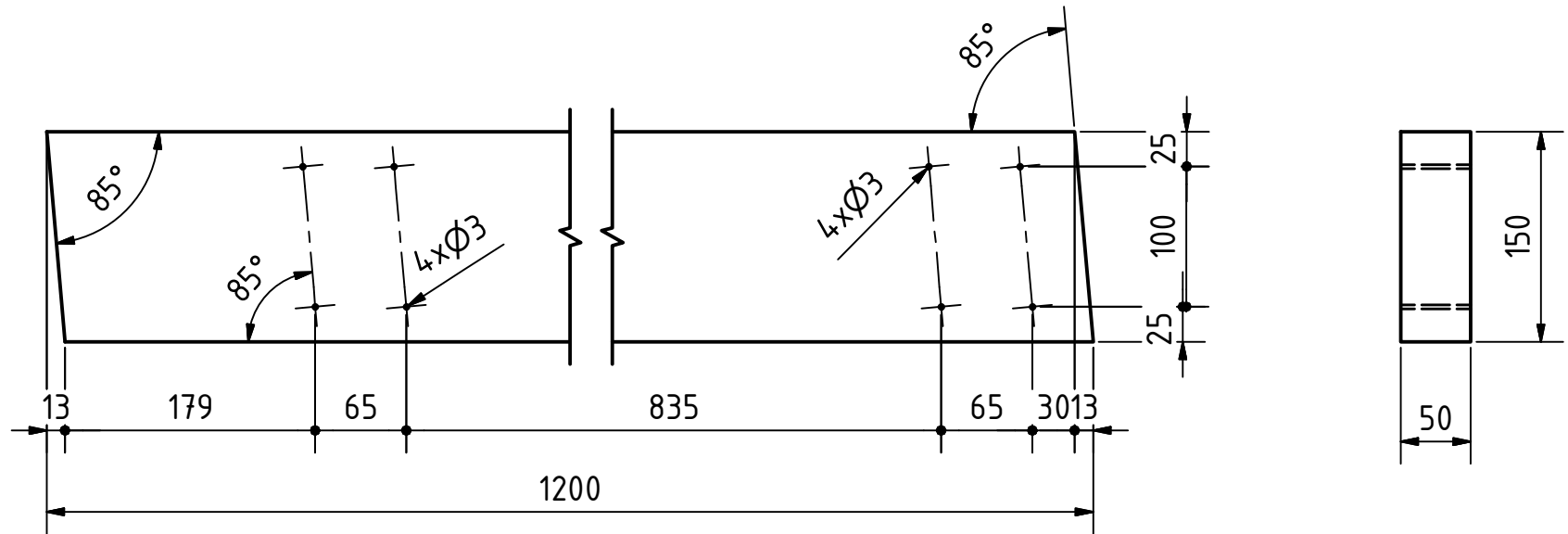
Note: All units in mm.

PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME	POS		
Support motor	oho_sso_support-motor.ipn	1.0		
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Assembly	1		
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:10	10 /46	



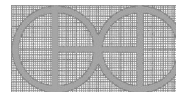
Note: All units in mm.

PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME	POS		
Transom bolt	oho_sso_transom-bolter.ipt	1.1		
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	Wood	1	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:5	11 /46	



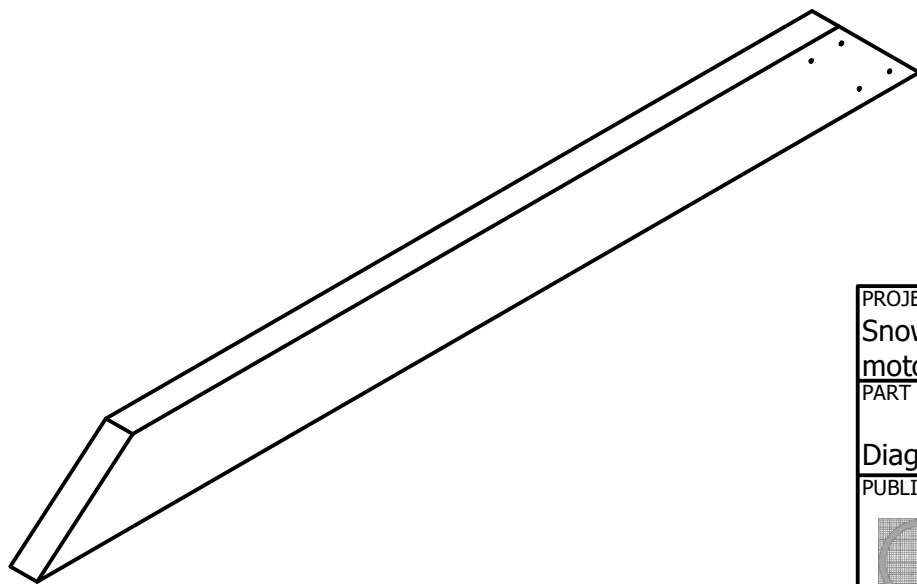
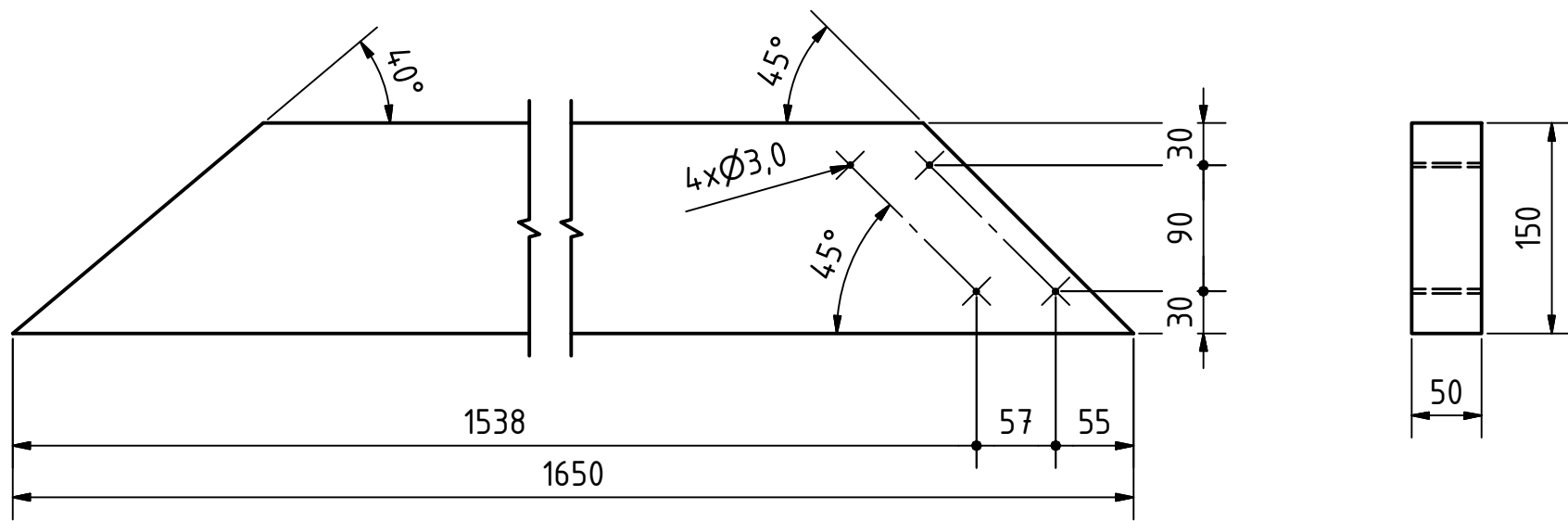
Note: All units in mm.

PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Vertical support	oho_sso_vertical-support.ipt			1.2
PUBLISHED BY	DOC. TYPE	MATERIAL		QUANTITY
	Part	Wood		1
	LICENCE	SCALE		SHEET
	CC-BY-SA 4.0	1:5		12 /46



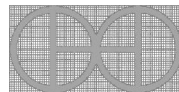
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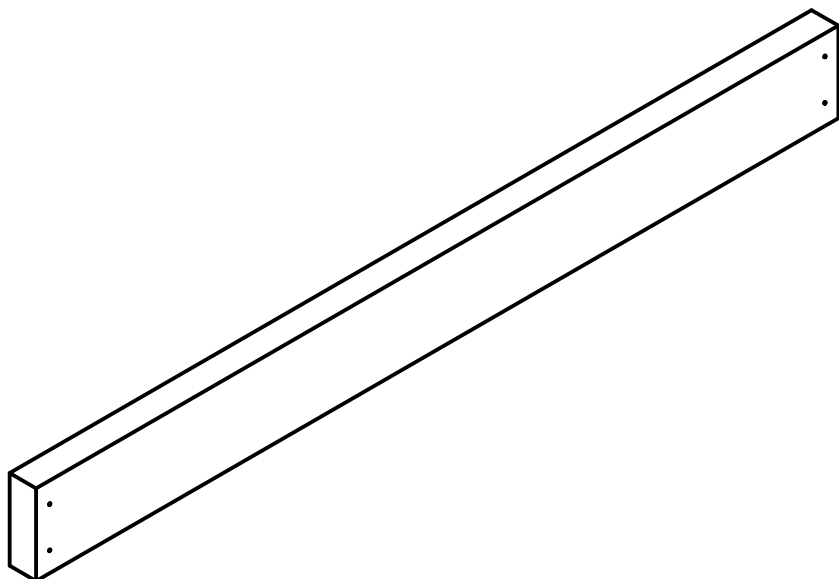
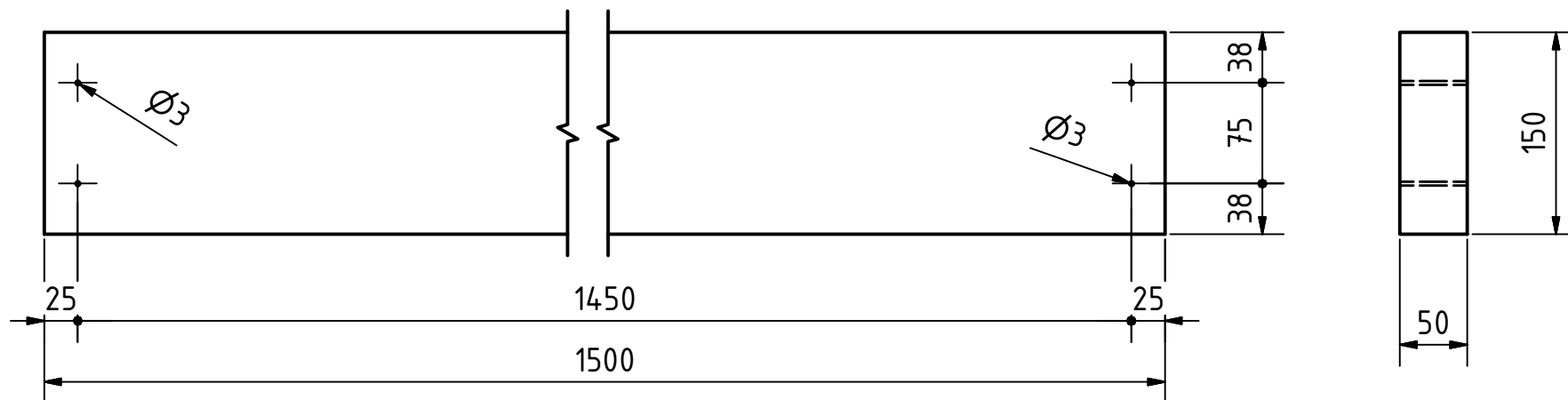
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PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Diagonal support	oho_sso_diagonal-support.ipt			1.3
PUBLISHED BY	DOC. TYPE	MATERIAL		QUANTITY
	Part	Woods		2
	LICENCE	SCALE		SHEET
	CC-BY-SA 4.0	1:5		13 /46

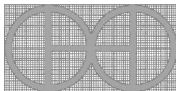


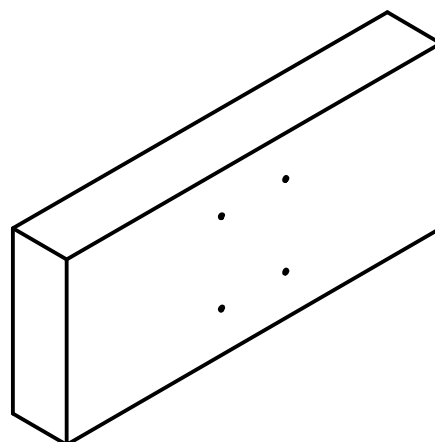
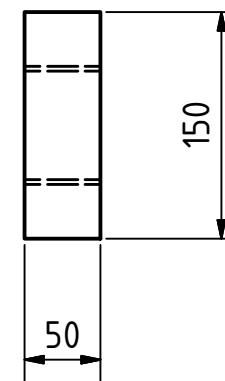
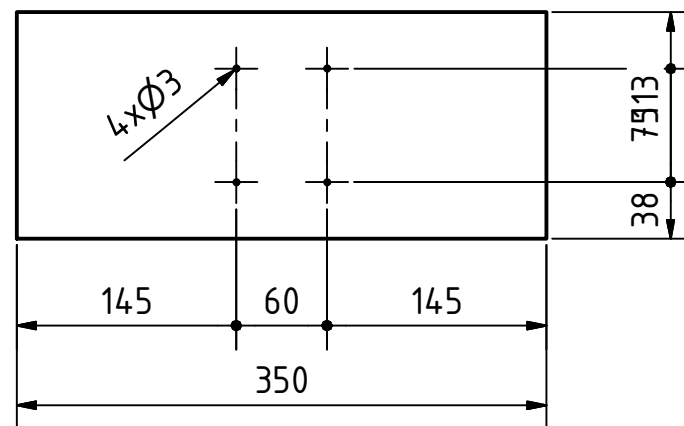
**OPEN HARDWARE OBSERVATORY**  
Free Blueprints for Sustainable Development

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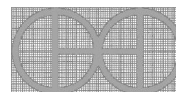
Note: All units in mm.

PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME	POS		
Frame base	oho_sso_frame-base.ipt	1.4		
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	Woods	2	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:5	14 /46	



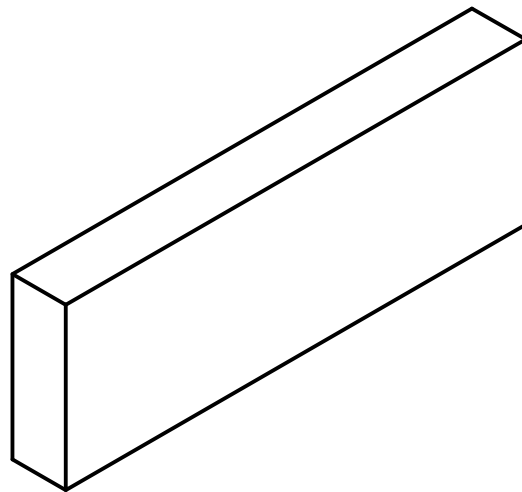
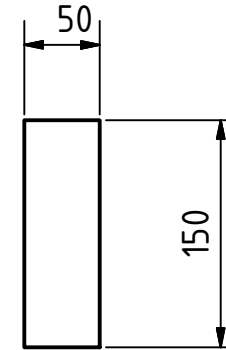
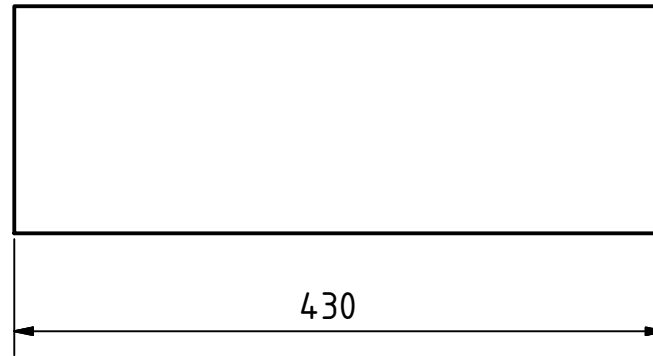
Note: All units in mm.

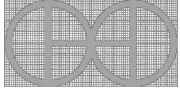
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Frame base2	oho_sso_frame-base2.ipt			1.5
PUBLISHED BY	DOC. TYPE	MATERIAL		QUANTITY
	Part	Wood		2
	LICENCE	SCALE		SHEET
	CC-BY-SA 4.0	1:5		15 /46



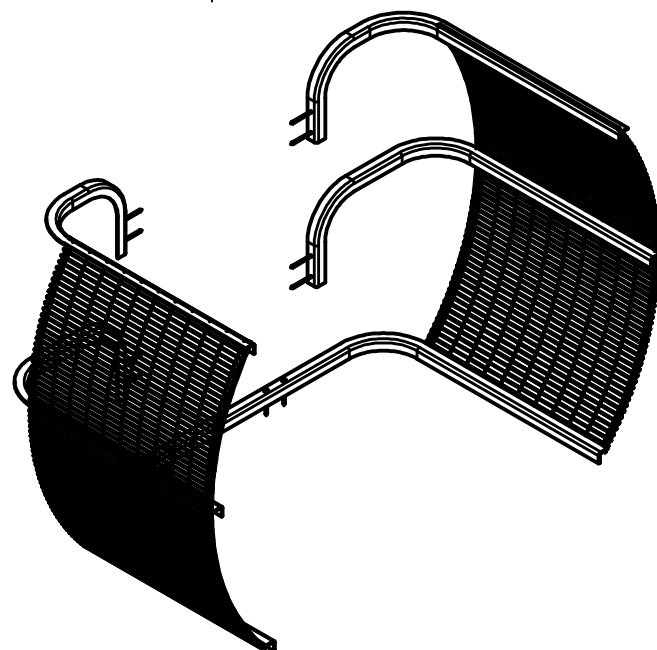
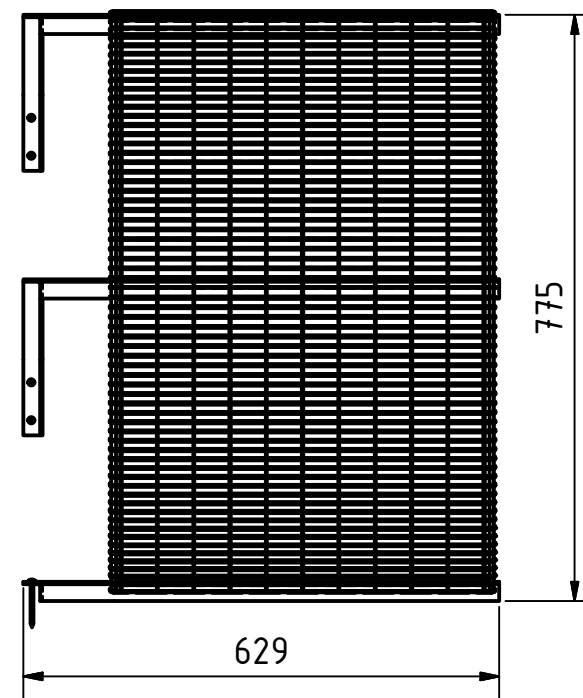
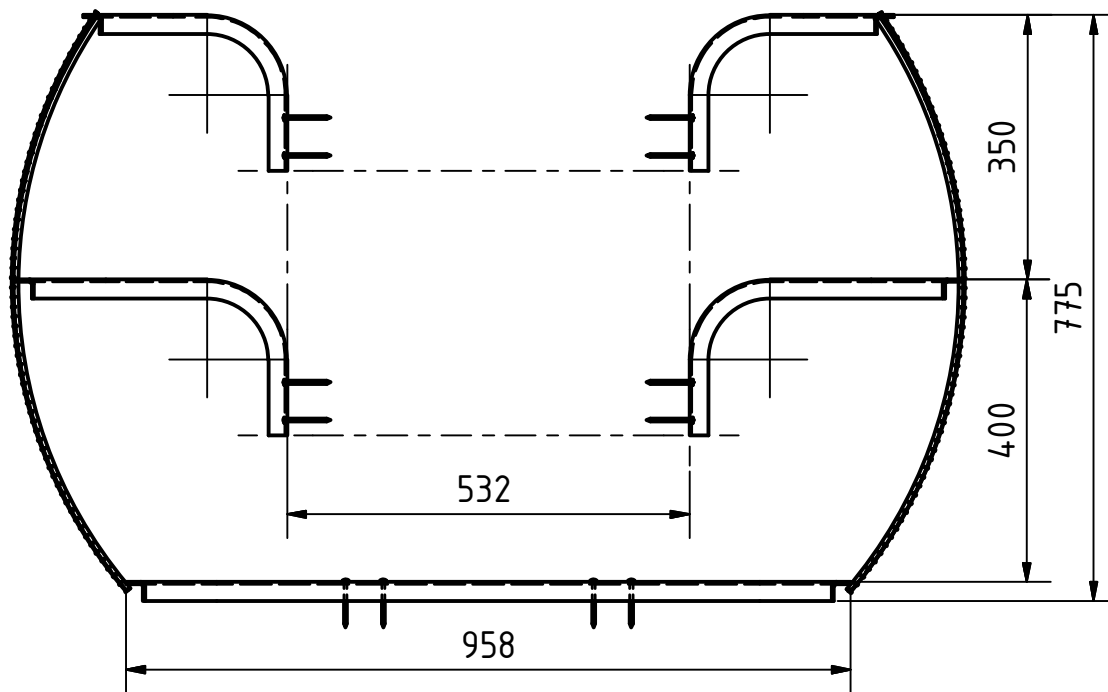
**OPEN HARDWARE OBSERVATORY**  
Free Blueprints for Sustainable Development

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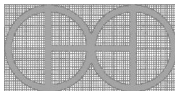


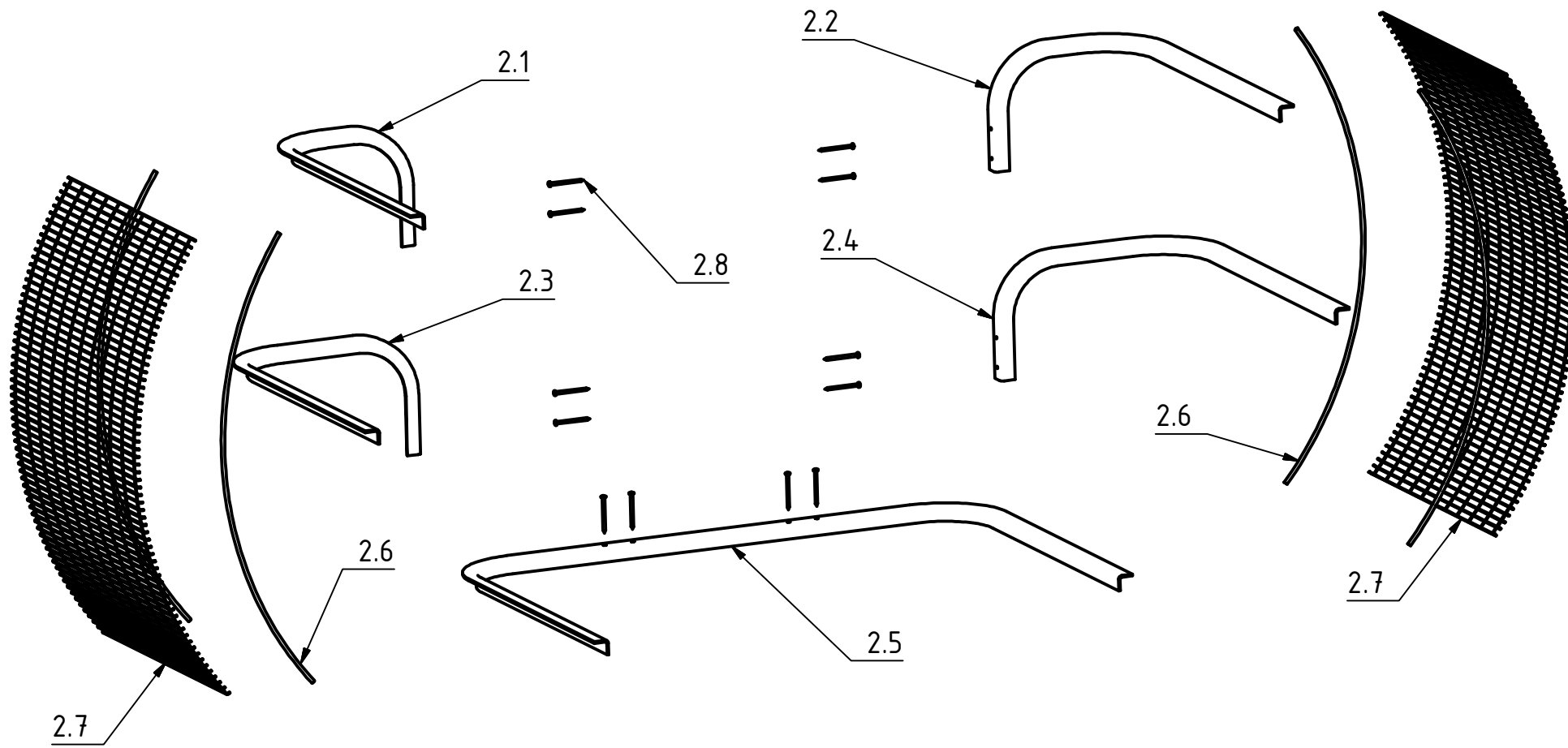
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Transom inferior	oho_sso_transom-inferior.ipt			1.6
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	Wood	1	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:5	16 /46	

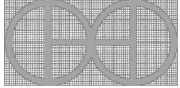


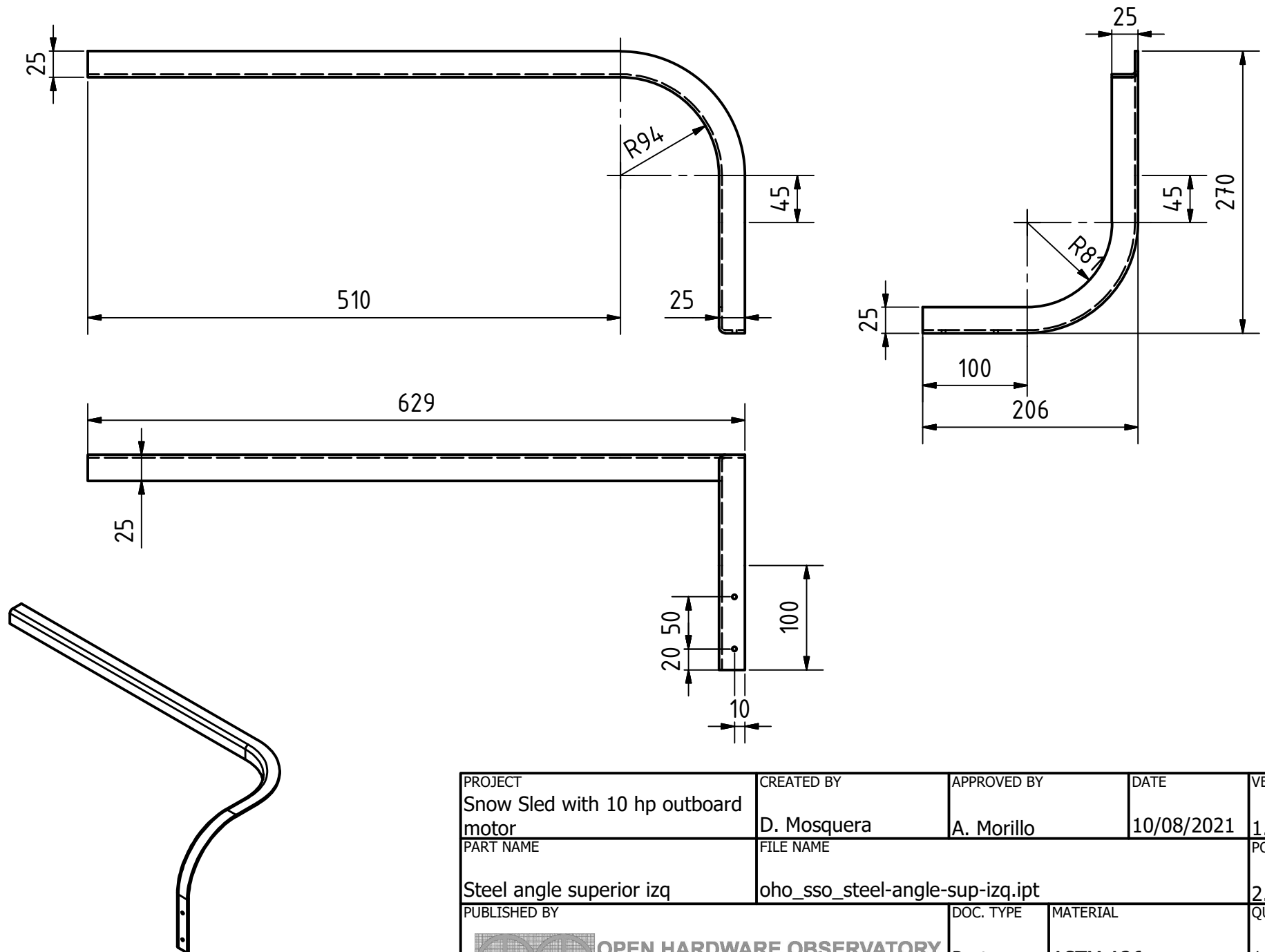


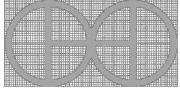
Note: All units in mm.

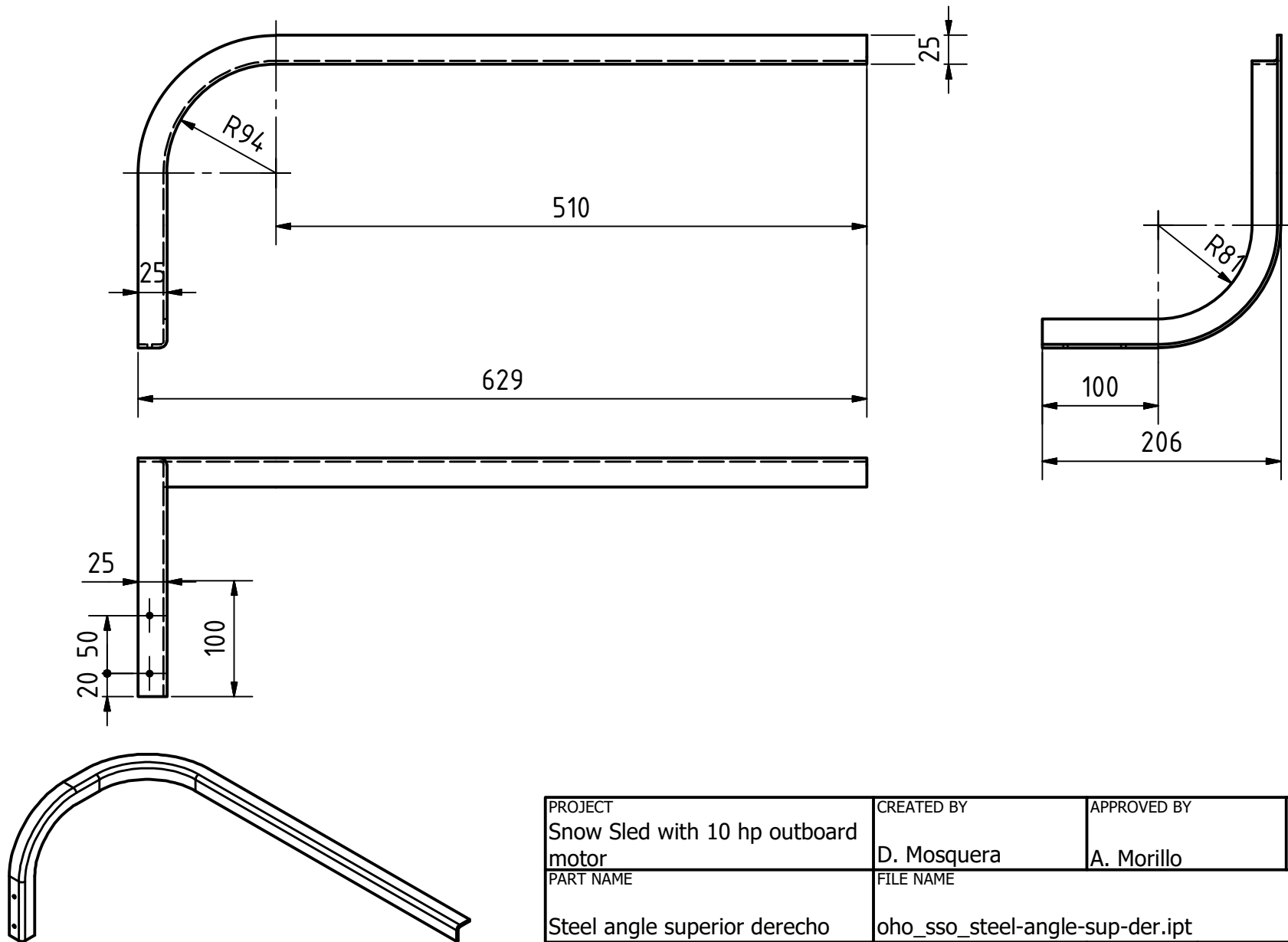
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME	POS		
Guard	oho_sso_Guard.iam	2.0		
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Assembly		1	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:15	17 /46	

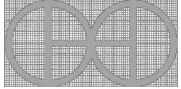


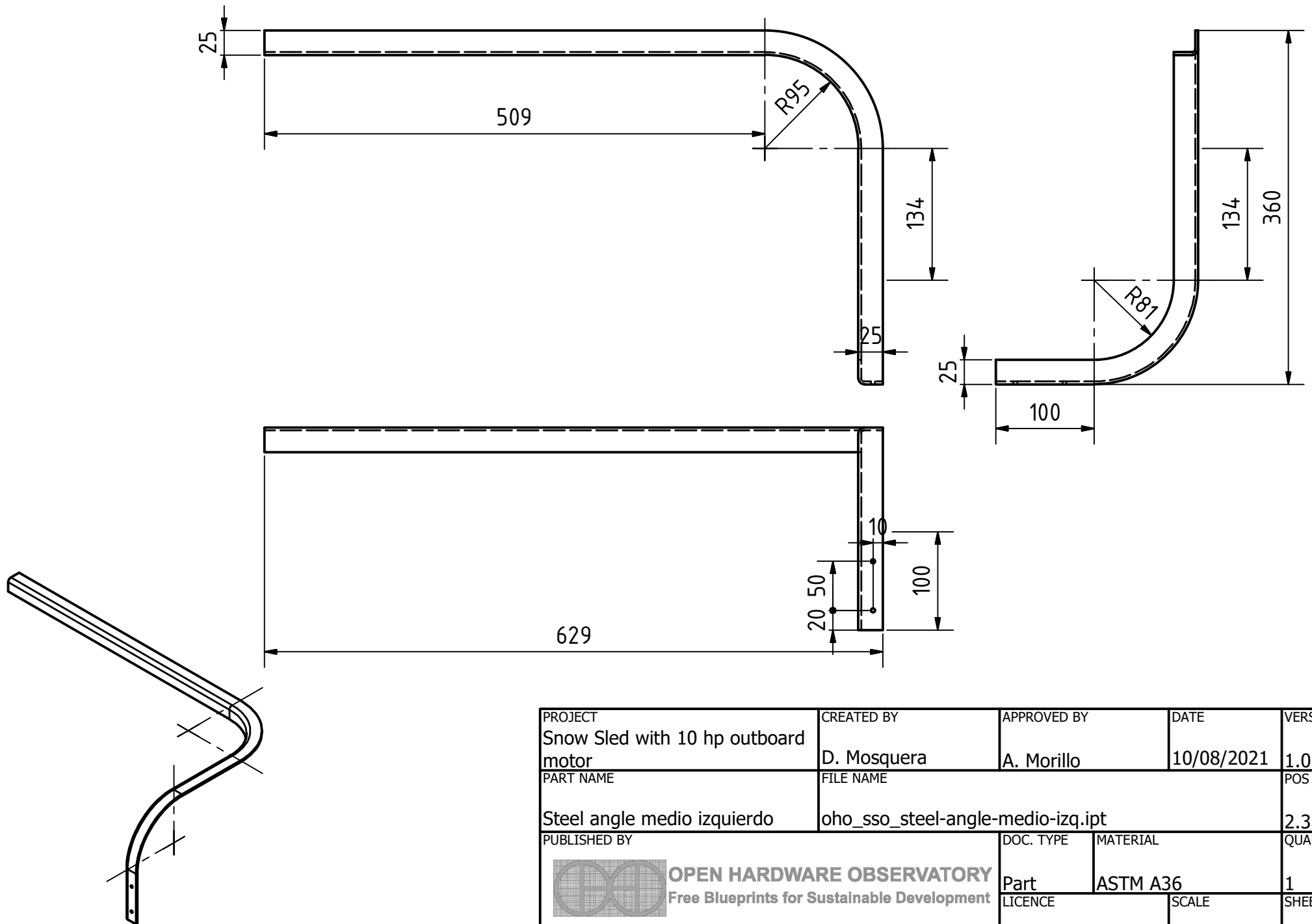
PROJECT Snow Sled with 10 hp outboard motor		CREATED BY D. Mosquera		APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Guard		FILE NAME oho_sso_Guard.ipn				POS 2.0
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development		DOC. TYPE Assembly	MATERIAL		QUANTITY 1	
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE 1:10		SHEET 18 /46	

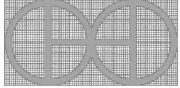


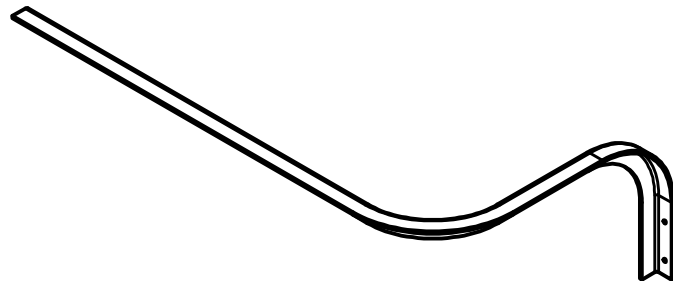
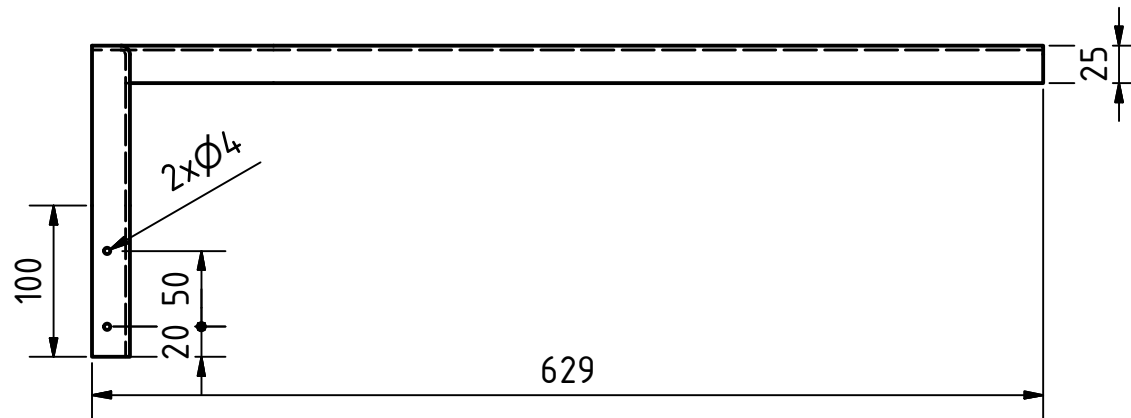
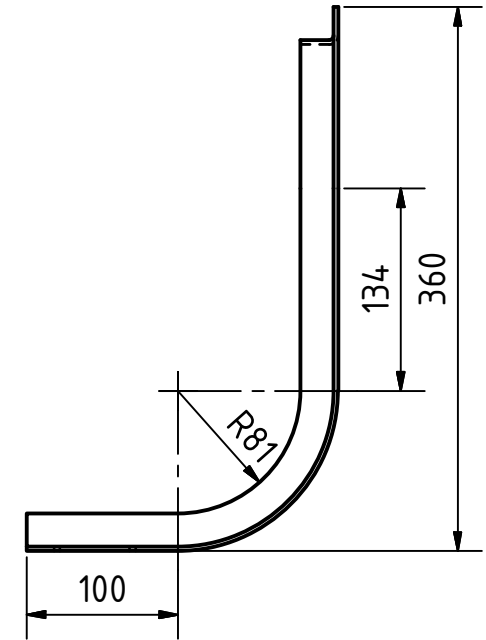
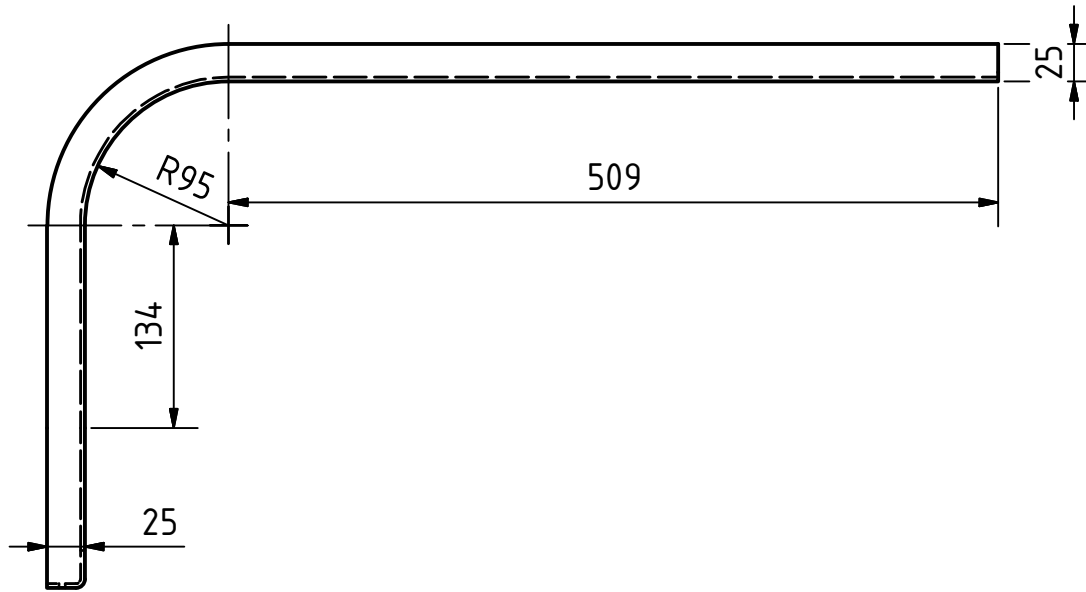
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Steel angle superior izq	oho_sso_steel-angle-sup-izq.ipt			2.1
PUBLISHED BY	DOC. TYPE	MATERIAL		QUANTITY
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	ASTM A36		1
	LICENCE	SCALE		SHEET
OHO e.V.	CC-BY-SA 4.0	1:5		19 /46



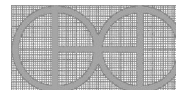
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Steel angle superior derecho	oho_sso_steel-angle-sup-der.ipt			2.2
PUBLISHED BY	DOC. TYPE	MATERIAL		QUANTITY
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	ASTM A36		1
	LICENCE	SCALE		SHEET
OHO e.V.	CC-BY-SA 4.0	1:5		20 /46



PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME	POS		
Steel angle medio izquierdo	oho_sso_steel-angle-medio-izq.ipt	2.3		
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	ASTM A36	1	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:5	21 /46	

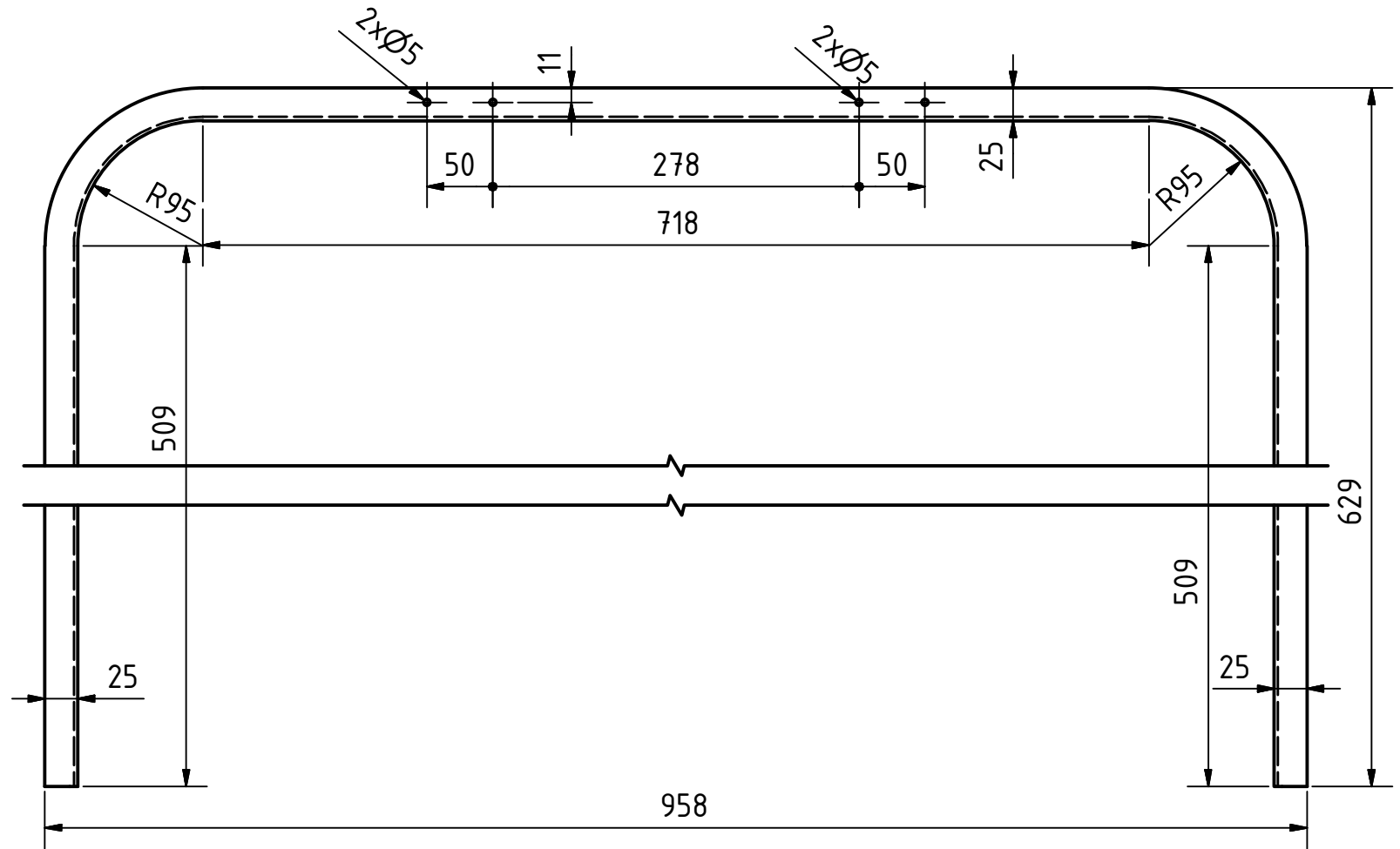


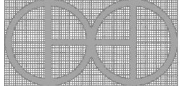
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Steel angle medio derecho	oho_sso_steel-angle-medio-der.ipt			2.4
PUBLISHED BY	DOC. TYPE	MATERIAL		QUANTITY
	Part	ASTM A36		1
	LICENCE	SCALE		SHEET
	CC-BY-SA 4.0	1:5		22 /46

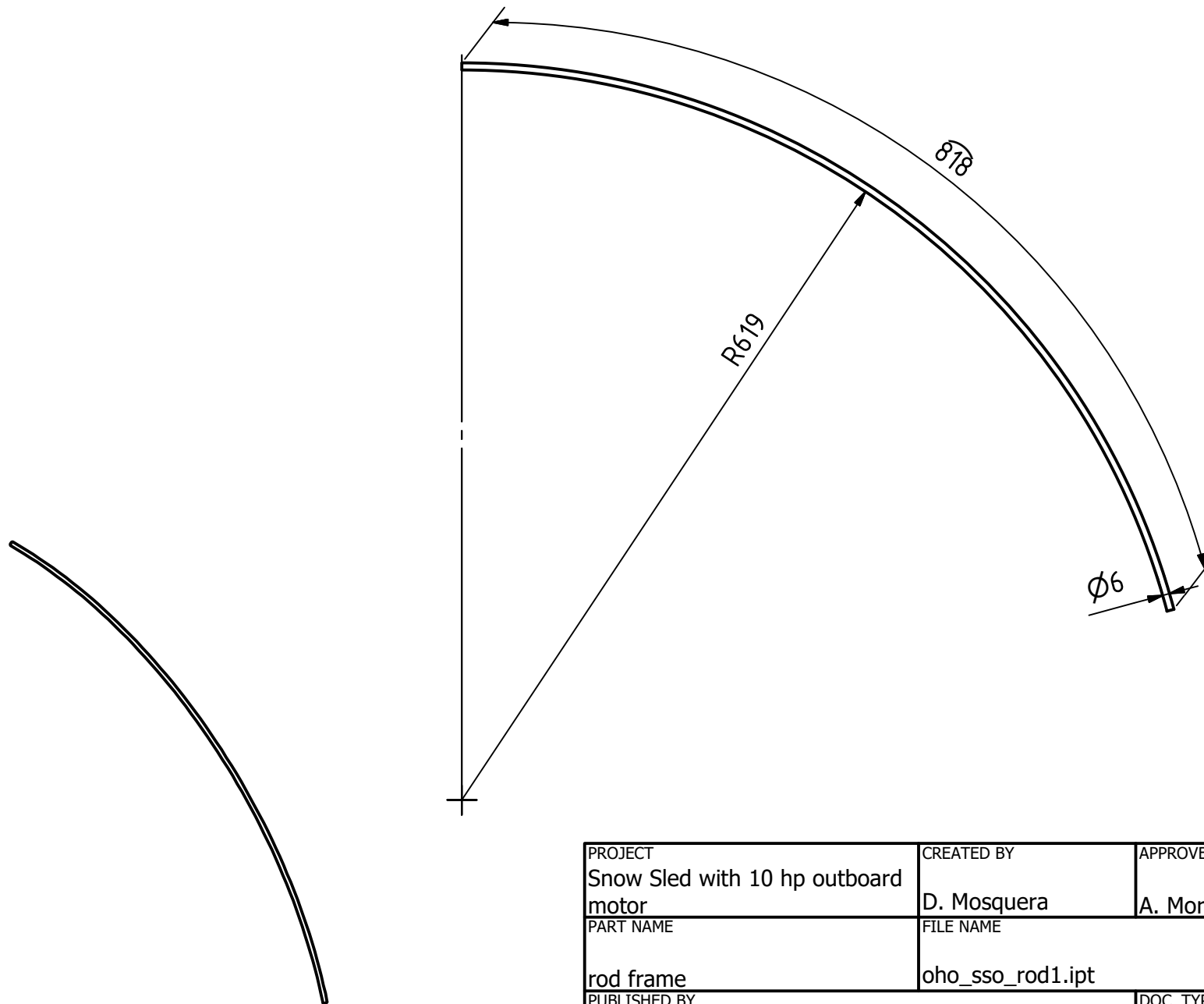


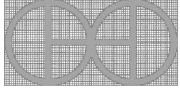
**OPEN HARDWARE OBSERVATORY**  
Free Blueprints for Sustainable Development

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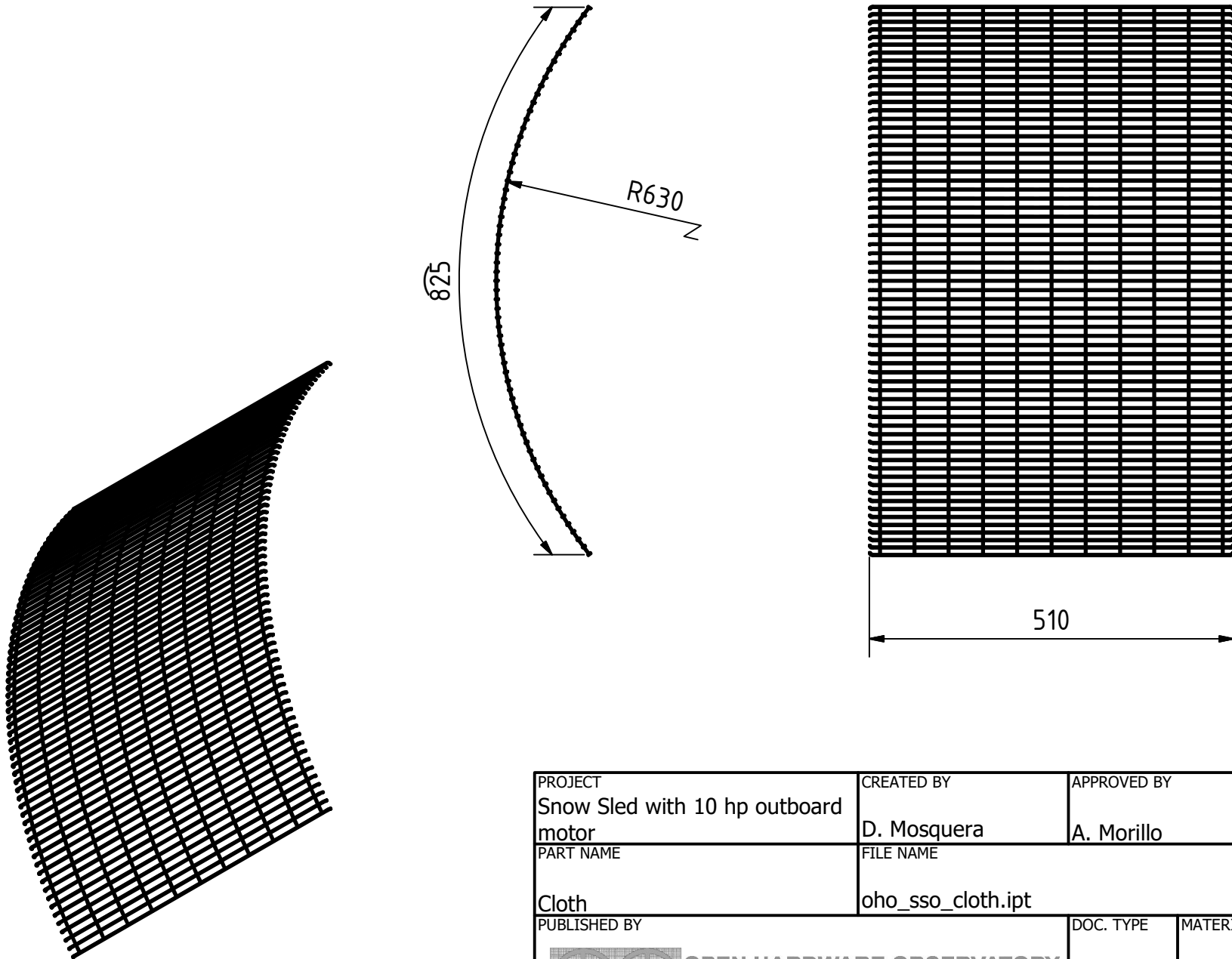


PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Steel angle inferior	oho_sso_steel-angle-inf.ipt			2.5
PUBLISHED BY	DOC. TYPE	MATERIAL		QUANTITY
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	ASTM A36		1
	LICENCE	SCALE		SHEET
OHO e.V.	CC-BY-SA 4.0	1:5		23 /46

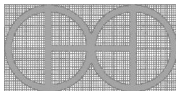


PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME	POS		
rod frame	oho_sso_rod1.ipt	2.6		
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	A56	4	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:5	24 /46	

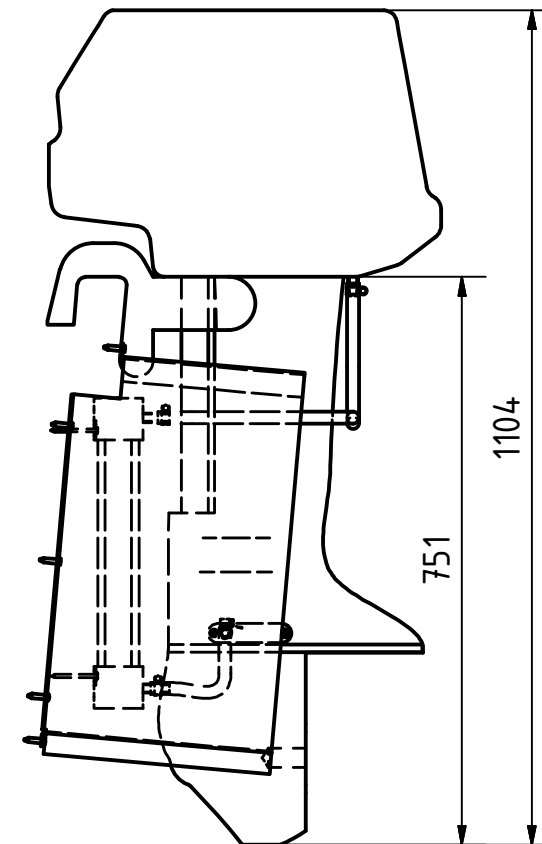
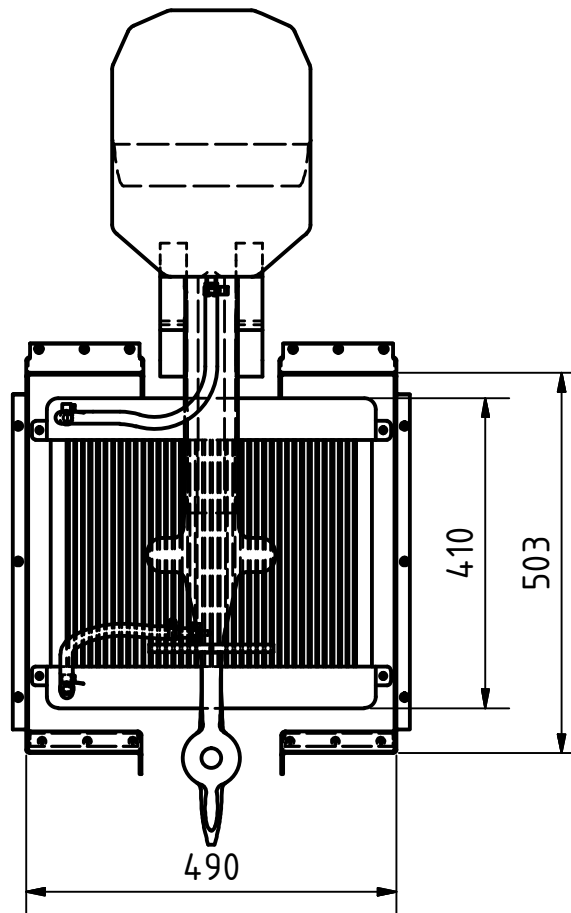
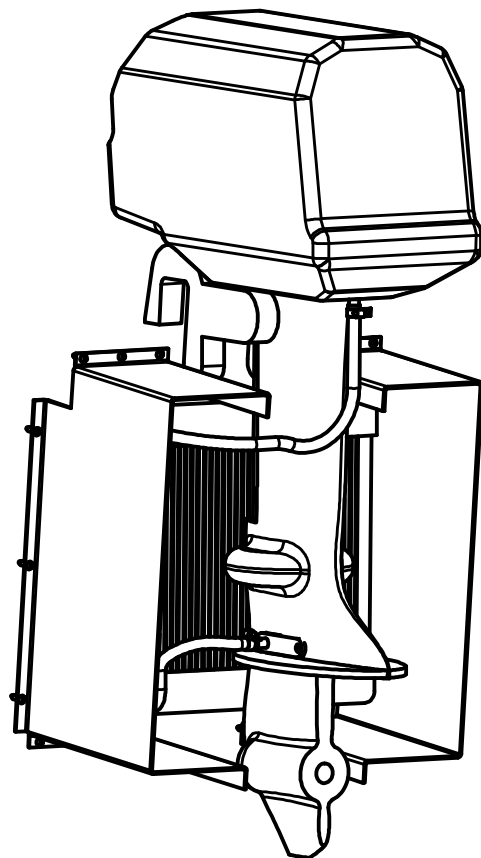


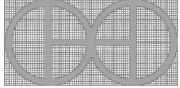


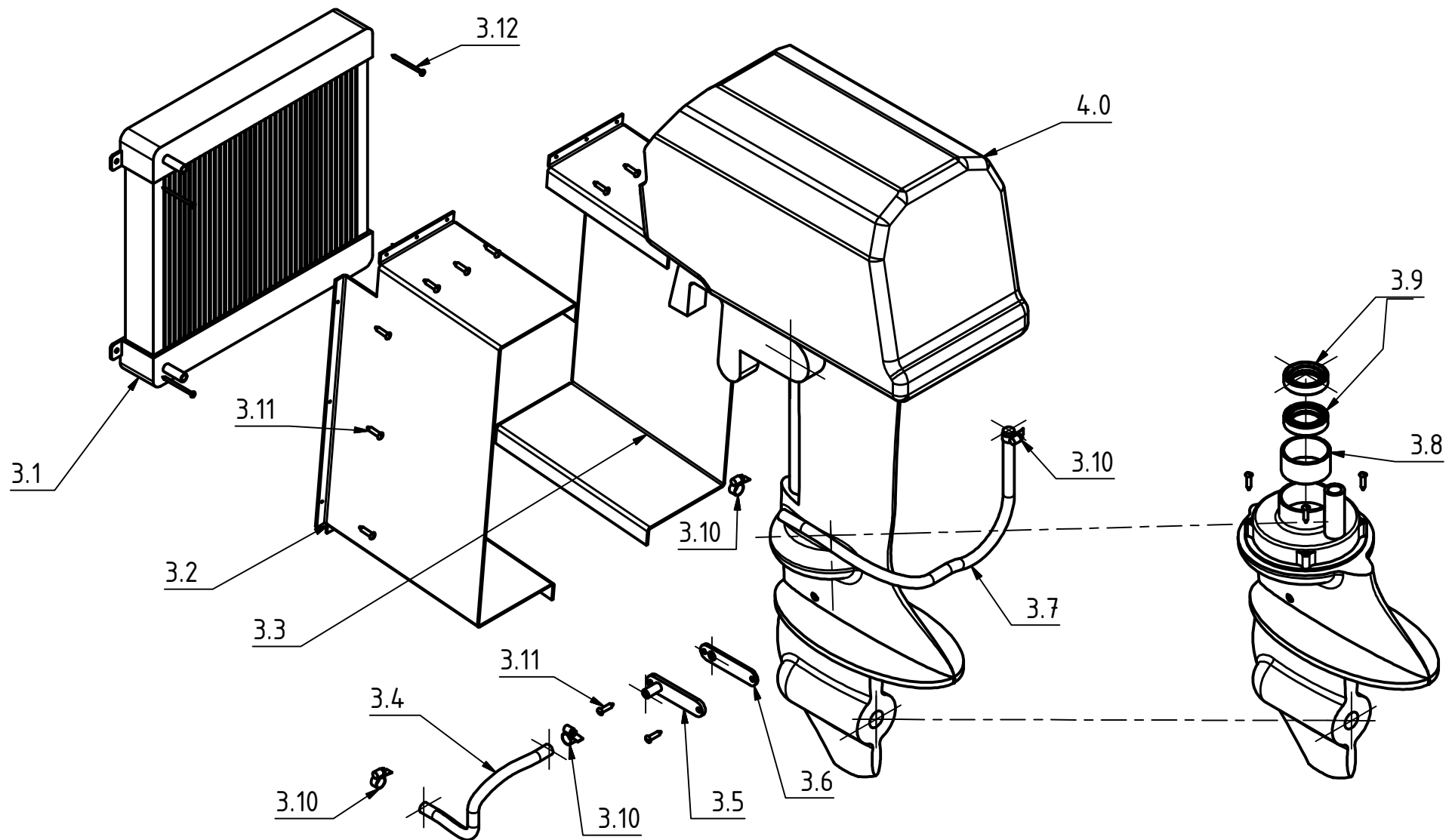
PROJECT Snow Sled with 10 hp outboard motor		CREATED BY D. Mosquera		APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Cloth		FILE NAME oho_sso_cloth.ipt				POS 2.7
PUBLISHED BY			DOC. TYPE Part	MATERIAL Steel C45	QUANTITY 2	
OHO e.V.			LICENCE CC-BY-SA 4.0	SCALE 1:8	SHEET 25 /46	

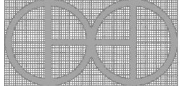


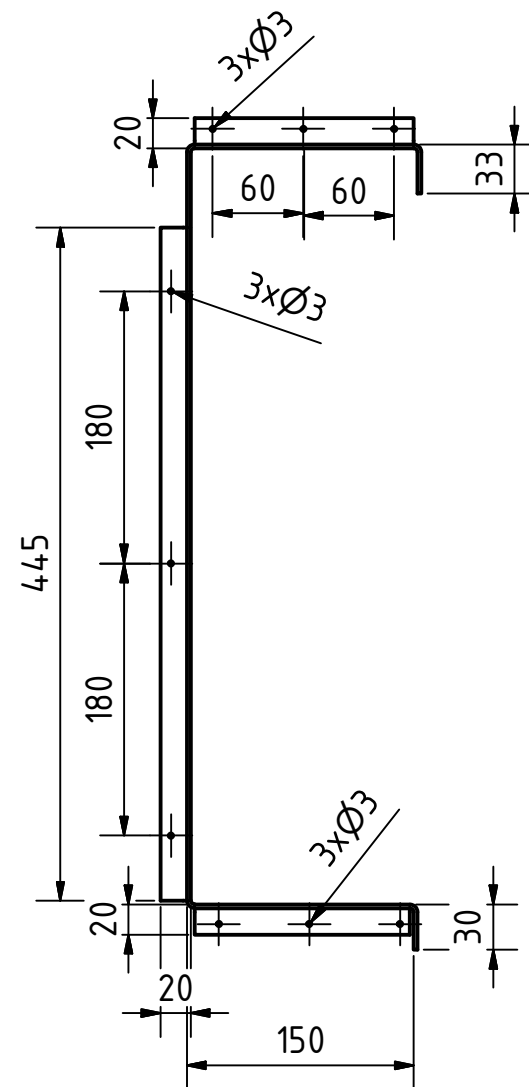
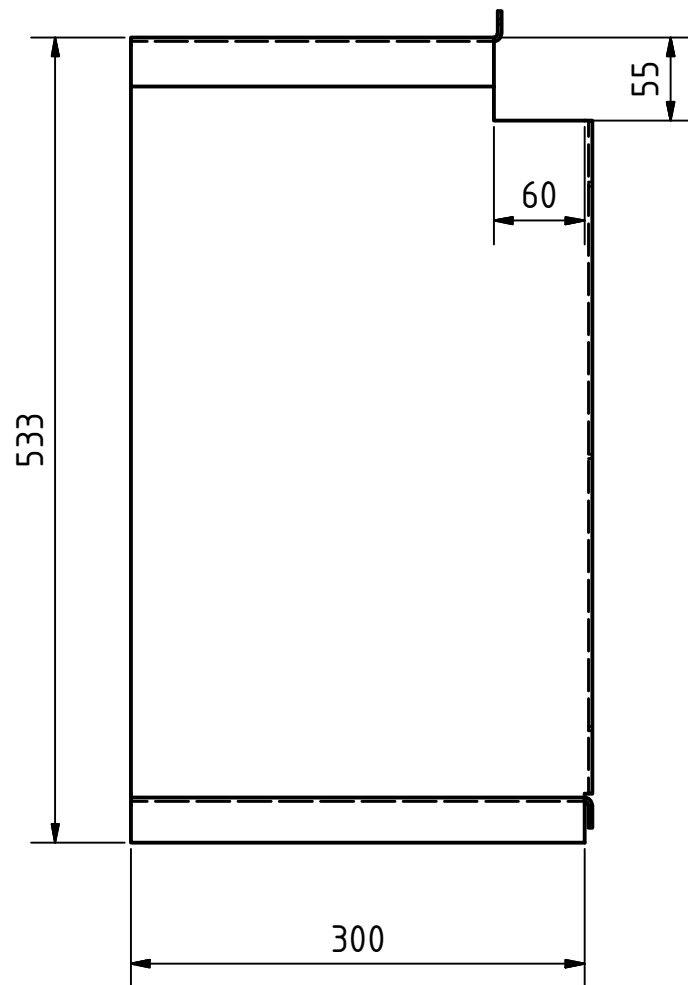
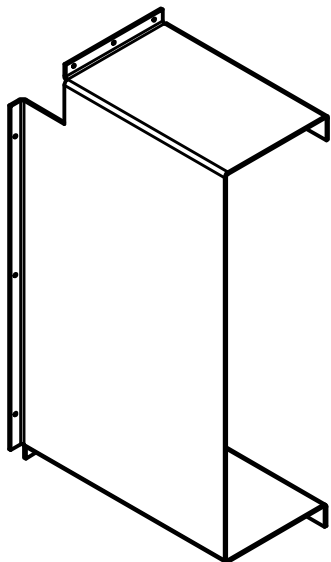
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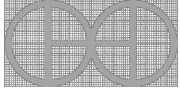


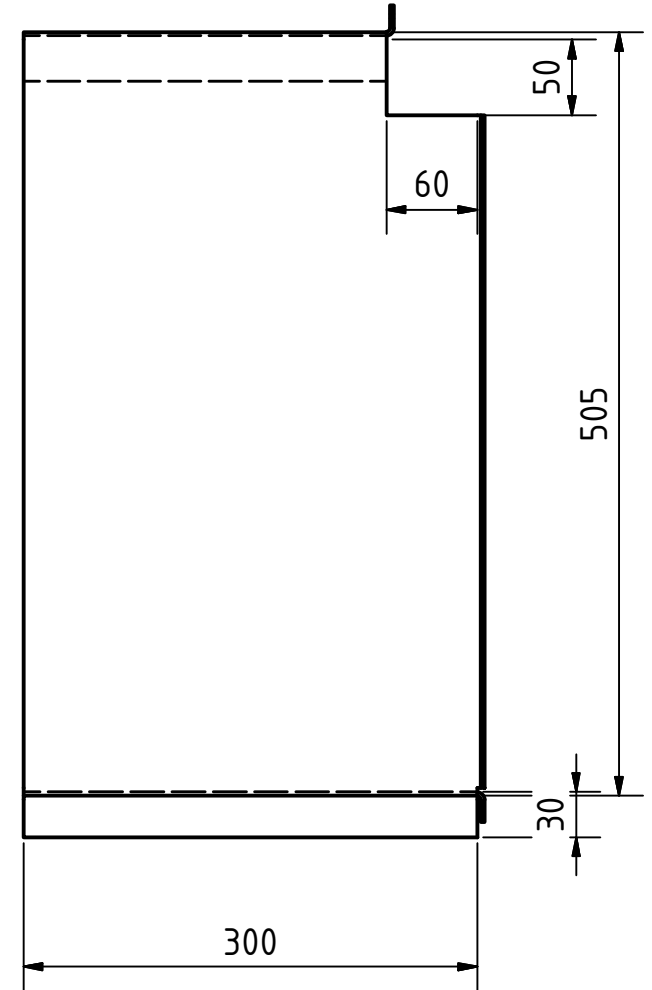
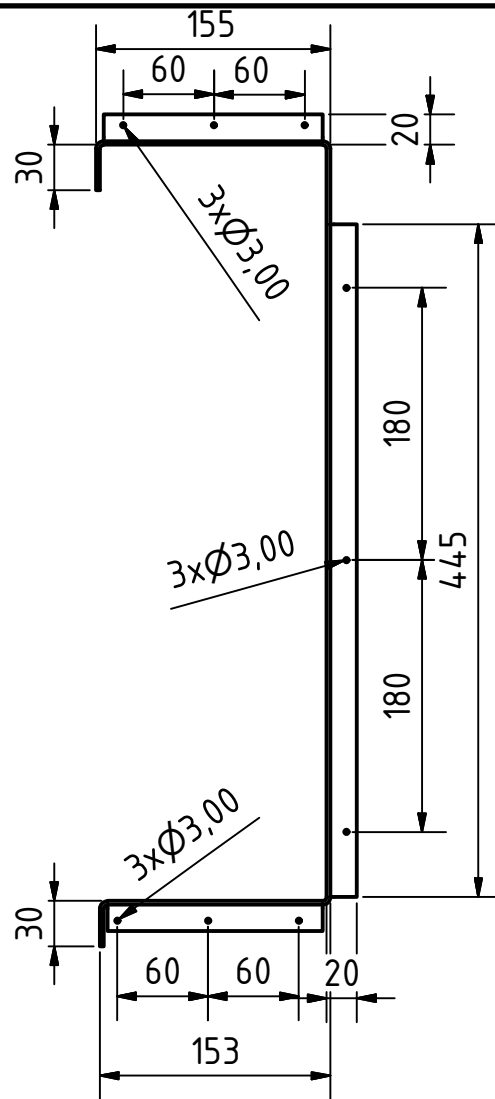
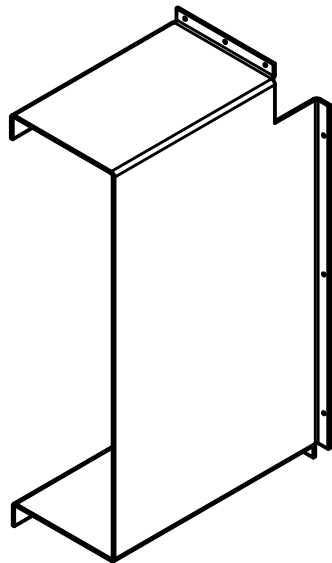
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME	POS		
Cooler outboard motor	oho_sso_cooler-outboard-motor1.iam	3.0		
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Assembly		1	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:16	26 /46	

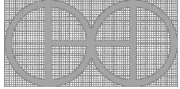


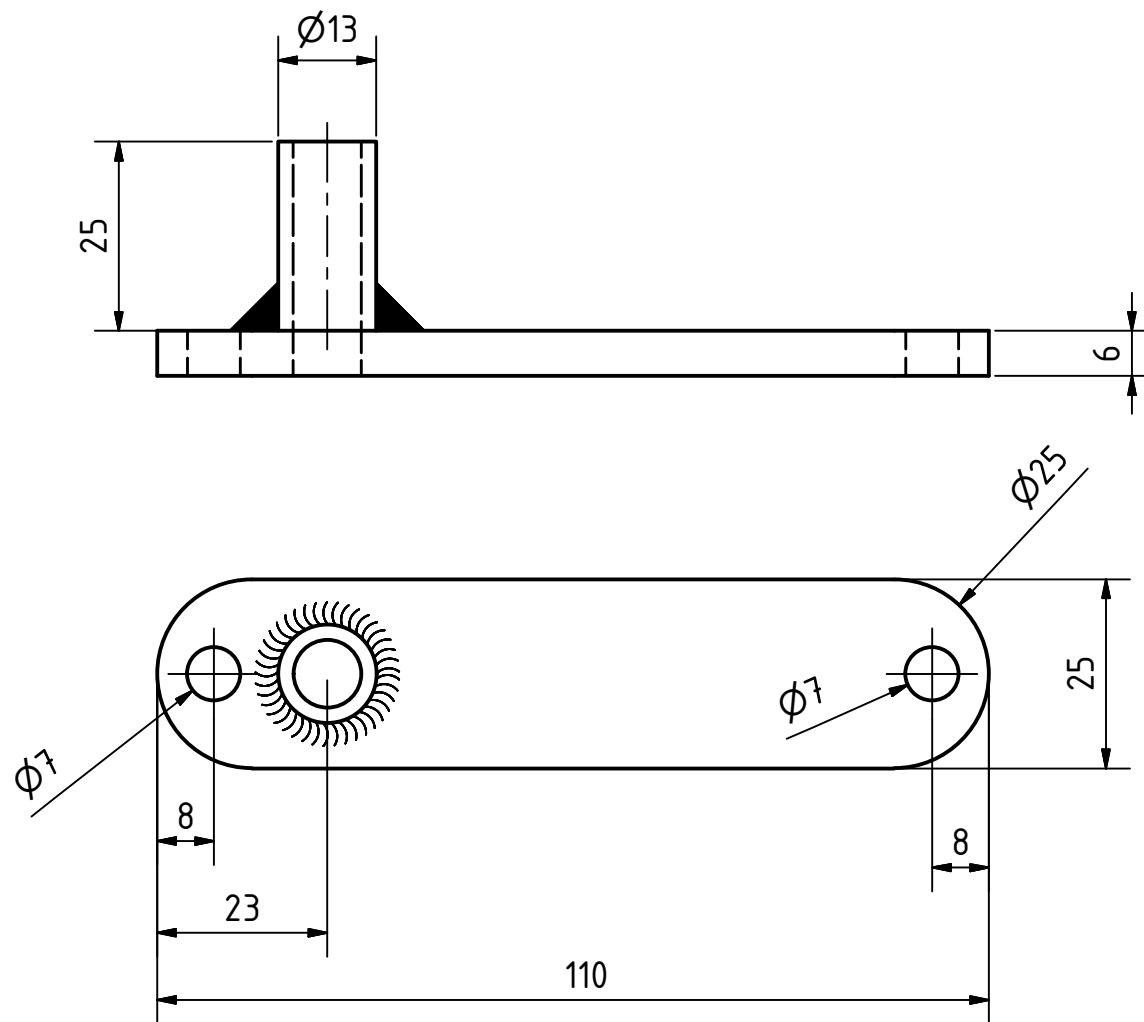
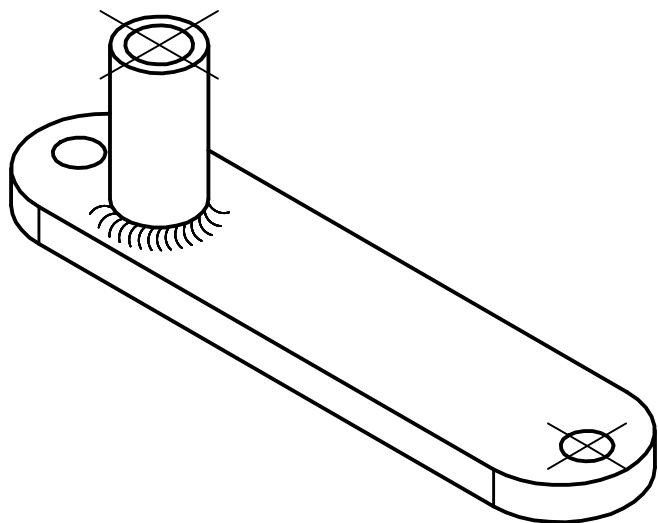
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME	POS		
Cooler outboard motor	oho_sso_cooler-outboard-motor1.ipn	3.0		
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Assembly		1	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:8	27 /46	

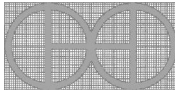


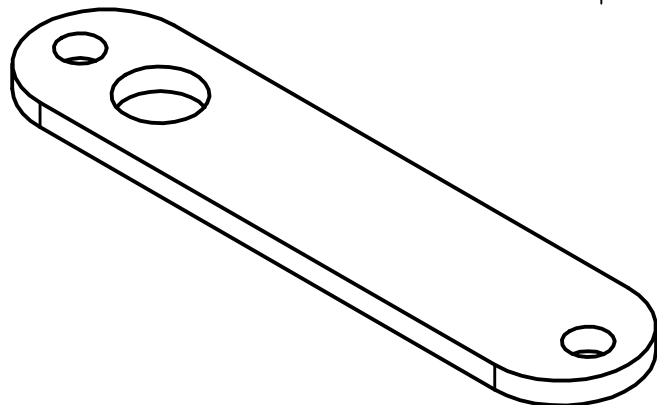
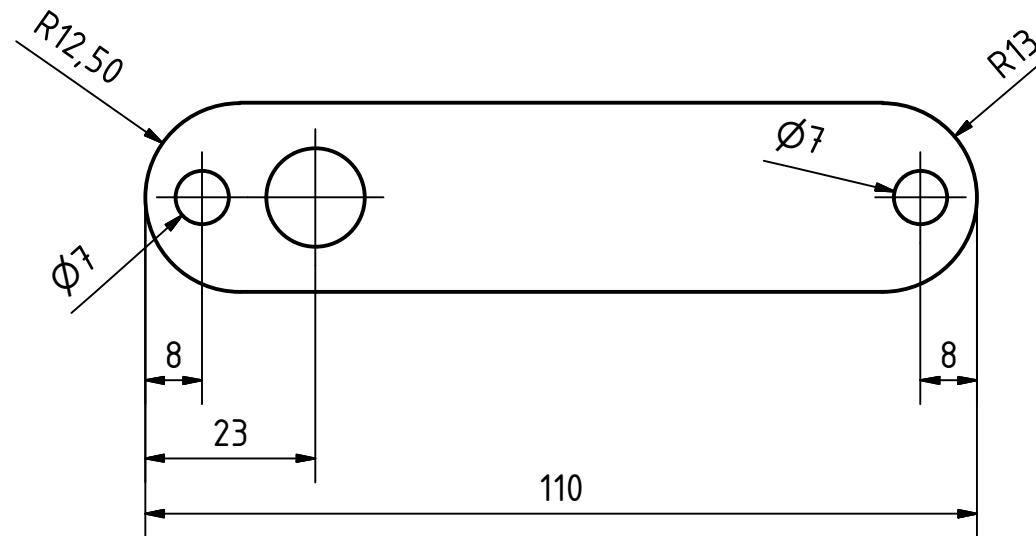
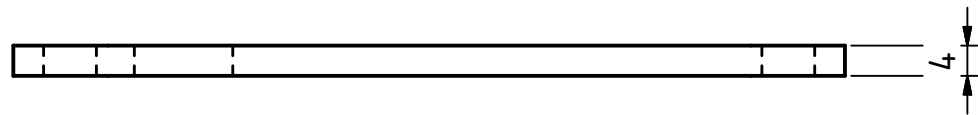
PROJECT	Snow Sled with 10 hp outboard motor	CREATED BY	D. Mosquera	APPROVED BY	A. Morillo	DATE	10/08/2021	VERSION	1.0
PART NAME	Sheetmetal duct izquierda	FILE NAME	oho_sso_sheetmetal-duct.ipt					POS	3.2
PUBLISHED BY	 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development			DOC. TYPE	Part	MATERIAL	Steel C45	QUANTITY	1
OHO e.V.				LICENCE	CC-BY-SA 4.0	SCALE	1:5	SHEET	28 /46

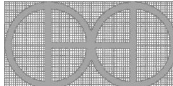


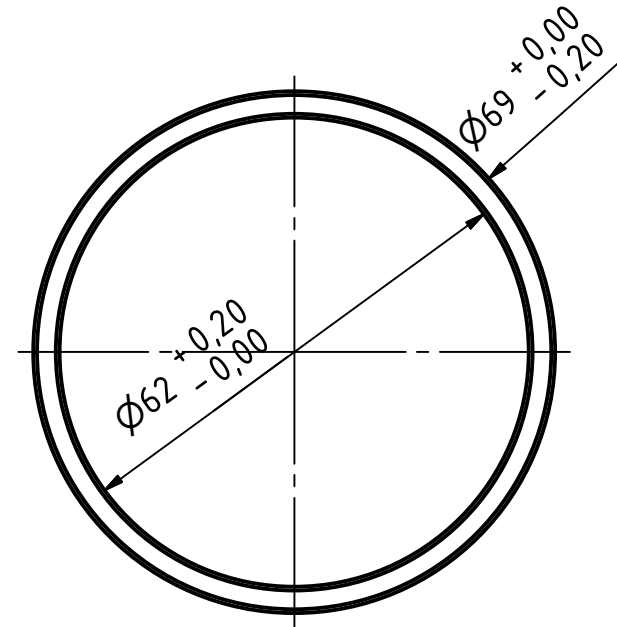
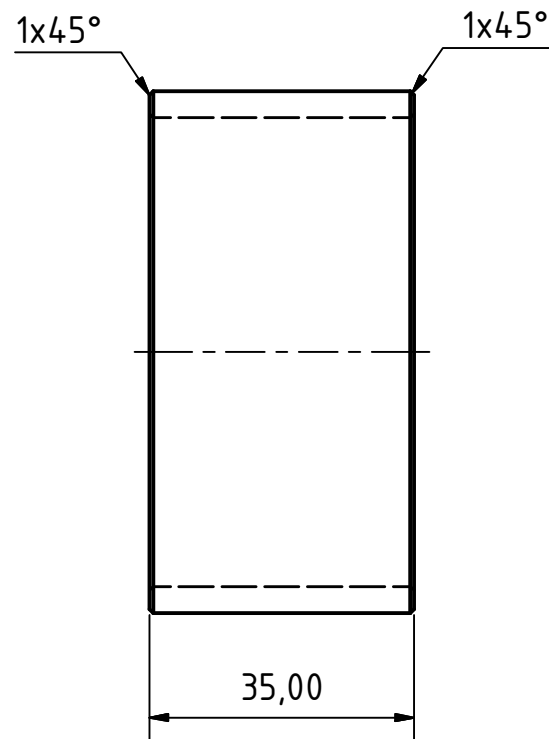
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME	POS		
Sheetmeta duct derecha	oho_sso_sheetmetal-duct-der.ipt	3.3		
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	Steel C45	1	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:5	29 /46	

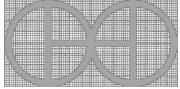


PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Steel plate	oho_sso_steel-plate.ipt			3.5
PUBLISHED BY		DOC. TYPE	MATERIAL	QUANTITY
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development		Part	Steel C45	1
		LICENCE		SHEET
OHO e.V.		CC-BY-SA 4.0	1:1	30 /46

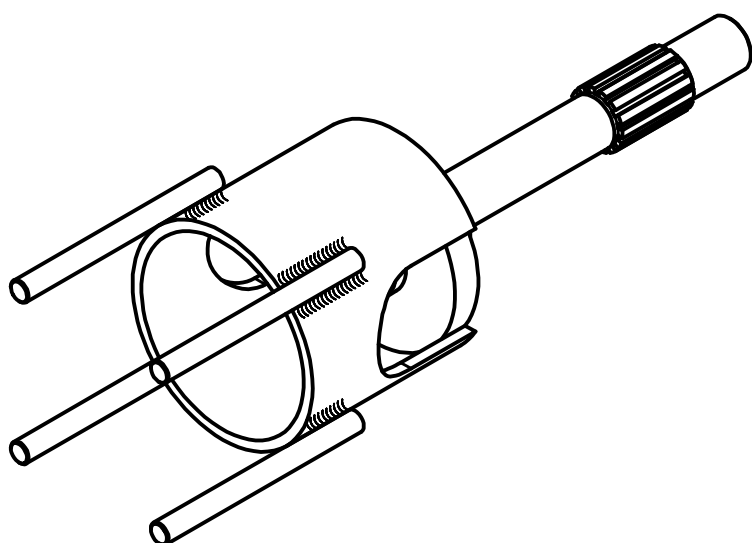
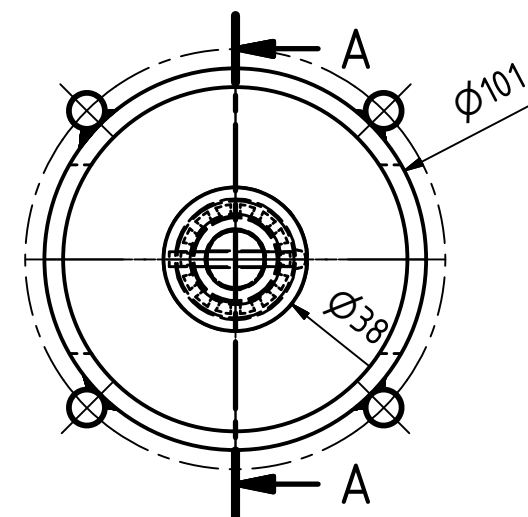
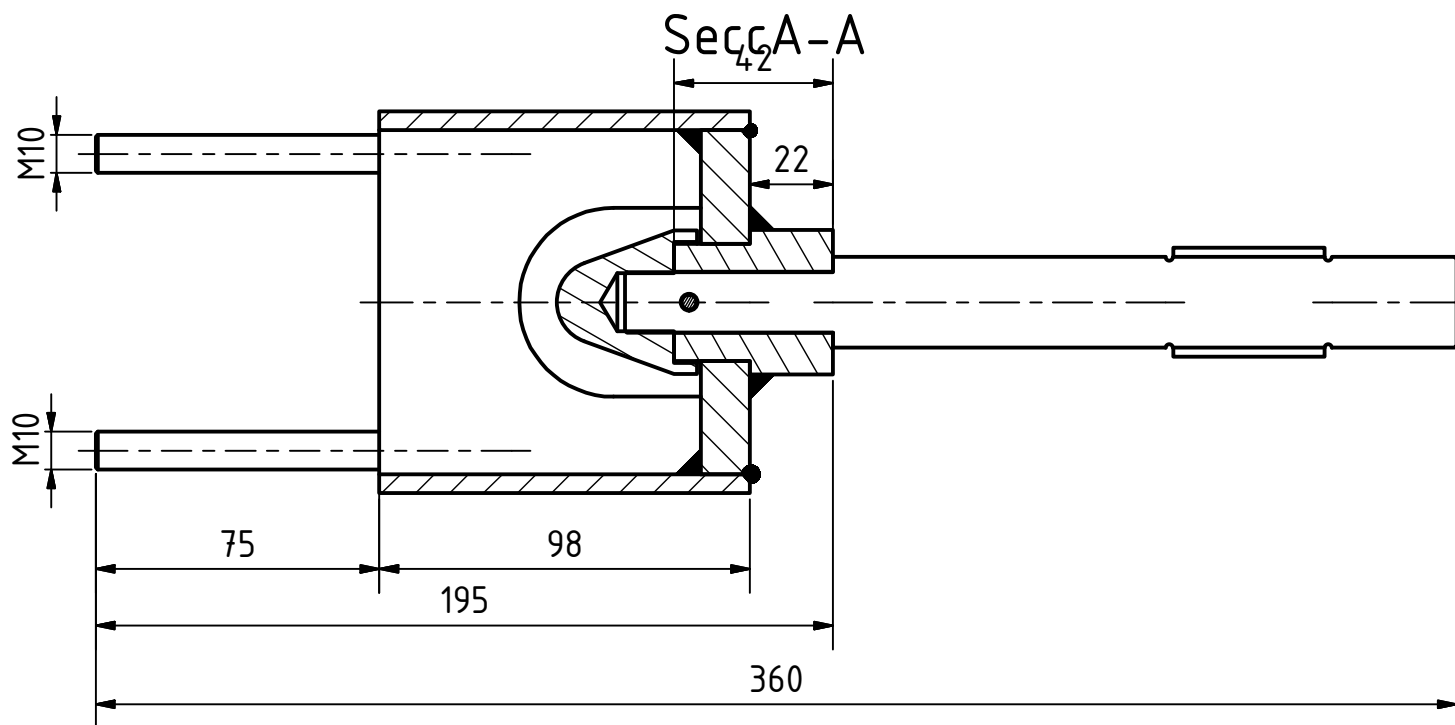


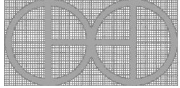
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Gasket	oho_sso_gasket.ipt			3.6
PUBLISHED BY		DOC. TYPE	MATERIAL	QUANTITY
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development		Part	Rubber	1
		LICENCE		SHEET
OHO e.V.		CC-BY-SA 4.0	1:1	31 /46

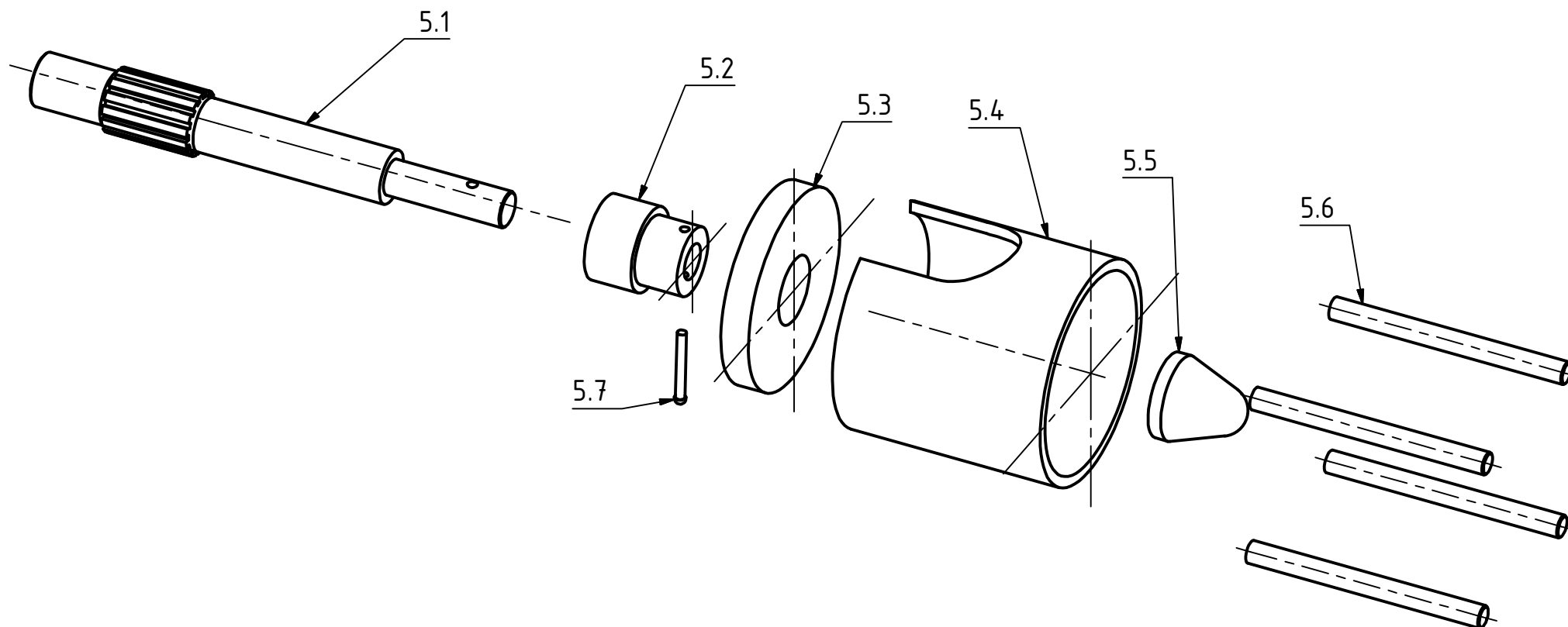


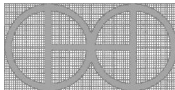
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME	POS		
Bushing Seals	oho_sso_bushing40.ipt	3.8		
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	Aluminum	1	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:1	32 /46	

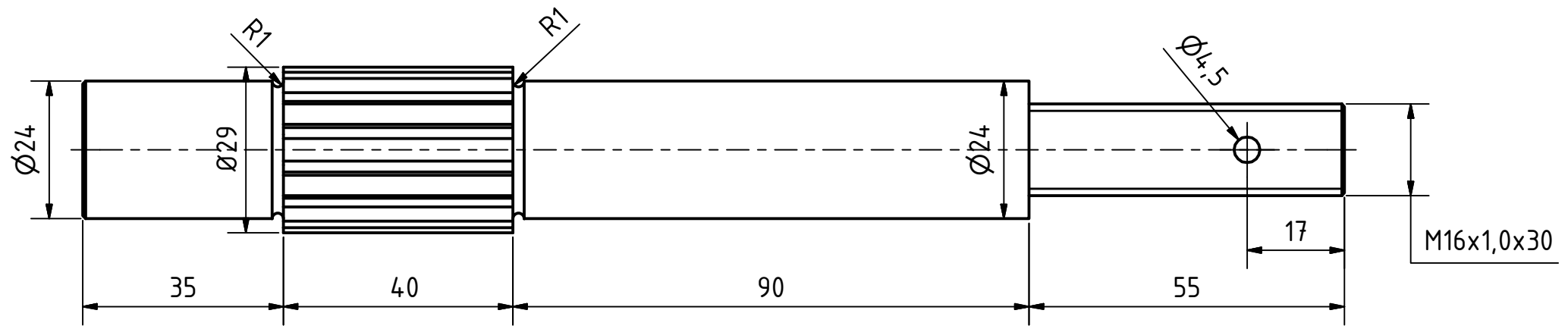


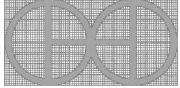


PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Propeller hub 1	oho_sso_propeller-hub-1.iam			5.0
PUBLISHED BY	DOC. TYPE	MATERIAL		QUANTITY
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Assembly			1
	LICENCE	SCALE		SHEET
OHO e.V.	CC-BY-SA 4.0	1:2		33 /46

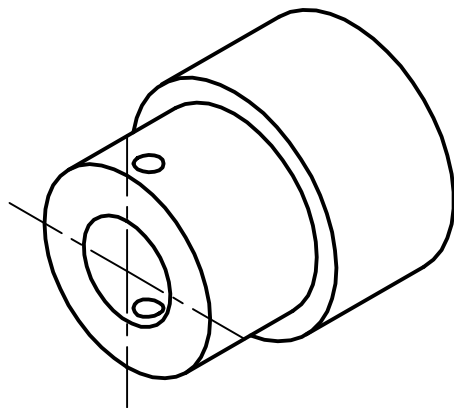
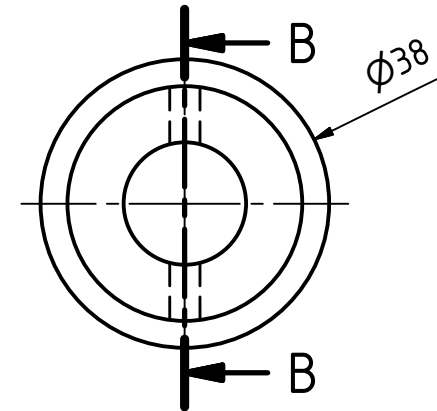
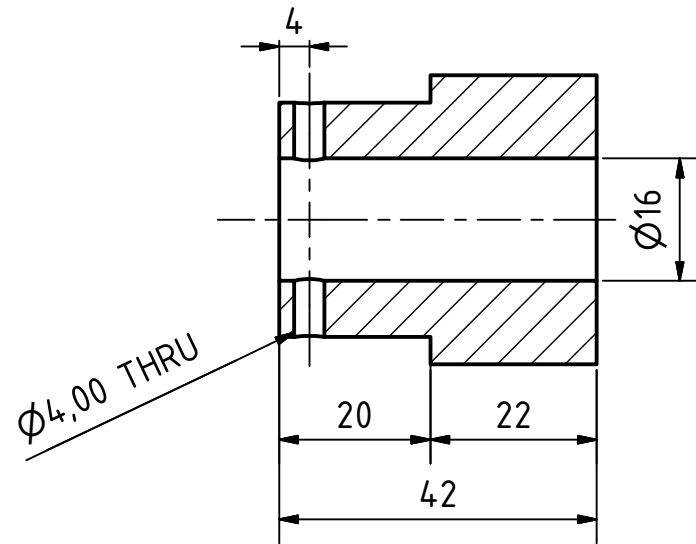


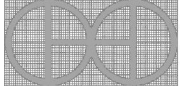
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME	POS		
Propeller hub1	oho_sso_propeller-hub-1.ipn	5.0		
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Assembly		1	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:2,5	34 /46	

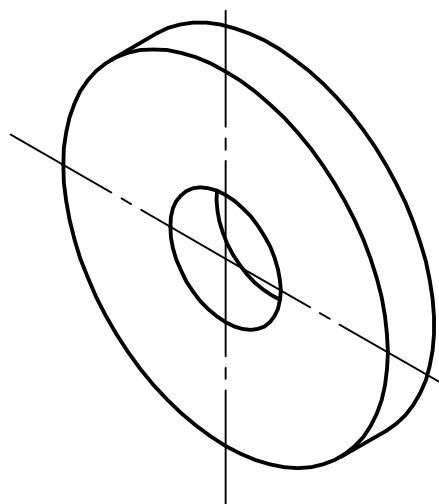
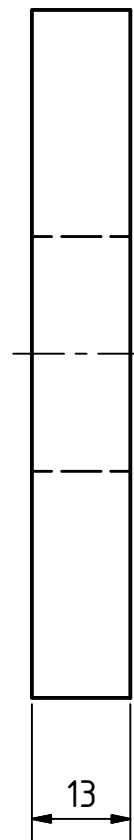
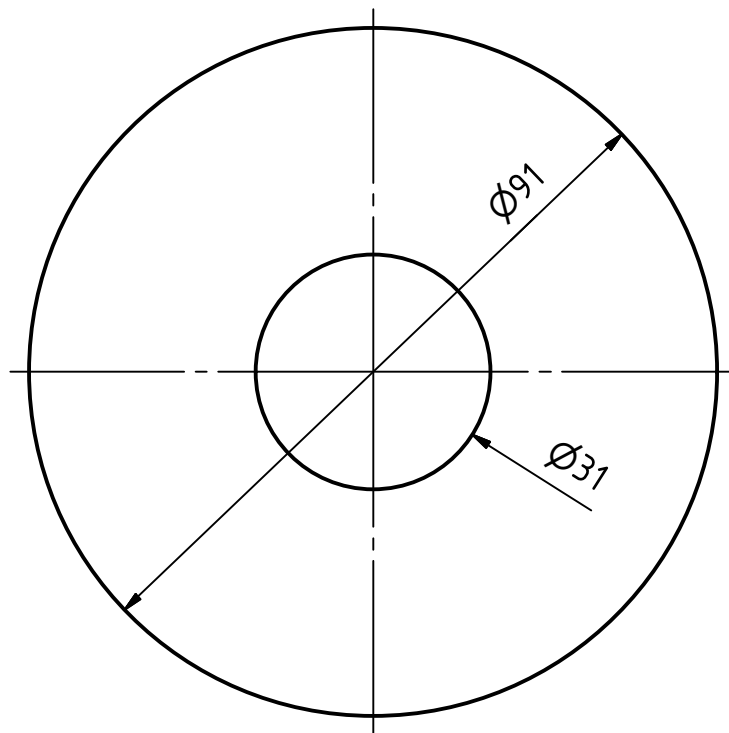


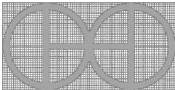
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME	POS		
Threaded shaft	oho_sso_shaft.ipt	5.1		
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	Steel AISI-304	1	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:1	35 /46	

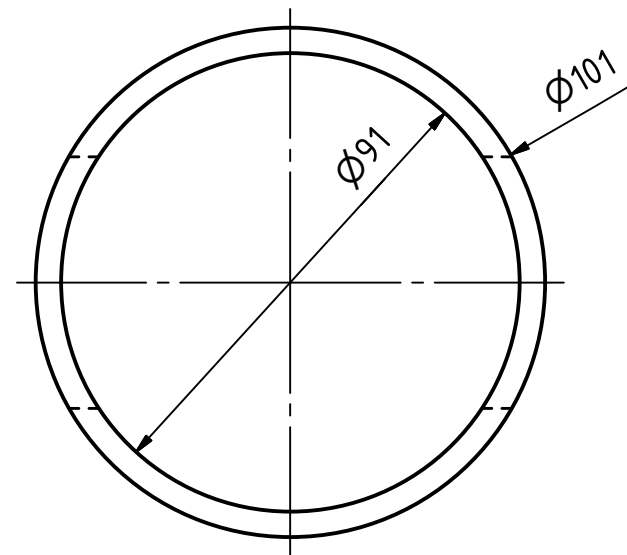
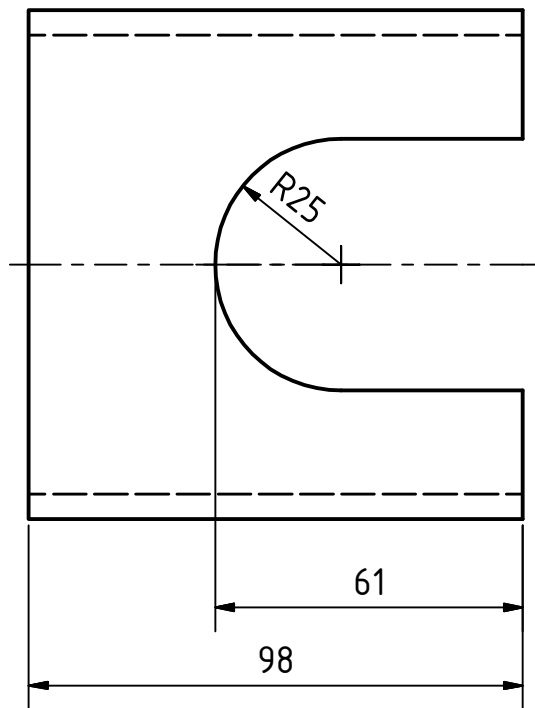
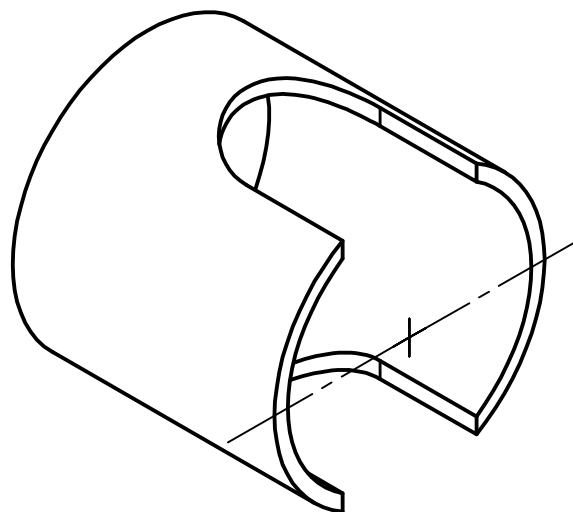
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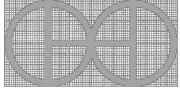


PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Cube	oho_sso_cube.ipt			5.2
PUBLISHED BY	DOC. TYPE	MATERIAL		QUANTITY
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	Steel C45		1
	LICENCE	SCALE		SHEET
OHO e.V.	CC-BY-SA 4.0	1:1		36 /46

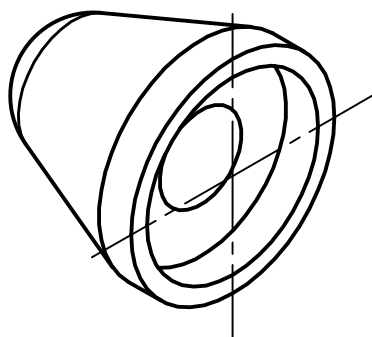
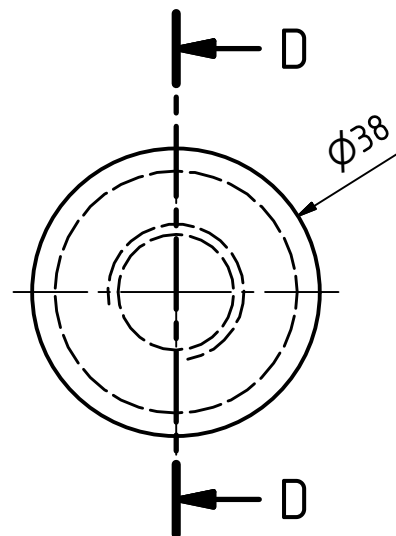
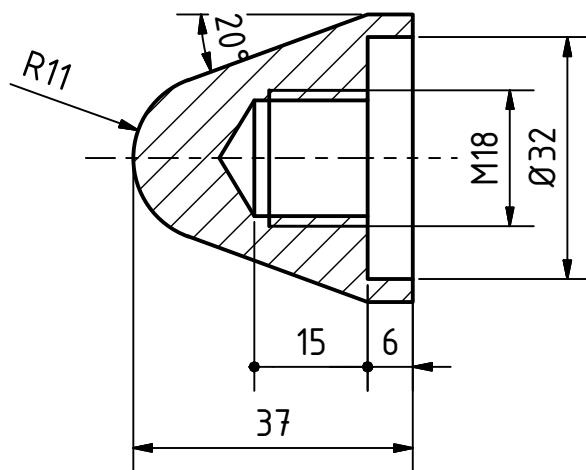


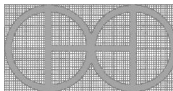
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME	POS		
Plate cube	oho_sso_plate-cube.ipt	5.3		
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	Steel C45	1	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:1	37 /46	



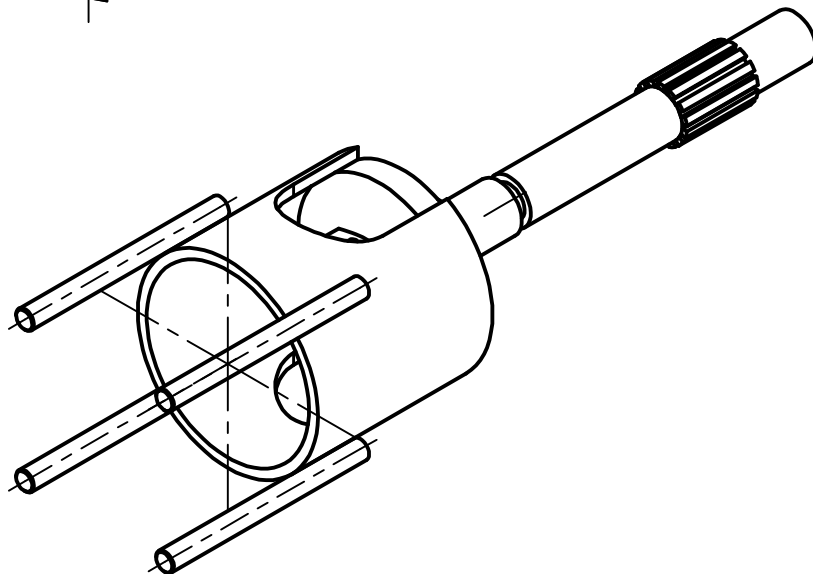
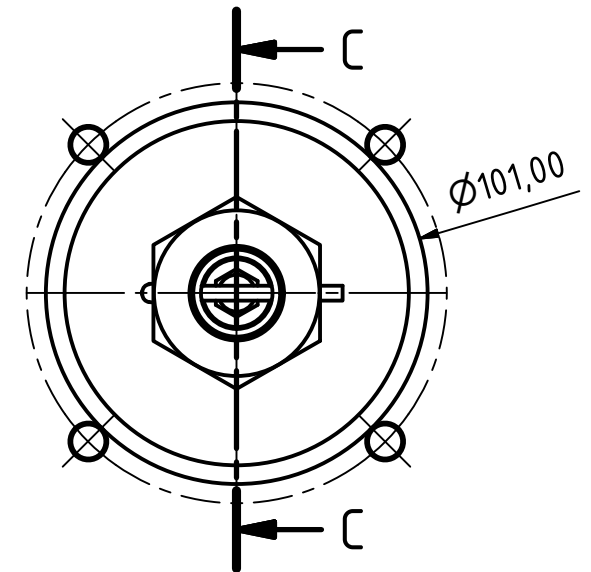
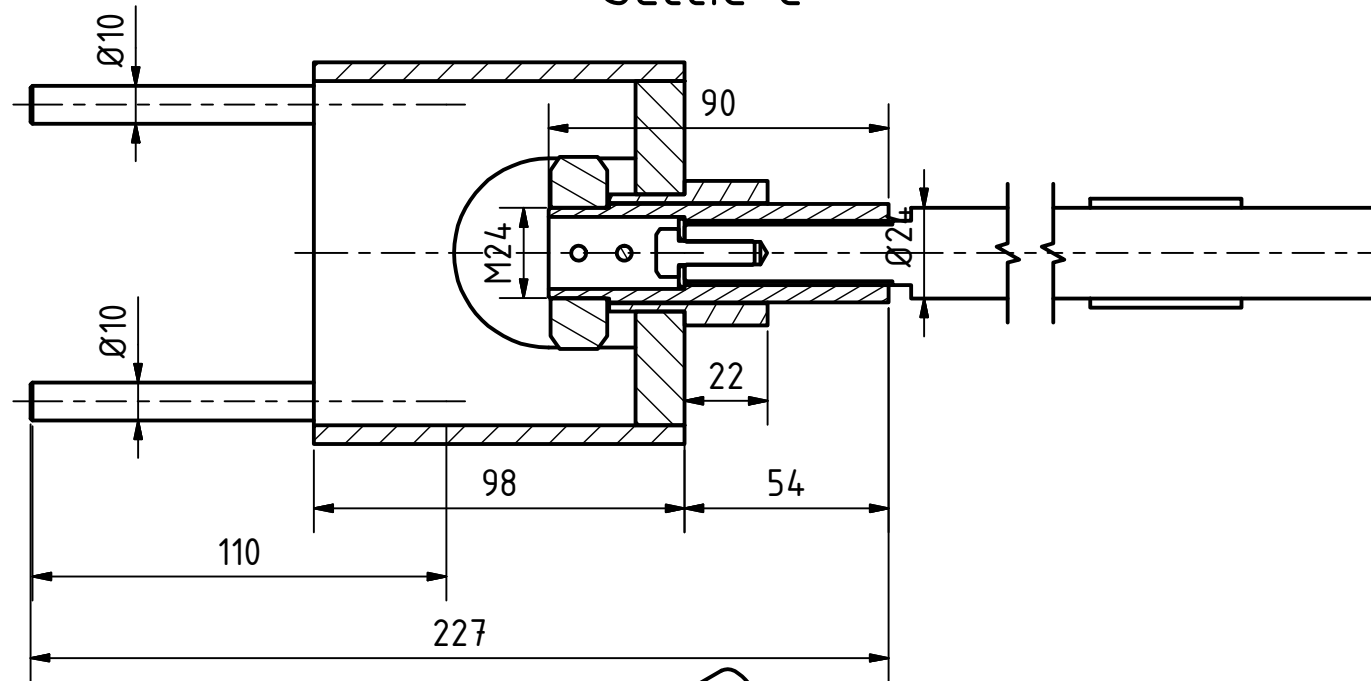
PROJECT Snow Sled with 10 hp outboard motor		CREATED BY D. Mosquera		APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Hub		FILE NAME oho_sso_hub.ipt				POS 5.4
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development			DOC. TYPE Part	MATERIAL Steel C45		QUANTITY 1
OHO e.V.			LICENCE CC-BY-SA 4.0	SCALE 1:1,5		SHEET 38 /46

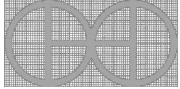
Secc.D-D



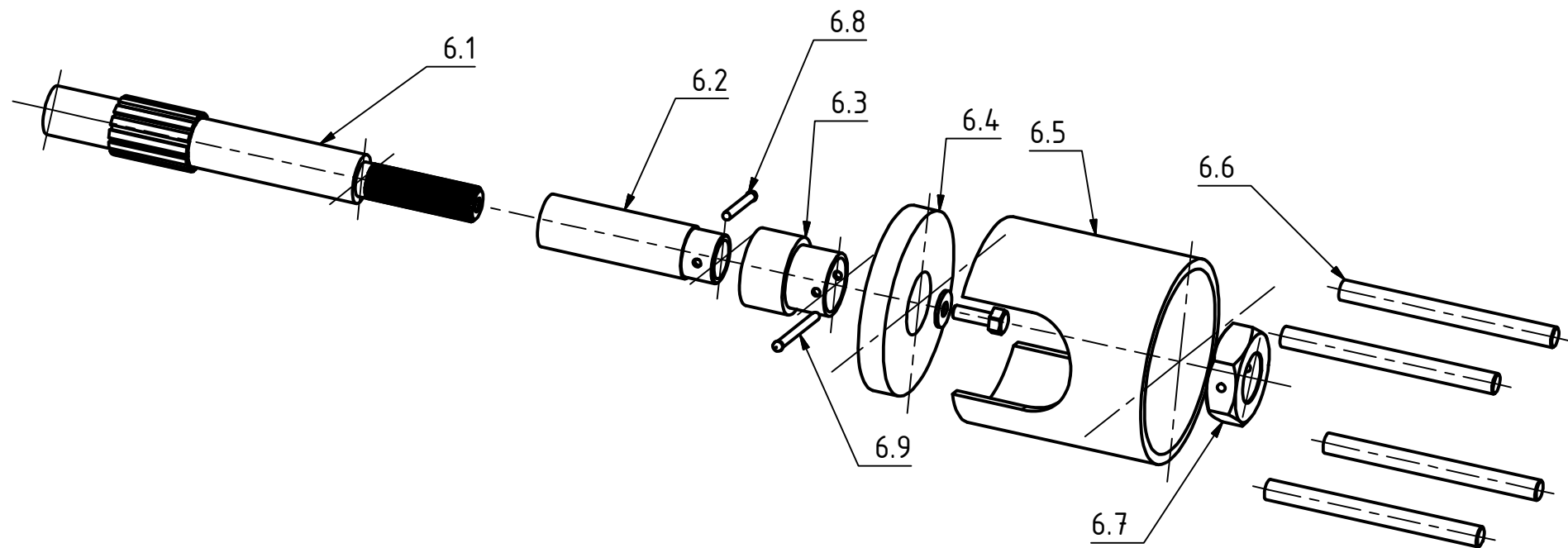
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME	POS		
Nut tope	oho_sso_nut-tope.ipt	5.5		
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	Steel C45	1	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:1	39 /46	

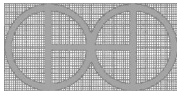
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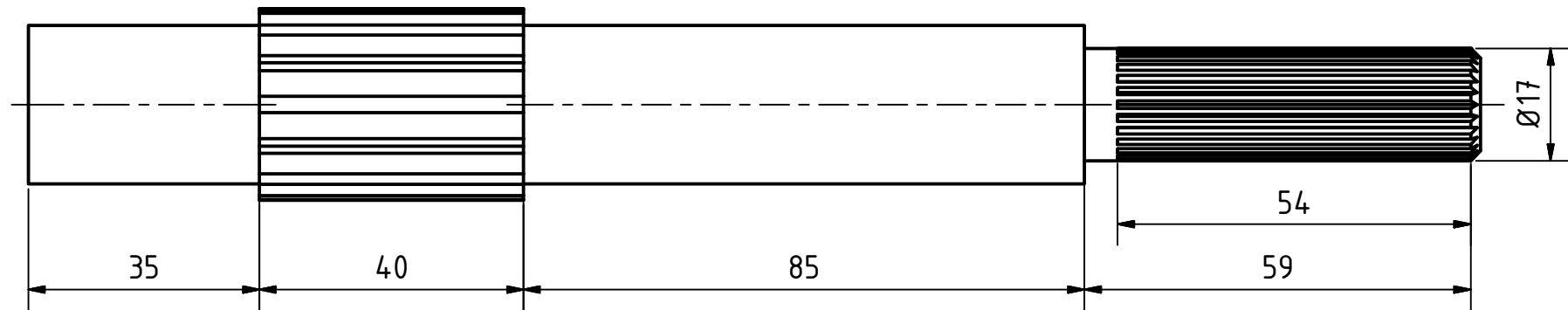


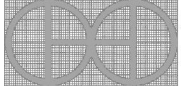
PROJECT	Snow Sled with 10 hp outboard motor	CREATED BY	D. Mosquera	APPROVED BY	A. Morillo	DATE	10/08/2021	VERSION	1.0
PART NAME	Propeller hub 2	FILE NAME	oho_sso_propeller-hub-2.iam					POS	6.0
PUBLISHED BY	 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development				DOC. TYPE	MATERIAL		QUANTITY	1
					LICENCE	SCALE		SHEET	40 /46
					CC-BY-SA 4.0	1:2			

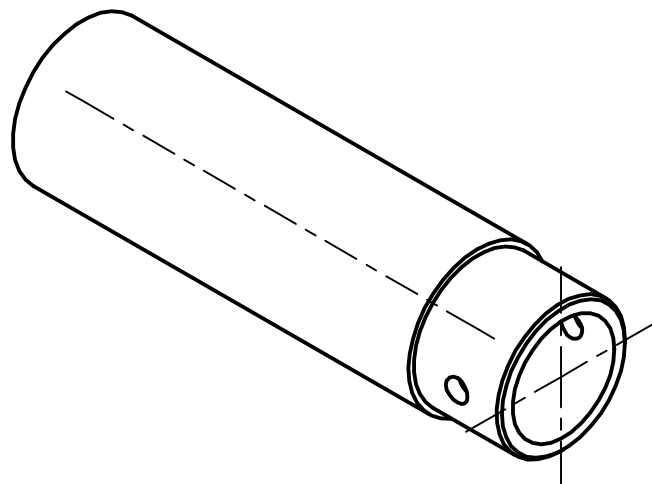
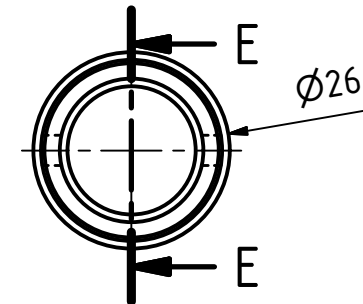
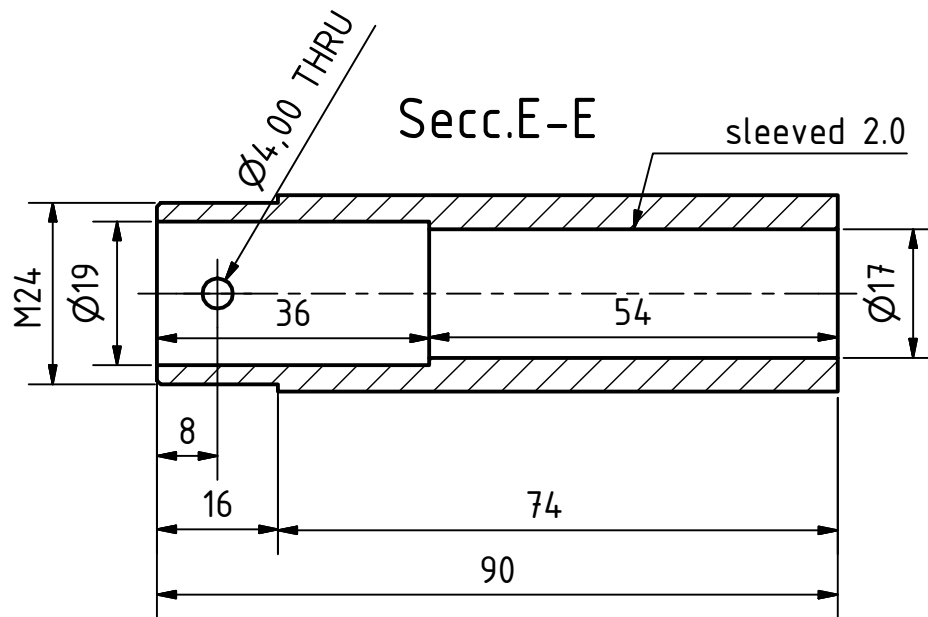


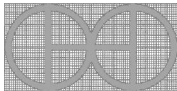


PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Propeller hub 2	oho_sso_propeller-hub-2.ipn			6.0
PUBLISHED BY		DOC. TYPE	MATERIAL	QUANTITY
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development		Assembly		1
		LICENCE	SCALE	SHEET
OHO e.V.		CC-BY-SA 4.0	1:2,5	41 /46

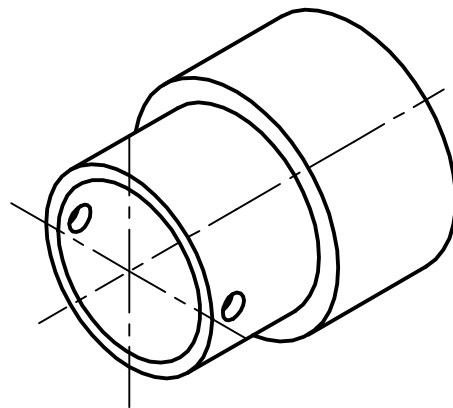
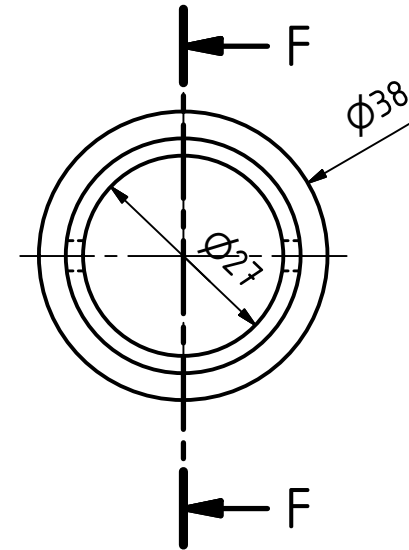
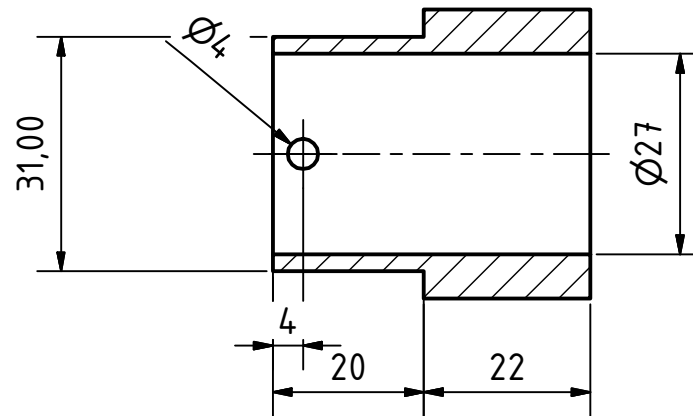


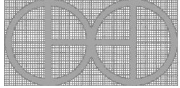
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME	POS		
Splined shaft	oho_sso_splined-shaft.ipt	6.1		
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	AISI C-304	1	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:1	42 /46	

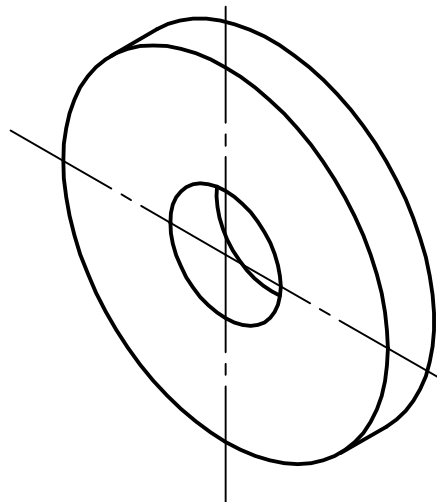
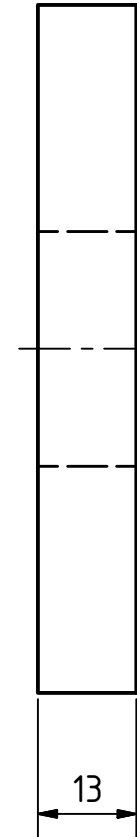
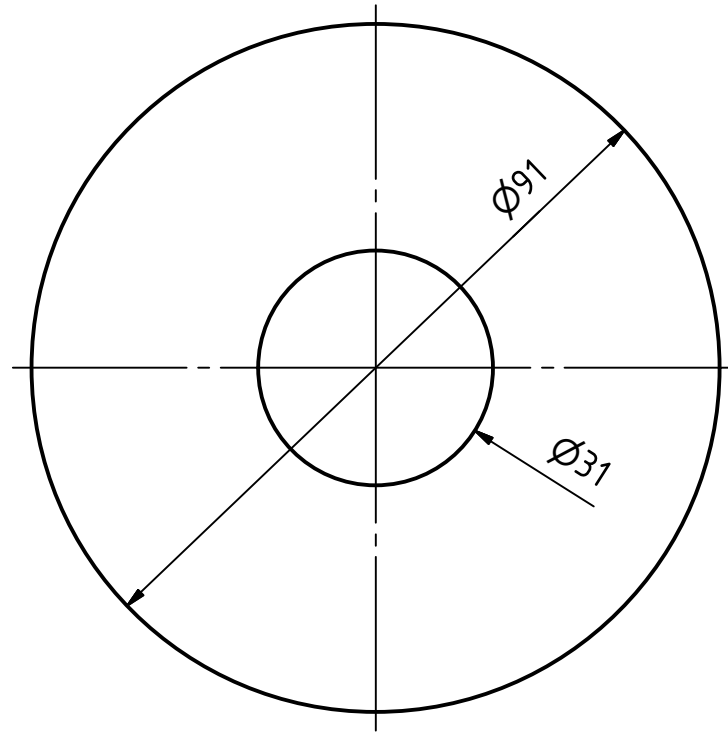


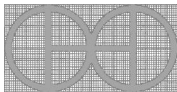
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION	
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0	
PART NAME	FILE NAME			POS	
Spline sleeved	oho_sso_spline-sleeved.ipt			6.2	
PUBLISHED BY		DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development		Part	Steel C45	1	
		LICENCE		SCALE	SHEET
		CC-BY-SA 4.0		1:1	43 /46
OHO e.V.					

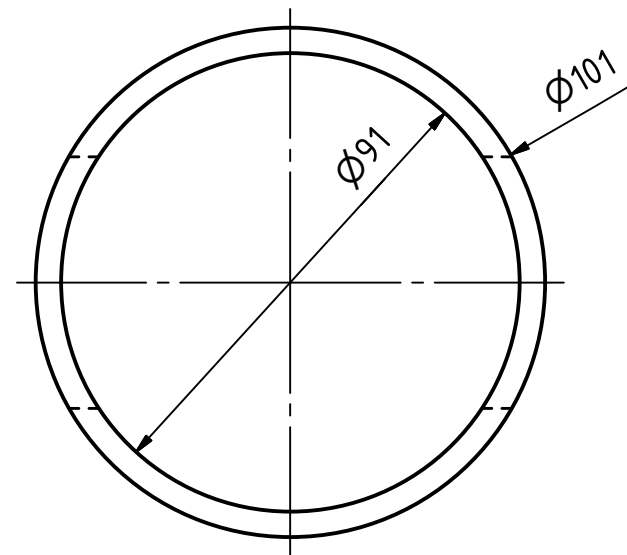
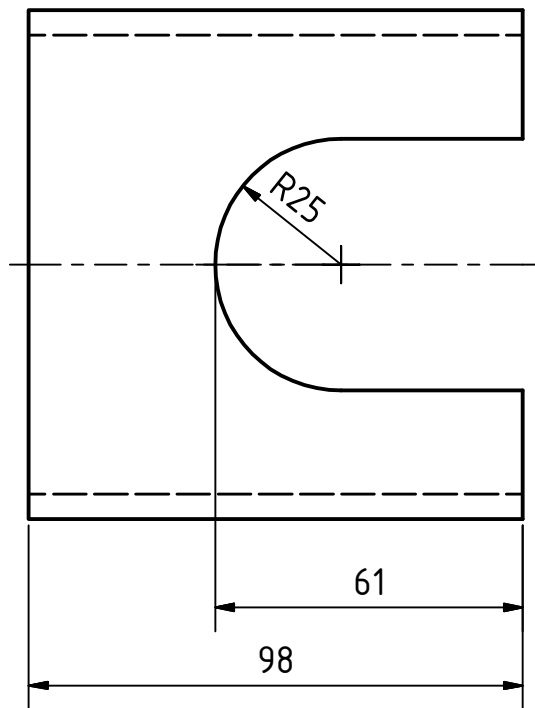
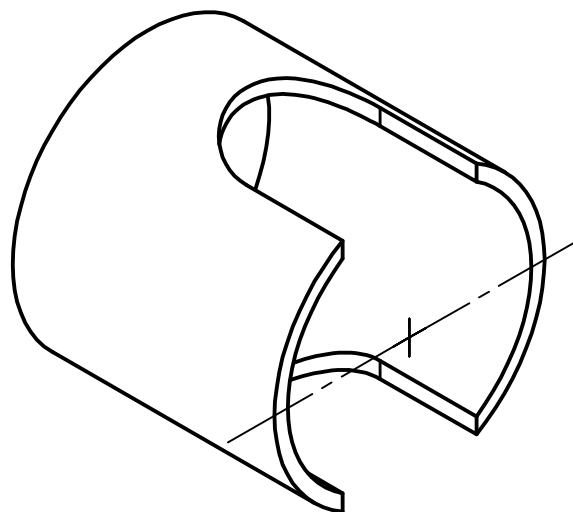
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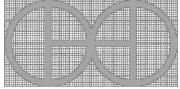


PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Cube 2	oho_sso_cube2.ipt			6.3
PUBLISHED BY	DOC. TYPE	MATERIAL		QUANTITY
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	Seel C45		1
LICENCE	SCALE			SHEET
OHO e.V.	CC-BY-SA 4.0	1:1		44 /46



PROJECT Snow Sled with 10 hp outboard motor		CREATED BY D. Mosquera	APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Plate cube		FILE NAME oho_sso_plate-cube.ipt			POS 6.4
PUBLISHED BY <div> OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development</div>			DOC. TYPE Part	MATERIAL Steel C45	QUANTITY 1
OHO e.V.			LICENCE CC-BY-SA 4.0	SCALE 1:1	SHEET 45 /46



PROJECT Snow Sled with 10 hp outboard motor		CREATED BY D. Mosquera		APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Hub		FILE NAME oho_sso_hub.ipt				POS 6.5
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development			DOC. TYPE Part	MATERIAL Steel C45		QUANTITY 1
OHO e.V.			LICENCE CC-BY-SA 4.0	SCALE 1:1		SHEET 46 /46