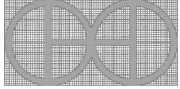
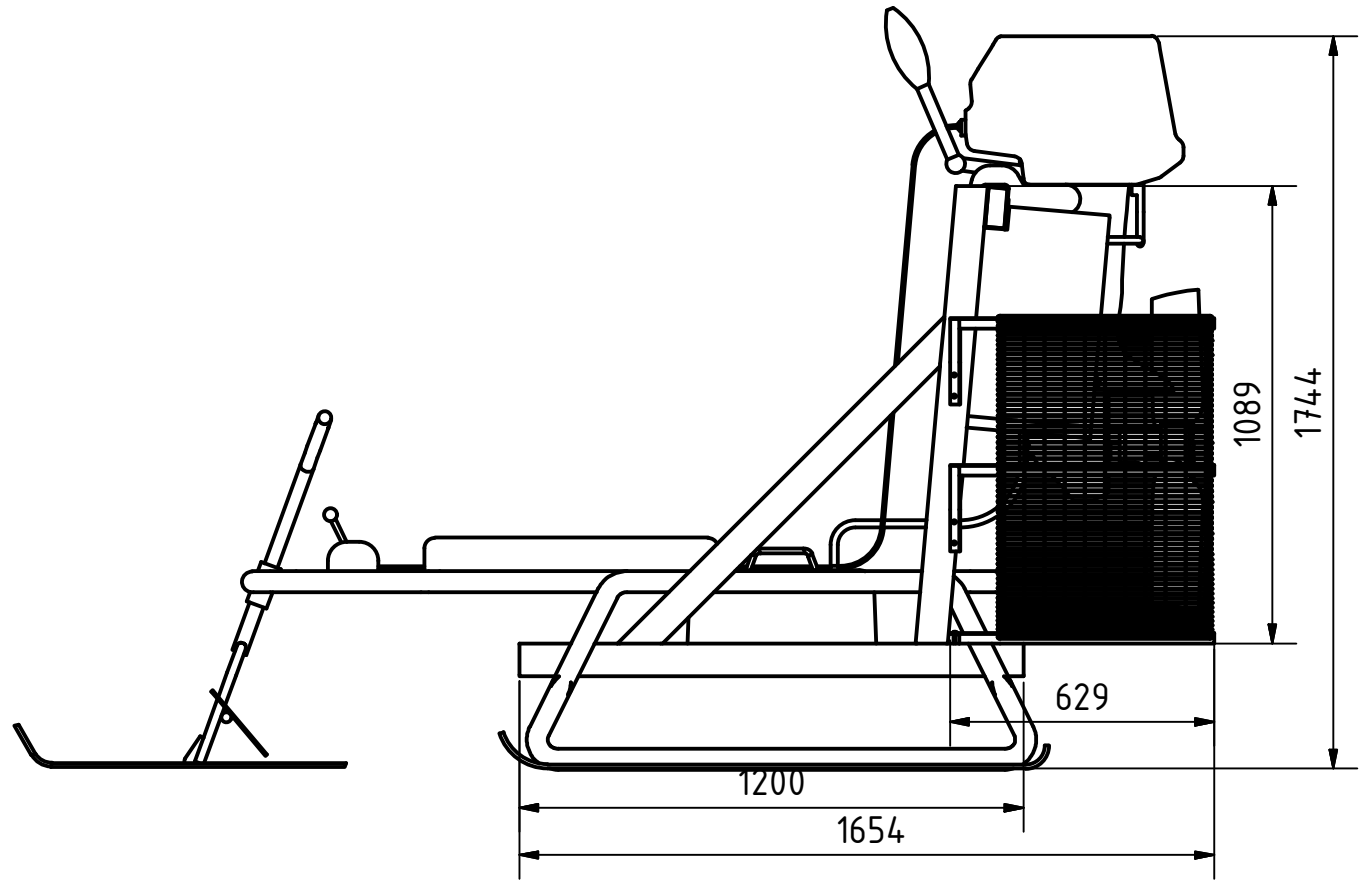
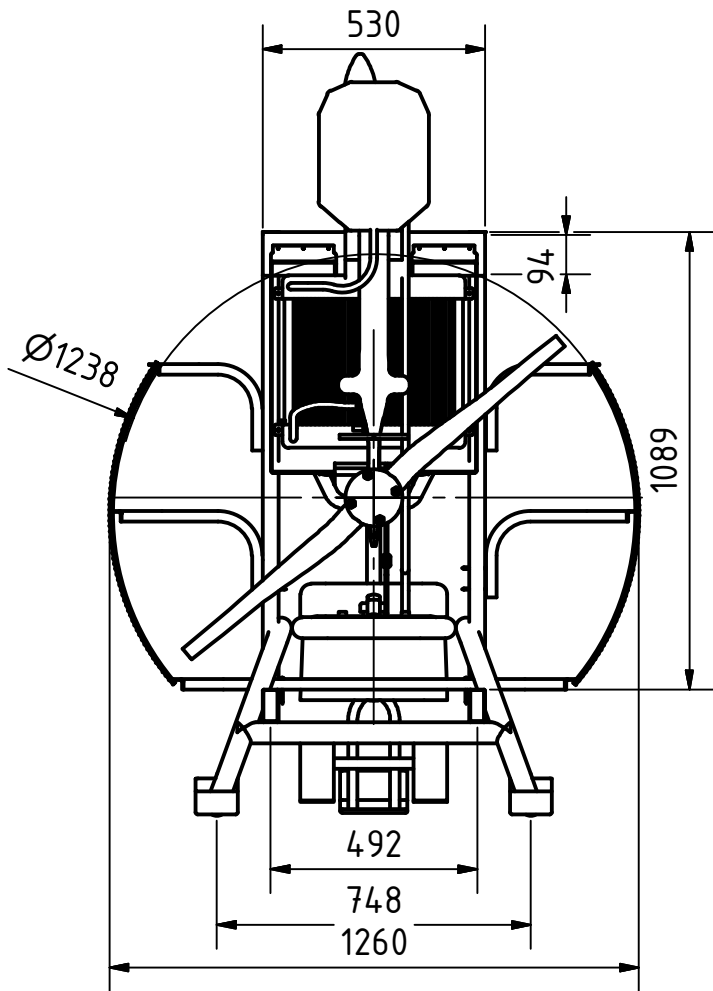


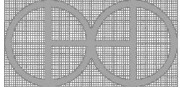
Note: All units in mm.

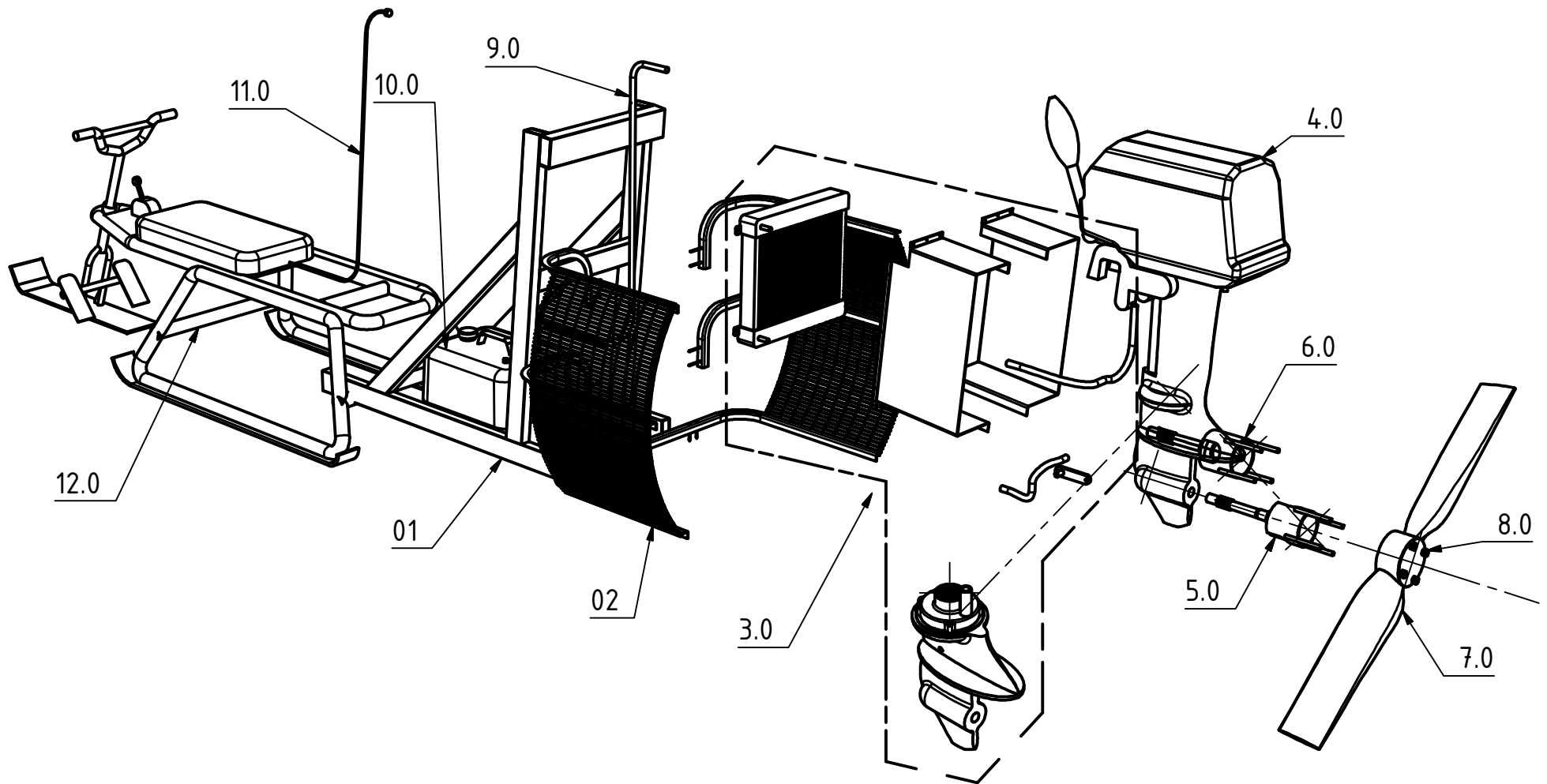
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
3D views	oho_sso_A1-snow-sled-with-10-hp-outboard-motor.iam			A1
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Assembly		1	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:12	1 /47	

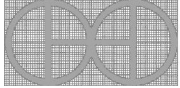
Based on drawings of Harold W. Grube,



Note: All units in mm.

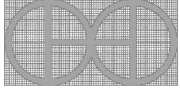
PROJECT Snow Sled with 10 hp outboard motor	CREATED BY D. Mosquera	APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME	FILE NAME oho_sso_A1-snow-sled-with-10-hp-outboard-motor.iam			POS A1
3D views				
PUBLISHED BY	DOC. TYPE Assembly	MATERIAL	QUANTITY 1	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	LICENCE CC-BY-SA 4.0	SCALE 1:20	SHEET 2 / 47	
	OHO e.V.			



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	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:15	3 /47	

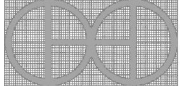
## Parts list

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	ASTME A36	11
1.2	1	Vertical support	oho_sso_vertical-support.ipt	Production	ASTM A36	12
1.3	2	Diagonal support	oho_sso_diagonal-support.ipt	Production	ASTM A36	13
1.4	2	Frame base	oho_sso_frame-base.ipt	Production	ASTM A36	14
1.5	1	Transom inferior	oho_sso_transom-inferior.ipt	Production	ASTM A36	15
1.6	8	frame plate	oho_sso_frame-top.ipt	Production	Steel C45	16
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	Steel C45	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	
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
3.3	1	Sheetmeta duct derecha	oho_sso_sheetmetal-duct-der.ipt	Production	Sheet e=2,5, Steel C45	29

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 Parts list		FILE NAME			POS B1
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development		DOC. TYPE Parts list	MATERIAL		QUANTITY
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE		SHEET 4 / 47

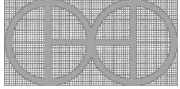
## Parts list

POS	QTY	PART NAME	FILE NAME	PART TYPE	SPECIFICATIONS	SHEET
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 superior, 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 6x12	
3.12	4	Woodscrew 12	oho_sso_woodscrew12.ipt	Standard	Woodscrew 12, DIN96 6x40	
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 Propeller, 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 propeller, 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 Cube, 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
 OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development	Parts list			
OHO e.V.	LICENCE	SCALE		SHEET
	CC-BY-SA 4.0			5 /47

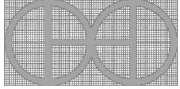
Parts list

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	Flexible hose	oho_sso_flexible-hose3.ipt	Standard	Flexible hose, 1/2 in. flexible hose - combustibile L:1600mm	
10.0	1	Gasoline tank	oho_sso_gasoline-tank.ipt	Buy	Gasoline tank, Cap. 12.0 Lts.	
11.0	1	Control cable	oho_sso_control-cable.ipt	Buy	control cable, remote control cable is used for controlling the throttle	
12.0	1	Snowsled	oho_sso_snowsled01.iam	Buy	snow race pre-assembly for catalague	47

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 Parts list		FILE NAME			POS B3
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development			DOC. TYPE Parts list	MATERIAL	QUANTITY
OHO e.V.			LICENCE CC-BY-SA 4.0	SCALE	SHEET 6 /47


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.
...	...
...	...

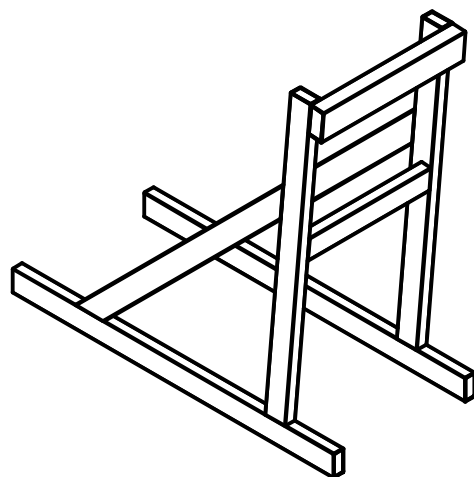
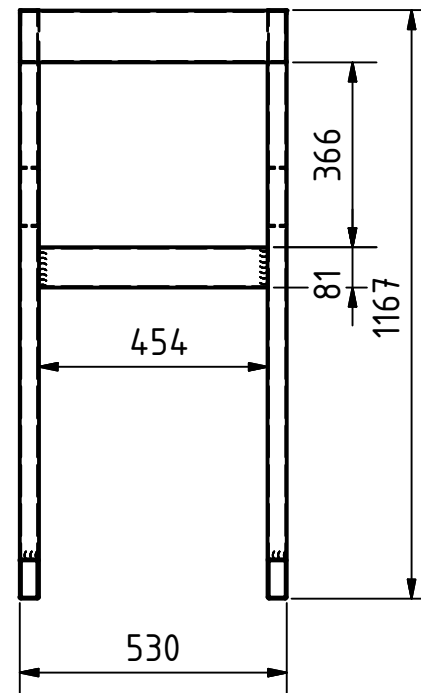
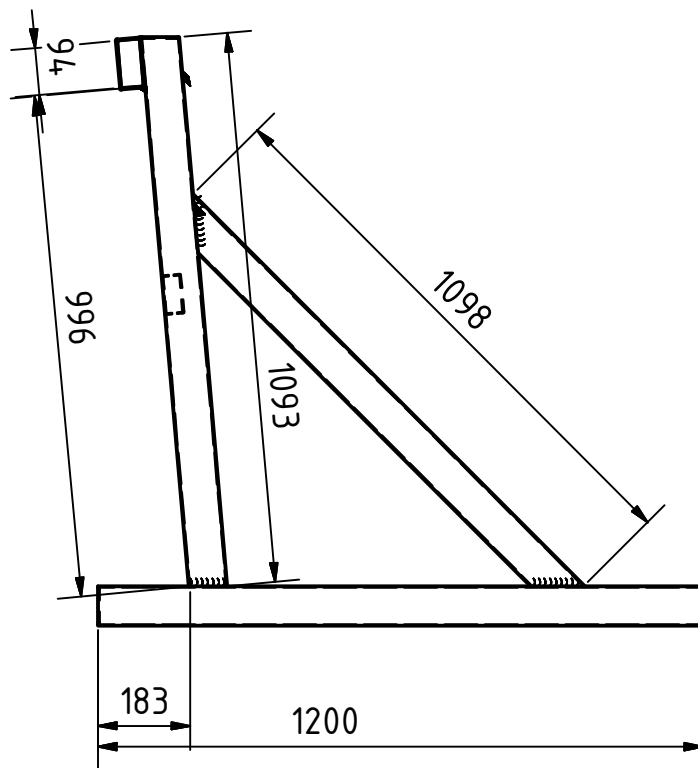
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Technical notes				C1
PUBLISHED BY		DOC. TYPE	MATERIAL	QUANTITY
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development		Technical notes		
OHO e.V.		LICENCE	SCALE	SHEET
		CC-BY-SA 4.0		7 /47

TECHNICAL NOTES


NOTES	CONTENT
DIAGRAM	
DESCRIPTION	

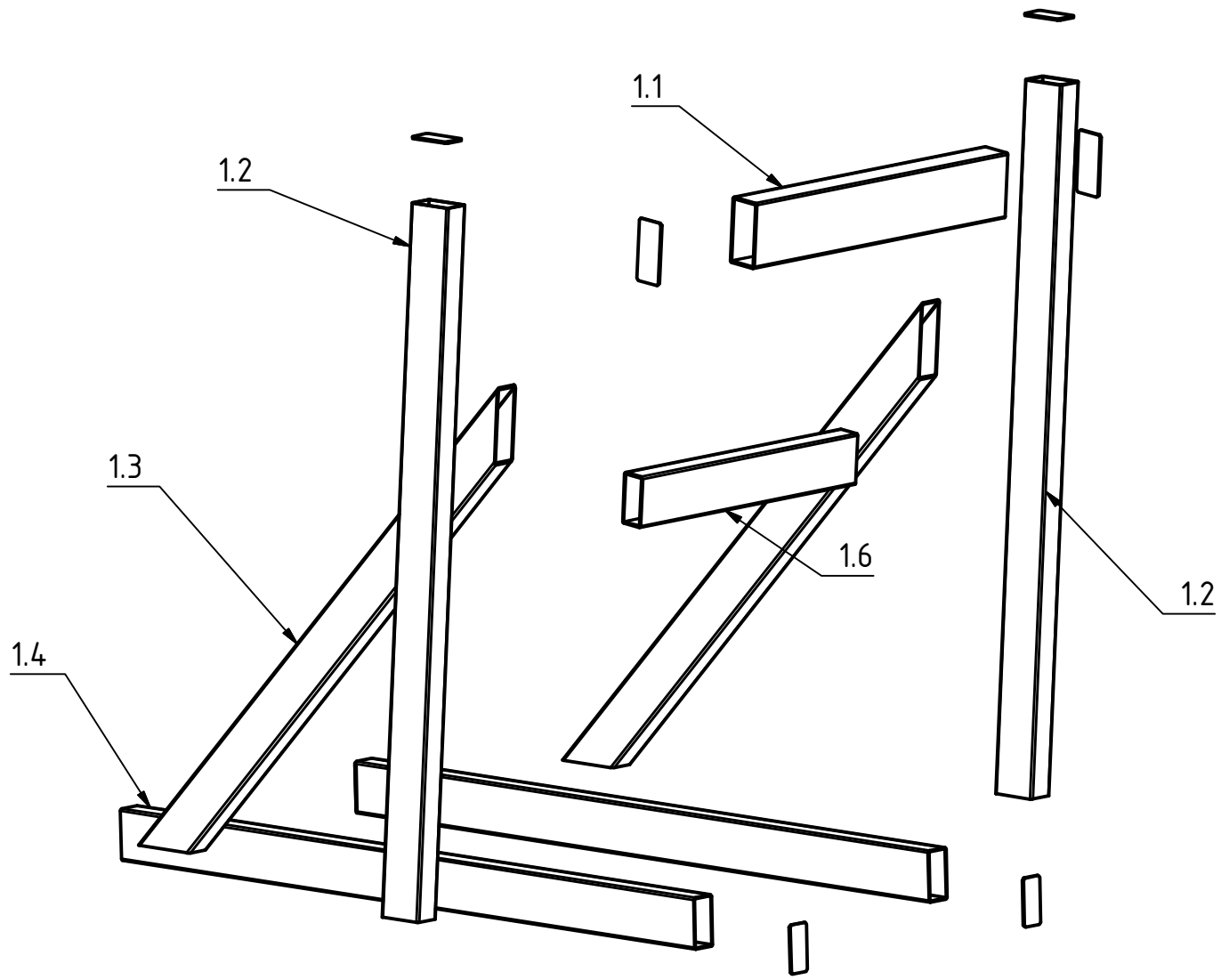
PROJECT Snow Sled with 10 hp outboard motor	CREATED BY D. Mosquera	APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Technical notes	FILE NAME			POS C2
PUBLISHED BY  <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development		DOC. TYPE Technical notes	MATERIAL	QUANTITY
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE	SHEET 8 /47



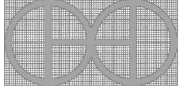


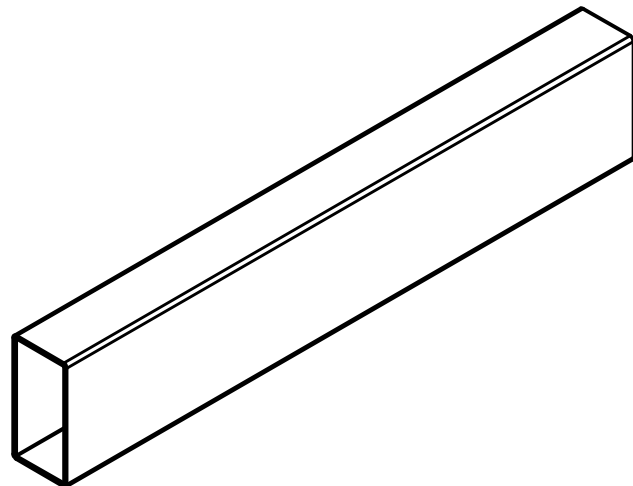
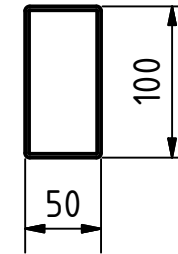
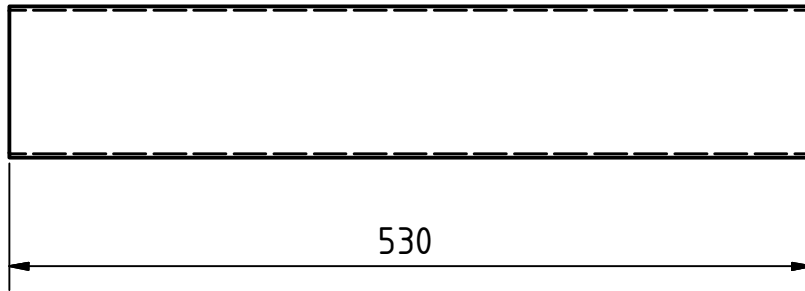
Note: All units in mm.

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 Support motor	FILE NAME oho_sso_support-motor.iam			POS 1.0
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 1:15	SHEET 9 /47

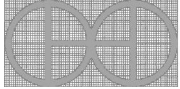


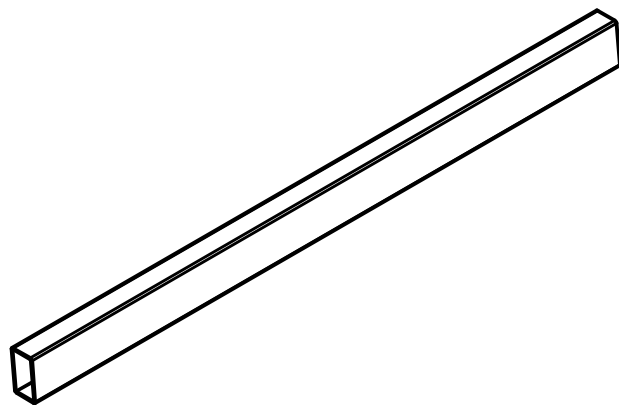
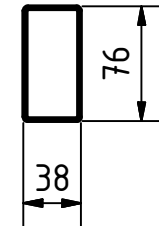
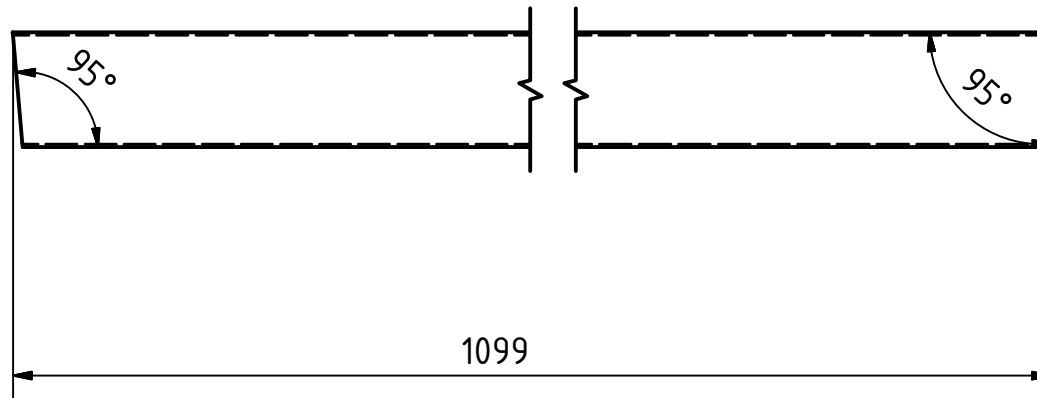
Note: All units in mm.

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 Support motor	FILE NAME oho_sso_support-motor.ipn			POS 1.0
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 10 /47

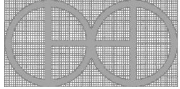


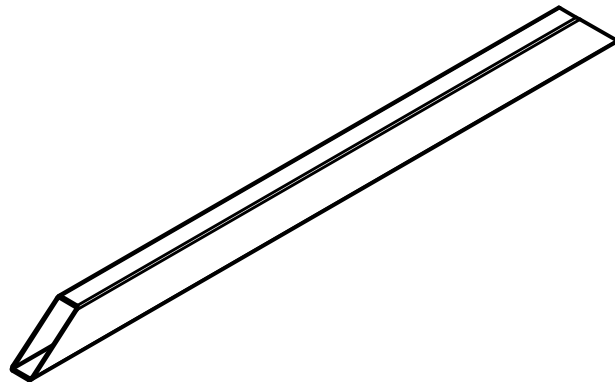
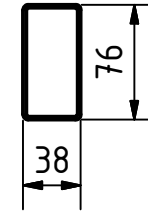
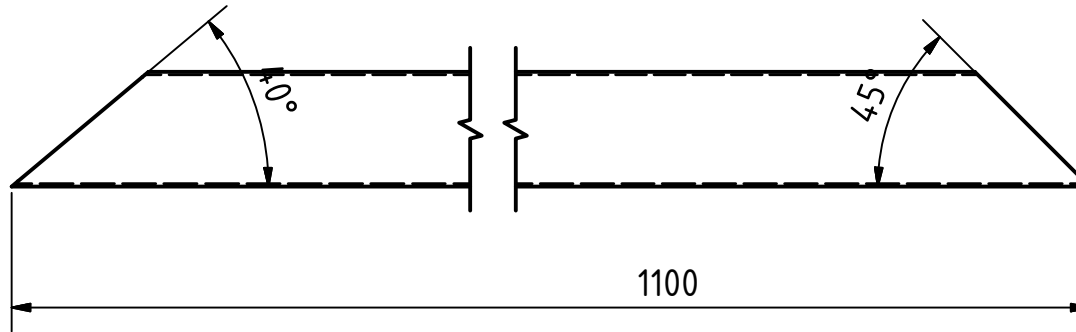
Note: All units in mm.

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 Transom bolter	FILE NAME oho_sso_transom-bolter.ipt			POS 1.1
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development		DOC. TYPE Part	MATERIAL ASTME A36	QUANTITY 1
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE 1:5	SHEET 11 /47

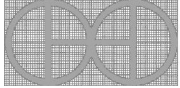


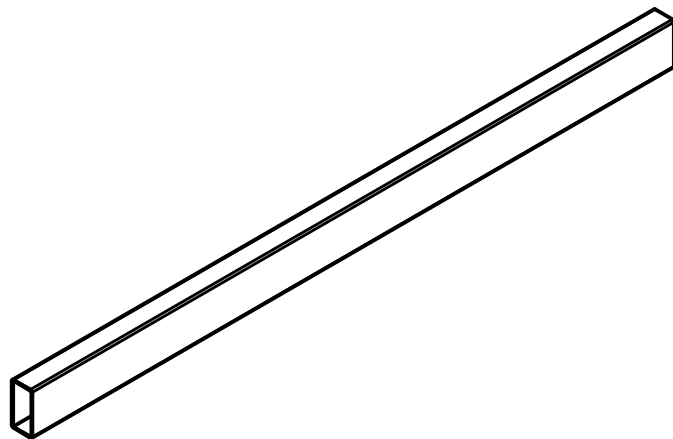
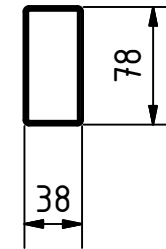
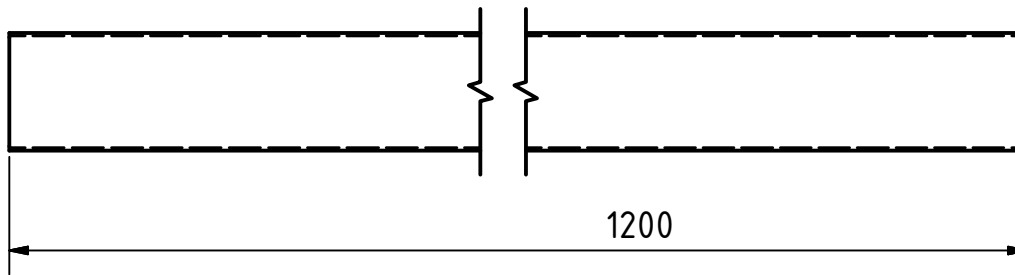
Note: All units in mm.

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 Vertical support	FILE NAME oho_sso_vertical-support.ipt			POS 1.2
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development		DOC. TYPE Part	MATERIAL ASTM A36	QUANTITY 1
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE 1:5	SHEET 12 /47

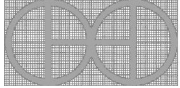


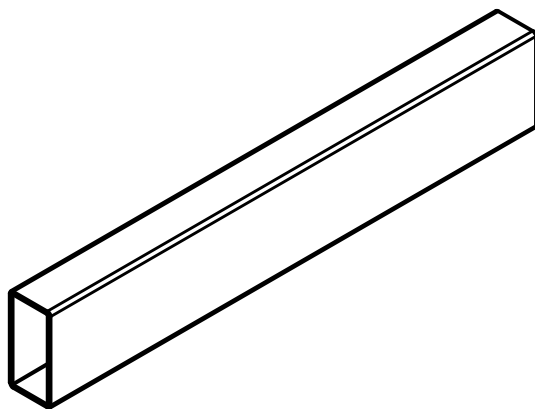
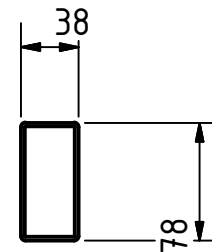
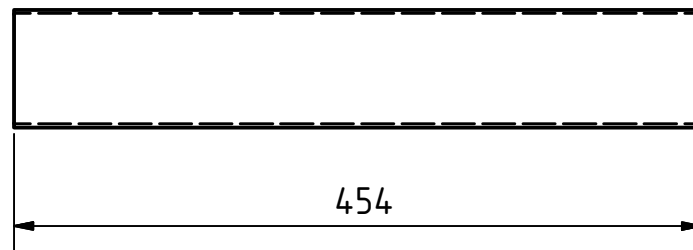
Note: All units in mm.

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 Diagonal support	FILE NAME oho_sso_diagonal-support.ipt			POS 1.3
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development		DOC. TYPE Part	MATERIAL ASTM A36	QUANTITY 2
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE 1:5	SHEET 13 /47

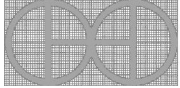


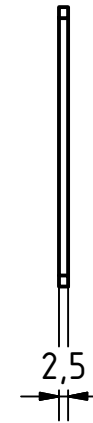
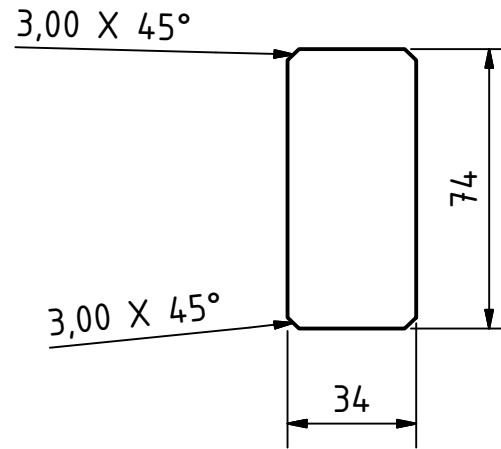
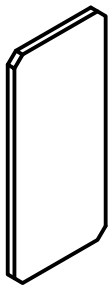
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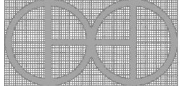
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Frame base	oho_sso_frame-base.ipt			1.4
PUBLISHED BY	DOC. TYPE	MATERIAL		QUANTITY
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	ASTM A36		2
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:5	14 /47	



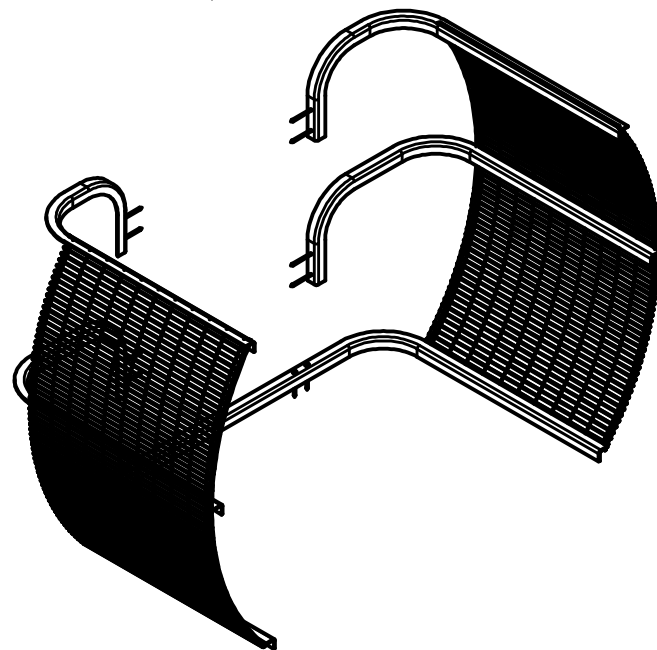
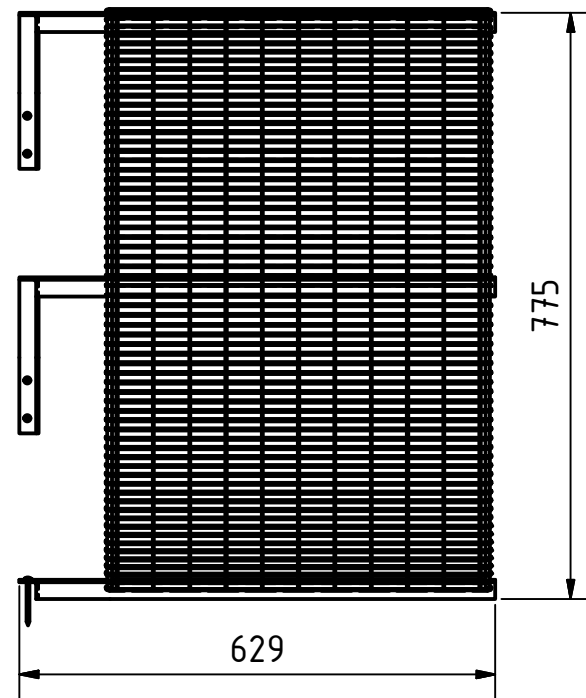
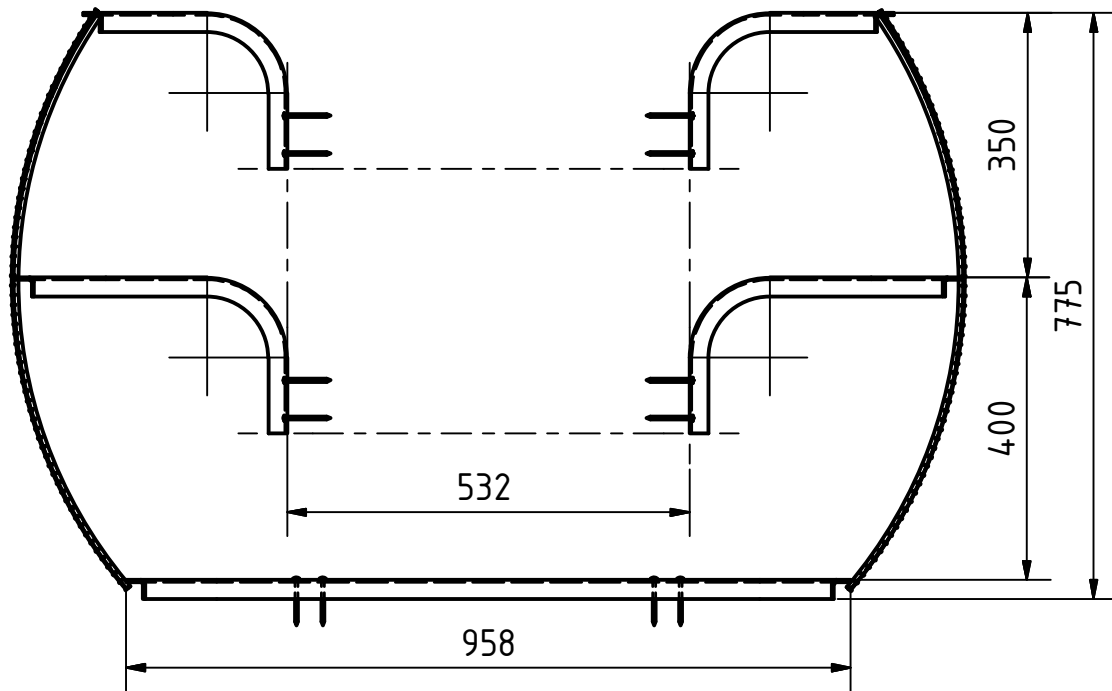
Note: All units in mm.

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 Transom inferior	FILE NAME oho_sso_transom-inferior.ipt			POS 1.5
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development		DOC. TYPE Part	MATERIAL ASTM A36	QUANTITY 1
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE 1:5	SHEET 15 /47

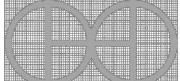


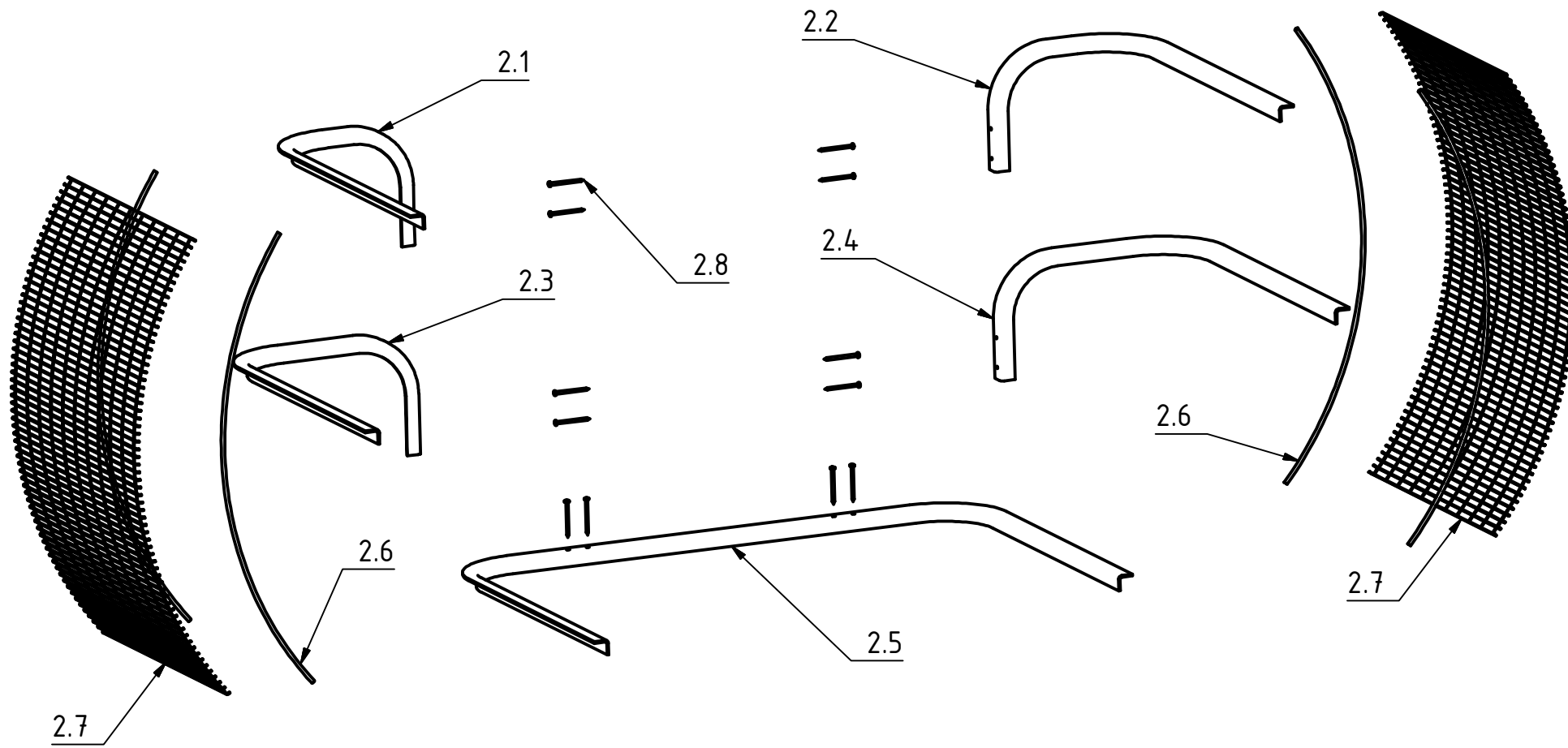
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
frame plate	oho_sso_frame-top.ipt			1.6
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	Steel C45	6	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:2	16 /47	

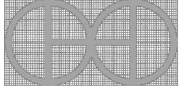


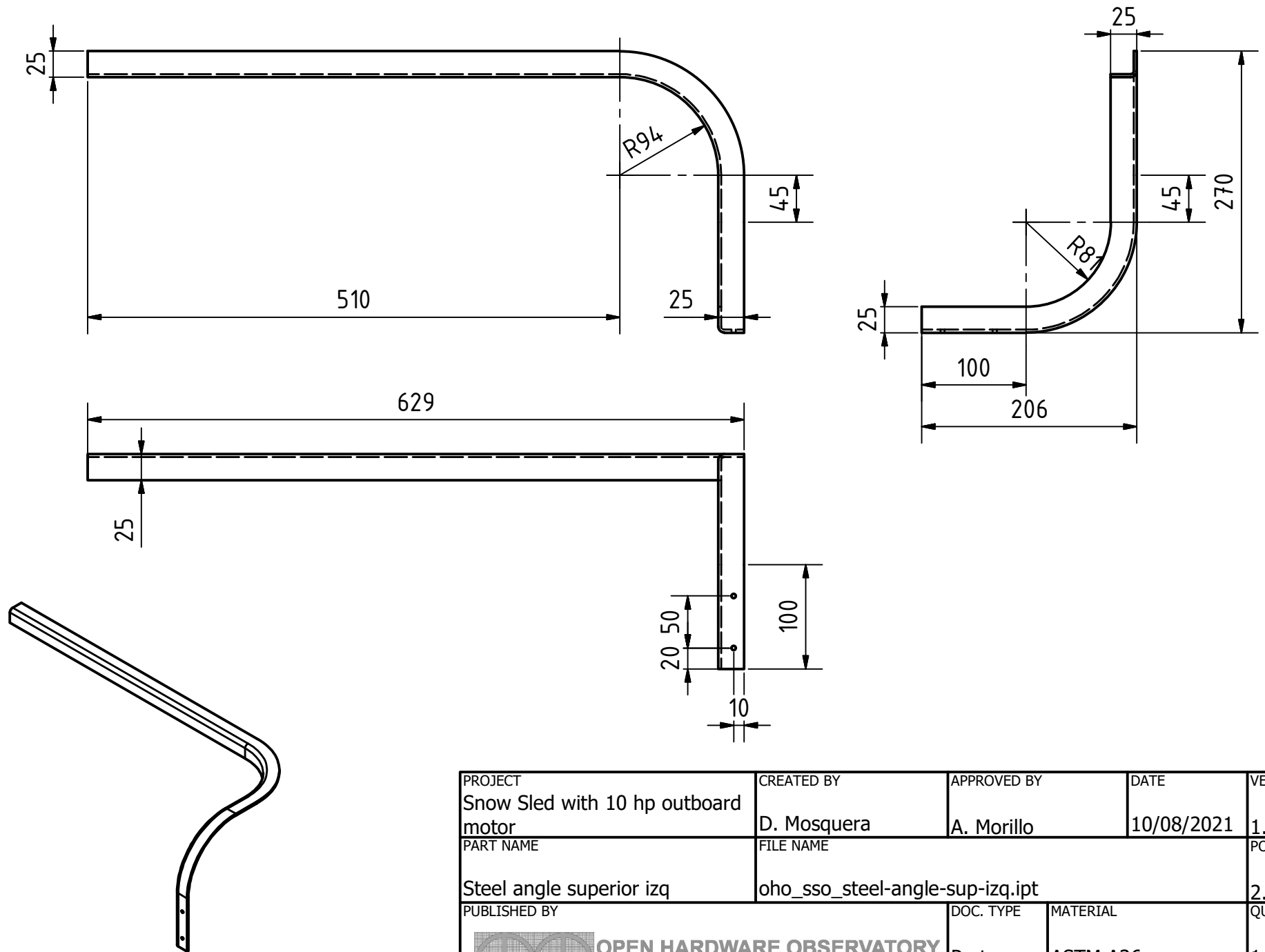


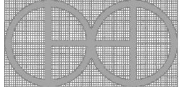
Note: All units in mm.

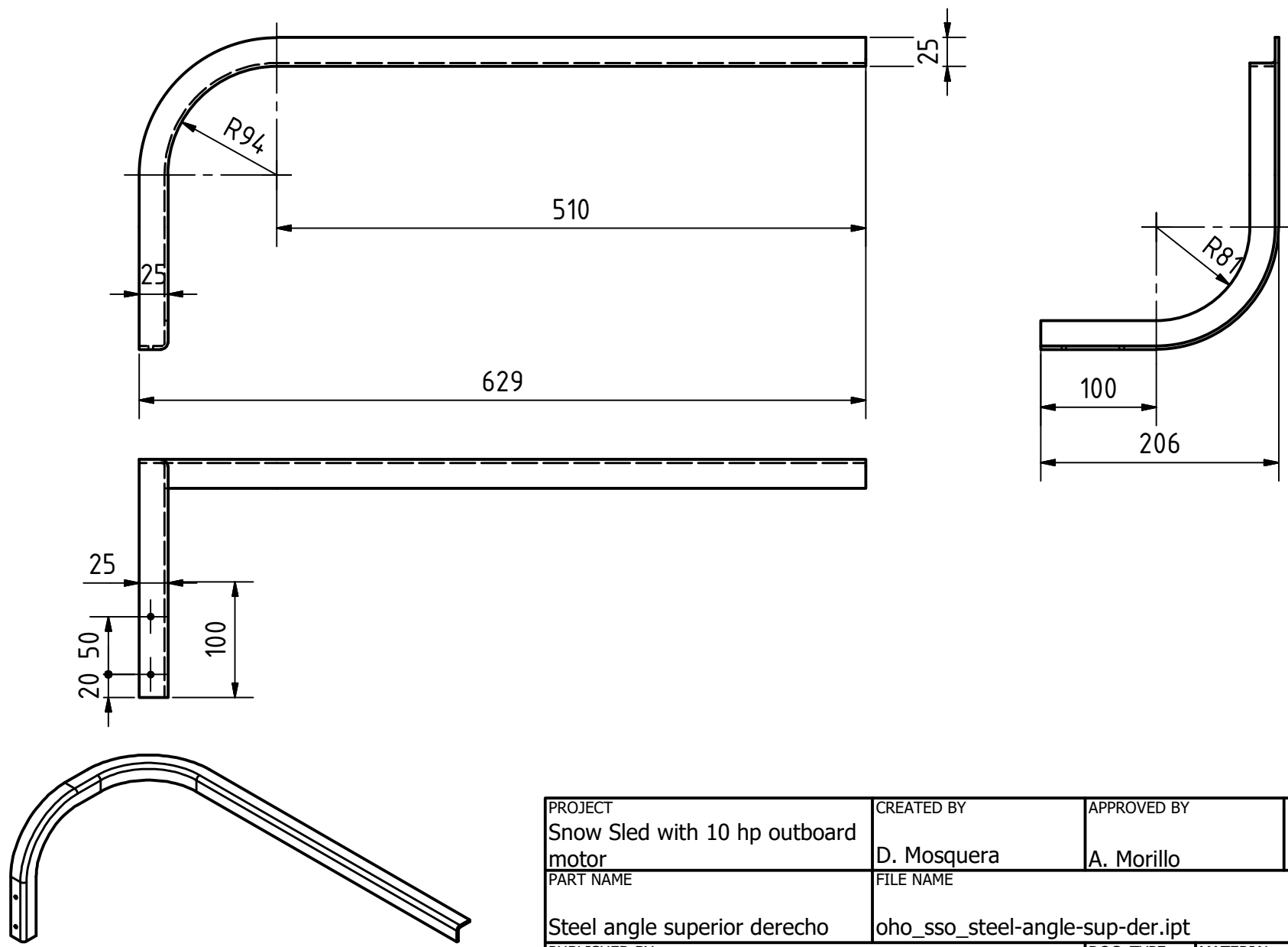
PROJECT Snow Sled with 10 hp outboard motor	CREATED BY D. Mosquera	APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Guard	FILE NAME oho_sso_Guard.iam			POS 2.0
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development	DOC. TYPE Assembly	MATERIAL	QUANTITY 1	
OHO e.V.	LICENCE CC-BY-SA 4.0	SCALE 1:15	SHEET 17 /47	

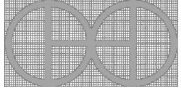


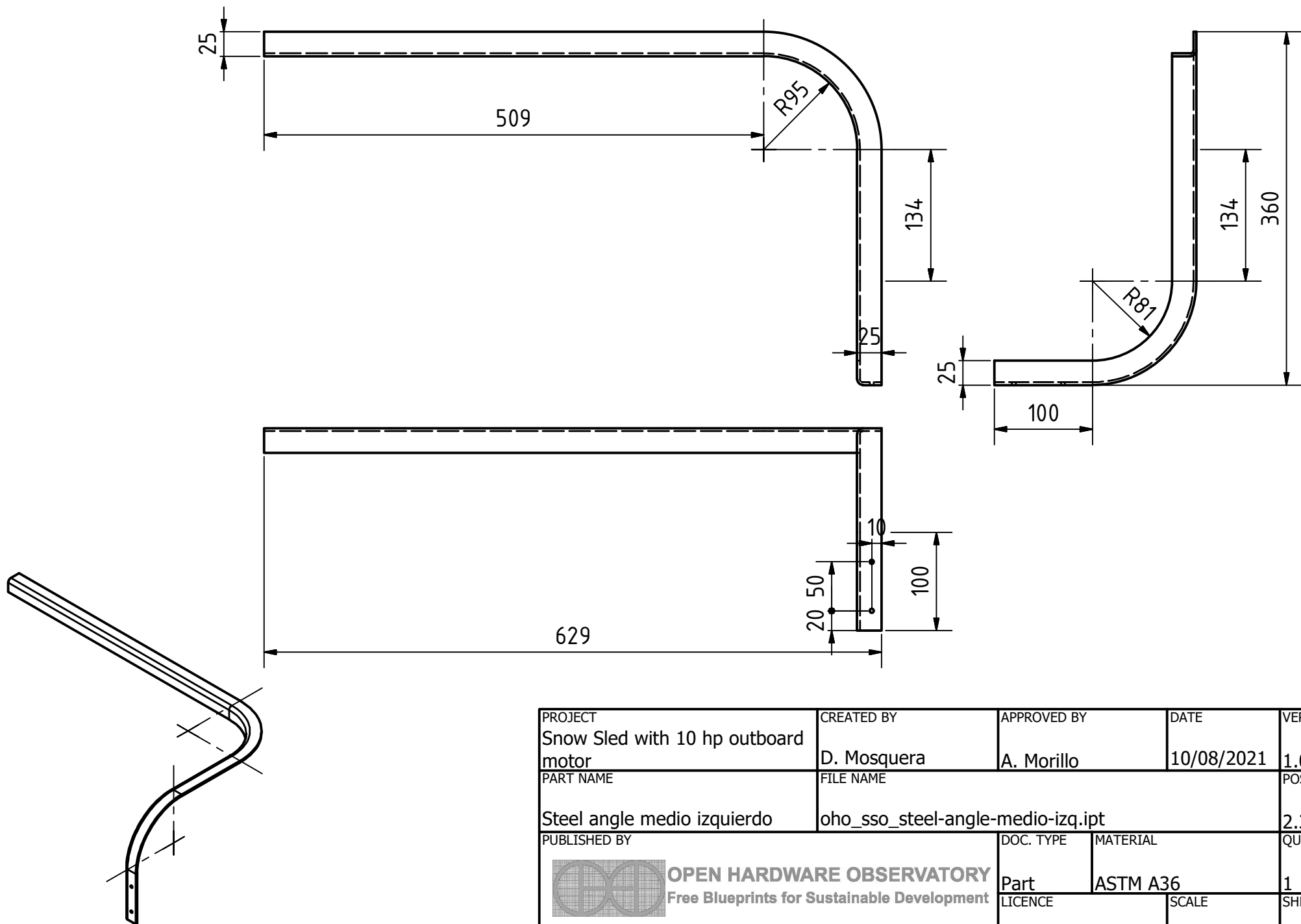
PROJECT Snow Sled with 10 hp outboard motor	CREATED BY D. Mosquera	APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Guard	FILE NAME oho_sso_Guard.ipn			POS 2.0
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development	DOC. TYPE Assembly	MATERIAL		QUANTITY 1
OHO e.V.	LICENCE CC-BY-SA 4.0	SCALE 1:10		SHEET 18 /47

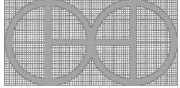


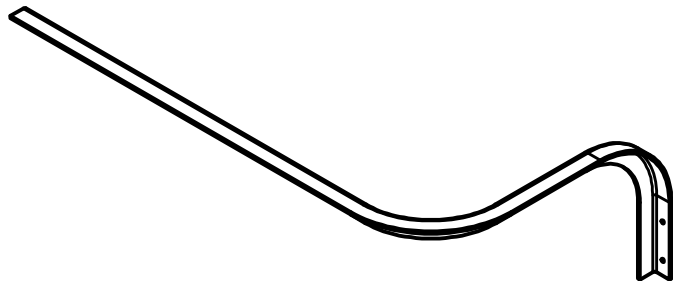
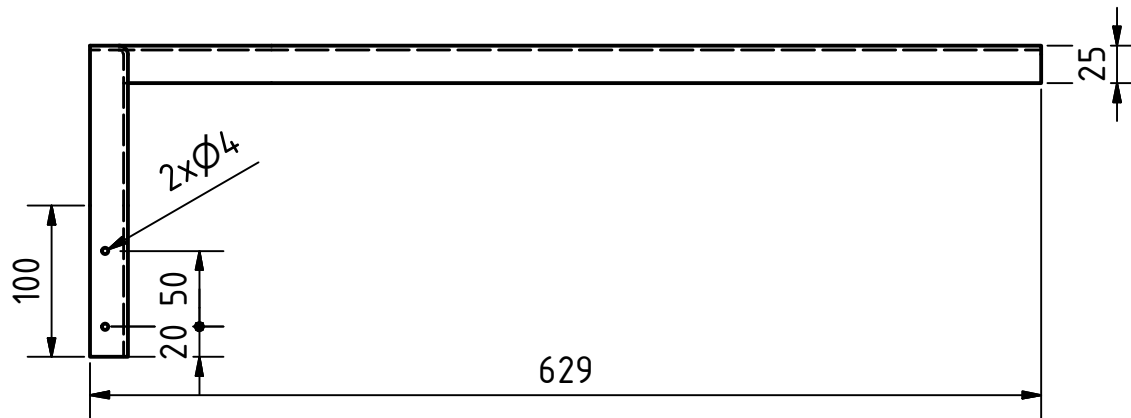
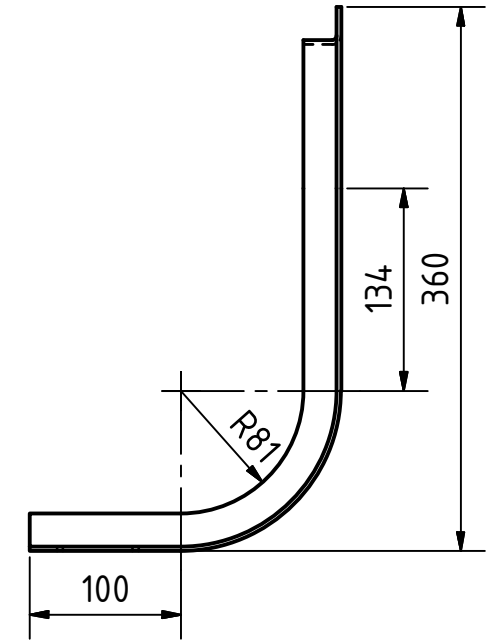
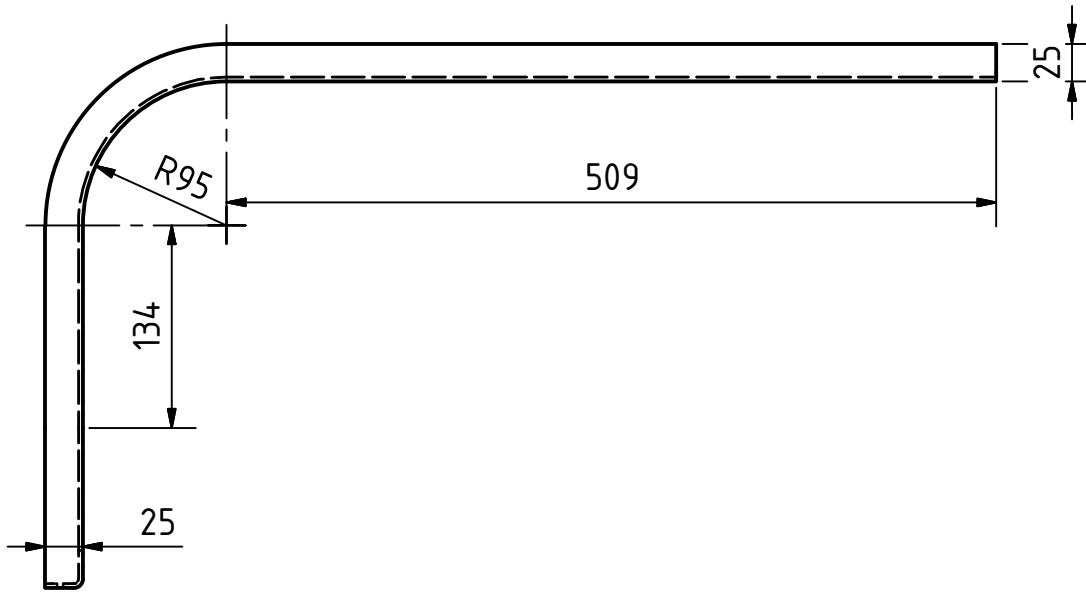
PROJECT Snow Sled with 10 hp outboard motor	CREATED BY D. Mosquera	APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Steel angle superior izq	FILE NAME oho_sso_steel-angle-sup-izq.ipt			POS 2.1
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development		DOC. TYPE Part	MATERIAL ASTM A36	QUANTITY 1
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE 1:5	SHEET 19 /47

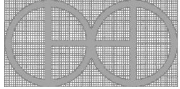


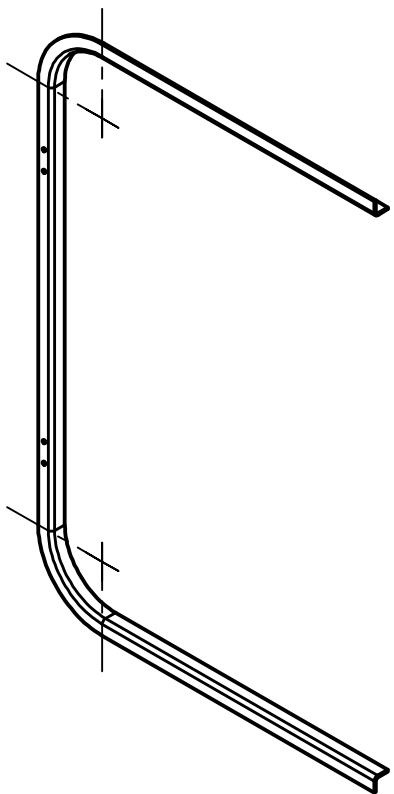
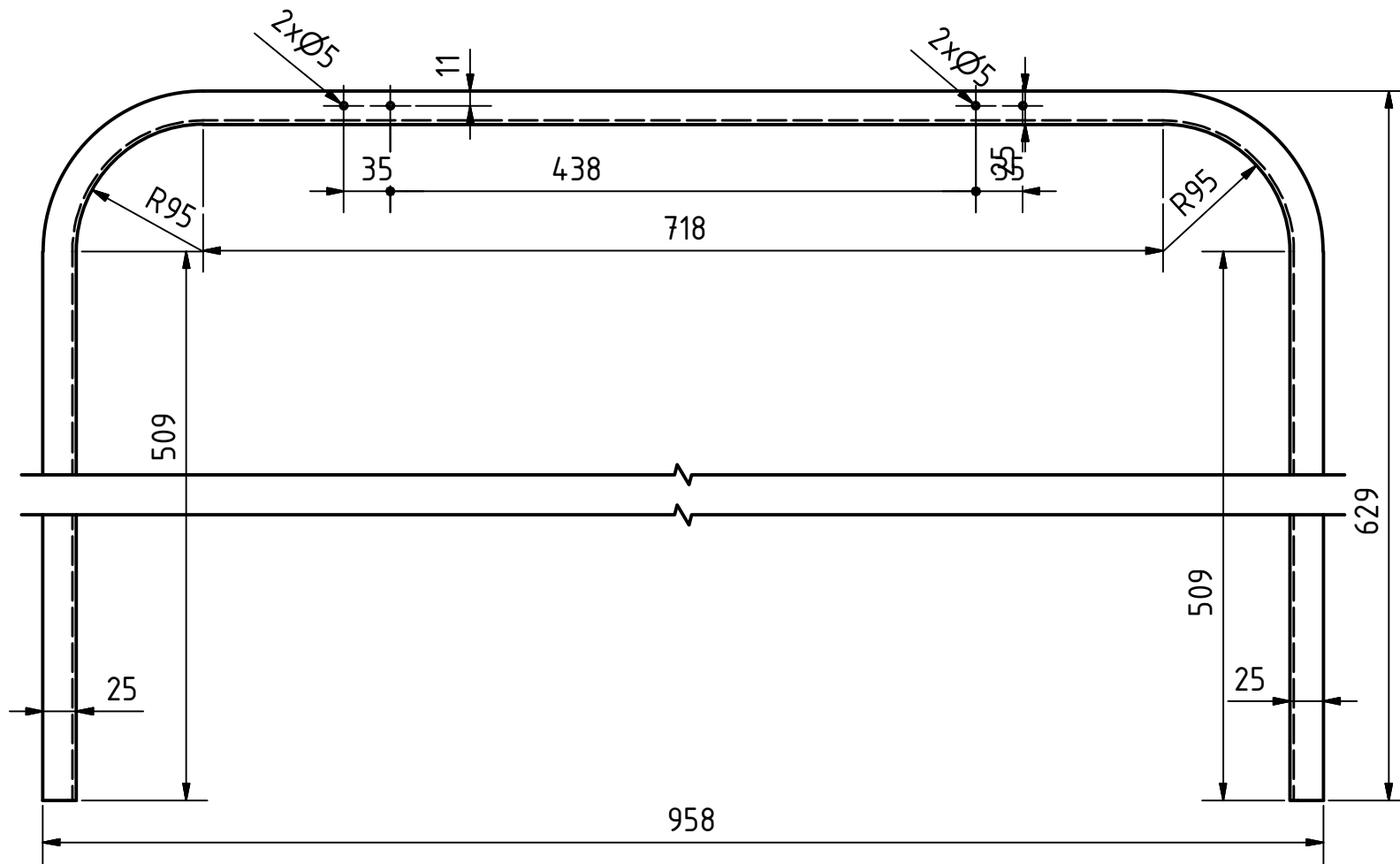
PROJECT Snow Sled with 10 hp outboard motor	CREATED BY D. Mosquera	APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Steel angle superior derecho	FILE NAME oho_sso_steel-angle-sup-der.ipt			POS 2.2
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development		DOC. TYPE Part	MATERIAL ASTM A36	QUANTITY 1
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE 1:5	SHEET 20 /47

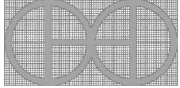


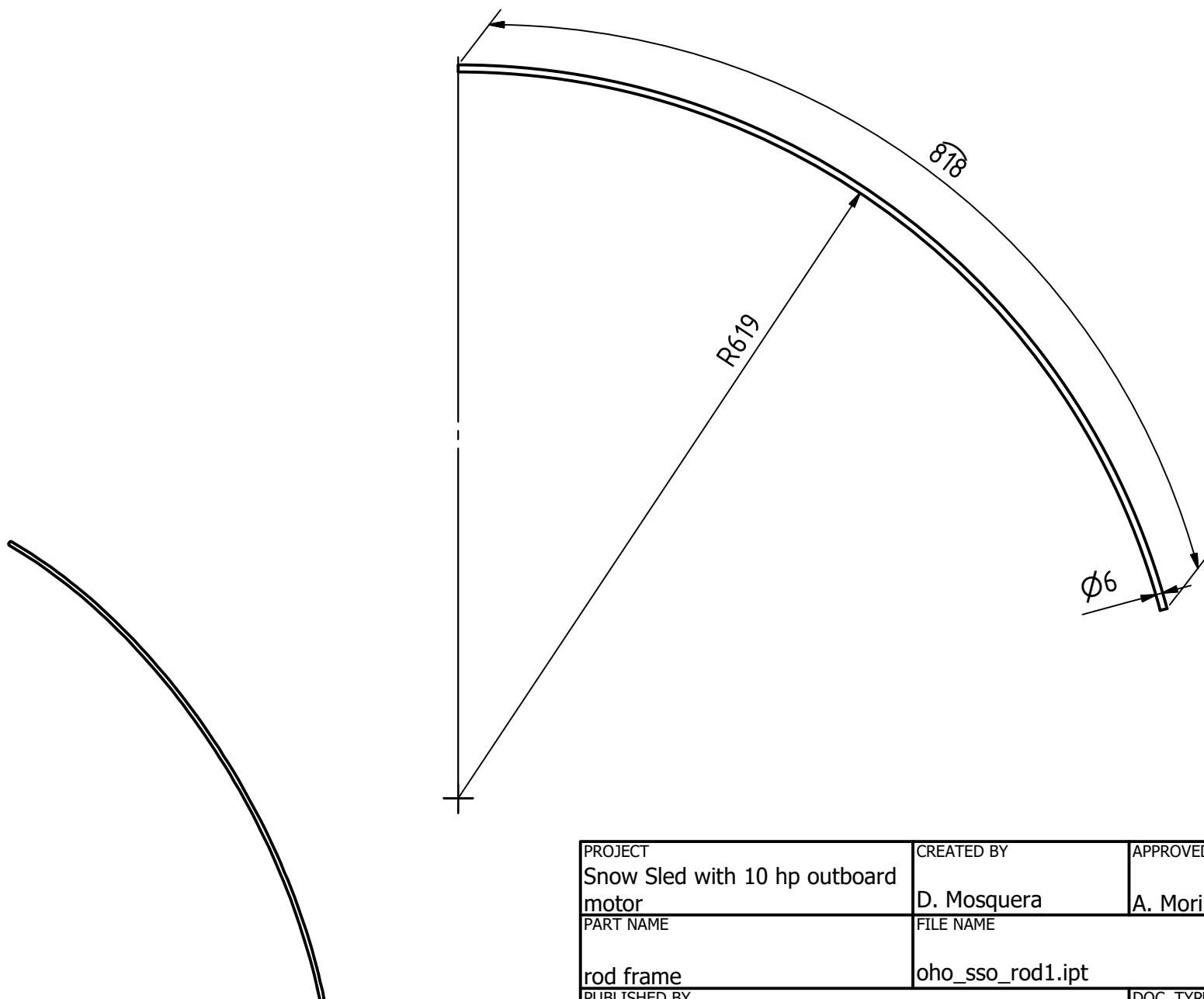
PROJECT Snow Sled with 10 hp outboard motor	CREATED BY D. Mosquera	APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Steel angle medio izquierdo	FILE NAME oho_sso_steel-angle-medio-izq.ipt			POS 2.3
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development		DOC. TYPE Part	MATERIAL ASTM A36	QUANTITY 1
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE 1:5	SHEET 21 /47

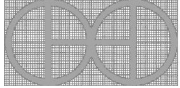


PROJECT Snow Sled with 10 hp outboard motor	CREATED BY D. Mosquera	APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Steel angle medio derecho	FILE NAME oho_sso_steel-angle-medio-der.ipt			POS 2.4
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development		DOC. TYPE Part	MATERIAL ASTM A36	QUANTITY 1
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE 1:5	SHEET 22 /47

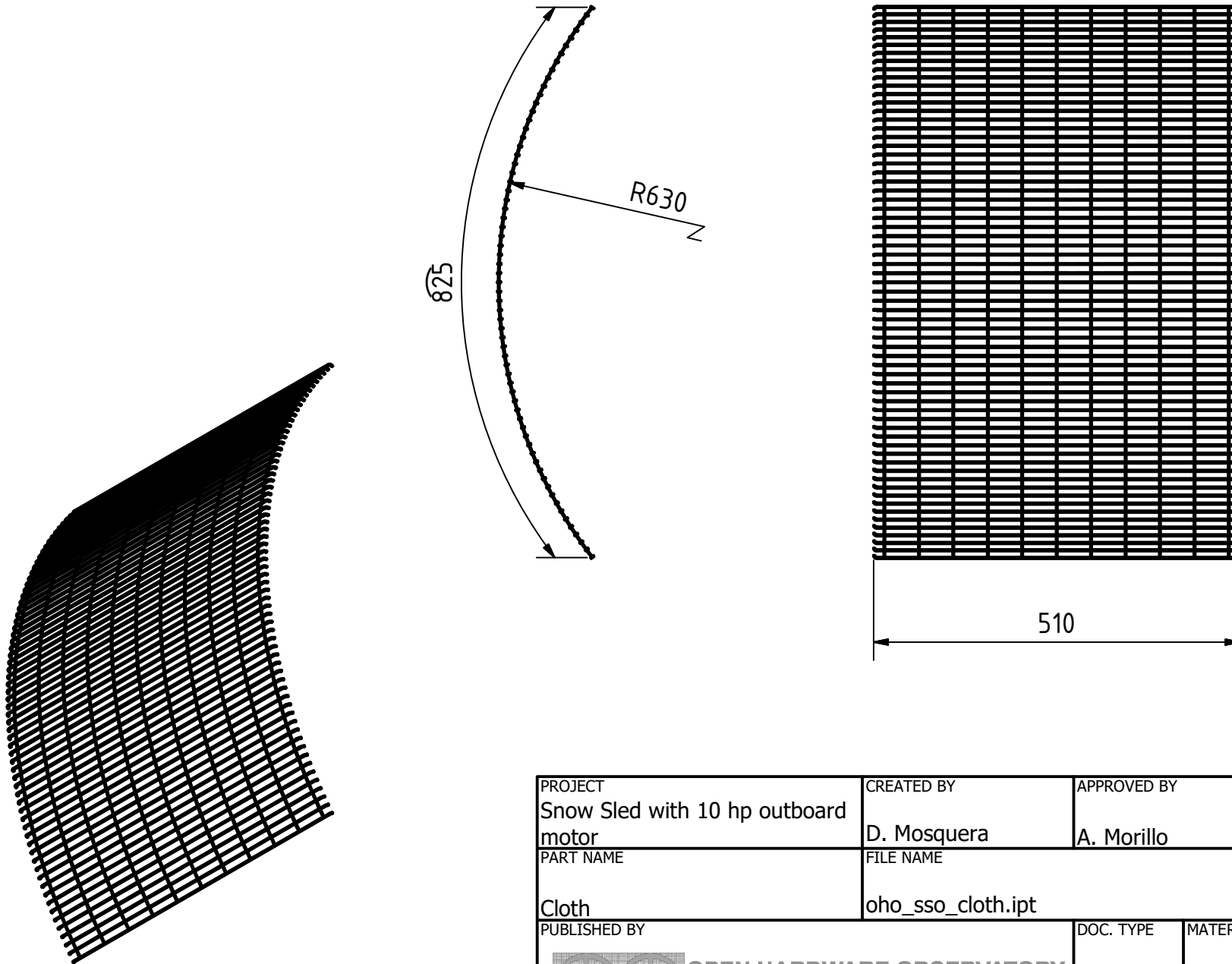


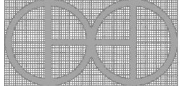
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Steel angle inferior	oho_sso_steel-angle-inf.ipt			2.5
PUBLISHED BY	DOC. TYPE	MATERIAL		QUANTITY
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	ASTM A36		1
	LICENCE	SCALE		SHEET
OHO e.V.	CC-BY-SA 4.0	1:5		23 /47

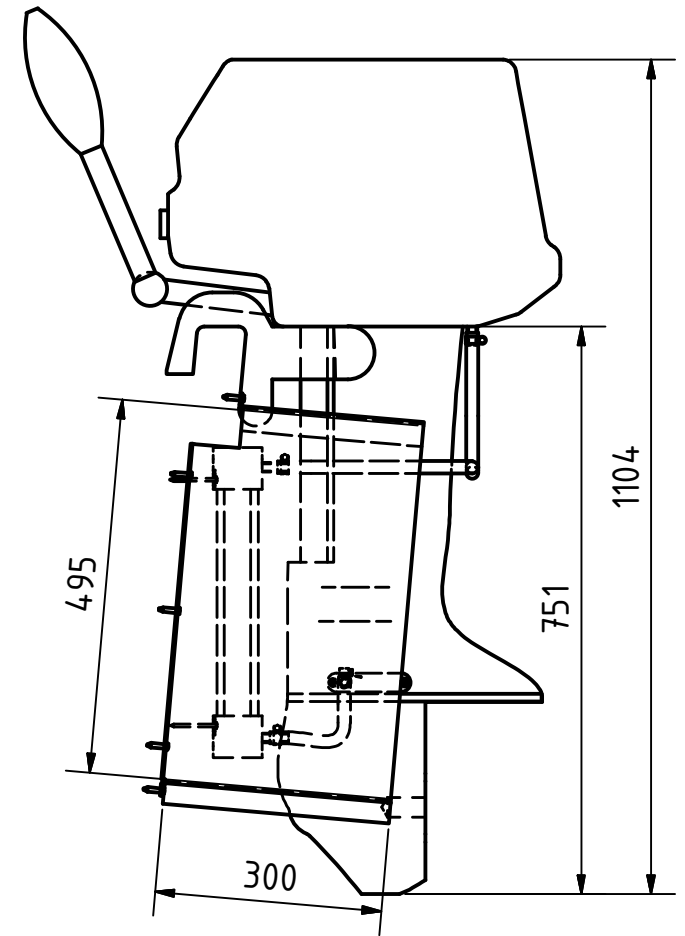
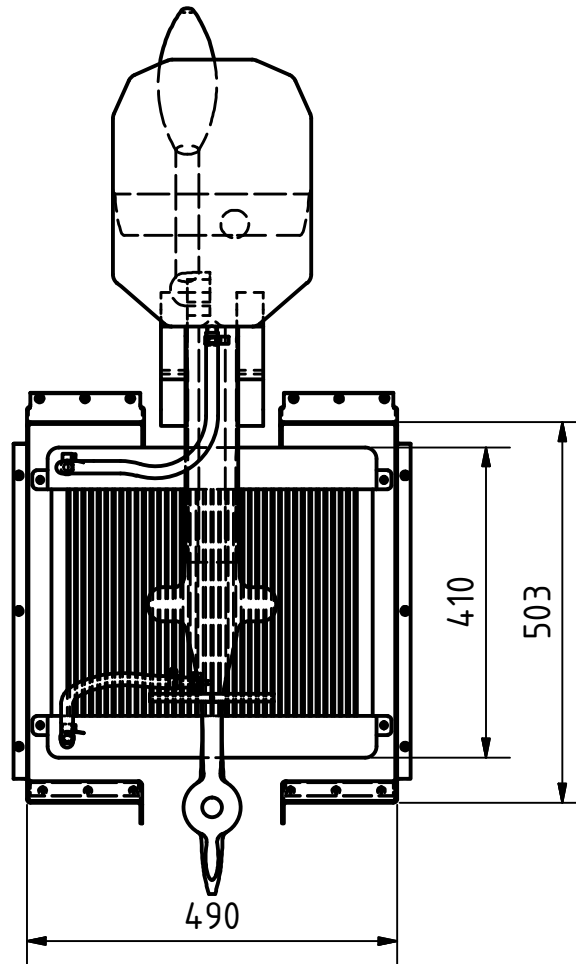
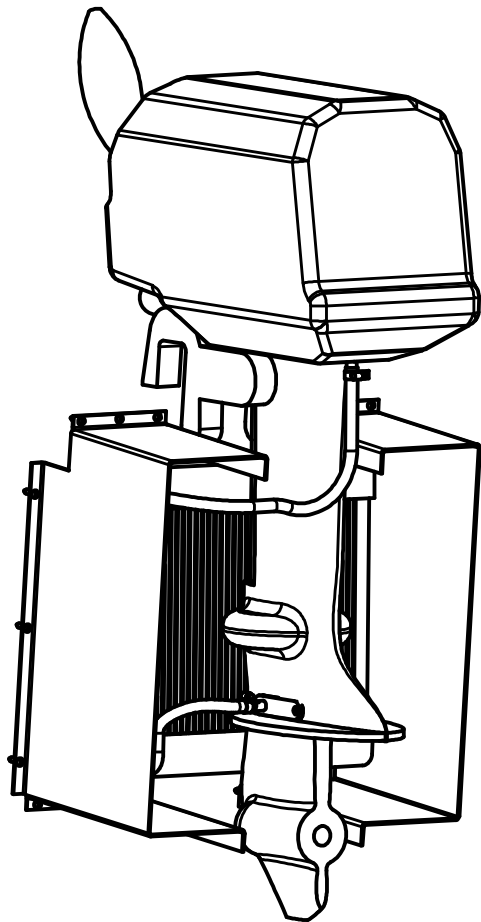


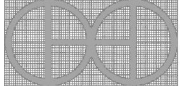
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
rod frame	oho_sso_rod1.ipt			2.6
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	Steel C45	4	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:5	24 /47	

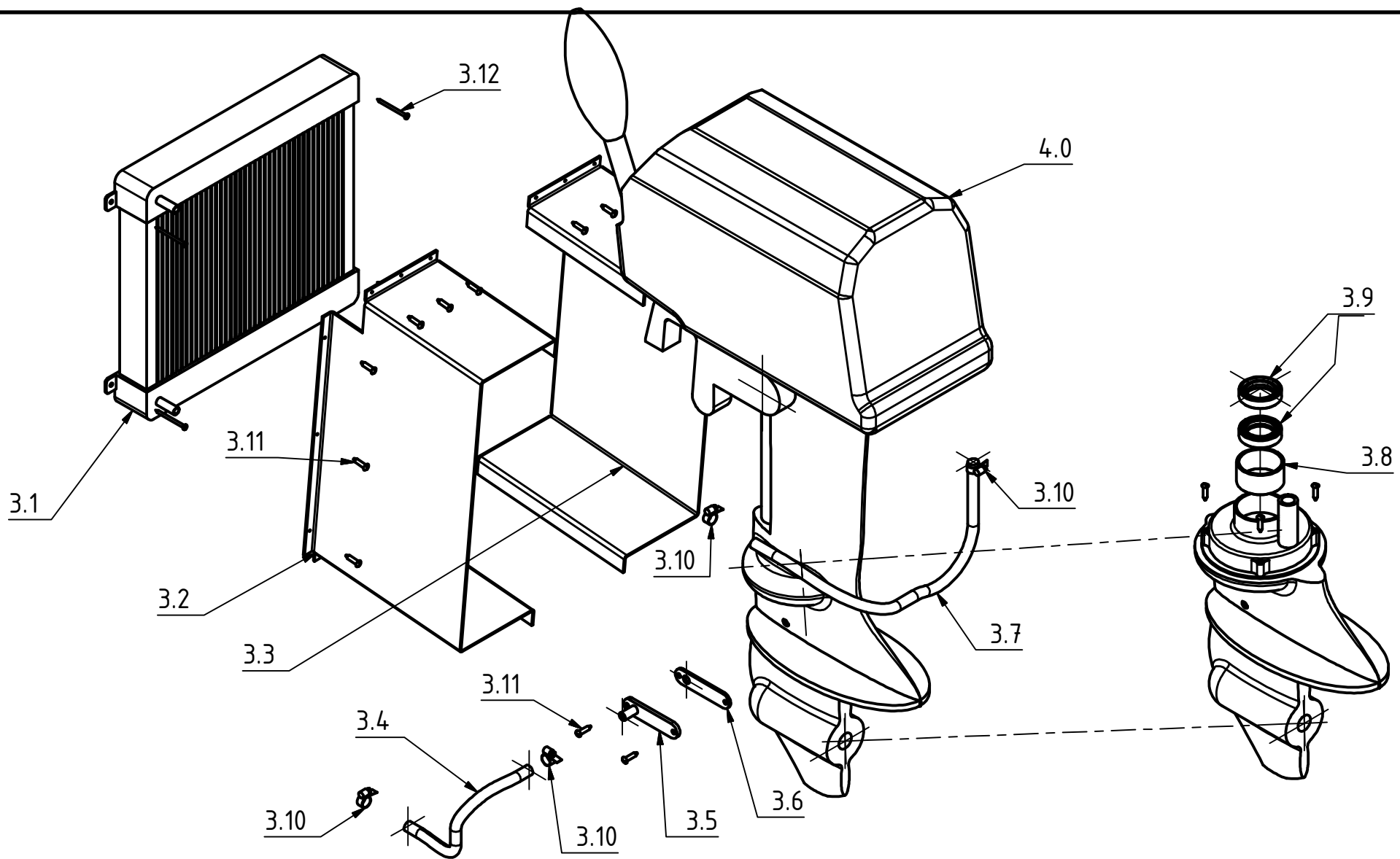


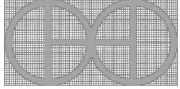


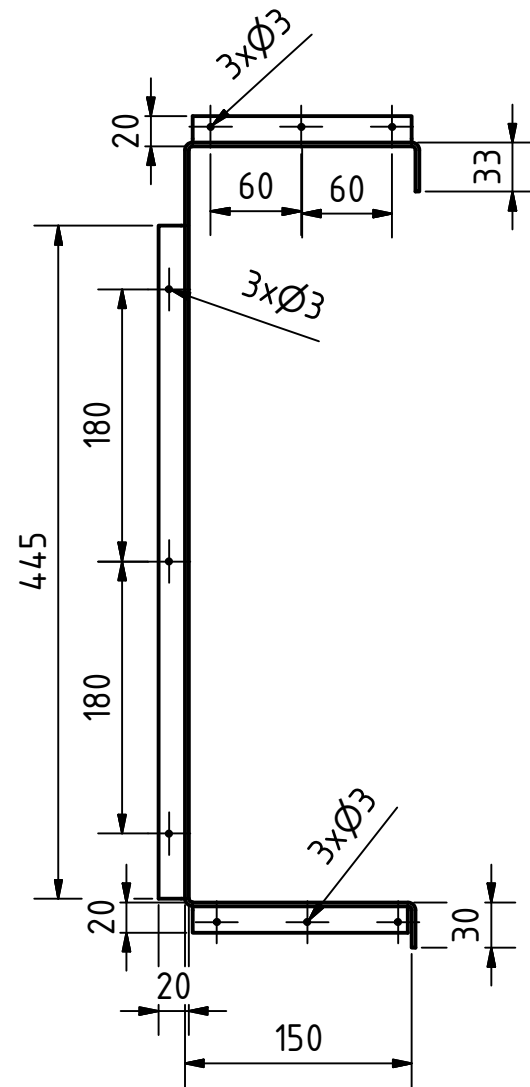
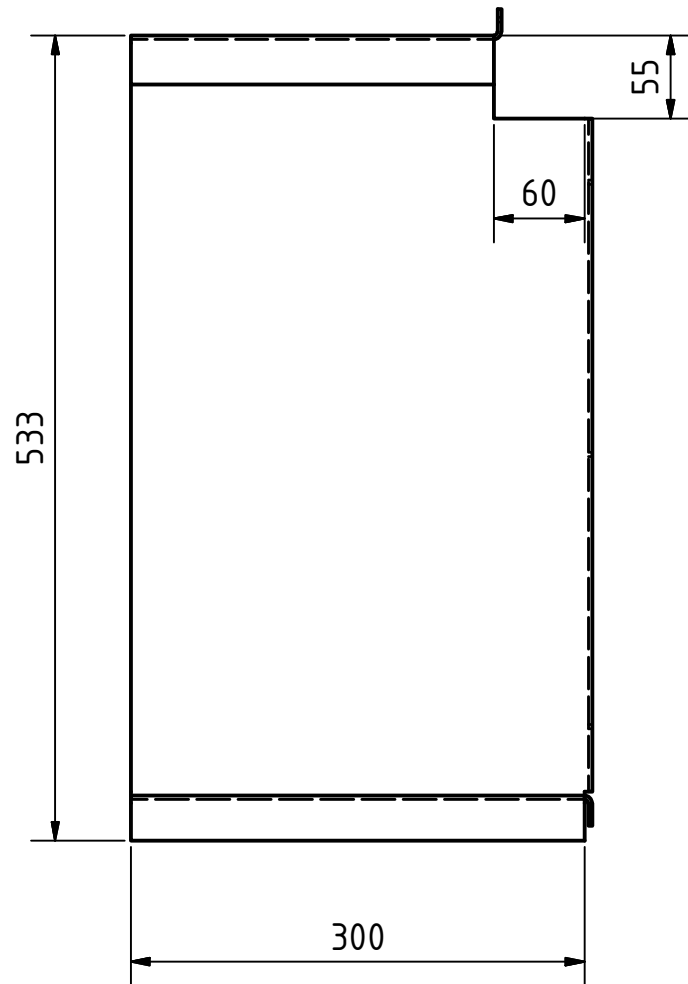
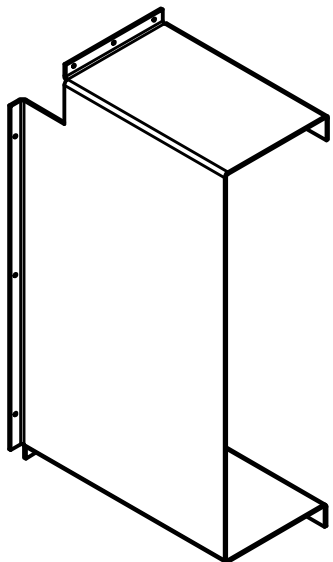
PROJECT Snow Sled with 10 hp outboard motor	CREATED BY D. Mosquera	APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Cloth	FILE NAME oho_sso_cloth.ipt			POS 2.7
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development		DOC. TYPE Part	MATERIAL Steel C45	QUANTITY 2
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE 1:8	SHEET 25 /47

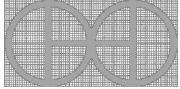


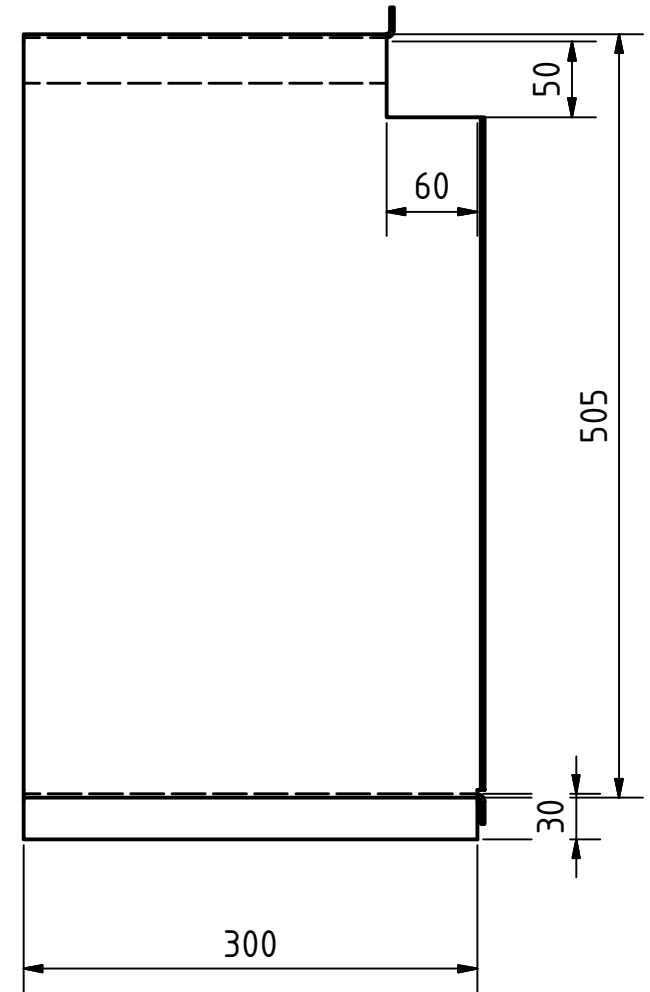
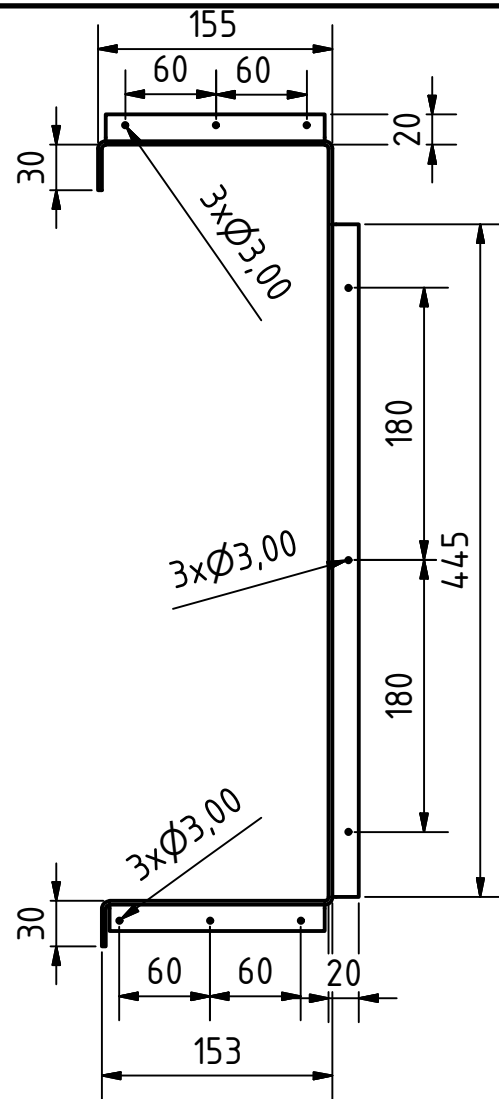
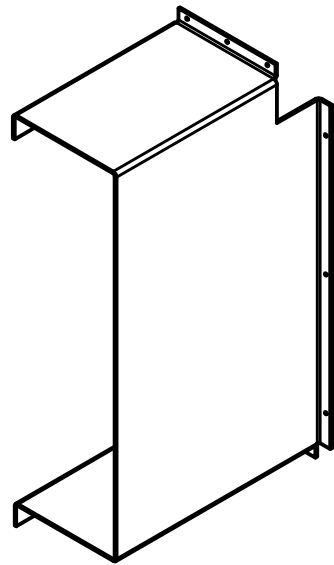
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Cooler outboard motor	oho_sso_cooler-outboard-motor1.iam			3.0
PUBLISHED BY	DOC. TYPE	MATERIAL		QUANTITY
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Assembly			1
	LICENCE	SCALE		SHEET
OHO e.V.	CC-BY-SA 4.0	1:16		26 /47

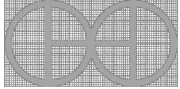


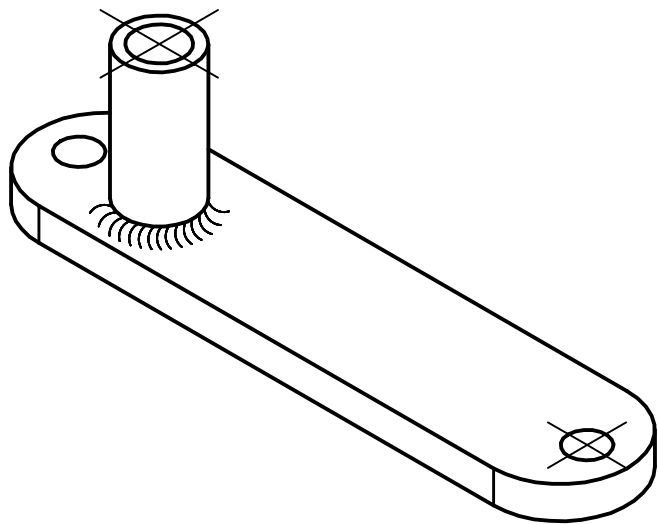
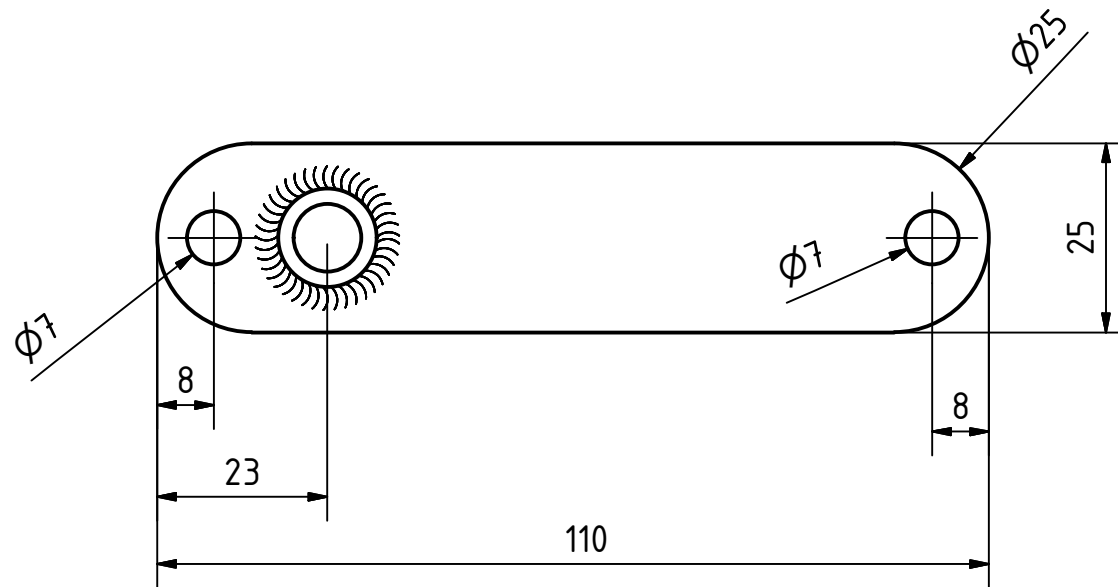
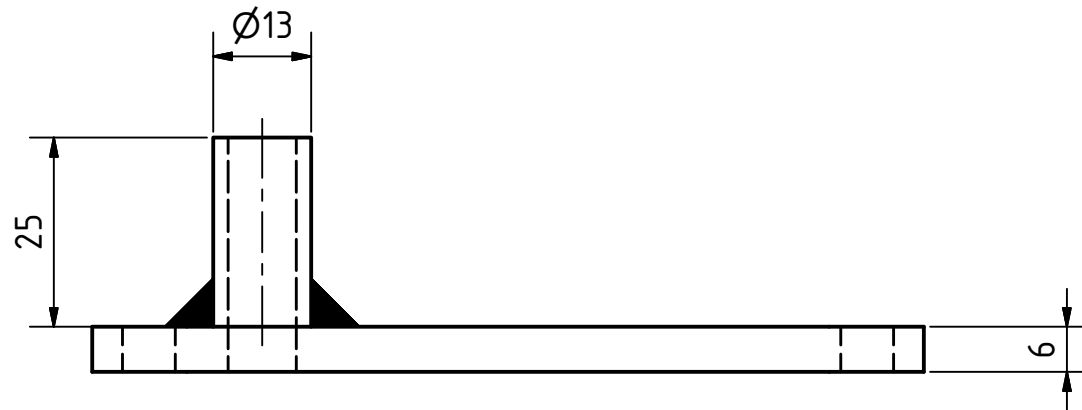
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Cooler outboard motor	oho_sso_cooler-outboard-motor1.ipn			3.0
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Assembly		1	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:8	27 /47	




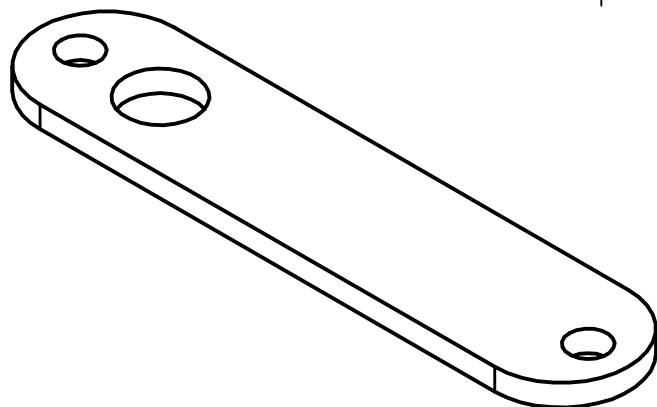
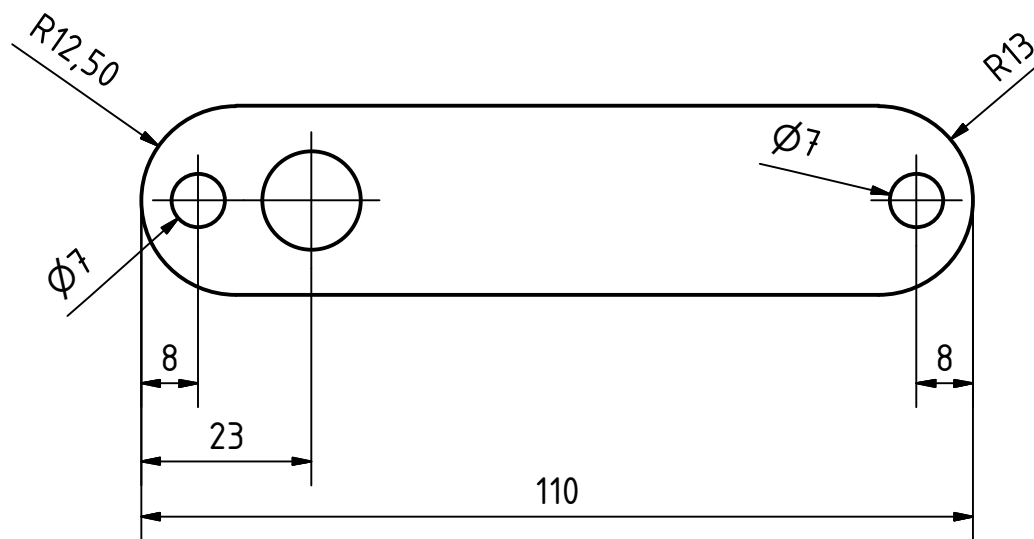
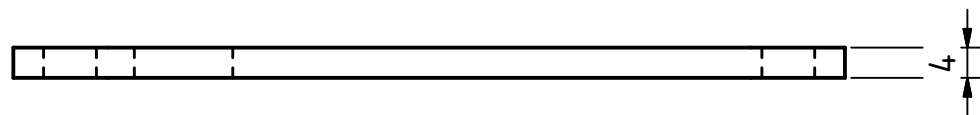
PROJECT Snow Sled with 10 hp outboard motor	CREATED BY D. Mosquera	APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Sheetmetal duct izquierda	FILE NAME oho_sso_sheetmetal-duct.ipt			POS 3.2
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development	DOC. TYPE Part	MATERIAL Steel C45	QUANTITY 1	
OHO e.V.	LICENCE CC-BY-SA 4.0	SCALE 1:5	SHEET 28 /47	




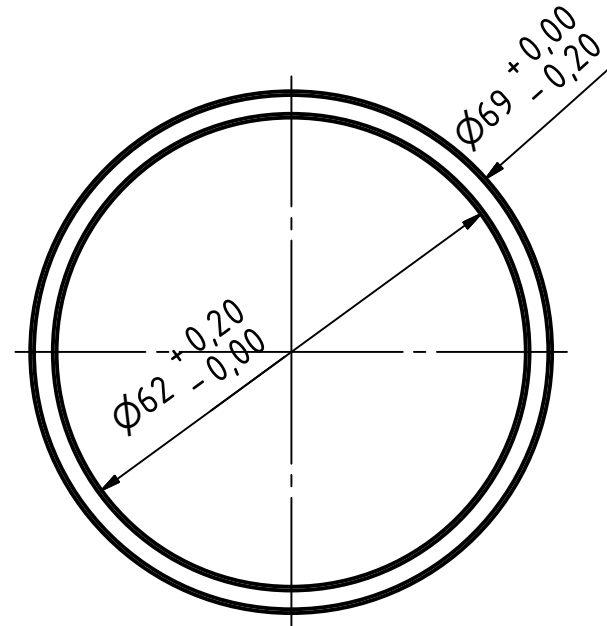
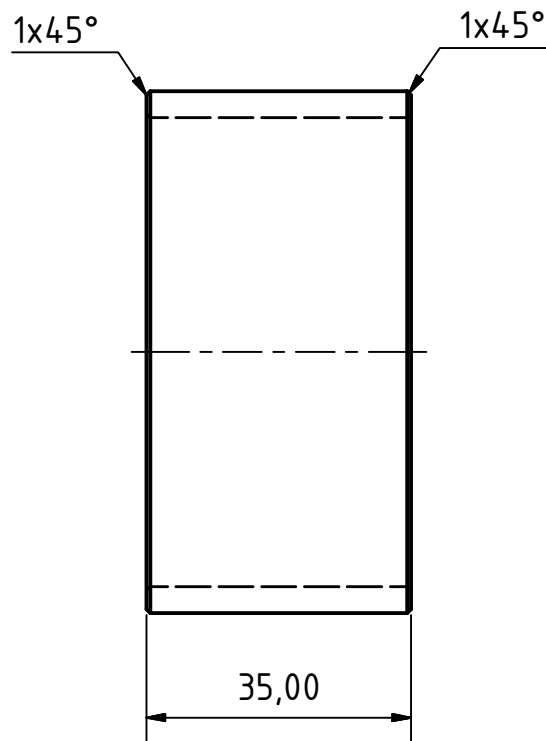
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Sheetmeta duct derecha	oho_sso_sheetmetal-duct-der.ipt			3.3
PUBLISHED BY	DOC. TYPE	MATERIAL	QUANTITY	
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	Steel C45	1	
	LICENCE	SCALE	SHEET	
OHO e.V.	CC-BY-SA 4.0	1:5	29 /47	

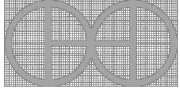


PROJECT Snow Sled with 10 hp outboard motor	CREATED BY D. Mosquera	APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Steel plate	FILE NAME oho_sso_steel-plate.ipt			POS 3.5
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development		DOC. TYPE Part	MATERIAL Steel C45	QUANTITY 1
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE 1:1	SHEET 30 /47

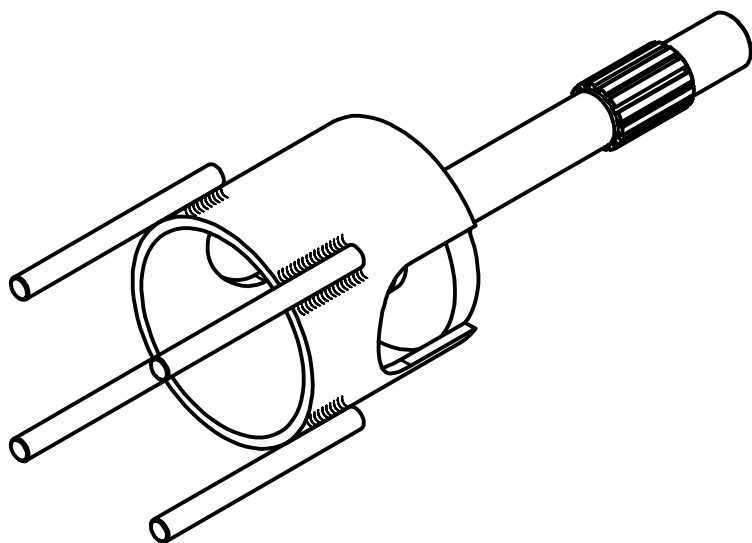
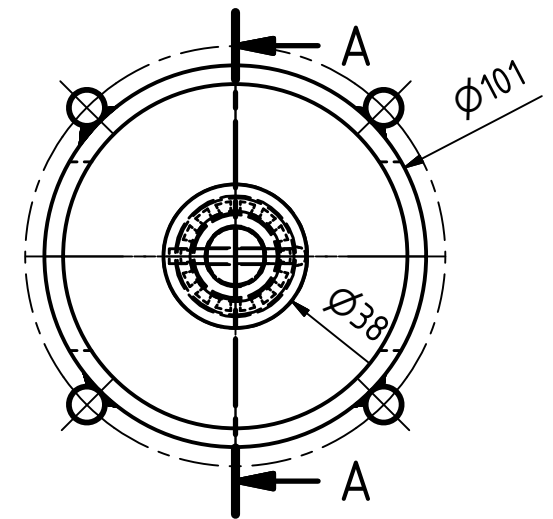
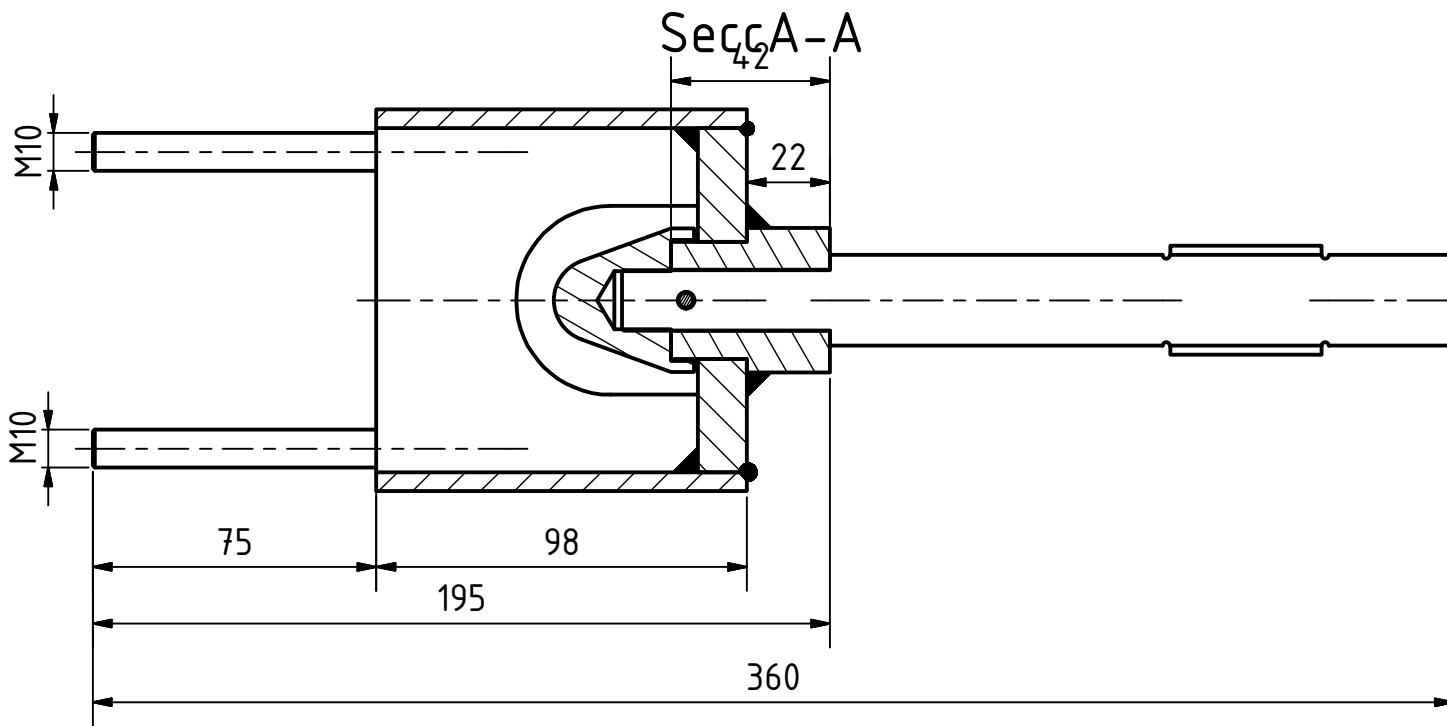


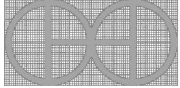
PROJECT Snow Sled with 10 hp outboard motor	CREATED BY D. Mosquera	APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Gasket	FILE NAME oho_sso_gasket.ipt			POS 3.6
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development	DOC. TYPE Part	MATERIAL Rubber		QUANTITY 1
OHO e.V.	LICENCE CC-BY-SA 4.0	SCALE 1:1	SHEET 31 /47	

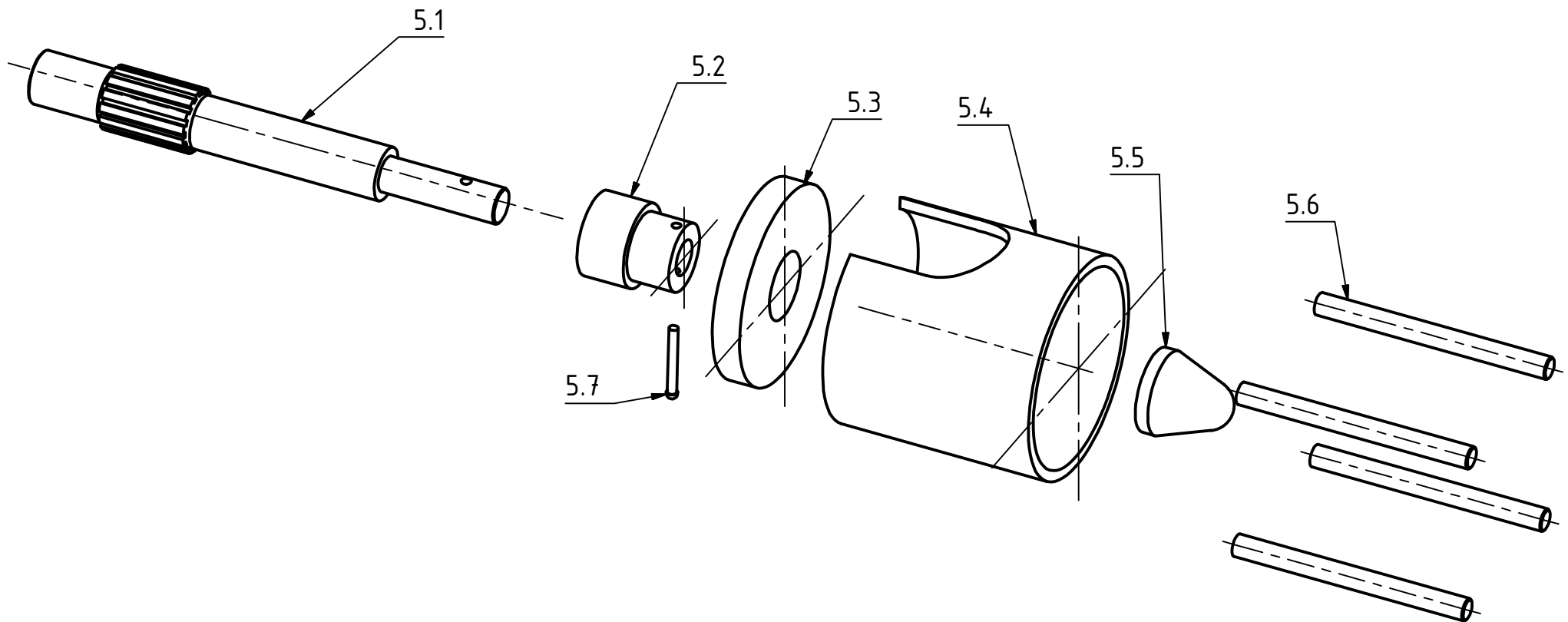


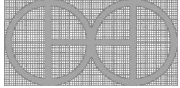
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Bushing Seals	oho_sso_bushing40.ipt			3.8
PUBLISHED BY	DOC. TYPE	MATERIAL		QUANTITY
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	Aluminum		1
	LICENCE	SCALE		SHEET
OHO e.V.	CC-BY-SA 4.0	1:1		32 /47

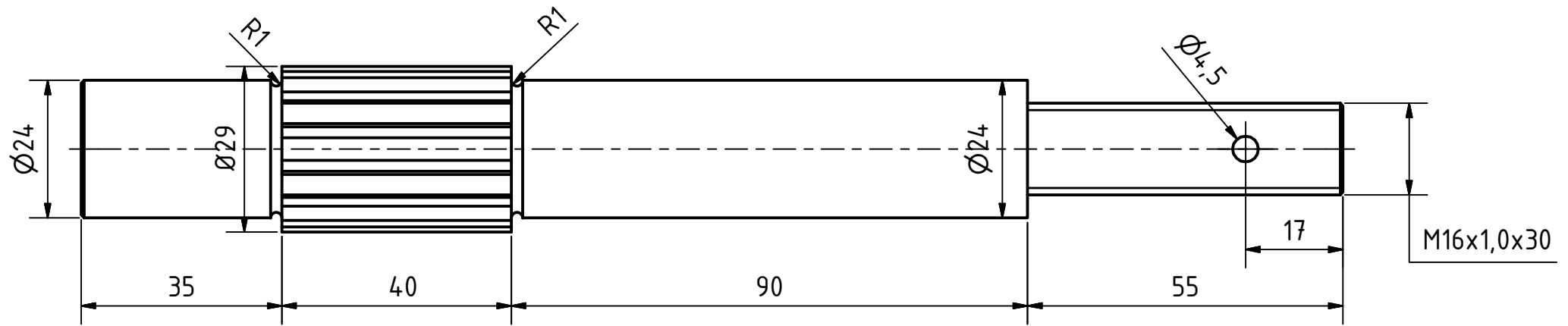


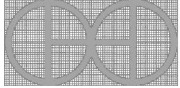


PROJECT Snow Sled with 10 hp outboard motor	CREATED BY D. Mosquera	APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Propeller hub 1	FILE NAME oho_sso_propeller-hub-1.iam			POS 5.0
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development		DOC. TYPE Assembly	MATERIAL	QUANTITY 1
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE 1:2	SHEET 33 /47

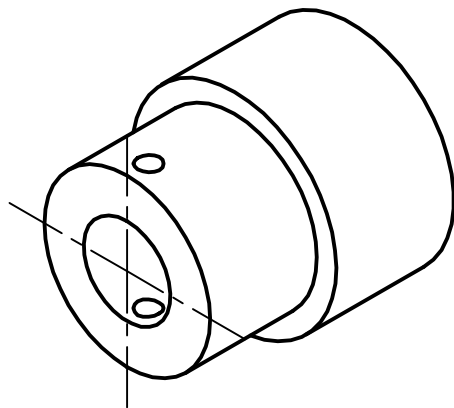
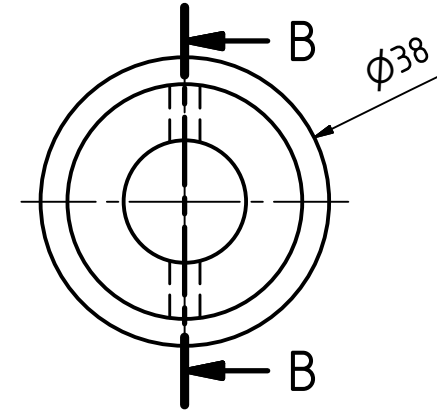
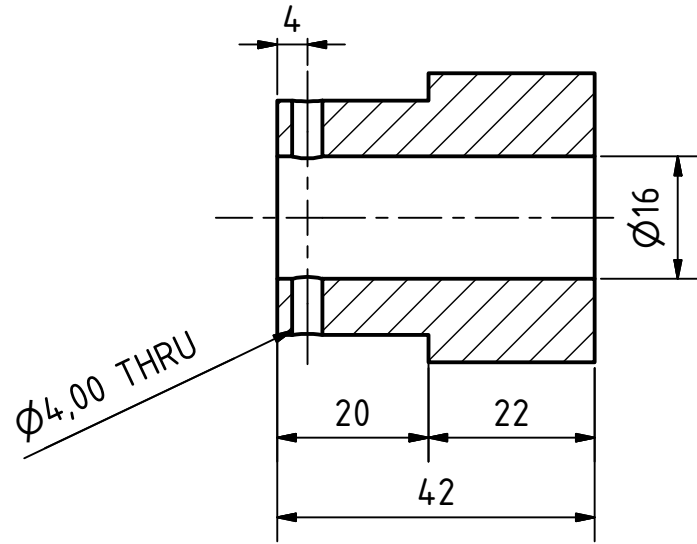


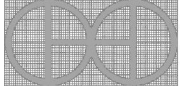
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Propeller hub1	oho_sso_propeller-hub-1.ipn			5.0
PUBLISHED BY	DOC. TYPE	MATERIAL		QUANTITY
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Assembly			1
	LICENCE	SCALE		SHEET
OHO e.V.	CC-BY-SA 4.0	1:2,5		34 /47

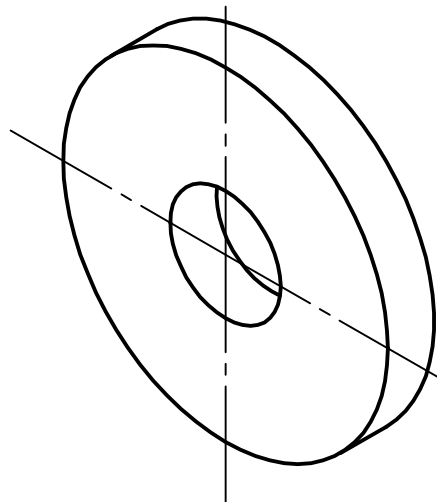
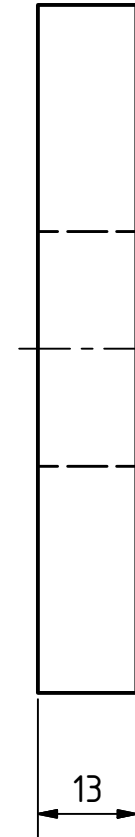
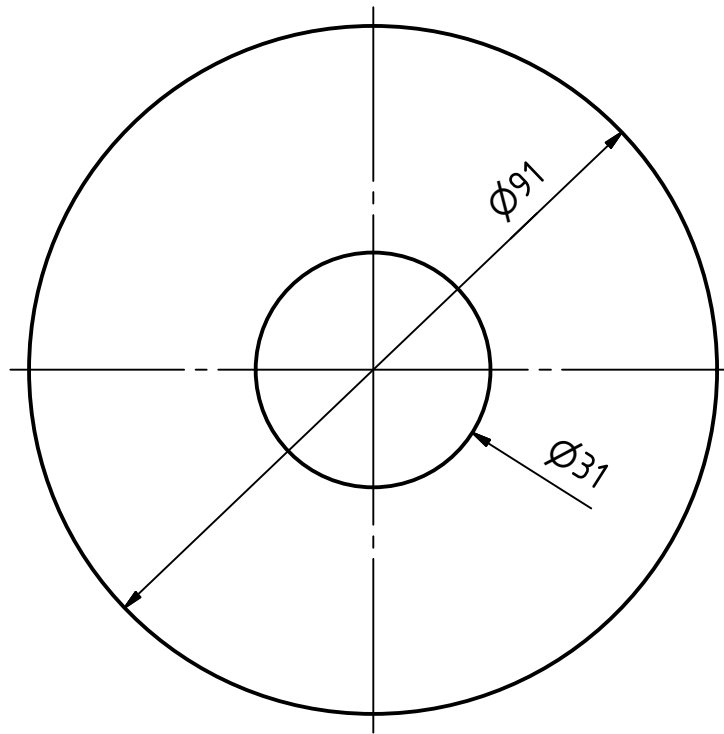


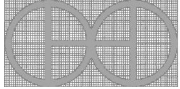
PROJECT Snow Sled with 10 hp outboard motor	CREATED BY D. Mosquera	APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Threaded shaft	FILE NAME oho_sso_shaft.ipt			POS 5.1
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development		DOC. TYPE Part	MATERIAL Steel AISI-304	QUANTITY 1
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE 1:1	SHEET 35 /47

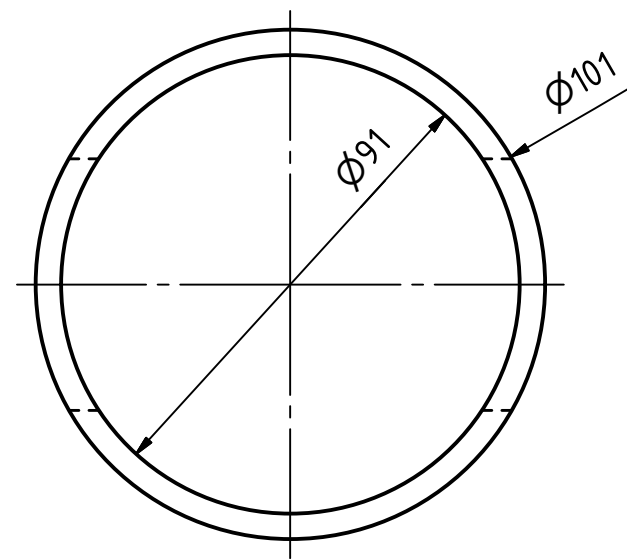
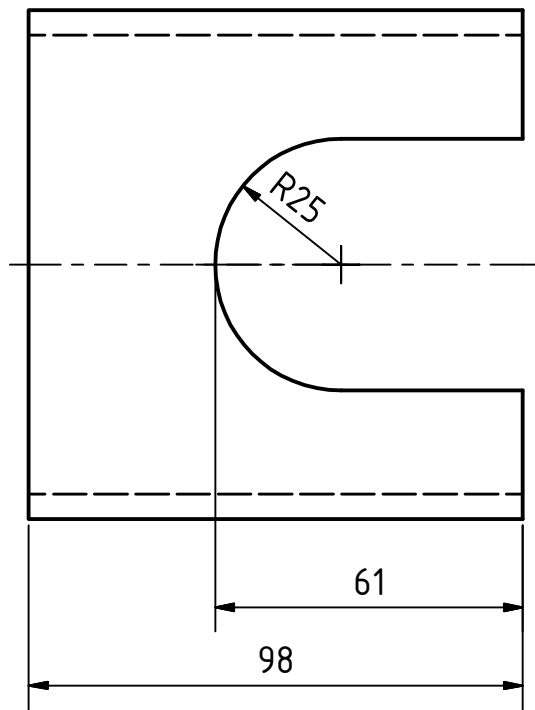
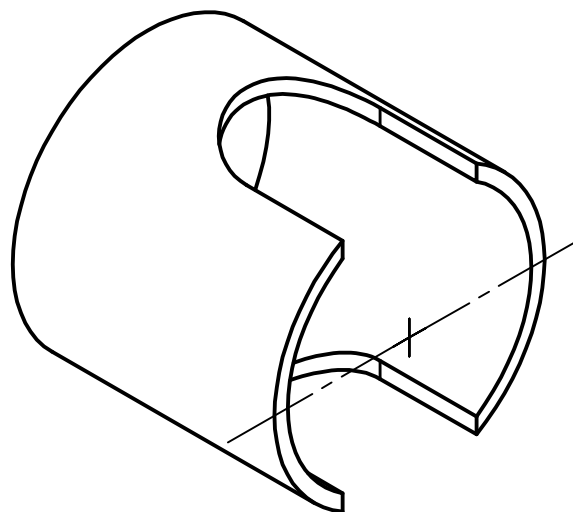
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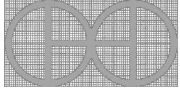


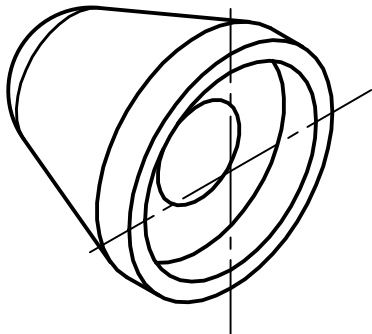
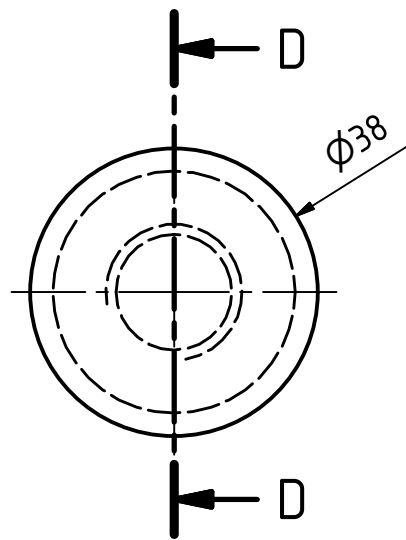
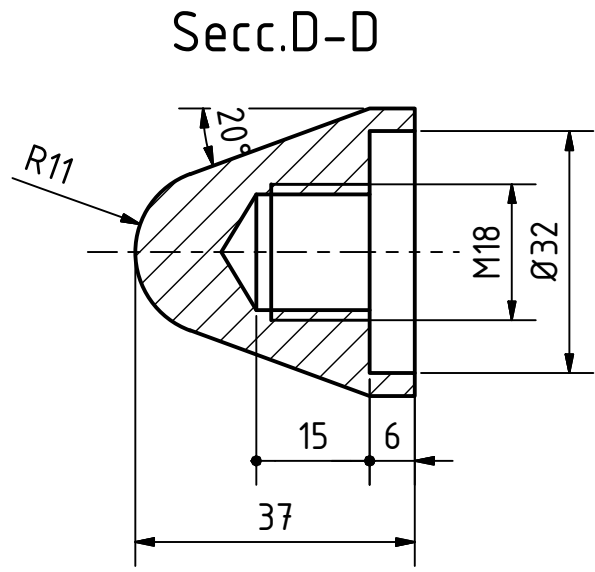
PROJECT Snow Sled with 10 hp outboard motor	CREATED BY D. Mosquera	APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Cube	FILE NAME oho_sso_cube.ipt			POS 5.2
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development		DOC. TYPE Part	MATERIAL Steel C45	QUANTITY 1
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE 1:1	SHEET 36 /47

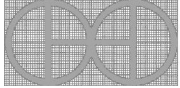


PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Plate cube	oho_sso_plate-cube.ipt			5.3
PUBLISHED BY	DOC. TYPE	MATERIAL		QUANTITY
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	Steel C45		1
	LICENCE	SCALE		SHEET
OHO e.V.	CC-BY-SA 4.0	1:1		37 /47

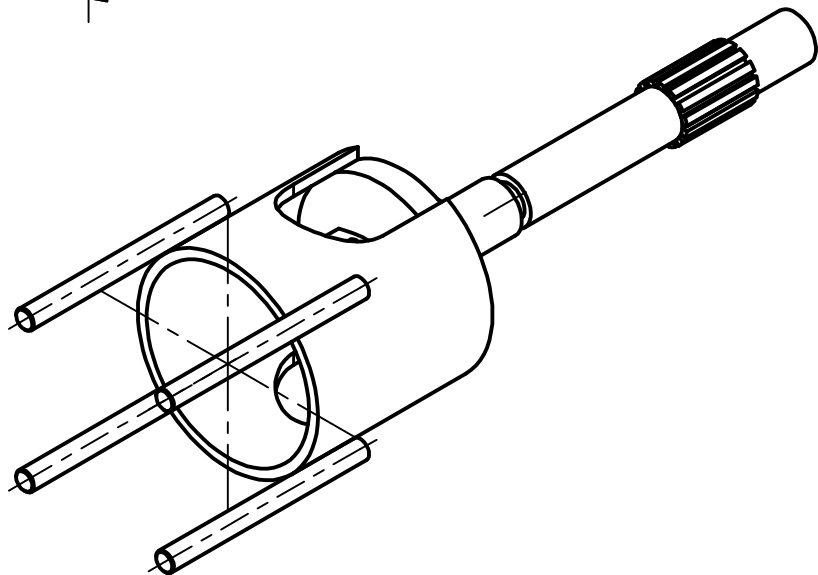
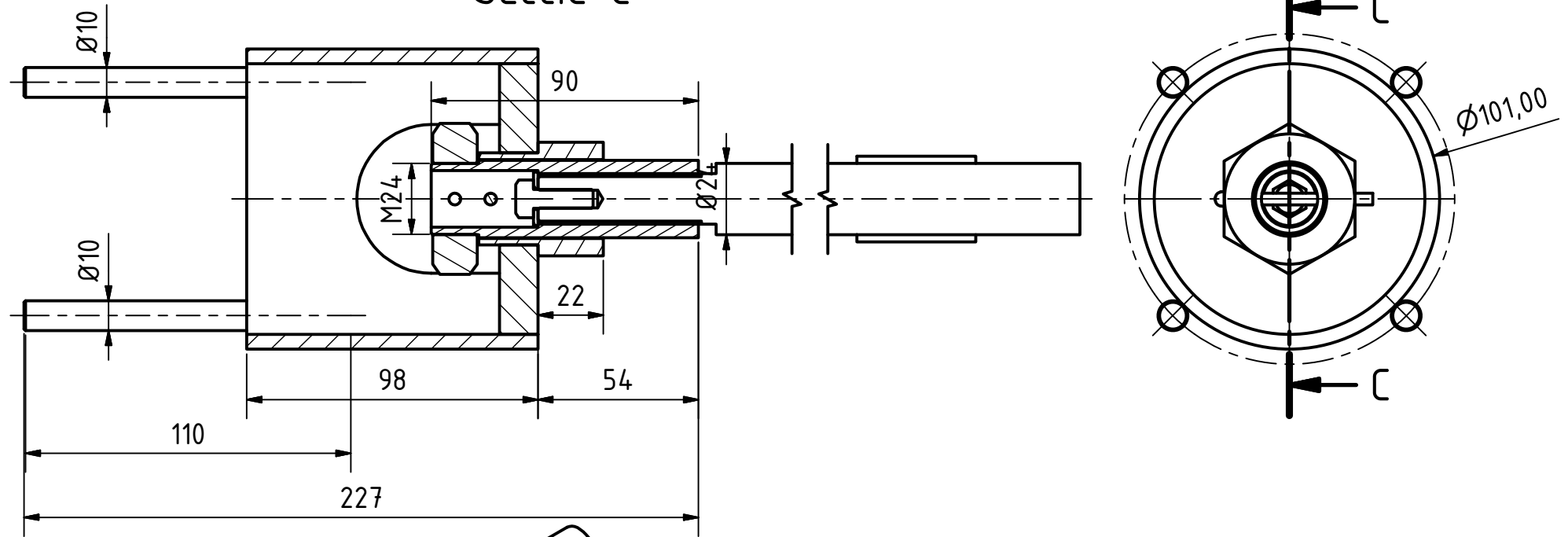


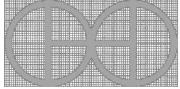
PROJECT Snow Sled with 10 hp outboard motor	CREATED BY D. Mosquera	APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Hub	FILE NAME oho_sso_hub.ipt			POS 5.4
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development		DOC. TYPE Part	MATERIAL Steel C45	QUANTITY 1
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE 1:1,5	SHEET 38 /47



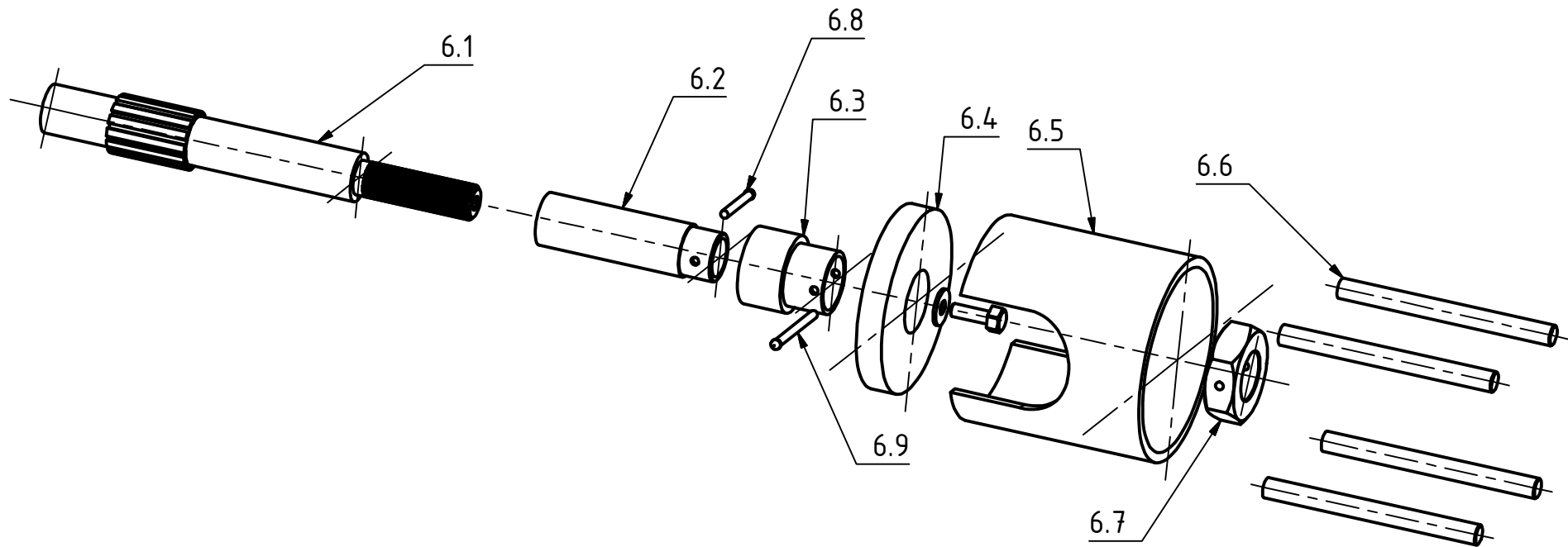
PROJECT Snow Sled with 10 hp outboard motor	CREATED BY D. Mosquera	APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Nut tope	FILE NAME oho_sso_nut-tope.ipt			POS 5.5
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development		DOC. TYPE Part	MATERIAL Steel C45	QUANTITY 1
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE 1:1	SHEET 39 /47

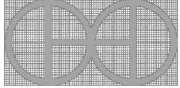
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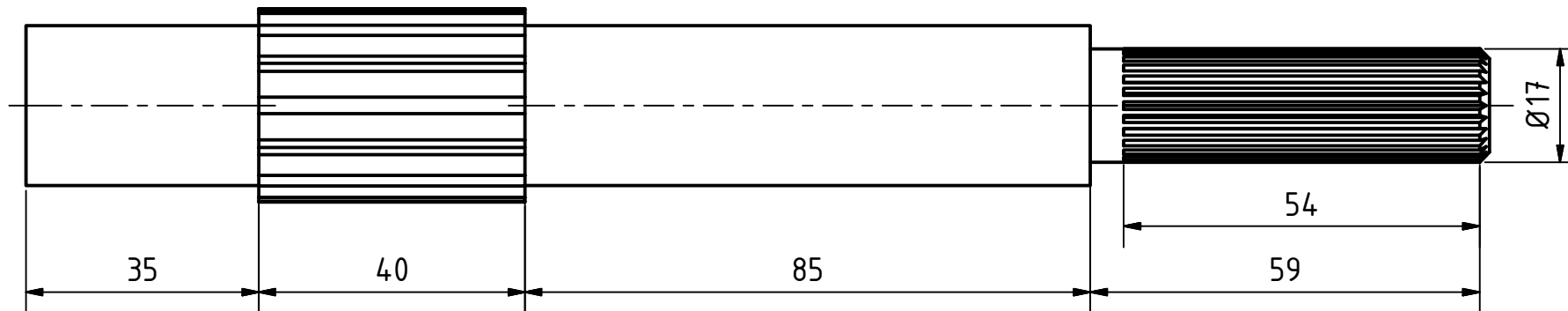


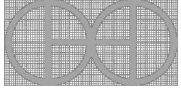
PROJECT Snow Sled with 10 hp outboard motor	CREATED BY D. Mosquera	APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Propeller hub 2	FILE NAME oho_sso_propeller-hub-2.iam			POS 6.0
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development		DOC. TYPE Assembly	MATERIAL	QUANTITY 1
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE 1:2	SHEET 40 /47

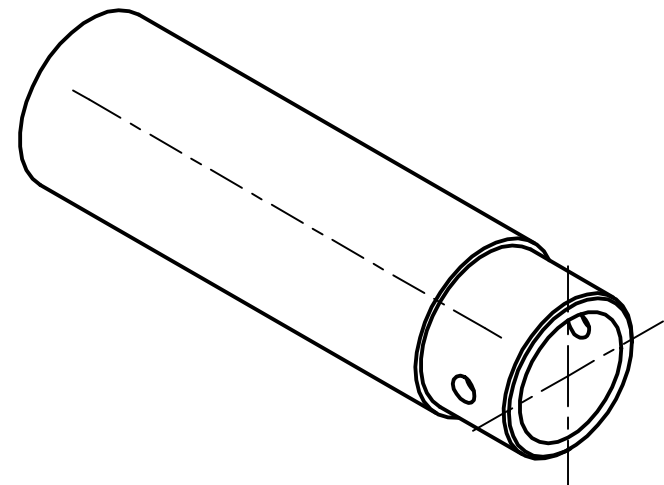
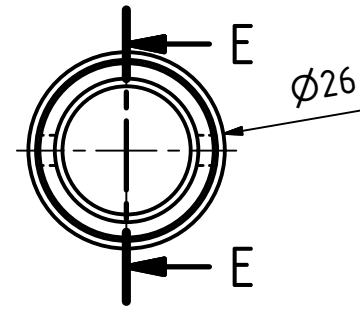
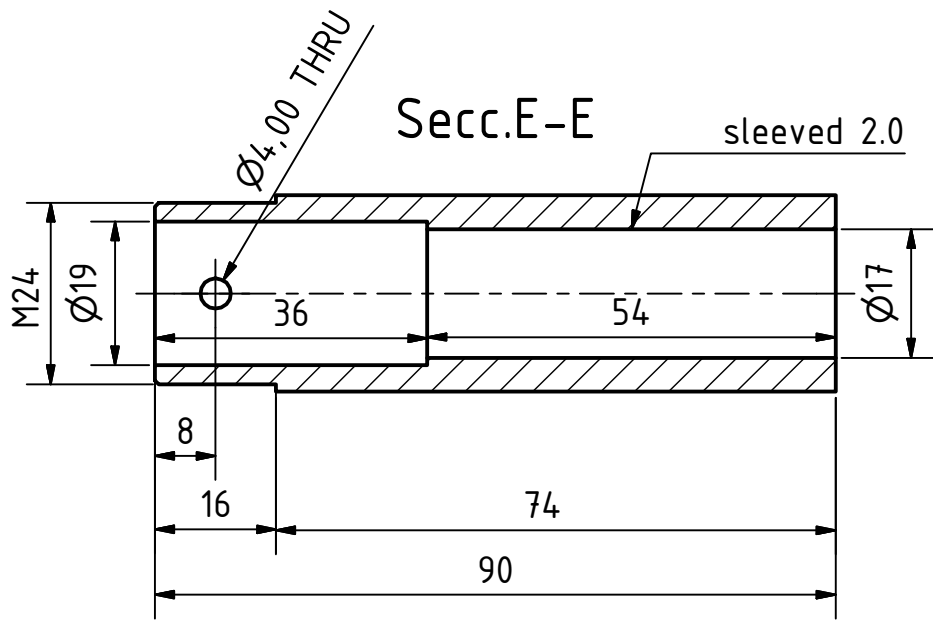


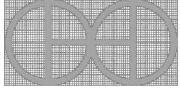


PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Propeller hub 2	oho_sso_propeller-hub-2.ipn			6.0
PUBLISHED BY	DOC. TYPE	MATERIAL		QUANTITY
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Assembly			1
	LICENCE	SCALE		SHEET
OHO e.V.	CC-BY-SA 4.0	1:2,5		41 /47

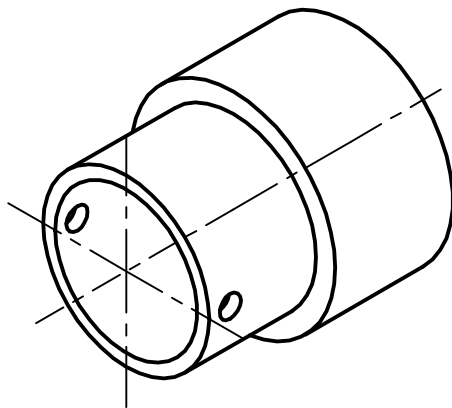
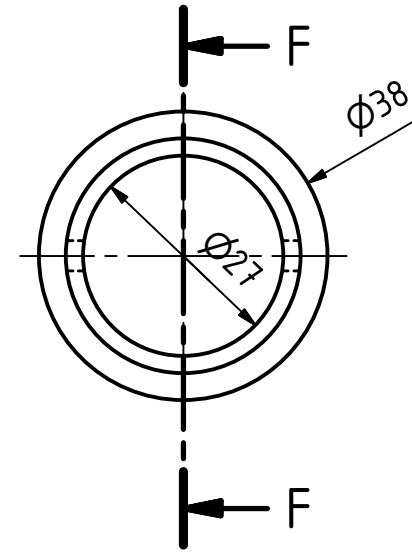
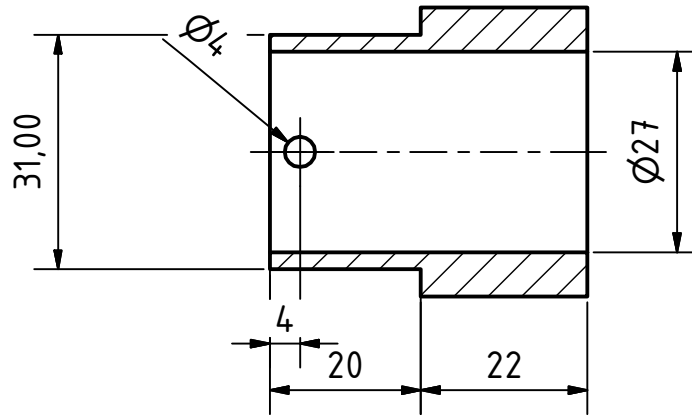


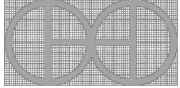
PROJECT Snow Sled with 10 hp outboard motor	CREATED BY D. Mosquera	APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Splined shaft	FILE NAME oho_sso_splined-shaft.ipt			POS 6.1
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development		DOC. TYPE Part	MATERIAL AISI C-304	QUANTITY 1
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE 1:1	SHEET 42 /47

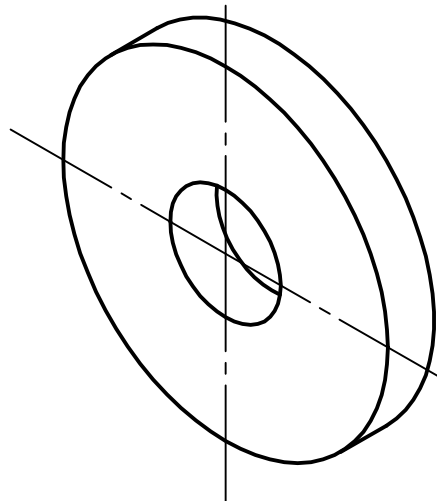
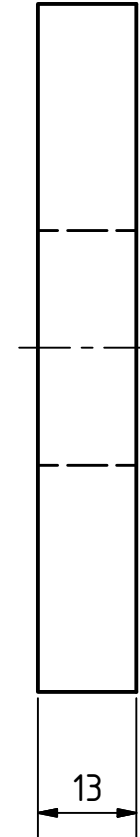
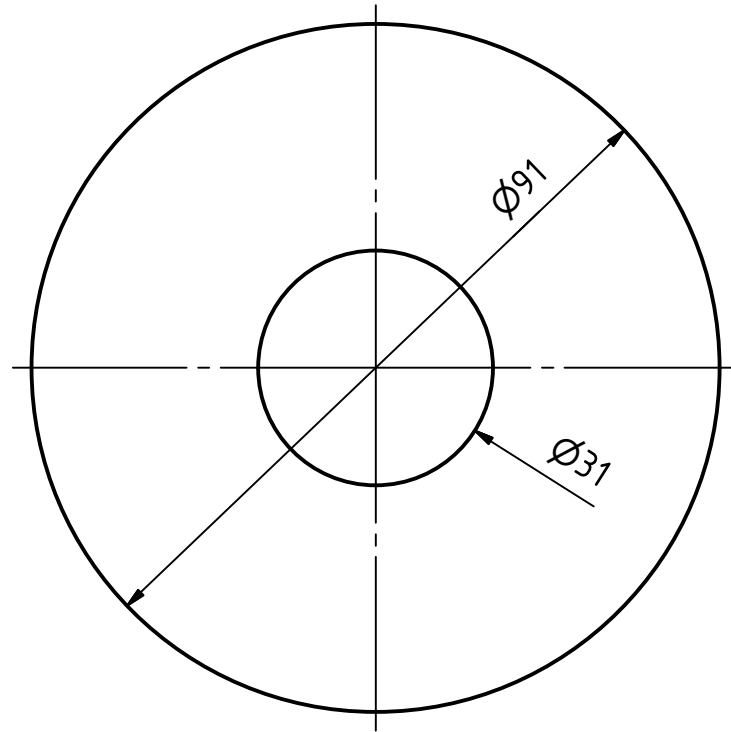


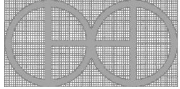
PROJECT Snow Sled with 10 hp outboard motor	CREATED BY D. Mosquera	APPROVED BY A. Morillo	DATE 10/08/2021	VERSION 1.0
PART NAME Spline sleeved	FILE NAME oho_sso_spline-sleeved.ipt			POS 6.2
PUBLISHED BY  OPEN HARDWARE OBSERVATORY Free Blueprints for Sustainable Development		DOC. TYPE Part	MATERIAL Steel C45	QUANTITY 1
OHO e.V.		LICENCE CC-BY-SA 4.0	SCALE 1:1	SHEET 43 /47

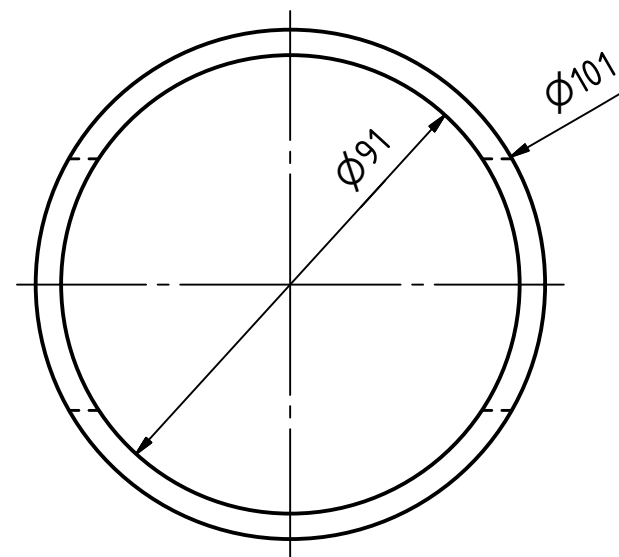
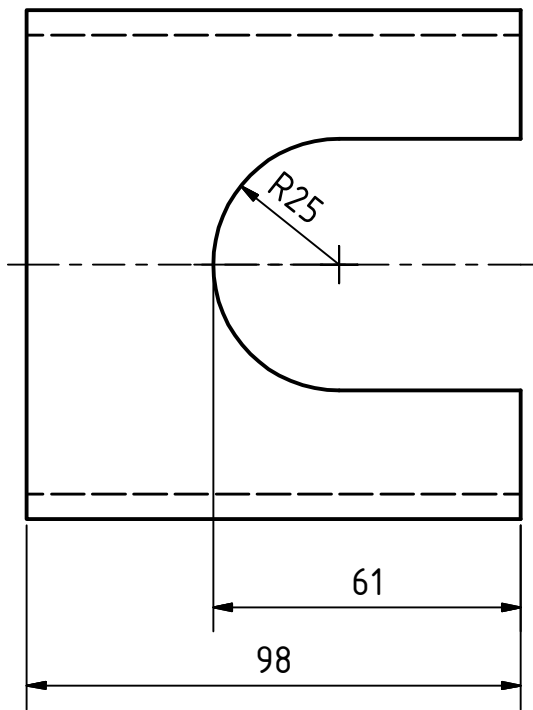
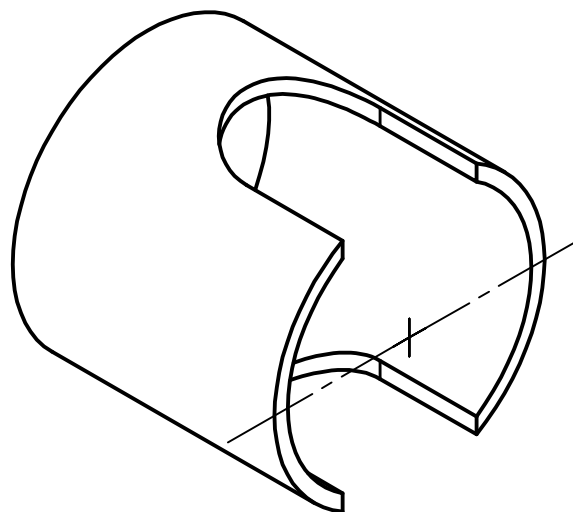
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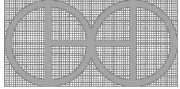


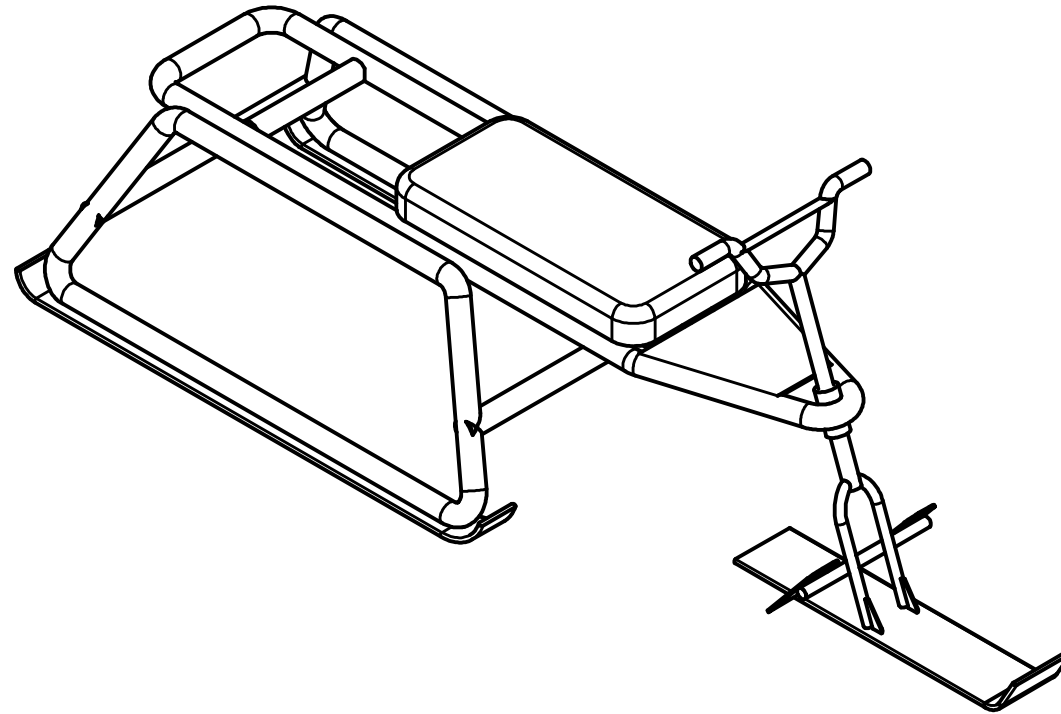
PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Cube 2	oho_sso_cube2.ipt			6.3
PUBLISHED BY	DOC. TYPE	MATERIAL		QUANTITY
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	Seel C45		1
	LICENCE	SCALE		SHEET
OHO e.V.	CC-BY-SA 4.0	1:1		44 /47

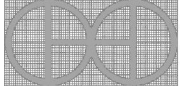


PROJECT	CREATED BY	APPROVED BY	DATE	VERSION
Snow Sled with 10 hp outboard motor	D. Mosquera	A. Morillo	10/08/2021	1.0
PART NAME	FILE NAME			POS
Plate cube	oho_sso_plate-cube.ipt			6.4
PUBLISHED BY	DOC. TYPE	MATERIAL		QUANTITY
 <b>OPEN HARDWARE OBSERVATORY</b> Free Blueprints for Sustainable Development	Part	Steel C45		1
	LICENCE	SCALE		SHEET
OHO e.V.	CC-BY-SA 4.0	1:1		45 /47



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 /47



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
Snowsled	oho_sso_snowsled01.iam			12.0
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		47 /47