
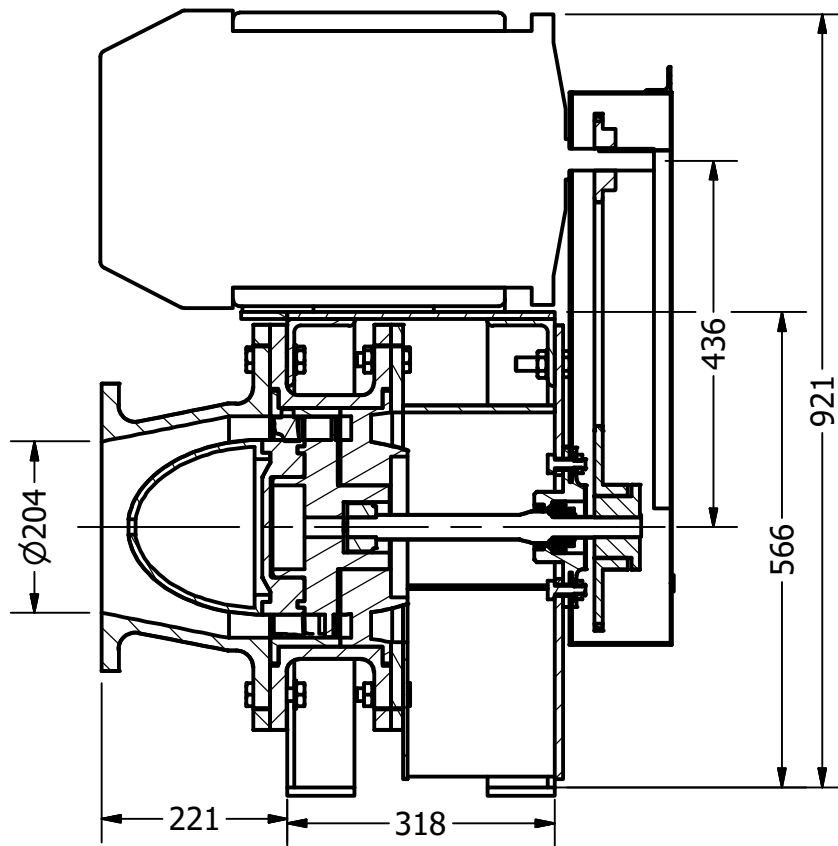
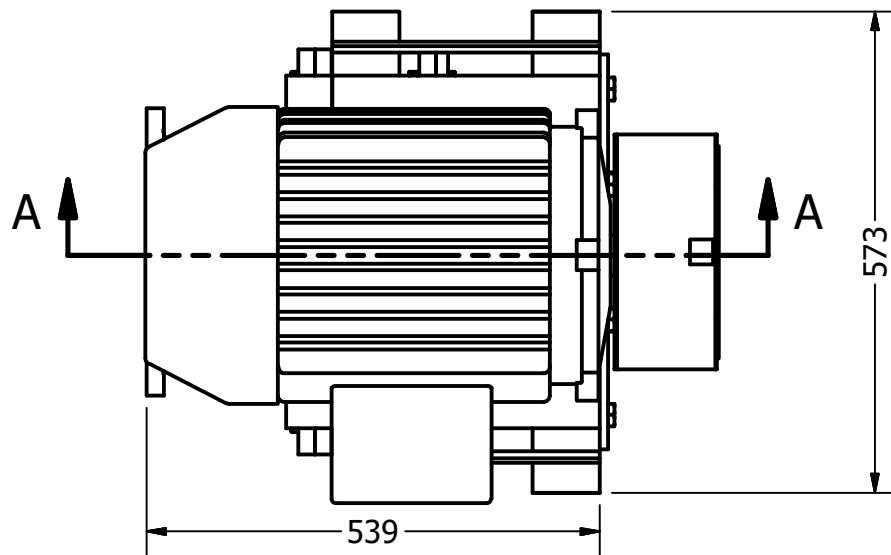



<b>Proyect</b> Small water turbine		Created by D. Mosquera		Approved by D. Jeager	
<b>Part Name</b> small-water-turbiner		Part Code A1		Document Type ASSEMBLY	
Redesigned by 	Original drawing from <b>Practical ACTION</b>	License CERN-OHL		File Name oseg_swt_A1_small-water-turbiner	Version 1.0
				Scale 1:8	Quantity 1
				Sheet 1	

2

1

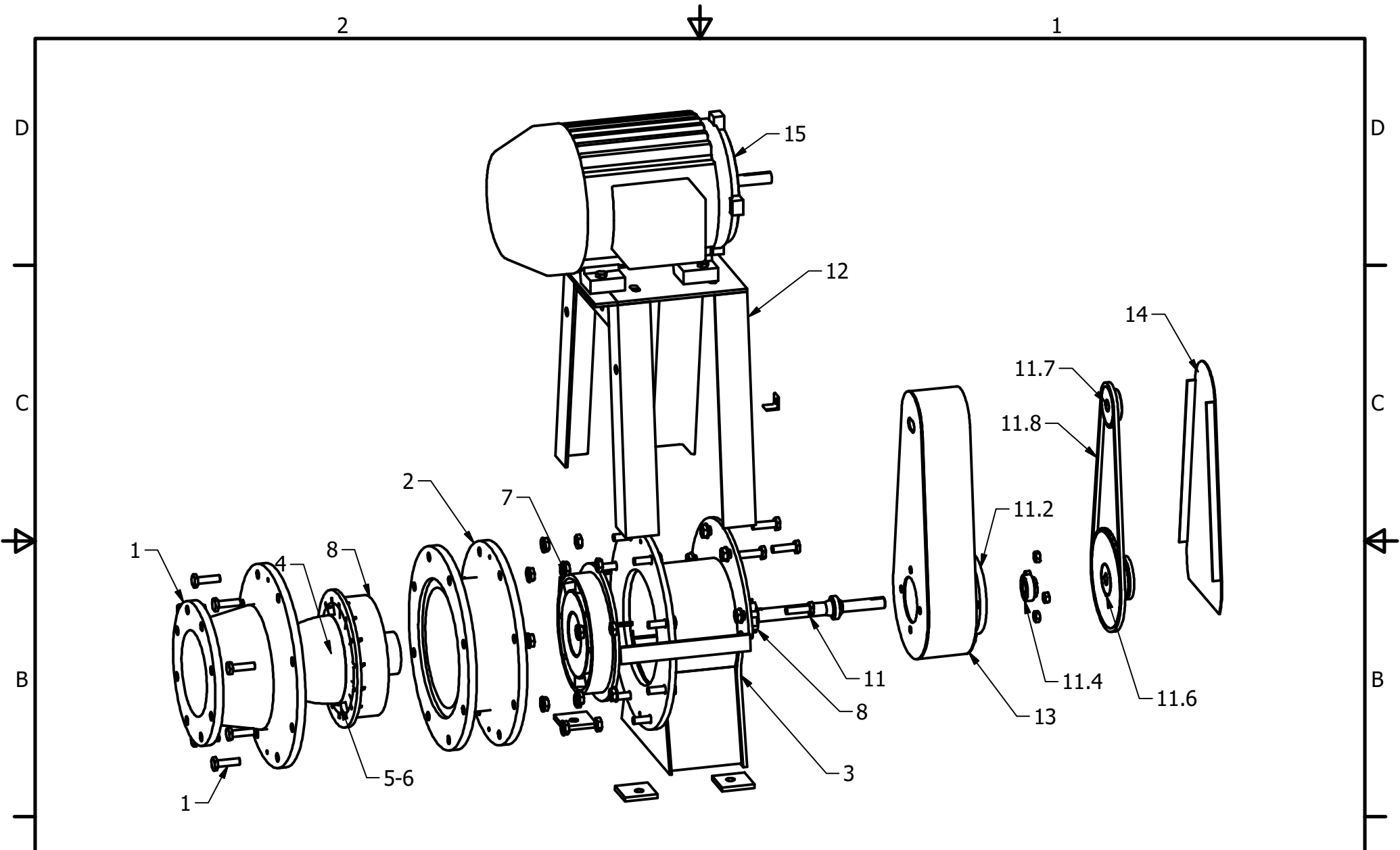



SECTION A-A

<b>Proyect</b> Small water turbine		Created by D. Mosquera		Approved by D. Jeager	
<b>Part Name</b> small-water-turbiner		Part Code A1		Document Type ASSEMBLY	
Redesigned by 		Original drawing from <b>Practical ACTION</b>		License CERN-OHL	
				File Name oseg_swt_A1_small-water-turbiner	
				Version 1.0	
				Quantity 1	
				Scale 1:8	
				Sheet 2	
				Date 18.01.21	

2

1




<b>Proyect</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>	
<b>Part Name</b> small-water-turbiner		Part Code <b>A2</b>	Document Type <b>ASSEMBLY</b>		Material
Redesigned by  <small>OPEN SOURCE ECOLOGY GERMANY</small>	Original drawing from <b>Practical ACTION</b>	License <b>CERN-OHL</b>	File Name oseg_swt_A2_small-water-turbiner	Version 1.0	Quantity 1
			Scale 1:12	Sheet 3	Date 18.01.21

2



1

PART LIST							
POS	POS OLD	QTY	PART NAME	FILE NAME	PART TYPE	SPECS	SHT
A1			small water turbine	oseg_swt_A1_small-water-turbiner.iam	Production		1-2
A2			Explosión	oseg_swt_A2_small-water-turbiner.ipn	Production		3
B			Parts-list	oseg_swt_B_parts-list.xls			4-6
C			Technical notes		Tech. notes	General notes	7
1	AF311	1	front adaptor	oseg_swt_front-adaptor.ipt	Production	CAST IRON	8
2	AF312	1	middle section	oseg_swt_left-side-frame.ipt	Production	CAST IRON	9
3	AF313	1	drain chute	oseg_swt_drain-chute.iam	Production	STEEL C45	10-1 1
3.1	AF313A	1	back plate	oseg_swt_back-plate.ipt	Production	STEEL C45	12
3.2	AF313B	1	front flange	oseg_swt_front-flange.ipt	Production	STEEL C45	13
3.3	AF313C	1	curved plate	oseg_swt_curved-plate.ipt	Production	STEEL C45	14
3.4	AF313D	2	side plate	oseg_swt_side-plate.ipt	Production	STEEL C45	15
3.5	AF313E	1	front plate	oseg_swt_front-plate.ipt	Production	STEEL C45	16
4	AF314(1)	1	nose	oseg_swt_nose.ipt	Production	see tech. notes	17
5	AF315A	1	stator blading	oseg_swt_stator-blading.ipt	Production	see tech. notes	18
6	AF316A	1	rotor blading	oseg_swt_rotor-blading.iam	Production		
6.1		1	rotor blading	oseg_swt_rotor-blading.ipt	Production	see tech. notes	19
6.2		1	rotor washer	oseg_swt_rotor-washer.ipt	Production	1,5 mm STEEL SHEET	20
7	AF318A	1	diffuser blanding	oseg_swt_diffuser-blanding.iam	Production		
7.1		1	diffuser blanding	oseg_swt_diffuser-blanding.ipt	Production	see tech. notes	21
7.2			diffuser washer	oseg_swt_diffuser-washer.ipt	Production	1,5 mm STEEL SHEET	22
8	AF320A	1	bush	oseg_swt_bush.ipt	Production	see tech. notes	23
9	AF321A	1	slotted disk	oseg_swt_slotted-disk.ipt	Production	ALUMINIUM	24
10	AF321B	2	key	oseg_swt_key.ipt	Standard	key 6 x 6 x 36.0, HARD STEEL	
11			Transmission (hub assembly)	oseg_swt_hub-assembly.iam	Production		25
11.1	AF322	1	shaft	oseg_swt_shaft.iam	Production	STAINLESS STEEL	26
11.2	AF323A	1	hub housing	oseg_swt_hub-housing.ipt	Production	CAST STEEL	27
11.3	AF323B	1	front cap	oseg_swt_front-cap.ipt	Standard	1,5 mm STEEL SHEET	
11.4	AF323C	1	ball bearing	oseg_swt_ball-bearing.ipt	Standard	bearing 206-SX adater and nut G-Y or equivalent part	

<b>Proyect</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>	
<b>Part Name</b> small-water-turbine		Part Code <b>B1</b>		Document Type <b>part-list</b>	
Redesigned by 		Original drawing from <b>Practical ACTION</b>		File Name oseg_swt_A2_small-water-turbine	
License <b>CERN-OHL</b>		Version <b>1.1</b>		Quantity <b>1</b>	
		Scale		Sheet <b>4</b>	
				Date <b>03.03.21</b>	

2




1

2

## PART LIST

1

POS	POS OLD	QTY	PART NAME	FILE NAME	PART TYPE	SPECS	SHT
D 11.5	AF323D	1	seal	oseg_swt_seal.ipt	Standard	GARLOCK 78*0542	
11.6	AF324	1	big sprocket	oseg_swt_big-sprocket.ipt	Standard	brownign 40P60 - $\frac{1}{2}$ " pich - 60 teeth - Dia.: 9.55"	
11.7	AF325	1	small sprocket	oseg_swt_samll-sprocket.ipt	Standard	brownign N° 4024 - $\frac{1}{2}$ " pich - 24 teeth - Dia.: 3.83"	
11.8	AF326	1	chain	oseg_swt_chain.ipt	Standard	brownign N° 40 - $\frac{1}{2}$ " pich N° 40	
11.9	AF323	3	bolt 3/16" x 32 x 5/16"		Standard		
12	AF327	1	frame	oseg_swt_frame.iam	Production		28-29
12.1	AF327A	4	side angles	oseg_swt_side-angles.ipt	Production	STEEL A36	30
12.2	AF327B	2	top angle	oseg_swt_top-angle.ipt	Production	STEEL A36	31
C 12.3	AF327C	1	top plate	oseg_swt_top-plate.ipt	Production	STEEL A36	32
12.4	AF327D	2	bar	oseg_swt_bar.ipt	Production	STEEL A36	33
12.5	AF327E	4	foundation plate	oseg_swt_foundation-plate.ipt	Production	STEEL A36	34
13	AF328	1	oil bath cover	oseg_swt_oil-bath.iam	Production		35
13.1		1	plate front cover	oseg_swt_plate-front-cover.ipt	Production	2-3 MM STEEL SHEET	36
D 13.2		1	band side cover	oseg_swt_band-side-cover.ipt	Production	2-3 MM STEEL SHEET BENT AND WELDED	37
13.3		1	plate down cover	oseg_swt_plate-down-cover.ipt	Production	2-3 MM STEEL SHEET	38
13.4		1	brake angle cover	oseg_swt_brake-angle-cover.ipt	Production	STEEL A36	39
13.5		1	brake bar cover	oseg_swt_brake-bar-cover.ipt	Production	2-3 MM STEEL SHEET	40
B 14	AF329	1	back oil bath cover	oseg_swt_back-oil-bath-cover.iam	Production		41
14.1		1	plate back cover	oseg_swt_bar-for-plate-front.ipt	Production	2-3 MM STEEL SHEET	42
14.2		2	bar for plate front	oseg_swt_plate-back-cover.ipt	Production	2-3 MM STEEL SHEET	43

<b>Proyect</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>	
<b>Part Name</b> small-water-turbiner		Part Code <b>B2</b>		Document Type <b>part-list</b>	
Redesigned by 		Original drawing from <b>Practical ACTION</b>		License <b>CERN-OHL</b>	
		File Name oseg_swt_A2_small-water-turbiner		Version 1.1	
		Scale		Quantity 1	
				Sheet 5	
				Date 03.03.21	

2

1

2



1

## PART LIST

D

POS	POS OLD	QTY	PART NAME	FILE NAME	PART TYPE	SPECS	SHT
15	AF330	1	Generator	oseg_swt_generator.ipt	Standard	5 KW; 115-230 V; 21,5 A; 60Hz	
16	AF331A	20	bolt 5/8"x12 - 2 1/2"		Standard		
17	AF331B	20	nut 5/8"x12		Standard		
18	AF331C	20	plain washer 5/8"		Standard		
19	AF332A	4	bolt 1/2"x12 - 1 1/2"		Standard		
20	AF332B	4	nut 1/2"x12		Standard		
21	AF332C	4	plain washer 1/2"		Standard		
22	AF333A	4	bolt 9/16"x12 - 2"		Standard		
23	AF333B	4	nut 9/16"x12		Standard		
24	AF333C	4	plain washer 9/16"		Standard		
25	AF333D	4	lock washer 9/16"		Standard		
26	AF334A	1	bolt 3/8"x16 - 2"		Standard		
27	AF334B	2	wing nut 3/8"x16		Standard		
28	AF334C	1	plain washer 3/8"		Standard		
29	AF334	4	ALIGNMENT-PIN		Standard	HARD STEEL	

D

C

C

B


B

B

B

A

A

<b>Proyect</b> Small water turbine		Created by D. Mosquera	Approved by D. Jeager		
<b>Part Name</b> small-water-turbiner		Part Code B3	Document Type part-list	Material	
Redesigned by 	Original drawing from <b>Practical ACTION</b>	License CERN-OHL	File Name oseg_swt_A2_small-water-turbiner	Version 1.1	Quantity 1
			Scale	Sheet 6	Date 03.03.21

2



1


2



1

## TECHNICAL NOTES

NOTES	CONTENT
General notes	
Metal structure treatment	<p>Iron structures should be painted to prevent rust and improve equipment life.</p> <ul style="list-style-type: none"> <li>- Remove loose rust with a wire brush, sandpaper or chemical rust remover.</li> <li>- If applicable, sand areas where paint is chipping until surface is smooth.</li> <li>- Remove dust or oil with a degreaser or denatured alcohol.</li> <li>- Prime surface to protect against rust and corrosion.</li> </ul>
Foundations fixing	<ul style="list-style-type: none"> <li>- The ground must be stable and have a low water table.</li> <li>- The structure must be fixed on firm concrete soil or on poured footings with steel reinforcement.</li> <li>- The anchorage can be bolted with expansive ramplugs or welded.</li> </ul>
Manufacture of special internal parts	<ul style="list-style-type: none"> <li>- The internal parts that will have contact with the water, such as impellers, blades and nose, must have smooth and aerodynamic surfaces.</li> <li>- According to the original source, the manufacturing process can be by fiberglass forming or polyester resin casting.</li> <li>- Other materials such as epoxy resins and other processes such as CNC machining and 3D printing are not ruled out.</li> <li>- Due to the relatively complicated production of various components, this project is only recommended for small workshops to a limited extent</li> </ul>
Tolerances of sliding parts	In cases of sliding parts, use 0.2 mm as tolerance for diametrical dimensions.

<b>Project</b> Small water turbine		Created by D. Mosquera	Approved by D. Jeager		
<b>Part Name</b> General notes		Part Code C1	Document Type Technical notes		Material
Redesigned by 	Original drawing from <b>Practical ACTION</b>	License CERN-OHL	File Name		Version 1.1
			Scale	Sheet 7	Quantity 1
				Date 06.03.21	

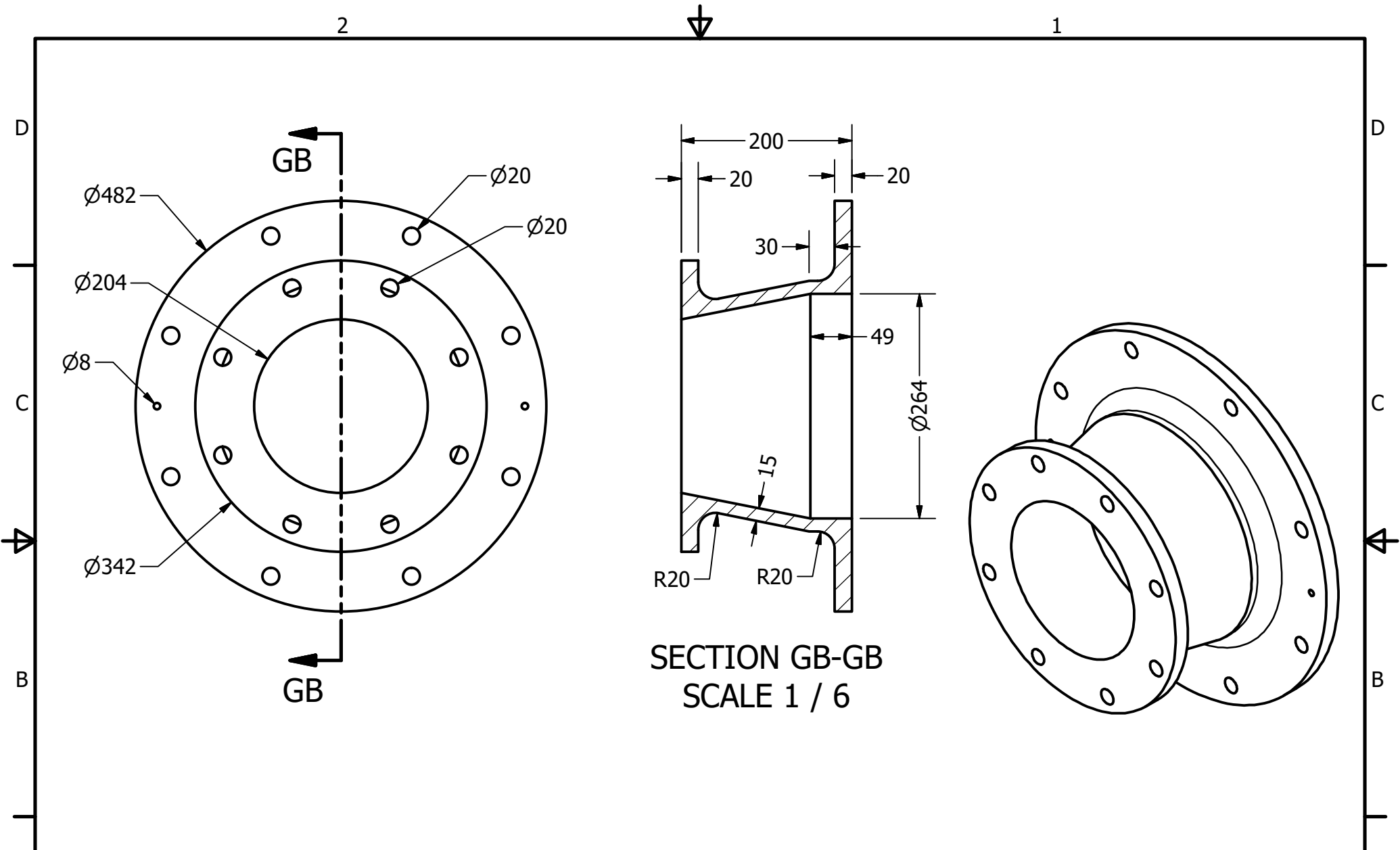
2




1

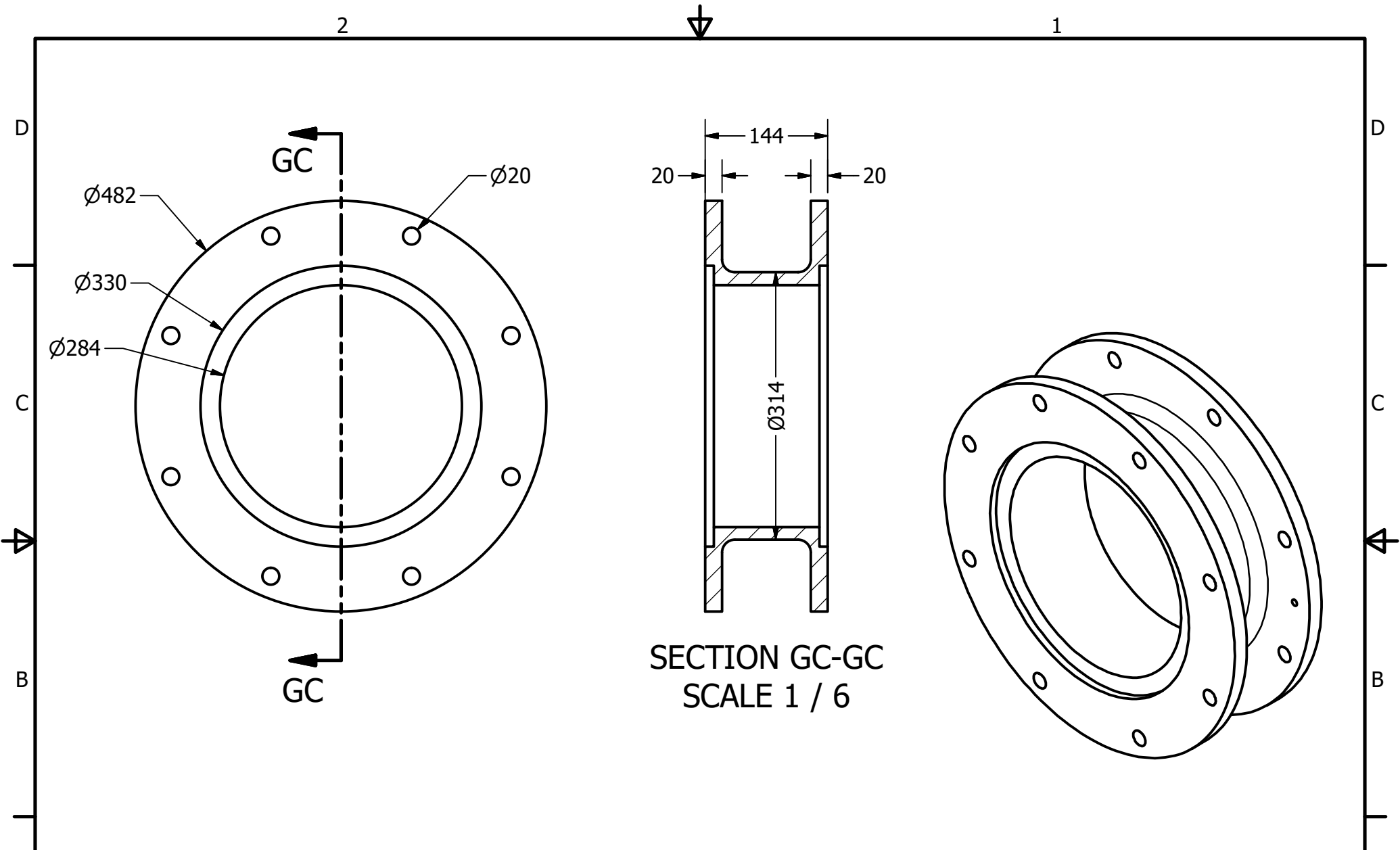
A

A




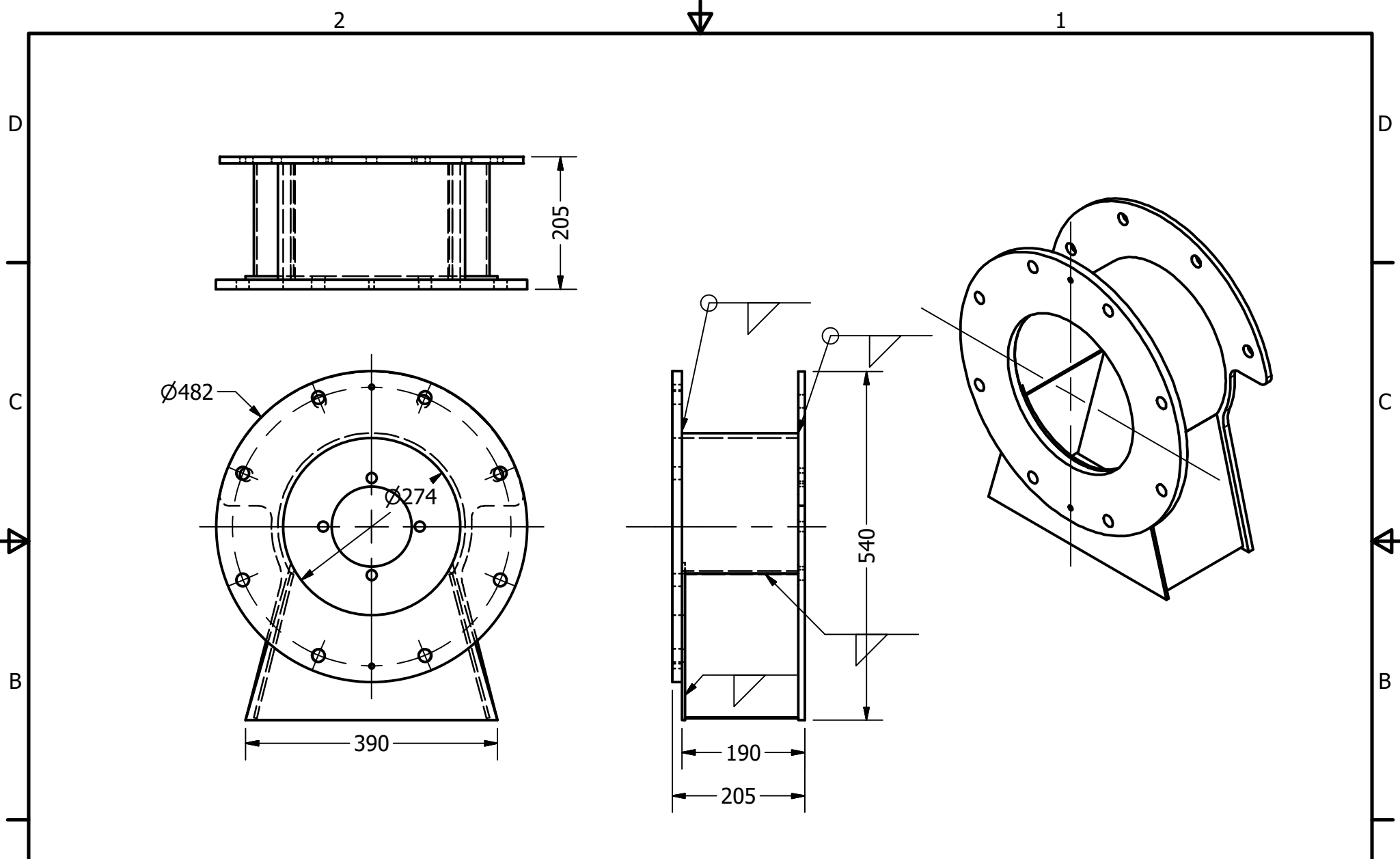
<b>Proyect</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>	
<b>Part Name</b> front adaptor		Part Code 1	Document Type part		Material cast iron
Redesigned by  OPEN SOURCE ECOLOGY GERMANY	Original drawing from <b>Practical ACTION</b>	License CERN-OHL	File Name oseq_swt_front-adaptor.ipt		Version 1.0
			Scale 1 / 6	Sheet 8	Quantity 1
				Date 18.01.21	




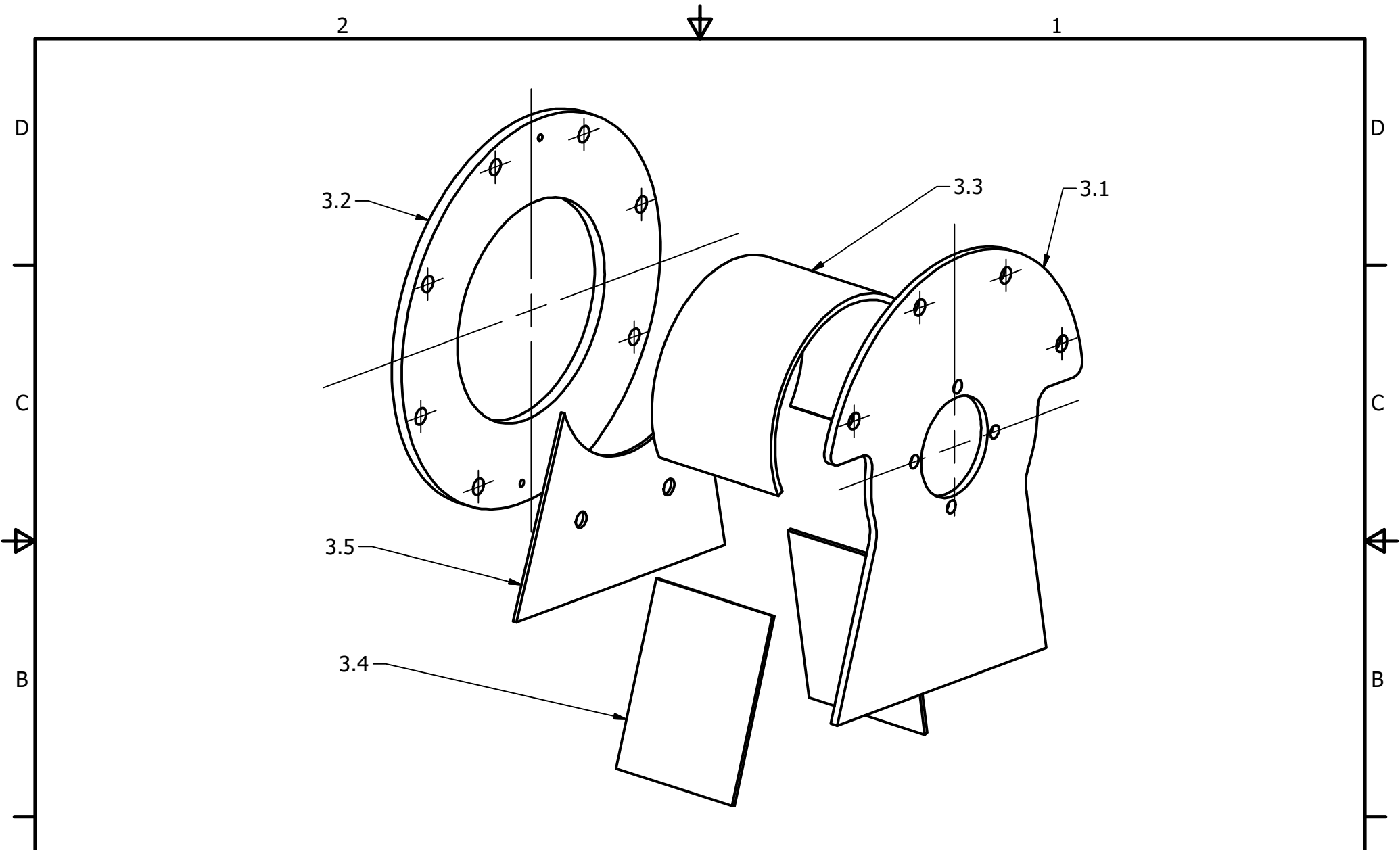



SECTION GC-GC  
SCALE 1 / 6

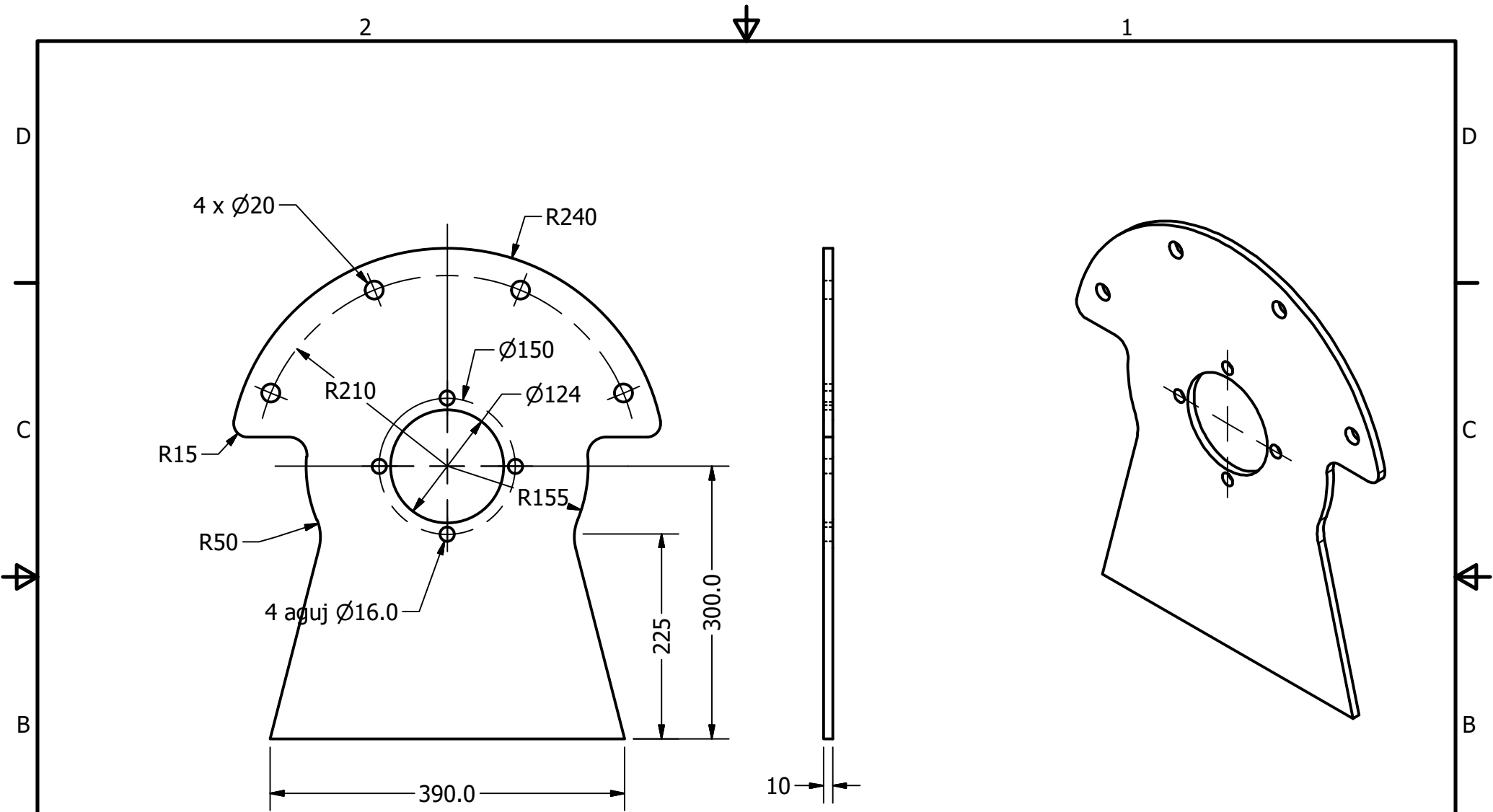
<b>Proyect</b> Small water turbine		Created by D. Mosquera		Approved by D. Jeager		
<b>Part Name</b> middle section		Part Code 2		Document Type part		Material cast iron
Redesigned by 	Original drawing from <b>Practical ACTION</b>	License CERN-OHL		File Name oseg_swt_middle-section.ipt		Version 1.0
				Scale 1 / 6	Sheet 9	Quantity 1
					Date 18.01.21	




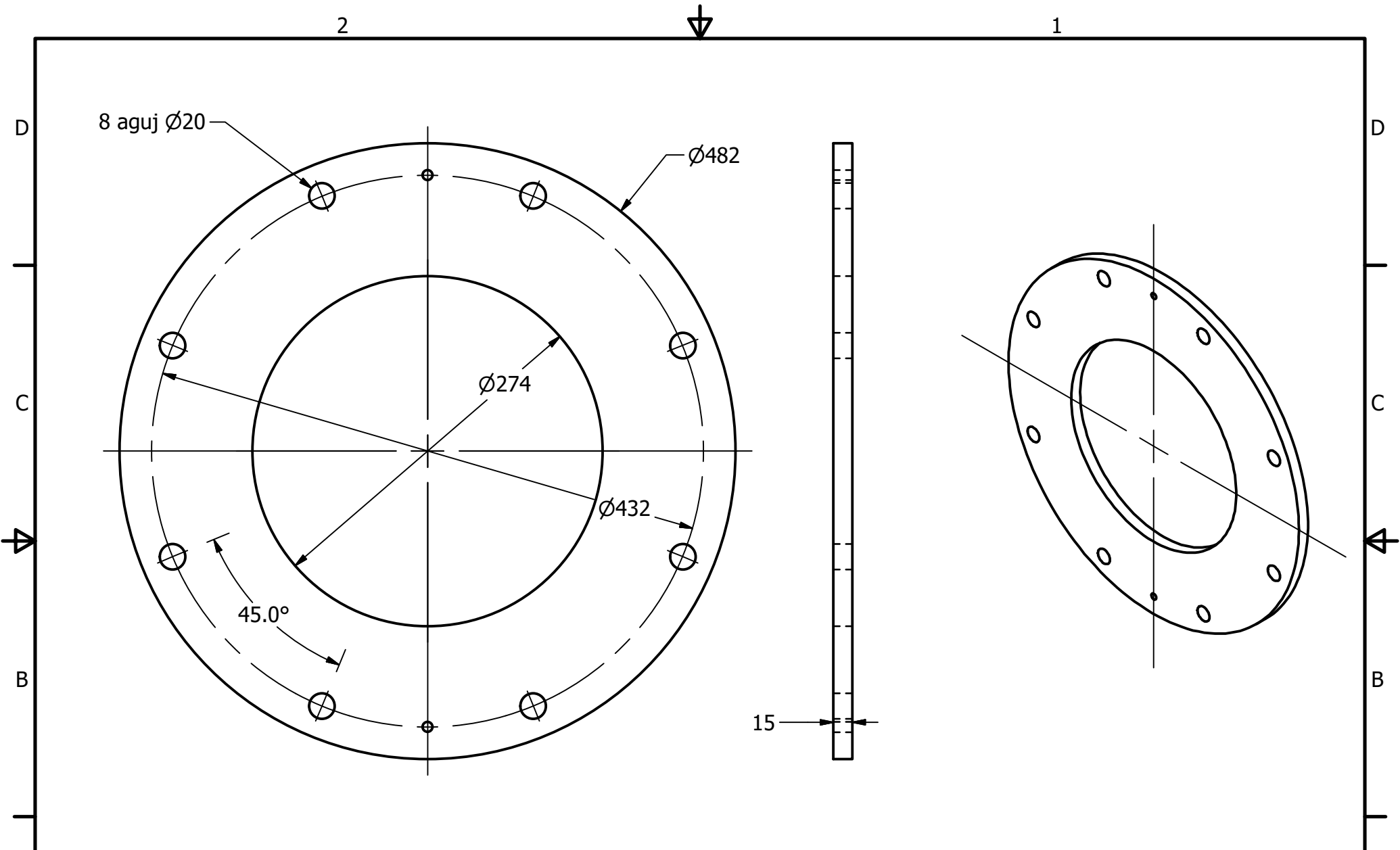
<b>Proyect</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>	
<b>Part Name</b> drain chute		Part Code 3		Document Type assembly	
Redesigned by 		Original drawing from <b>Practical ACTION</b>		License CERN-OHL	
				File Name oseg_swt_drain-chute.iam	
				Version 1.0	
				Quantity 1	
				Scale 1 / 8	
				Sheet 10	
				Date 18.01.21	




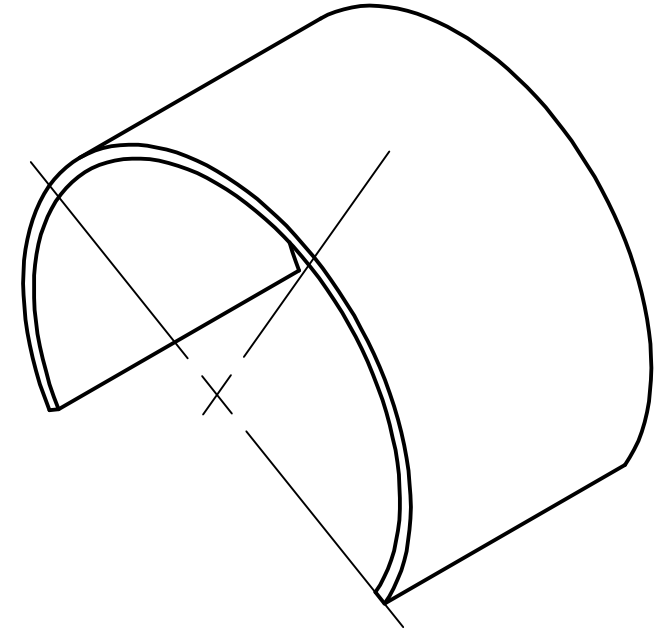
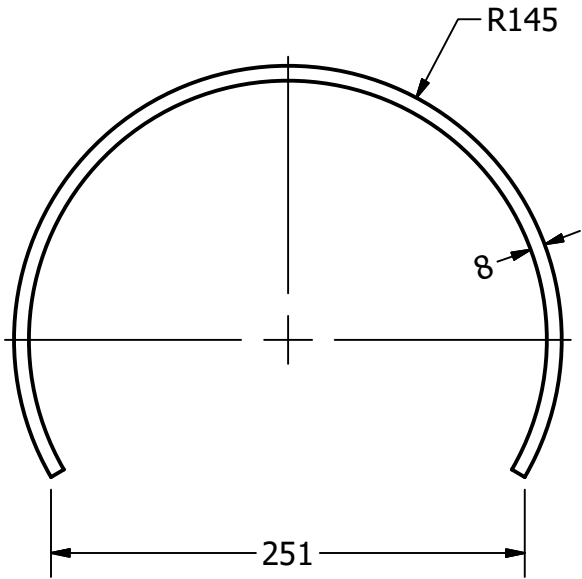
<b>Proyect</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>	
<b>Part Name</b> drain chute		Part Code 3		Document Type assembly	
Redesigned by 		Original drawing from <b>Practical ACTION</b>		Material steel C45	
		License CERN-OHL		File Name oseg_swt_drain-chute.iam	
				Version 1.0	
				Quantity 1	
				Scale	
				Sheet 11	
				Date 18.01.21	




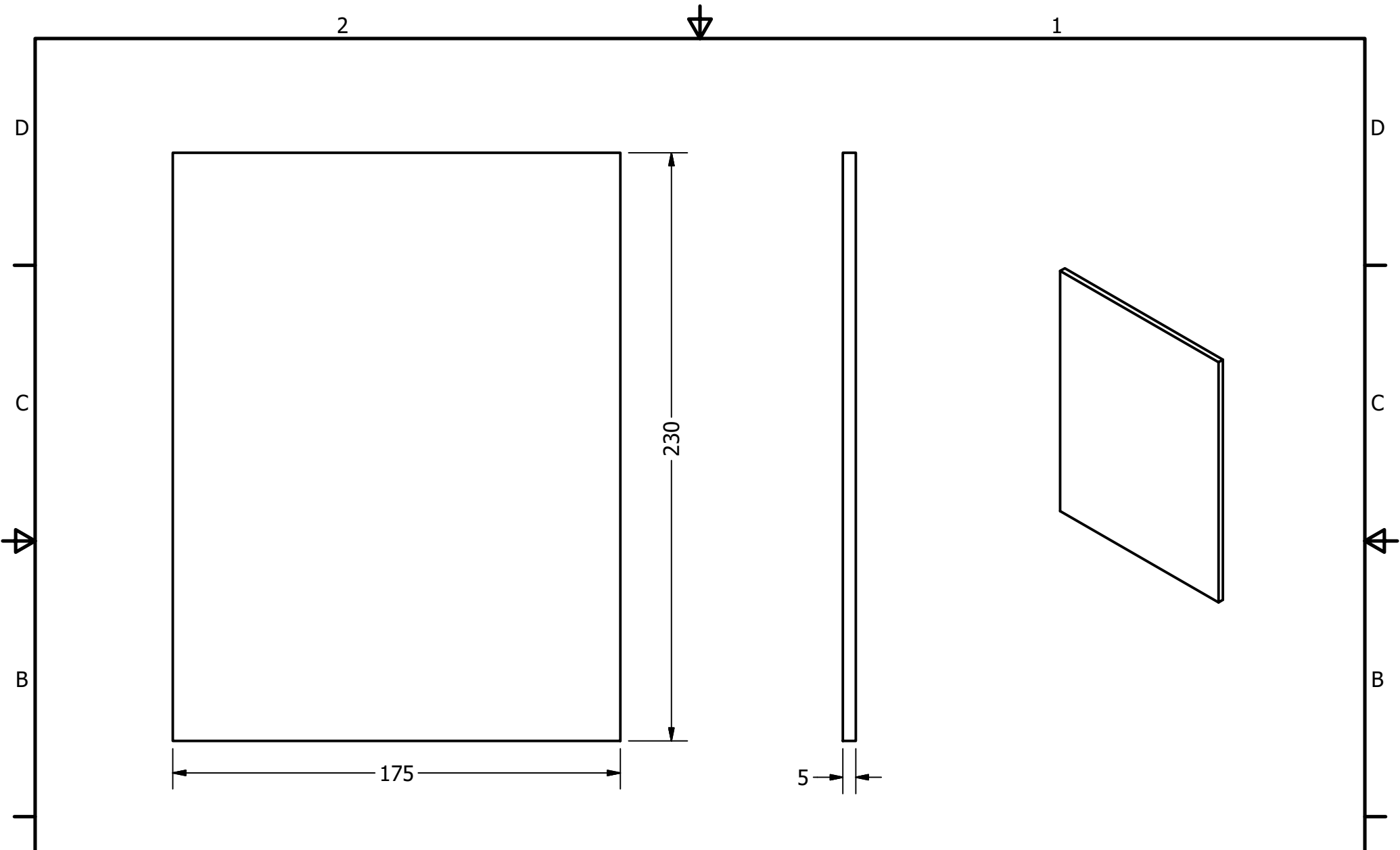
<b>Project</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>	
<b>Part Name</b> back plate		Part Code 3.1		Document Type part	
Redesigned by 		Original drawing from <b>Practical ACTION</b>		License CERN-OHL	
		File Name oseg_swt_back-plate.ipt		Version 1.0	
		Scale 1 / 6		Quantity 1	
				Date 18.01.21	
				Sheet 12	




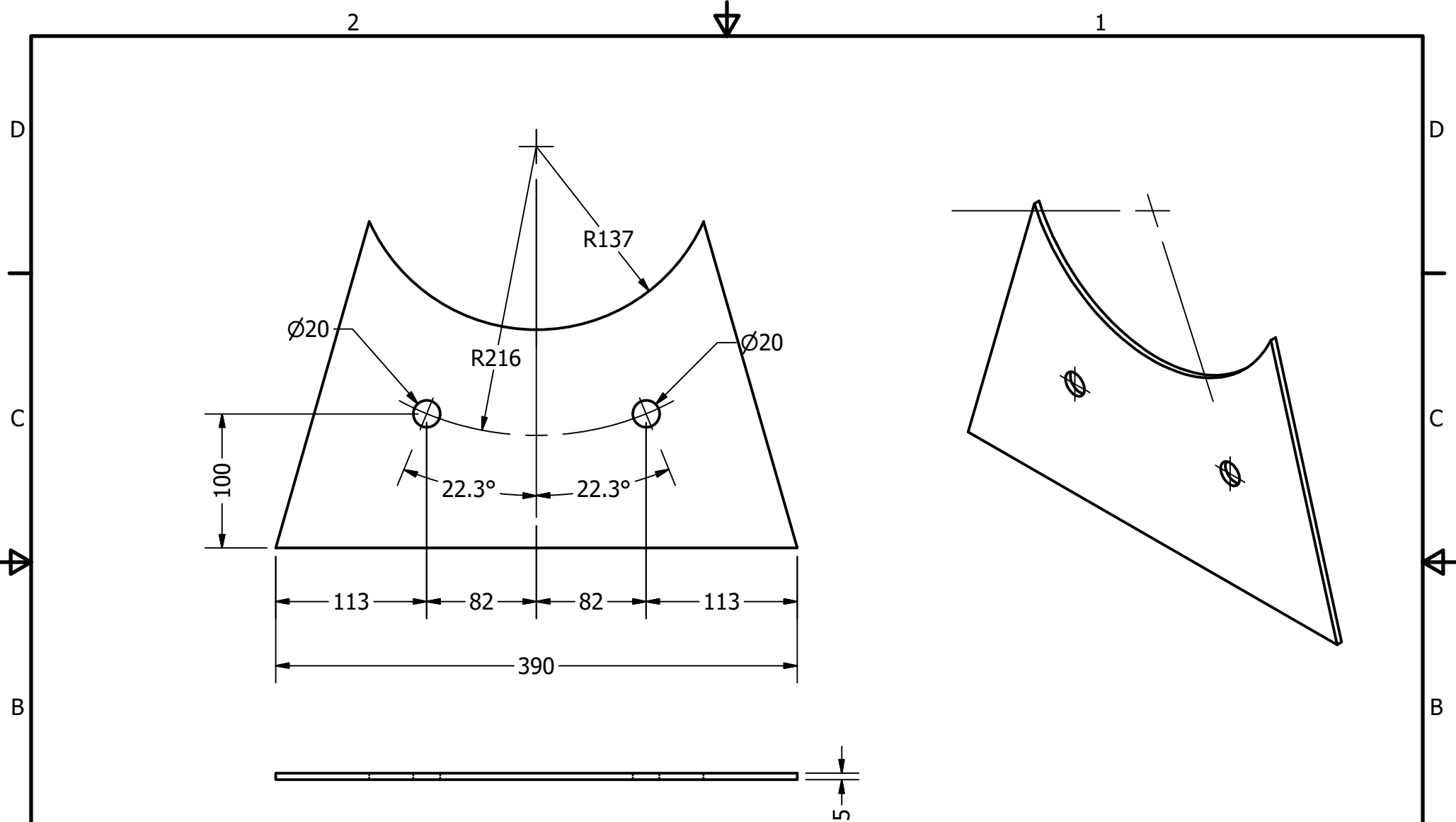
<b>Proyect</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>	
<b>Part Name</b> front flange		Part Code 3.2		Document Type part	
Redesigned by 		Original drawing from <b>Practical ACTION</b>		License CERN-OHL	
				File Name oseg_swt_front-flange.ipt	
				Version 1.0	
				Quantity 1	
				Scale 1 / 4	
				Sheet 13	
				Date 18.01.21	




<b>Project</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>		
<b>Part Name</b> curved plate		Part Code <b>3.3</b>		Document Type <b>part</b>		Material <b>steel C45</b>
Redesigned by 	Original drawing from <b>Practical ACTION</b>	License <b>CERN-OHL</b>		File Name <b>oseg_swt_curve-plate.ipt</b>		Version <b>1.0</b>
				Scale <b>1 / 4</b>	Sheet <b>14</b>	Quantity <b>1</b>
					Date <b>18.01.21</b>	

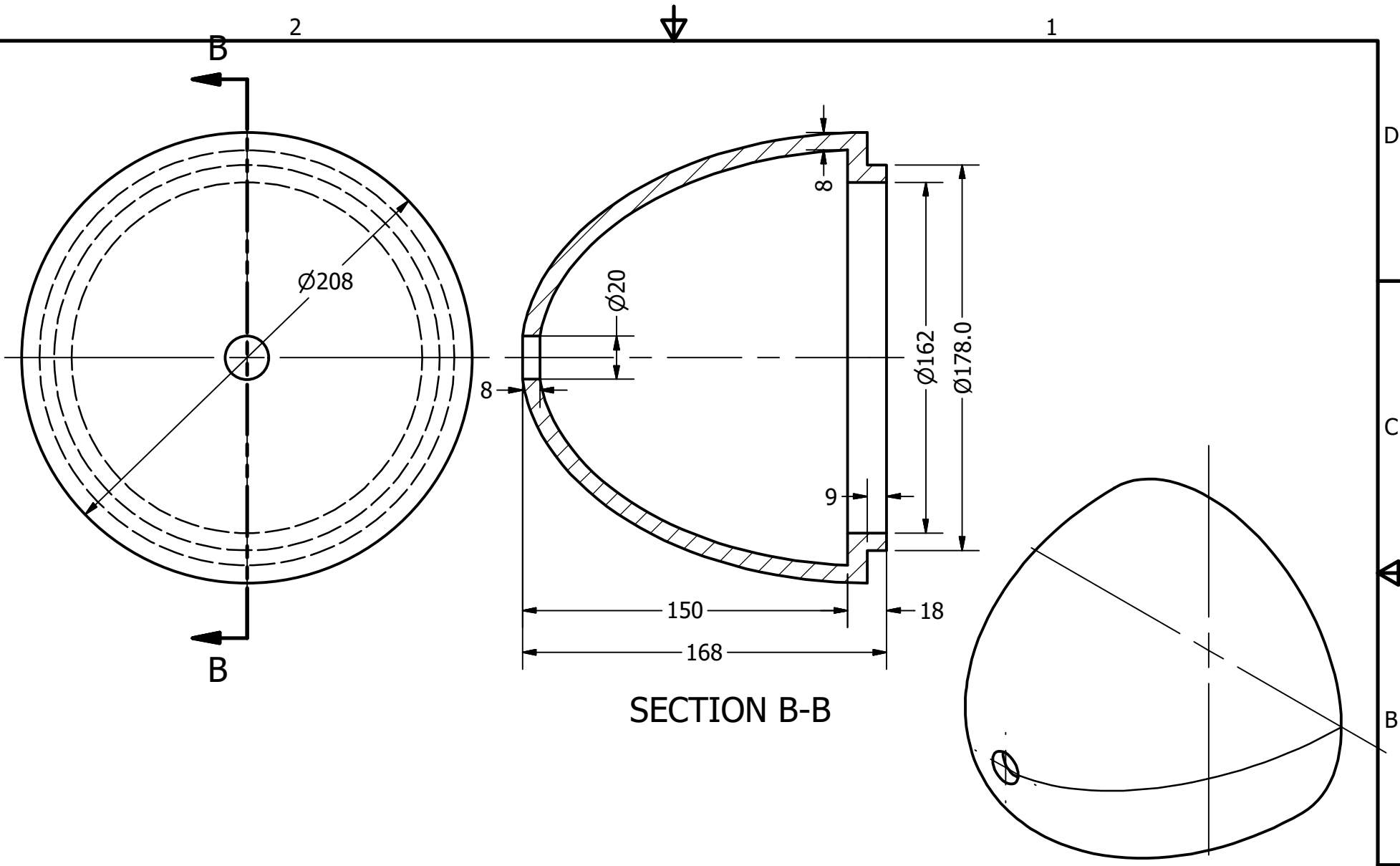


<b>Proyect</b> Small water turbine		Created by D. Mosquera		Approved by D. Jeager	
<b>Part Name</b> side plate		Part Code 3.4		Document Type part	
Redesigned by 		Original drawing from <b>Practical ACTION</b>		Material steel C45	
		License CERN-OHL		File Name oseg_swt_side-plate.ipt	
				Version 1.0	
				Quantity 1	
				Date 18.01.21	
				Scale 1 / 2	
				Sheet 15	
				Date 18.01.21	




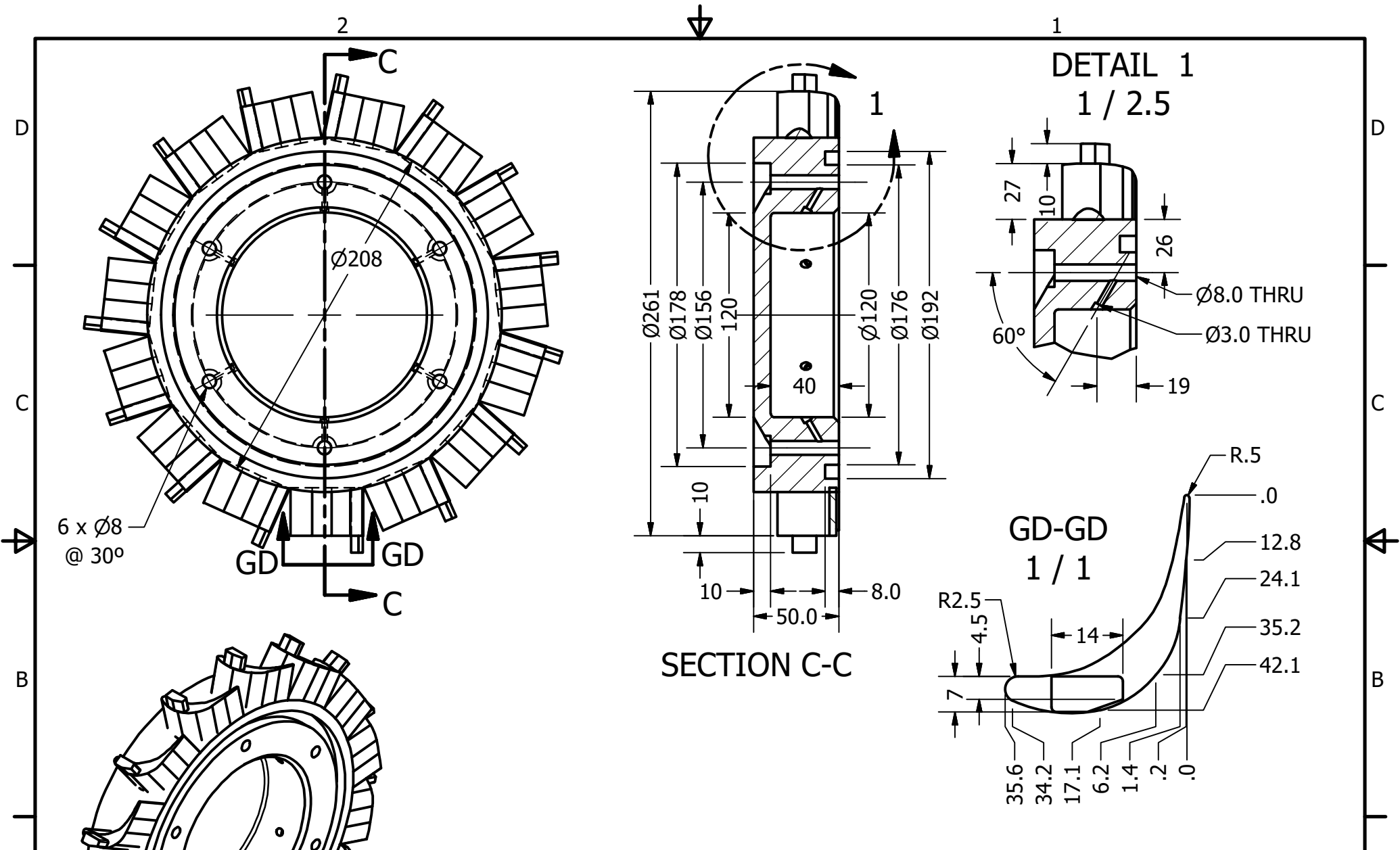
<b>Project</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>		
<b>Part Name</b> front plate		Part Code 3.5		Document Type part		Material steel C45
Redesigned by  OPEN SOURCE ECOLOGY GERMANY	Original drawing from <b>Practical ACTION</b>		License CERN-OHL	File Name oseg_swt_front-plate.ipt		Version 1.0
				Scale 1 / 4	Sheet 16	Quantity 1
					Date 18.01.21	




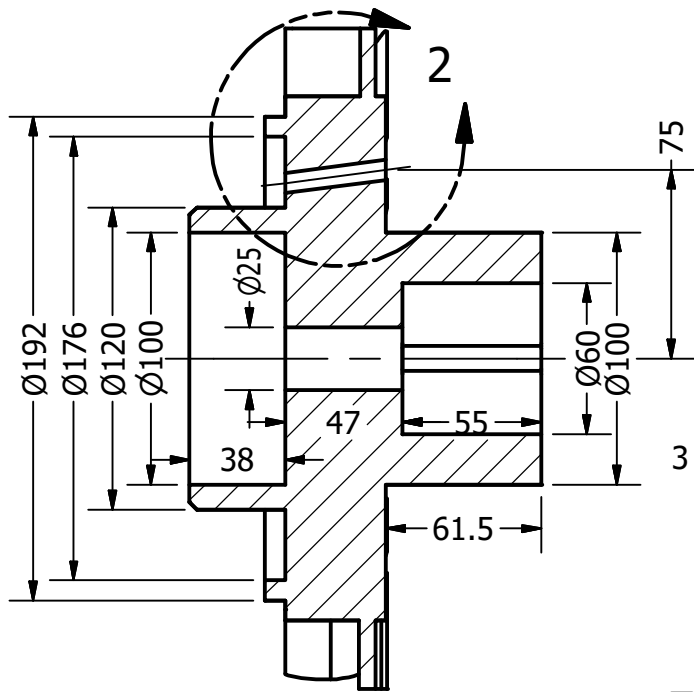
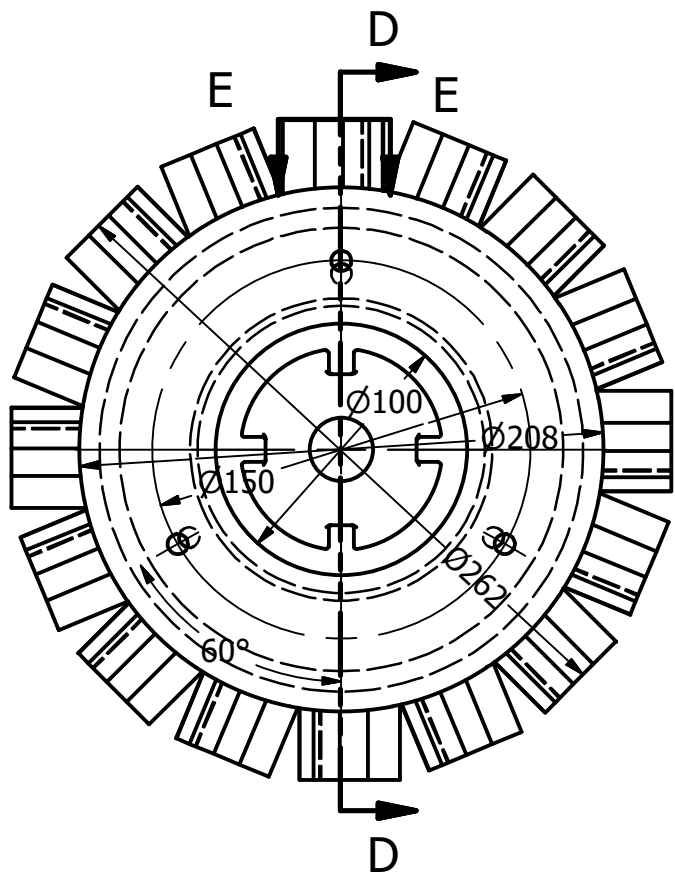


SECTION B-B

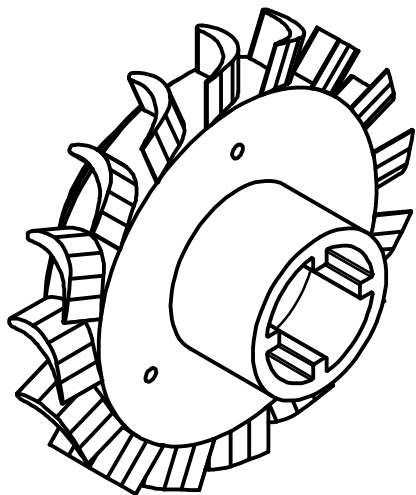
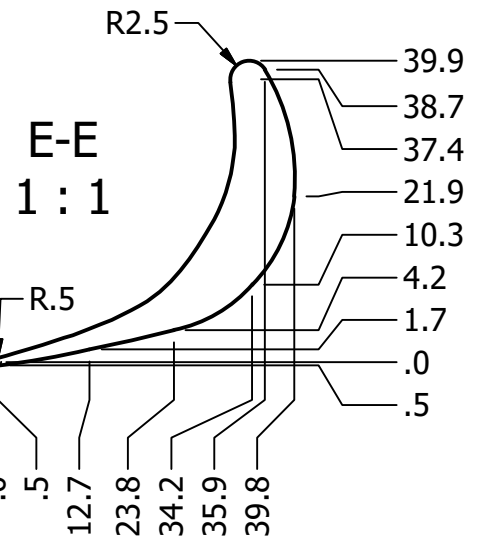
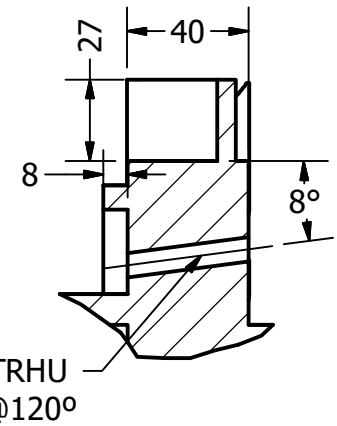
<b>Proyect</b> Small water turbine		Created by D. Mosquera		Approved by D. Jeager	
<b>Part Name</b> NOSE		Part Code 4		Document Type part	
Redesigned by 		Original drawing from <b>Practical ACTION</b>		Material see tech. notes	
License CERN-OHL		File Name oseg_swt_nose.ipt		Version 1.0	
		Scale 1 / 2.5		Quantity 1	
				Date 18.01.21	
				Sheet 17	




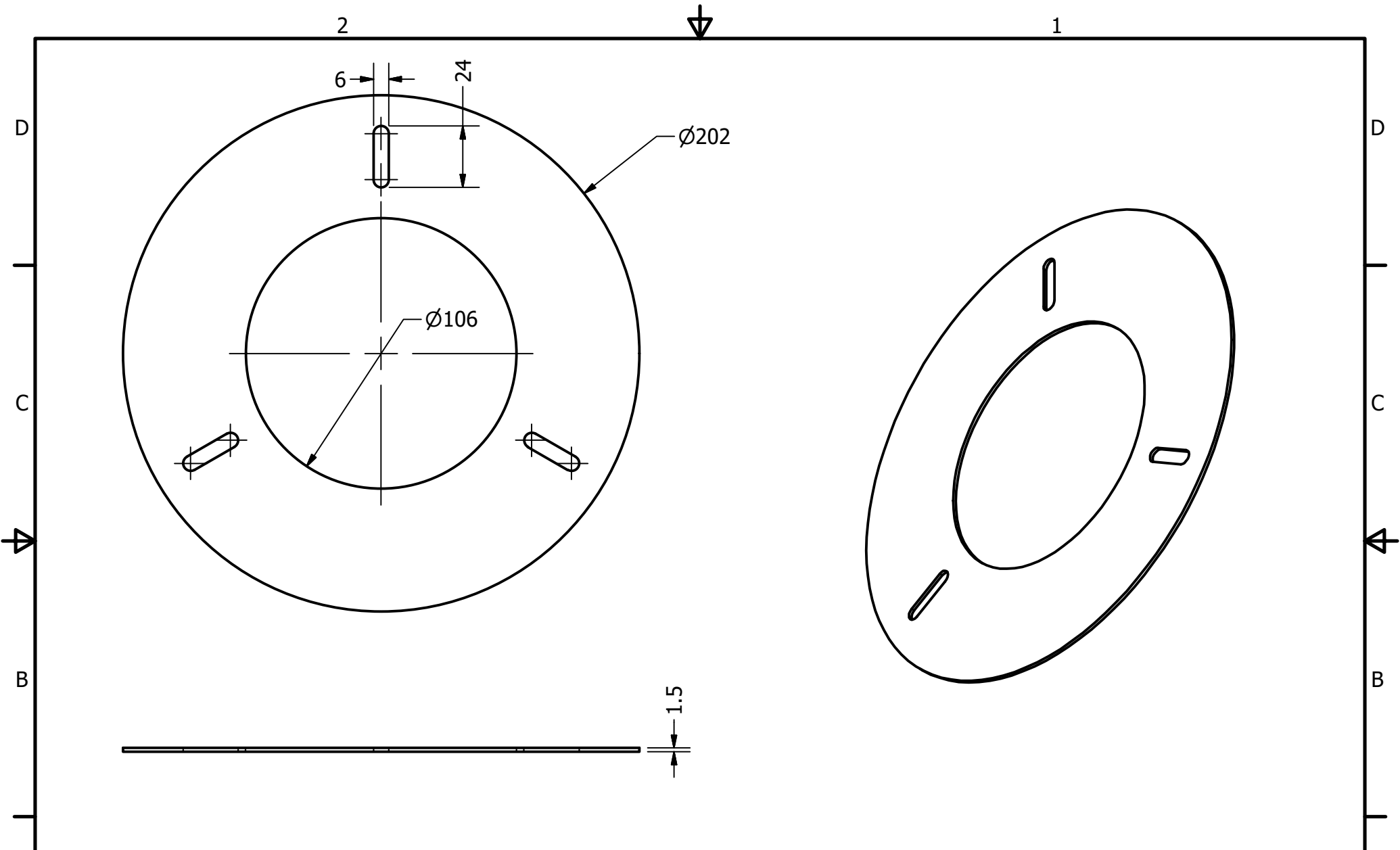
<b>Project</b> Small water turbine		<b>Created by</b> D. Mosquera		<b>Approved by</b> D. Jeager	
<b>Part Name</b> STATOR BLADING		<b>Part Code</b> 5		<b>Document Type</b> part	
<b>Redesigned by</b> 		<b>Original drawing from</b> <b>Practical ACTION</b>		<b>Material</b> see tech. notes	
<b>License</b> CERN-OHL		<b>File Name</b> oseg_swt_stator-blading.iam		<b>Version</b> 1.0	<b>Quantity</b> 1
		<b>Scale</b> 1 / 3		<b>Sheet</b> 18	<b>Date</b> 18.01.21




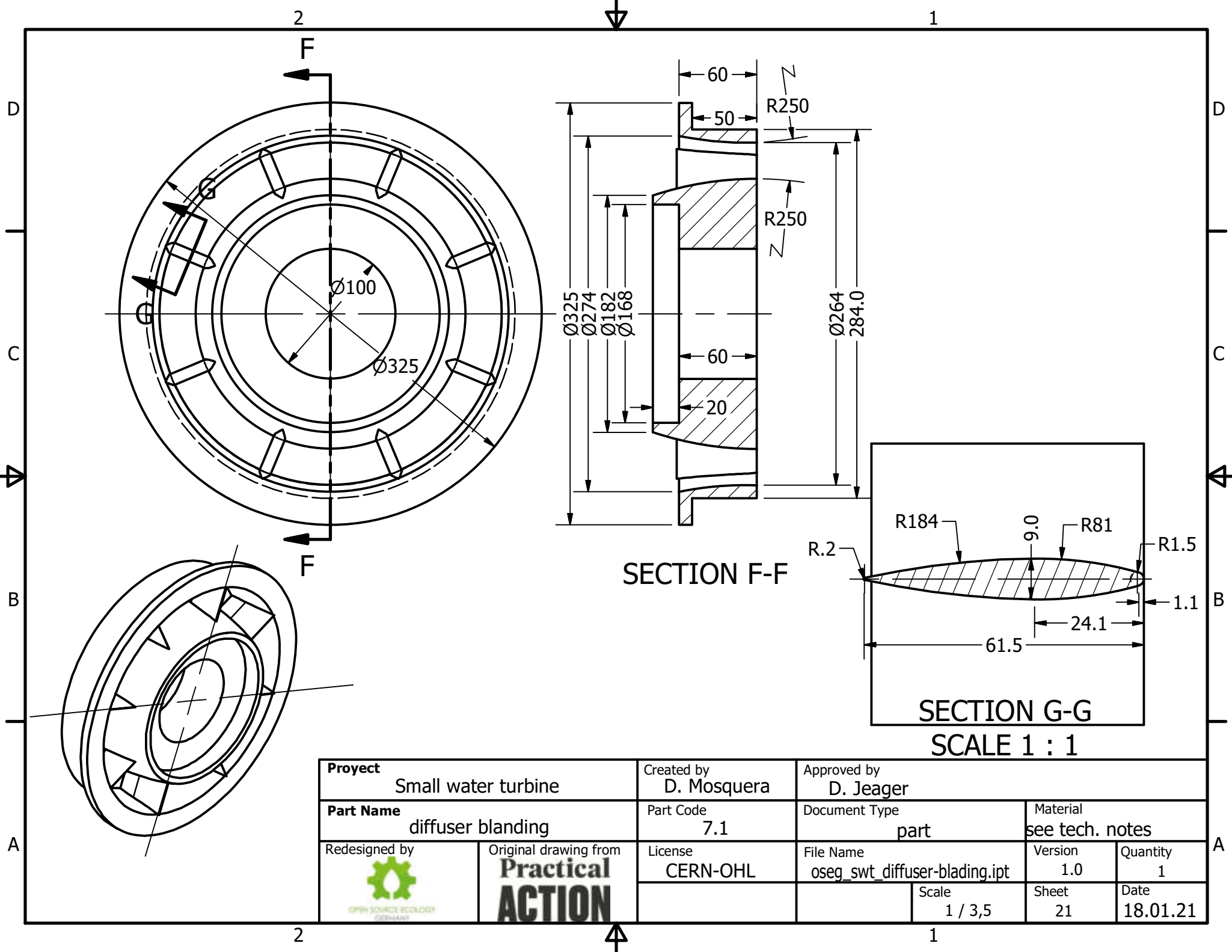
DETAIL 2  
1 / 2.5



<b>Project</b> Small water turbine		<b>Created by</b> D. Mosquera		<b>Approved by</b> D. Jeager	
<b>Part Name</b> ROTOR BLADING		<b>Part Code</b> 6.1		<b>Document Type</b> part	
<b>Redesigned by</b> 		<b>Original drawing from</b> <b>Practical ACTION</b>		<b>Material</b> see tech. notes	
<b>License</b> CERN-OHL		<b>File Name</b> oseg_swt_rotor-blading.ipt		<b>Version</b> 1.0	<b>Quantity</b> 1
		<b>Scale</b> 1/3		<b>Sheet</b> 19	<b>Date</b> 18.01.21




<b>Proyect</b> Small water turbine		Created by D. Mosquera	Approved by D. Jeager		
<b>Part Name</b> ROTOR WASHER		Part Code 6.2	Document Type part	Material 1,5 mm STEEL SHEET	
Redesigned by  OPEN SOURCE ECOLOGY GERMANY	Original drawing from <b>Practical ACTION</b>	License CERN-OHL	File Name oseg_swt_rotor-washer.ipt	Version 1.0	Quantity 1
			Scale 1 / 2	Sheet 20	Date 06.03.21

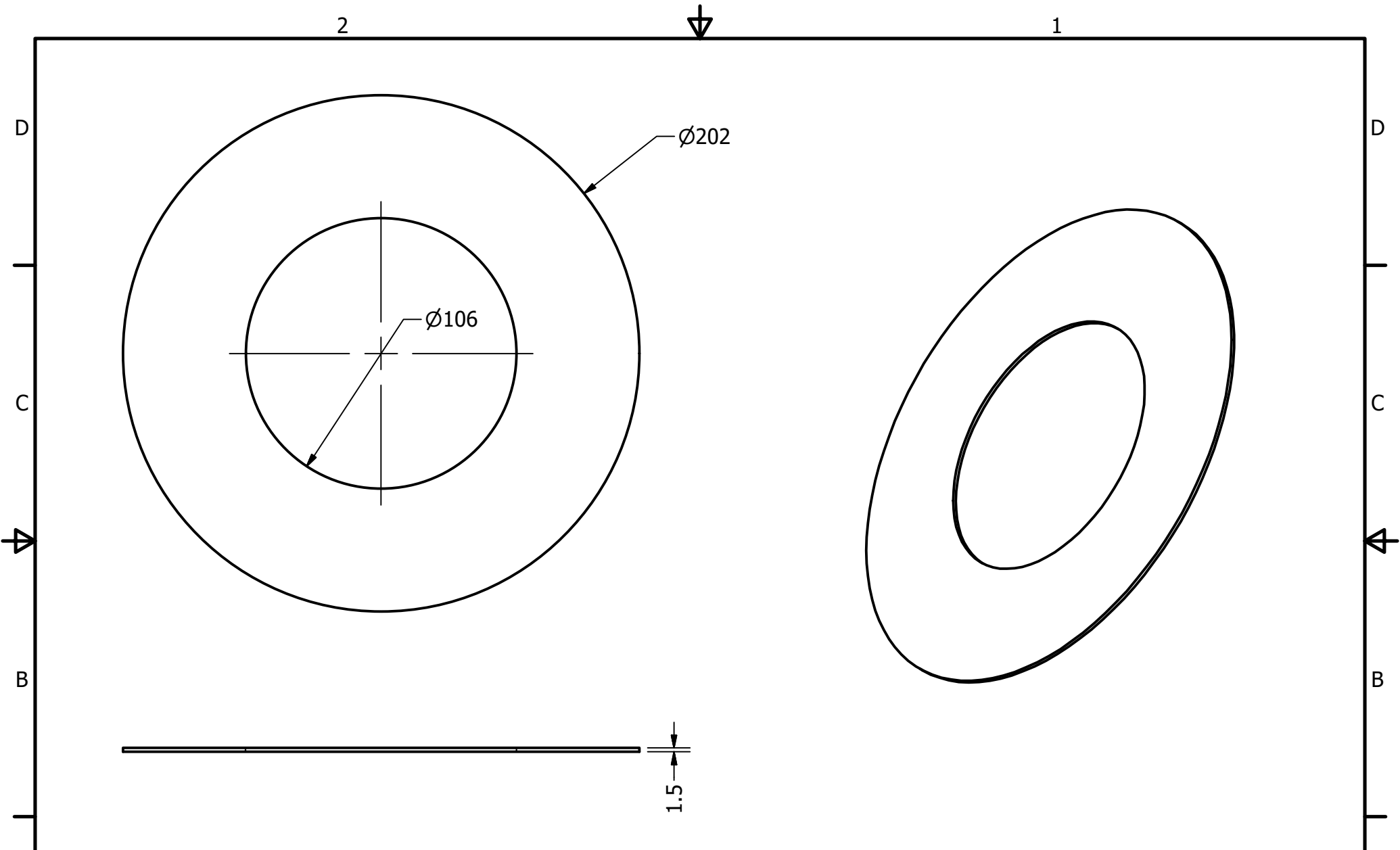



SECTION F-F

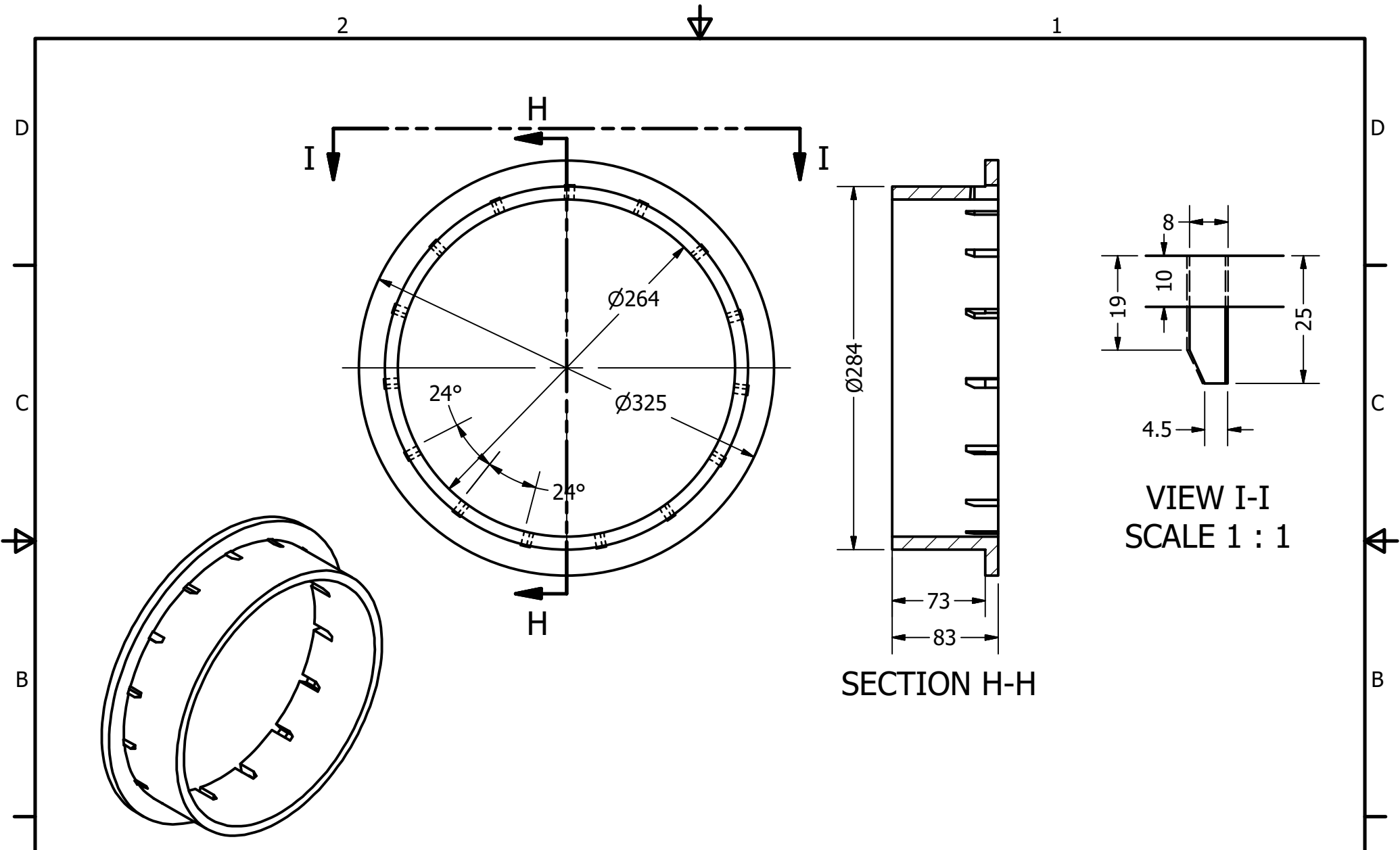
SECTION G-G

SCALE 1 : 1

<b>Project</b> Small water turbine		<b>Created by</b> D. Mosquera		<b>Approved by</b> D. Jeager	
<b>Part Name</b> diffuser blanding		<b>Part Code</b> 7.1		<b>Document Type</b> part	
<b>Redesigned by</b> 		<b>Original drawing from</b> <b>Practical ACTION</b>		<b>Material</b> see tech. notes	
<b>License</b> CERN-OHL		<b>File Name</b> oseg_swt_diffuser-blading.ipt		<b>Version</b> 1.0	
		<b>Scale</b> 1 / 3,5		<b>Quantity</b> 1	
				<b>Date</b> 18.01.21	




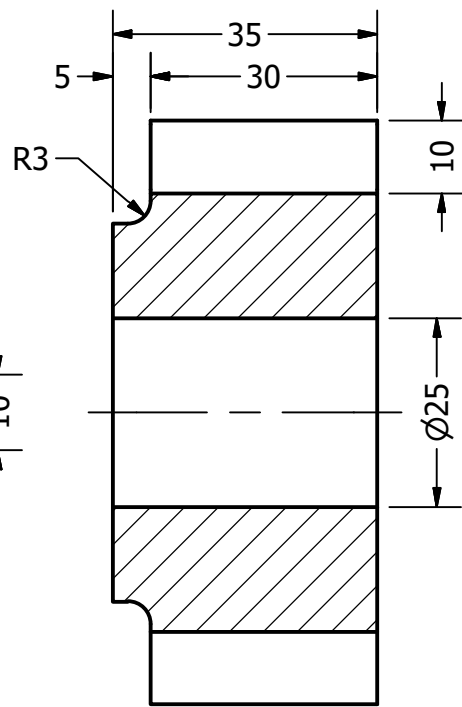
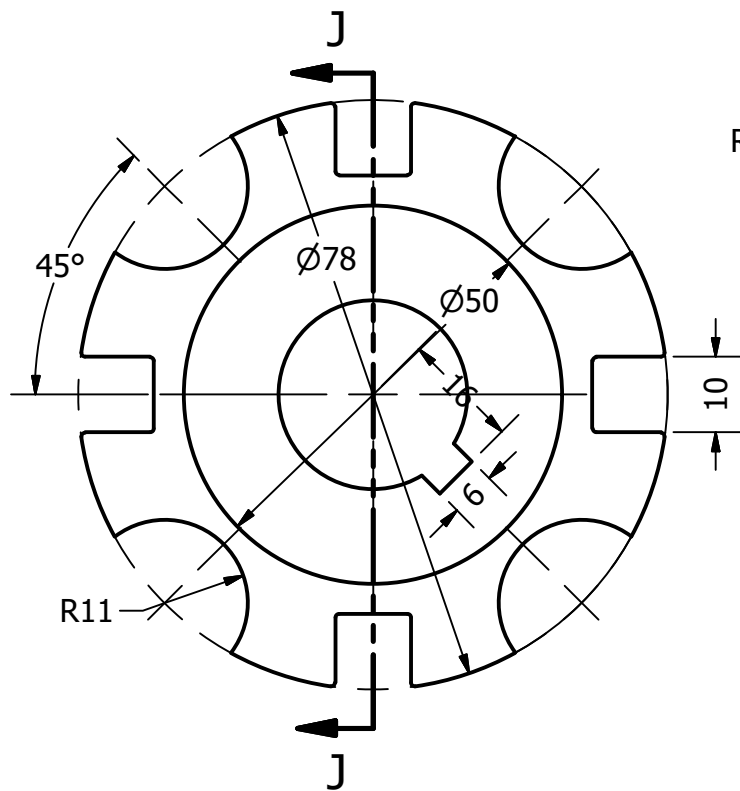
<b>Proyect</b> Small water turbine		Created by D. Mosquera	Approved by D. Jeager		
<b>Part Name</b> DIFFUSER WASHER		Part Code 7.2	Document Type part	Material 1,5 mm STEEL SHEET	
Redesigned by  OPEN SOURCE ECOLOGY GERMANY	Original drawing from <b>Practical ACTION</b>	License CERN-OHL	File Name oseg_swt_diffuser-washer.ipt	Version 1.0	Quantity 1
			Scale 1 / 2	Sheet 22	Date 06.03.21



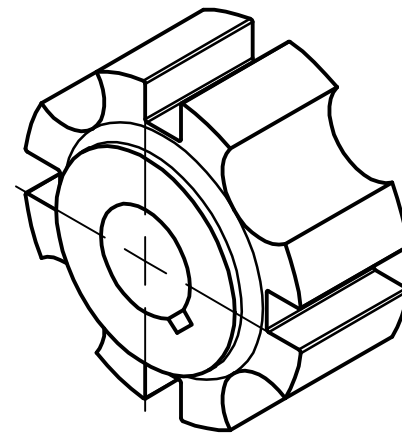
SECTION H-H


VIEW I-I  
SCALE 1 : 1

<b>Proyect</b> Small water turbine		Created by D. Mosquera		Approved by D. Jeager	
<b>Part Name</b> bush		Part Code 8		Document Type part	
Redesigned by  OPEN SOURCE ECOLOGY GERMANY		Original drawing from <b>Practical ACTION</b>		License CERN-OHL	
				File Name oseq_swt_bush.ipt	
				Version 1.0	
				Quantity 1	
				Scale 1 / 4	
				Sheet 23	
				Date 18.01.21	

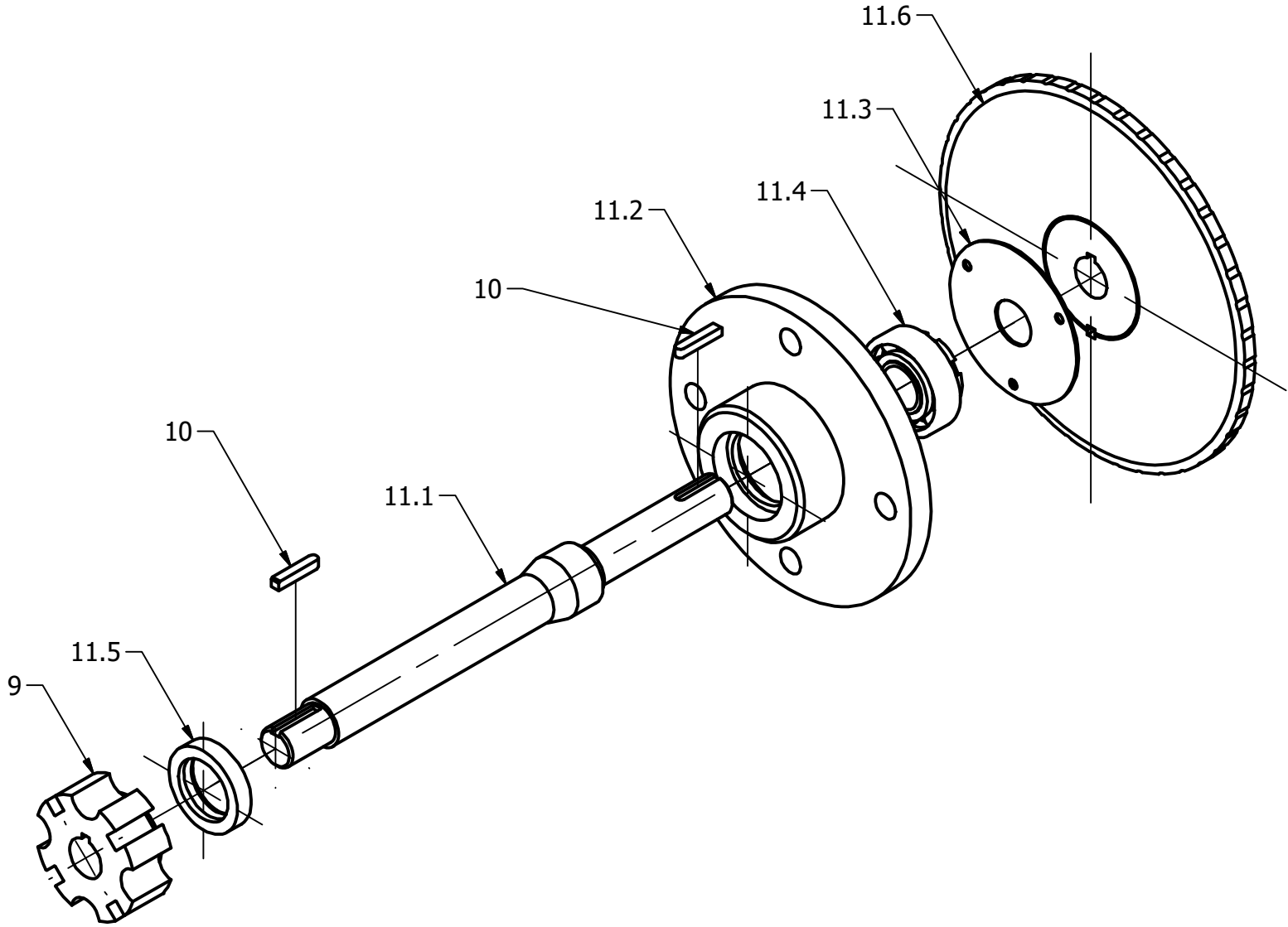



SECTION J-J

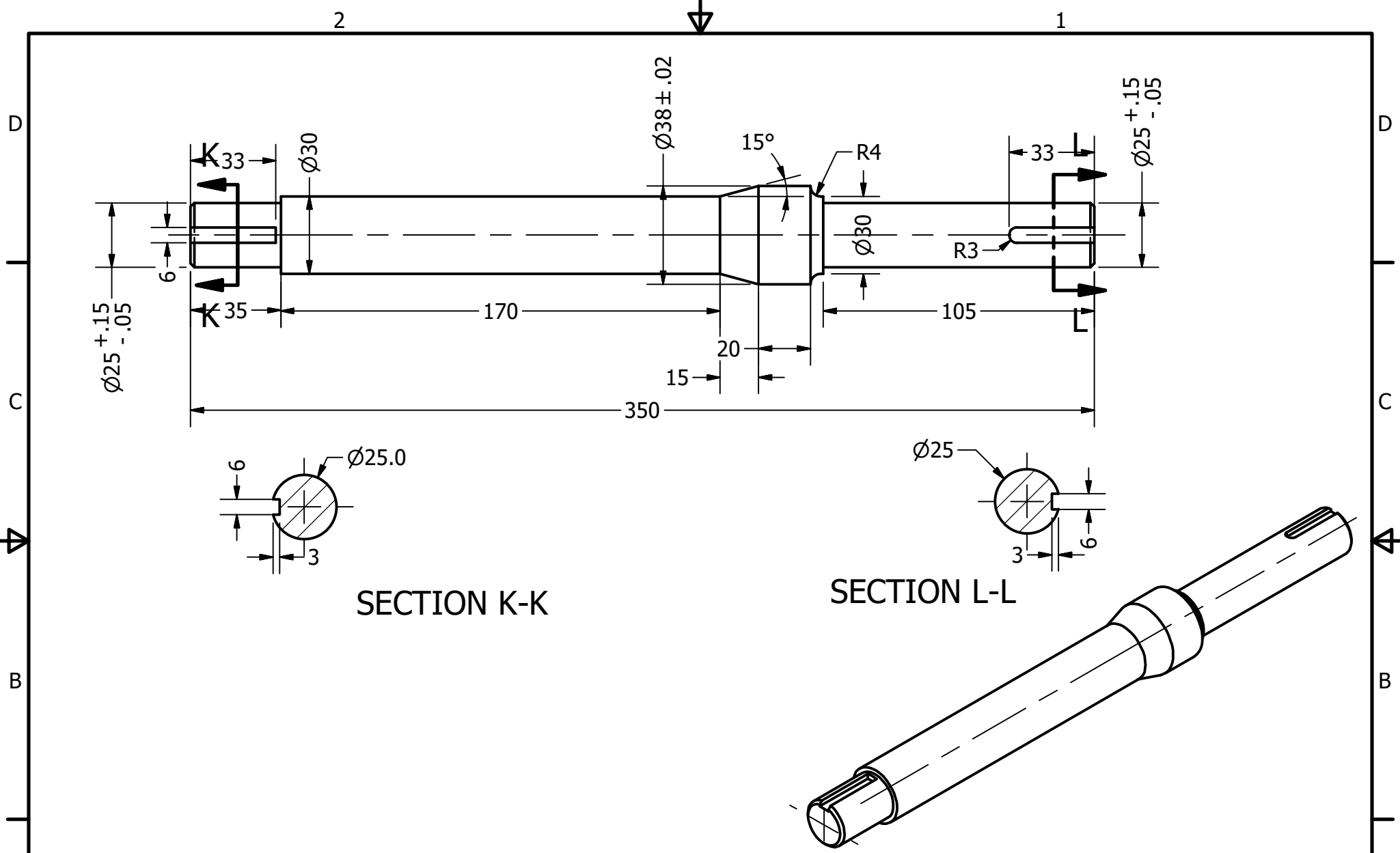


<b>Proyect</b> Small water turbine		Created by D. Mosquera		Approved by D. Jeager	
<b>Part Name</b> slotter disk		Part Code 9		Document Type part	
Redesigned by 		Original drawing from <b>Practical ACTION</b>		Material ALUMINIUM	
		License CERN-OHL		File Name oseg_swt_slotted-disk.ipt	
				Version 1.0	
				Quantity 1	
		Scale 1 : 1		Sheet 24	
				Date 18.01.21	






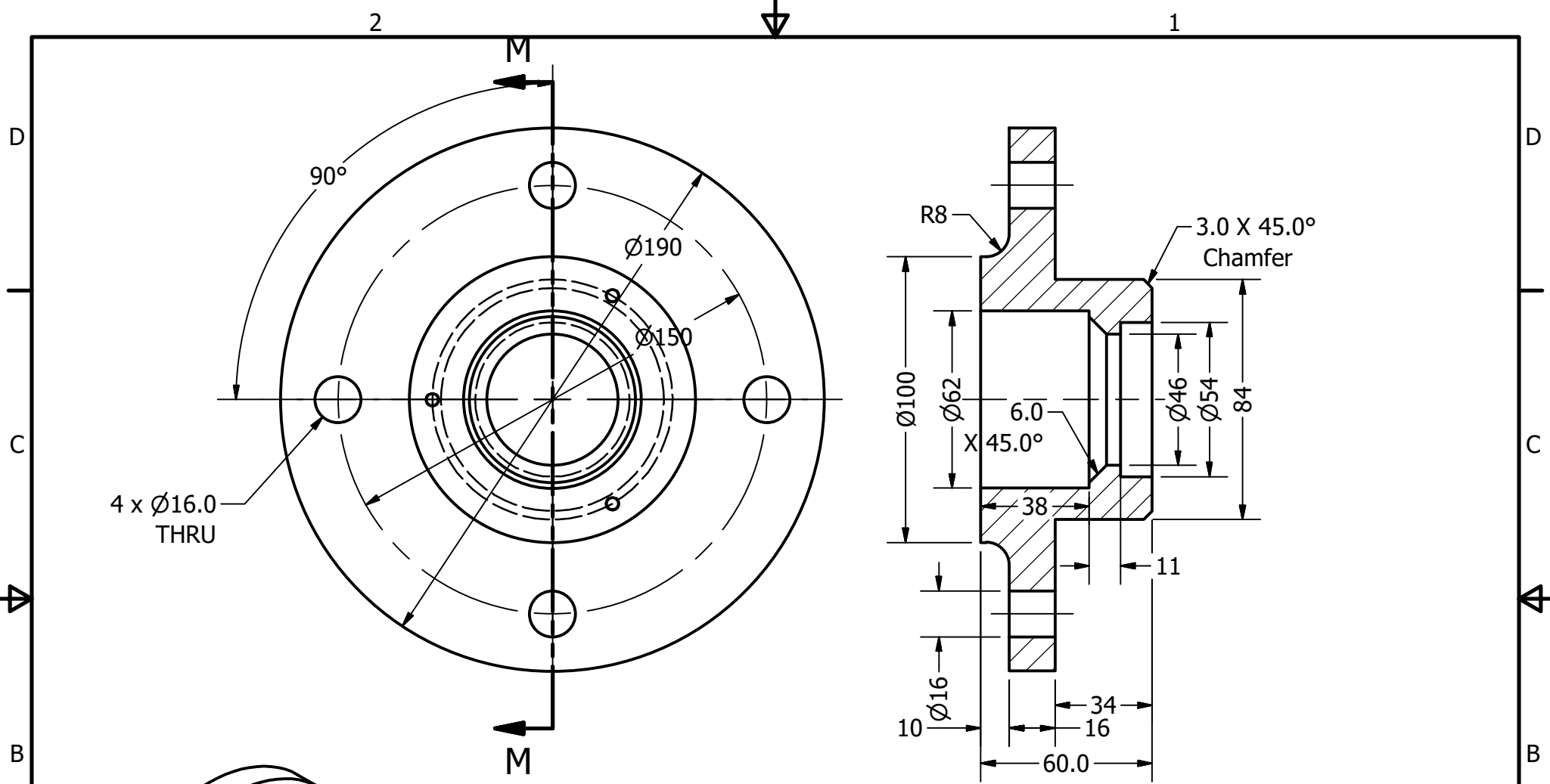
<b>Proyect</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>	
<b>Part Name</b> hub assembly		Part Code 11	Document Type part		Material
Redesigned by  OPEN SOURCE ECOLOGY GERMANY	Original drawing from <b>Practical ACTION</b>	License CERN-OHL	File Name oseg_swt_hub-assembly.iam	Version 1.0	Quantity 1
			Scale	Sheet 25	Date 18.01.21



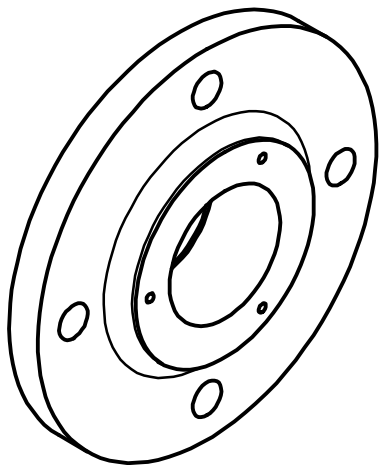
SECTION K-K


SECTION L-L

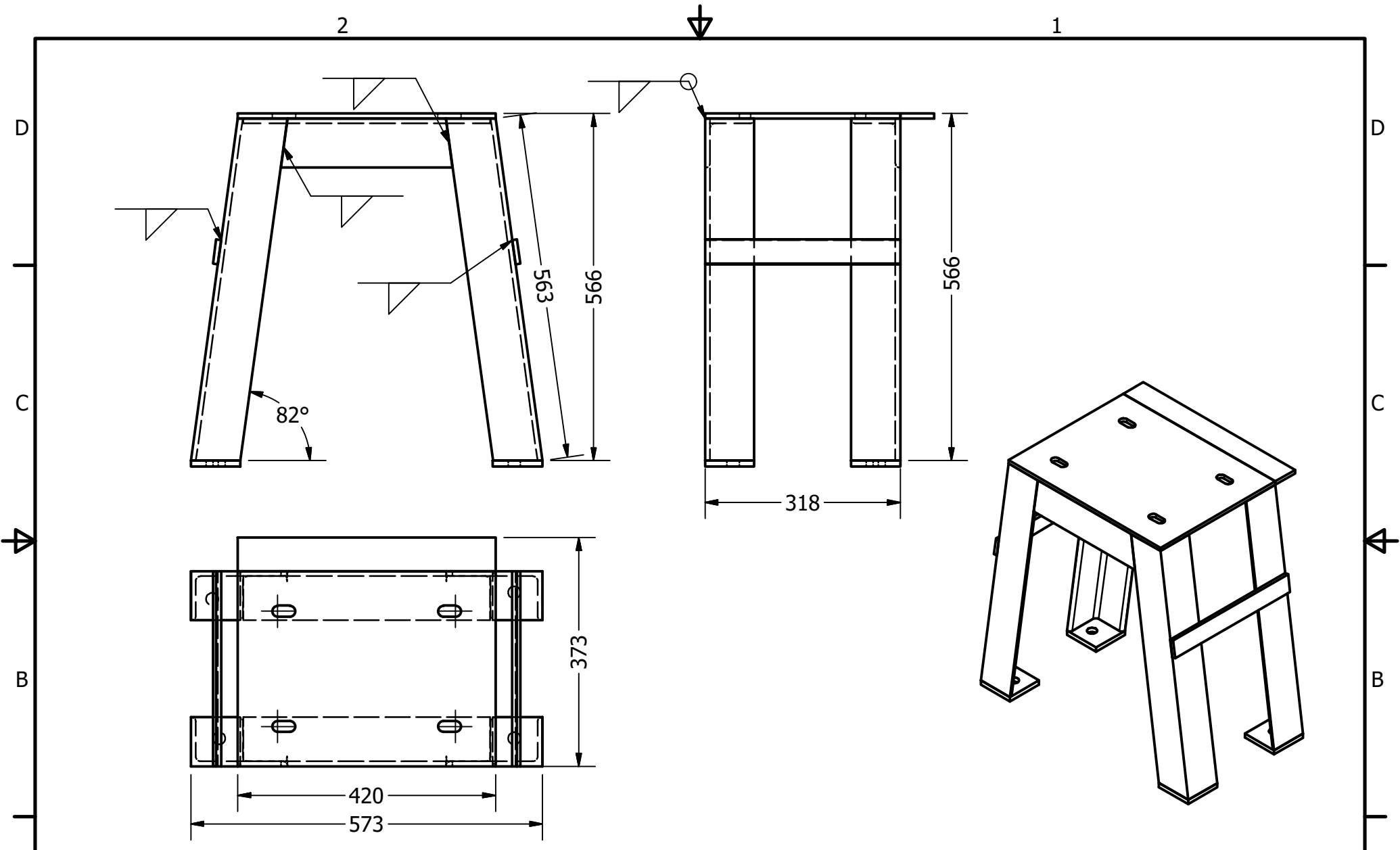
<b>Proyect</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>	
<b>Part Name</b> shaft		Part Code 11.1		Document Type part	
Redesigned by 		Original drawing from <b>Practical ACTION</b>		Material <b>STAINLESS STEEL</b>	
License CERN-OHL		File Name oseg_swt_shaft.ipt		Version 1.0	
		Scale 1 / 2		Quantity 1	
				Date 18.01.21	
				Sheet 26	




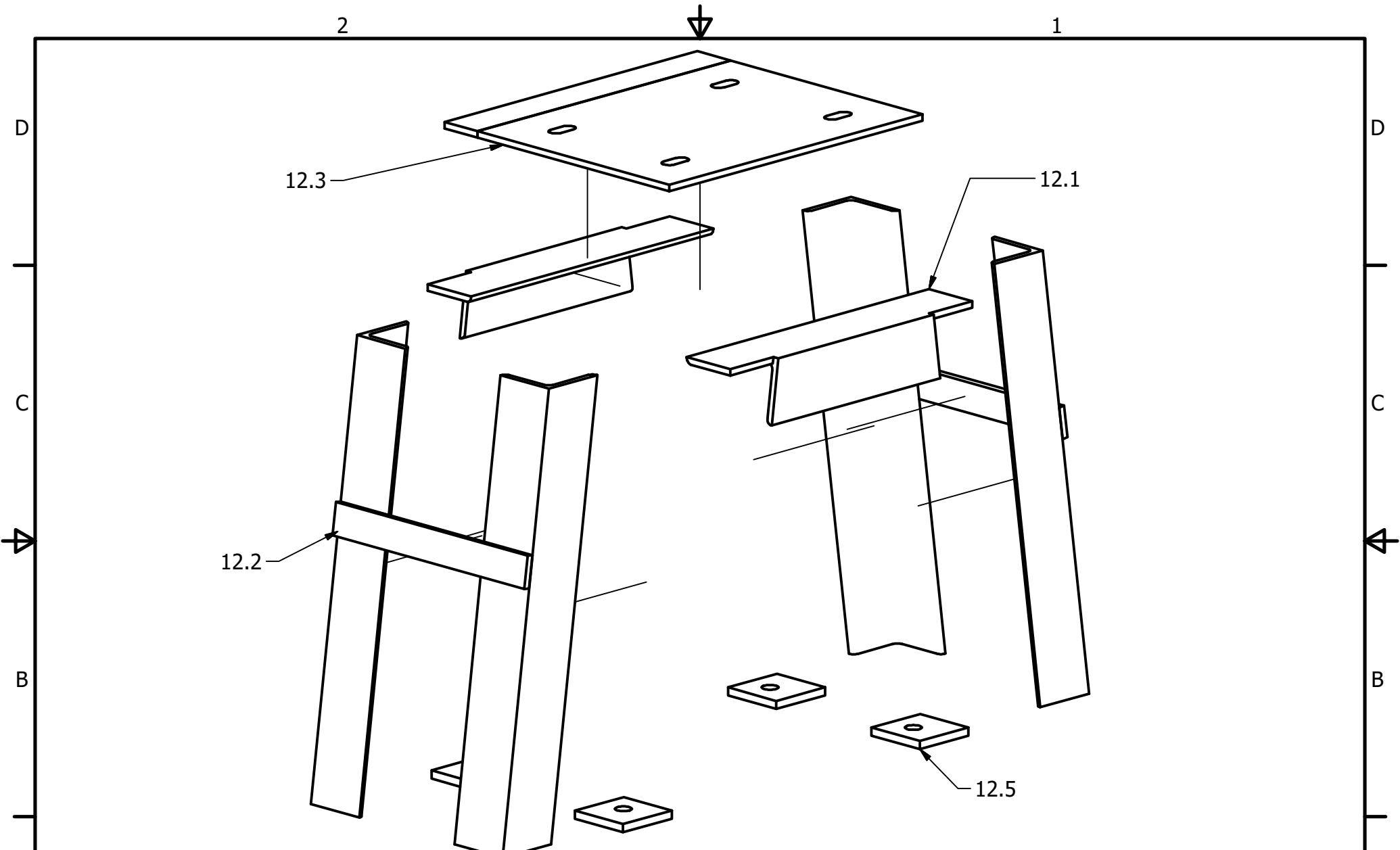
SECTION M-M




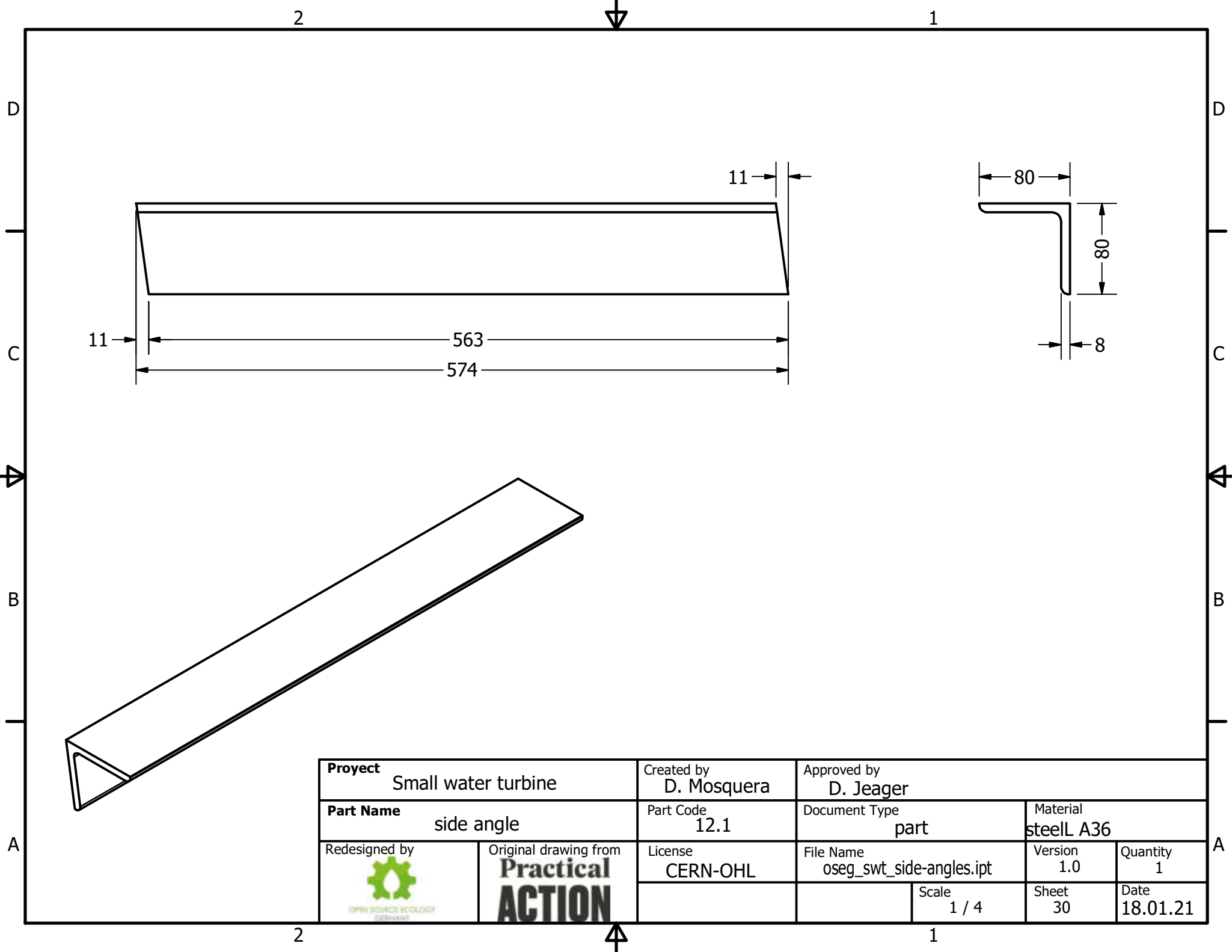
<b>Proyect</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>	
<b>Part Name</b> hub-housing		Part Code 11.2		Document Type part	
Redesigned by 		Original drawing from <b>Practical ACTION</b>		Material <b>CAST STEEL</b>	
License CERN-OHL		File Name oseg_swt_hub-housing.ipt		Version 1.0	
		Scale 1 / 2		Quantity 1	
				Date 18.01.21	
				Sheet 27	




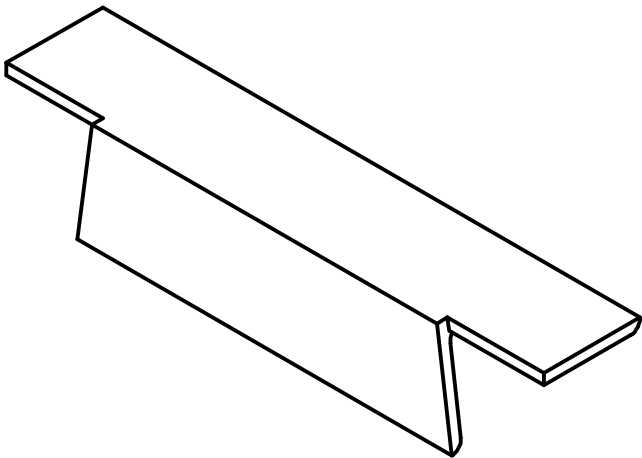
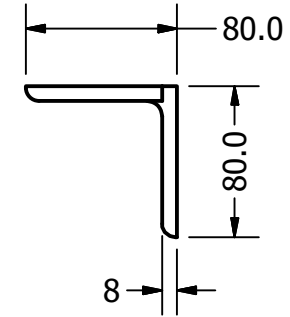
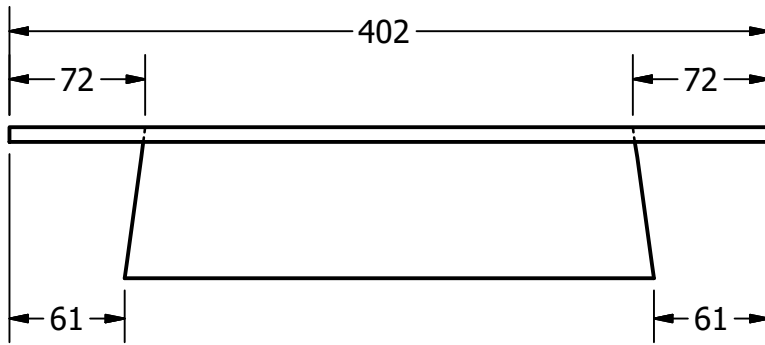
<b>Project</b> Small water turbine		Created by D. Mosquera		Approved by D. Jeager	
<b>Part Name</b> frame		Part Code 12	Document Type assemble		Material steel A36
Redesigned by 	Original drawing from <b>Practical ACTION</b>	License CERN-OHL	File Name oseg_swt_frame.iam		Version 1.0
			Scale 1 / 10	Sheet 28	Quantity 1
				Date 18.01.21	




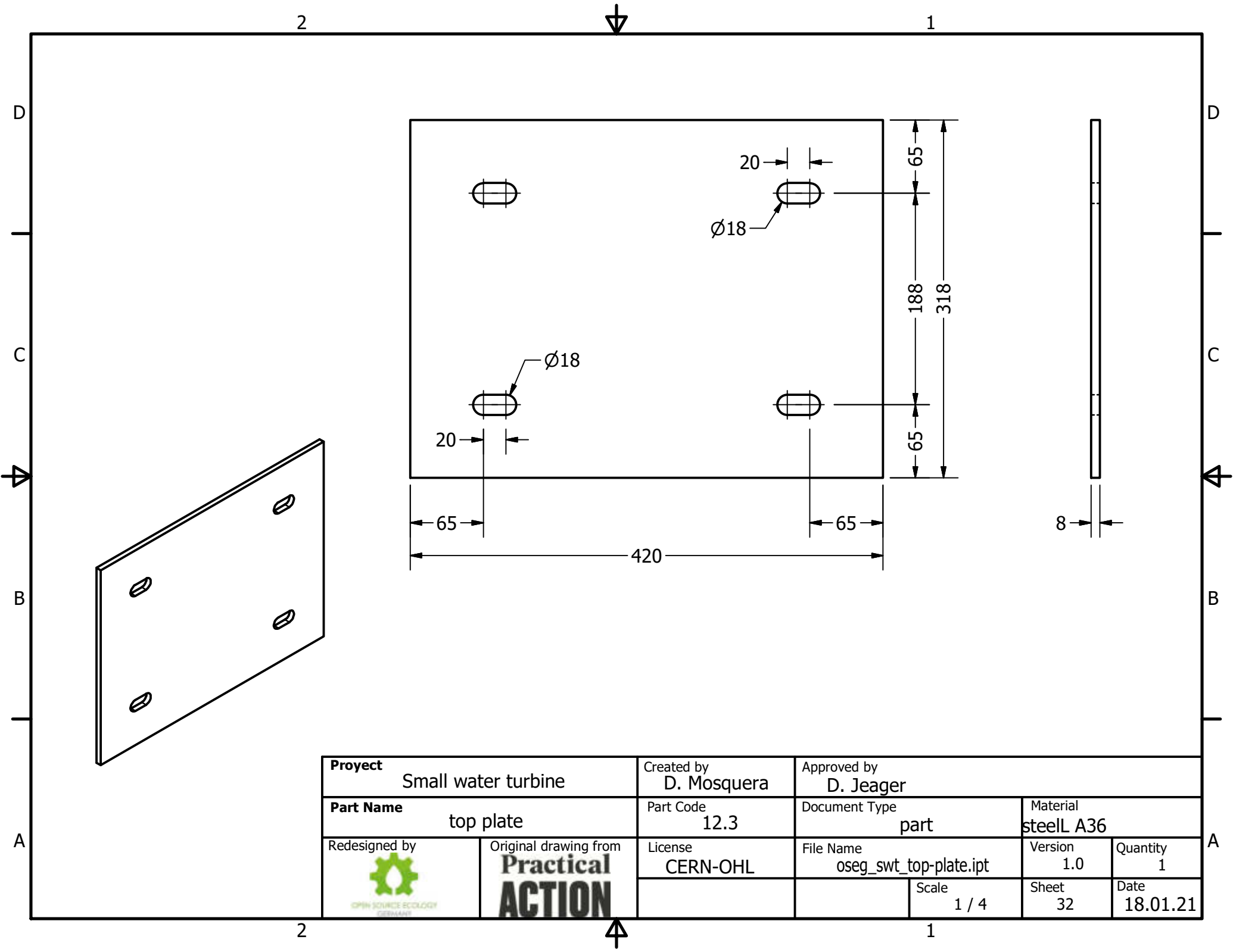
<b>Proyect</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>	
<b>Part Name</b> frame		Part Code 12		Document Type assemble	
Redesigned by 		Original drawing from <b>Practical ACTION</b>		Material steel A36	
		License CERN-OHL		File Name oseg_swt_frame.iam	
				Version 1.0	
				Quantity 1	
		Scale 1 / 6		Sheet 29	
				Date 18.01.21	




<b>Proyect</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>	
<b>Part Name</b> side angle		Part Code 12.1		Document Type part	
Redesigned by 		Original drawing from <b>Practical ACTION</b>		Material steelL A36	
		License CERN-OHL		File Name oseg_swt_side-angles.ipt	
		Scale 1 / 4		Version 1.0	
				Quantity 1	
				Date 18.01.21	
				Sheet 30	

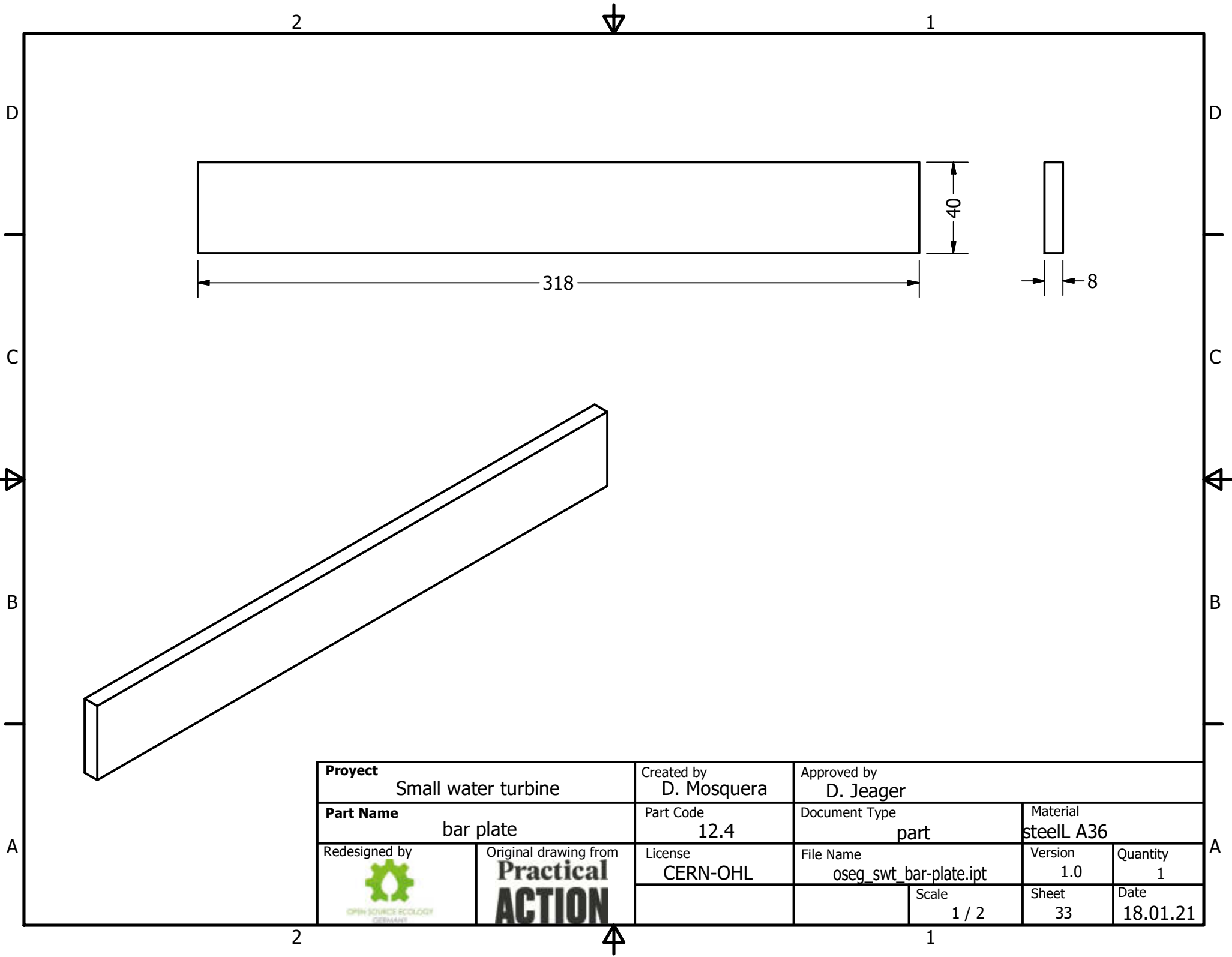



<b>Proyect</b> Small water turbine		Created by D. Mosquera		Approved by D. Jeager		
<b>Part Name</b> top angle		Part Code 12.2		Document Type part		Material steelL A36
Redesigned by 	Original drawing from <b>Practical ACTION</b>	License CERN-OHL		File Name oseg_swt_top-angles.ipt		Version 1.0
			Scale 1 / 4	Sheet 31	Date 18.01.21	

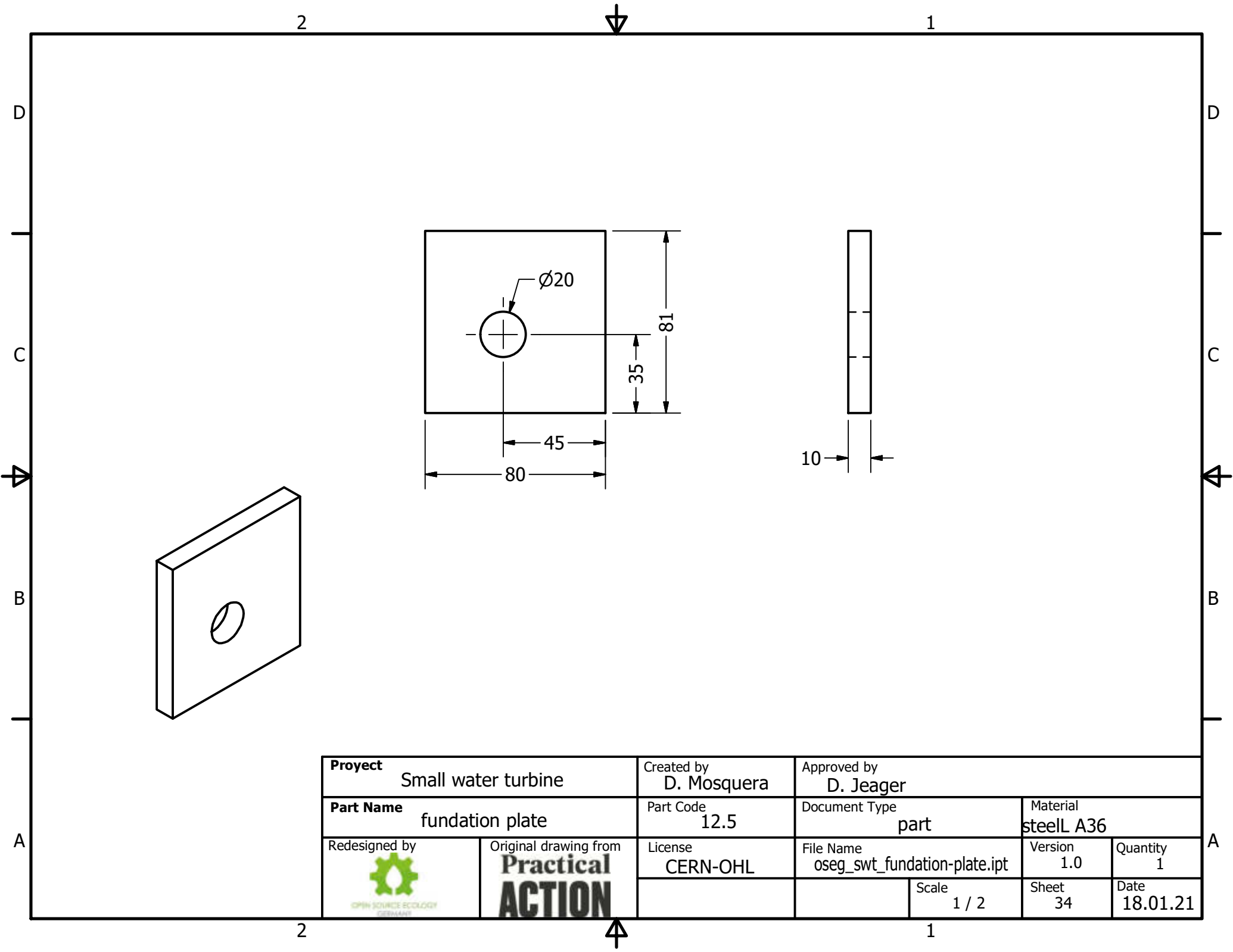



<b>Proyect</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>	
<b>Part Name</b> top plate		Part Code 12.3		Document Type part	
Redesigned by 		Original drawing from <b>Practical ACTION</b>		Material steelL A36	
		License CERN-OHL		File Name oseg_sw_t_top-plate.ipt	
				Version 1.0	
				Quantity 1	
				Scale 1 / 4	
				Sheet 32	
				Date 18.01.21	

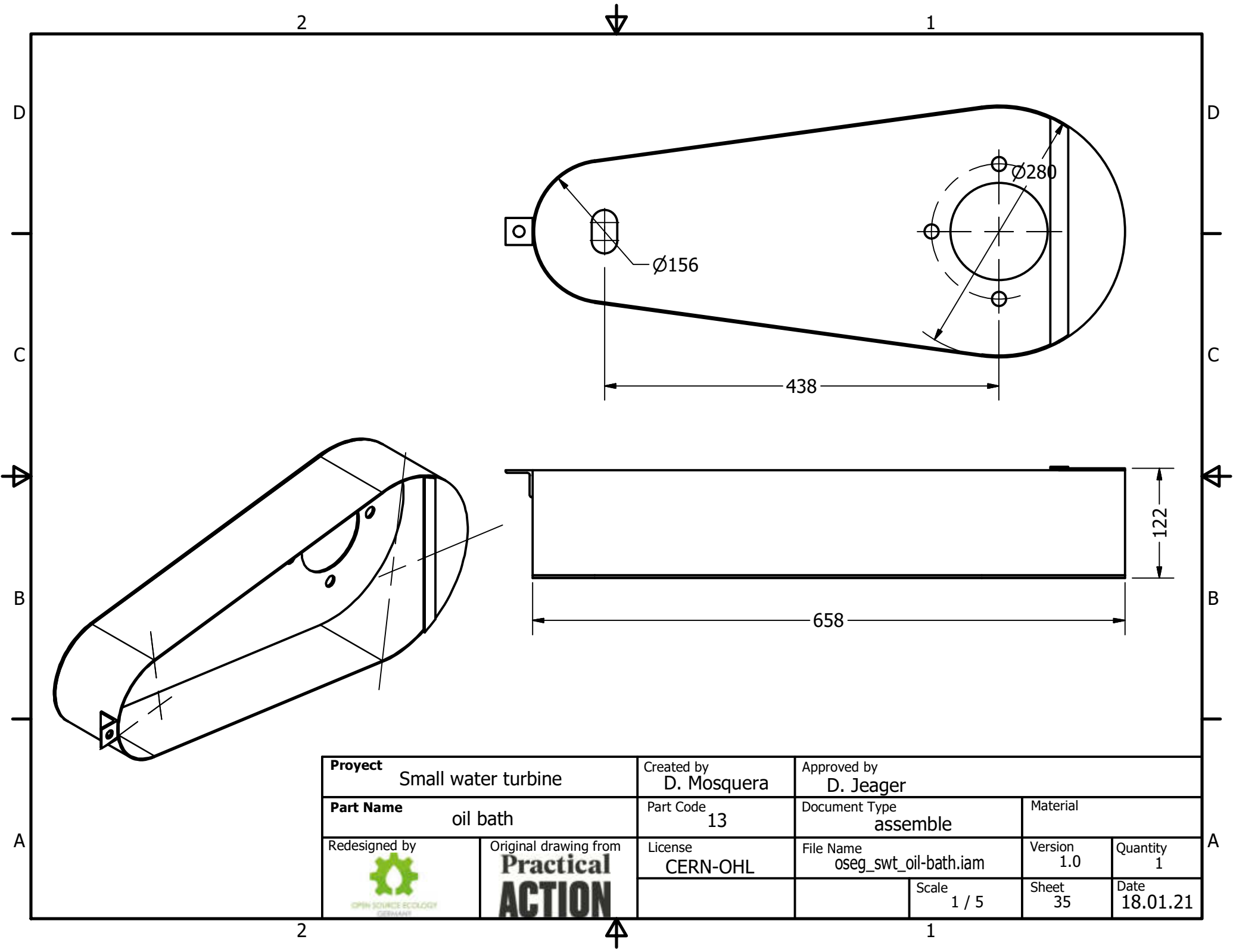





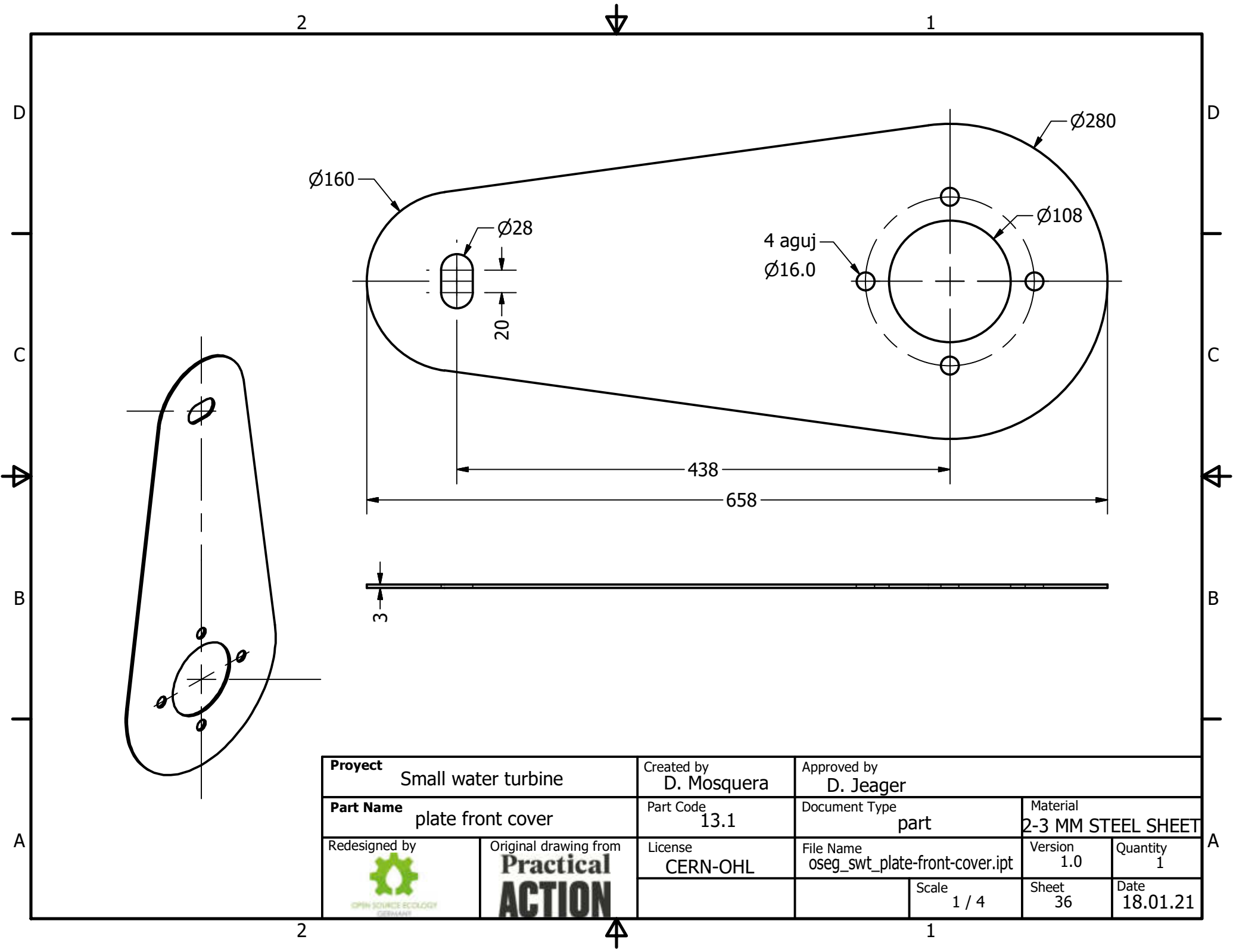
<b>Proyect</b> Small water turbine		Created by D. Mosquera	Approved by D. Jeager		
<b>Part Name</b> bar plate		Part Code 12.4	Document Type part	Material steelL A36	
Redesigned by  OPEN SOURCE ECOLOGY GERMANY	Original drawing from <b>Practical ACTION</b>	License CERN-OHL	File Name oseg_swt_bar-plate.ipt	Version 1.0	Quantity 1
			Scale 1 / 2	Sheet 33	Date 18.01.21




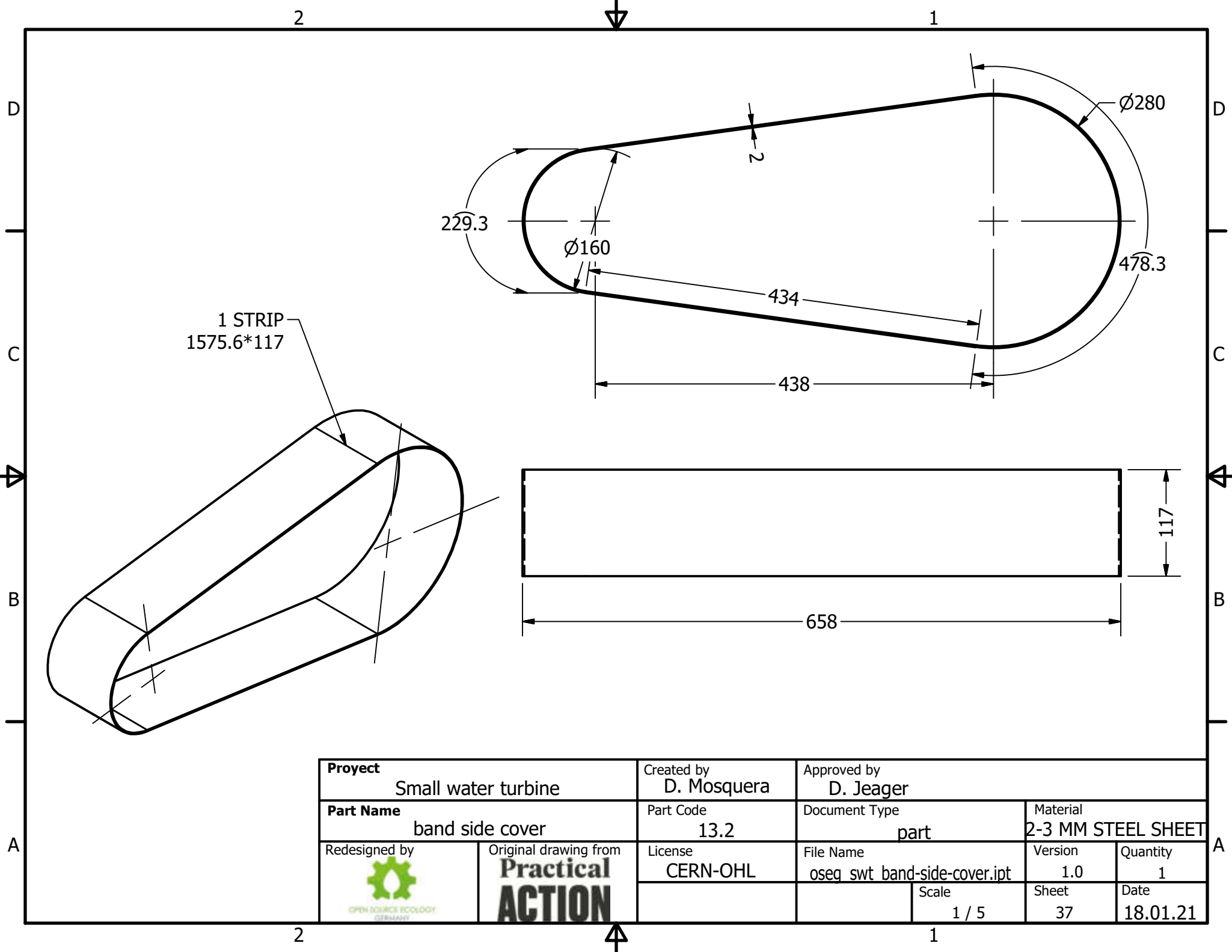
<b>Proyect</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>	
<b>Part Name</b> foundation plate		Part Code <b>12.5</b>		Document Type <b>part</b>	
Redesigned by 		Original drawing from <b>Practical ACTION</b>		Material <b>steel A36</b>	
		License <b>CERN-OHL</b>		File Name oseg_swt_foundation-plate.ipt	
				Version <b>1.0</b>	
				Quantity <b>1</b>	
				Scale <b>1 / 2</b>	
				Sheet <b>34</b>	
				Date <b>18.01.21</b>	




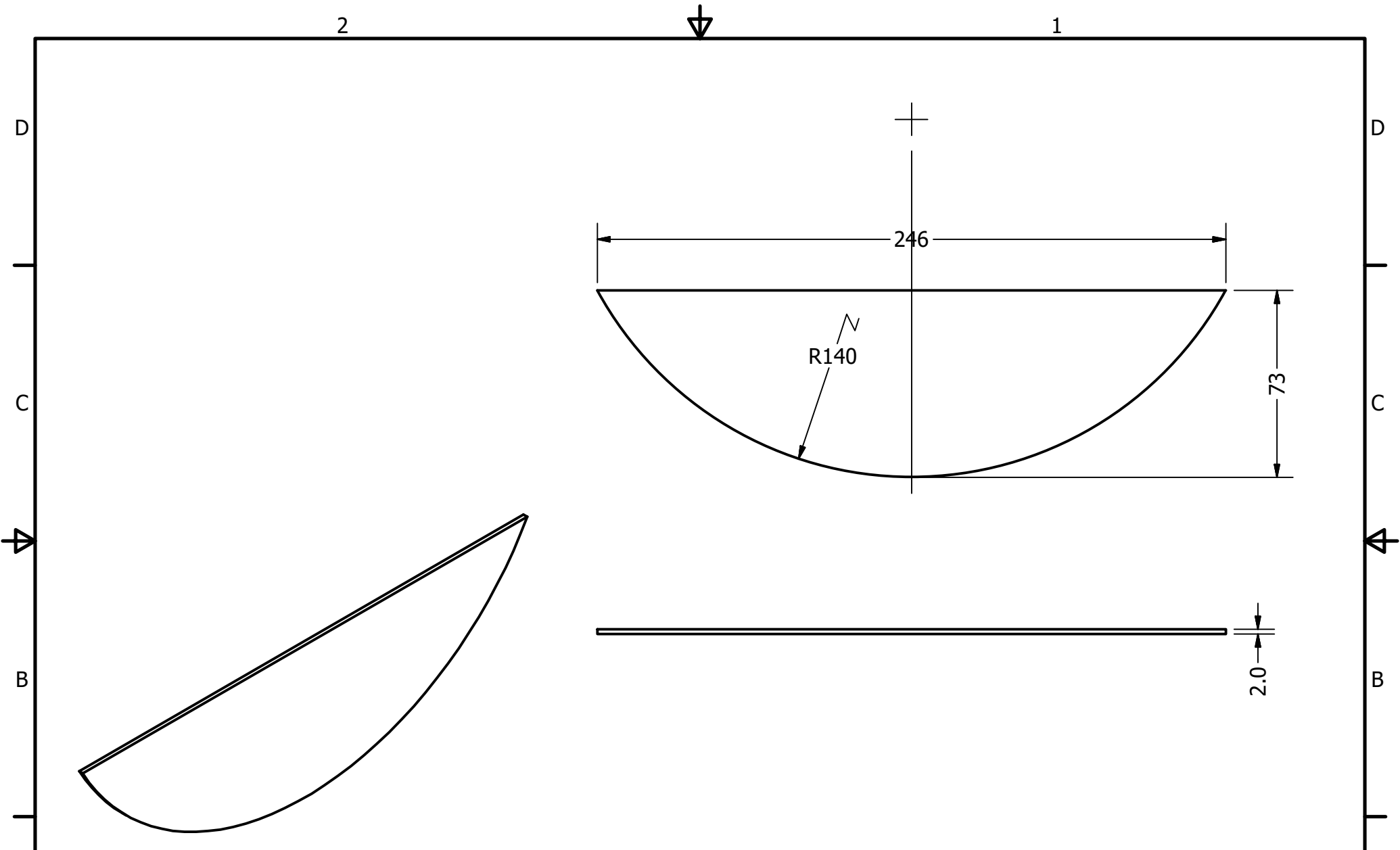
<b>Proyect</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>	
<b>Part Name</b> oil bath		Part Code 13		Document Type assemble	
Redesigned by 		Original drawing from <b>Practical ACTION</b>		File Name oseg_swt_oil-bath.iam	
		License CERN-OHL		Version 1.0	
				Quantity 1	
				Scale 1 / 5	
				Sheet 35	
				Date 18.01.21	




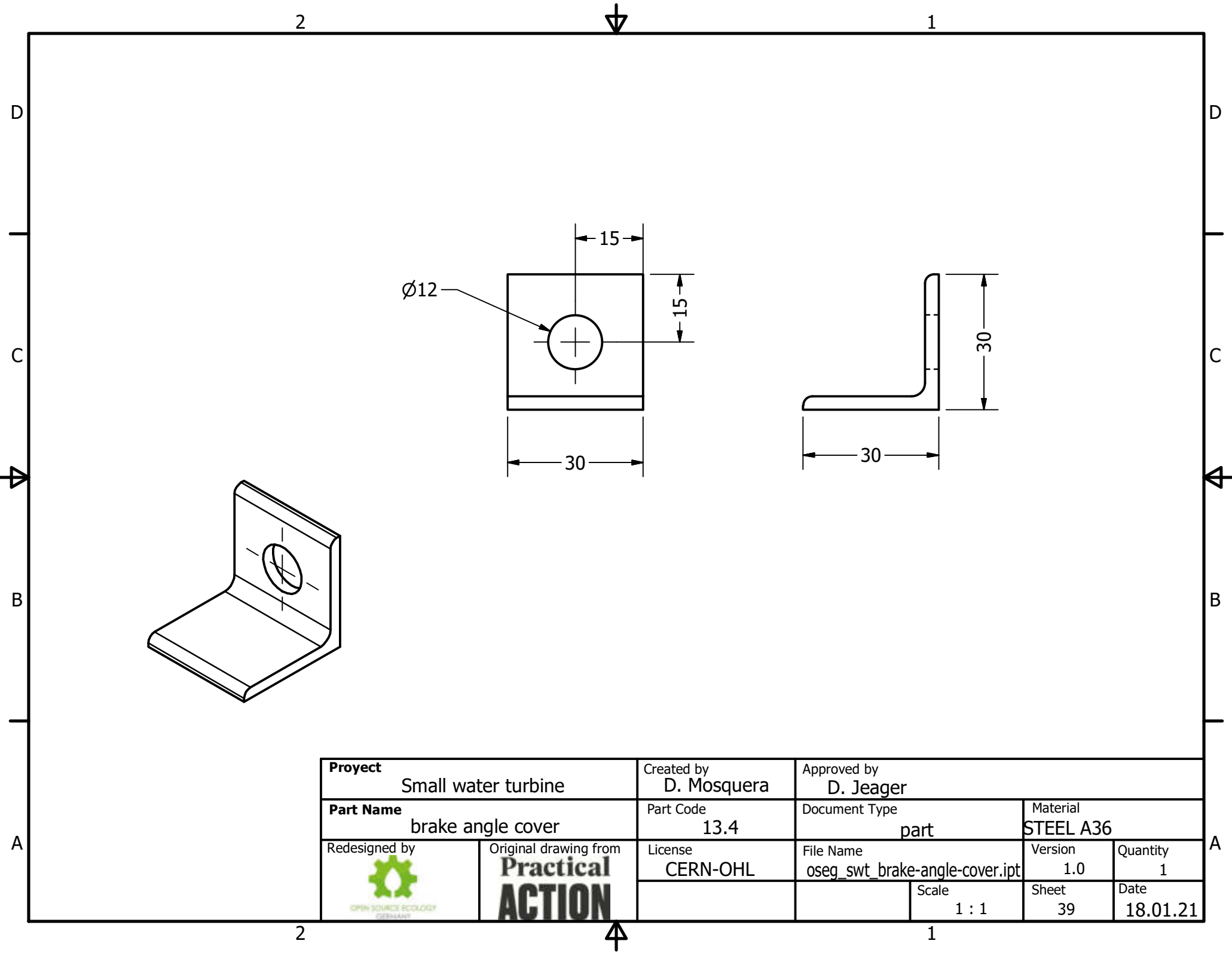
<b>Proyect</b> Small water turbine		Created by D. Mosquera		Approved by D. Jeager	
<b>Part Name</b> plate front cover		Part Code 13.1	Document Type part		Material 2-3 MM STEEL SHEET
Redesigned by 	Original drawing from <b>Practical ACTION</b>	License CERN-OHL	File Name oseg_swt_plate-front-cover.ipt		Version 1.0
			Scale 1 / 4	Sheet 36	Quantity 1
				Date 18.01.21	

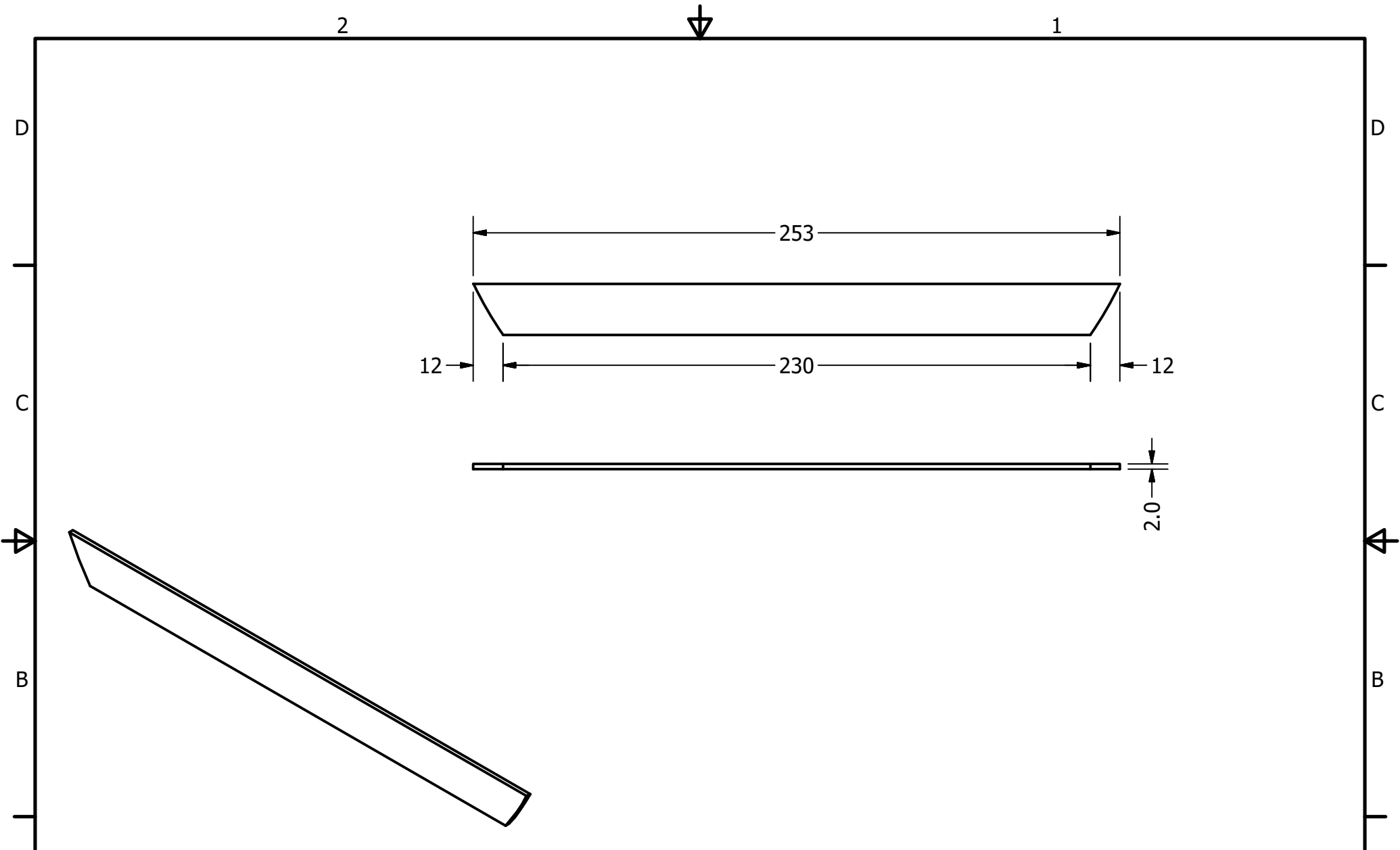



<b>Proyect</b> Small water turbine		Created by <b>D. Mosquera</b>	Approved by <b>D. Jeager</b>		
<b>Part Name</b> band side cover		Part Code 13.2	Document Type part	Material 2-3 MM STEEL SHEET	
Redesigned by 	Original drawing from <b>Practical ACTION</b>	License CERN-OHL	File Name oseq swt band-side-cover.ipt	Version 1.0	Quantity 1
			Scale 1 / 5	Sheet 37	Date 18.01.21



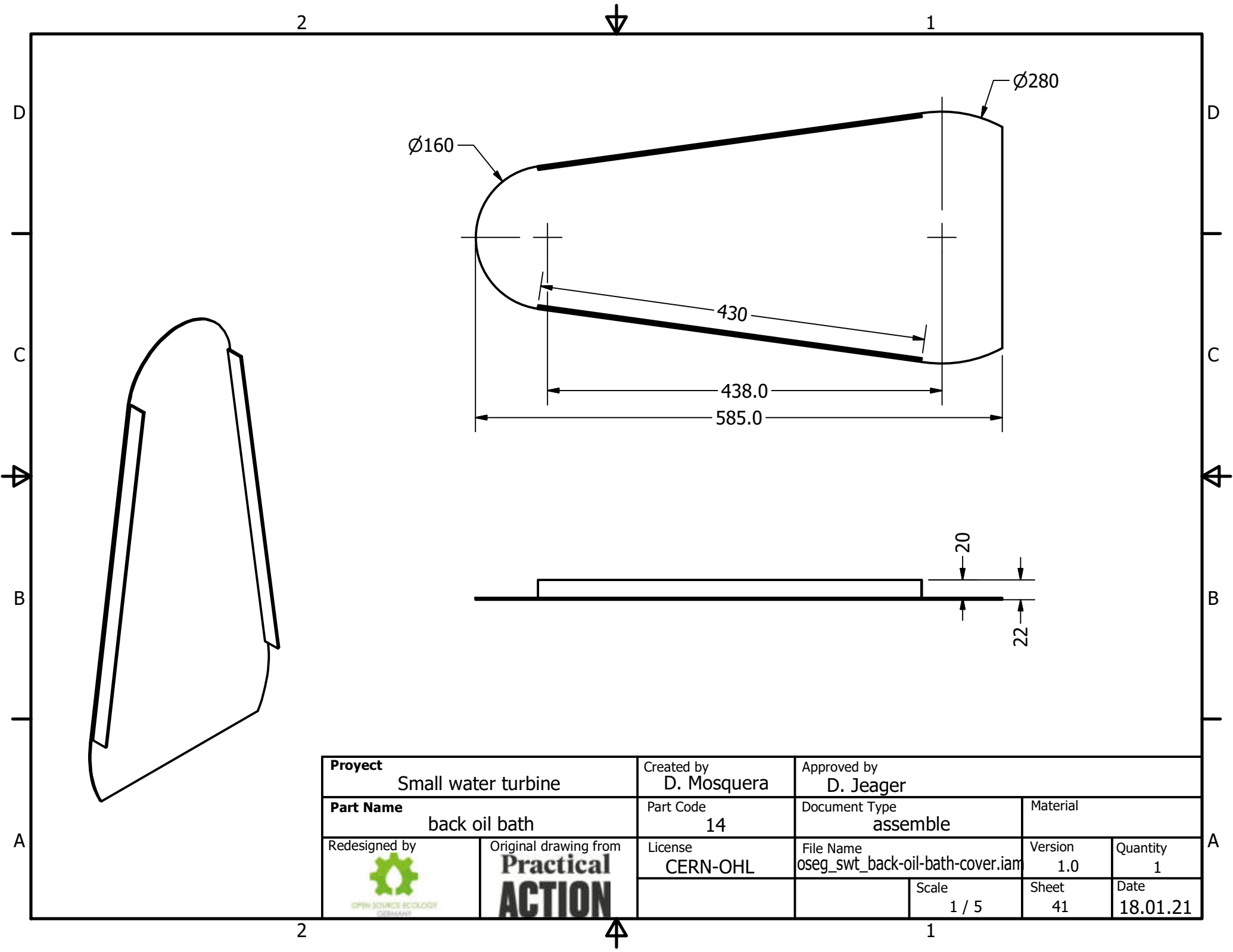
<b>Proyect</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>	
<b>Part Name</b> plate down cover		Part Code 13.3		Document Type part	
Redesigned by 		Original drawing from <b>Practical ACTION</b>		Material <b>2-3 MM STEEL SHEET</b>	
License CERN-OHL		File Name oseg_swt_plate-down-cover.ipt		Version 1.0	
		Scale 1 / 2		Quantity 1	
				Date 18.01.21	
				Sheet 38	




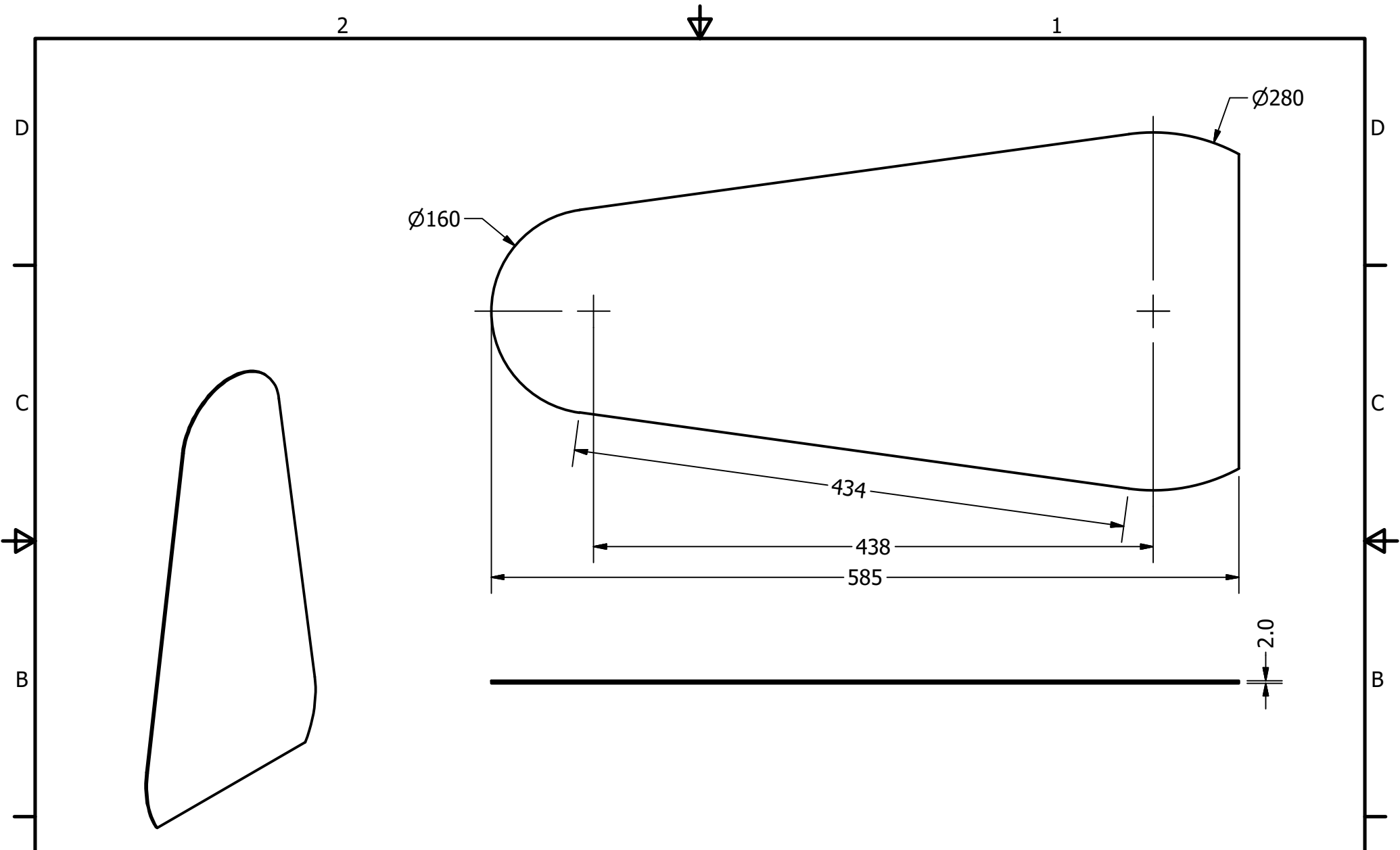



<b>Proyect</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>		
<b>Part Name</b> brake bar cover		Part Code 13.5		Document Type part		Material <b>2-3 MM STEEL SHEET</b>
Redesigned by 	Original drawing from <b>Practical ACTION</b>		License CERN-OHL	File Name oseg_swt_brake-bar-cover.ipt		Version 1.0
				Scale 1 / 2	Sheet 40	Quantity 1
					Date 18.01.21	

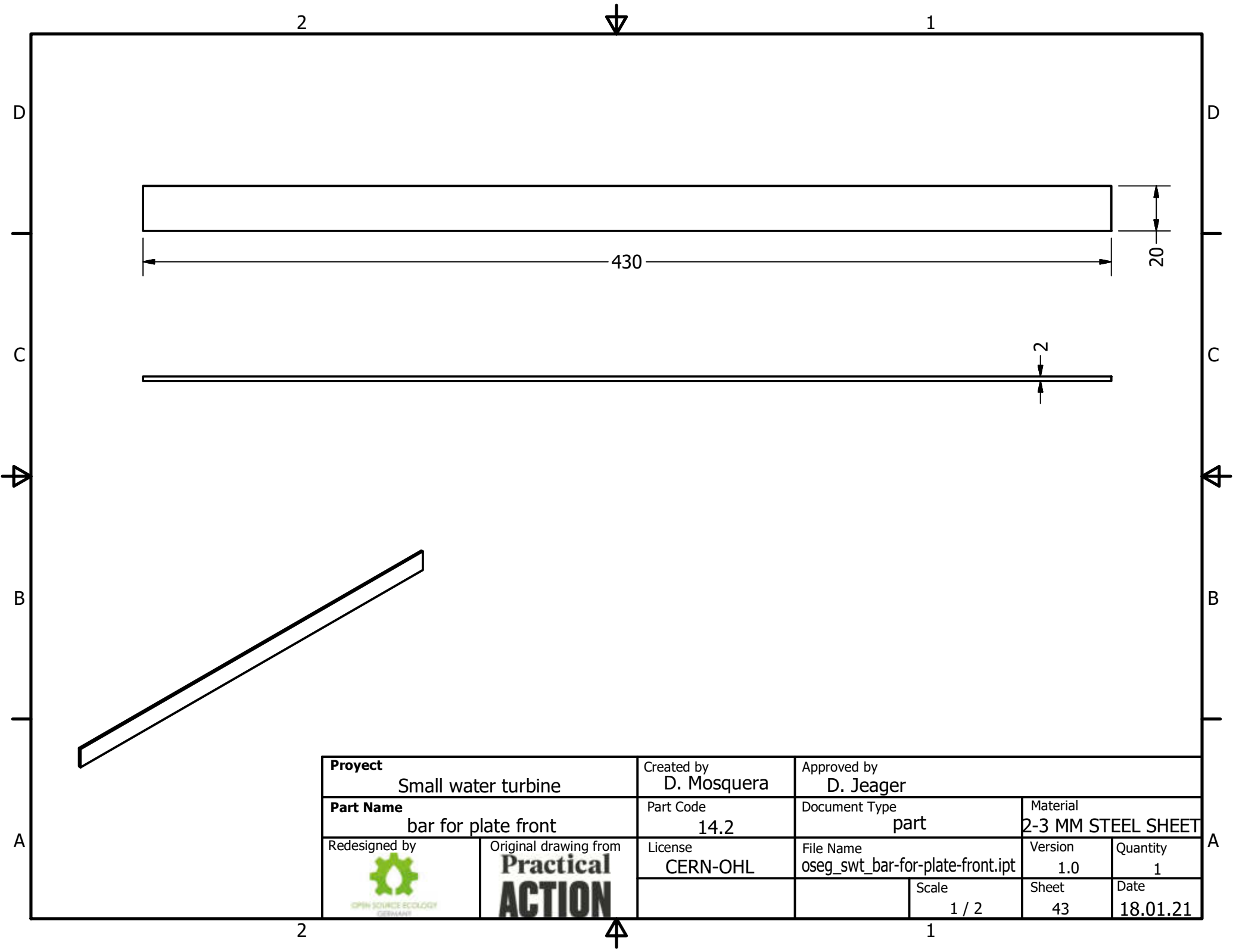





<b>Proyect</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>		
<b>Part Name</b> back oil bath		Part Code 14		Document Type assemble		Material
Redesigned by 	Original drawing from <b>Practical ACTION</b>		License CERN-OHL	File Name oseg_swt_back-oil-bath-cover.iam		Version 1.0
				Scale 1 / 5	Sheet 41	Quantity 1
					Date 18.01.21	



<b>Proyect</b> Small water turbine		Created by <b>D. Mosquera</b>		Approved by <b>D. Jeager</b>	
<b>Part Name</b> plate back cover		Part Code 14.1	Document Type part		Material 2-3 MM STEEL SHEET
Redesigned by 	Original drawing from <b>Practical ACTION</b>	License CERN-OHL	File Name oseg_swt_plate-back-cover.ipt		Version 1.0
			Scale 1 / 4	Sheet 42	Date 18.01.21



<b>Proyect</b> Small water turbine		Created by D. Mosquera	Approved by D. Jeager		
<b>Part Name</b> bar for plate front		Part Code 14.2	Document Type part	Material 2-3 MM STEEL SHEET	
Redesigned by 	Original drawing from <b>Practical ACTION</b>	License CERN-OHL	File Name oseg_swt_bar-for-plate-front.ipt	Version 1.0	Quantity 1
			Scale 1 / 2	Sheet 43	Date 18.01.21