GLOBAL HEALTH ENGINEERING

ETH zürich

Glass Crusher

Technical Drawings

—

Complete Collection

Philippe COLBACH

24 April 2024

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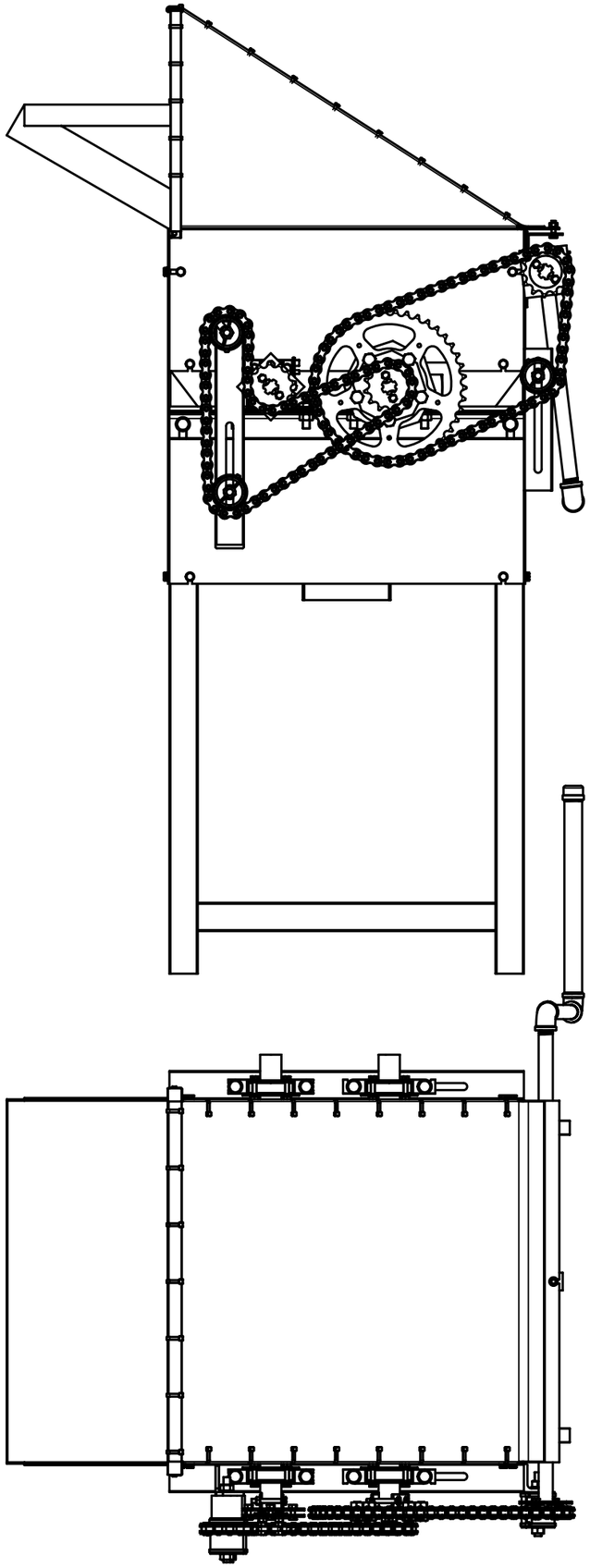
1 Preface

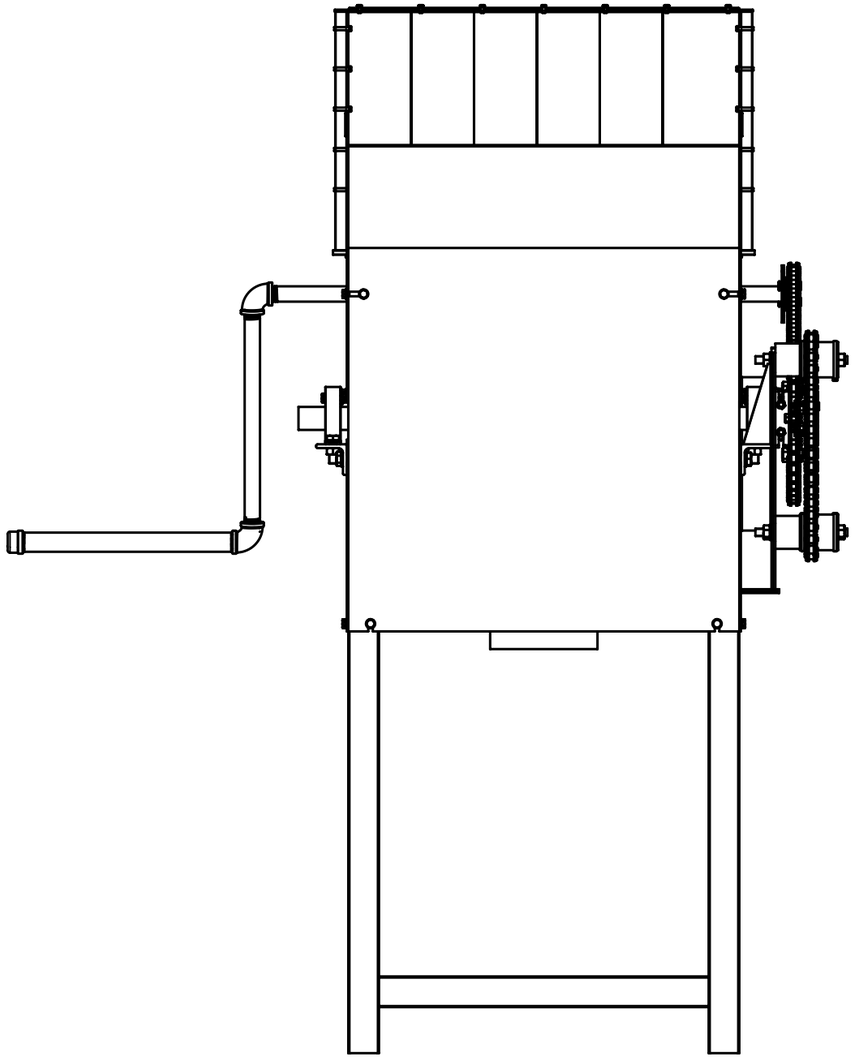
This document contains all the technical drawings required to build the glass crusher.

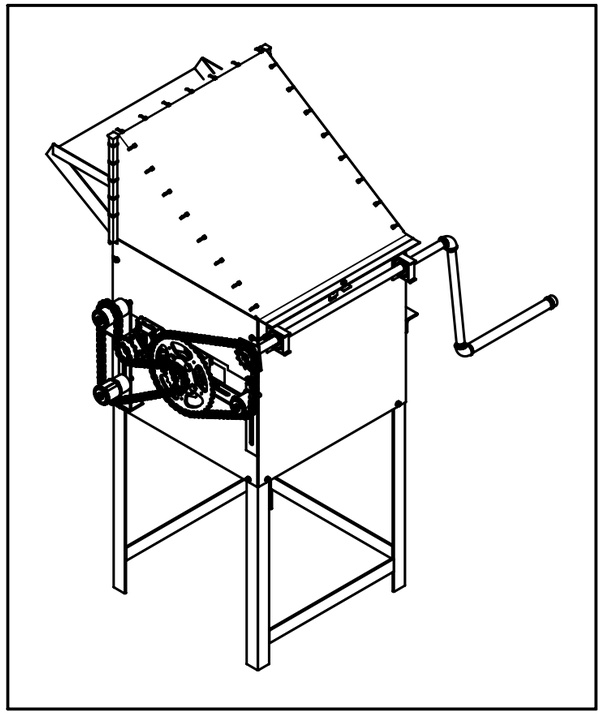
There are two types of drawings: assembly drawings and part drawings. Part drawings always consist of a single page. Assembly drawings are generally three, sometimes two pages long: the first page gives an overview from multiple angles and, if required, provides details on part spacing; the second page features a parts list and provides information on part placement; the third page provides information on where to weld, if welding is required.

For additional background information, instructions, and the CAD files, please visit:
https://global-health-engineering.github.io/glass-crusher-design

2 Full Assembly







Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:8 — Format / size: A3
			-	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/3
			Full Assembly	
gezeichnet von designed by	06.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			-	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name: A_Glass_Crusher_Full_Assembly_dwg
			1	

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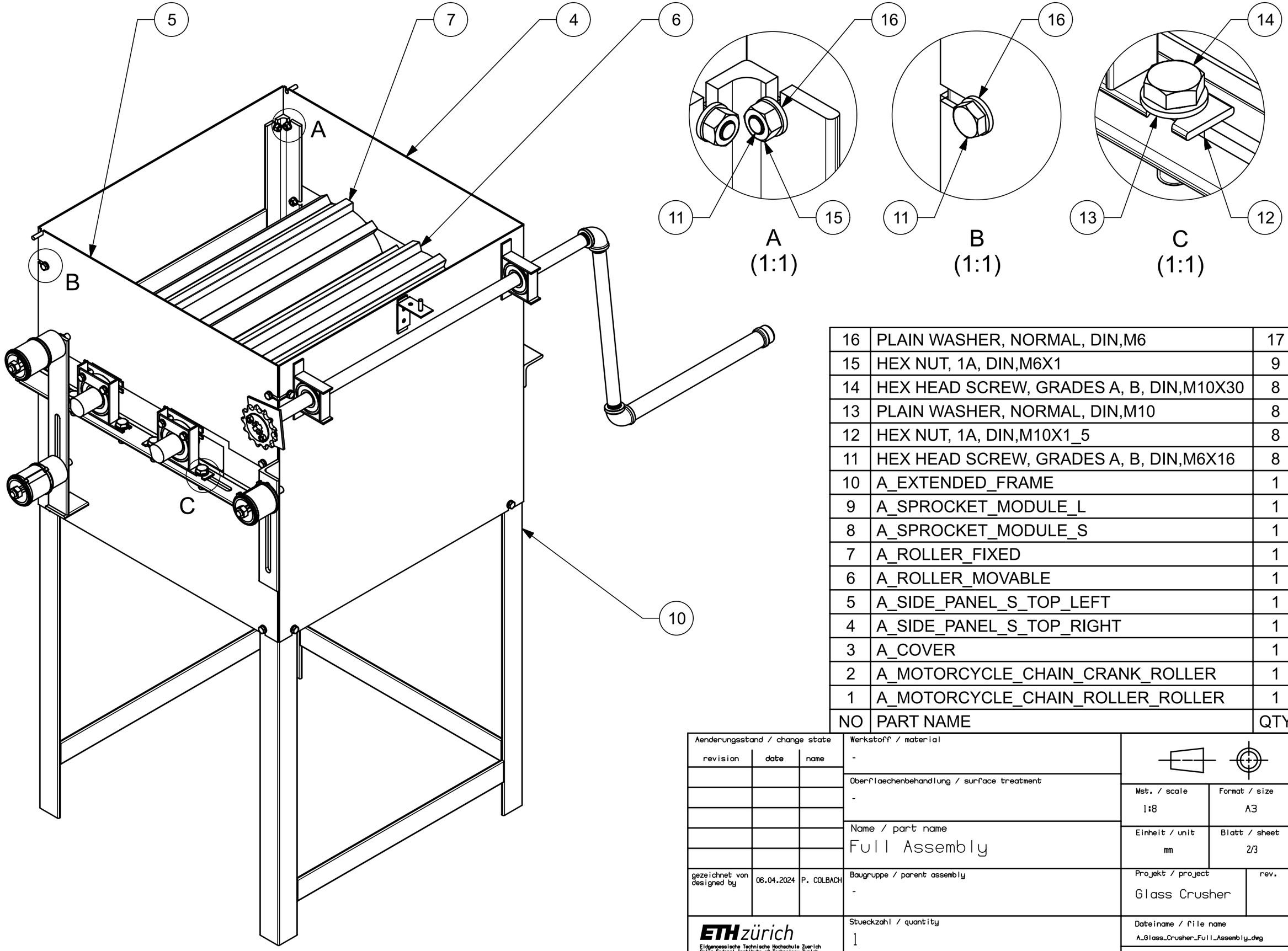

NO	PART NAME	QTY
16	PLAIN WASHER, NORMAL, DIN,M6	17
15	HEX NUT, 1A, DIN,M6X1	9
14	HEX HEAD SCREW, GRADES A, B, DIN,M10X30	8
13	PLAIN WASHER, NORMAL, DIN,M10	8
12	HEX NUT, 1A, DIN,M10X1_5	8
11	HEX HEAD SCREW, GRADES A, B, DIN,M6X16	8
10	A_EXTENDED_FRAME	1
9	A_SPROCKET_MODULE_L	1
8	A_SPROCKET_MODULE_S	1
7	A_ROLLER_FIXED	1
6	A_ROLLER_MOVABLE	1
5	A_SIDE_PANEL_S_TOP_LEFT	1
4	A_SIDE_PANEL_S_TOP_RIGHT	1
3	A_COVER	1
2	A_MOTORCYCLE_CHAIN_CRANK_ROLLER	1
1	A_MOTORCYCLE_CHAIN_ROLLER_ROLLER	1

Aenderungsstand / change state			Werkstoff / material		
revision	date	name	-		
			Oberflaechenbehandlung / surface treatment	Mst. / scale	Format / size
			-	1:8	A3
			Name / part name	Einheit / unit	Blatt / sheet
			Full Assembly	mm	2/3
gezeichnet von designed by	06.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project	rev.
			-	Glass Crusher	
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name	
			1	A_Glass_Crusher_Full_Assembly_dwg	

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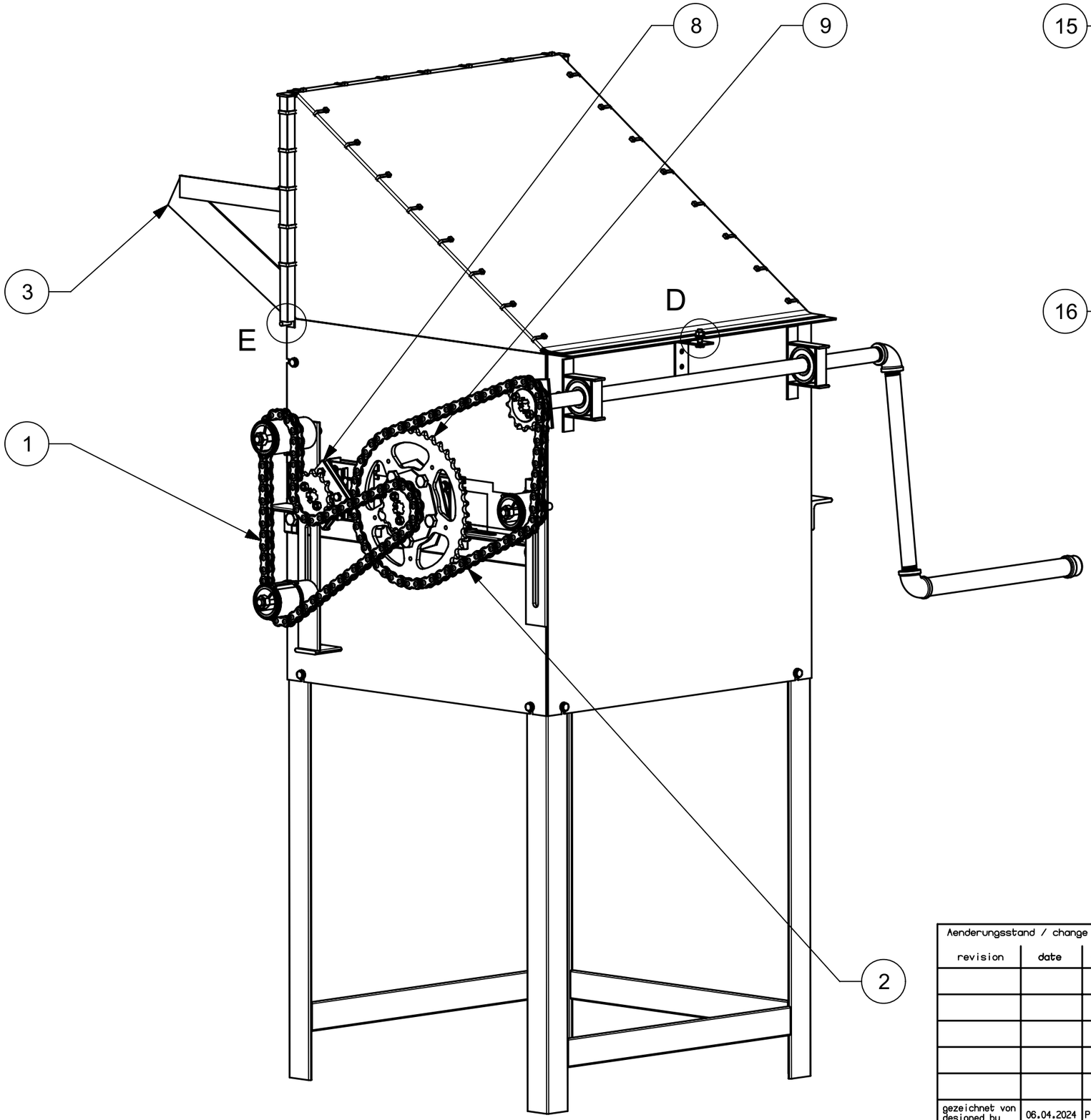

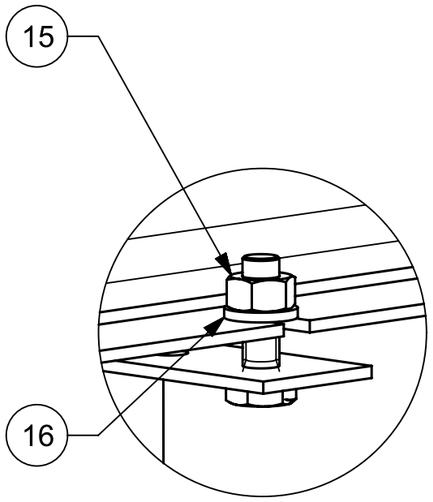

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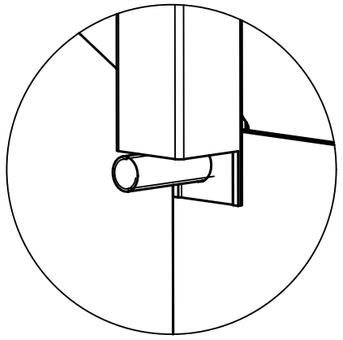

E
(1:1)

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:8 — Format / size: A3
			-	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 3/3
			Full Assembly	
gezeichnet von designed by	06.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			-	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name: A_Glass_Crusher_Full_Assembly_dwg
			1	

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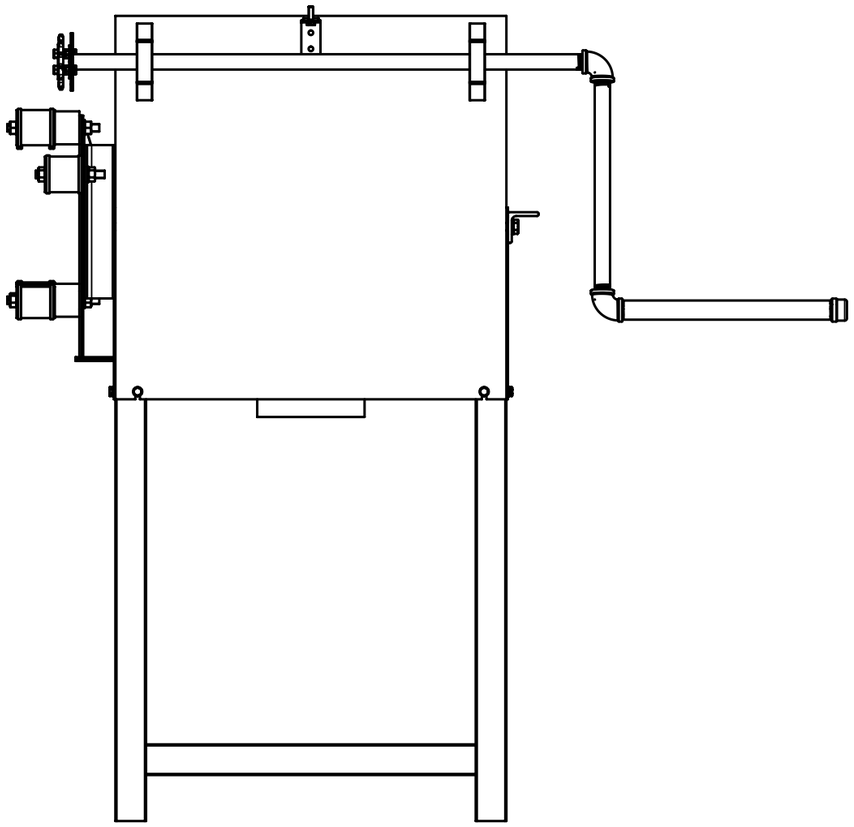
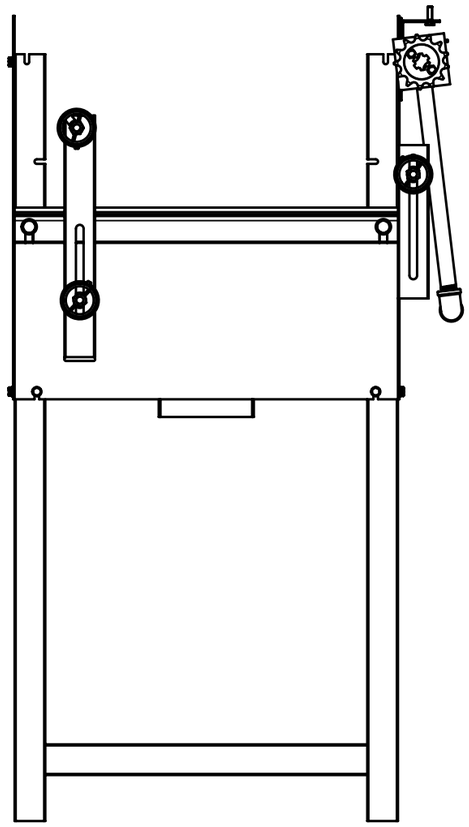
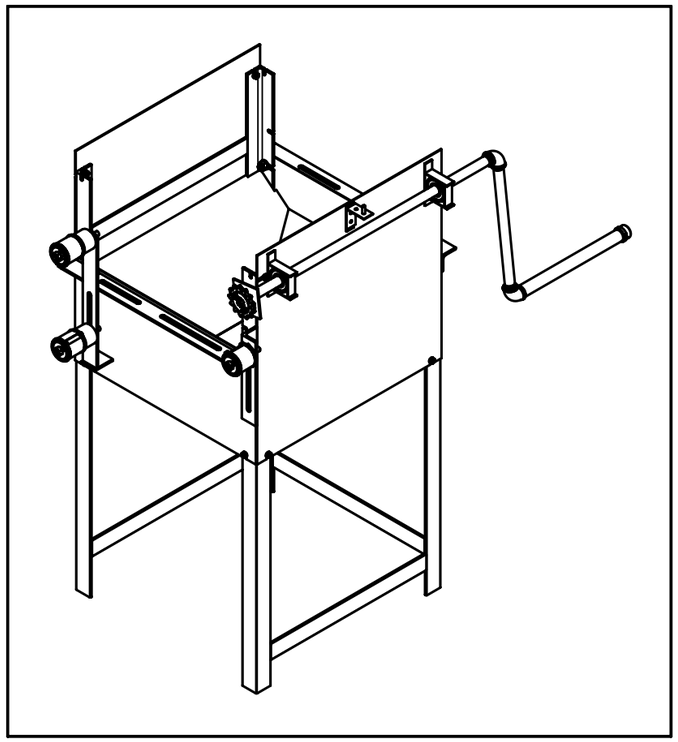
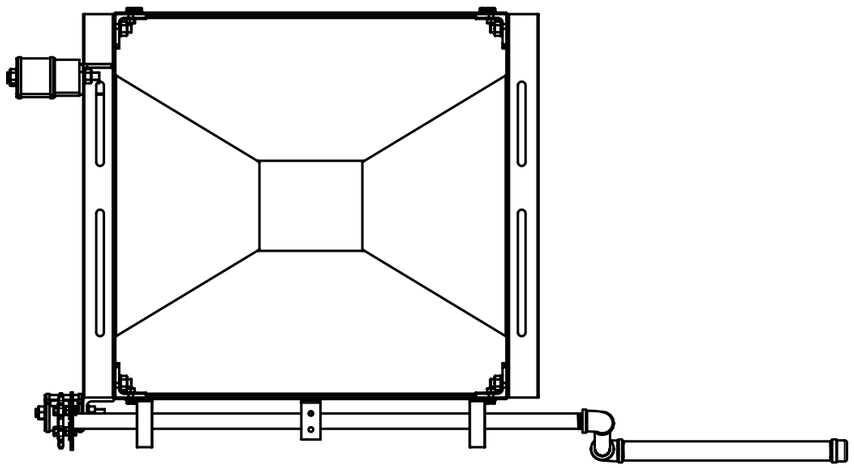
2.1 Extended Frame









Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment -	Mst. / scale: 1:8 — Format / size: A3
			Name / part name Extended Frame	Einheit / unit: mm — Blatt / sheet: 1/2
gezeichnet von / designed by	06.04.2024	P. COLBACH	Baugruppe / parent assembly Full Assembly	Projekt / project: Glass Crusher — rev.
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity 1	Dateiname / file name A_Extended_Frame_dwg

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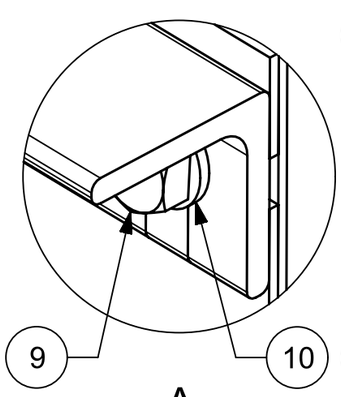

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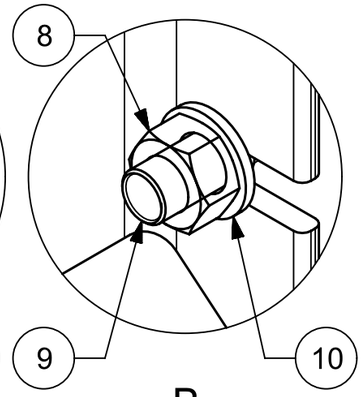

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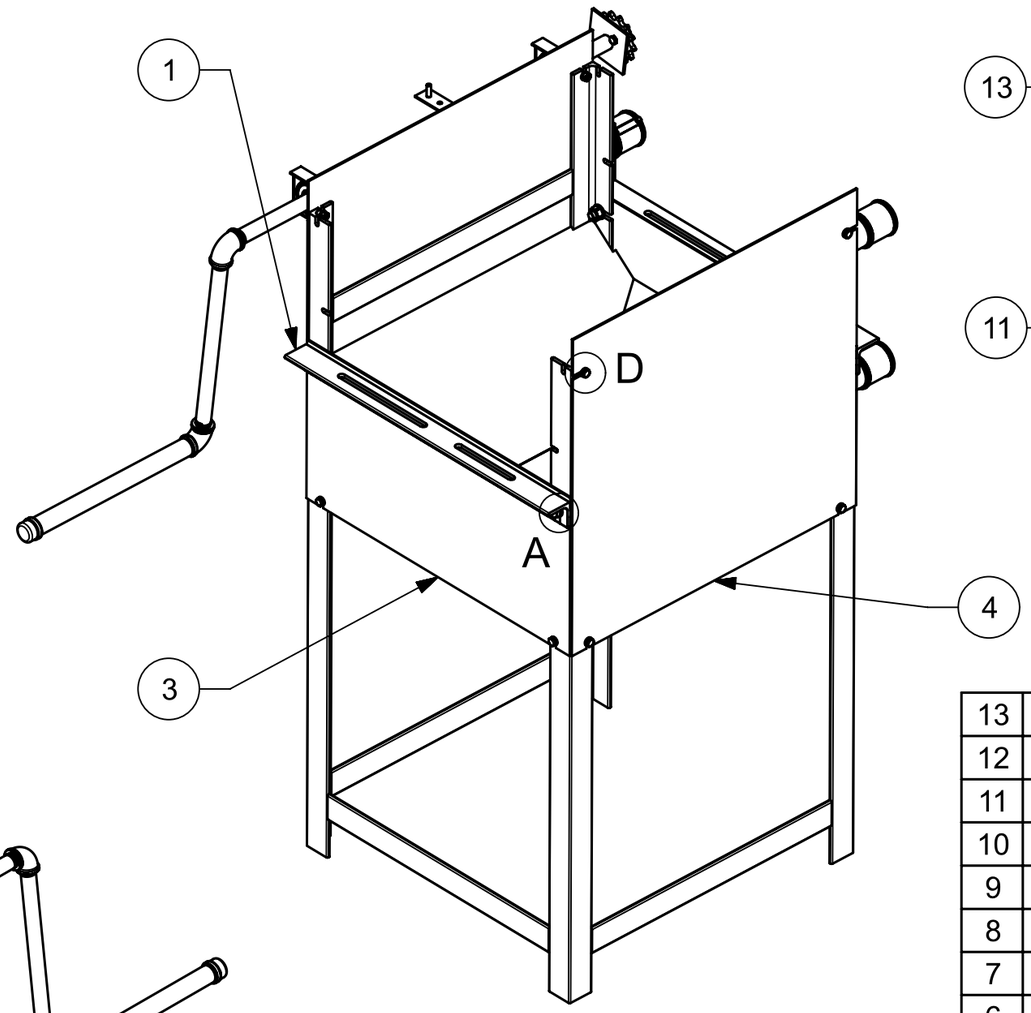

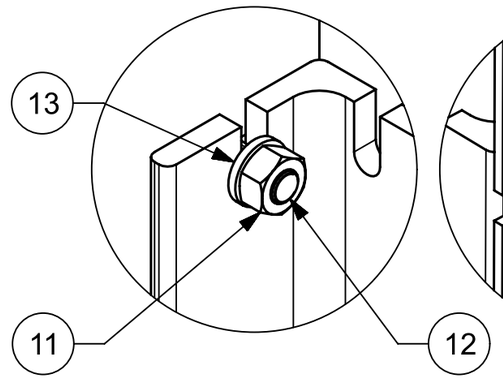

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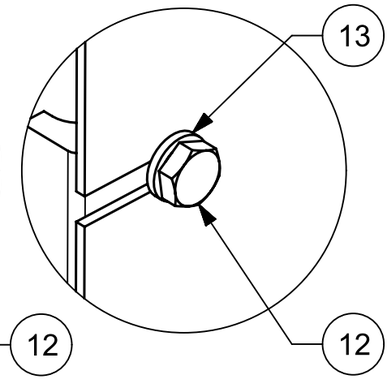

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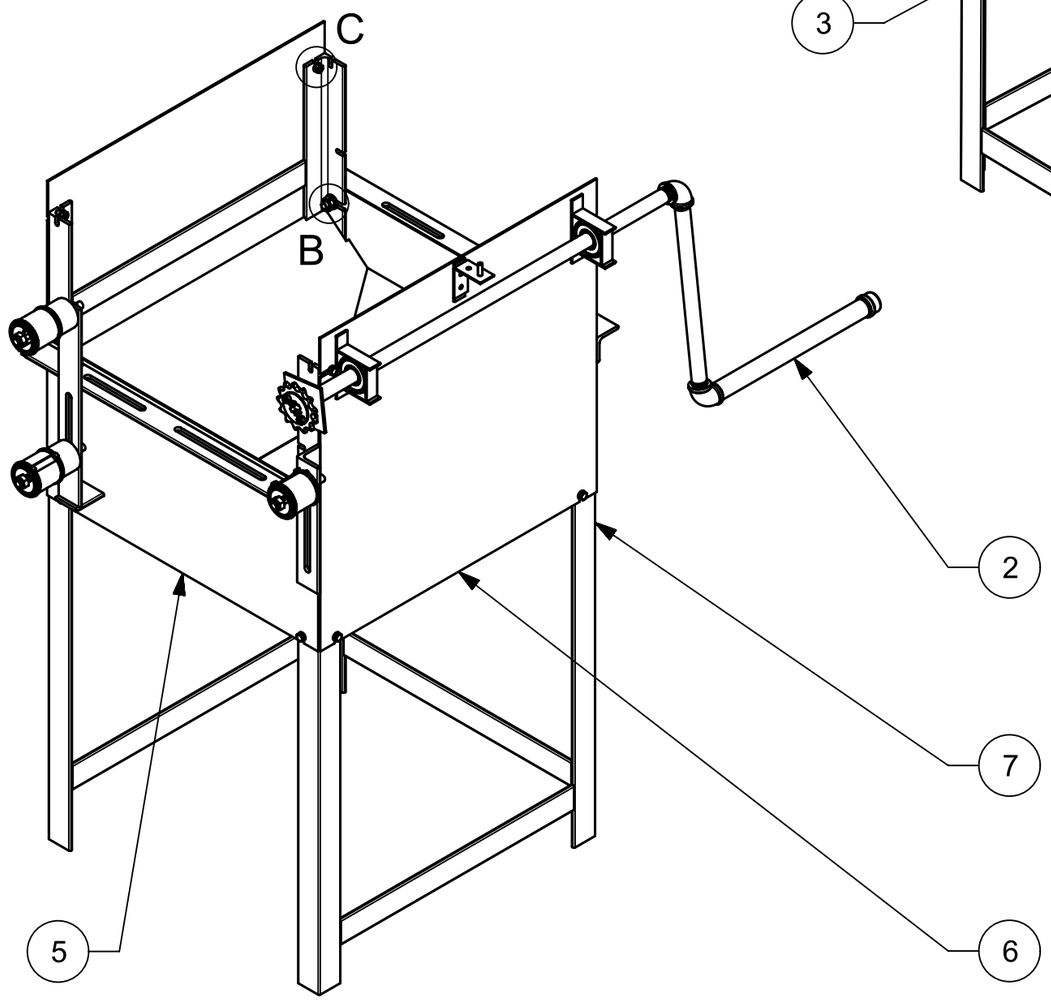

NO	PART NAME	QTY
13	PLAIN WASHER, NORMAL, DIN,M6	24
12	HEX HEAD SCREW, GRADES A, B, DIN,M6X16	12
11	HEX NUT, 1A, DIN,M6X1	12
10	PLAIN WASHER, NORMAL, DIN,M10	8
9	HEX HEAD SCREW, GRADES A, B, DIN,M10X30	4
8	HEX NUT, 1A, DIN,M10X1_5	4
7	A_FRAME	1
6	A_CRANK_SIDE_PANEL	1
5	A_SIDE_PANEL_S_BOT_DRIVETRAIN	1
4	M_SIDE_PANEL_L	1
3	M_SIDE_PANEL_S_BOT	1
2	A_CRANK	1
1	A_ROLLER_MOUNTING_PLATFORM_REBUILT	1

Aenderungsstand / change state			Werkstoff / material		
revision	date	name	-		
			Oberflaechenbehandlung / surface treatment	Mst. / scale	Format / size
			-	1:8	A3
			Name / part name	Einheit / unit	Blatt / sheet
			Extended Frame	mm	2/2
gezeichnet von designed by	06.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project	rev.
			Full Assembly	Glass Crusher	
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name	
			1	A_Extended_Frame_dwg	

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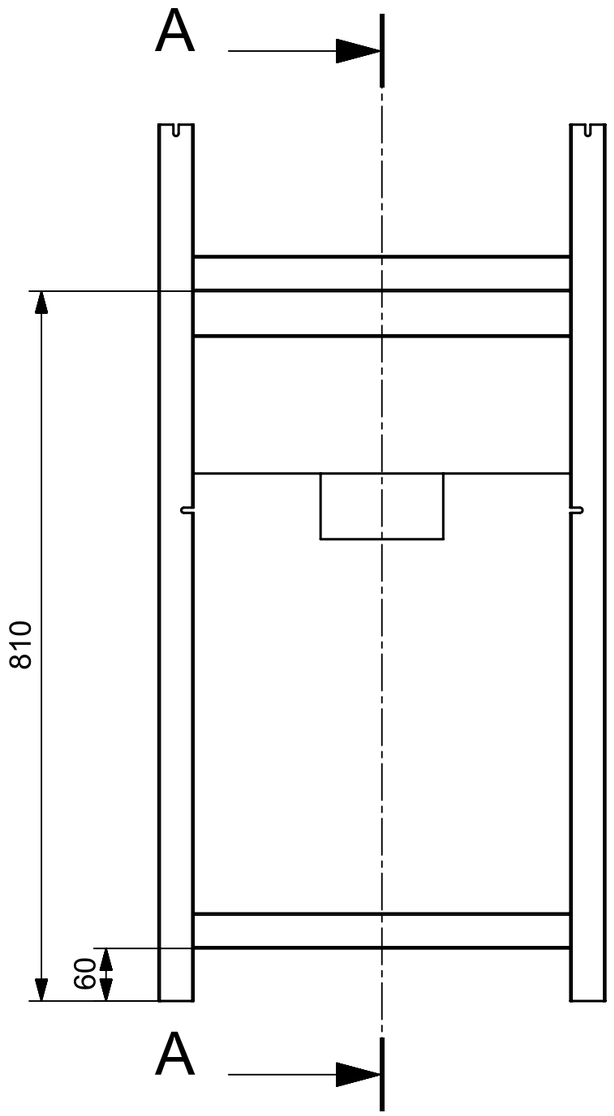
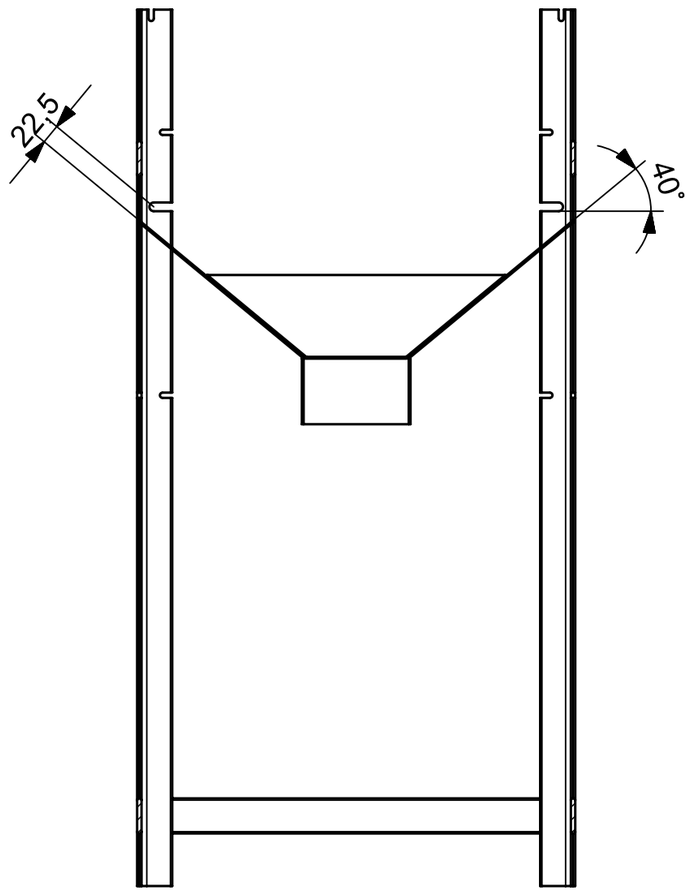
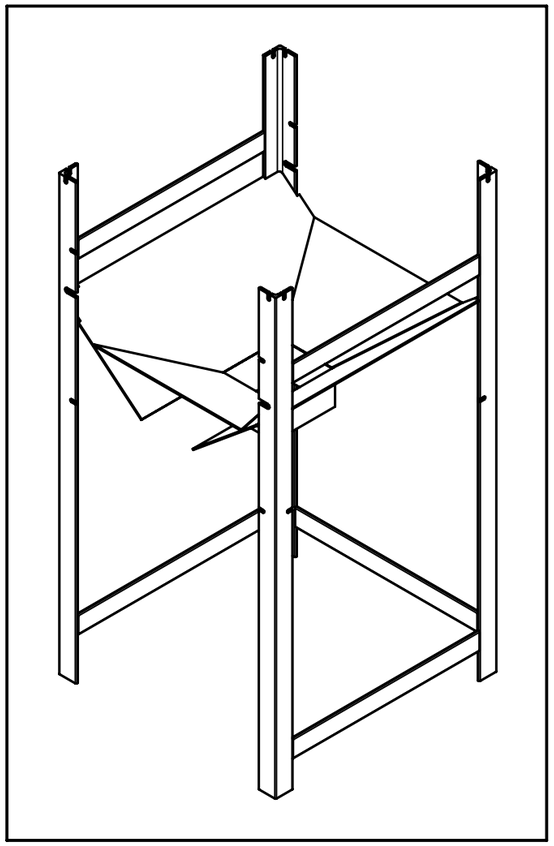
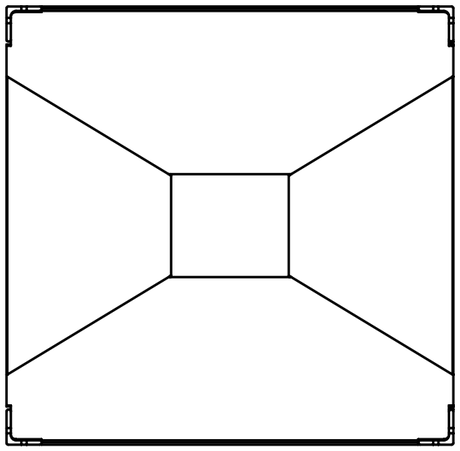
2.1.1 Frame





A-A





Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	
			-	Mst. / scale: 1:5 — Format / size: A3
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/3
			Frame	
gezeichnet von designed by	04.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Extended Frame	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name
			1	A_Frame_dwg

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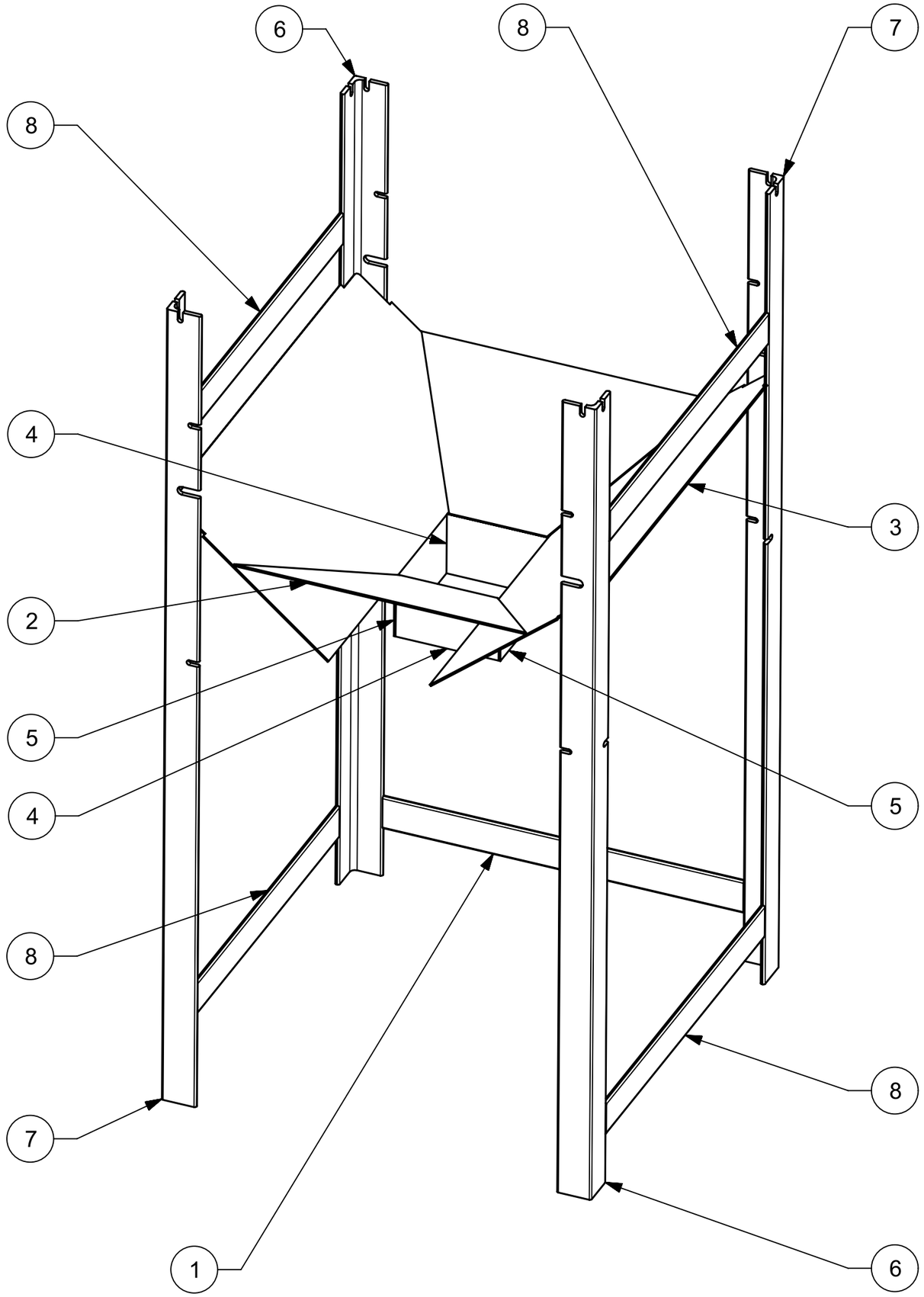

NO	PART NAME	QTY
8	M_FRAME_CONNECTING_BAR_L	4
7	M_FRAME_CORNER_PROFILE	2
6	M_FRAME_CORNER_PROFILE_MIRROR	2
5	M_BOT_FUNNEL_EXTENSION_L	2
4	M_BOT_FUNNEL_EXTENSION_S	2
3	M_BOT_FUNNEL_PANEL_MAIN	2
2	M_BOT_FUNNEL_PANEL_SIDE	2
1	M_FRAME_CONNECTING_BAR_S	1

Aenderungsstand / change state		
revision	date	name
gezeichnet von designed by	04.04.2024	P. COLBACH

Werkstoff / material
-

Oberflaechenbehandlung / surface treatment
-

Name / part name
Frame

Baugruppe / parent assembly
Extended Frame

Stueckzahl / quantity
1

Mst. / scale: 1:5
Format / size: A3
Einheit / unit: mm
Blatt / sheet: 2/3

Projekt / project: Glass Crusher
rev.

Dateiname / file name
A_Frame_dwg

ETH zürich
Eidgenoessische Technische Hochschule Zuerich
Swiss Federal Institute of Technology Zurich

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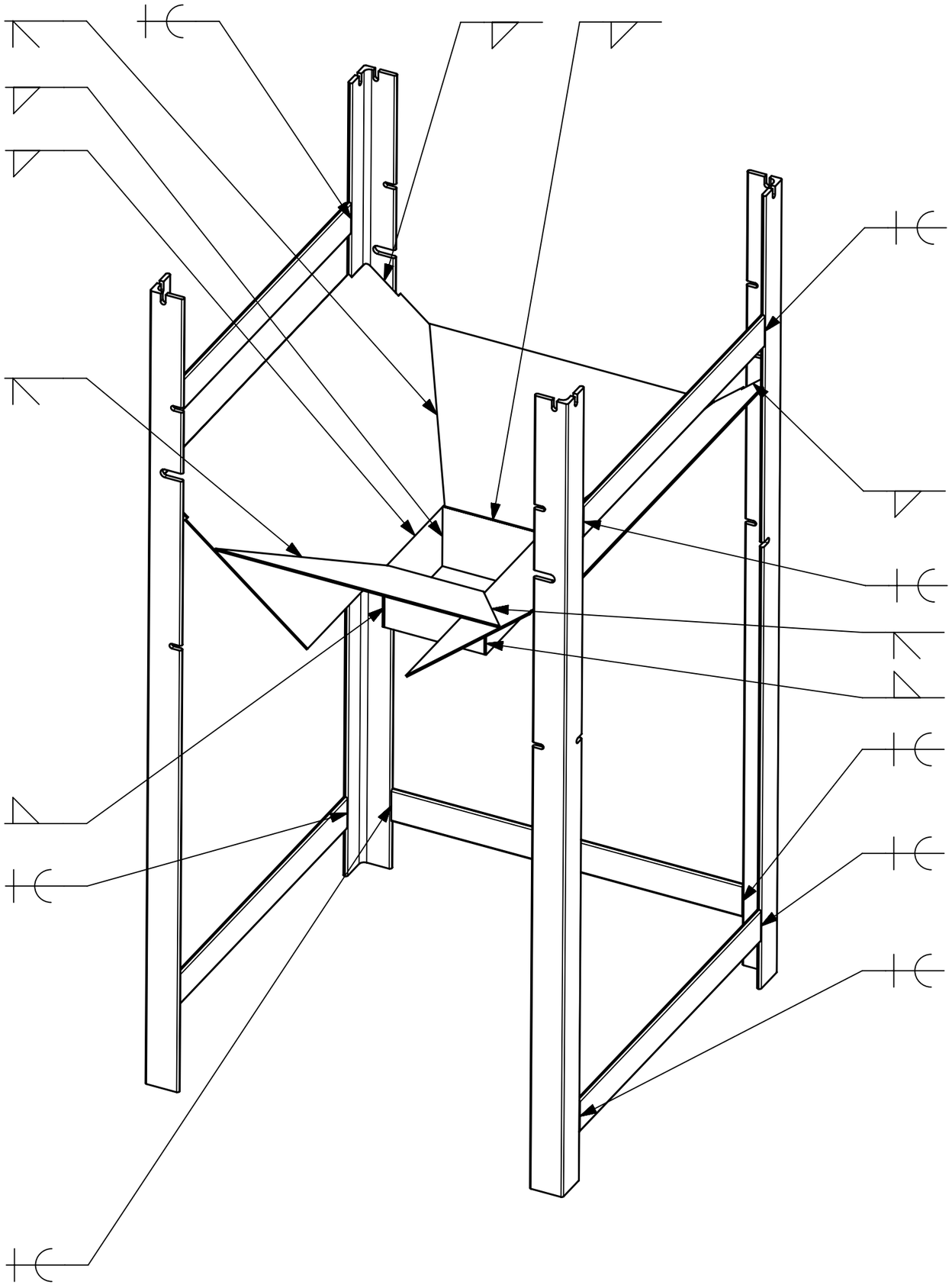

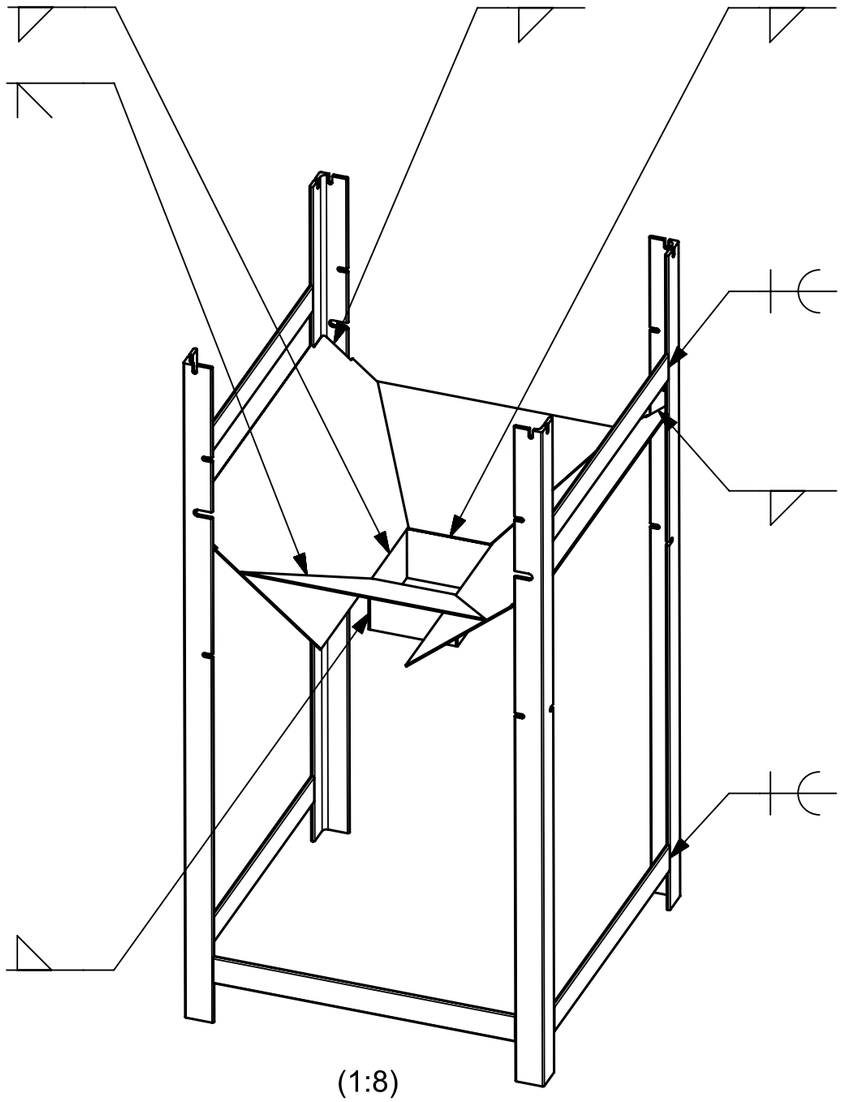

(1:8)

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:5 — Format / size: A3
			-	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 3/3
			Frame	
gezeichnet von designed by	04.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Extended Frame	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name
			1	A_Frame_dwg

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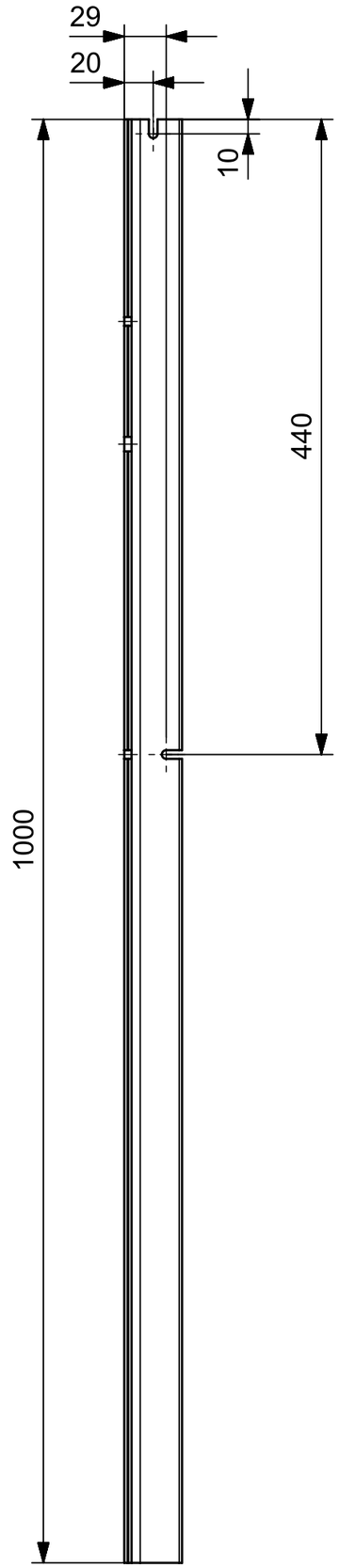
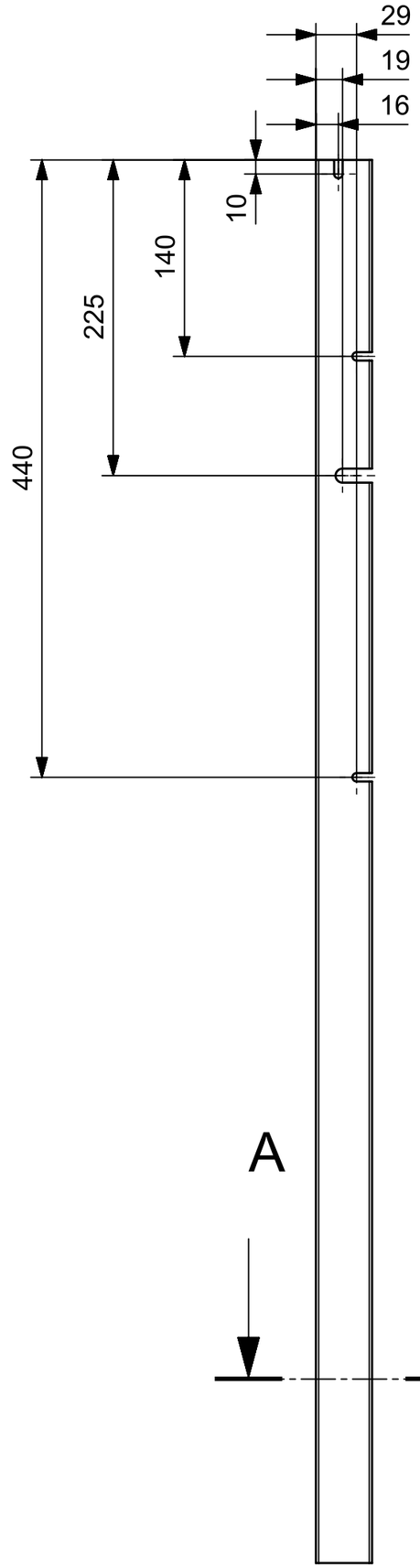
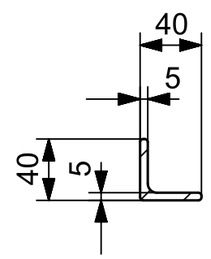
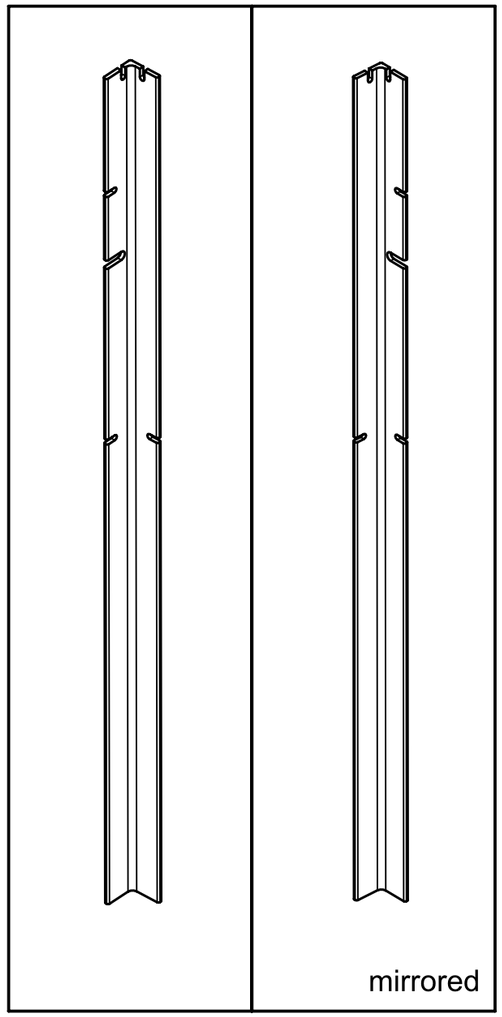
2.1.1.1 Independent Parts — Frame







A-A



A A

Aenderungsstand / change state			Werkstoff / material		
revision	date	name	Mild Steel		
			Oberflaechenbehandlung / surface treatment	Mst. / scale	Format / size
			Anti-Rust Coating	1:4	A3
			Name / part name	Einheit / unit	Blatt / sheet
			Corner Profile	mm	1/1
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project	rev.
			Frame	Glass Crusher	
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name	
			4 (2 mirrored)	M_Frame_Corner_Profile_dwg	

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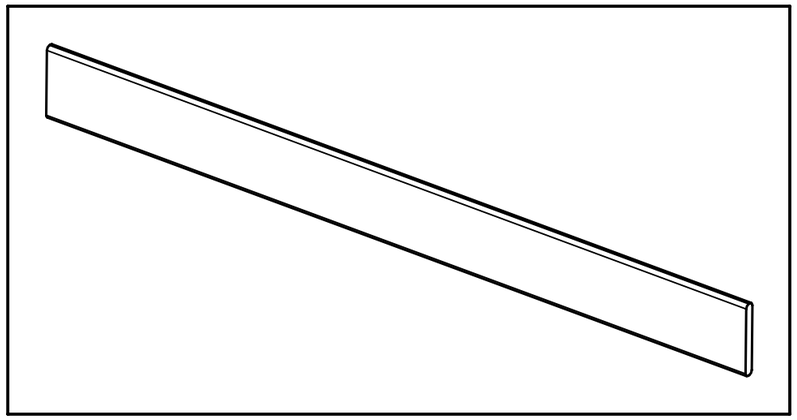

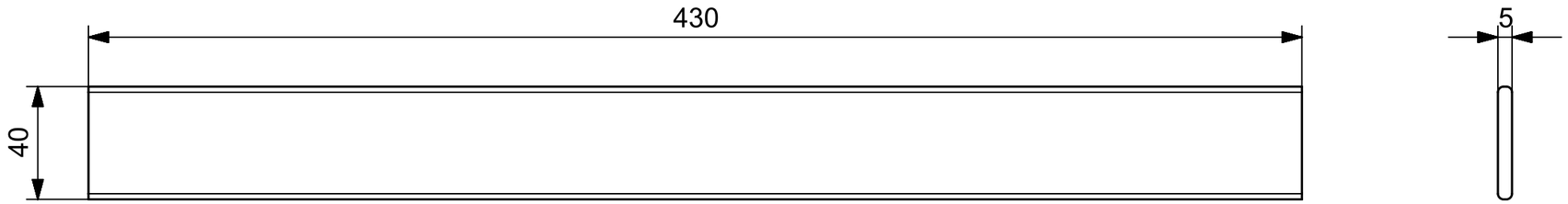

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	
			Anti-Rust Coating	
			Name / part name	
			Connecting Bar, Long	
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly	
			Frame	
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	
			4	

Mst. / scale	Format / size
1:2	A3
Einheit / unit	Blatt / sheet
mm	1/1
Projekt / project	rev.
Glass Crusher	
Dateiname / file name	
M_Frame_Connecting_Bar_L_.dwg	

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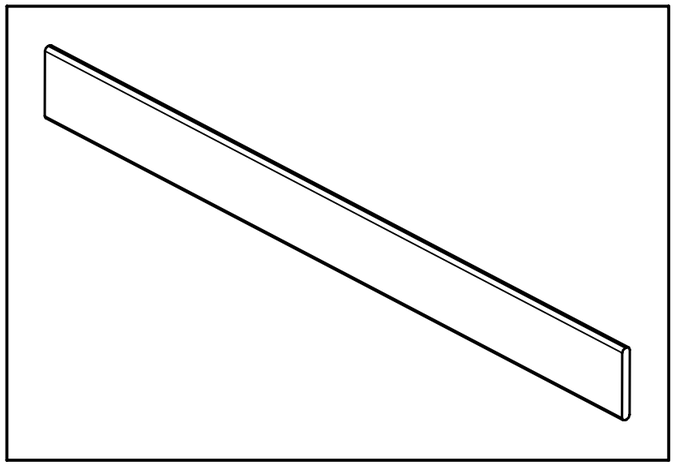

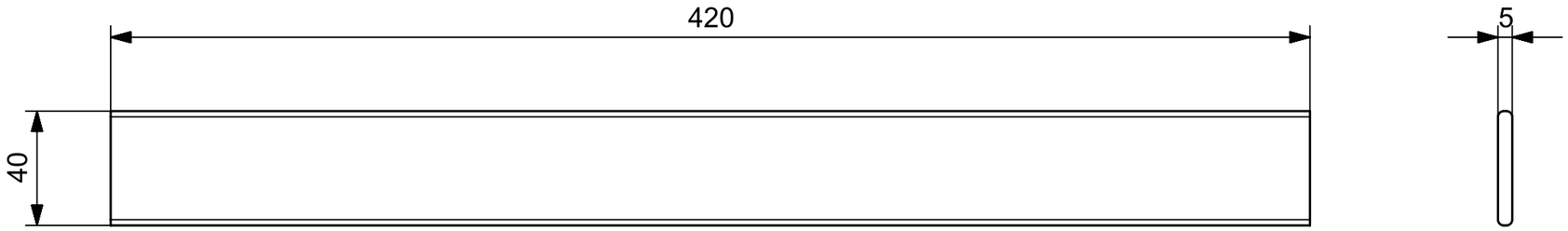

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	
			Anti-Rust Coating	
			Name / part name	
			Connecting Bar, Short	
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly	
			Frame	
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	
			1	

Mst. / scale	Format / size
1:2	A3
Einheit / unit	Blatt / sheet
mm	1/1
Projekt / project	rev.
Glass Crusher	
Dateiname / file name	
M_Frame_Connecting_Bar_S_dwg	

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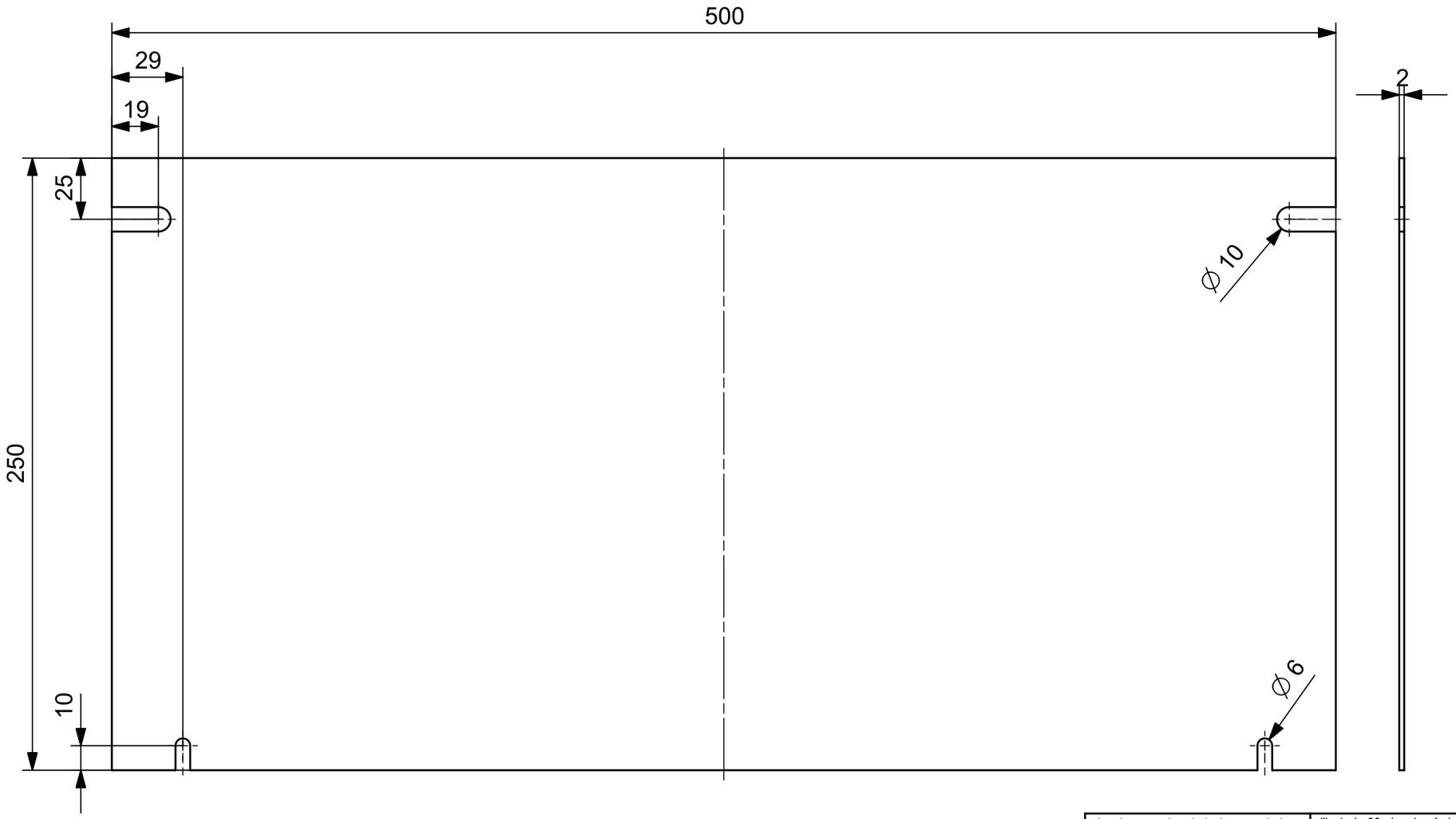

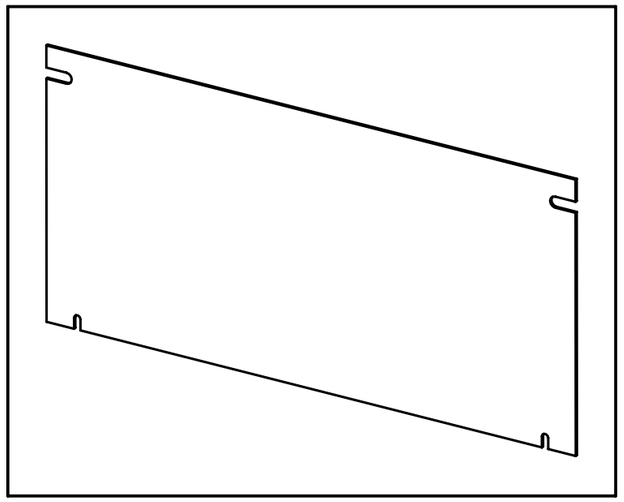

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	
			Anti-Rust Coating	Mst. / scale: 1:2 — Format / size: A3
			Name / part name	
			Lower Side Panel	Einheit / unit: mm — Blatt / sheet: 1/1
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly: Drivetrain Panel Extended Frame	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 2	Dateiname / file name: M_Side_Panel_S_Bot_dwg

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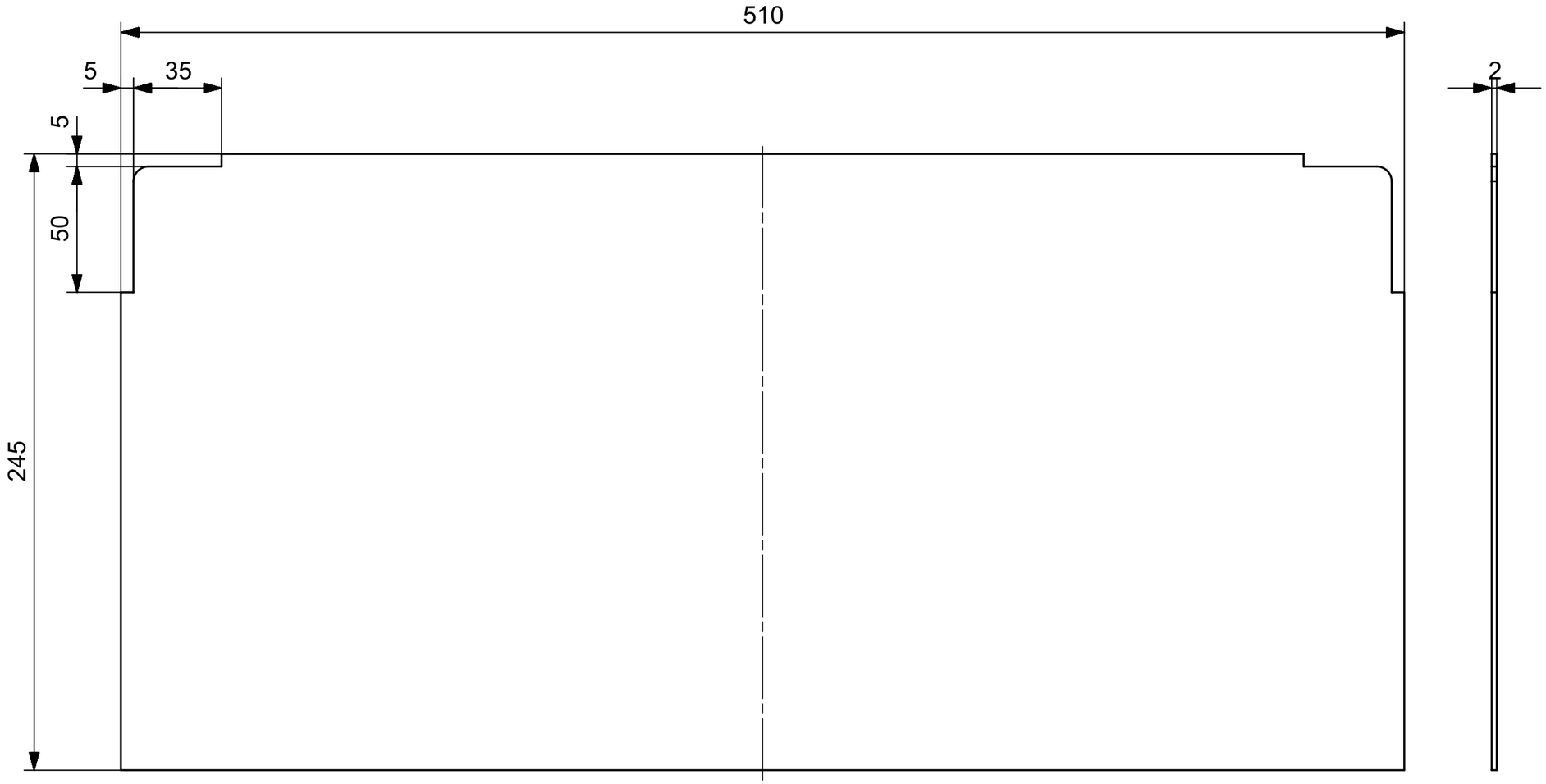

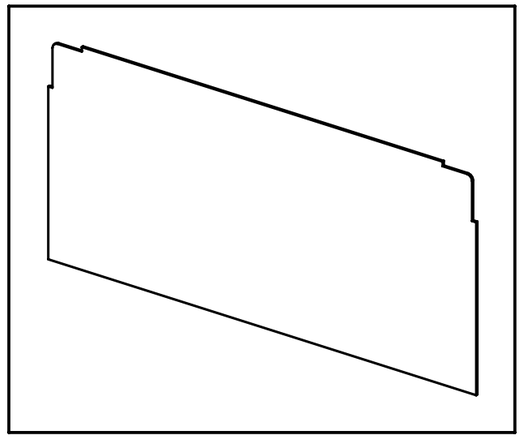

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:2 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Bottom Funnel Main Panel	
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Extended Frame	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name
			2	M_Bot_Funnel_Panel_Main_dwg

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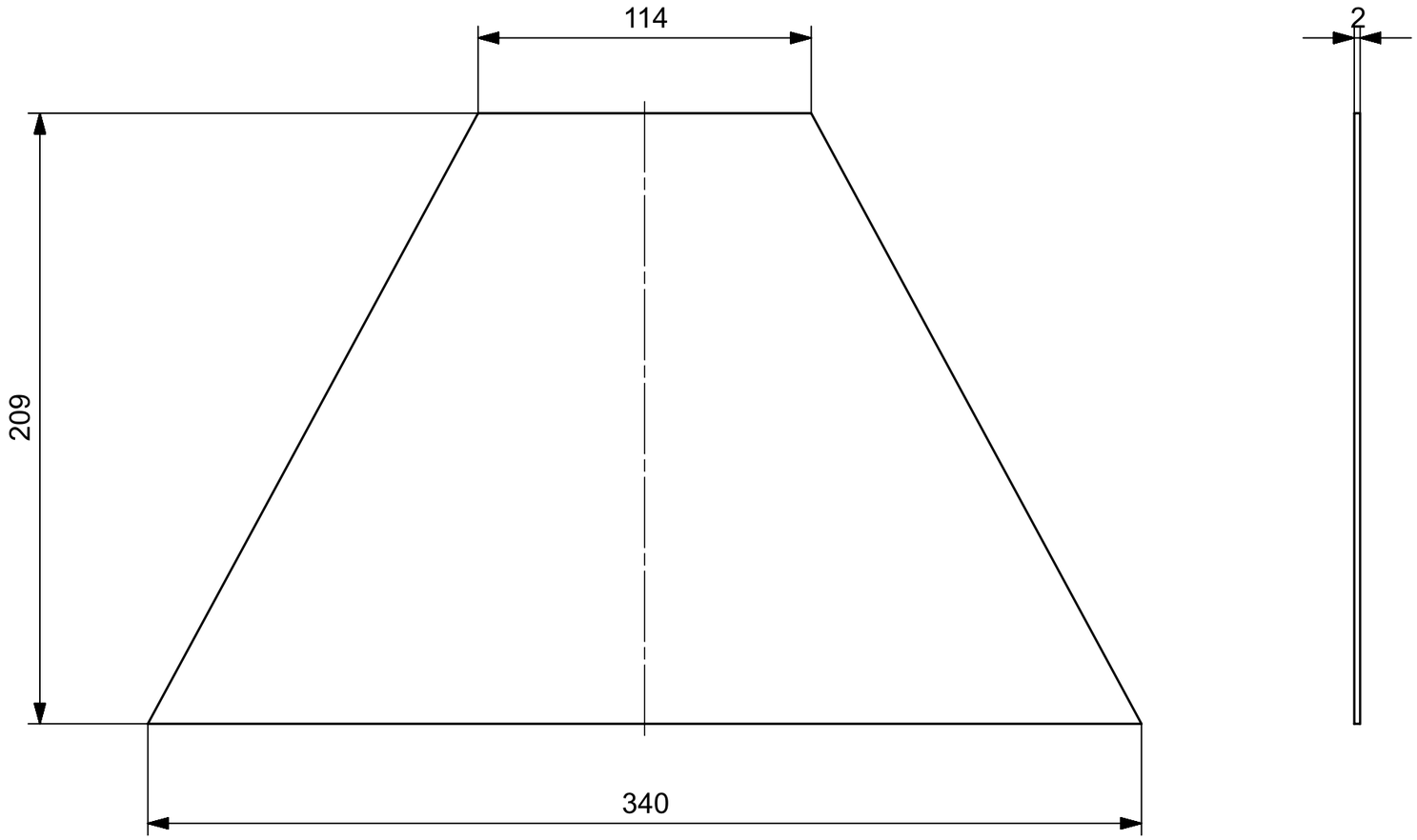

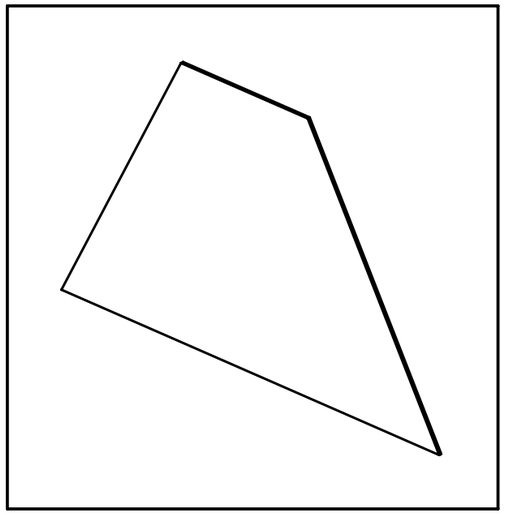

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	
			Anti-Rust Coating	
			Name / part name	
			Bottom Funnel Side Panel	
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly	
			Extended Frame	
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	
			2	

Mst. / scale	Format / size
1:2	A3
Einheit / unit	Blatt / sheet
mm	1/1
Projekt / project	rev.
Glass Crusher	
Dateiname / file name	
M_Bot_Funnel_Panel_Side_dwg	

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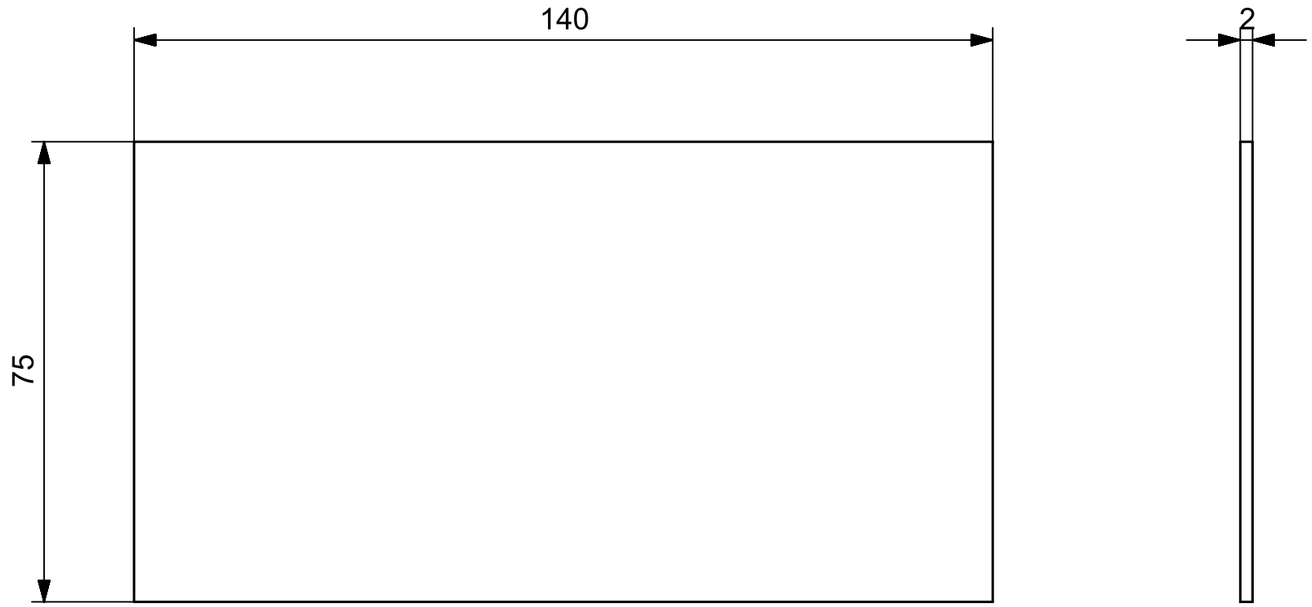

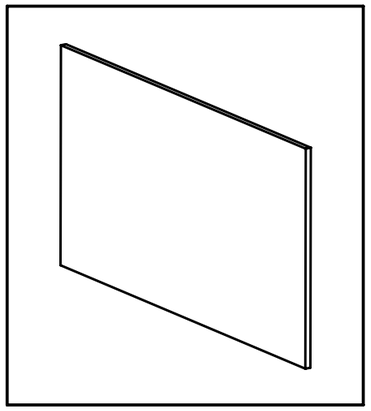

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:1 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Bottom Funnel Extension Plate, Long	
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Extended Frame	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name
			2	M_Bot_Funnel_Extension_L.dwg

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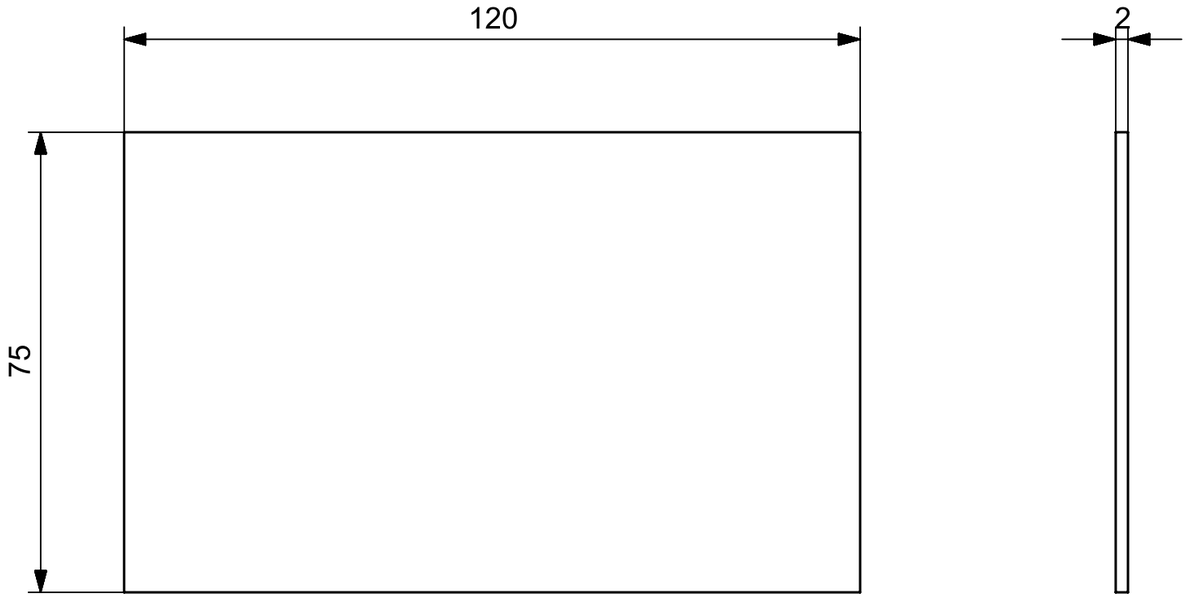

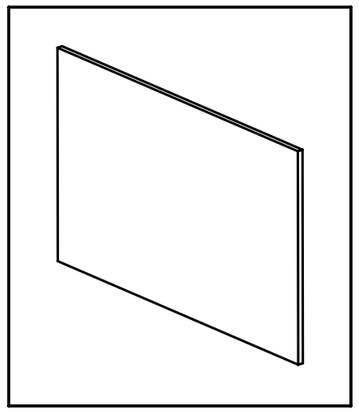

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:1
			Anti-Rust Coating	Format / size: A3
			Name / part name	Einheit / unit: mm
			Bottom Funnel Extension Plate, Short	Blatt / sheet: 1/1
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly: Extended Frame	Projekt / project: Glass Crusher; rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 2	Dateiname / file name: M_Bot_Funnel_Extension_S_dwg

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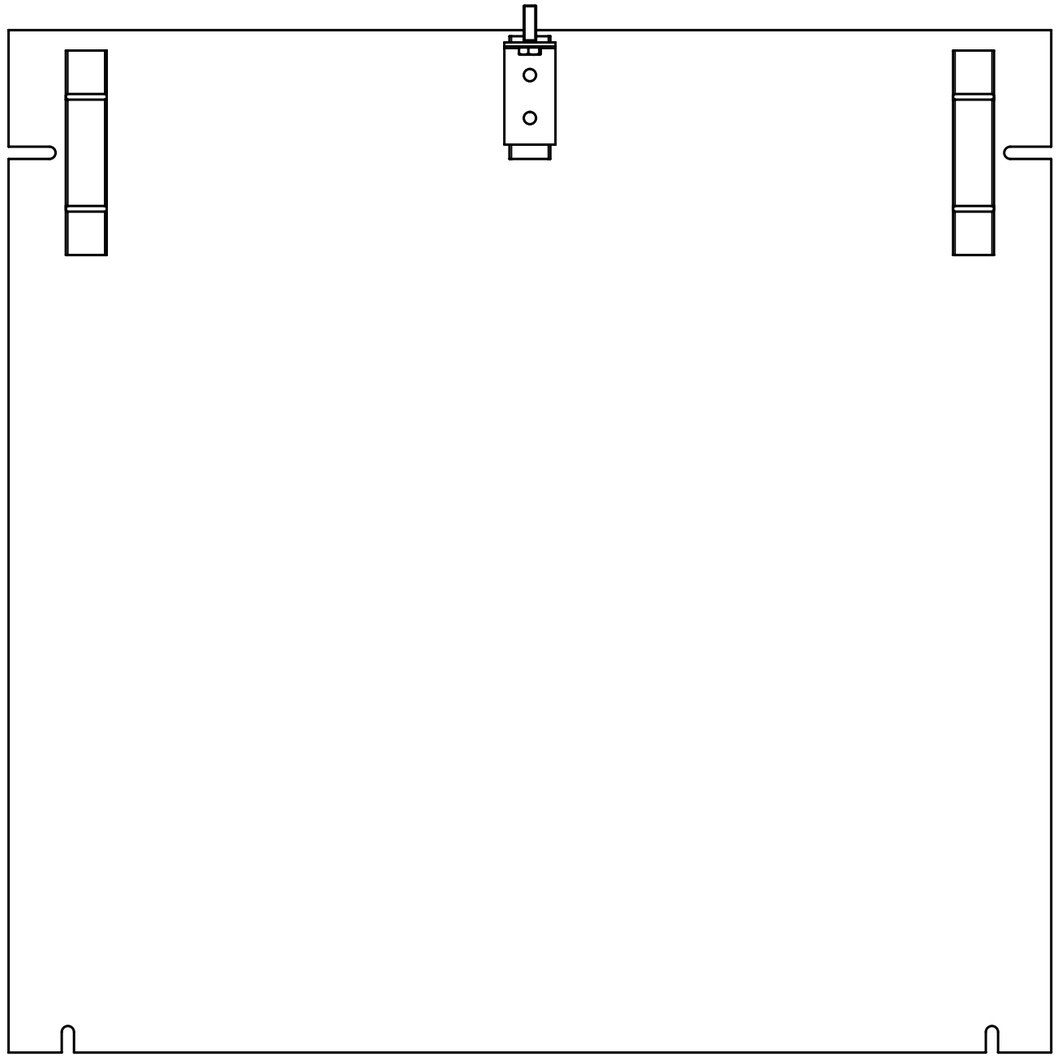
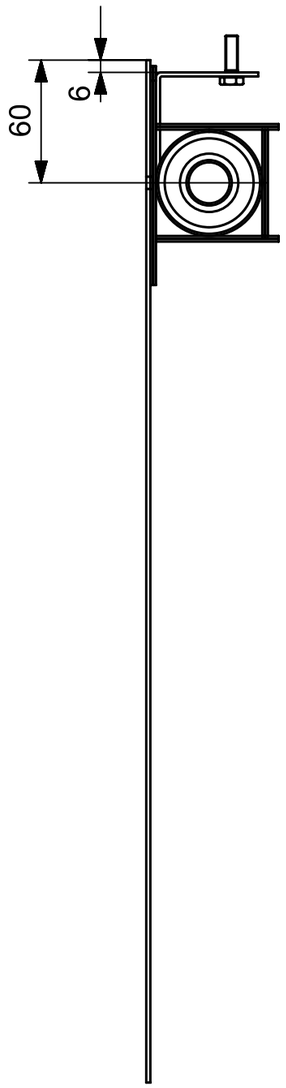
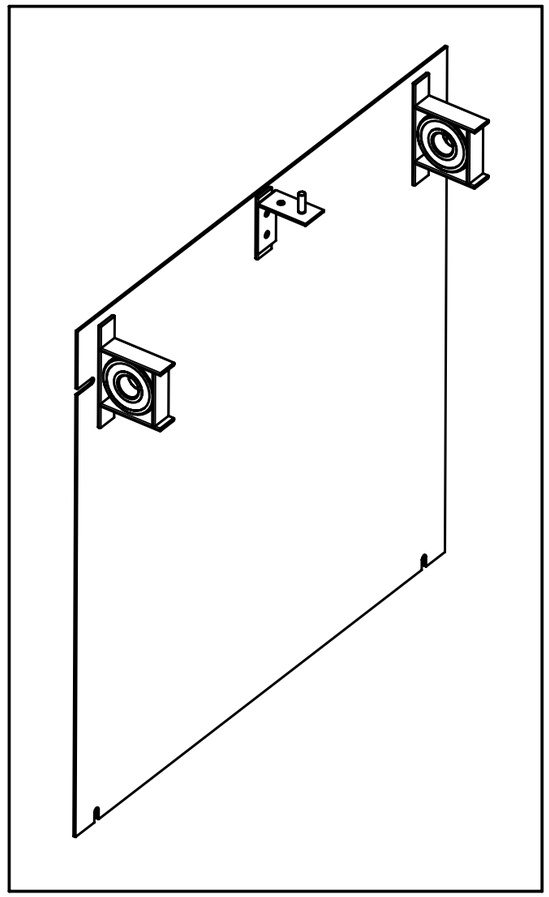
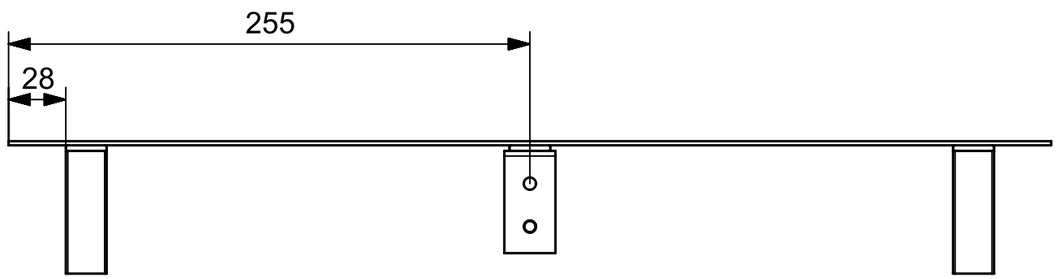
2.1.2 Crank Side Panel









Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:3 — Format / size: A3
			-	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/3
			Crank Side Panel	
gezeichnet von designed by	04.04.2024	P. COLBACH	Baugruppe / parent assembly: Extended Frame	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 1	Dateiname / file name: A_Crank_Side_Panel_dwg

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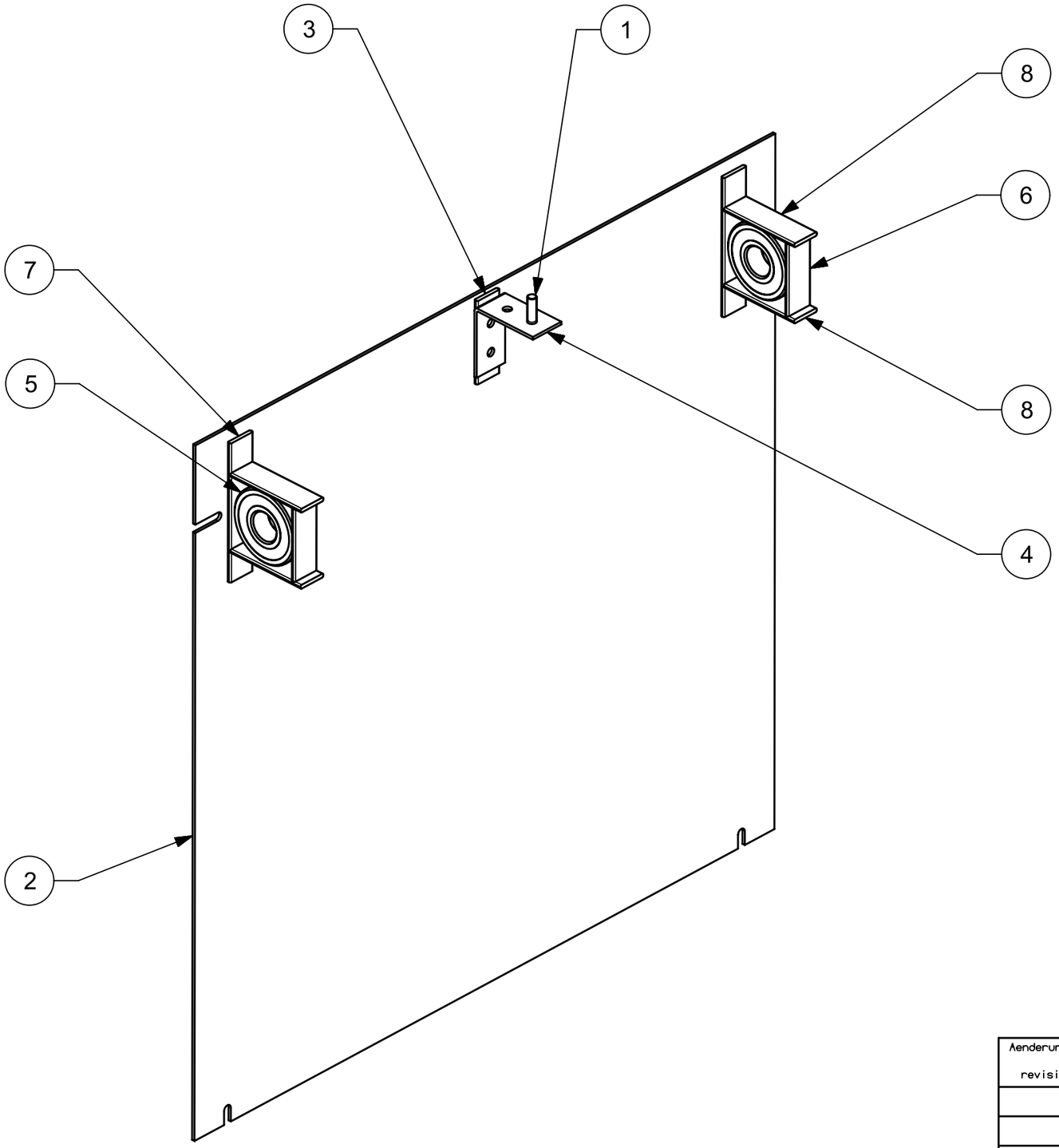

NO	PART NAME	QTY
8	M_BEARING_BRACKET_S_SIDE	4
7	M_BEARING_BRACKET_S_BASE	2
6	M_BEARING_BRACKET_S_TOP	2
5	SINGLE ROW RADIAL CONTACT BALL BRG, 2RS W 2 SEALS, DIN,6304_2RS	2
4	M_CORNER_BRACKET	1
3	M_CORNER_BRACKET_SPACER	1
2	M_SIDE_PANEL_L	1
1	HEX HEAD SCREW, GRADES A, B, DIN,M6X20	1

Aenderungsstand / change state		
revision	date	name
gezeichnet von designed by	04.04.2024	P. COLBACH

Werkstoff / material: -

Oberflaechenbehandlung / surface treatment: -

Name / part name: Crank Side Panel

Baugruppe / parent assembly: Extended Frame

Stueckzahl / quantity: 1

Mst. / scale: 1:3

Format / size: A3

Einheit / unit: mm

Blatt / sheet: 2/3

Projekt / project: Glass Crusher

rev.

Dateiname / file name: A_Crank_Side_Panel_dwg

ETH zürich
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Swiss Federal Institute of Technology Zurich

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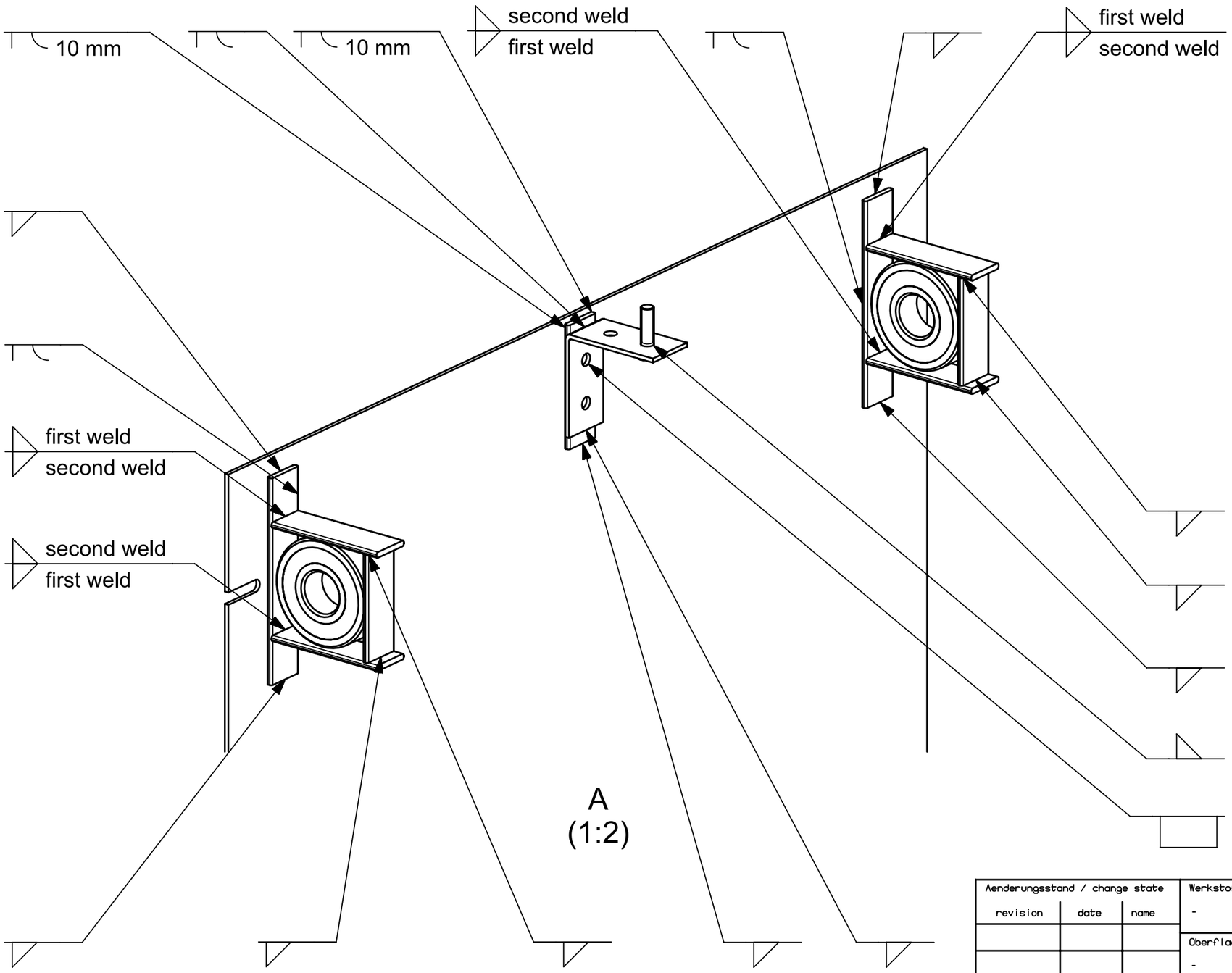

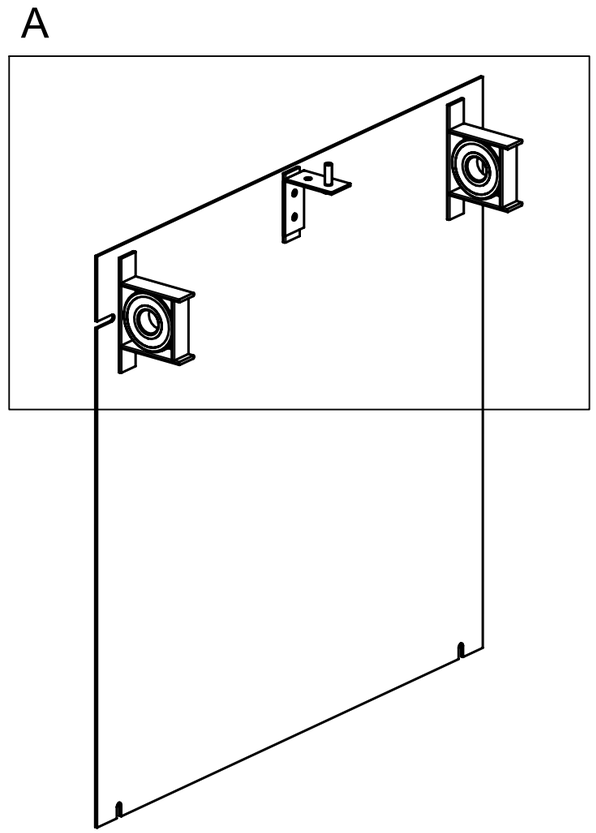

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	
			-	Mst. / scale: 1:3 — Format / size: A3
			Name / part name: Crank Side Panel	Einheit / unit: mm — Blatt / sheet: 3/3
gezeichnet von / designed by	04.04.2024	P. COLBACH	Baugruppe / parent assembly: Extended Frame	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 1	Dateiname / file name: A_Crank_Side_Panel_dwg

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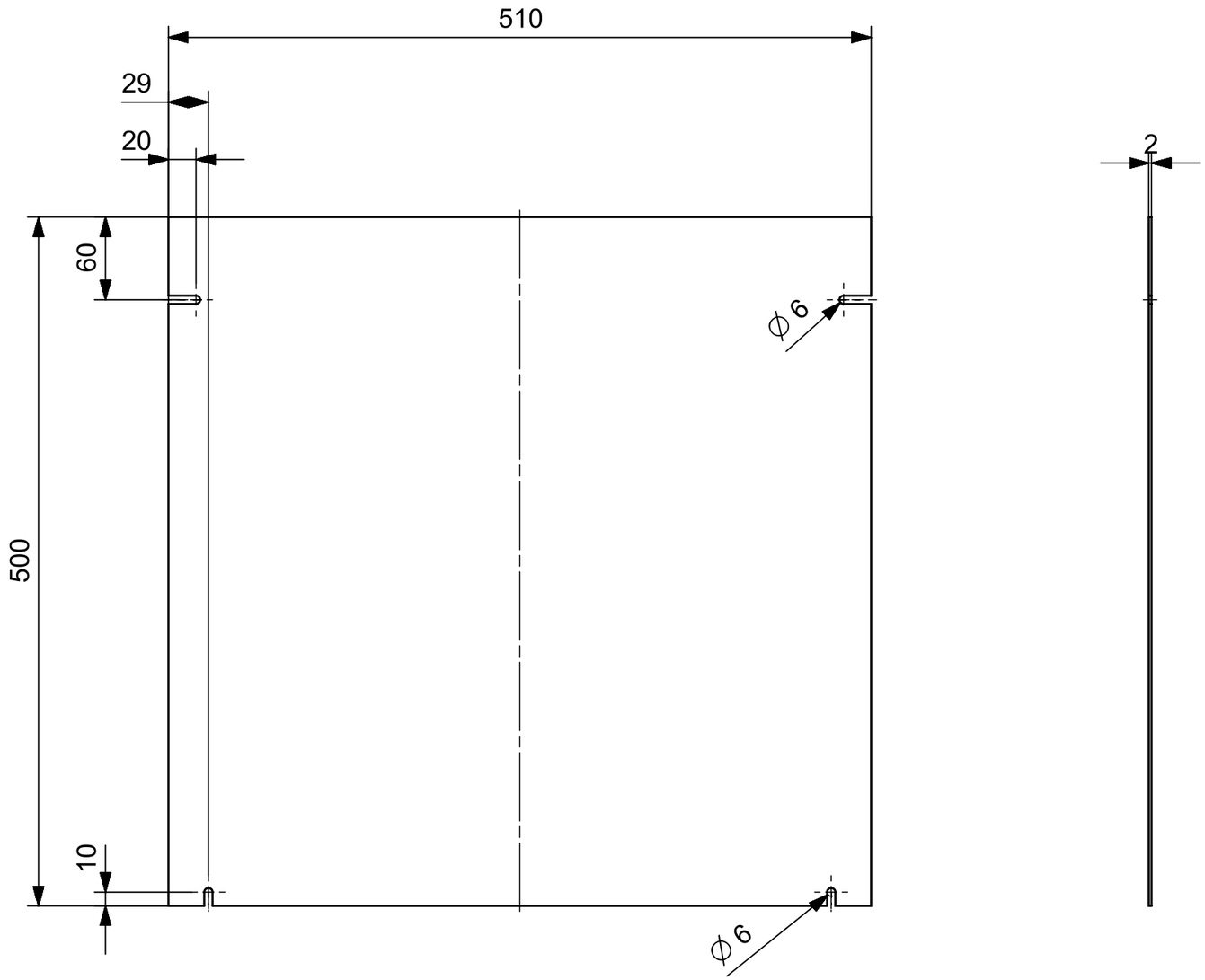
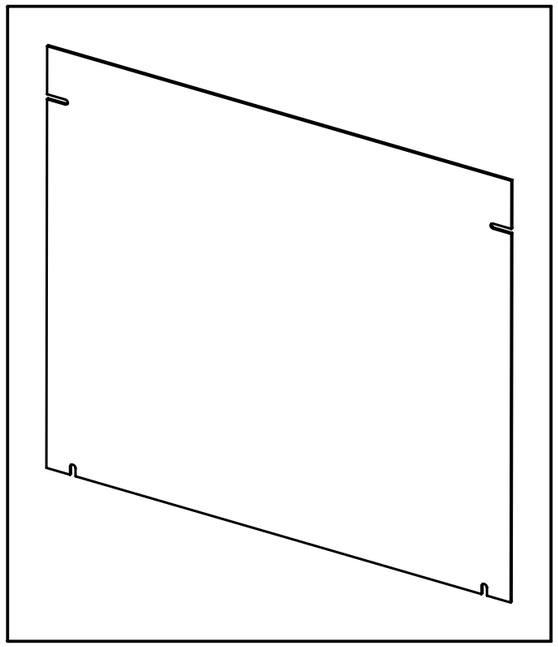
2.1.2.1 Independent Parts — Crank Side Panel





Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	
			Anti-Rust Coating	
			Name / part name	
			Large Side Panel	
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly	
			Extended Frame Crank Side Panel	
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	
			2	

Mst. / scale	Format / size
1:4	A3
Einheit / unit	Blatt / sheet
mm	1/1
Projekt / project	rev.
Glass Crusher	
Dateiname / file name	
M_Side_Panel_L.dwg	

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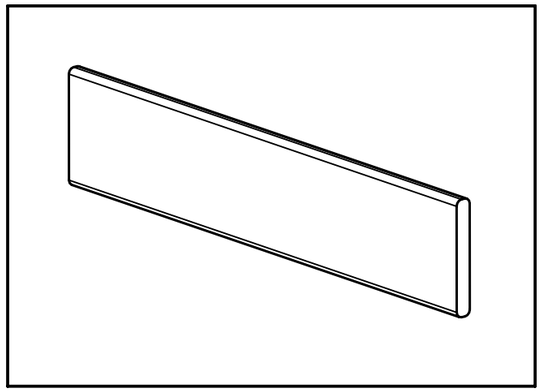

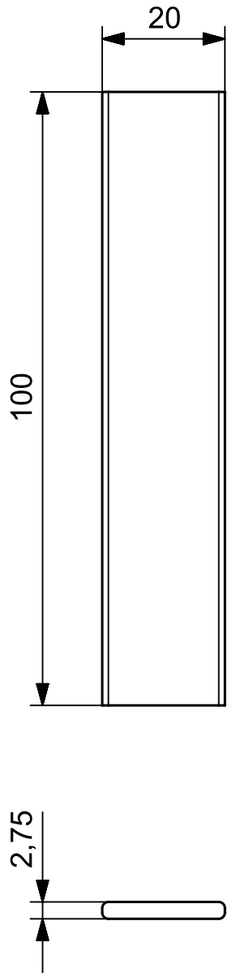

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:1 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Small Bearing Bracket, Base	
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly: Crank Side Panel	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 2	Dateiname / file name: M_Bearing_Bracket_S_Base_dwg

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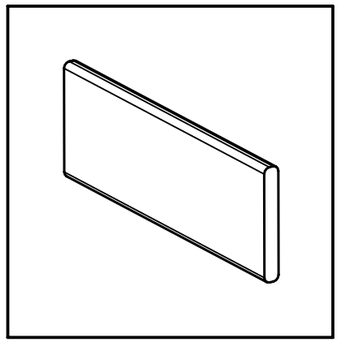

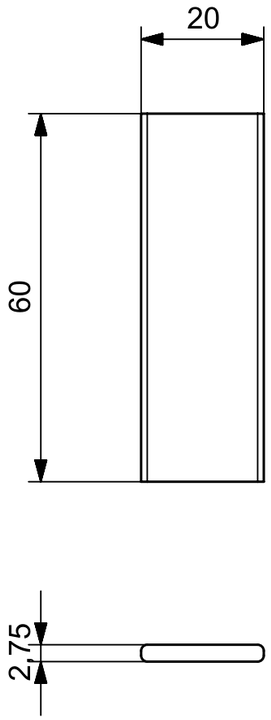

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:1 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Small Bearing Bracket, Side	
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly: Crank Side Panel	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 4	Dateiname / file name: M_Bearing_Bracket_S_Side_dwg 2

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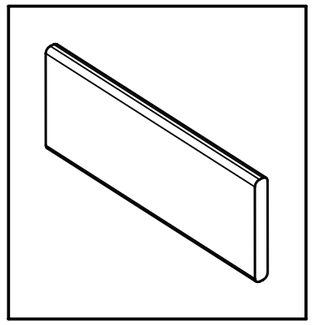

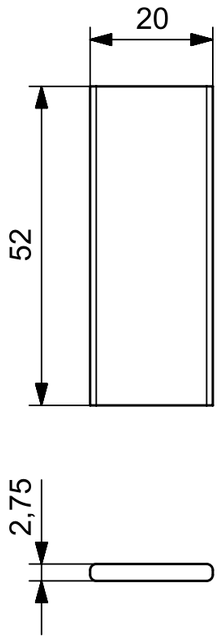

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:1 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Small Bearing Bracket, Top	
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly: Crank Side Panel	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 2	Dateiname / file name: M_Bearing_Bracket_S_Top_dwg

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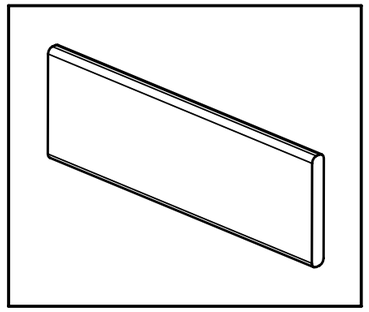

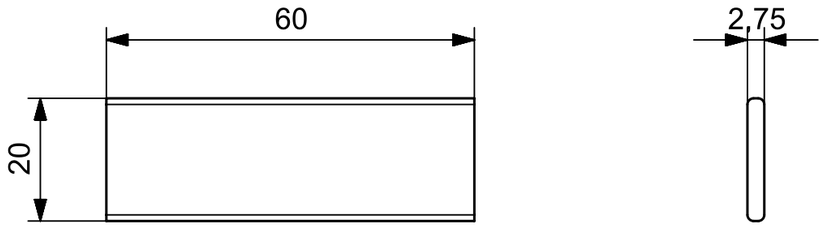

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:1
			Anti-Rust Coating	Format / size: A3
			Name / part name	Einheit / unit: mm
			Corner Bracket Spacer	Blatt / sheet: 1/1
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly: Crank Side Panel	Projekt / project: Glass Crusher; rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 1	Dateiname / file name: M_Corner_Bracket_Spacer_dwg

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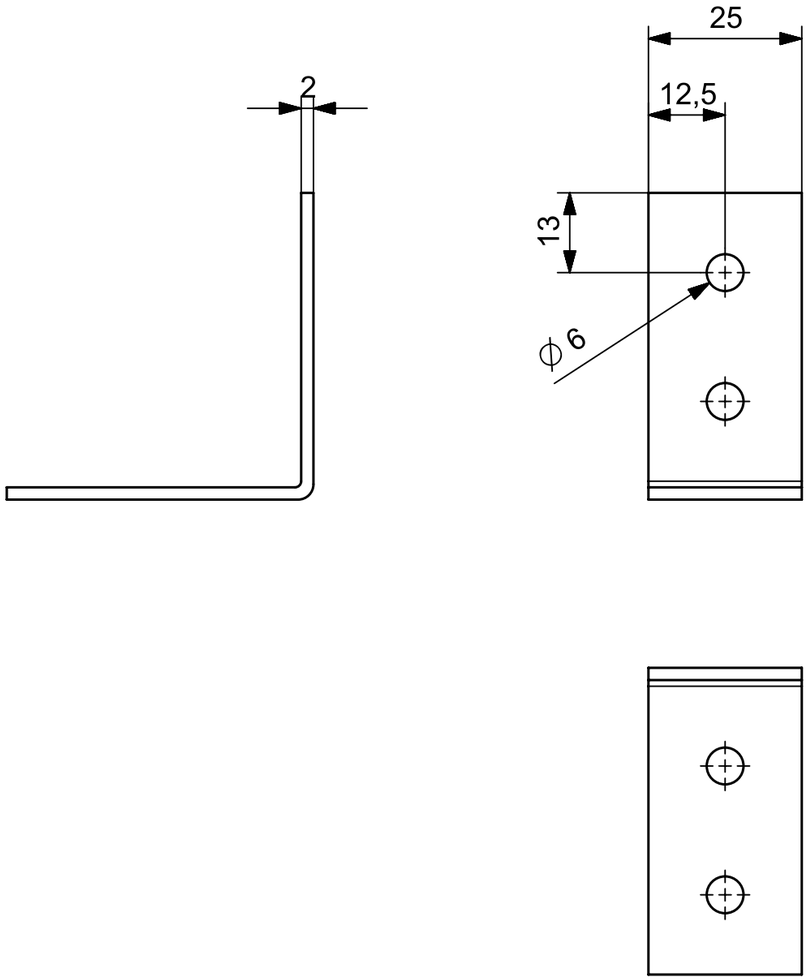
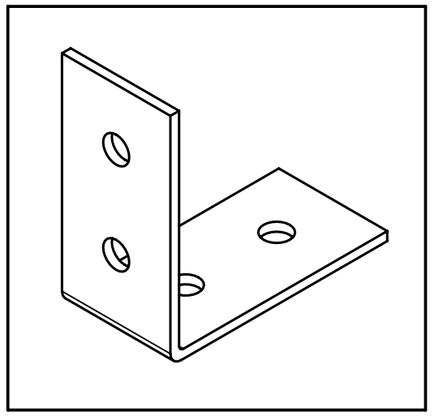


Only one hole needed.



Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:1 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Corner Bracket	
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Crank Side Panel	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name
			1	M_Corner_Bracket_dwg

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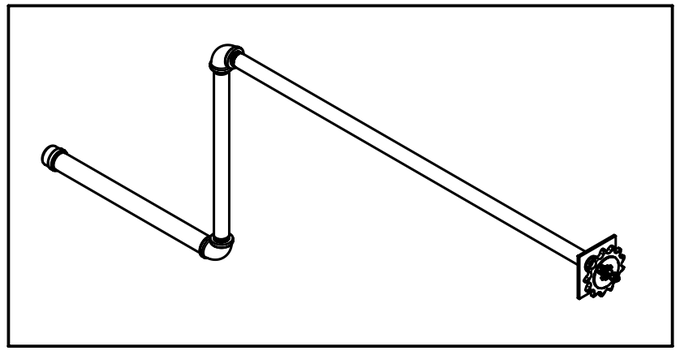
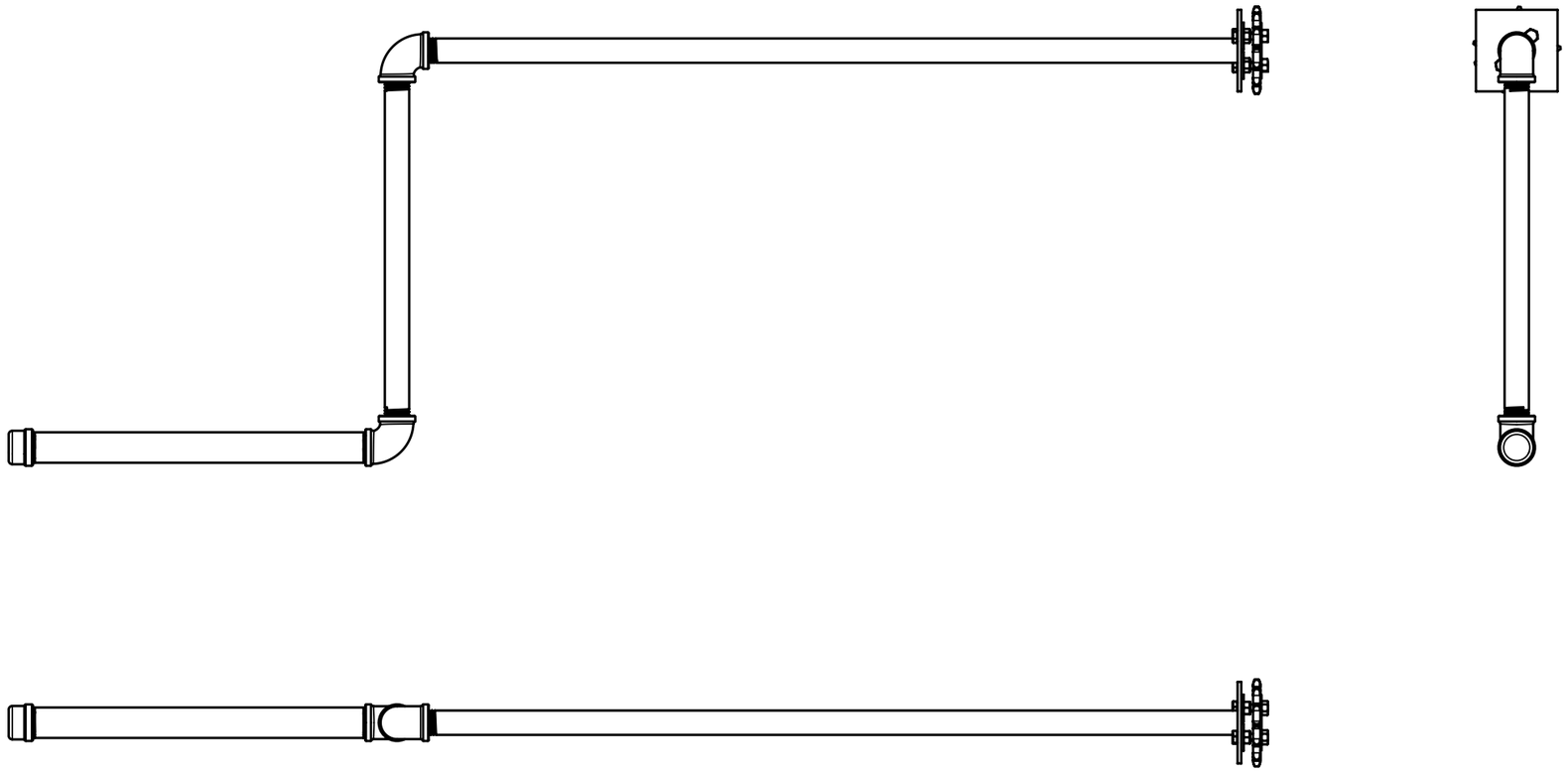
2.1.3 Crank





Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:5 — Format / size: A3
			-	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/3
			Crank	
gezeichnet von designed by	04.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Extended Frame	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name
			1	A_Crank.dwg

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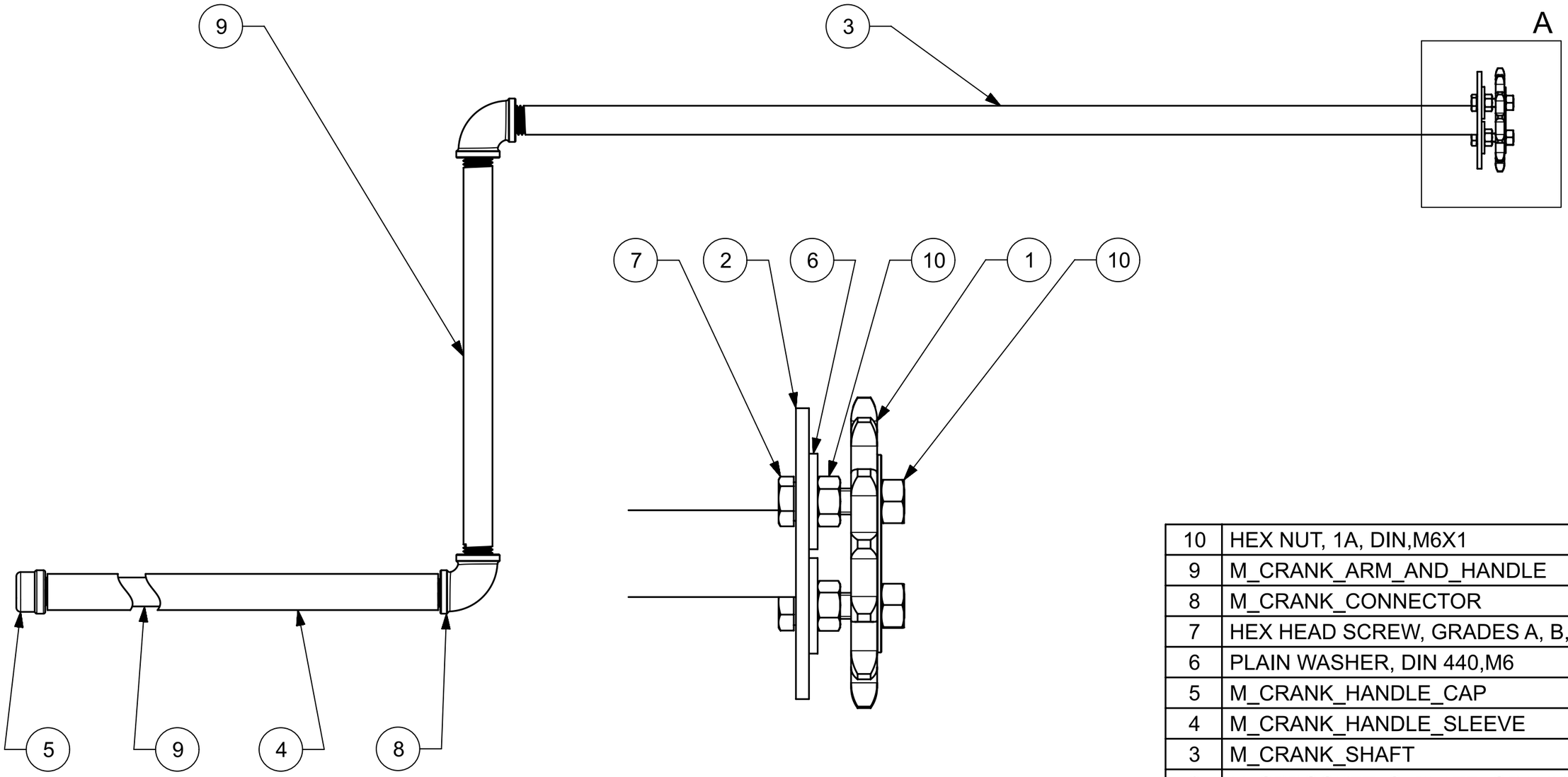

A
(1:1)

NO	PART NAME	QTY
10	HEX NUT, 1A, DIN,M6X1	4
9	M_CRANK_ARM_AND_HANDLE	2
8	M_CRANK_CONNECTOR	2
7	HEX HEAD SCREW, GRADES A, B, DIN,M6X25	2
6	PLAIN WASHER, DIN 440,M6	2
5	M_CRANK_HANDLE_CAP	1
4	M_CRANK_HANDLE_SLEEVE	1
3	M_CRANK_SHAFT	1
2	M_SPROCKET_S_PLATE_CRANK	1
1	M_SPROCKET_S	1

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:5 — Format / size: A3
			-	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 2/3
			Crank	
gezeichnet von designed by	04.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Extended Frame	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name: A_Crank_dwg
			1	

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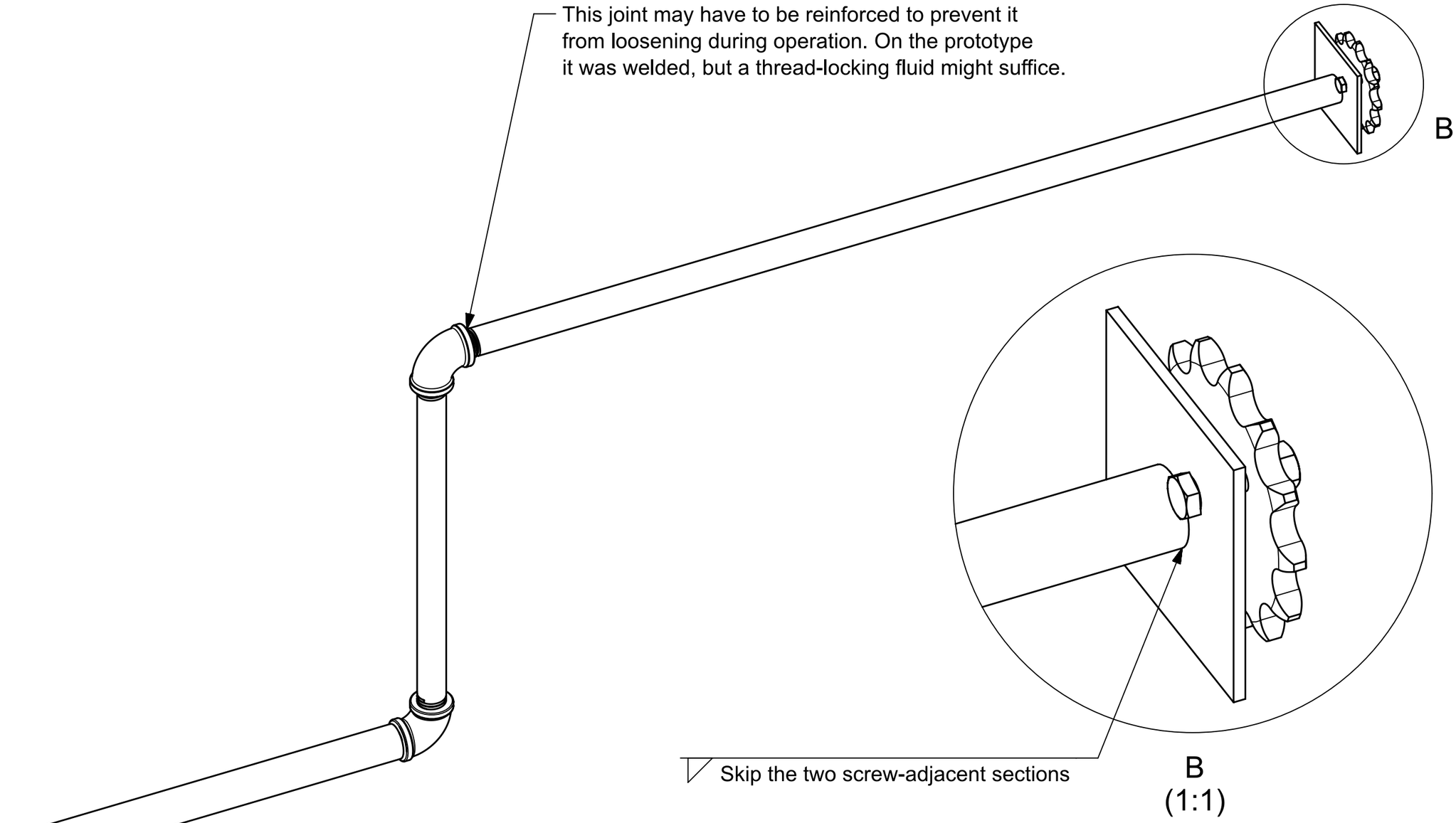

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:5 — Format / size: A3
			-	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 3/3
			Crank	
gezeichnet von designed by	04.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Extended Frame	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name
			1	A_Crank_dwg

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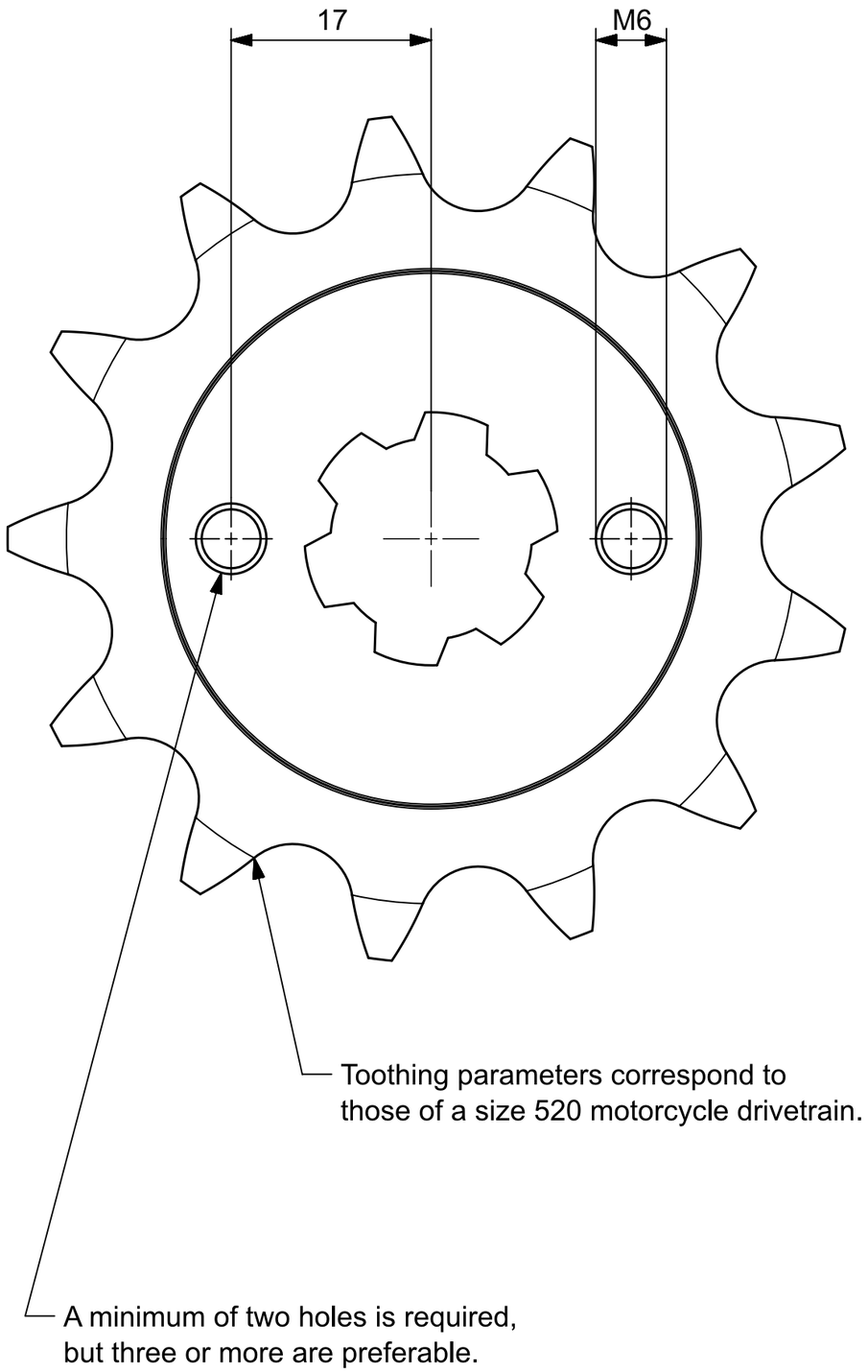
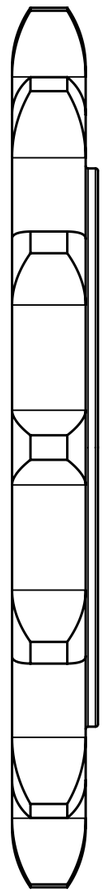
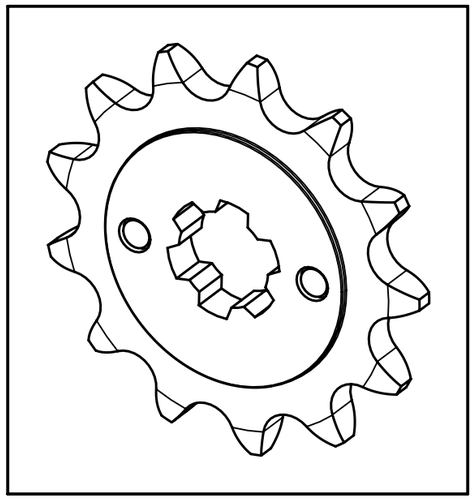
2.1.3.1 Independent Parts — Crank







Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Steel	
			Oberflaechenbehandlung / surface treatment -	Mst. / scale: 2:1
				Format / size: A3
			Name / part name 13 Tooth Sprocket	Einheit / unit: mm
				Blatt / sheet: 1/1
gezeichnet von designed by	26.03.2024	P. COLBACH	Baugruppe / parent assembly Crank Sprocket Module, Small	Projekt / project: Glass Crusher
				rev.
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity 3	Dateiname / file name M_Sprocket_S_dwg

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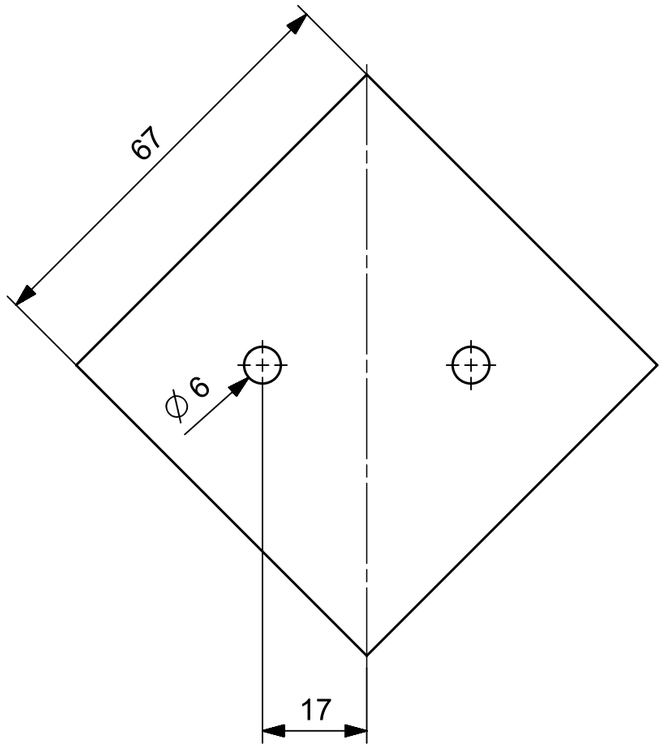

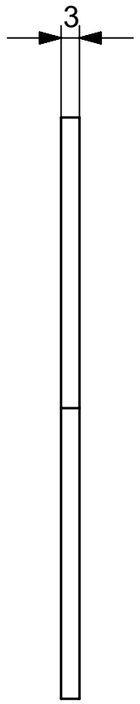

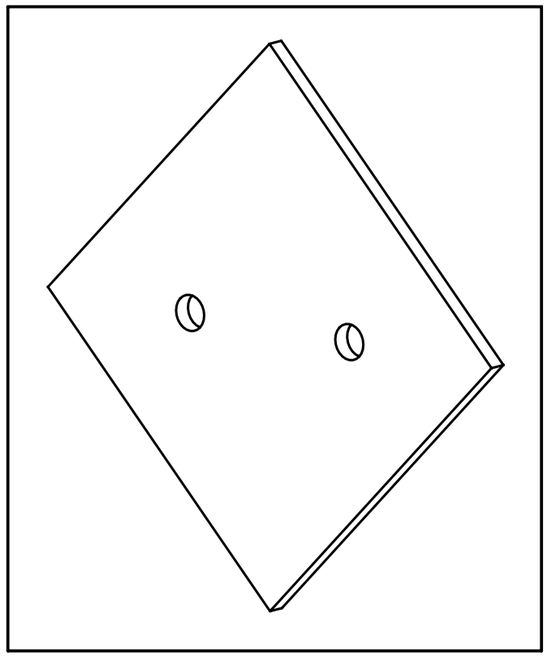

Aenderungsstand / change state			Werkstoff / material		
revision	date	name	Mild Steel		
			Oberflaechenbehandlung / surface treatment Anti-Rust Coating	Mst. / scale 1:1	Format / size A3
			Name / part name Crank Mount for 13T Sprocket	Einheit / unit mm	Blatt / sheet 1/1
gezeichnet von designed by	26.03.2024	P. COLBACH	Baugruppe / parent assembly Crank	Projekt / project Glass Crusher	rev.
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity 1	Dateiname / file name M_Sprocket_S_Plate_Crank_dwg	

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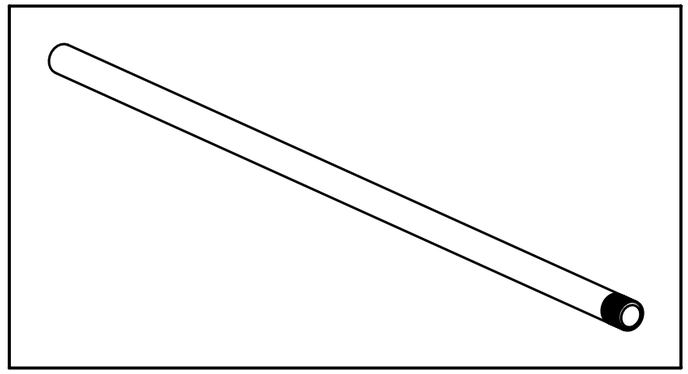

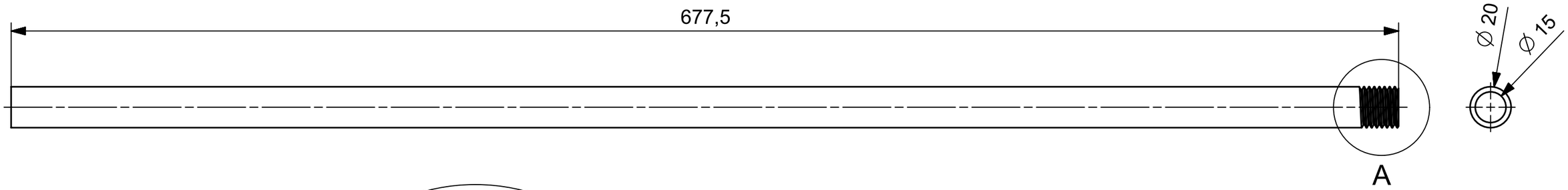

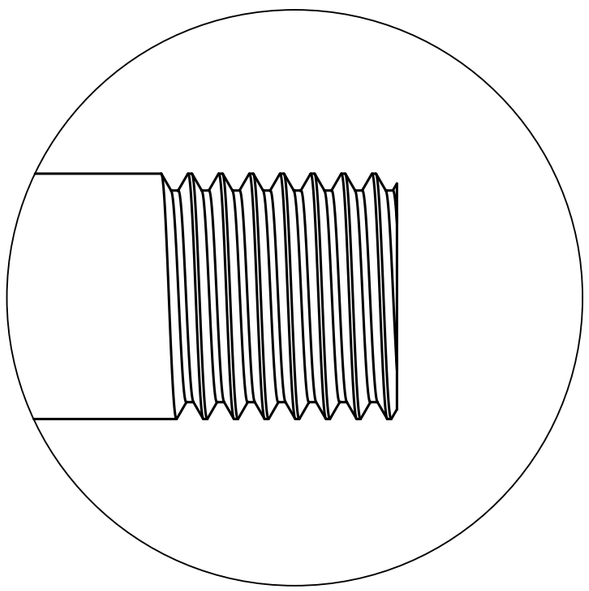

A
(2:1)

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Galvanized Steel	
			Oberflaechenbehandlung / surface treatement	
			Anti-Rust Coating	Mst. / scale: 1:2 — Format / size: A3
			Name / part name	
			Crank Shaft	Einheit / unit: mm — Blatt / sheet: 1/1
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly: Crank	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 1	Dateiname / file name: M_Crank_Shaft_dwg

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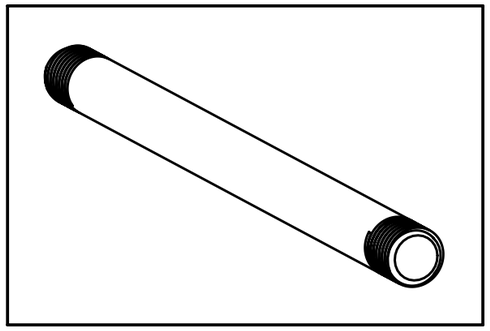

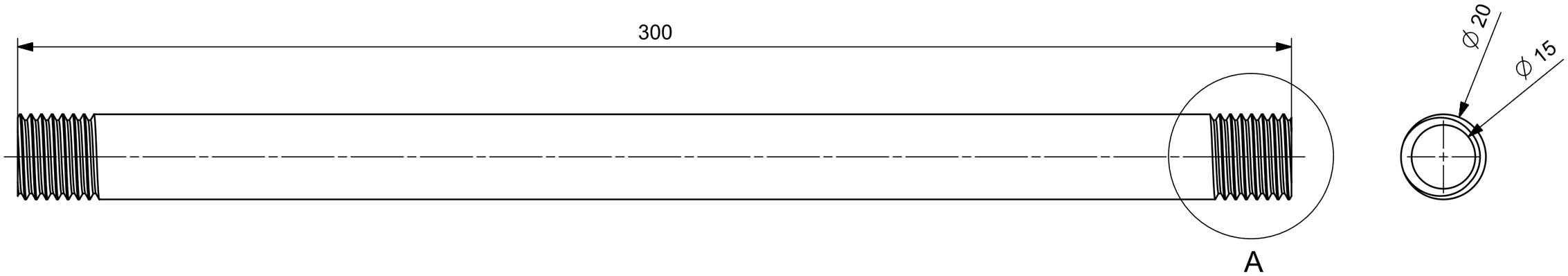

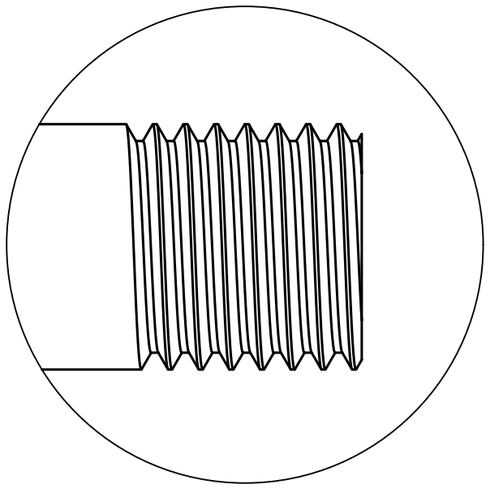

A
(2:1)

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Galvanized Steel	
			Oberflaechenbehandlung / surface treatment Anti-Rust Coating	Mst. / scale: 1:1 — Format / size: A3
			Name / part name Crank Arm and Handle	Einheit / unit: mm — Blatt / sheet: 1/1
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly Crank	Projekt / project: Glass Crusher — rev.
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity 2	Dateiname / file name M_Crank_Arm_and_Handle_dwg

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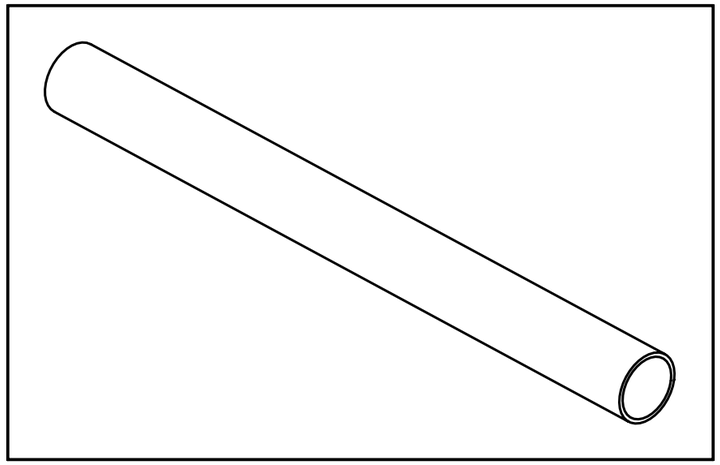

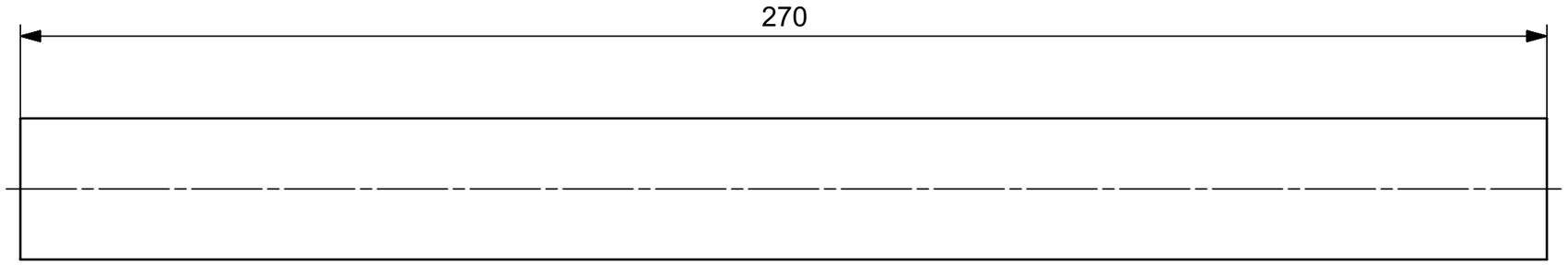

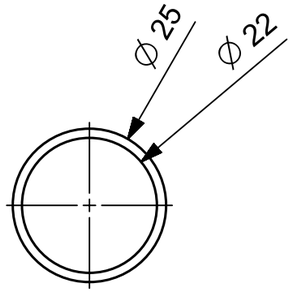

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Plastic	
			Oberflaechenbehandlung / surface treatment -	Mst. / scale 1:1 / Format / size A3
			Name / part name Sleeve for Handle	Einheit / unit mm / Blatt / sheet 1/1
gezeichnet von / designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly Crank	Projekt / project Glass Crusher / rev.
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity 1	Dateiname / file name M_Crank_Handle_Sleeve_dwg

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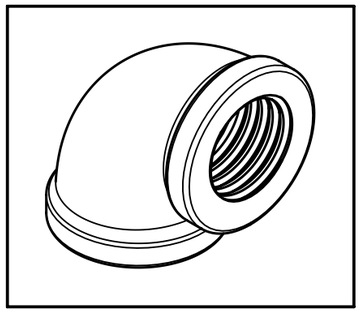

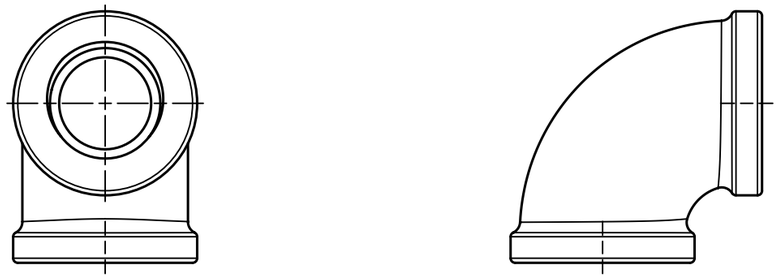

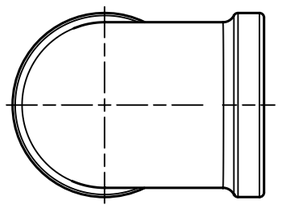

Standard part.
Fits onto the galvanized steel pipes' threading.

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Galvanized Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:1 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Pipe Connector	
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Crank	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name
			2	M_Crank_Connector_dwg

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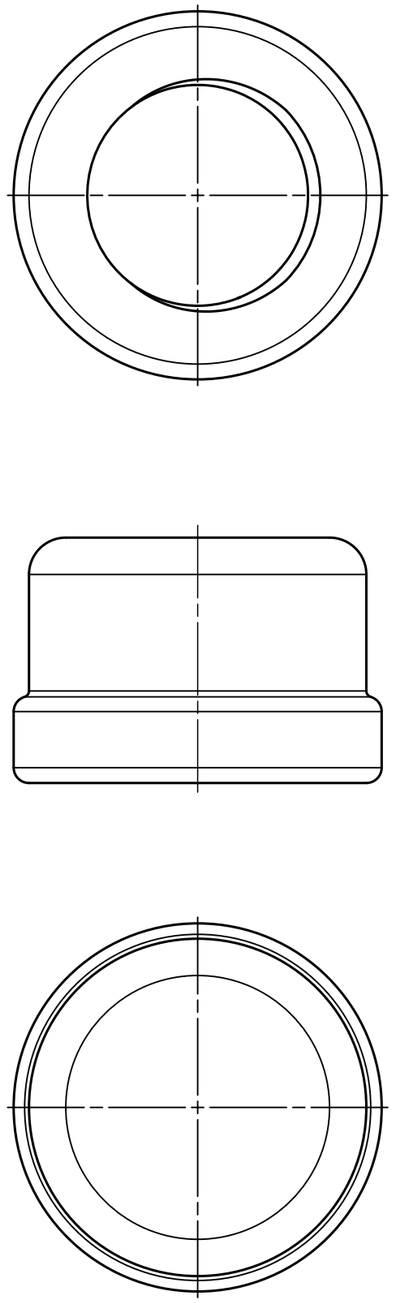

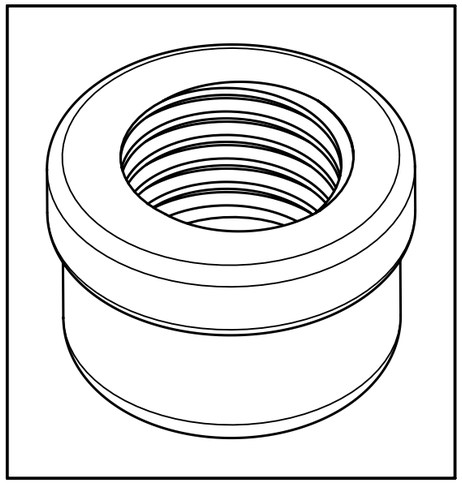

Standard part.
Fits onto the galvanized steel pipes' threading.

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Galvanized Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 2:1
			Anti-Rust Coating	Format / size: A3
			Name / part name	Einheit / unit: mm
			Cap for Crank Handle	Blatt / sheet: 1/1
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly: Crank	Projekt / project: Glass Crusher; rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 1	Dateiname / file name: M_Crank_Handle_Cap_dwg

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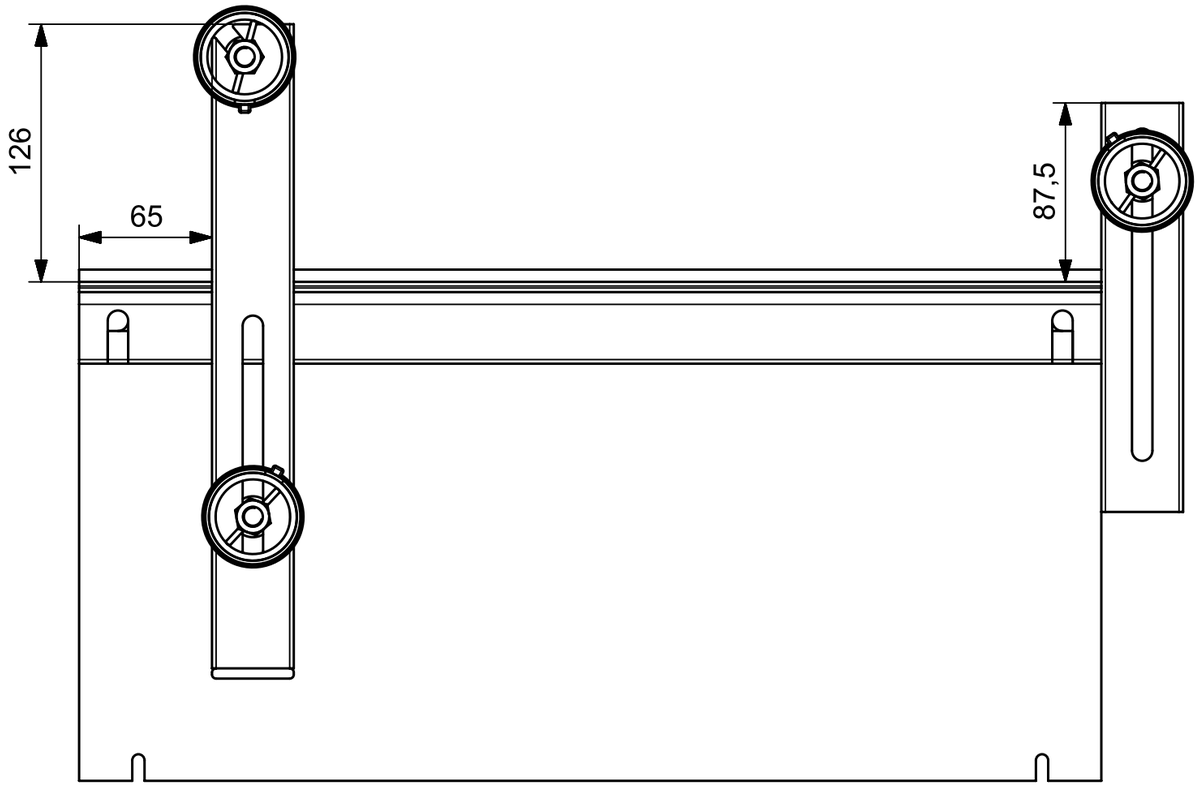
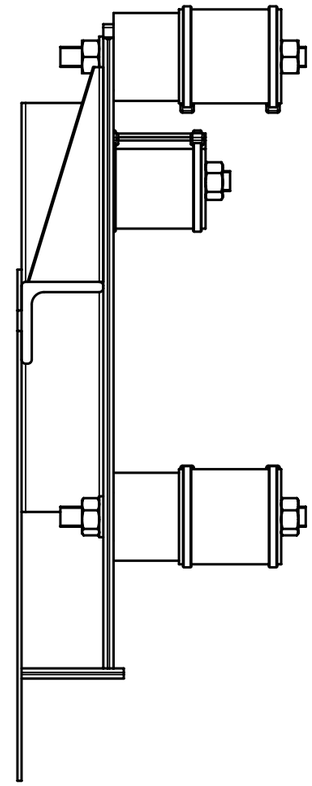
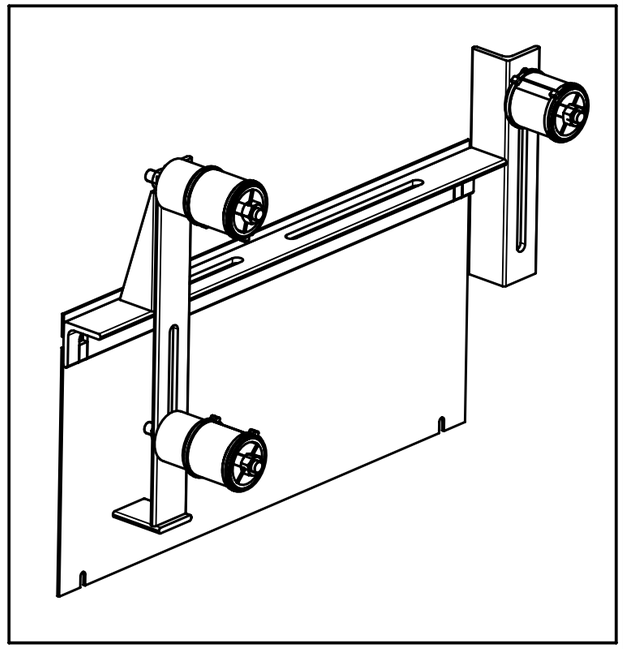
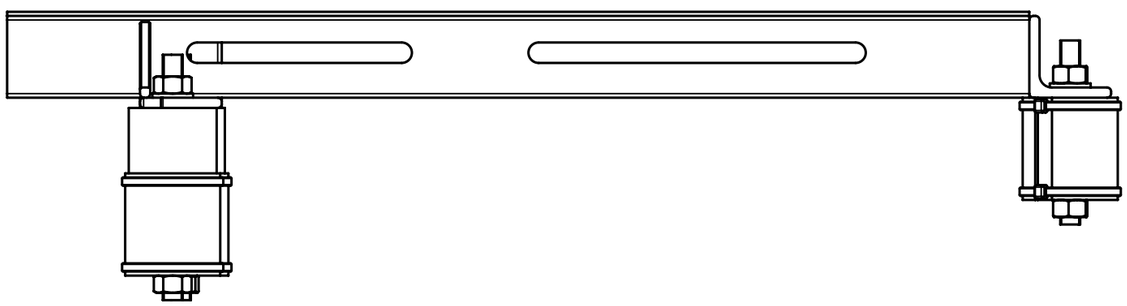
2.1.4 Drivetrain Panel









Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:3 — Format / size: A3
			-	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/3
			Drivetrain Panel	
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly: Full Assembly	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 1	Dateiname / file name: A_Side_Panel_S_Bot_Drivetrain_dwg

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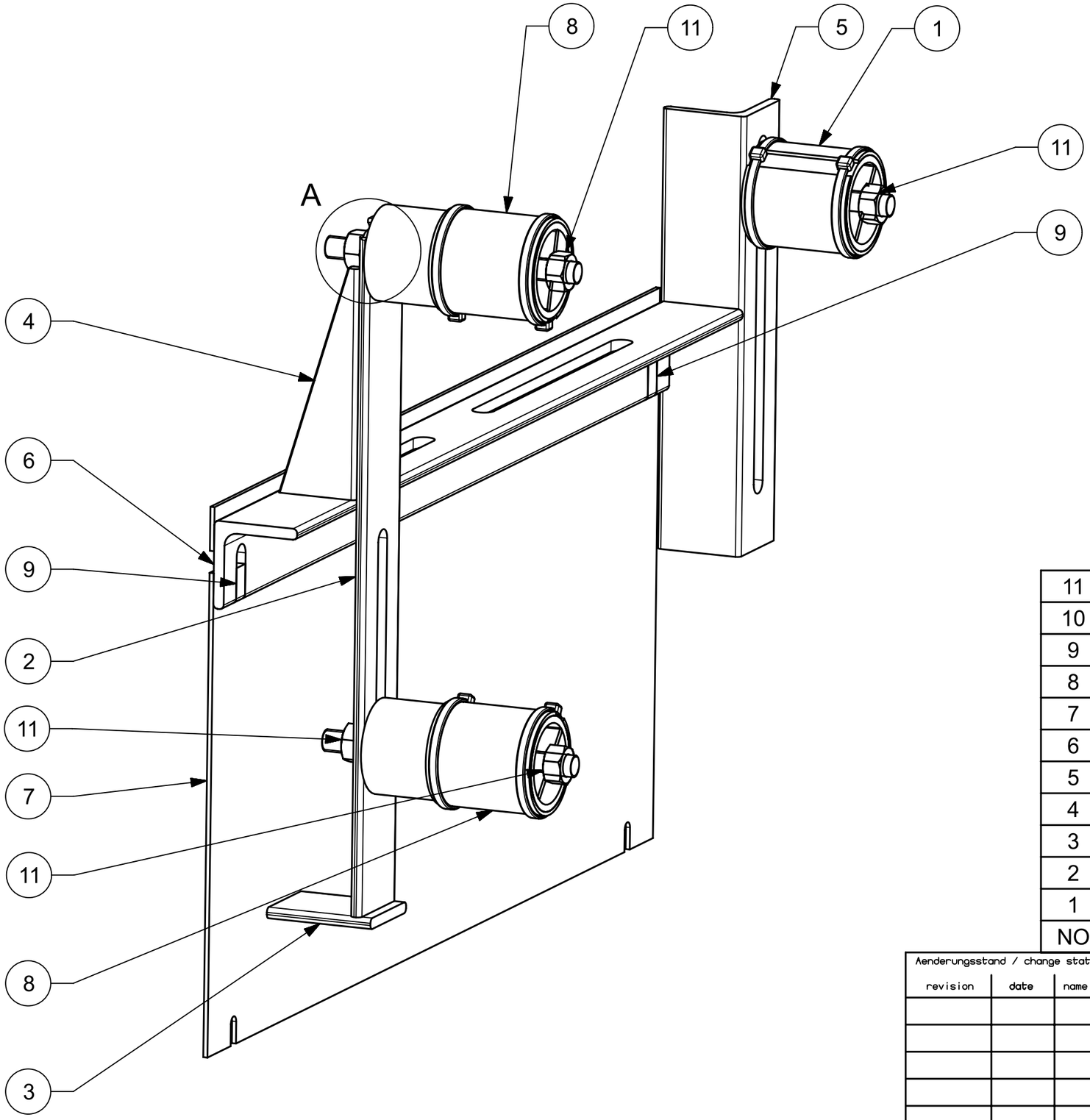

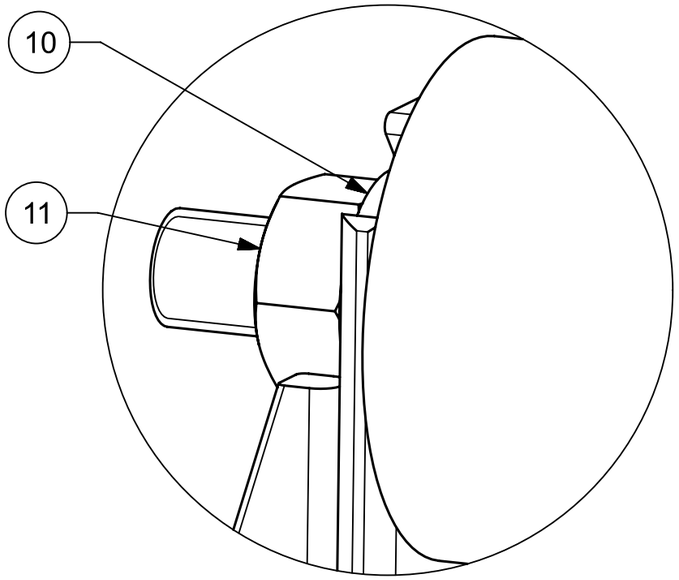

A
(2:1)

NO	PART NAME	QTY
11	HEX NUT, 1A, DIN,M10X1_5	6
10	PLAIN WASHER, NORMAL, DIN,M10	3
9	M_ROLLER_MOUNTING_PLATFORM_SLIT_INSERT	2
8	A_CHAIN_GUIDE_L	2
7	M_SIDE_PANEL_S_BOT	1
6	M_ROLLER_MOUNTING_PLATFORM_MIRROR	1
5	M_CHAIN_GUIDE_MOUNTING_CORNER_PROFILE	1
4	M_CHAIN_GUIDE_MOUNTING_BAR_SUPPORT_TOP	1
3	M_CHAIN_GUIDE_MOUNTING_BAR_SUPPORT_BOT	1
2	M_CHAIN_GUIDE_MOUNTING_BAR	1
1	A_CHAIN_GUIDE_S	1

Aenderungsstand / change state			Werkstoff / material		
revision	date	name	-		
			Oberflaechenbehandlung / surface treatment	Mst. / scale	Format / size
			-	1:3	A3
			Name / part name	Einheit / unit	Blatt / sheet
			Drivetrain Panel	mm	2/3
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project	rev.
			Full Assembly	Glass Crusher	
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name	
			1	A_Side_Panel_S_Bot_Drivetrain_dwg	

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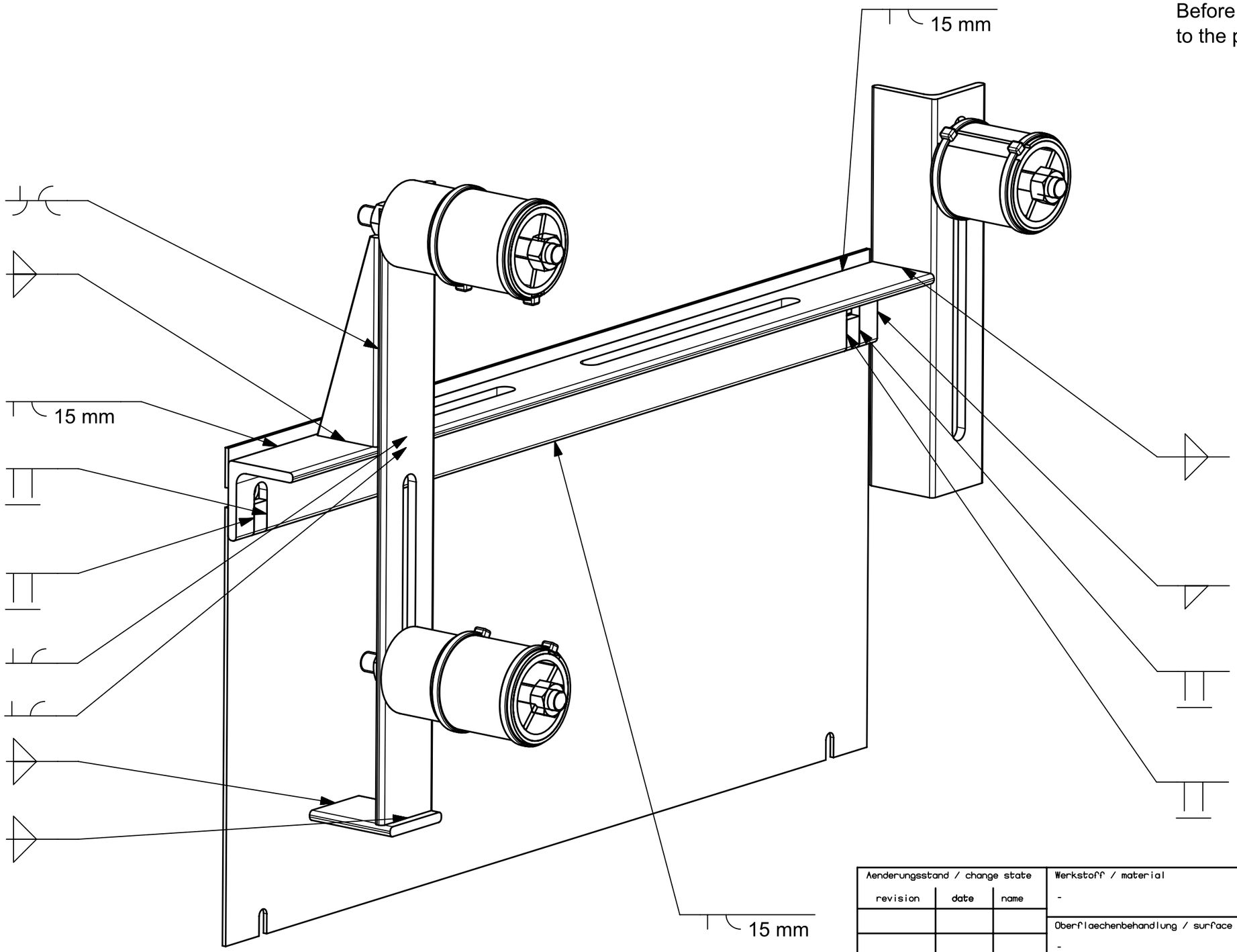
Before welding, screwing the roller platform to the panel helps with part alignment.



Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:3 — Format / size: A3
			-	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 3/3
			Drivetrain Panel	
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly: Full Assembly	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 1	Dateiname / file name: A_Side_Panel_S_Bot_Drivetrain_dwg

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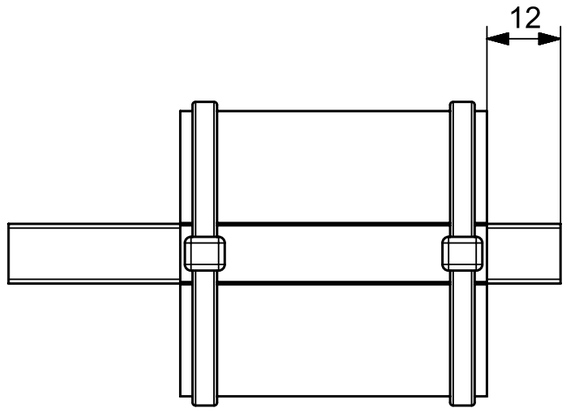
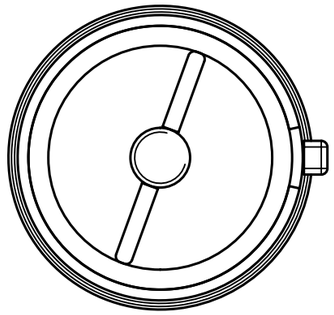
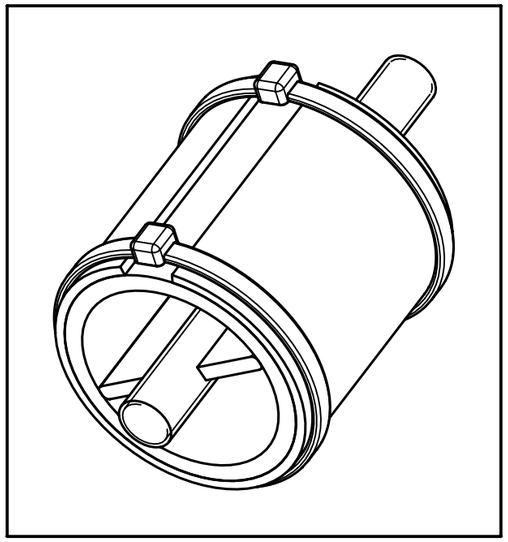
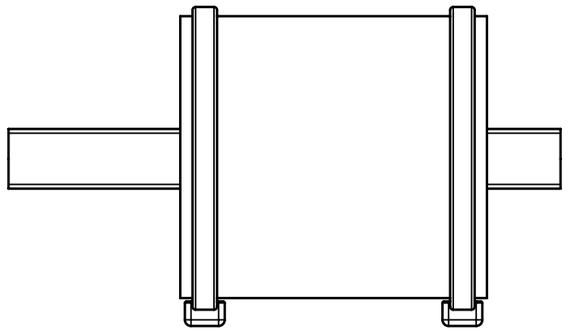
2.1.4.1 Chain Guide, Small









Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:1 — Format / size: A3
			-	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/3
			Chain Guide, Short	
gezeichnet von designed by	05.04.2024	P. COLBACH	Baugruppe / parent assembly: Drivetrain Panel	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 1	Dateiname / file name: A_Chain_Guide_S_dwg

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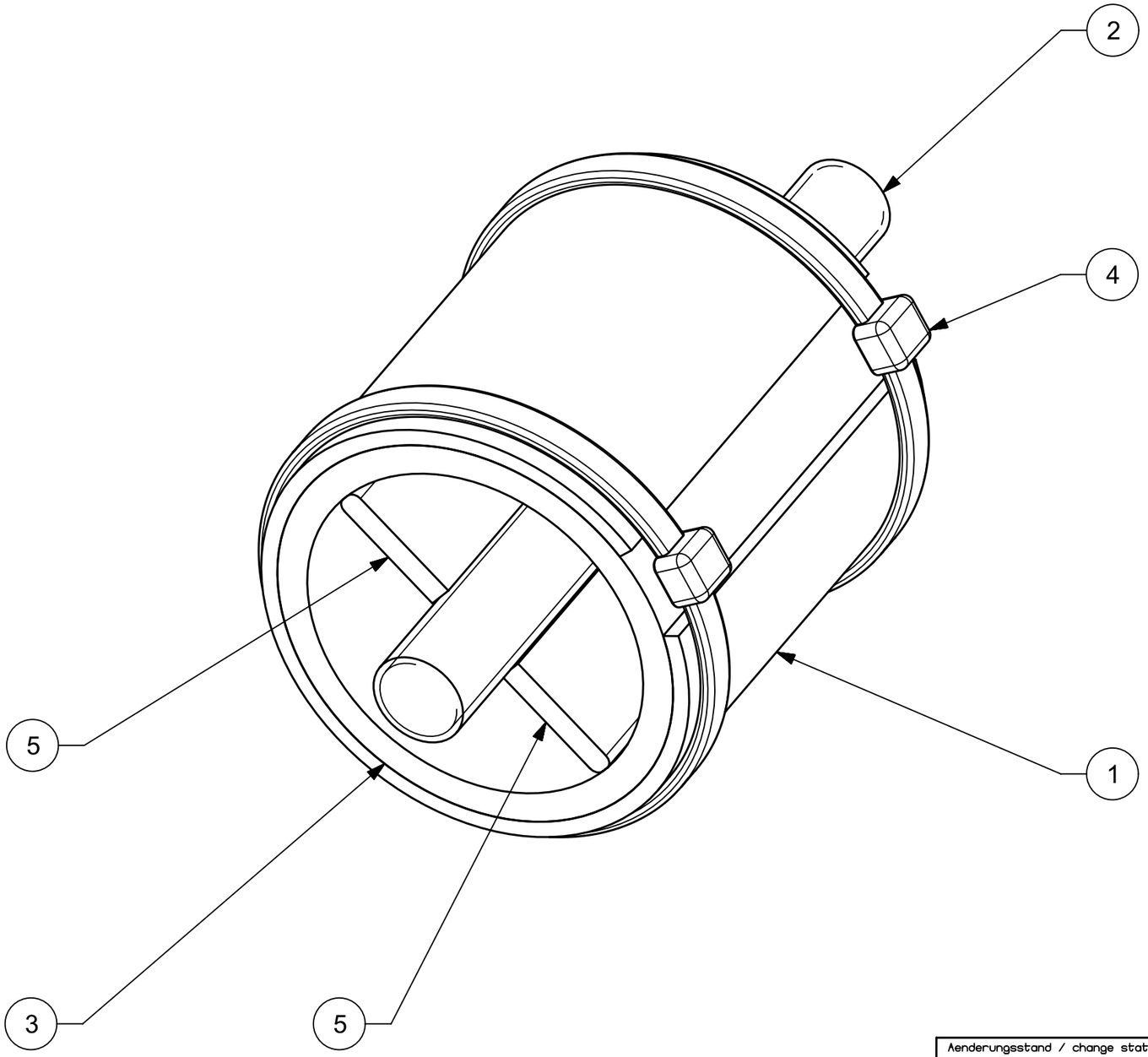

NO	PART NAME	QTY
5	M_CHAIN_GUIDE_CONNECTOR_S	2
4	M_ZIP_TIE_SYMBOLIC_CIRCULAR	2
3	M_CHAIN_GUIDE_PIPE_S	1
2	STUD, FORM A, DIN,M10X1_5X90	1
1	M_CHAIN_GUIDE_SLEEVE	1

Aenderungsstand / change state		
revision	date	name
gezeichnet von designed by	05.04.2024	P. COLBACH

Werkstoff / material
-

Oberflaechenbehandlung / surface treatment
-

Name / part name
Chain Guide, Short

Baugruppe / parent assembly
Drivetrain Panel

Stueckzahl / quantity
1

Mst. / scale: 1:1
Format / size: A3
Einheit / unit: mm
Blatt / sheet: 2/3

Projekt / project: Glass Crusher
rev.

Dateiname / file name
A_Chain_Guide_S_dwg

ETH zürich
Eidgenoessische Technische Hochschule Zuerich
Swiss Federal Institute of Technology Zurich

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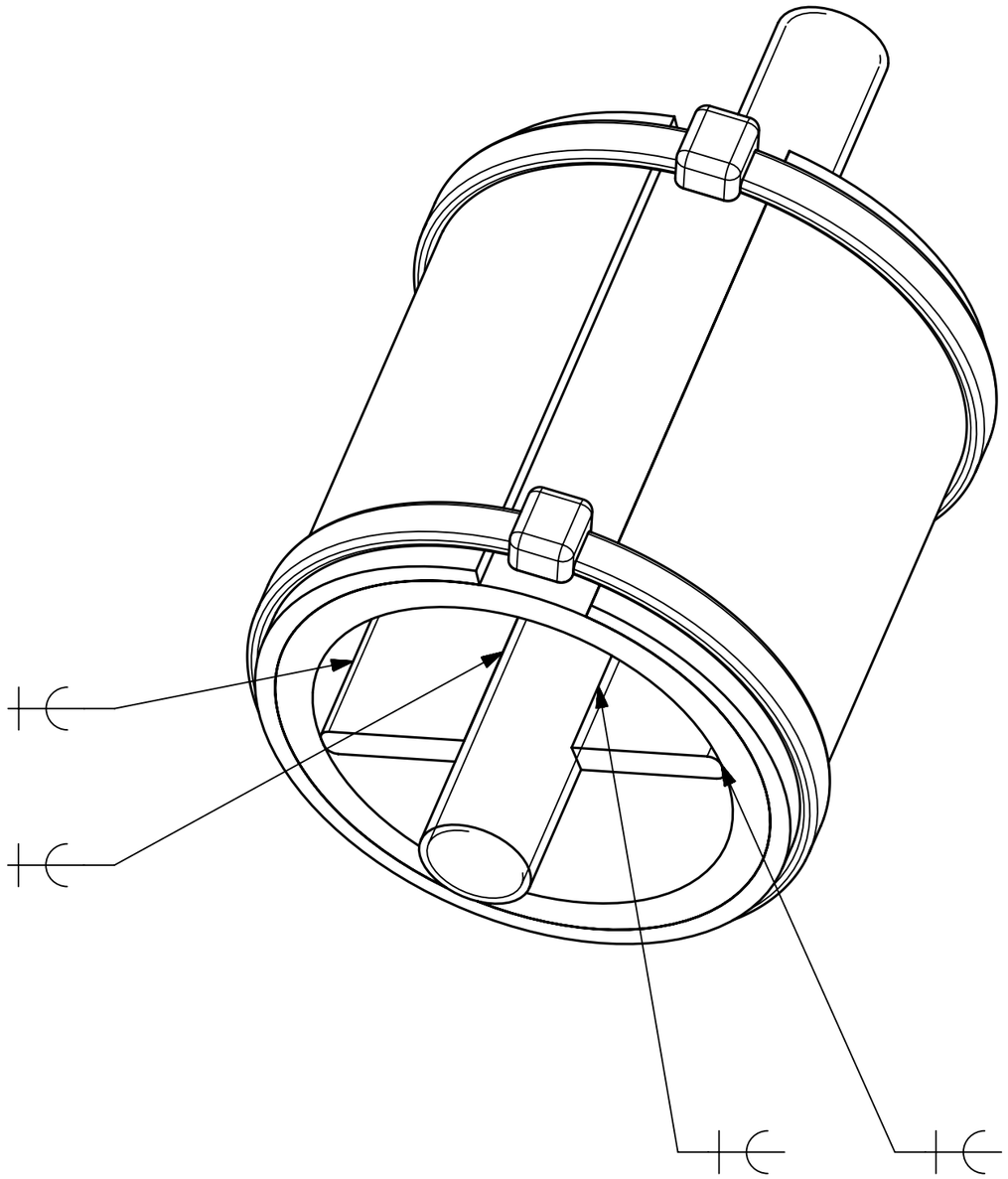

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:1 — Format / size: A3
			-	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 3/3
			Chain Guide, Short	
gezeichnet von designed by	05.04.2024	P. COLBACH	Baugruppe / parent assembly: Drivetrain Panel	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 1	Dateiname / file name: A_Chain_Guide_S_dwg

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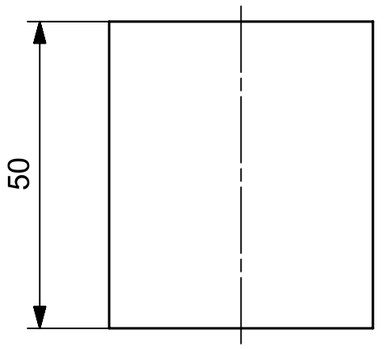
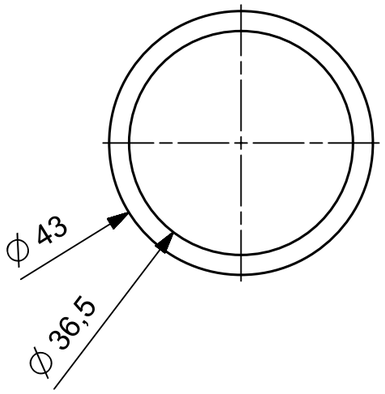
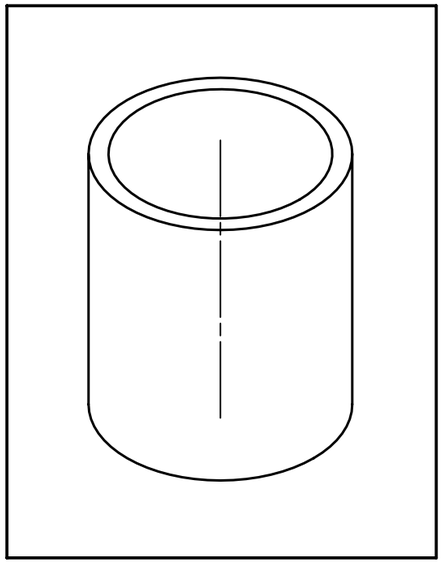
2.1.4.1.1 Independent Parts — Chain Guide, Small







Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Steel	
			Oberflaechenbehandlung / surface treatment Anti-Rust Coating	Mst. / scale: 1:1 Format / size: A3
			Name / part name Chain Guide Pipe, Short	Einheit / unit: mm Blatt / sheet: 1/1
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly Chain Guides	Projekt / project: Glass Crusher rev.
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity 1	Dateiname / file name M_Chain_Guide_Pipe_S_dwg

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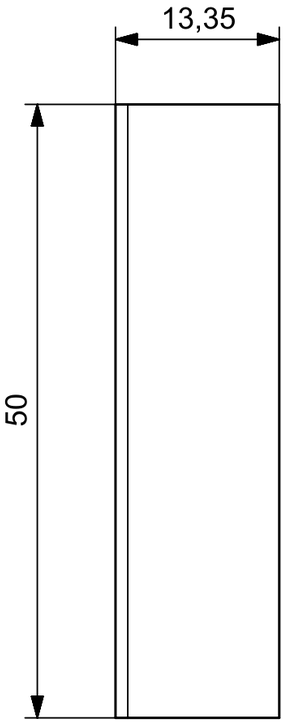

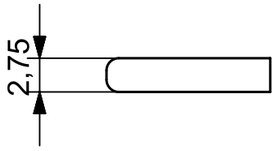

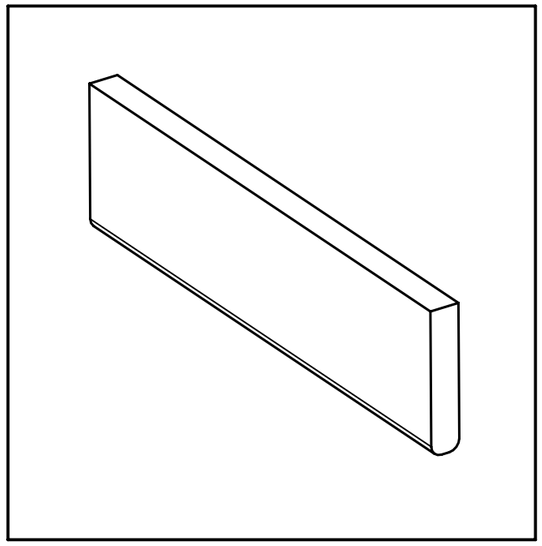

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 2:1
			Anti-Rust Coating	Format / size: A3
			Name / part name	Einheit / unit: mm
			Chain Guide Connector, Short	Blatt / sheet: 1/1
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly: Chain Guides	Projekt / project: Glass Crusher; rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 2	Dateiname / file name: M_Chain_Guide_Connector_S_dwg

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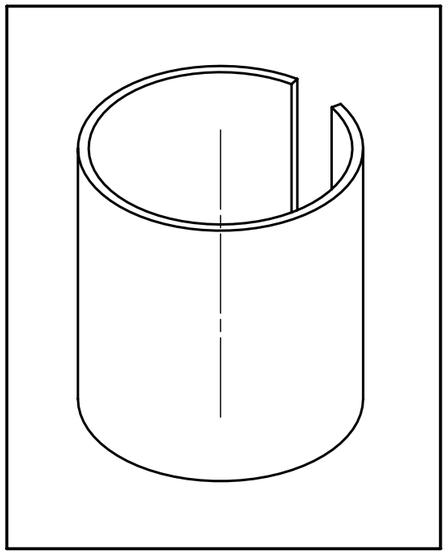

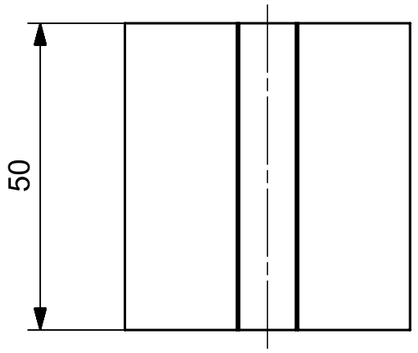

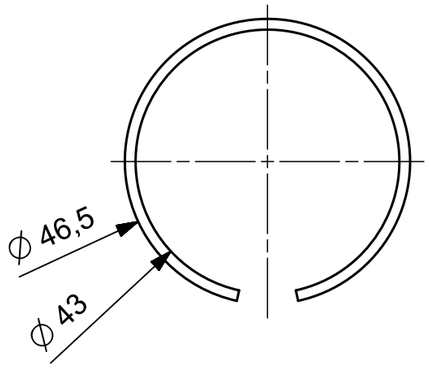

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Plastic	
			Oberflaechenbehandlung / surface treatment -	Mst. / scale: 1:1 — Format / size: A3
			Name / part name Chain Guide Sleeve	Einheit / unit: mm — Blatt / sheet: 1/1
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly Chain Guides	Projekt / project: Glass Crusher — rev.
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity 3	Dateiname / file name M_Chain_Guide_Sleeve_dwg

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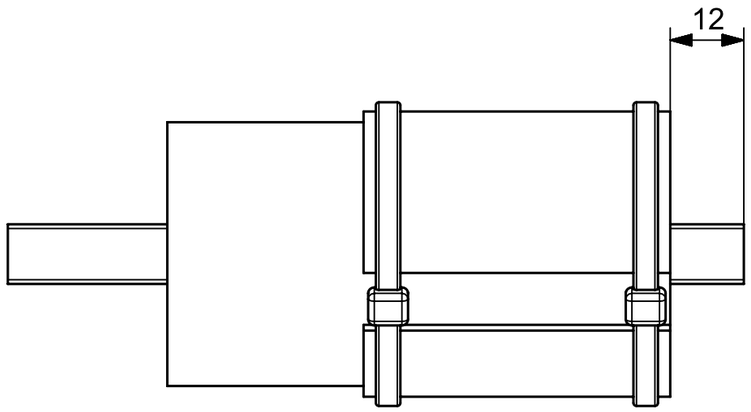
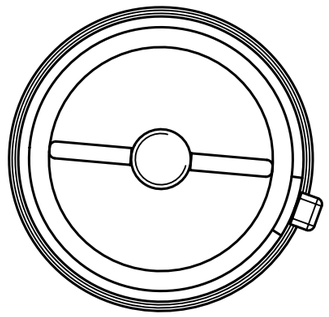
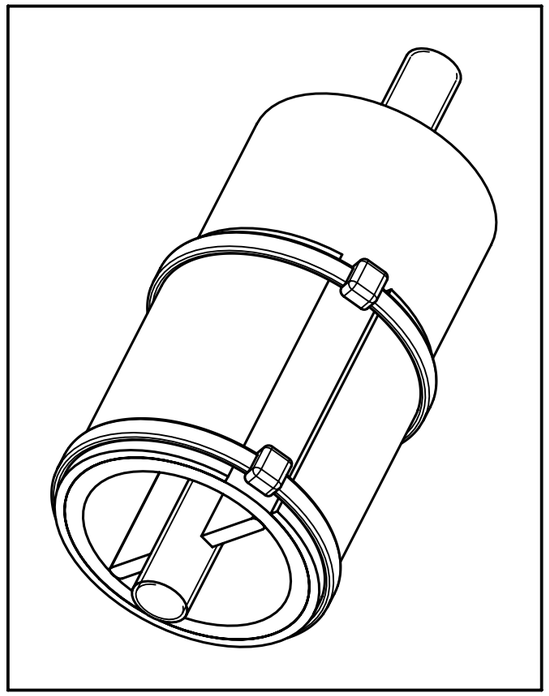
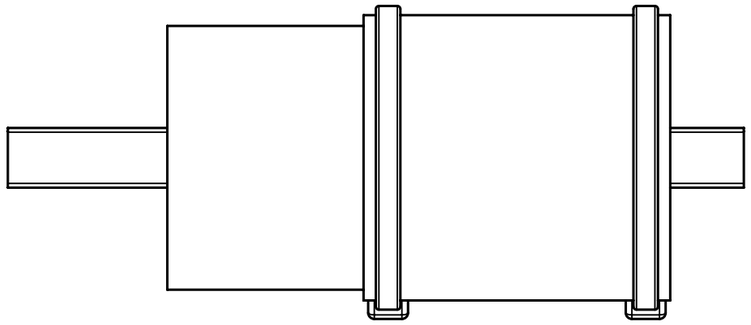
2.1.4.2 Chain Guides, Large









Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 2:1 — Format / size: A3
			-	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/3
			Chain Guide, Long	
gezeichnet von designed by	05.04.2024	P. COLBACH	Baugruppe / parent assembly: Drivetrain Panel	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 2	Dateiname / file name: A_Chain_Guide_L_dwg

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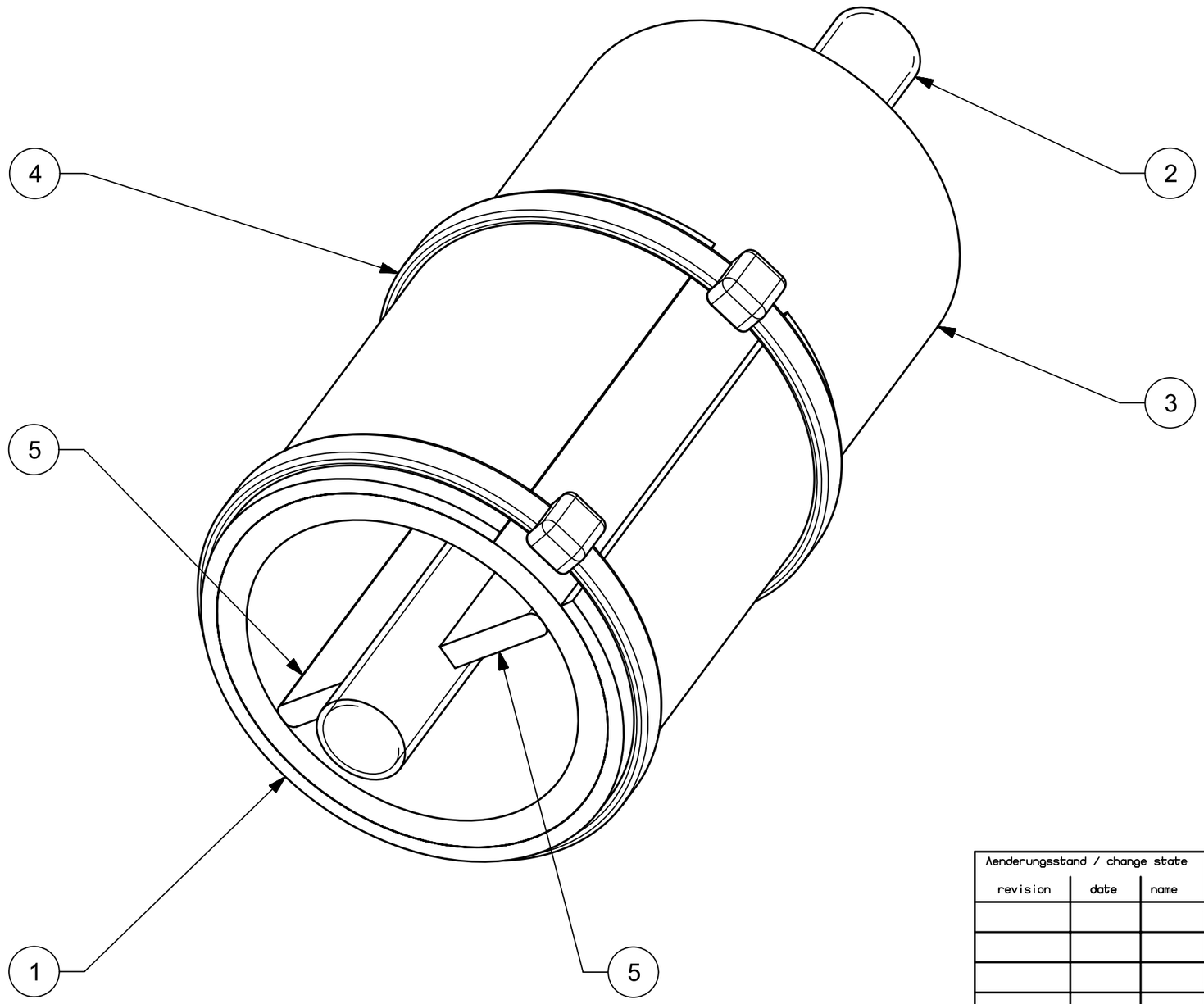

NO	PART NAME	QTY
5	M_CHAIN_GUIDE_CONNECTOR_L	2
4	M_ZIP_TIE_SYMBOLIC_CIRCULAR	2
3	M_CHAIN_GUIDE_PIPE_L	1
2	STUD, FORM A, DIN,M10X1_5X120	1
1	M_CHAIN_GUIDE_SLEEVE	1

Aenderungsstand / change state			Werkstoff / material		
revision	date	name	-		
			Oberflaechenbehandlung / surface treatment	Mst. / scale	Format / size
			-	2:1	A3
			Name / part name	Einheit / unit	Blatt / sheet
			Chain Guide, Long	mm	2/3
gezeichnet von designed by	05.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project	rev.
			Drivetrain Panel	Glass Crusher	
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name	
			2	A_Chain_Guide_L_.dwg	

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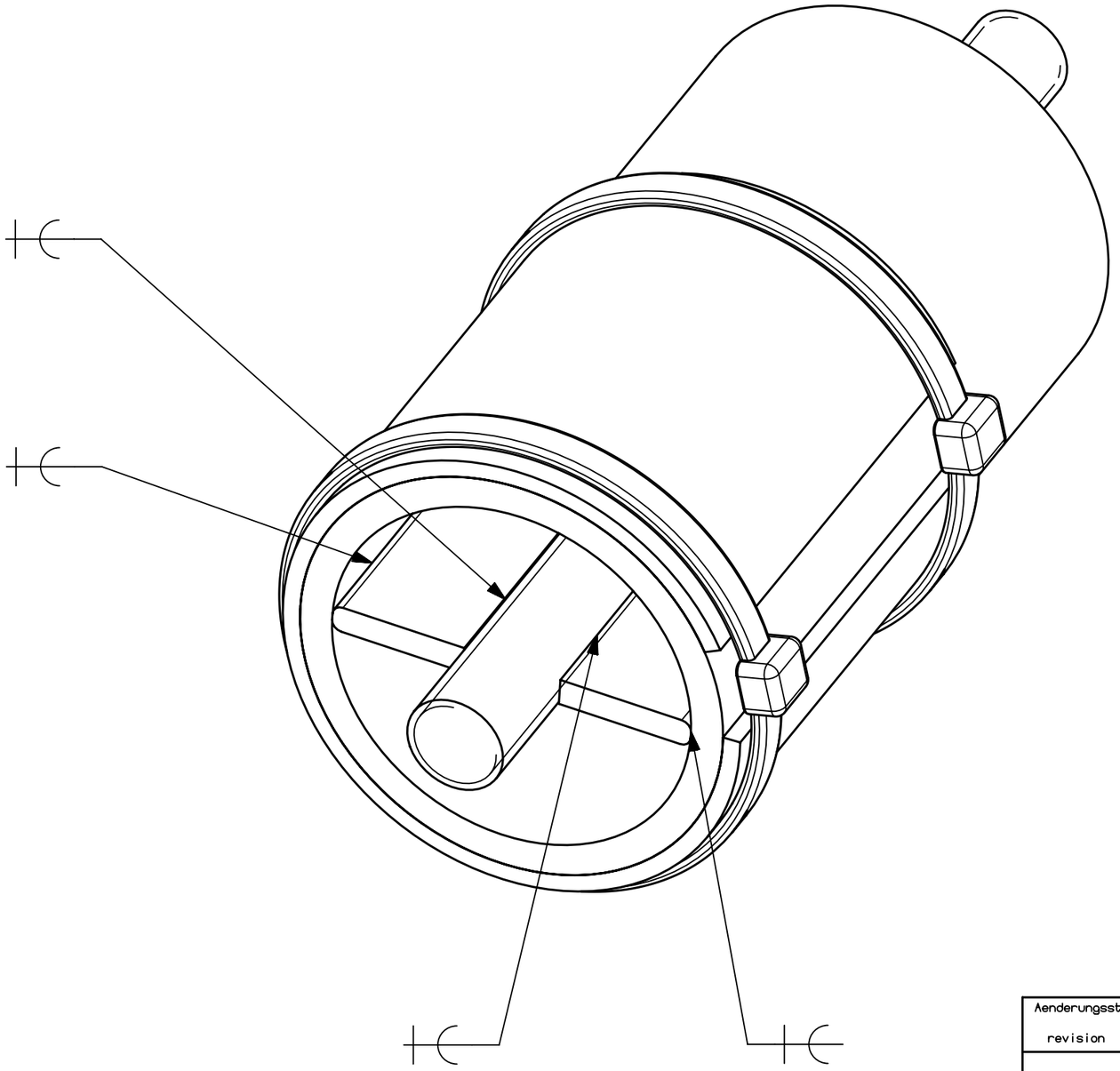

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 2:1 — Format / size: A3
			-	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 3/3
			Chain Guide, Long	
gezeichnet von designed by	05.04.2024	P. COLBACH	Baugruppe / parent assembly: Drivetrain Panel	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 2	Dateiname / file name: A_Chain_Guide_L_.dwg

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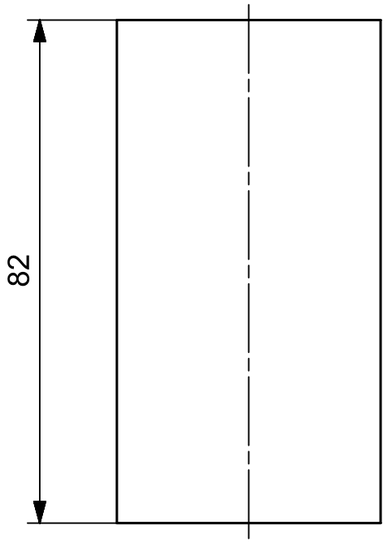
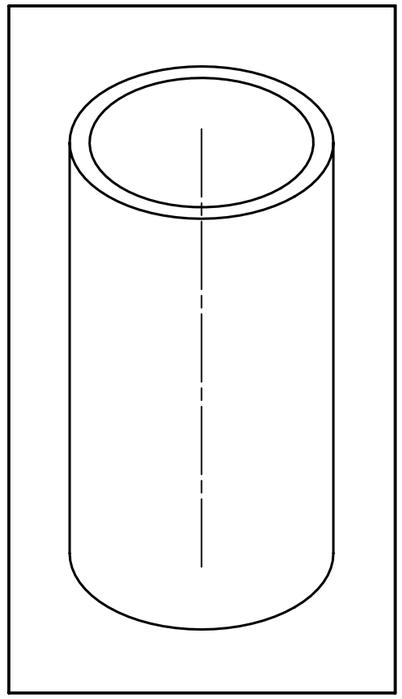
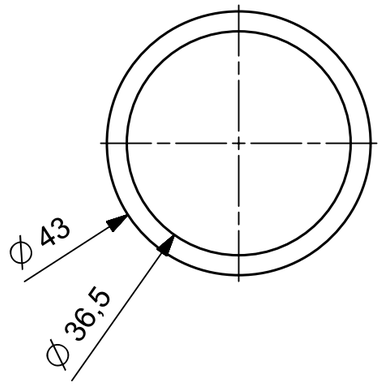
2.1.4.2.1 Independent Parts — Chain Guides, Large







Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:1 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Chain Guide Pipe, Long	
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Chain Guides	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name
			2	M_Chain_Guide_Pipe_L_dwg

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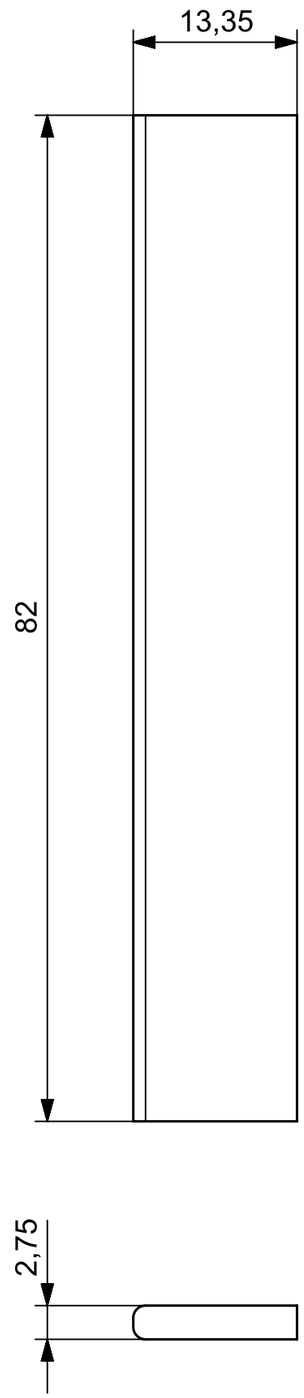

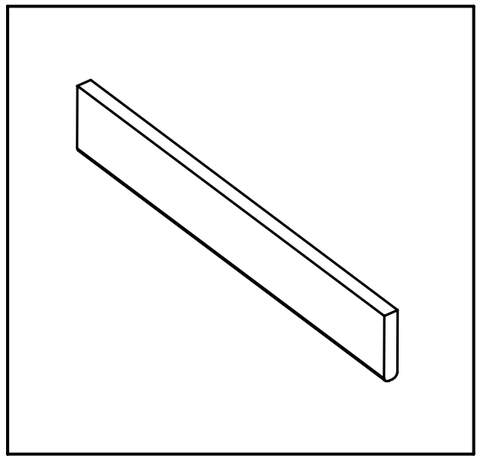

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 2:1
			Anti-Rust Coating	Format / size: A3
			Name / part name	Einheit / unit: mm
			Chain Guide Connector, Long	Blatt / sheet: 1/1
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly: Chain Guides	Projekt / project: Glass Crusher; rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 4	Dateiname / file name: M_Chain_Guide_Connector_L_dwg

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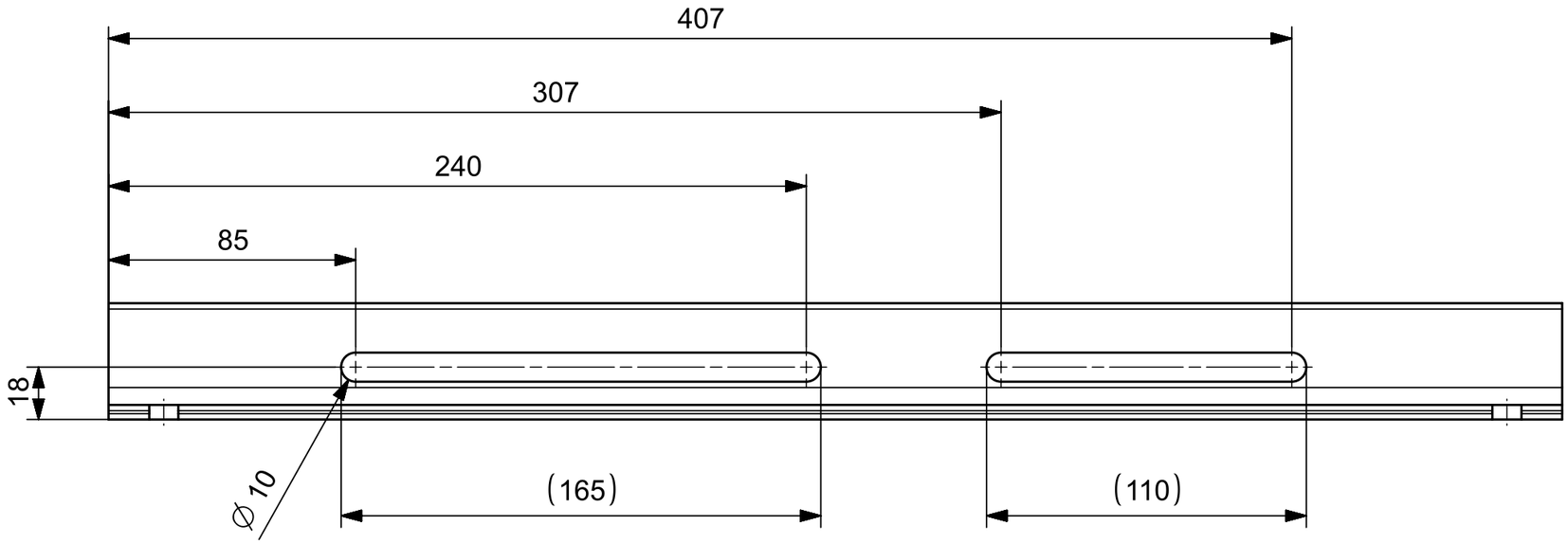
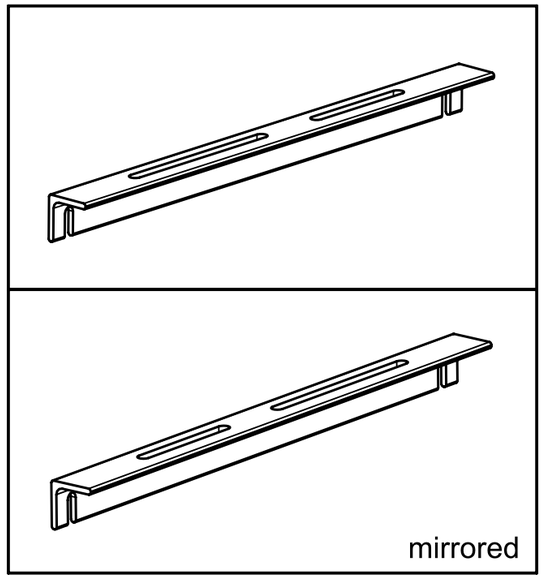
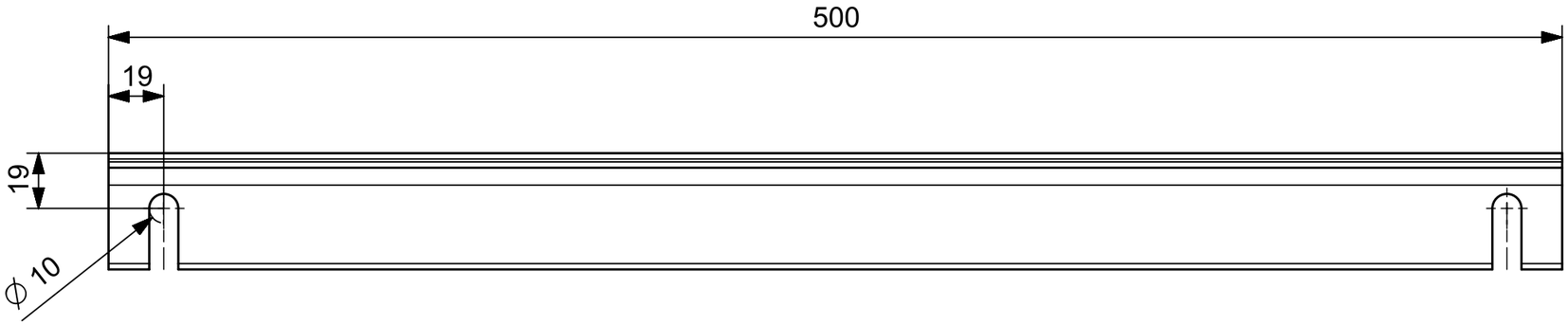
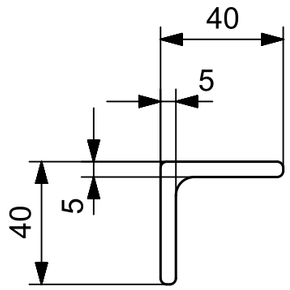
2.1.4.3 Independent Parts — Drivetrain Panel









Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	
			Anti-Rust Coating	
			Name / part name	
			Roller Mounting Platform	
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly	
			Drivetrain Panel Roller Mounting Platform, Rebuilt	
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	
			2 (1 mirrored)	

Mst. / scale	Format / size
1:2	A3
Einheit / unit	Blatt / sheet
mm	1/1
Projekt / project	rev.
Glass Crusher	
Dateiname / file name	
M_Roller_Mounting_Platform_dwg	

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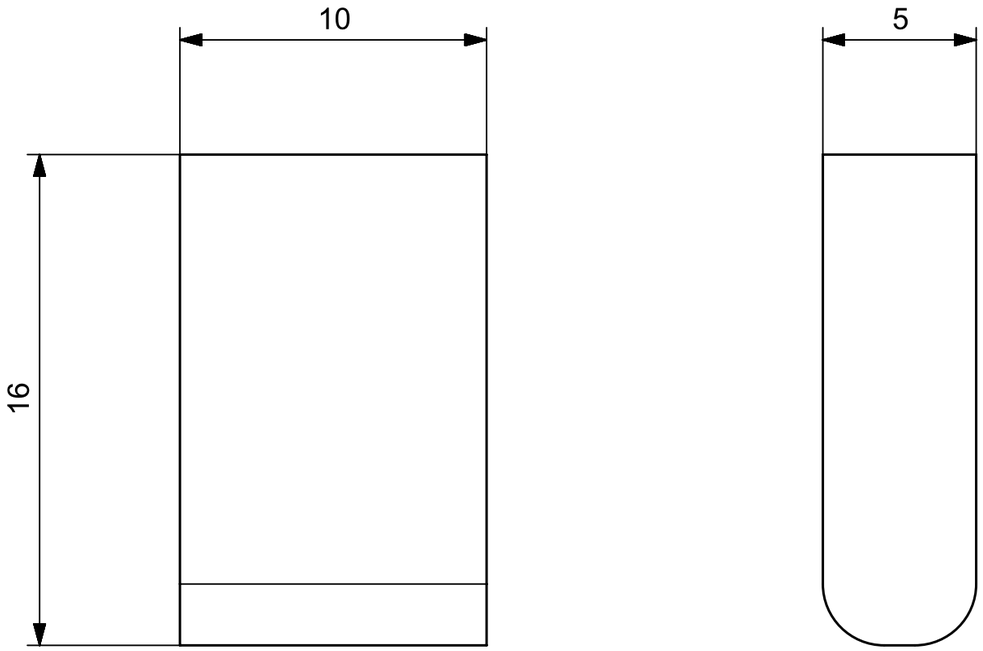

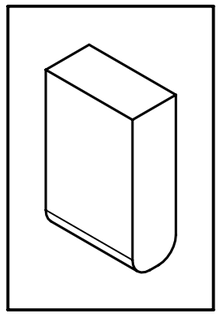

These inserts are meant to partially refill
the screw slits on the roller mounting platforms.

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment Anti-Rust Coating	Mst. / scale: 5:1 — Format / size: A3
			Name / part name Slit Insert	Einheit / unit: mm — Blatt / sheet: 1/1
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly Drivetrain Panel Roller Mounting Platform	Projekt / project: Glass Crusher — rev.
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity 4	Dateiname / file name M_Roller_Mounting_Platform_Slit_Insert_dwg

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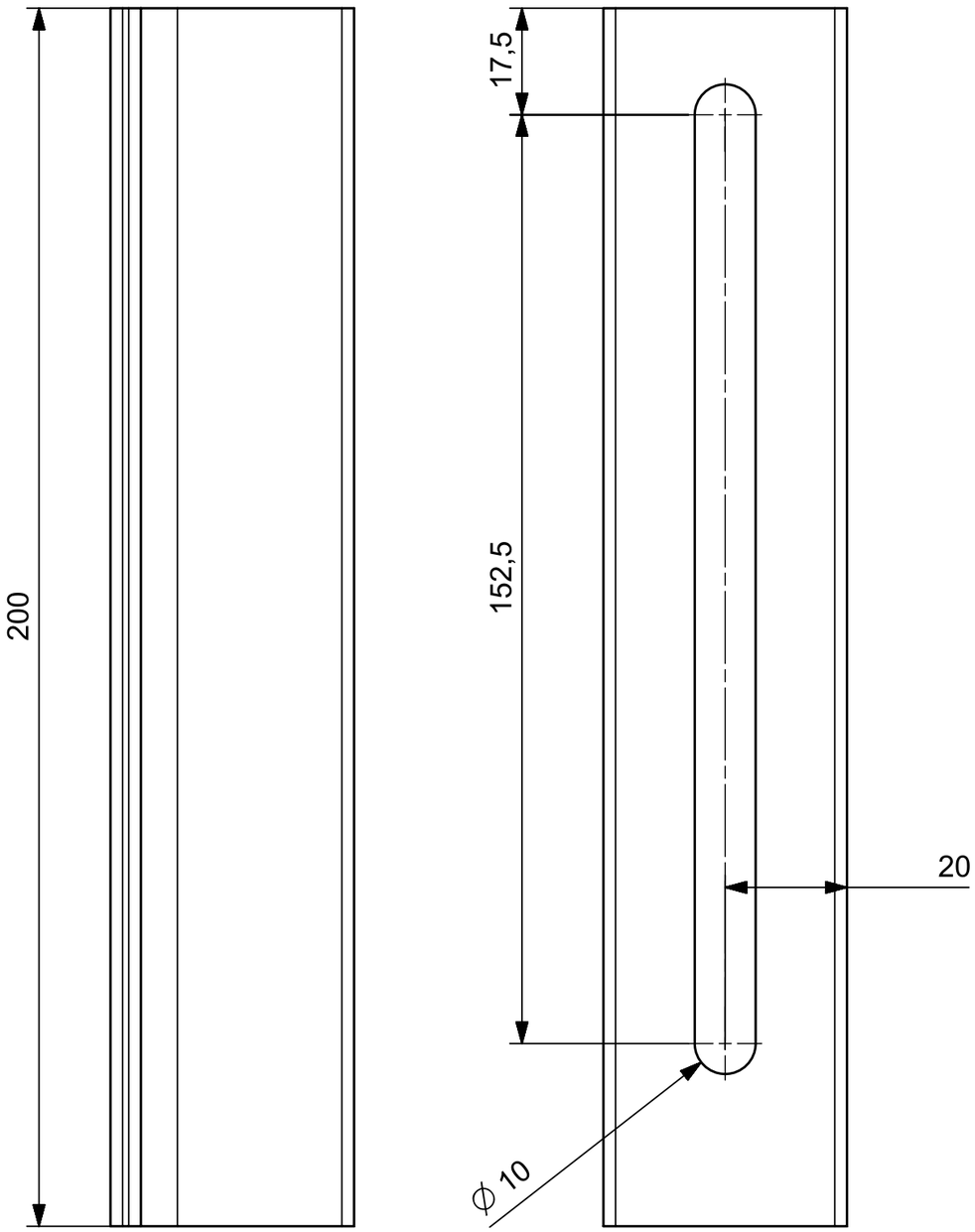

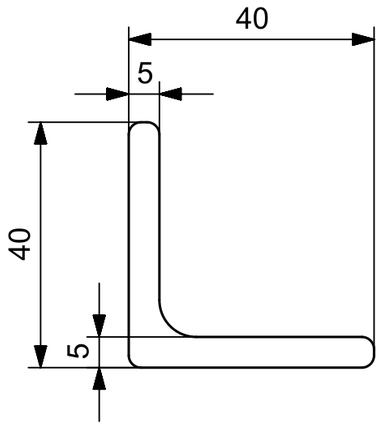

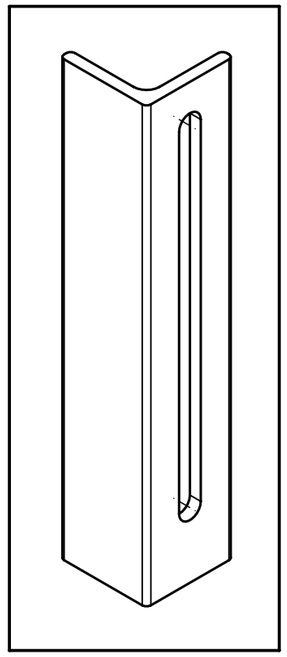

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:1 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Chain Guide Corner Profile	
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Drivetrain Panel	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 1	Dateiname / file name: M_Chain_Guide_Mounting_Corner_Profile_dwg

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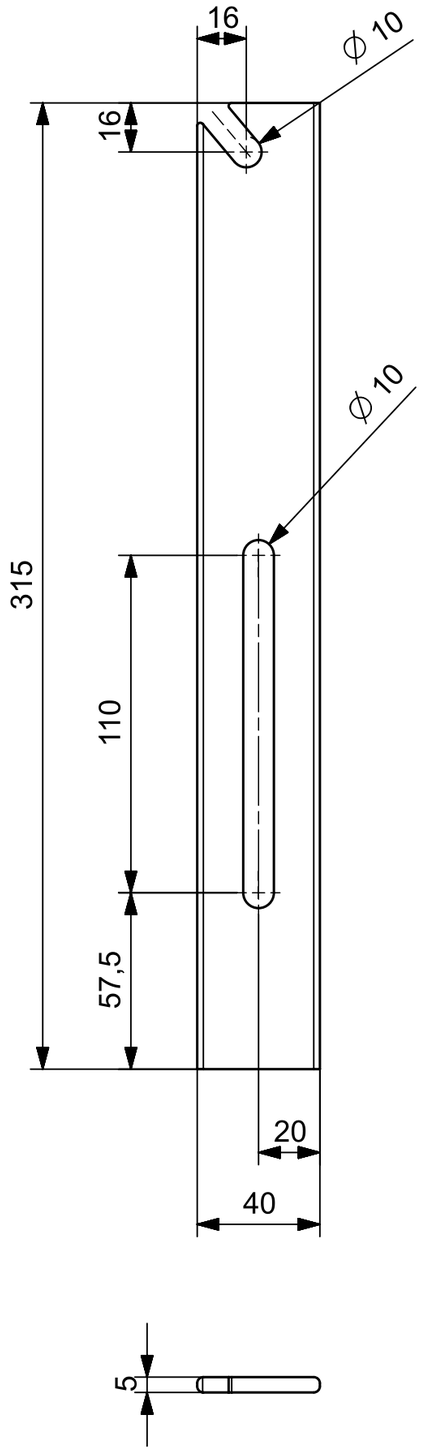

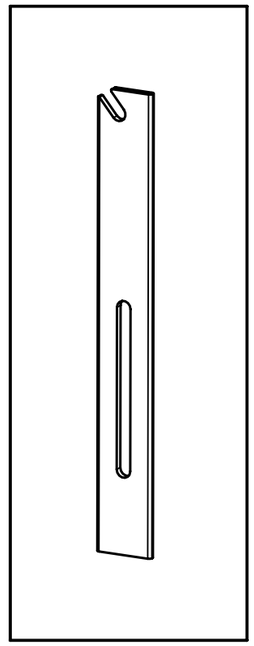

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:2 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Chain Guide Mounting Bar	
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Drivetrain Panel	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 1	Dateiname / file name: M_Chain_Guide_Mounting_Bar_dwg

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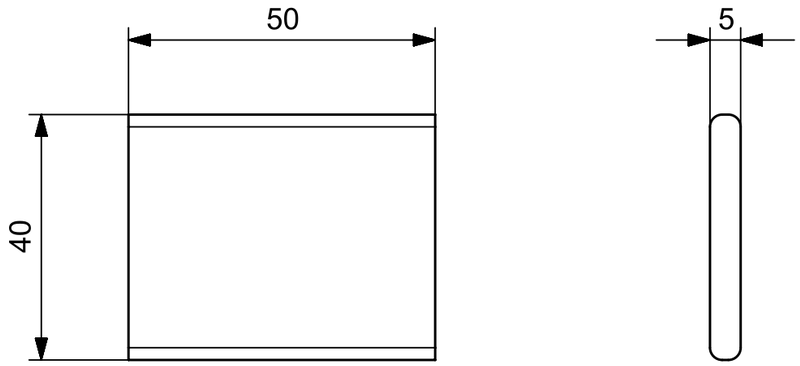

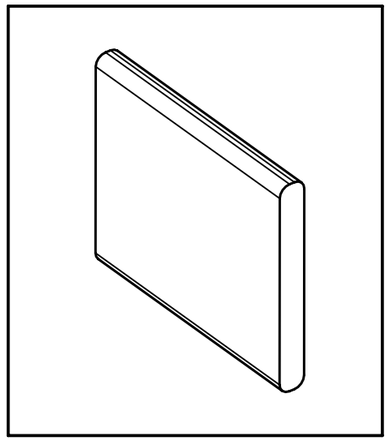

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:1 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Lower Chain Guide Mount Support	
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Drivetrain Panel	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name
			1	M_Chain_Guide_Mounting_Bar_Support_Bot.dwg

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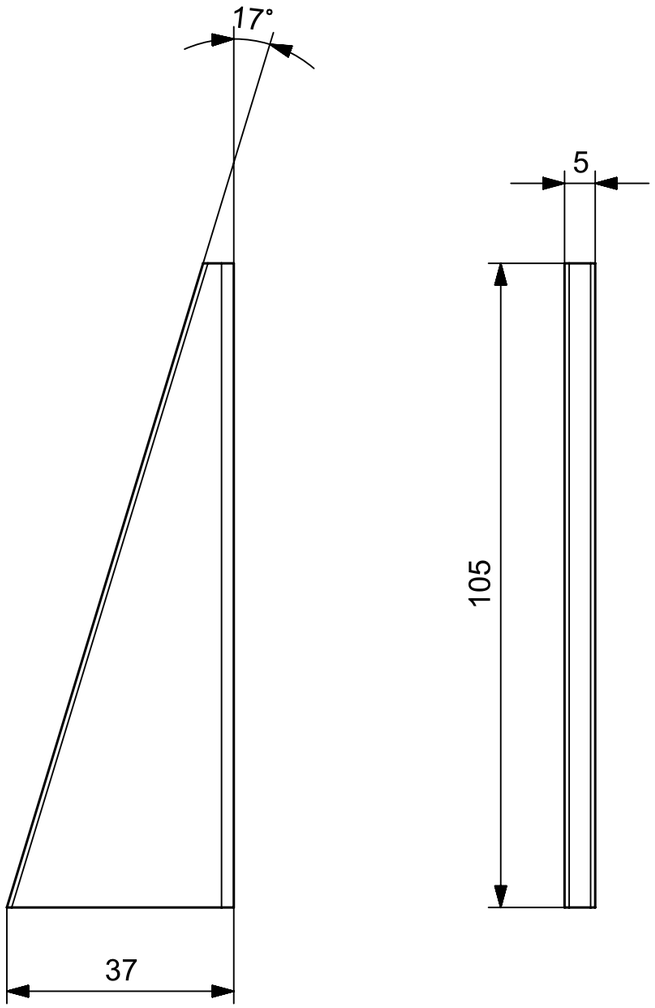

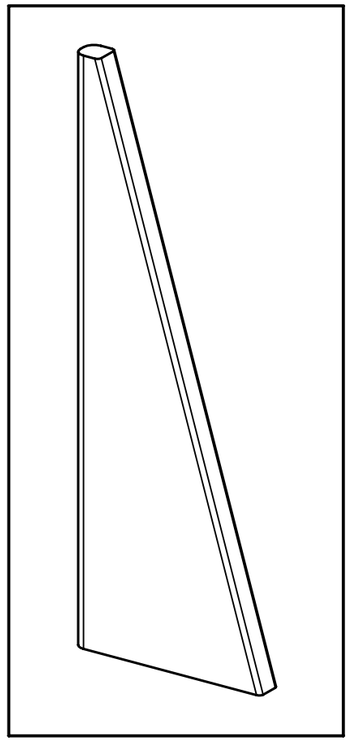

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:1 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Upper Chain Guide Mount Support	
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly: Drivetrain Panel	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 1	Dateiname / file name: M_Chain_Guide_Mounting_Bar_Support_Top_dwg

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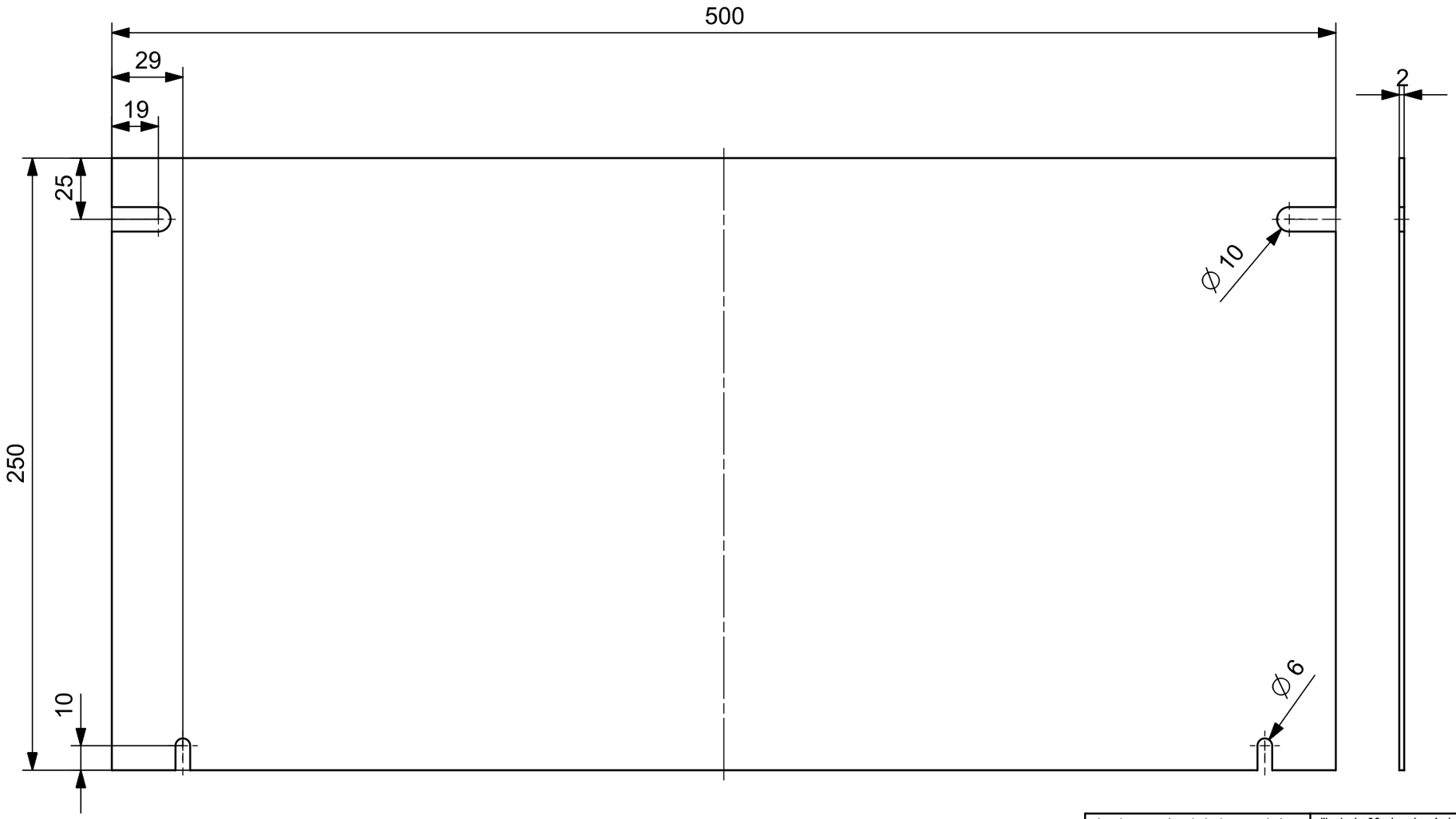
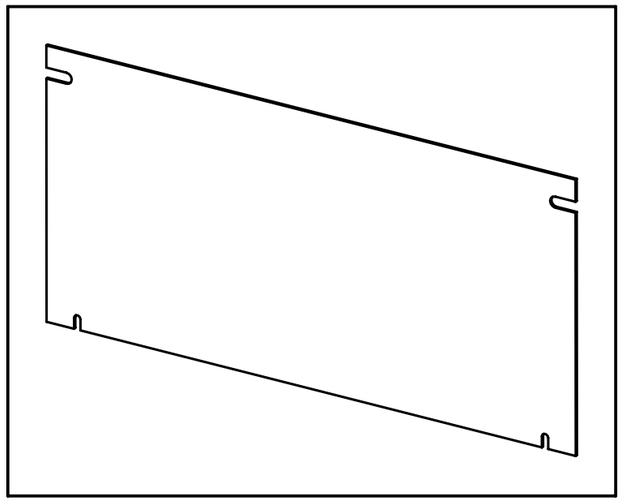
2.1.5 Independent Parts — Extended Frame

The drawing for the part M_Side_Panel_L can be found in section 2.1.2.1 on page 28.





Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	
			Anti-Rust Coating	Mst. / scale: 1:2 — Format / size: A3
			Name / part name	
			Lower Side Panel	Einheit / unit: mm — Blatt / sheet: 1/1
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly: Drivetrain Panel Extended Frame	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 2	Dateiname / file name: M_Side_Panel_S_Bot_dwg

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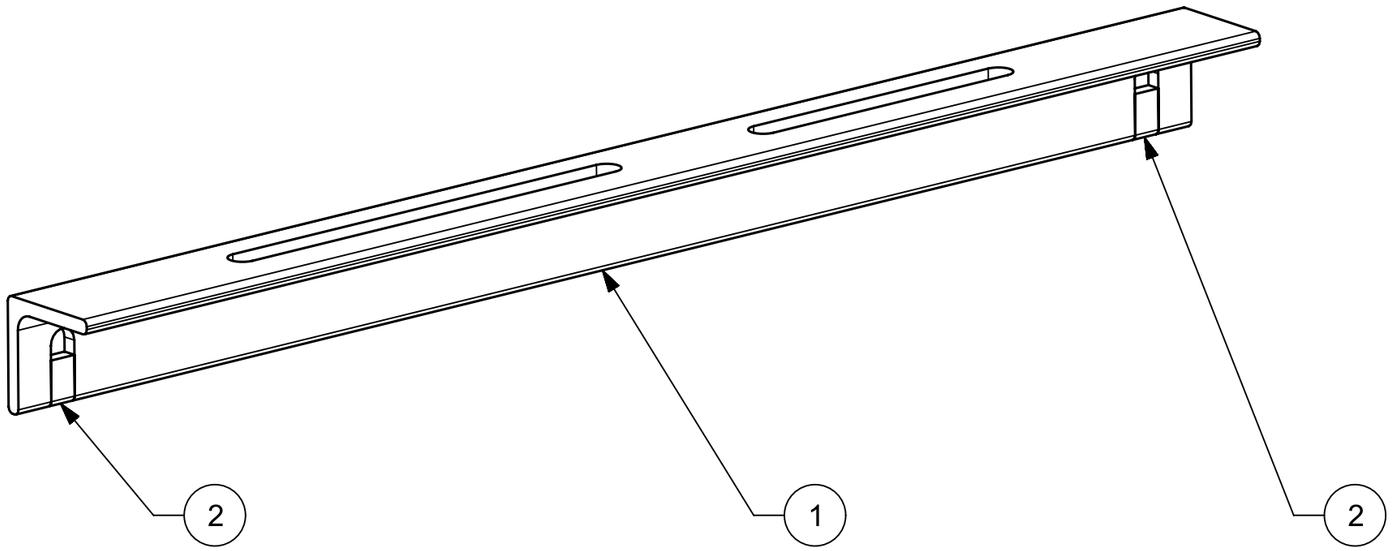
2.2 Roller Mounting Platform



NO	PART NAME	QTY
2	M_ROLLER_MOUNTING_PLATFORM_SLIT_INSERT	2
1	M_ROLLER_MOUNTING_PLATFORM	1

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:2 — Format / size: A3
			-	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/2
			Roller Mounting Platform, Rebuilt	
gezeichnet von designed by	06.04.2024	P. COLBACH	Baugruppe / parent assembly: Extended Frame	Projekt / project: Glass Crusher — rev.
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 1	Dateiname / file name: A_Roller_Mounting_Platform_Rebuilt_dwg

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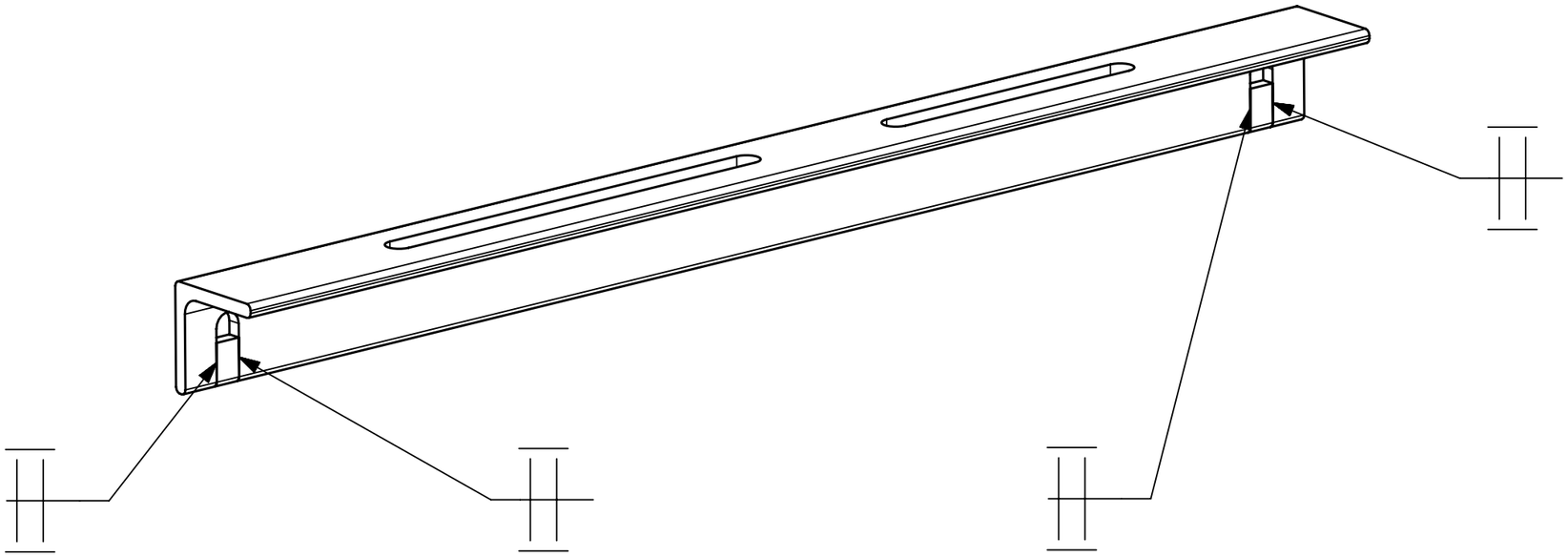

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:2 — Format / size: A3
			-	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 2/2
			Roller Mounting Platform, Rebuilt	
gezeichnet von designed by	06.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Extended Frame	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name
			1	A_Roller_Mounting_Platform_Rebuilt_dwg

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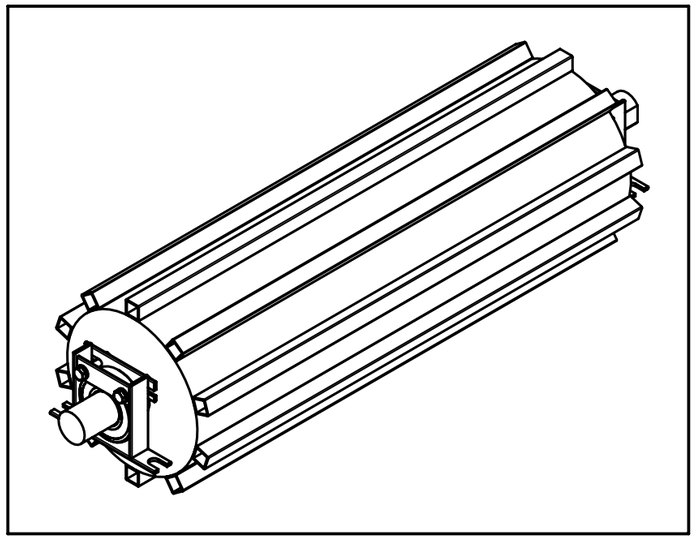
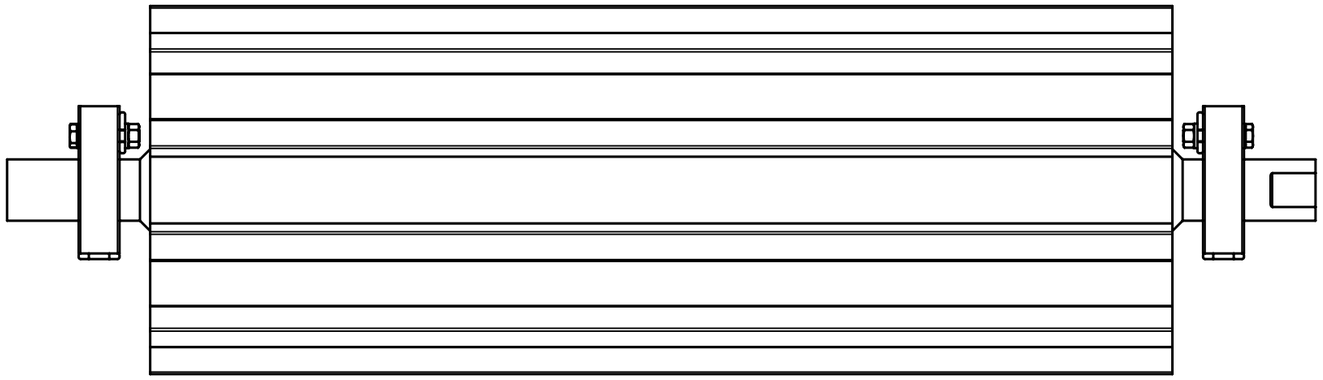
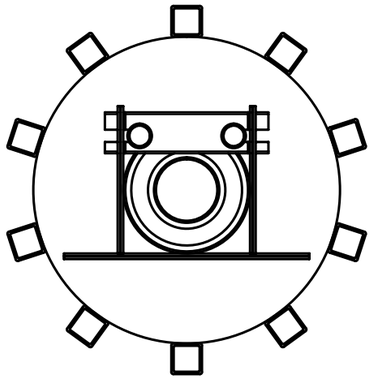
2.2.1 Independent Parts — Roller Mounting Platform

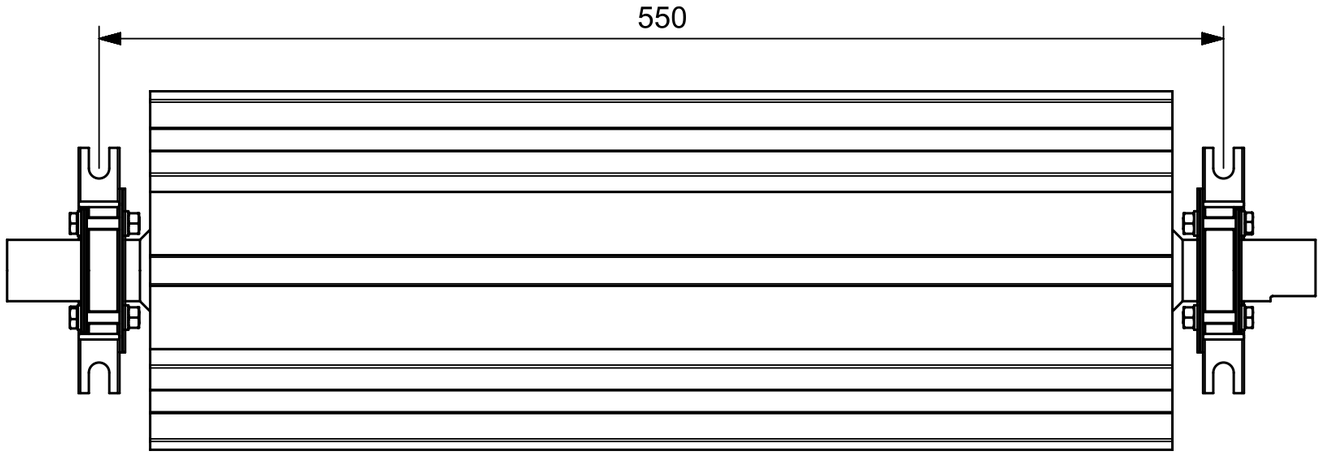
The drawings for the two constituent parts M_Roller_Mounting_Platform and M_Roller_Mounting_Platform_Slit_Insert can be found in section 2.1.4.3 on page 66.

2.3 Rollers









Aenderungsstand / change state			Werkstoff / material		
revision	date	name	-		
			Oberflaechenbehandlung / surface treatment	Mst. / scale	Format / size
			-	1:3	A3
			Name / part name	Einheit / unit	Blatt / sheet
			Roller	mm	1/3
gezeichnet von designed by	06.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project	rev.
			Full Assembly	Glass Crusher	
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name	
			2 (1 fixed, 1 movable)	A_Roller_dwg	

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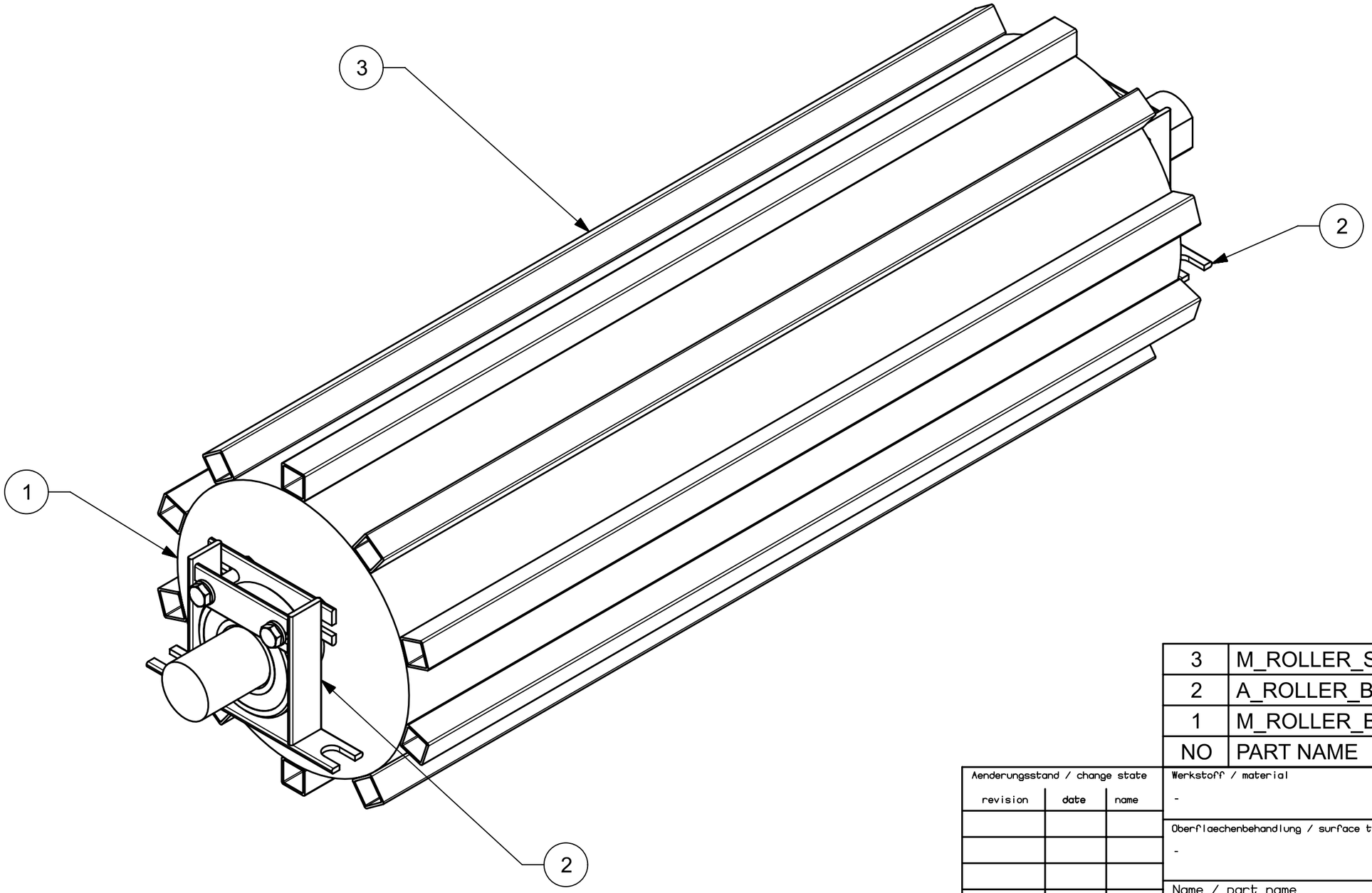

NO	PART NAME	QTY
3	M_ROLLER_SQUARE_PROFILE	10
2	A_ROLLER_BEARING_BRACKET_FIXED	2
1	M_ROLLER_BODY	1

Aenderungsstand / change state		
revision	date	name
gezeichnet von designed by	06.04.2024	P. COLBACH

ETH zürich
Eidgenoessische Technische Hochschule Zuerich
Swiss Federal Institute of Technology Zurich

Werkstoff / material
-

Oberflaechenbehandlung / surface treatment
-

Name / part name
Roller

Baugruppe / parent assembly
Full Assembly

Stueckzahl / quantity
2 (1 fixed, 1 movable)

Mst. / scale: 1:3
Format / size: A3
Einheit / unit: mm
Blatt / sheet: 2/3
Projekt / project: Glass Crusher
rev.

Dateiname / file name
A_Roller_dwg

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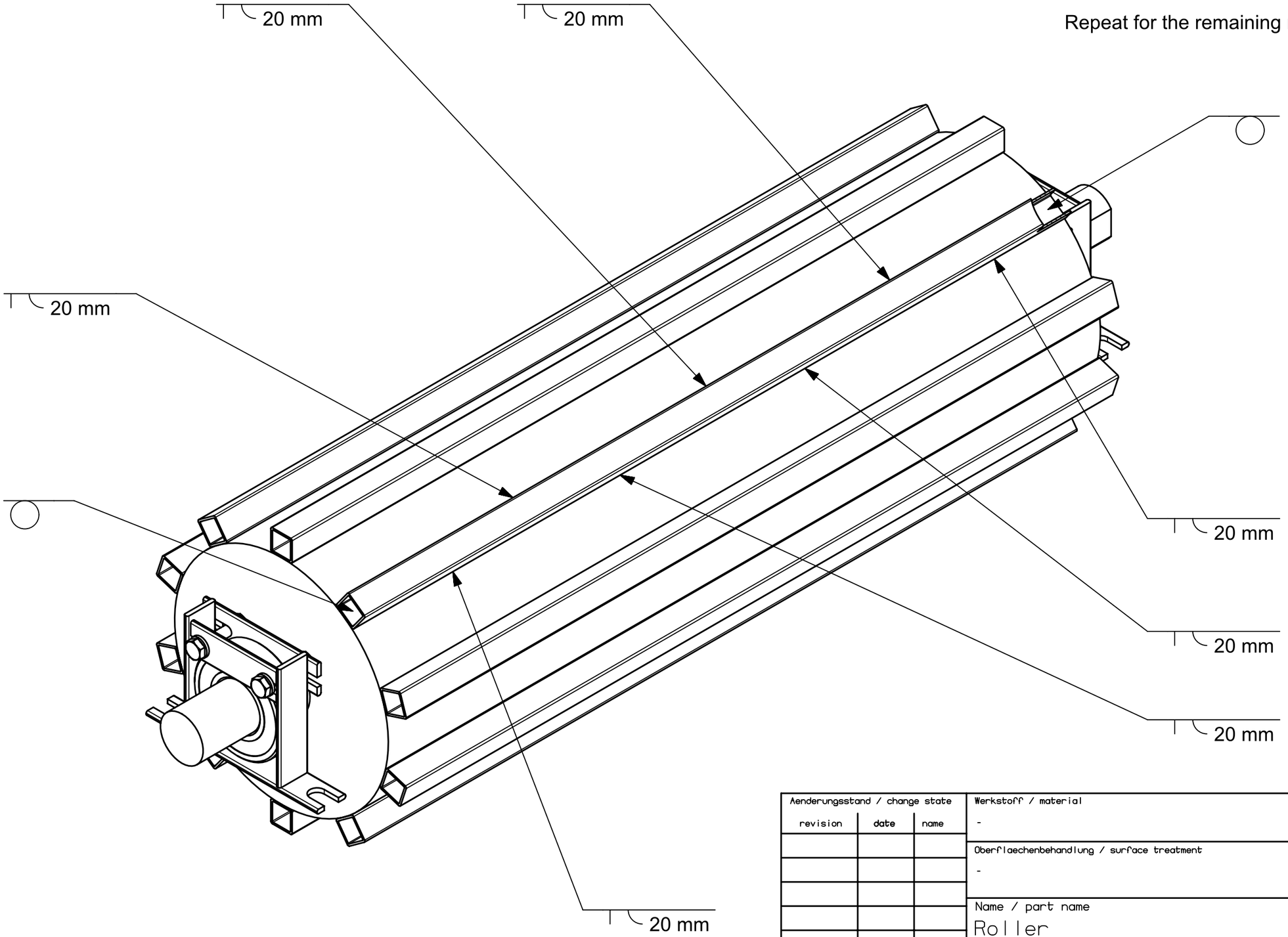
Repeat for the remaining nine profiles.



Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:3 — Format / size: A3
			-	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 3/3
			Roller	
gezeichnet von designed by	06.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Full Assembly	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name
			2 (1 fixed, 1 movable)	A_Roller.dwg

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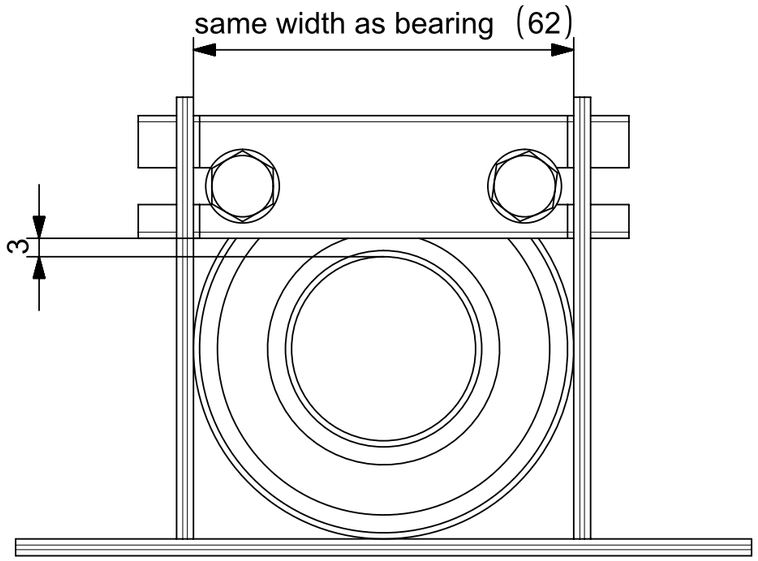
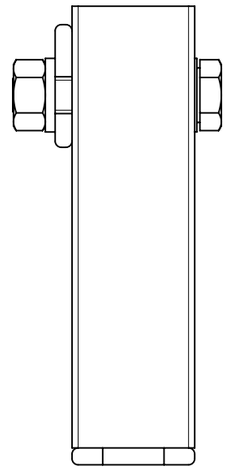
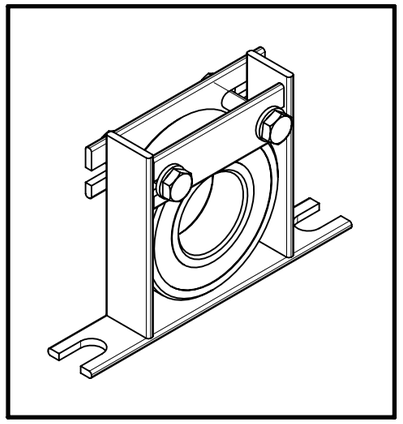
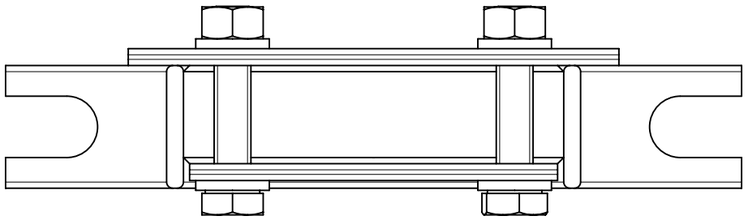
2.3.1 Roller Bearing Brackets









Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 2:1 — Format / size: A3
			-	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/3
			Bearing Bracket, Fixed	
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly: Roller, Fixed	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 2	Dateiname / file name: A_Roller_Bearing_Bracket_Fixed_dwg

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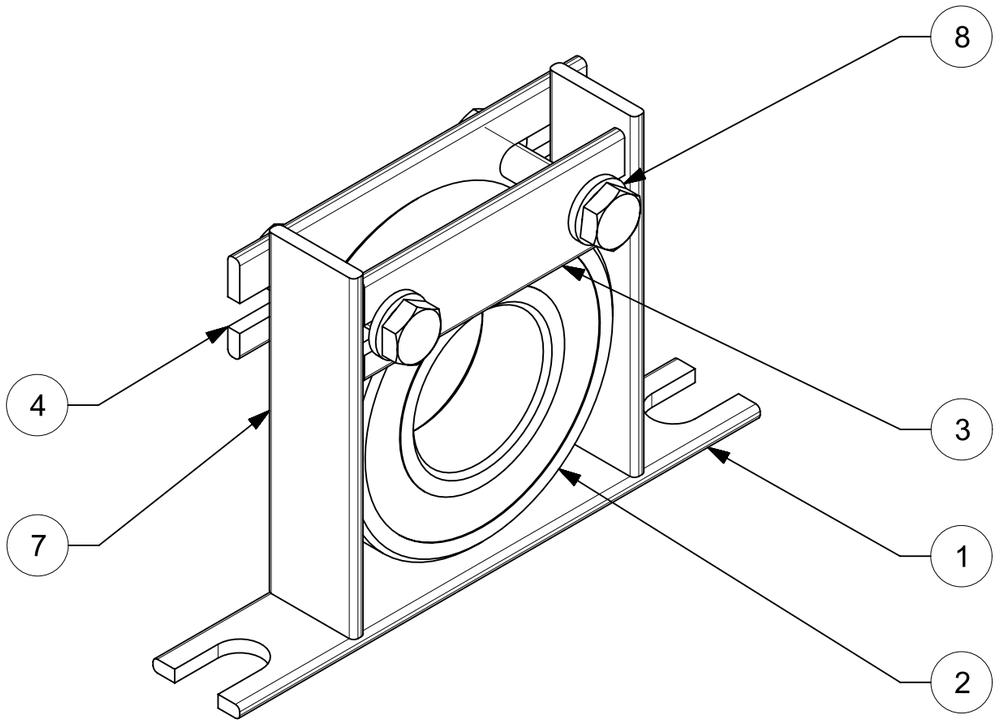

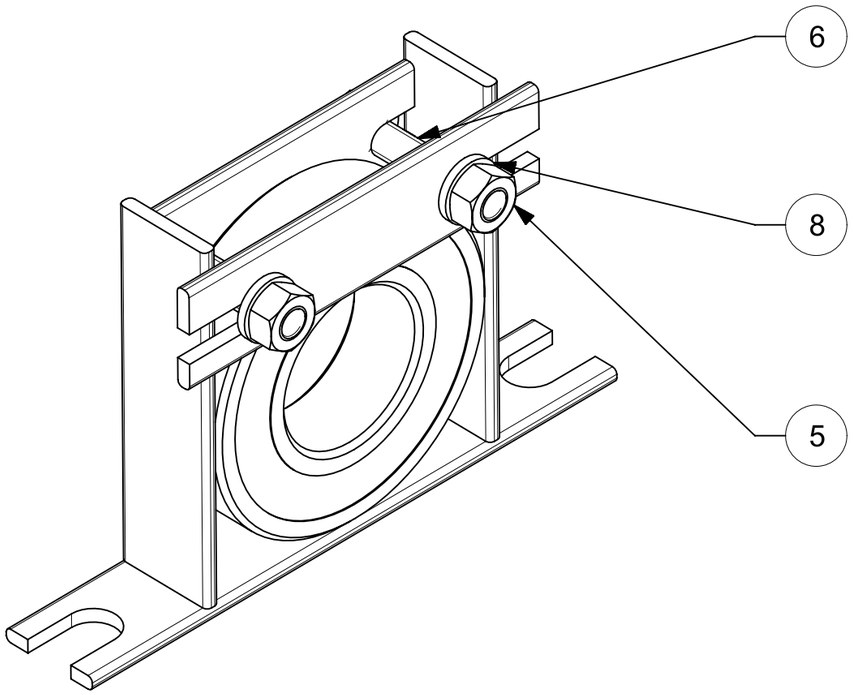

NO	PART NAME	QTY
8	PLAIN WASHER, NORMAL, DIN,M6	4
7	M_BEARING_BRACKET_L_SIDE	2
6	HEX HEAD SCREW, GRADES A, B, DIN,M6X30	2
5	HEX NUT, 1A, DIN,M6X1	2
4	M_BEARING_BRACKET_L_BACKPLATE	1
3	M_BEARING_BRACKET_L_CLAMPING_PLATE	1
2	SINGLE ROW RADIAL CONTACT BALL BRG, 2RS W 2 SEALS, DIN,6206_2RS	1
1	M_BEARING_BRACKET_L_BASE_FIXED	1

Aenderungsstand / change state		
revision	date	name
gezeichnet von designed by	03.04.2024	P. COLBACH

Werkstoff / material
-

Oberflaechenbehandlung / surface treatment
-

Name / part name
Bearing Bracket, Fixed

Baugruppe / parent assembly
Roller, Fixed

Stueckzahl / quantity
2

Mst. / scale: 2:1
Format / size: A3
Einheit / unit: mm
Blatt / sheet: 2/3

Projekt / project: Glass Crusher
rev.

Dateiname / file name
A_Roller_Bearing_Bracket_Fixed_dwg

ETH zürich
Eidgenoessische Technische Hochschule Zuerich
Swiss Federal Institute of Technology Zurich

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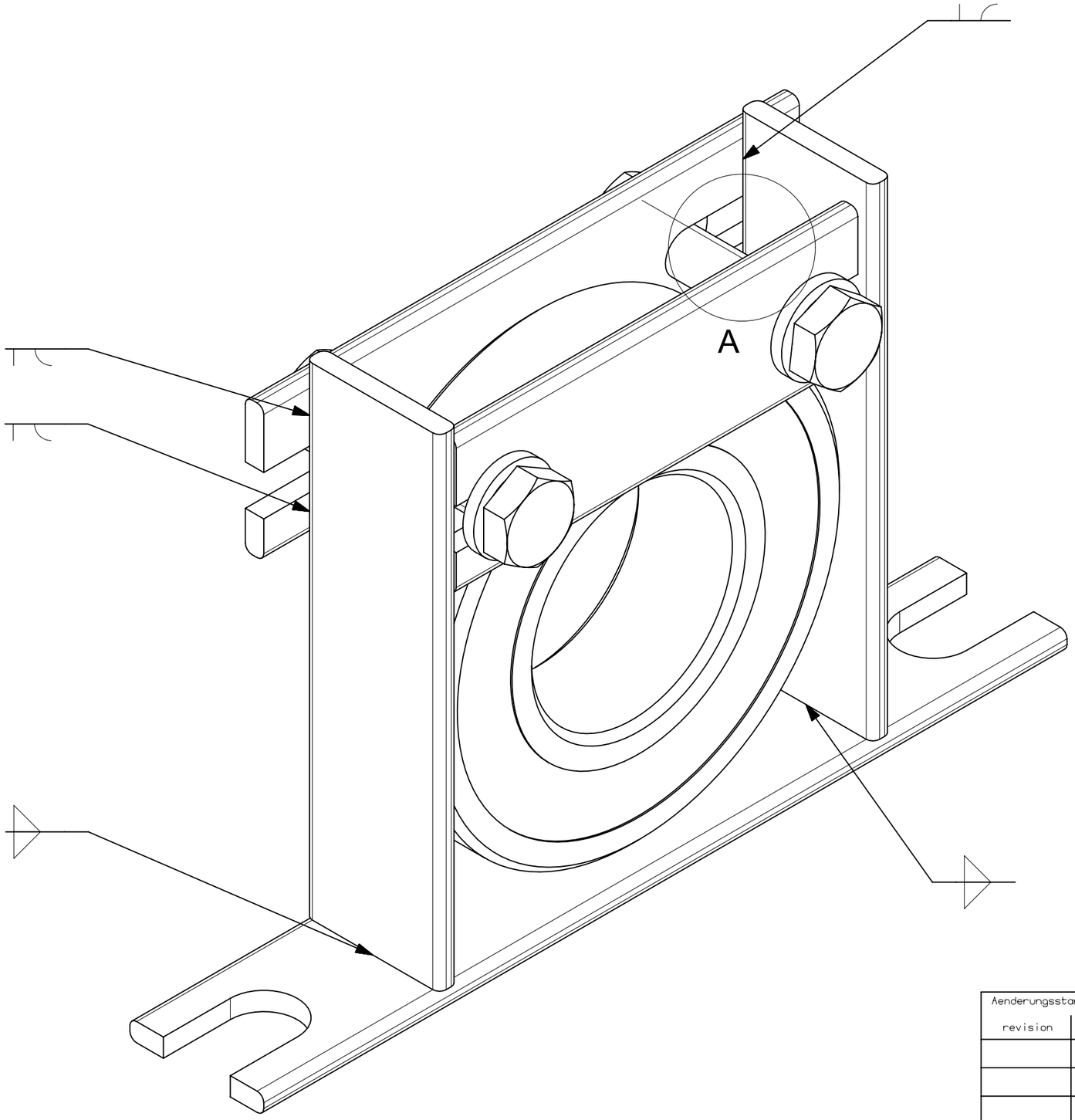

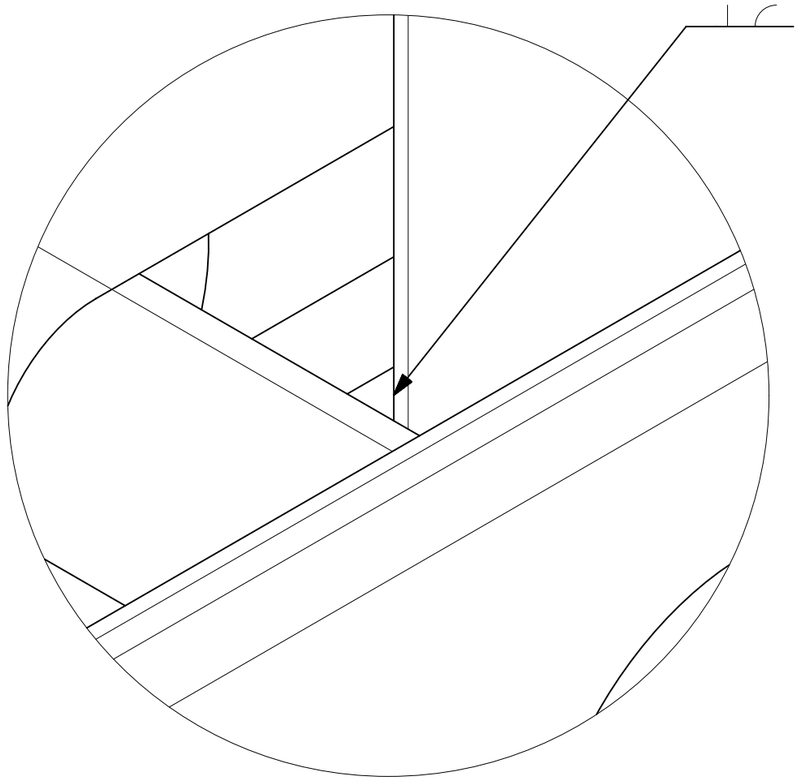

A
(8:1)

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment -	Mst. / scale: 2:1 — Format / size: A3
			Name / part name Bearing Bracket, Fixed	Einheit / unit: mm — Blatt / sheet: 3/3
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly Roller, Fixed	Projekt / project: Glass Crusher — rev.
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity 2	Dateiname / file name A_Roller_Bearing_Bracket_Fixed_dwg

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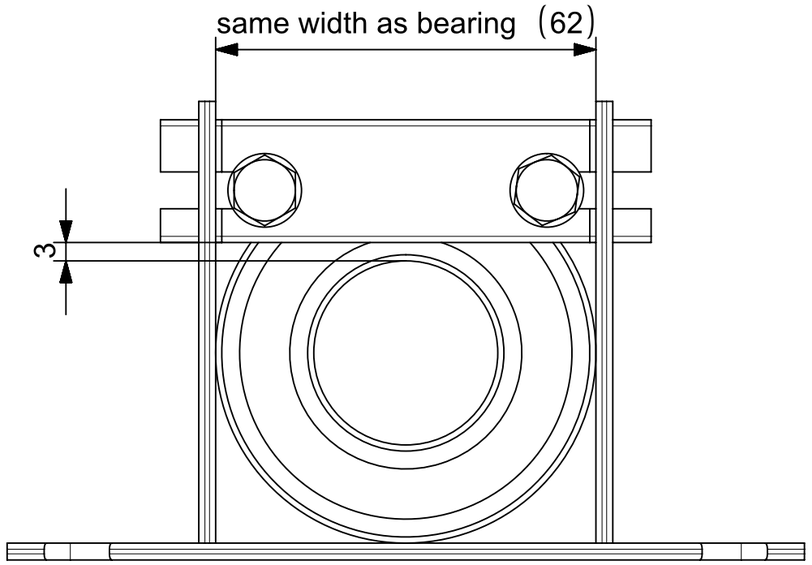

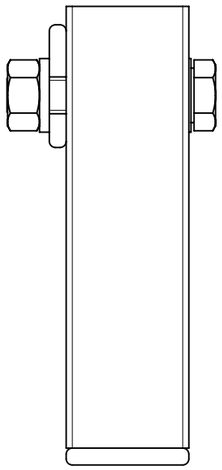

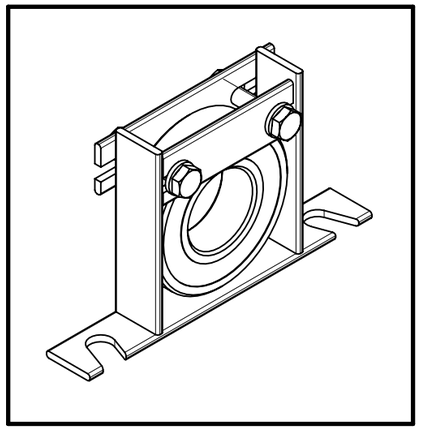

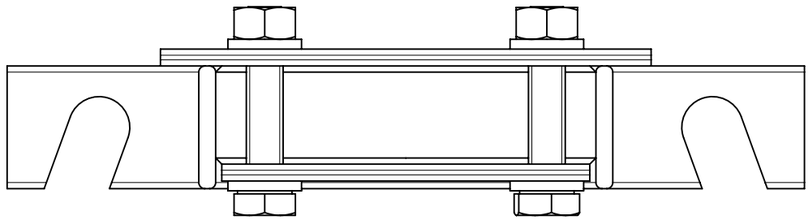

Aenderungsstand / change state		
revision	date	name
gezeichnet von designed by	03.04.2024	P. COLBACH

Werkstoff / material
-

Oberflaechenbehandlung / surface treatment
-

Name / part name
Bearing Bracket, Movable

Baugruppe / parent assembly
Roller, Movable

Stueckzahl / quantity
2

Mst. / scale: 1:1
Format / size: A3
Einheit / unit: mm
Blatt / sheet: 1/3

Projekt / project: Glass Crusher
rev.

Dateiname / file name
A_Roller_Bearing_Bracket_Movable_dwg

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Swiss Federal Institute of Technology Zurich

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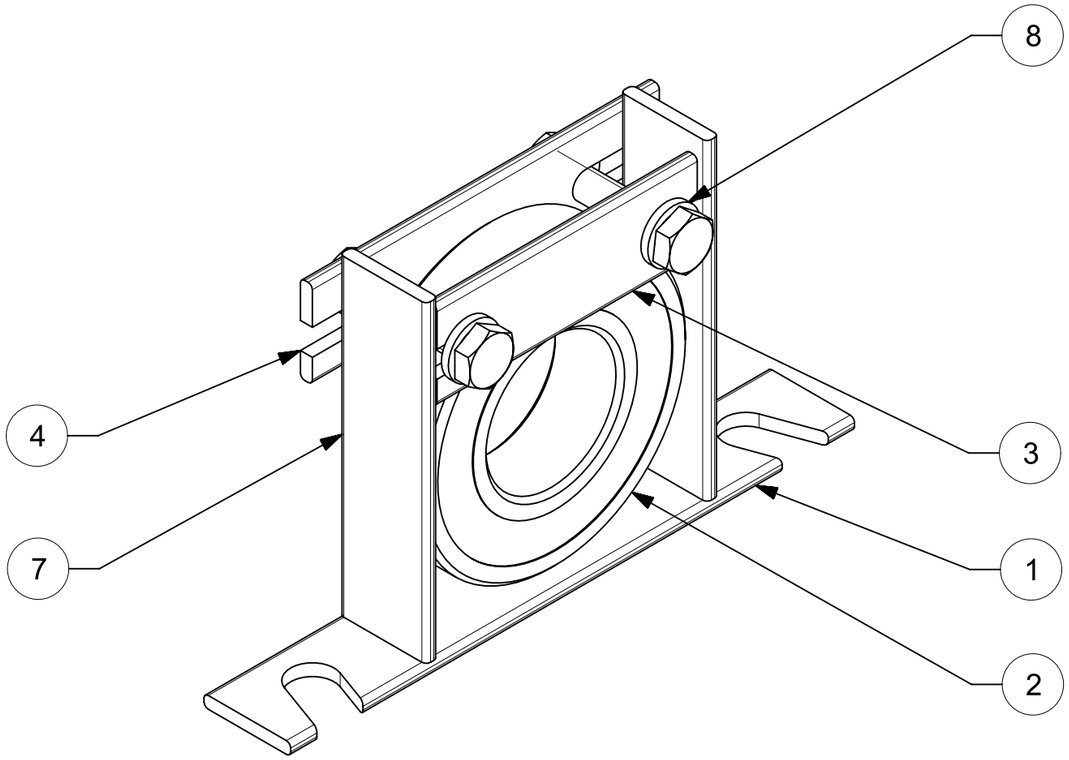

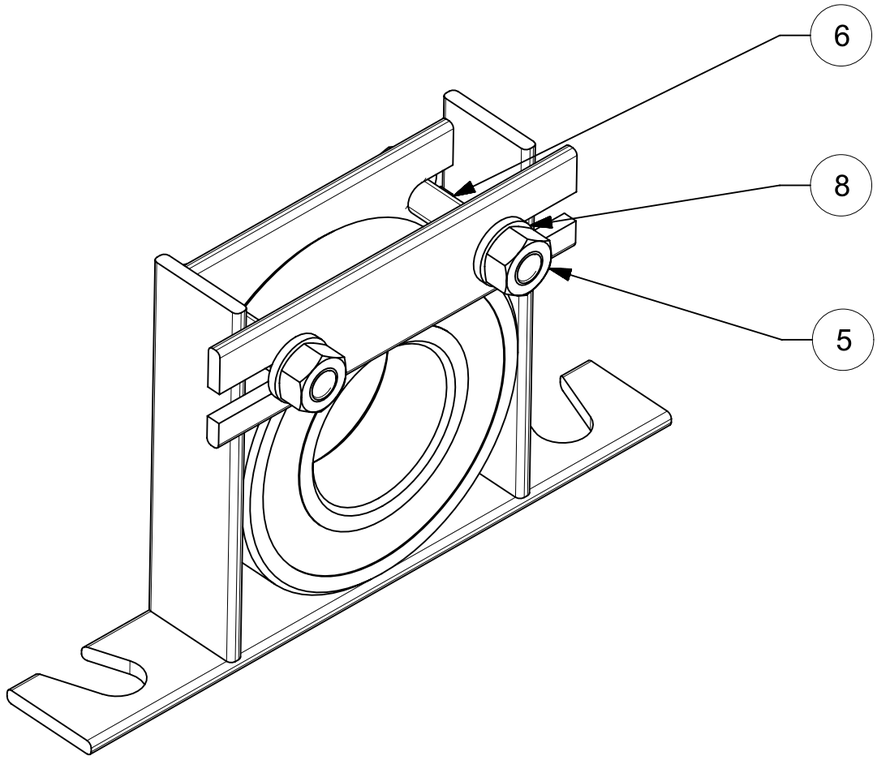

NO	PART NAME	QTY
8	PLAIN WASHER, NORMAL, DIN,M6	4
7	M_BEARING_BRACKET_L_SIDE	2
6	HEX HEAD SCREW, GRADES A, B, DIN,M6X30	2
5	HEX NUT, 1A, DIN,M6X1	2
4	M_BEARING_BRACKET_L_BACKPLATE	1
3	M_BEARING_BRACKET_L_CLAMPING_PLATE	1
2	SINGLE ROW RADIAL CONTACT BALL BRG, 2RS W 2 SEALS, DIN,6206_2RS	1
1	M_BEARING_BRACKET_L_BASE_MOVABLE	1

Aenderungsstand / change state		
revision	date	name
gezeichnet von designed by	03.04.2024	P. COLBACH

Werkstoff / material
-

Oberflaechenbehandlung / surface treatment
-

Name / part name
Bearing Bracket, Movable

Baugruppe / parent assembly
Roller, Movable

Stueckzahl / quantity
2

Mst. / scale: 1:1
Format / size: A3
Einheit / unit: mm
Blatt / sheet: 2/3

Projekt / project: Glass Crusher
rev.

Dateiname / file name
A_Roller_Bearing_Bracket_Movable_dwg

ETH zürich
Eidgenoessische Technische Hochschule Zuerich
Swiss Federal Institute of Technology Zurich

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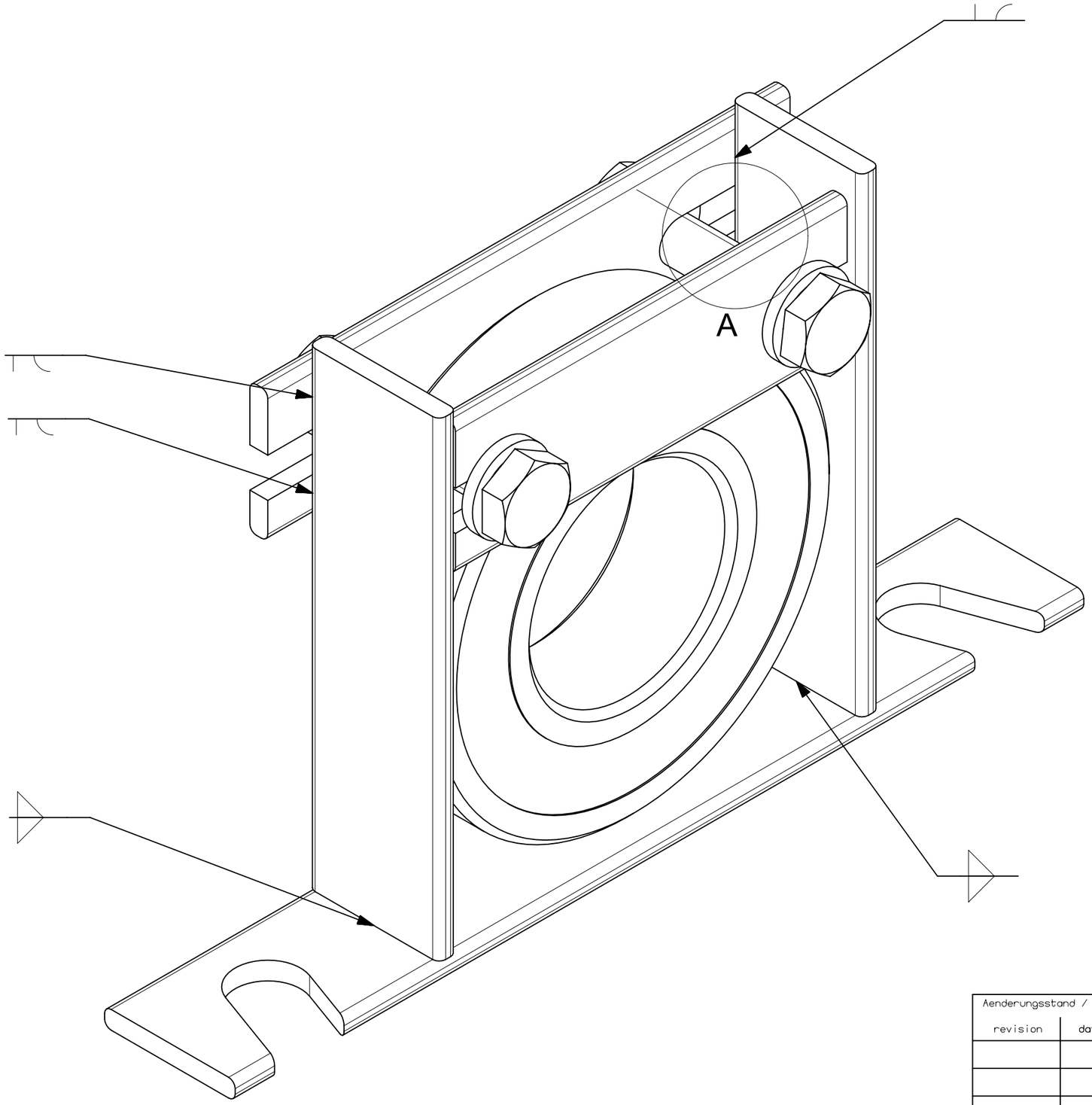

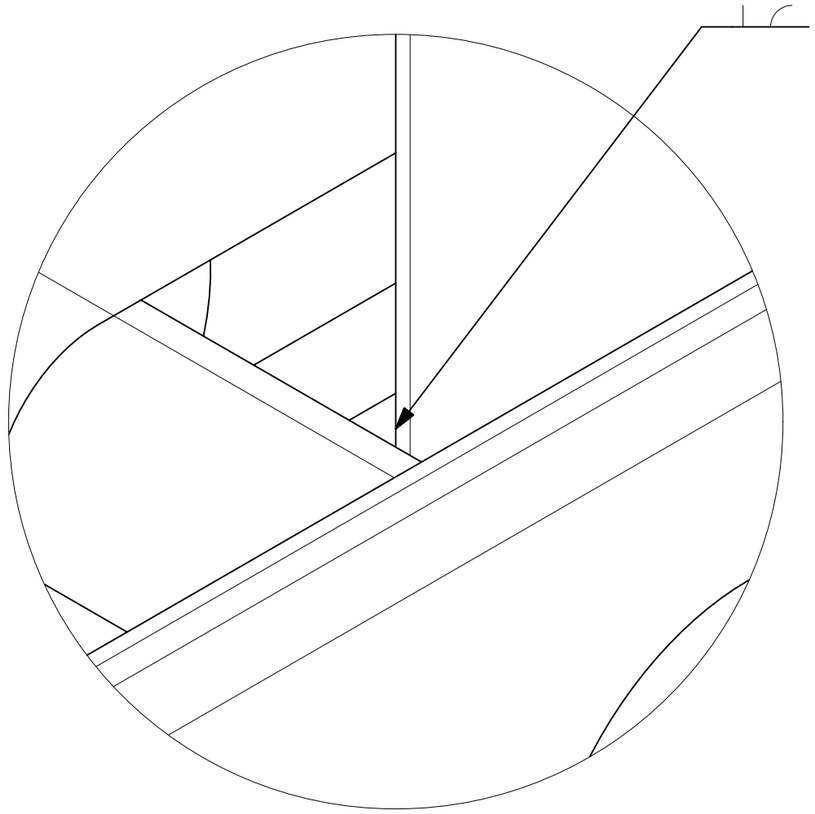

A
(8:1)

Aenderungsstand / change state			Werkstoff / material		
revision	date	name	-		
			Oberflaechenbehandlung / surface treatment	Mst. / scale	Format / size
			-	1:1	A3
			Name / part name	Einheit / unit	Blatt / sheet
			Bearing Bracket, Movable	mm	3/3
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project	rev.
			Roller, Movable	Glass Crusher	
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name	
			2	A_Roller_Bearing_Bracket_Movable_dwg	

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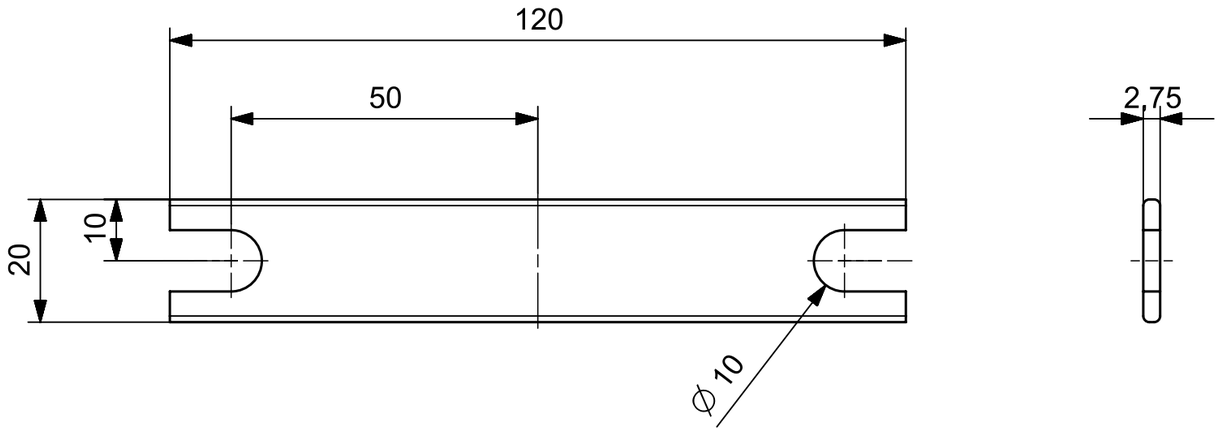
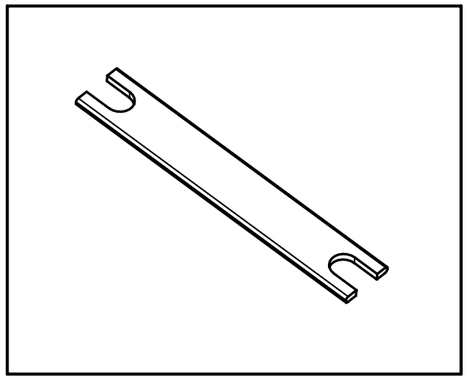
2.3.1.1 Independent Parts — Roller Bearing Brackets





Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:1 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Large Bearing Bracket, Fixed Base	
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Roller Bearing Brackets	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name
			2	M_Bearing_Bracket_L_Base_Fixed_dwg

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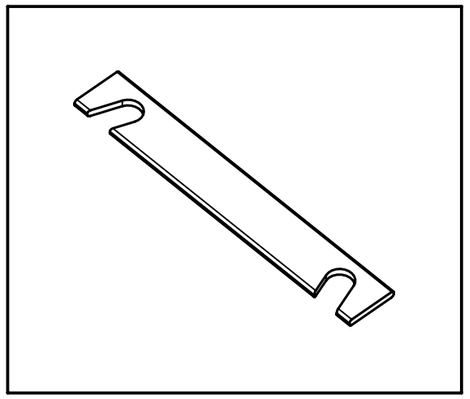

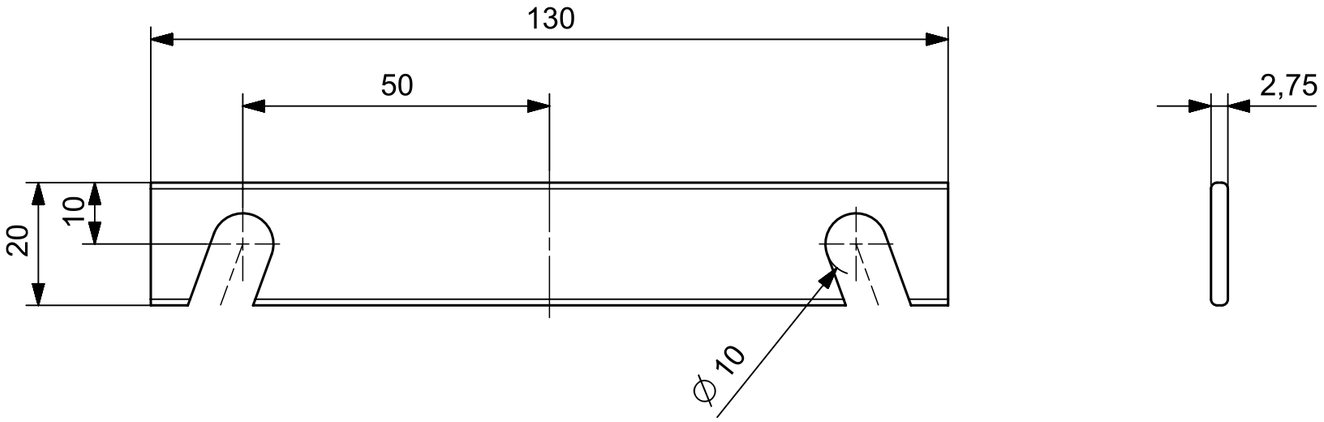

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:1 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Large Bearing Bracket, Movable Base	
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Roller Bearing Brackets	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name
			2	M_Bearing_Bracket_L_Base_Movable_dwg

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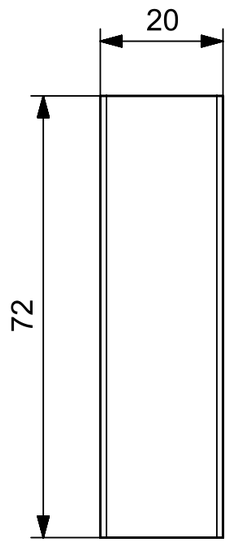

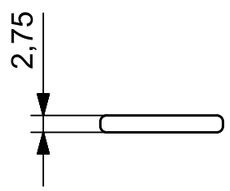

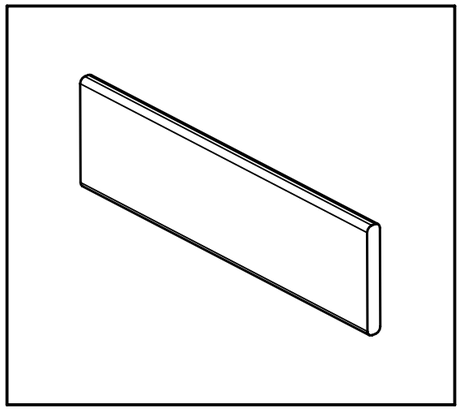

Aenderungsstand / change state			Werkstoff / material		
revision	date	name	Mild Steel		
			Oberflaechenbehandlung / surface treatment Anti-Rust Coating	Mst. / scale 1:1	Format / size A3
			Name / part name Large Bearing Bracket, Side	Einheit / unit mm	Blatt / sheet 1/1
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly Roller Bearing Brackets	Projekt / project Glass Crusher	rev.
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity 8	Dateiname / file name M_Bearing_Bracket_L_Side_dwg	

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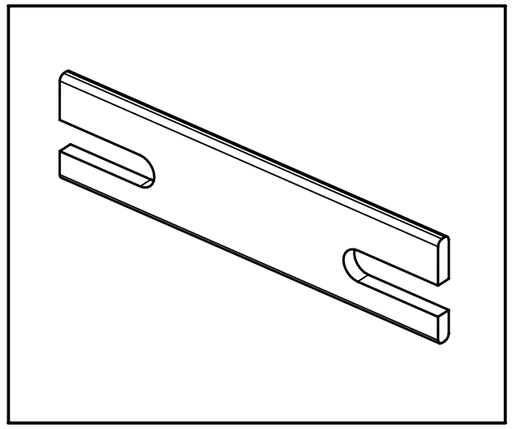

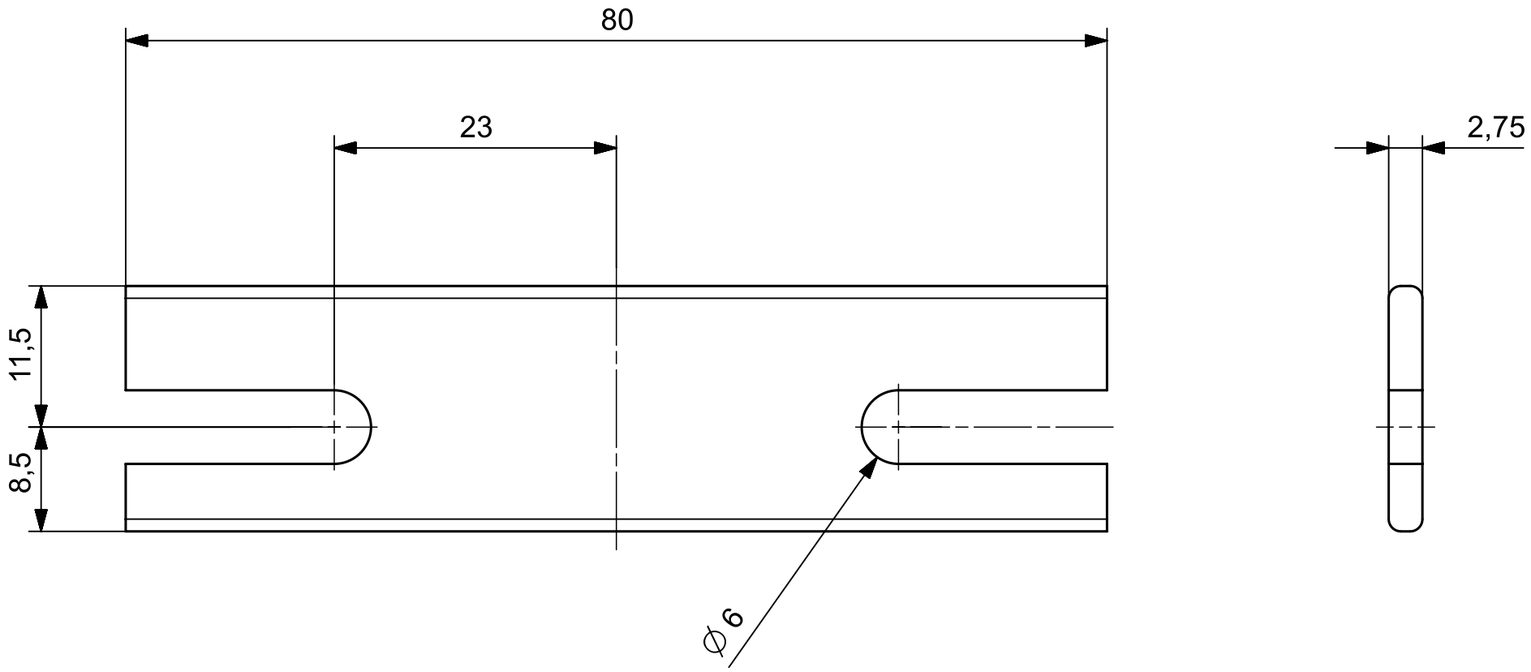

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 2:1 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Large Bearing Bracket, Backplate	
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Roller Bearing Brackets	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name
			4	M_Bearing_Bracket_L_Backplate_dwg

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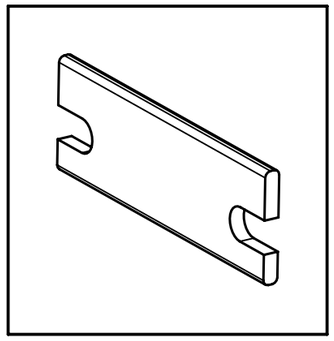

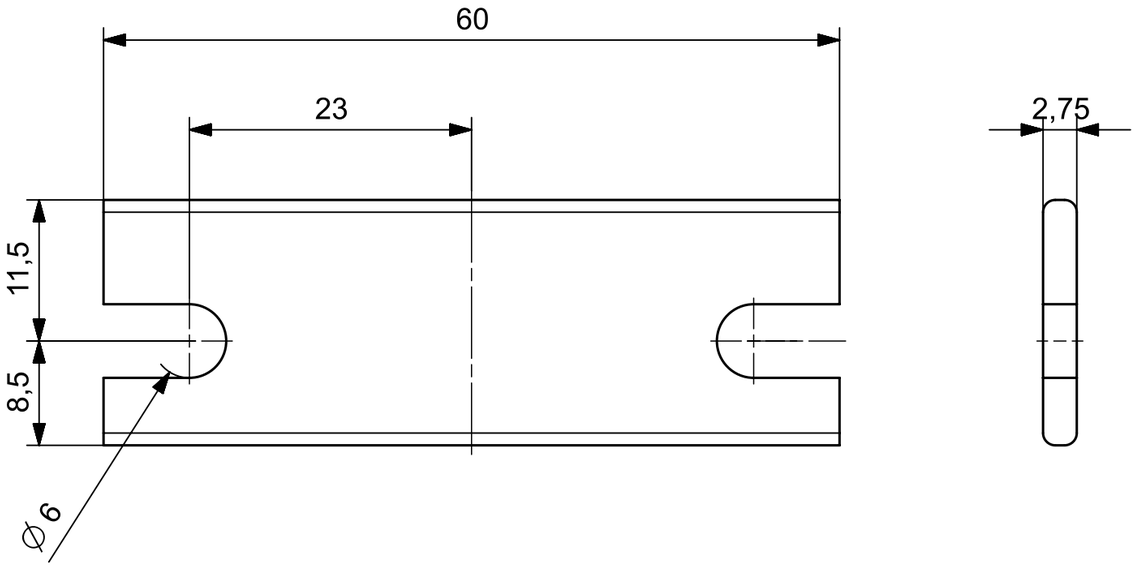

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 2:1 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Large Bearing Bracket, Clamping Plate	
gezeichnet von designed by	03.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Roller Bearing Brackets	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name
			4	M_Bearing_Bracket_L_Clamping_Plate.dwg

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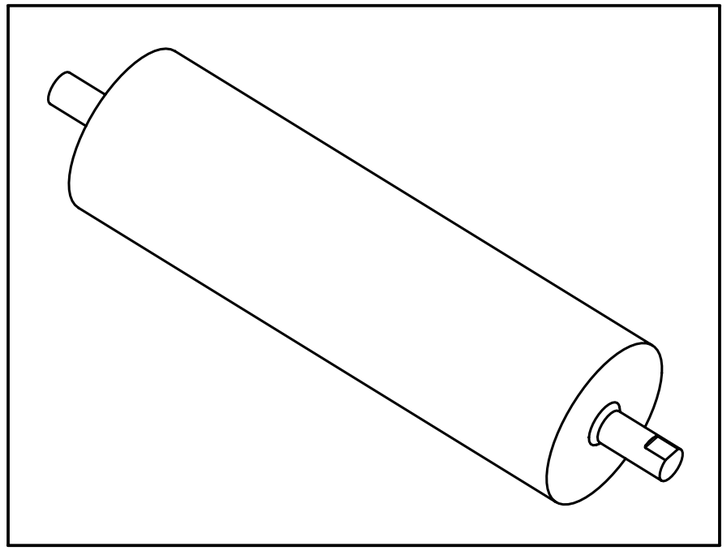
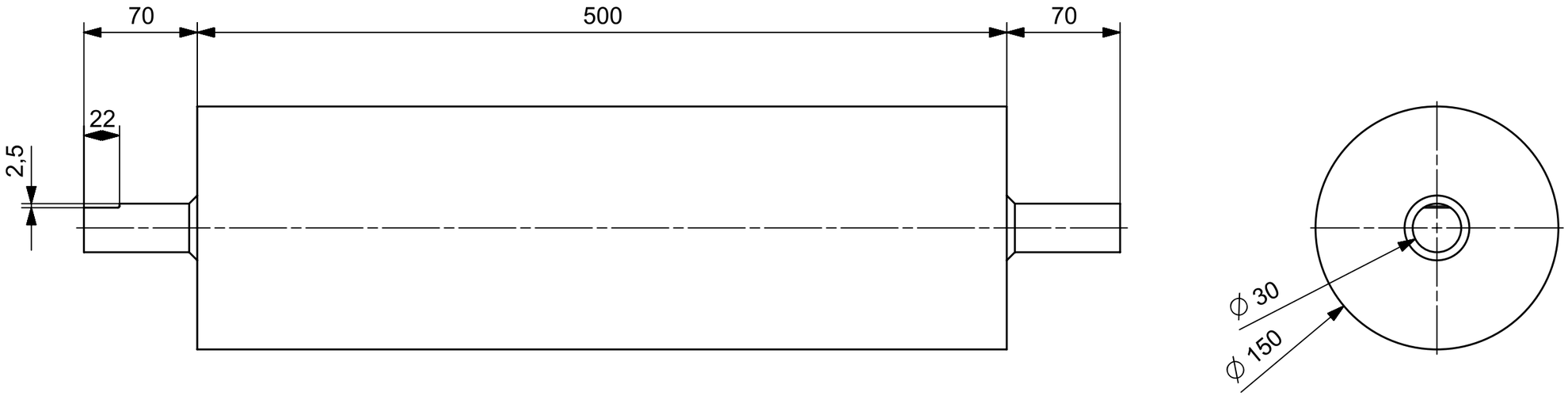
2.3.2 Independent Parts — Rollers





Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Steel	
			Oberflaechenbehandlung / surface treatment Anti-Rust Coating	Mst. / scale: 1:3 — Format / size: A3
			Name / part name Roller Body	Einheit / unit: mm — Blatt / sheet: 1/1
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly Roller Fixed Roller Movable	Projekt / project: Glass Crusher — rev.
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity 2	Dateiname / file name M_Roller_Body_dwg

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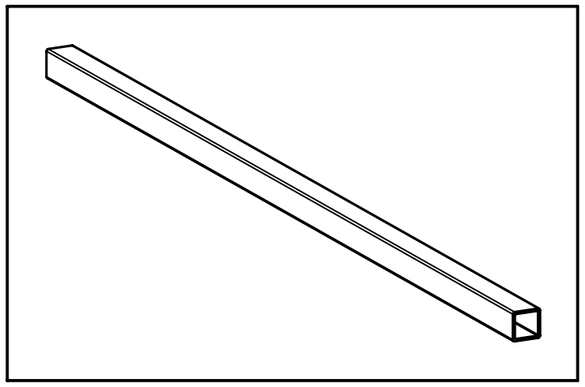

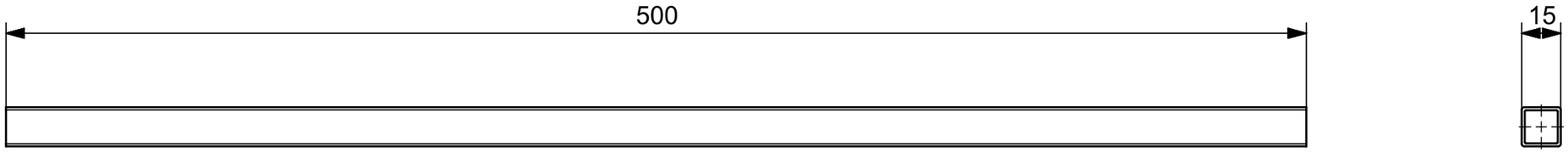

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment Anti-Rust Coating	Mst. / scale: 1:2 — Format / size: A3
			Name / part name Square Roller Profile	Einheit / unit: mm — Blatt / sheet: 1/1
gezeichnet von / designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly Roller Fixed & Movable	Projekt / project: Glass Crusher — rev.
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity 20	Dateiname / file name M_Roller_Square_Profile_dwg

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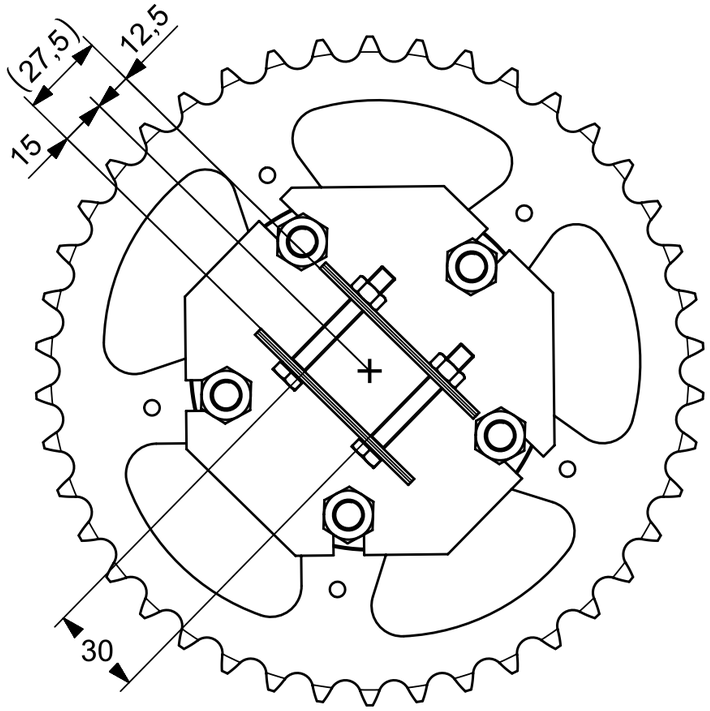
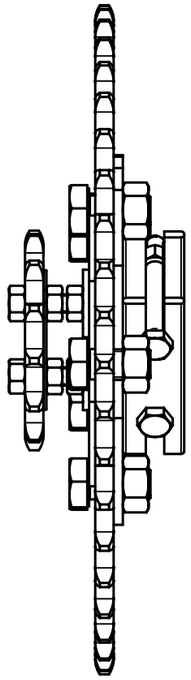
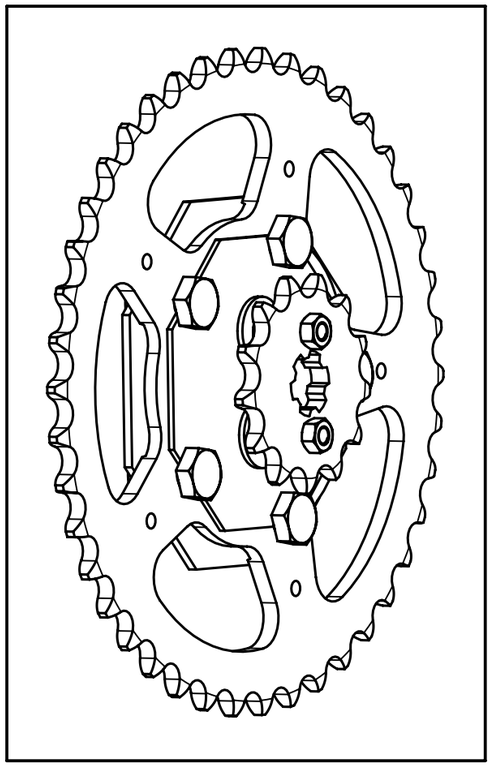
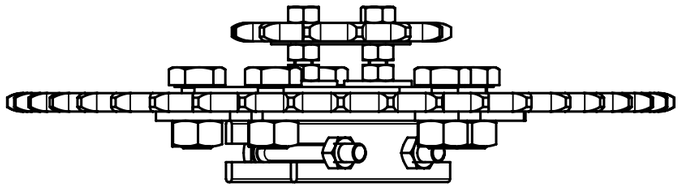
2.4 Sprocket Module, Large









Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	
			-	
			Name / part name	
			Sprocket Module, Large	
gezeichnet von designed by	06.04.2024	P. COLBACH	Baugruppe / parent assembly	
			Full Assembly	
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	
			1	

Mst. / scale	Format / size
1:2	A3
Einheit / unit	Blatt / sheet
mm	1/3
Projekt / project	rev.
Glass Crusher	
Dateiname / file name	
A_Sprocket_Module_L_.dwg	

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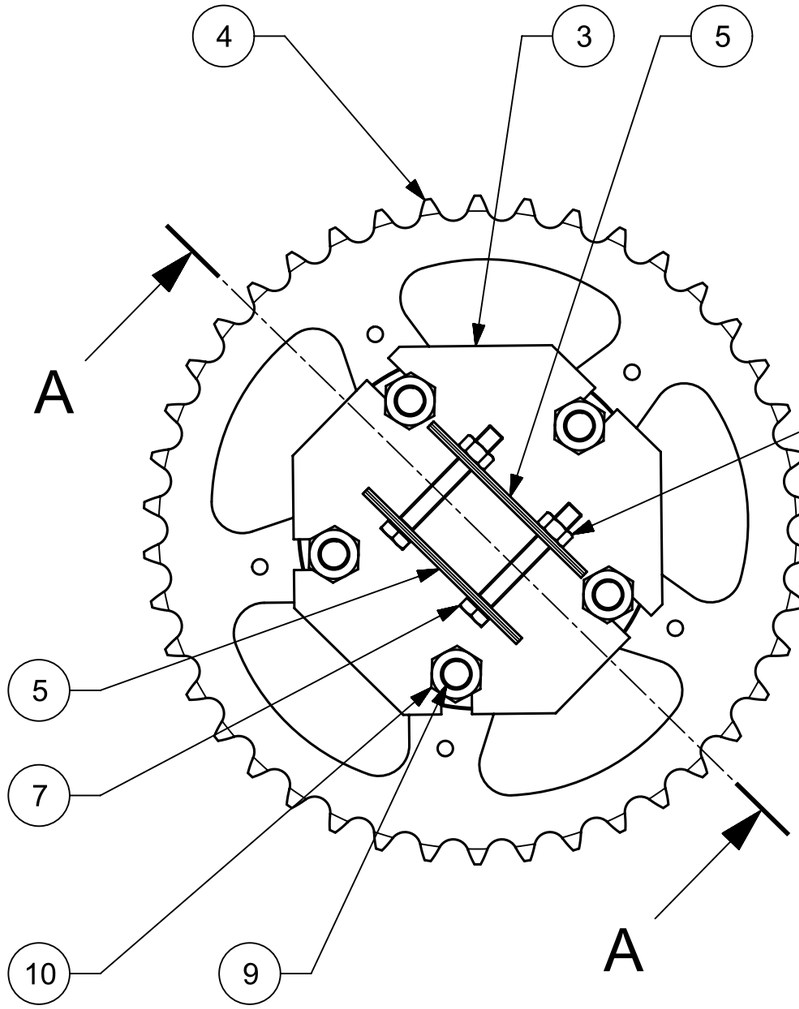

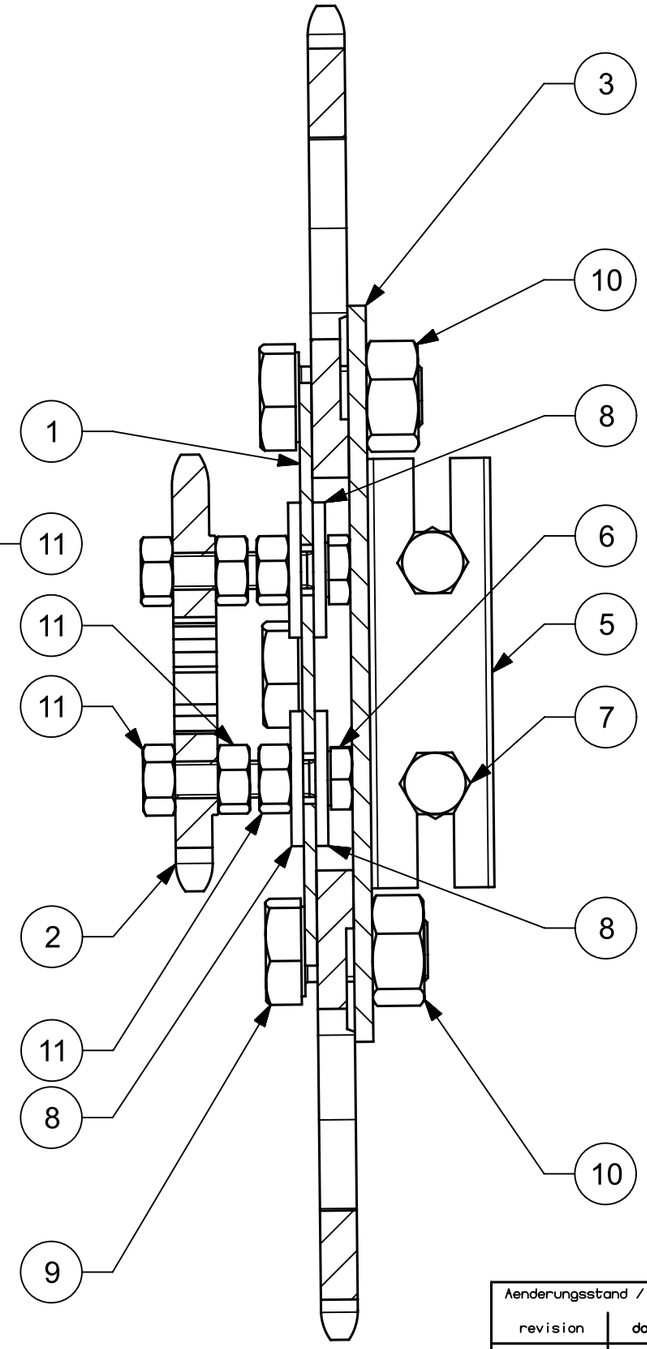

A-A
(1:1)

NO	PART NAME	QTY
11	HEX NUT, 1A, DIN,M6X1	8
10	HEX NUT, 1A, DIN,M10X1_5	5
9	HEX HEAD SCREW, GRADES A, B, DIN,M10X20	5
8	PLAIN WASHER, DIN 440,M6	4
7	HEX HEAD SCREW, GRADES A, B, DIN,M6X45	2
6	HEX HEAD SCREW, GRADES A, B, DIN,M6X30	2
5	M_SPROCKET_PLATE_FIXATION	2
4	M_SPROCKET_L	1
3	M_SPROCKET_L_PLATE	1
2	M_SPROCKET_S	1
1	M_SPROCKET_S_PLATE_L	1

Aenderungsstand / change state		
revision	date	name
gezeichnet von designed by	06.04.2024	P. COLBACH

Werkstoff / material
-

Oberflaechenbehandlung / surface treatment
-

Name / part name
Sprocket Module, Large

Baugruppe / parent assembly
Full Assembly

Stueckzahl / quantity
1

Mst. / scale: 1:2
Format / size: A3
Einheit / unit: mm
Blatt / sheet: 2/3
Projekt / project: Glass Crusher
rev.

Dateiname / file name
A_Sprocket_Module_L_.dwg

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Swiss Federal Institute of Technology Zurich

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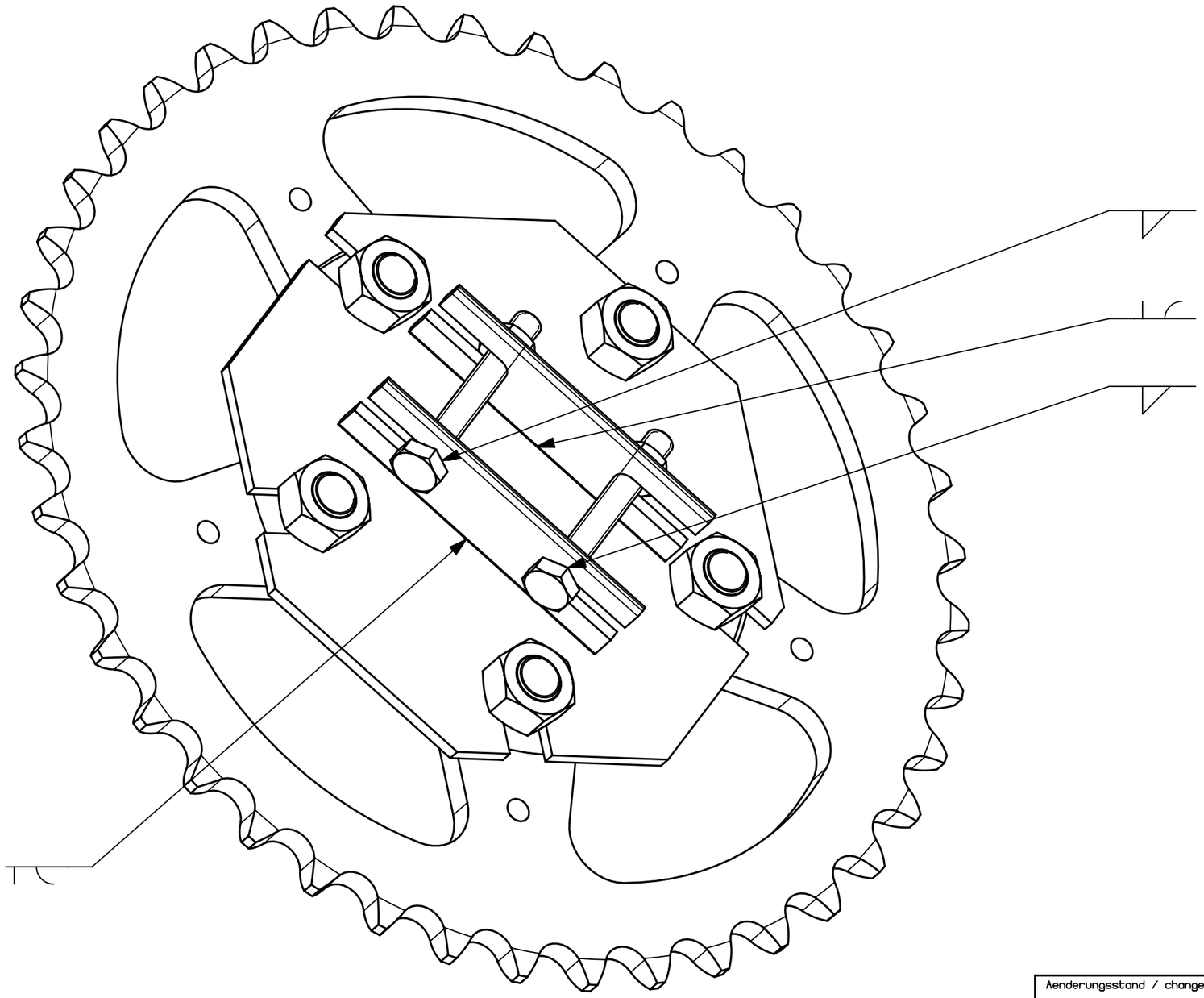

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:2 — Format / size: A3
			-	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 3/3
			Sprocket Module, Large	
gezeichnet von designed by	06.04.2024	P. COLBACH	Baugruppe / parent assembly: Full Assembly	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 1	Dateiname / file name: A_Sprocket_Module_L.dwg

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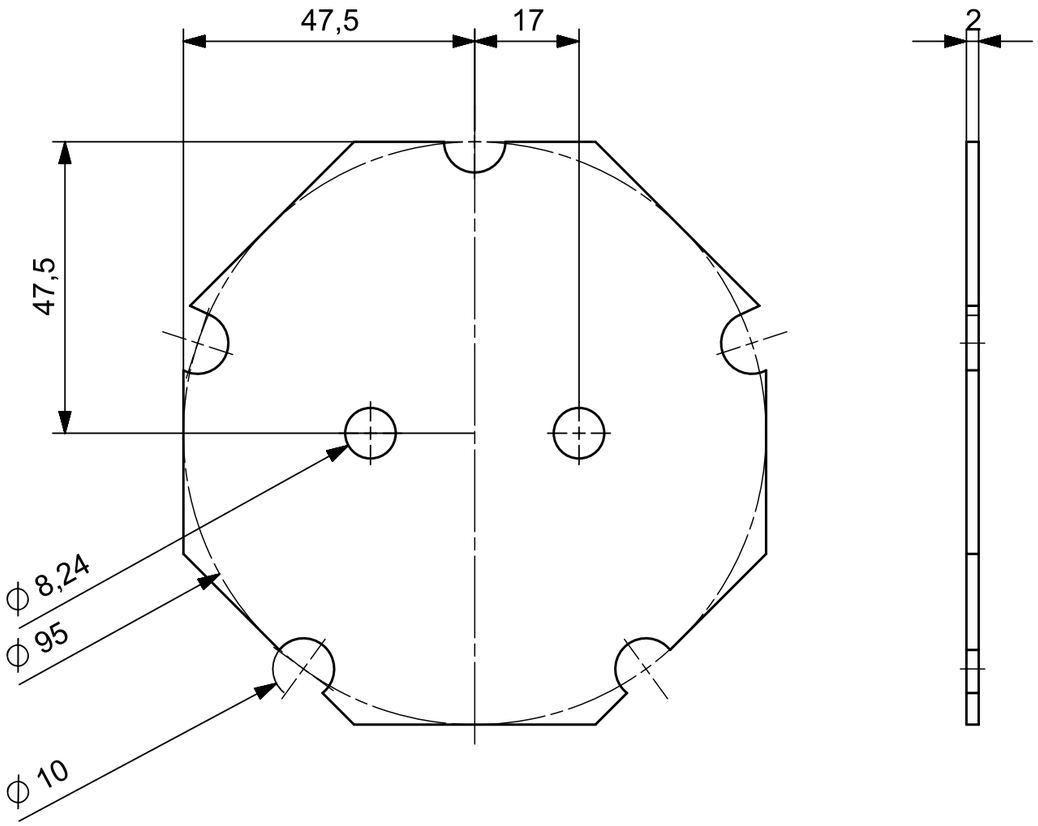
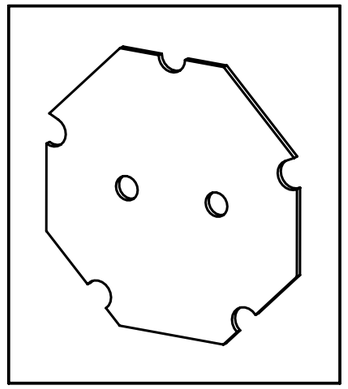
2.4.1 Independent Parts — Sprocket Module, Large





Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	
			Anti-Rust Coating	
			Name / part name	
			Front Mount 13T - 42T Sprocket	
gezeichnet von designed by	26.03.2024	P. COLBACH	Baugruppe / parent assembly	
			Sprocket Module, Large	
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	
			1	

Mst. / scale	Format / size
1:1	A3
Einheit / unit	Blatt / sheet
mm	1/1
Projekt / project	rev.
Glass Crusher	
Dateiname / file name	
M_Sprocket_S_Plate_L.dwg	

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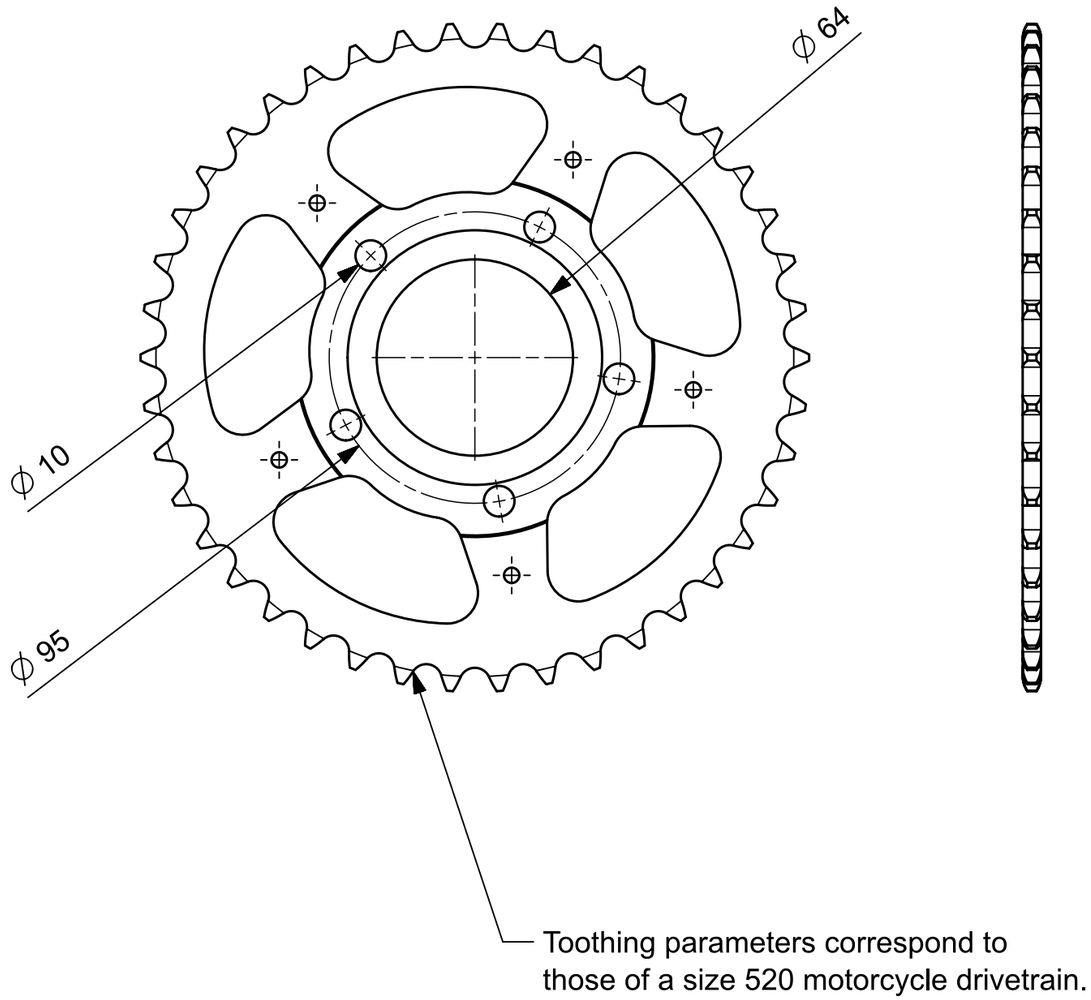

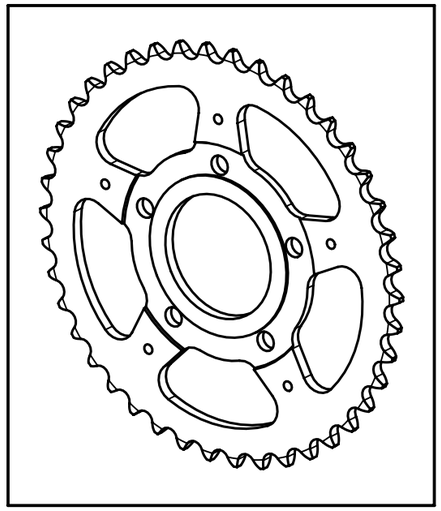

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Steel	
			Oberflaechenbehandlung / surface treatment -	Mst. / scale 1:2 / Format / size A3
			Name / part name 42 Tooth Sprocket	Einheit / unit mm / Blatt / sheet 1/1
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly Sprocket Module, Large	Projekt / project Glass Crusher / rev.
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity 1	Dateiname / file name M_Sprocket_L_dwg

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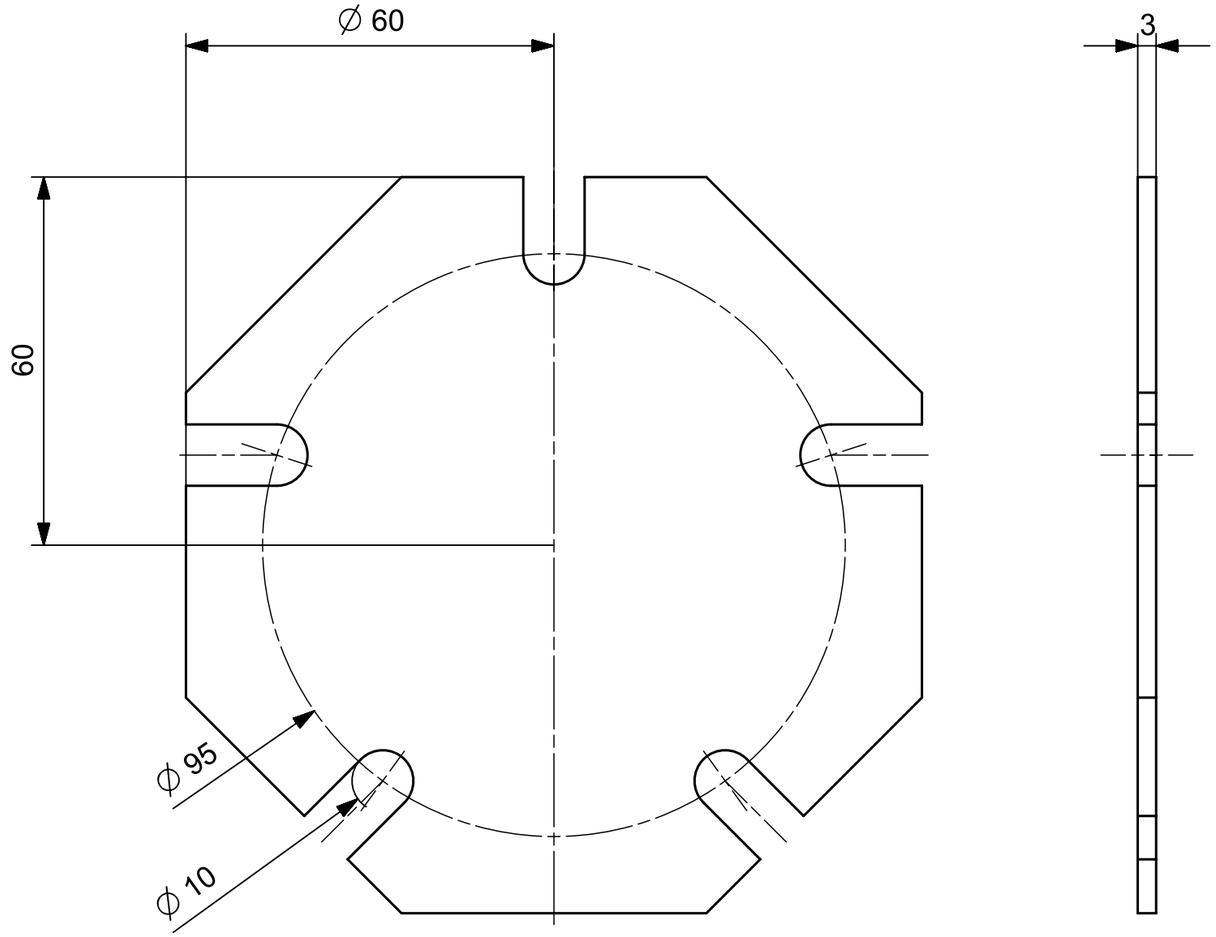

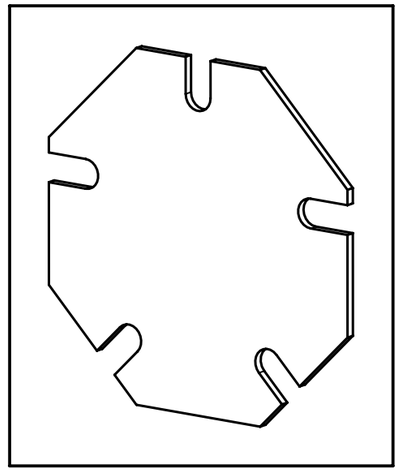

Aenderungsstand / change state			Werkstoff / material		
revision	date	name	Mild Steel		
			Oberflaechenbehandlung / surface treatment Anti-Rust Coating	Mst. / scale 1:1	Format / size A3
			Name / part name Back Mount 42 T Sprocket	Einheit / unit mm	Blatt / sheet 1/1
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly Sprocket Module, Large	Projekt / project Glass Crusher	rev.
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity 1	Dateiname / file name M_Sprocket_L_Plate_dwg	

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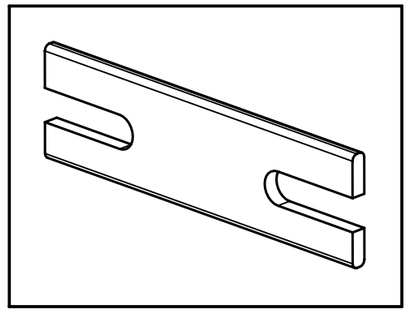

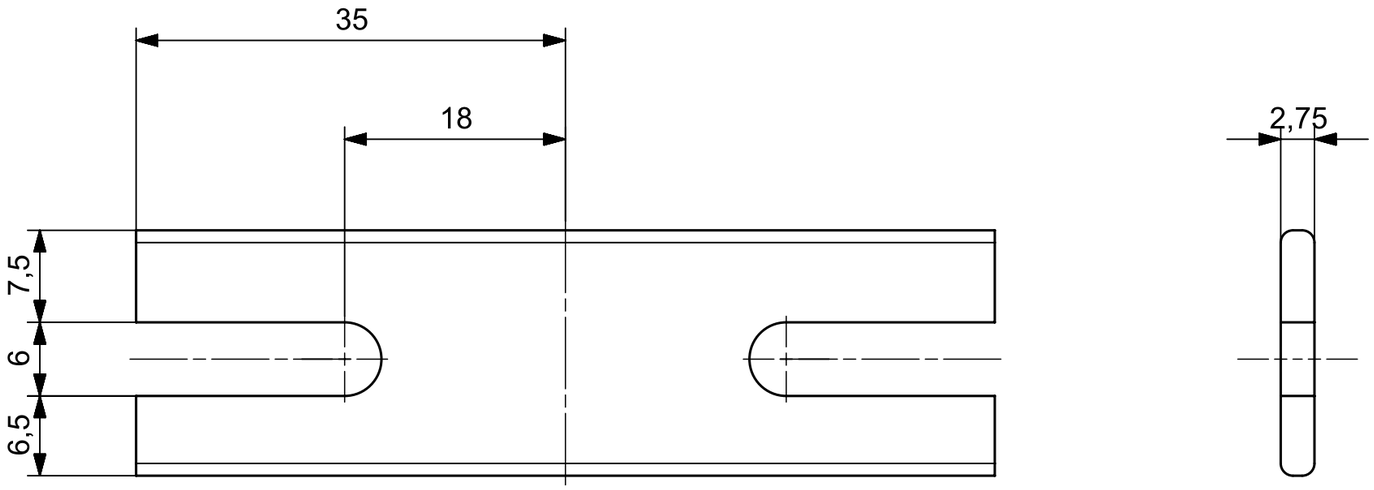

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 2:1 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Sprocket Plate Fixation	
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly: Sprocket Module, Large; Sprocket Module, Small	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 4	Dateiname / file name: M_Sprocket_Plate_Fixation_dwg

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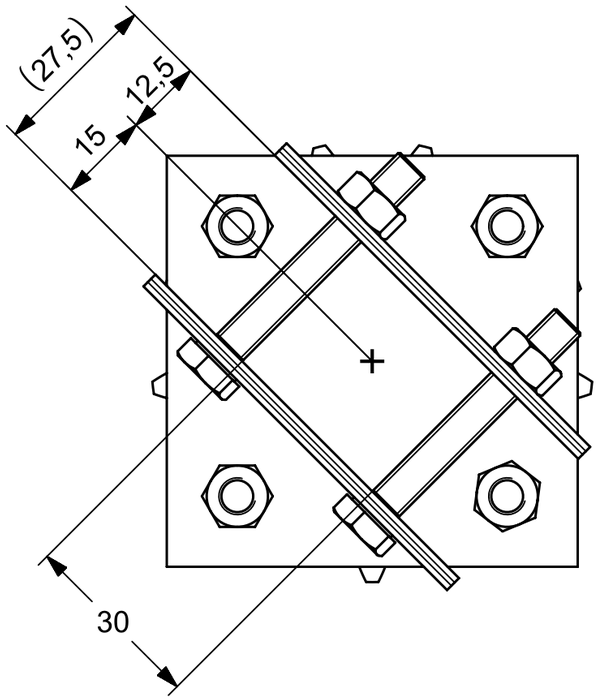
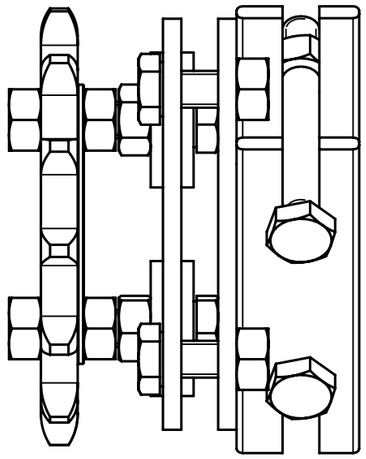
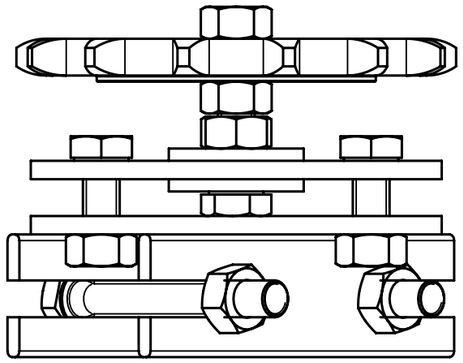
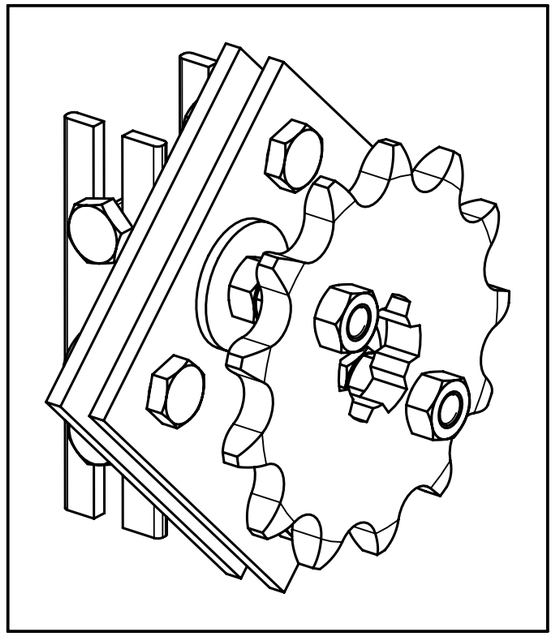
2.5 Sprocket Module, Small









Aenderungsstand / change state			Werkstoff / material		
revision	date	name	-		
			Oberflaechenbehandlung / surface treatment	Mst. / scale	Format / size
			-	2:1	A3
			Name / part name	Einheit / unit	Blatt / sheet
			Sprocket Module, Small	mm	1/3
gezeichnet von designed by	06.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project	rev.
			Full Assembly	Glass Crusher	
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name	
			1	A_Sprocket_Module_S_dwg	

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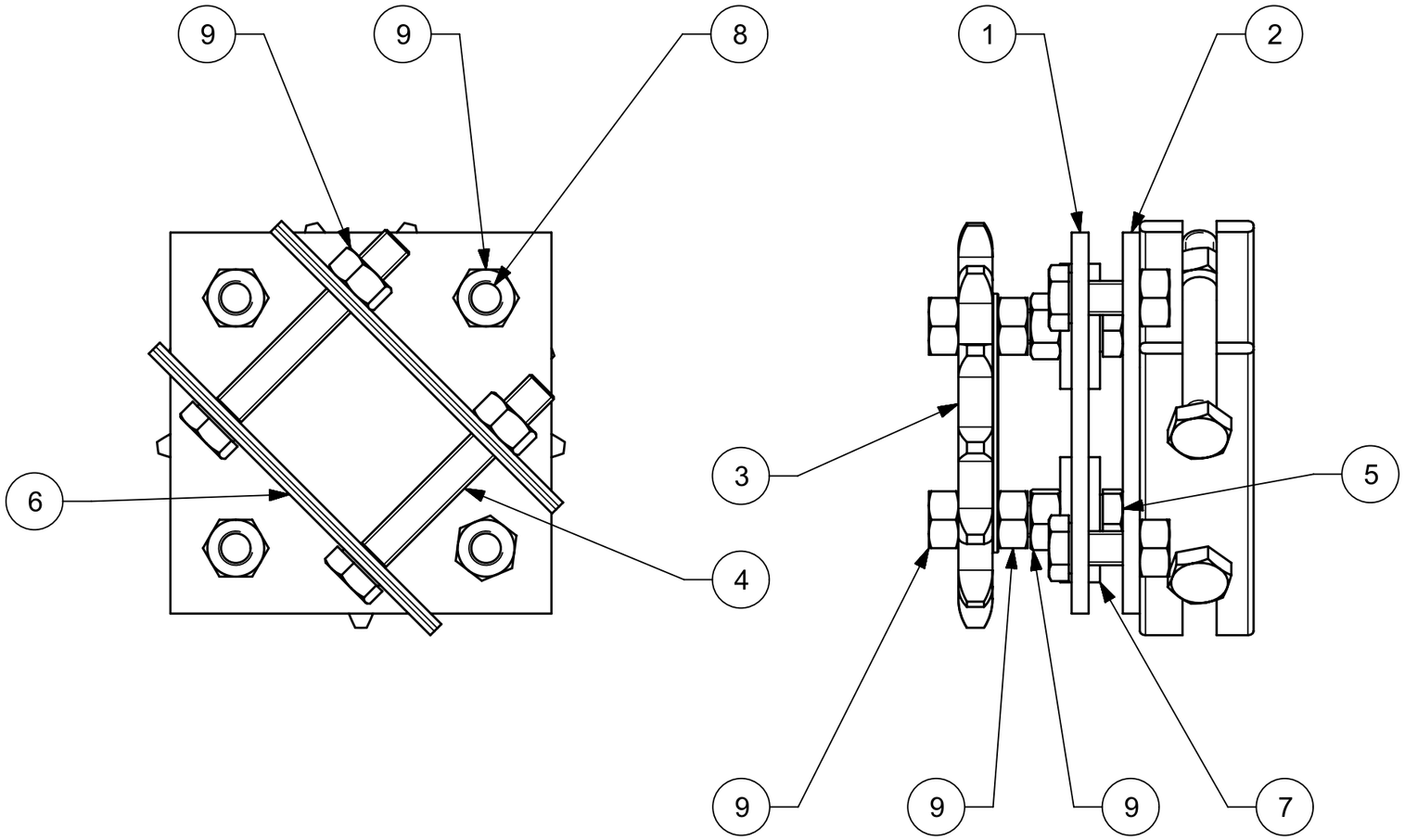

NO	PART NAME	QTY
9	HEX NUT, 1A, DIN,M6X1	12
8	HEX HEAD SCREW, GRADES A, B, DIN,M6X16	4
7	PLAIN WASHER, DIN 440,M6	4
6	M_SPROCKET_PLATE_FIXATION	2
5	HEX HEAD SCREW, GRADES A, B, DIN,M6X30	2
4	HEX HEAD SCREW, GRADES A, B, DIN,M6X45	2
3	M_SPROCKET_S	1
2	M_SPROCKET_S_PLATE_S_BACK	1
1	M_SPROCKET_S_PLATE_S_FRONT	1

Aenderungsstand / change state		
revision	date	name
gezeichnet von designed by	06.04.2024	P. COLBACH

Werkstoff / material
-

Oberflaechenbehandlung / surface treatment
-

Name / part name
Sprocket Module, Small

Baugruppe / parent assembly
Full Assembly

Stueckzahl / quantity
1

Mst. / scale: 2:1
Format / size: A3
Einheit / unit: mm
Blatt / sheet: 2/3
Projekt / project: Glass Crusher
rev.

Dateiname / file name
A_Sprocket_Module_S_dwg

ETH zürich
Eidgenoessische Technische Hochschule Zuerich
Swiss Federal Institute of Technology Zurich

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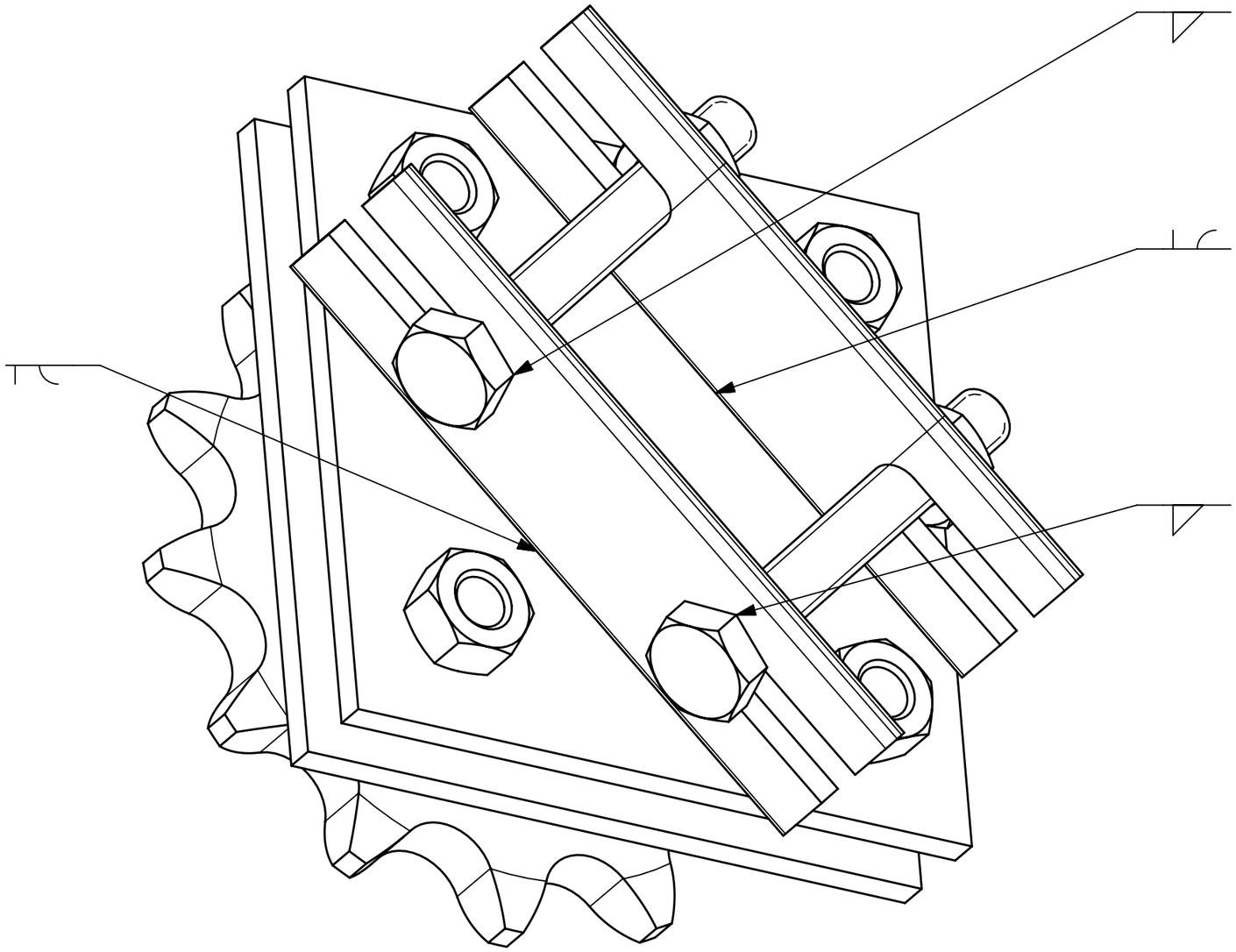

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	
			-	
			Name / part name	
			Sprocket Module, Small	
gezeichnet von designed by	06.04.2024	P. COLBACH	Baugruppe / parent assembly	
			Full Assembly	
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	
			1	

Mst. / scale	Format / size
2:1	A3
Einheit / unit	Blatt / sheet
mm	3/3
Projekt / project	rev.
Glass Crusher	
Dateiname / file name	
A_Sprocket_Module_S_dwg	

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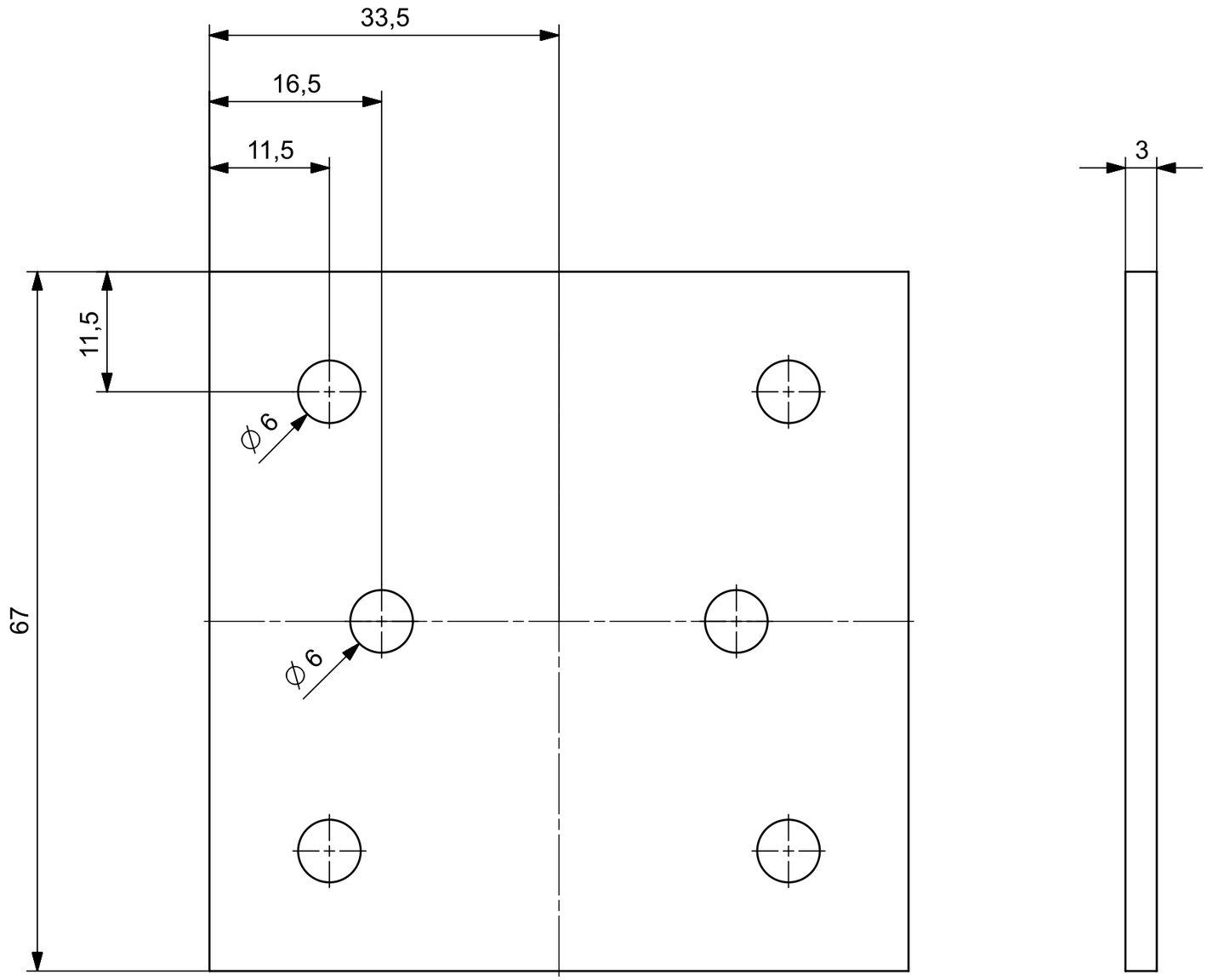
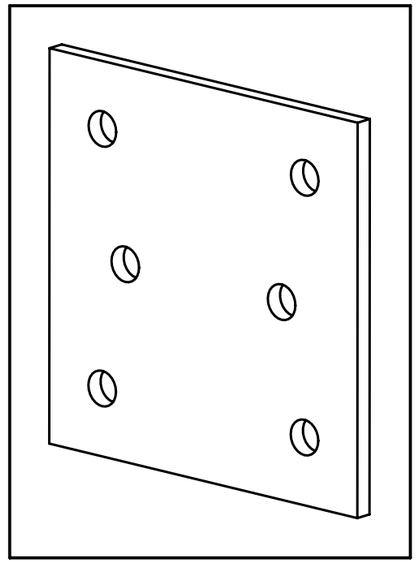
2.5.1 Independent Parts — Sprocket Module, Small

The drawings for the parts M_Sprocket_S and M_Sprocket_Plate_Fixation can be found in section 2.1.3.1 on page 39 and in section 2.4.1 on page 102, respectively.





Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 2:1 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Front Mount for 13T Sprocket	
gezeichnet von designed by	26.03.2024	P. COLBACH	Baugruppe / parent assembly: Sprocket Module, Small	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 1	Dateiname / file name: M_Sprocket_S_Plate_S_Front_dwg

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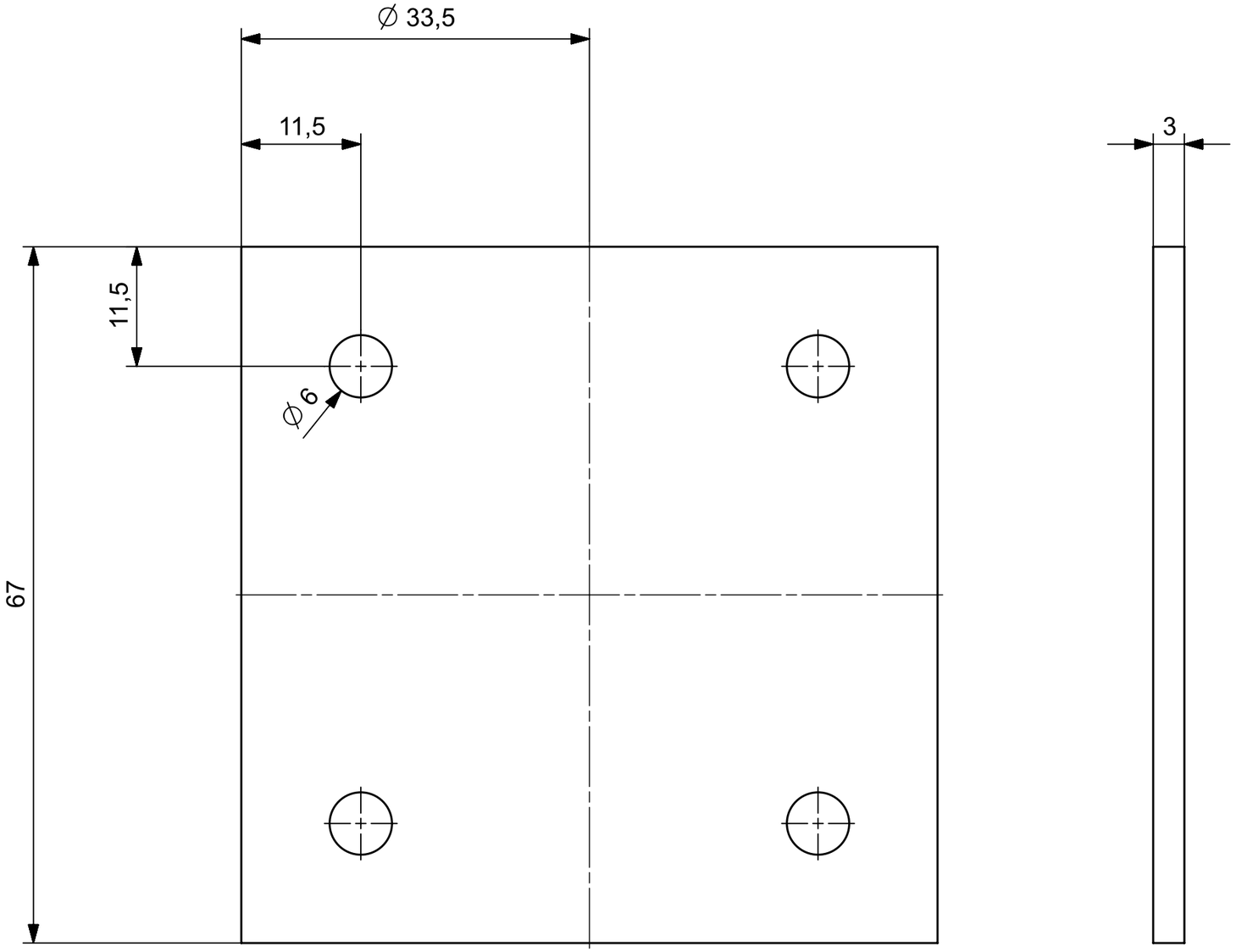

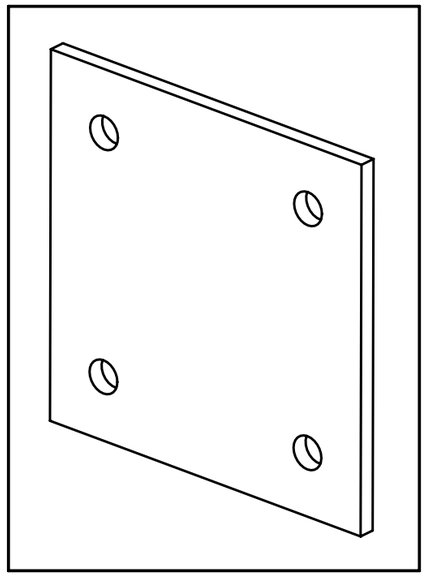

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	
			Anti-Rust Coating	
			Name / part name	
			Back Mount for 13T Sprocket	
gezeichnet von designed by	26.03.2024	P. COLBACH	Baugruppe / parent assembly	
			Sprocket Module, Small	
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	
			1	

Mst. / scale	Format / size
2:1	A3
Einheit / unit	Blatt / sheet
mm	1/1
Projekt / project	rev.
Glass Crusher	
Dateiname / file name	
M_Sprocket_S_Plate_S_Back_dwg	

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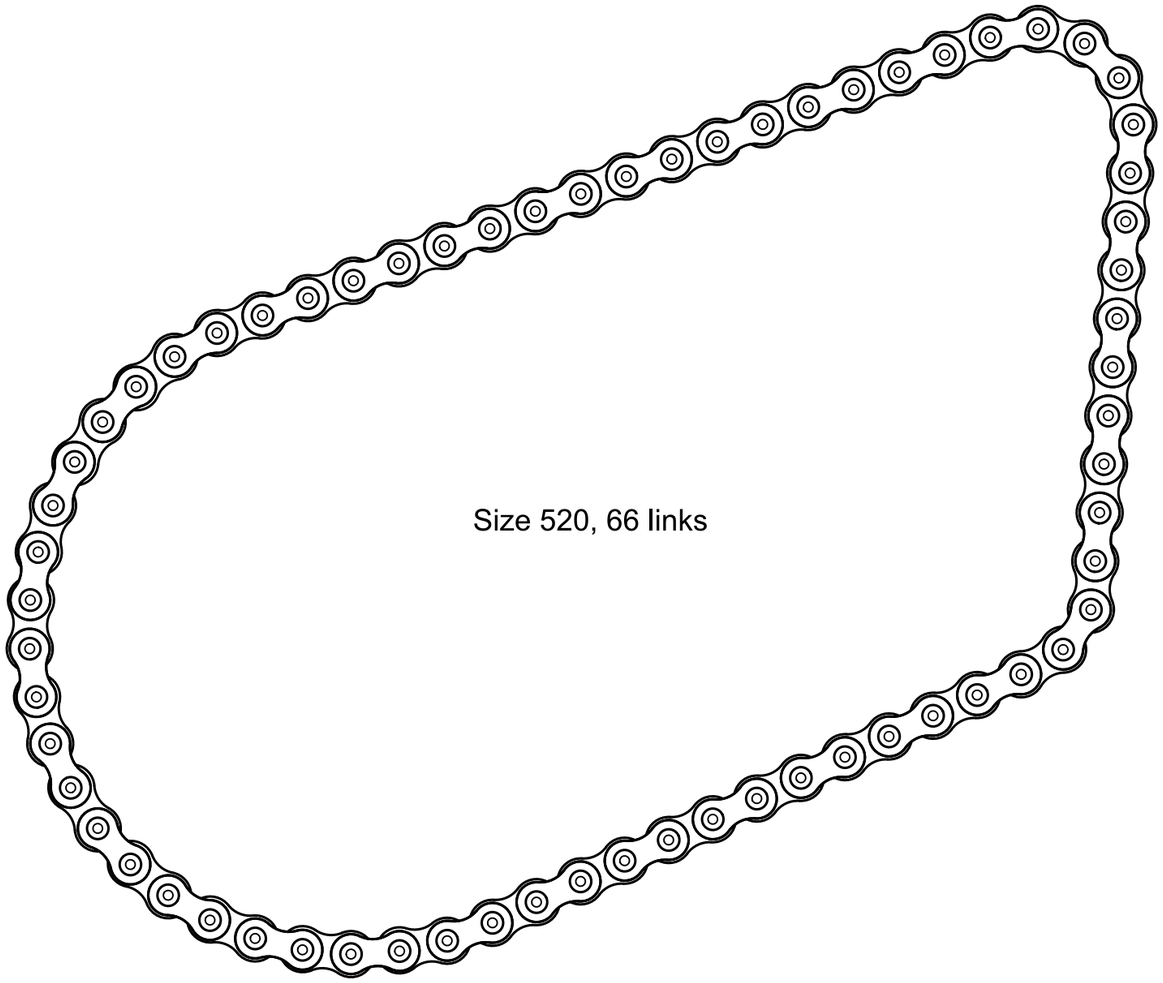
2.6 Motorcycle Chains



Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	
			-	
			Name / part name	
			Motorcycle Chain	
gezeichnet von designed by	06.04.2024	P. COLBACH	Baugruppe / parent assembly	
			Full Assembly	
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	
			2	

Mst. / scale	Format / size
1:2	A3
Einheit / unit	Blatt / sheet
mm	1/1
Projekt / project	rev.
Glass Crusher	
Dateiname / file name	
A_Motorcycle_Chain.dwg	

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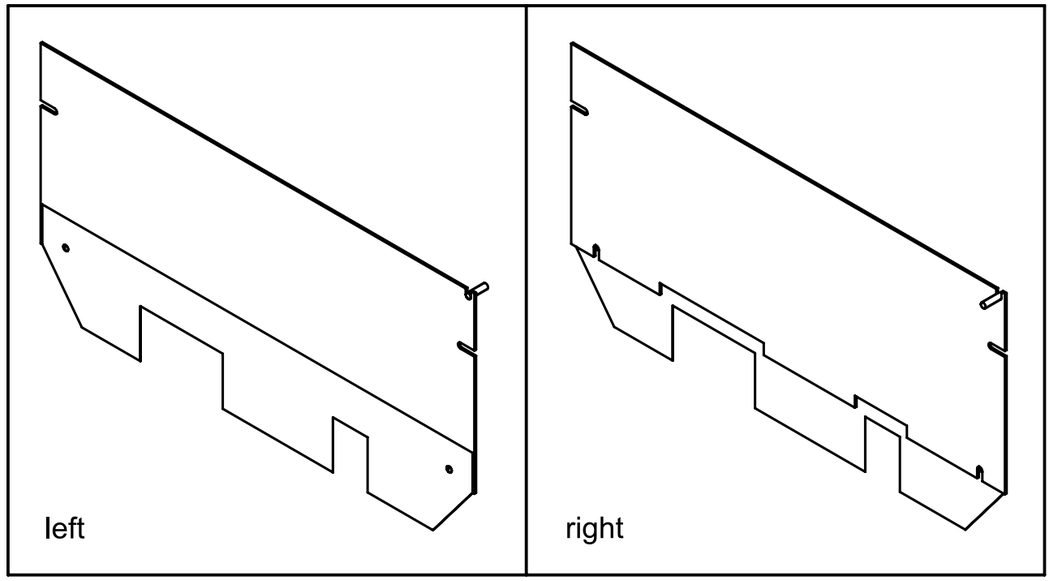
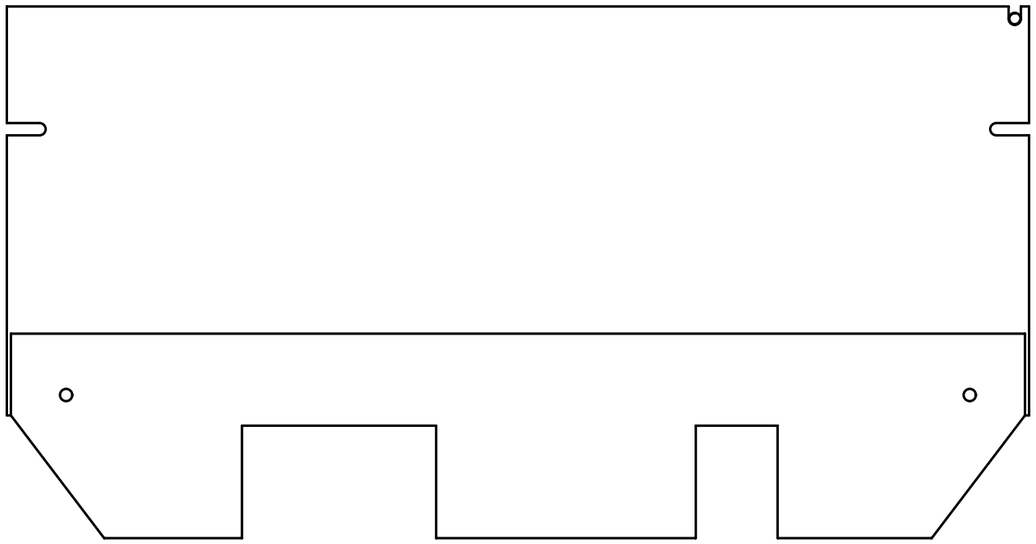
2.7 Upper Side Panels





Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:3 — Format / size: A3
			-	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/3
			Upper Side Panels	
gezeichnet von designed by	06.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Full Assembly	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name
			2 (1 left, 1 right)	A_Side_Panel_S_Top_Left_Right_dwg

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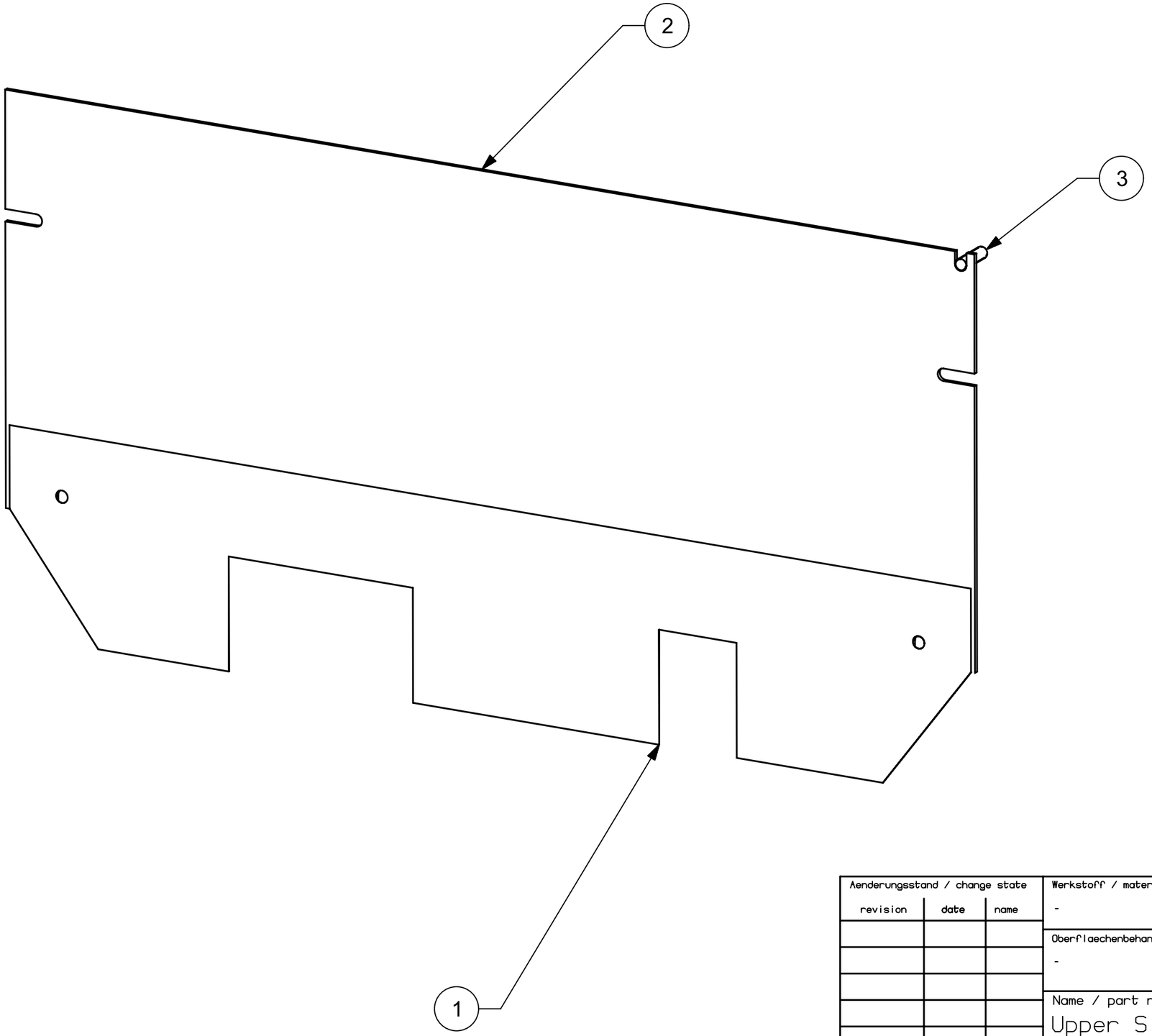

NO	PART NAME	QTY
3	STUD, FORM A, DIN,M6X1X20	1
2	M_SIDE_PANEL_S_TOP	1
1	M_SIDE_FLAP	1

Aenderungsstand / change state		
revision	date	name
gezeichnet von designed by	06.04.2024	P. COLBACH

Werkstoff / material
-

Oberflaechenbehandlung / surface treatment
-

Name / part name
Upper Side Panels

Baugruppe / parent assembly
Full Assembly

Stueckzahl / quantity
2 (1 left, 1 right)

Mst. / scale: 1:3
Format / size: A3
Einheit / unit: mm
Blatt / sheet: 2/3

Projekt / project: Glass Crusher
rev.

Dateiname / file name
A_Side_Panel_S_Top_Left_Right_dwg

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Swiss Federal Institute of Technology Zurich

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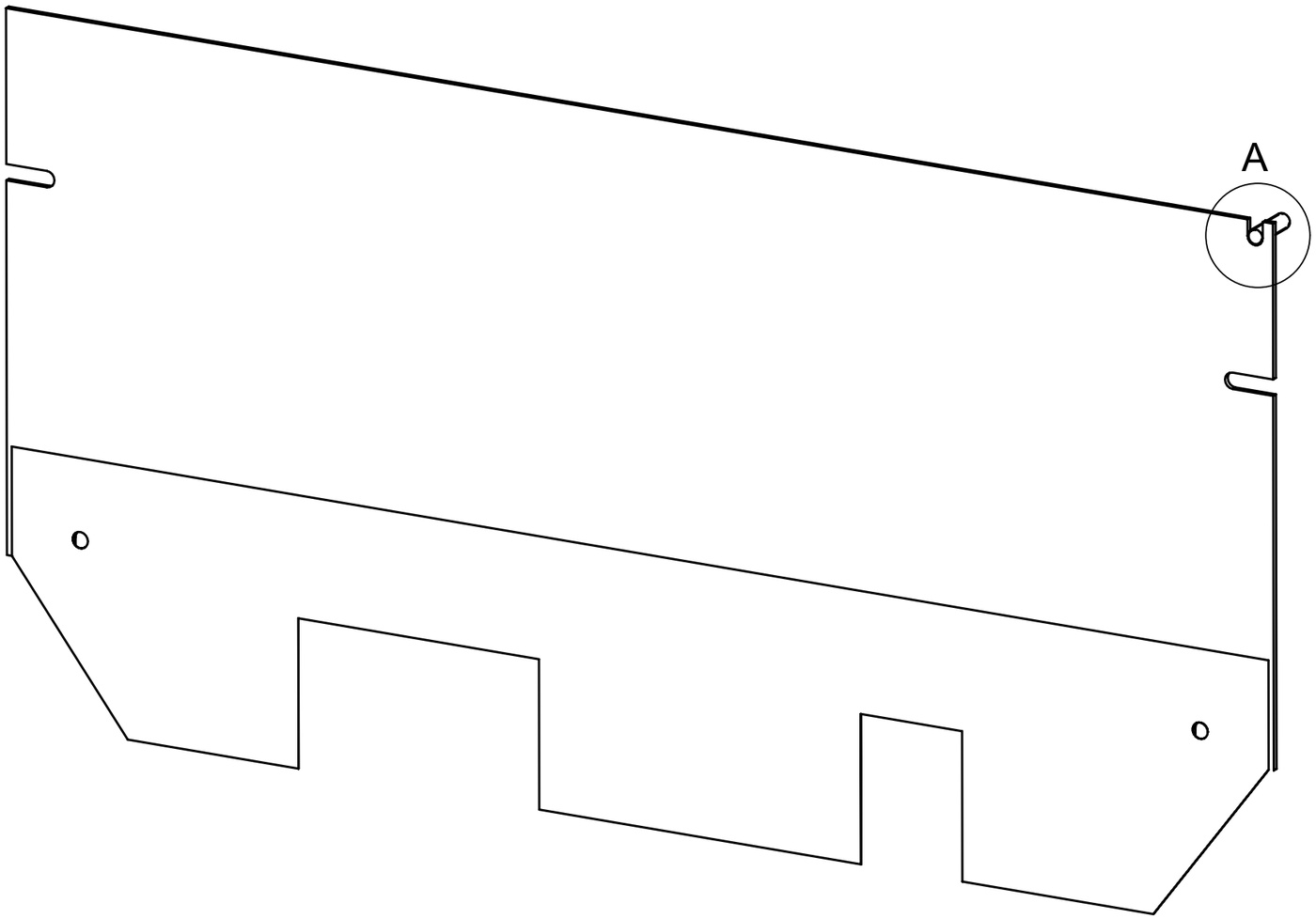

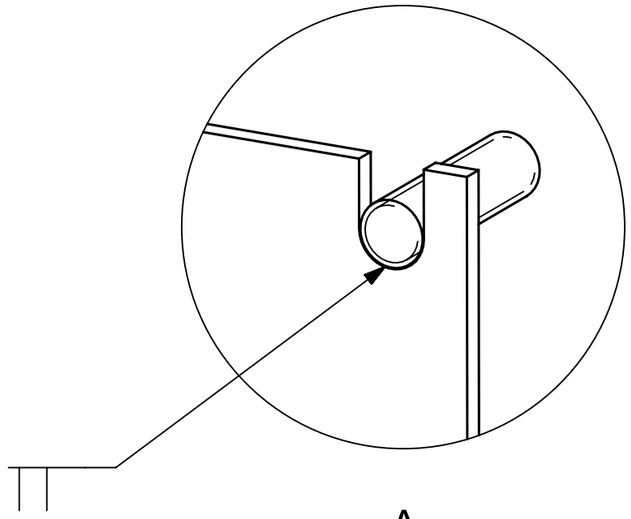

A
(2:1)

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	
			-	Mst. / scale: 1:3 — Format / size: A3
			Name / part name	Einheit / unit: mm — Blatt / sheet: 3/3
			Upper Side Panels	
gezeichnet von designed by	06.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Full Assembly	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name
			2 (1 left, 1 right)	A_Side_Panel_S_Top_Left_Right_dwg

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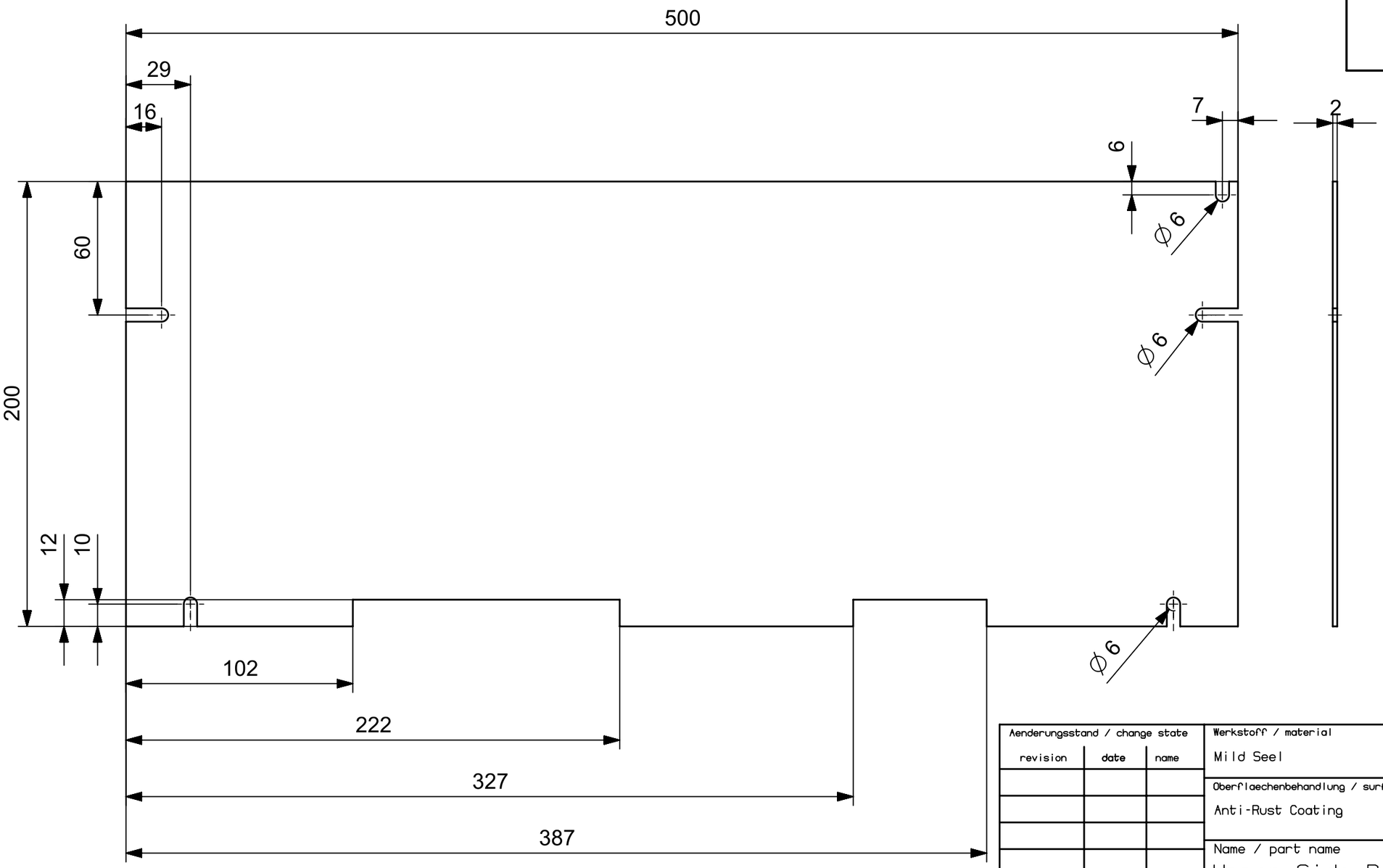
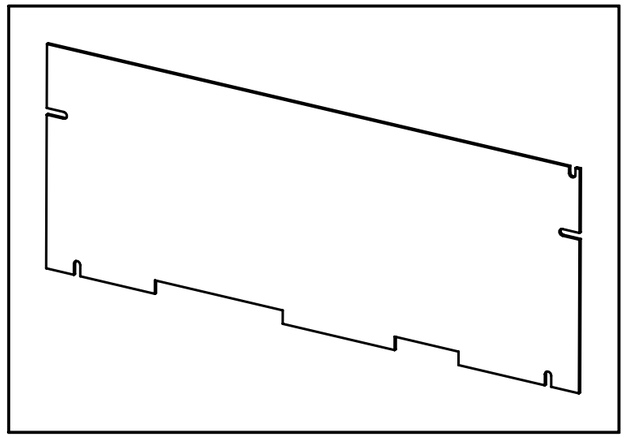
2.7.1 Independent Parts — Upper Side Panels





Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Seel	
			Oberflaechenbehandlung / surface treatment	
			Anti-Rust Coating	
			Name / part name	
			Upper Side Panel	
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly	
			Upper Side Panel Left & Right	
ETH zürich			Stueckzahl / quantity	
Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			2	

Mst. / scale	Format / size
1:2	A3
Einheit / unit	Blatt / sheet
mm	1/1
Projekt / project	rev.
Glass Crusher	
Dateiname / file name	
M_Side_Panel_S_Top_dwg	

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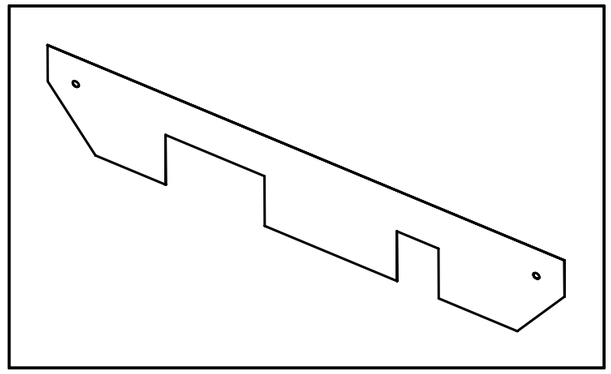

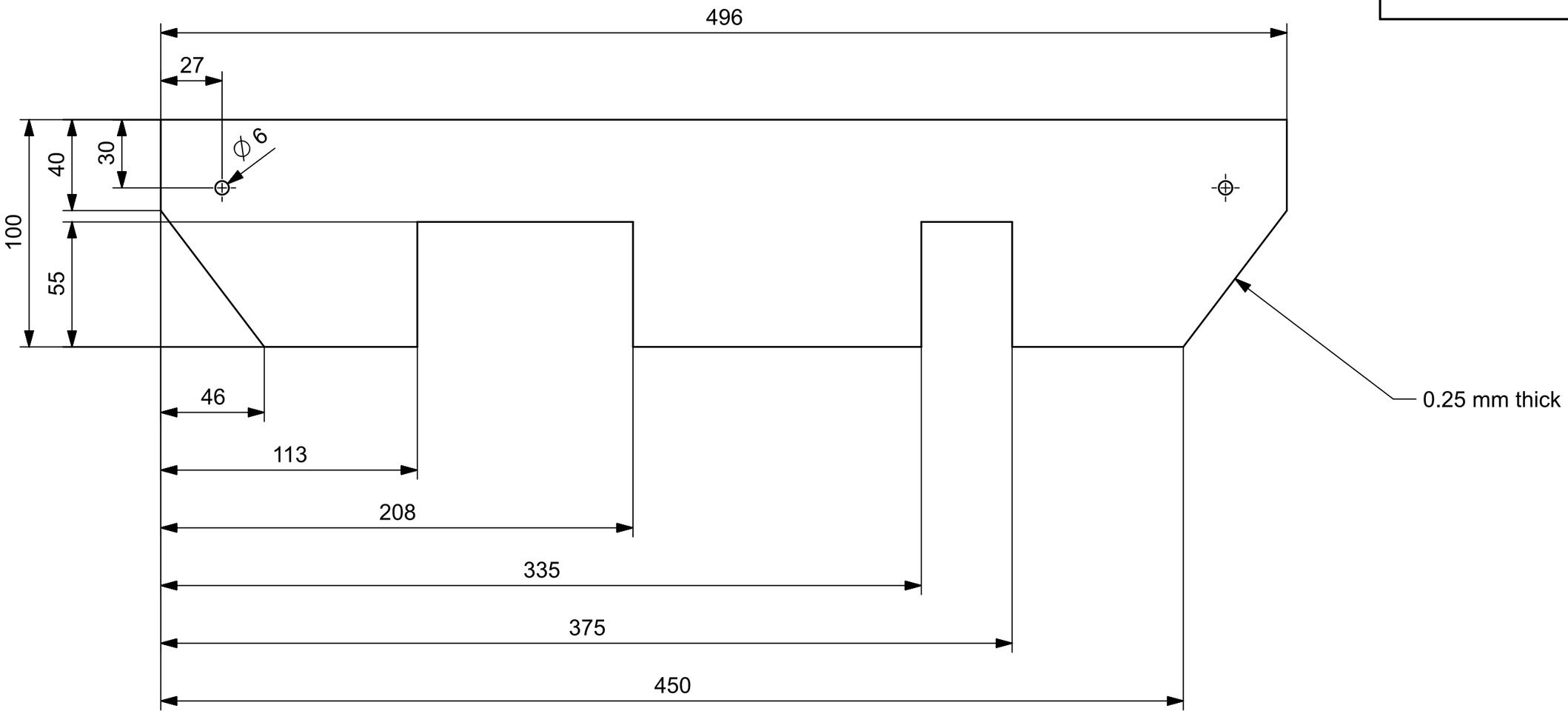

Although thin, the material must be strong enough to withstand shard projectiles.

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Soft Plastic	
			Oberflaechenbehandlung / surface treatment -	Mst. / scale: 1:2 — Format / size: A3
			Name / part name Protective Side Flap	Einheit / unit: mm — Blatt / sheet: 1/1
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly Upper Side Panel Left & Right	Projekt / project: Glass Crusher — rev.
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity 2	Dateiname / file name M_Side_Flap_dwg

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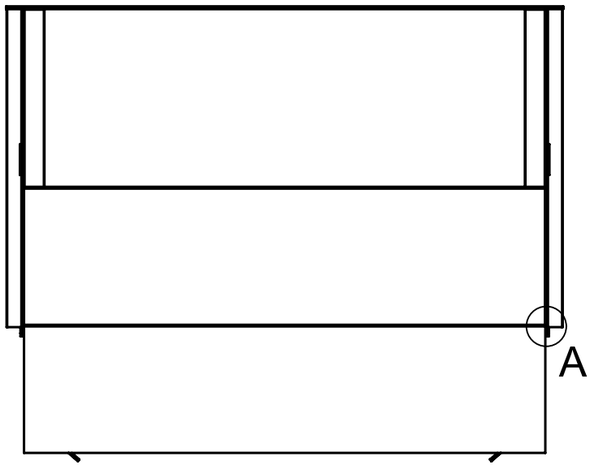
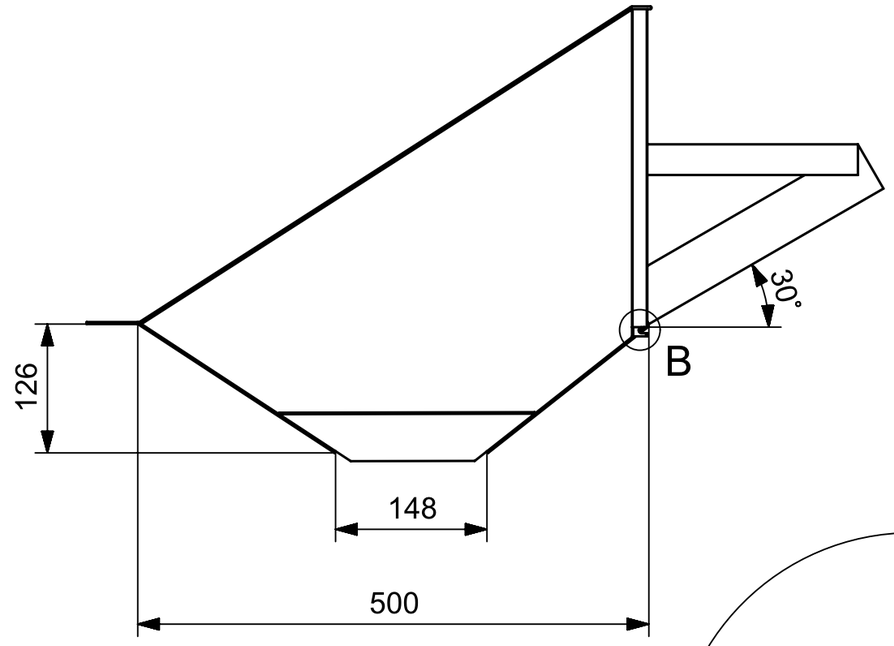
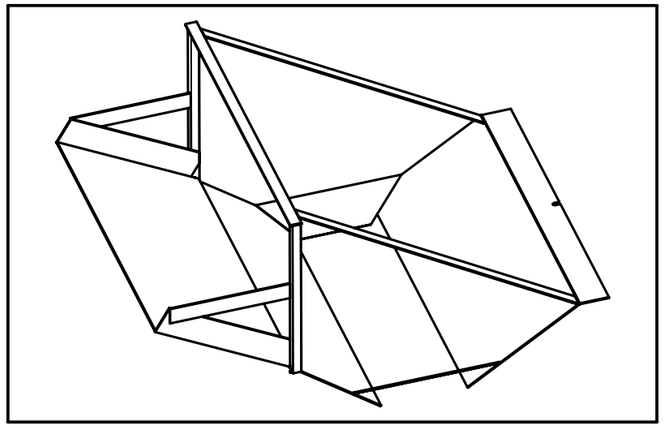
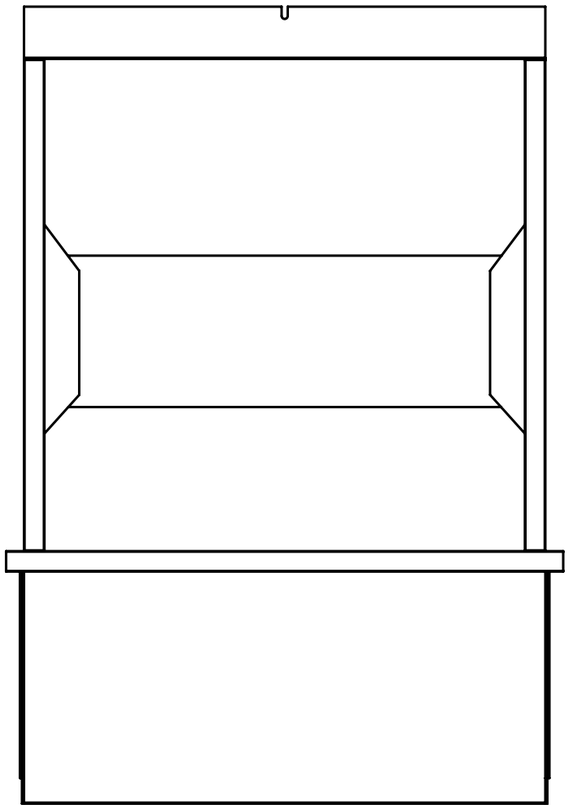
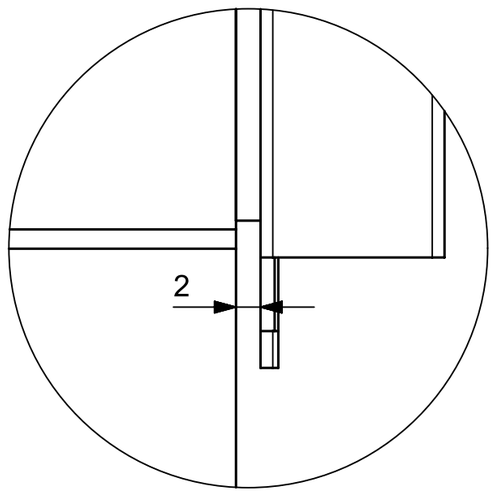
2.8 Cover



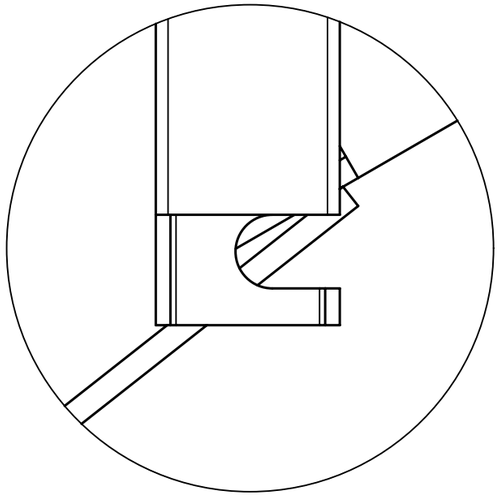








A
(2:1)



B
(2:1)

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:5 — Format / size: A3
			-	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/3
			Cover	
gezeichnet von designed by	05.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Full Assembly	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name
			1	A_Cover_dwg

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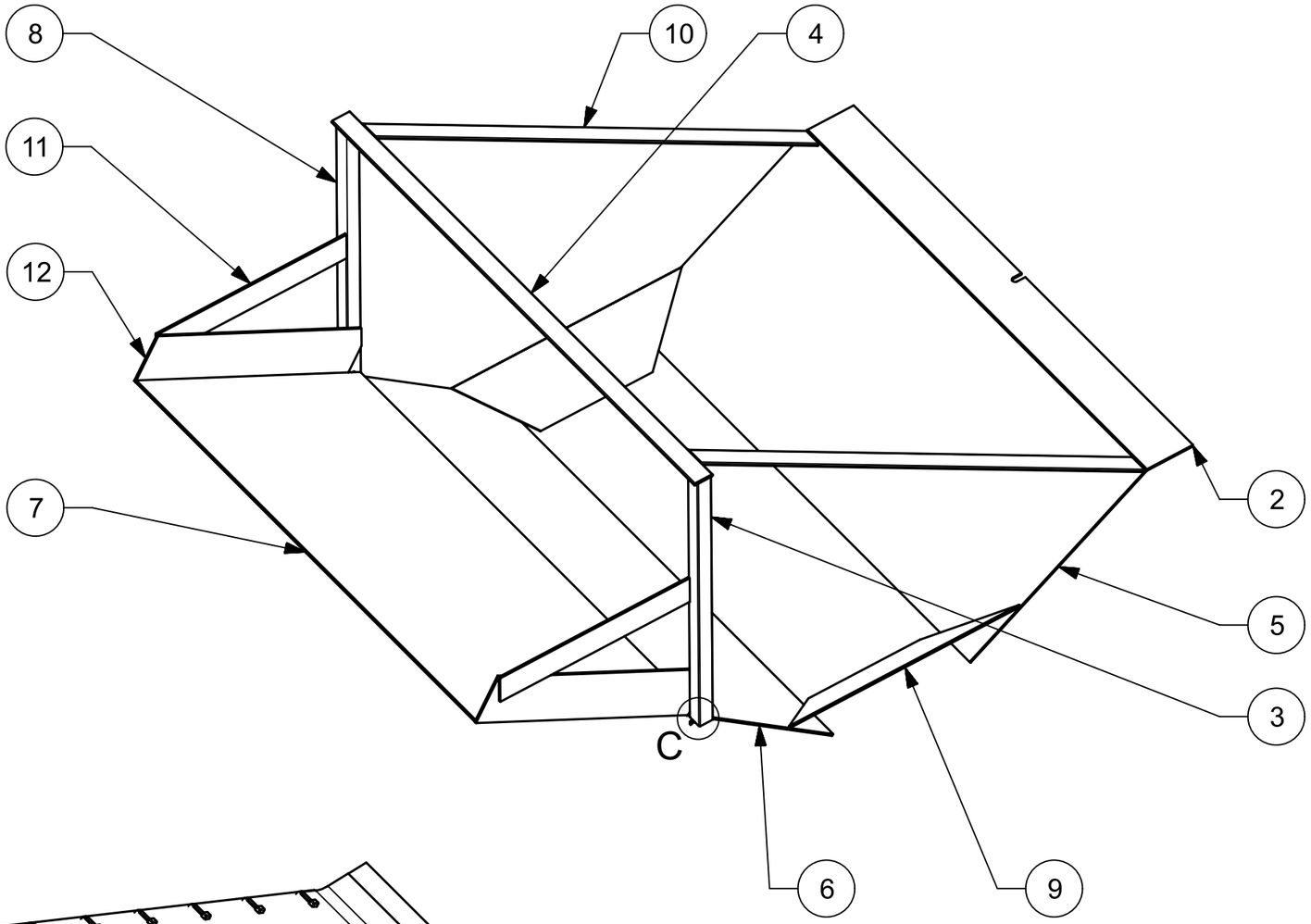

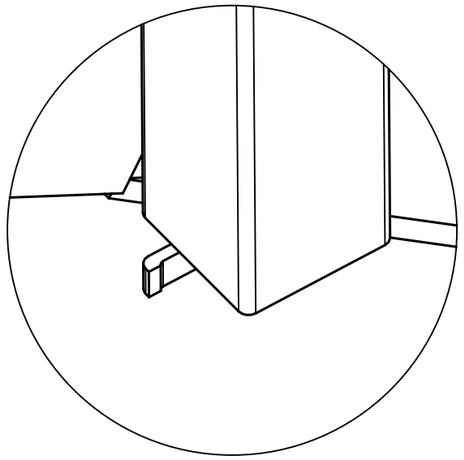

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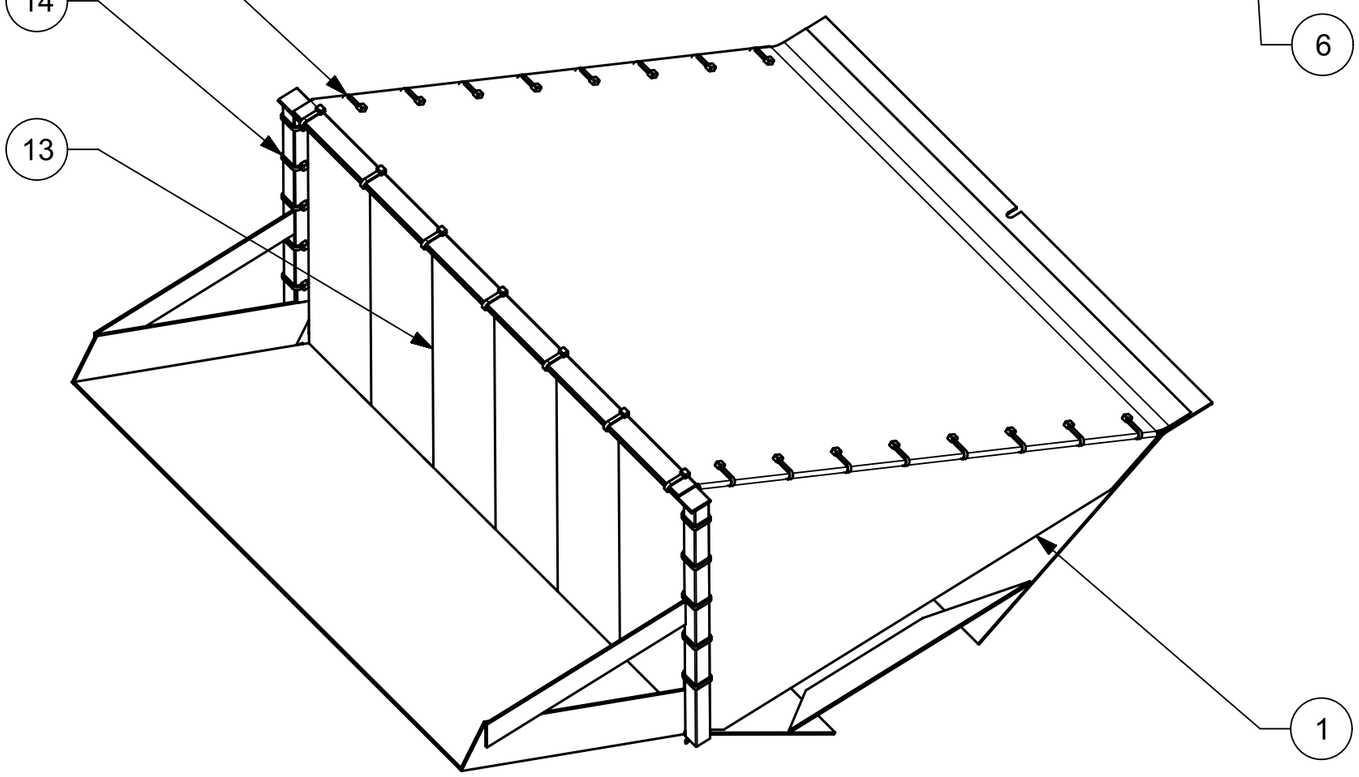

NO	PART NAME	QTY
15	M_ZIP_TIE_SYMBOLIC_FLAT	23
14	M_ZIP_TIE_SYMBOLIC_SQUARE	10
13	M_FRONT_FLAP	6
12	M_CHUTE_SIDE	2
11	M_CHUTE_SUPPORT	2
10	M_COVER_STRUT	2
9	M_TOP_FUNNEL_SIDE	2
8	M_COVER_SUPPORT	1
7	M_CHUTE_PLATE	1
6	M_TOP_FUNNEL_PLATE_S	1
5	M_TOP_FUNNEL_PLATE_L	1
4	M_COVER_CROSSBAR	1
3	M_COVER_SUPPORT_MIRROR	1
2	M_TOP_FUNNEL_SUPPORT	1
1	M_SOFT_COVER	1

Aenderungsstand / change state			Werkstoff / material		
revision	date	name	-		
			Oberflaechenbehandlung / surface treatment	Mst. / scale	Format / size
			-	1:5	A3
			Name / part name	Einheit / unit	Blatt / sheet
			Cover	mm	2/3
gezeichnet von designed by	05.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project	rev.
			Full Assembly	Glass Crusher	
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name	
			1	A_Cover_dwg	

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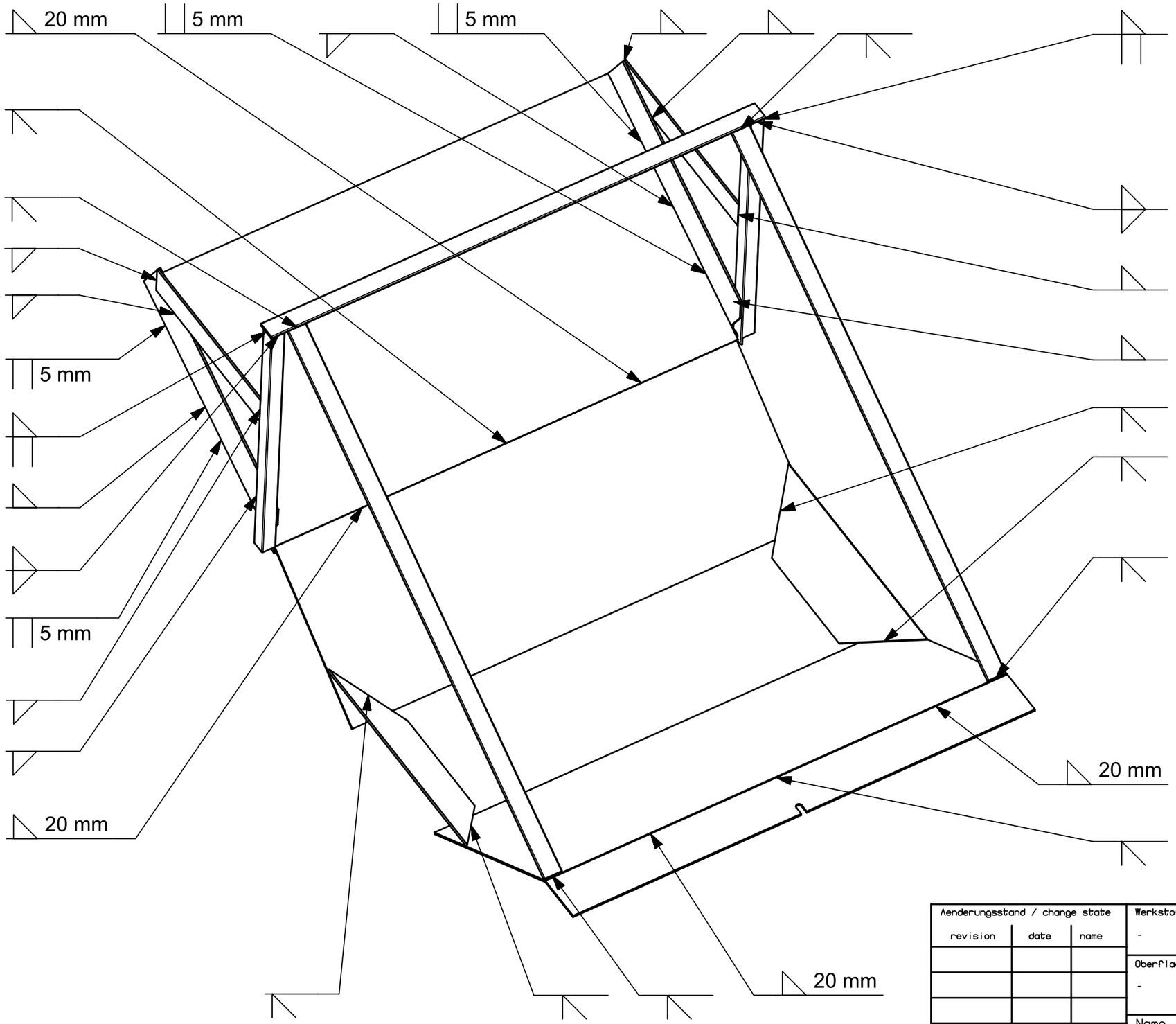

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	-	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:5 — Format / size: A3
			-	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 3/3
			Cover	
gezeichnet von designed by	05.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Full Assembly	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 1	Dateiname / file name: A_Cover_dwg

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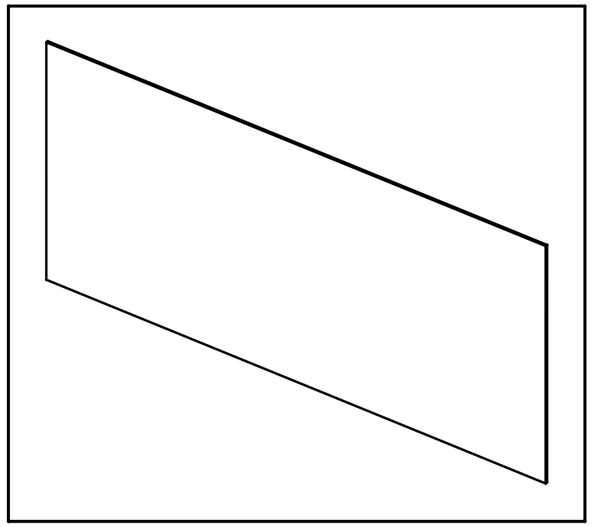
2.8.1 Independent Parts — Cover



Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:2 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Top Funnel Plate, Large	
gezeichnet von designed by	26.03.2024	P. COLBACH	Baugruppe / parent assembly: Cover	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 1	Dateiname / file name: M_Top_Funnel_Plate_L_dwg

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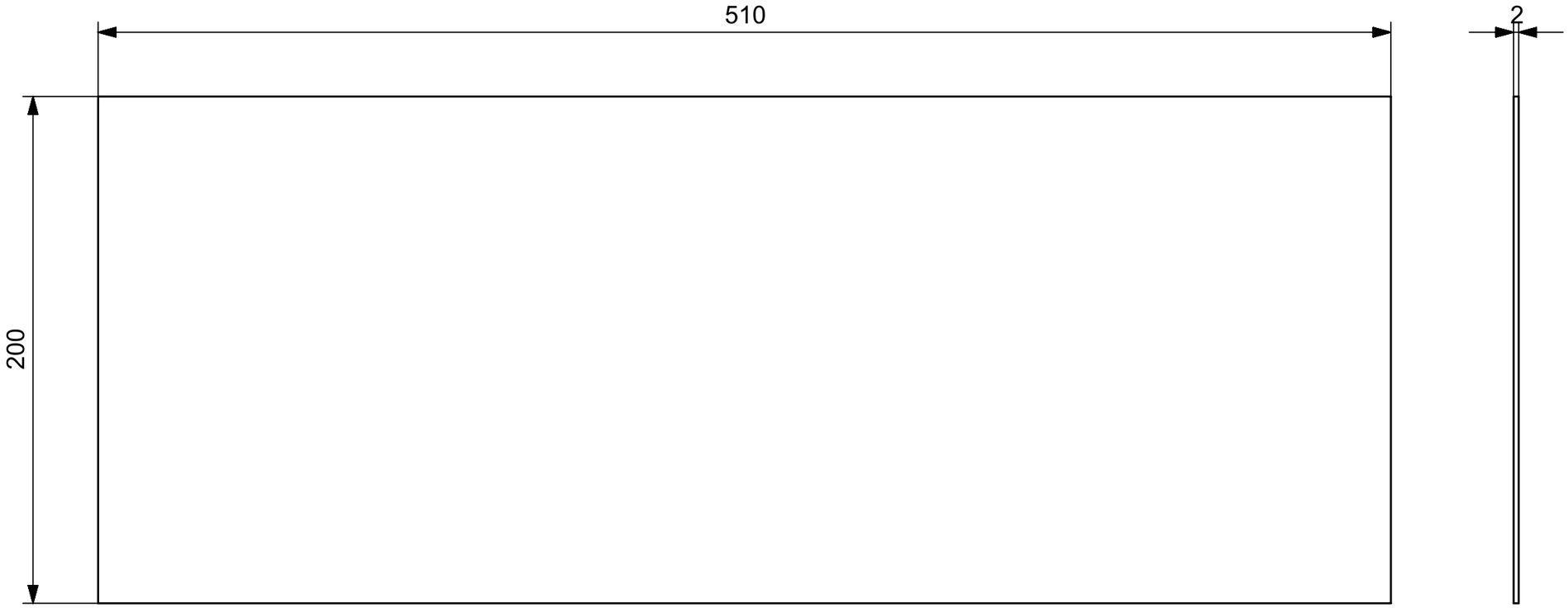

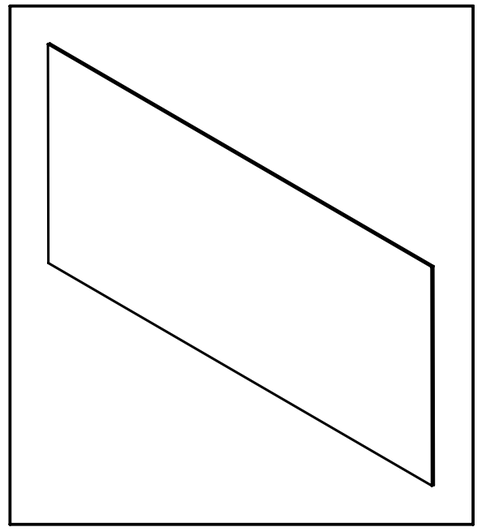

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:2 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Top Funnel Plate, Small	
gezeichnet von designed by	26.03.2024	P. COLBACH	Baugruppe / parent assembly: Cover	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 1	Dateiname / file name: M_Top_Funnel_Plate_S_dwg

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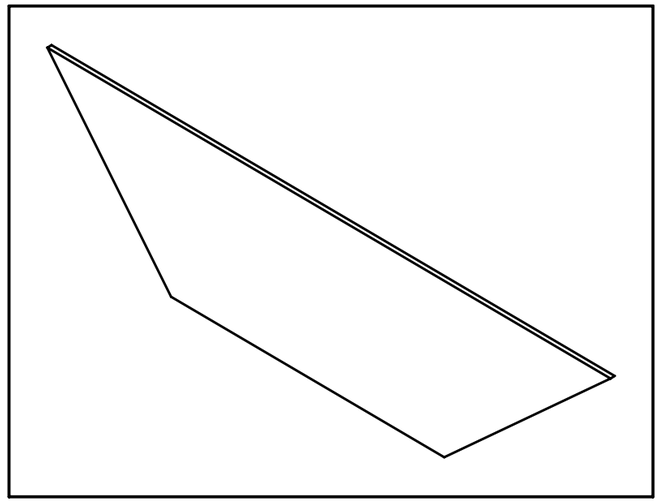

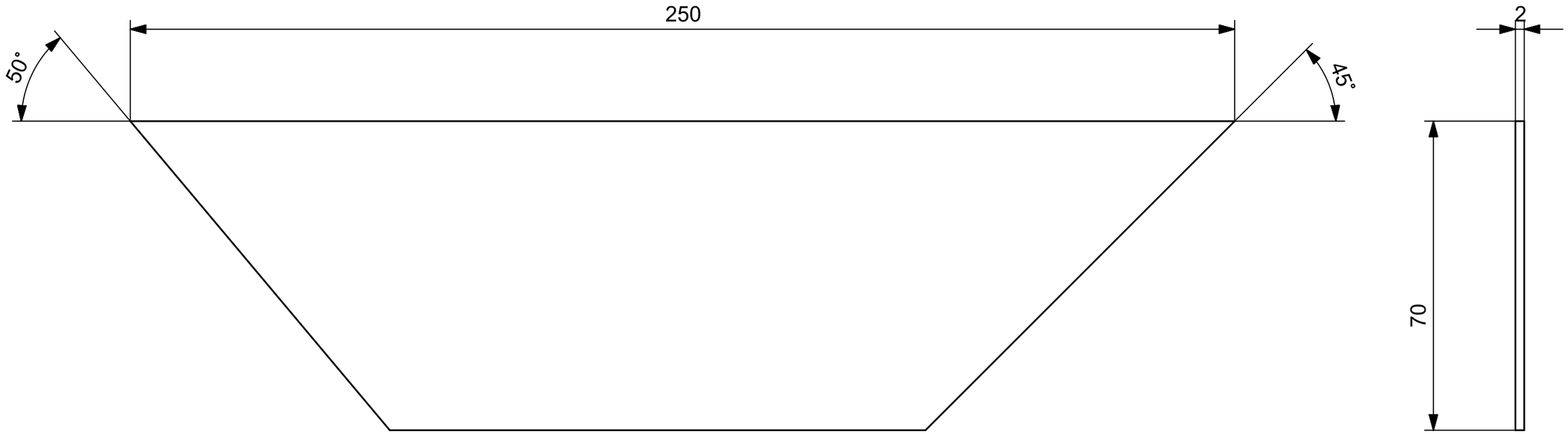

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:1 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Top Funnel Side Panel	
gezeichnet von designed by	26.03.2024	P. COLBACH	Baugruppe / parent assembly: Cover	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 2	Dateiname / file name: M_Top_Funnel_Side_dwg

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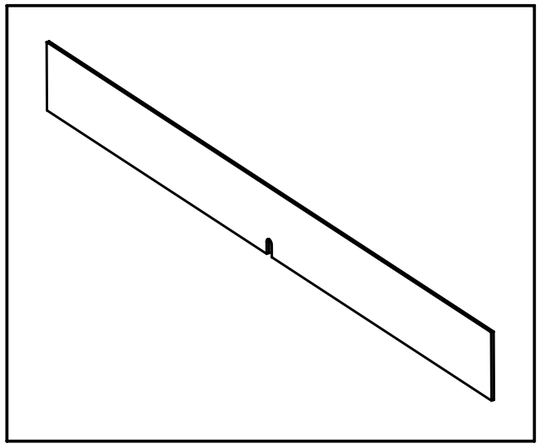

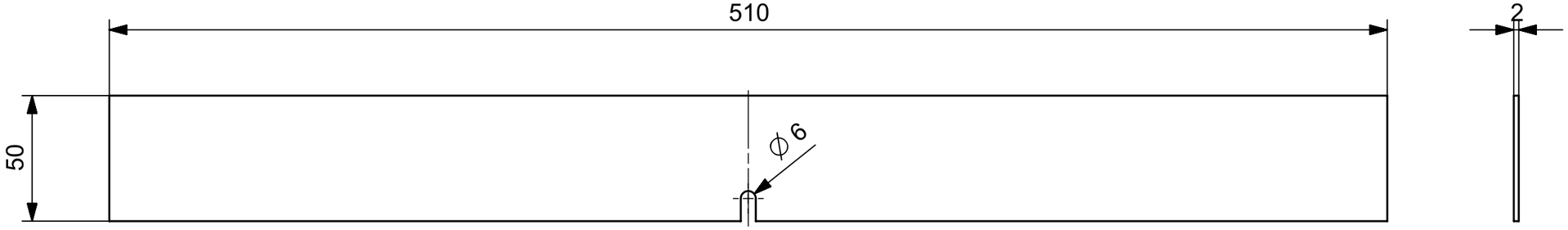

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment Anti-Rust Coating	Mst. / scale: 1:2 — Format / size: A3
			Name / part name Top Funnel Support Strip	Einheit / unit: mm — Blatt / sheet: 1/1
gezeichnet von designed by	26.03.2024	P. COLBACH	Baugruppe / parent assembly Cover	Projekt / project: Glass Crusher — rev.
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity 1	Dateiname / file name M_Top_Funnel_Support_dwg

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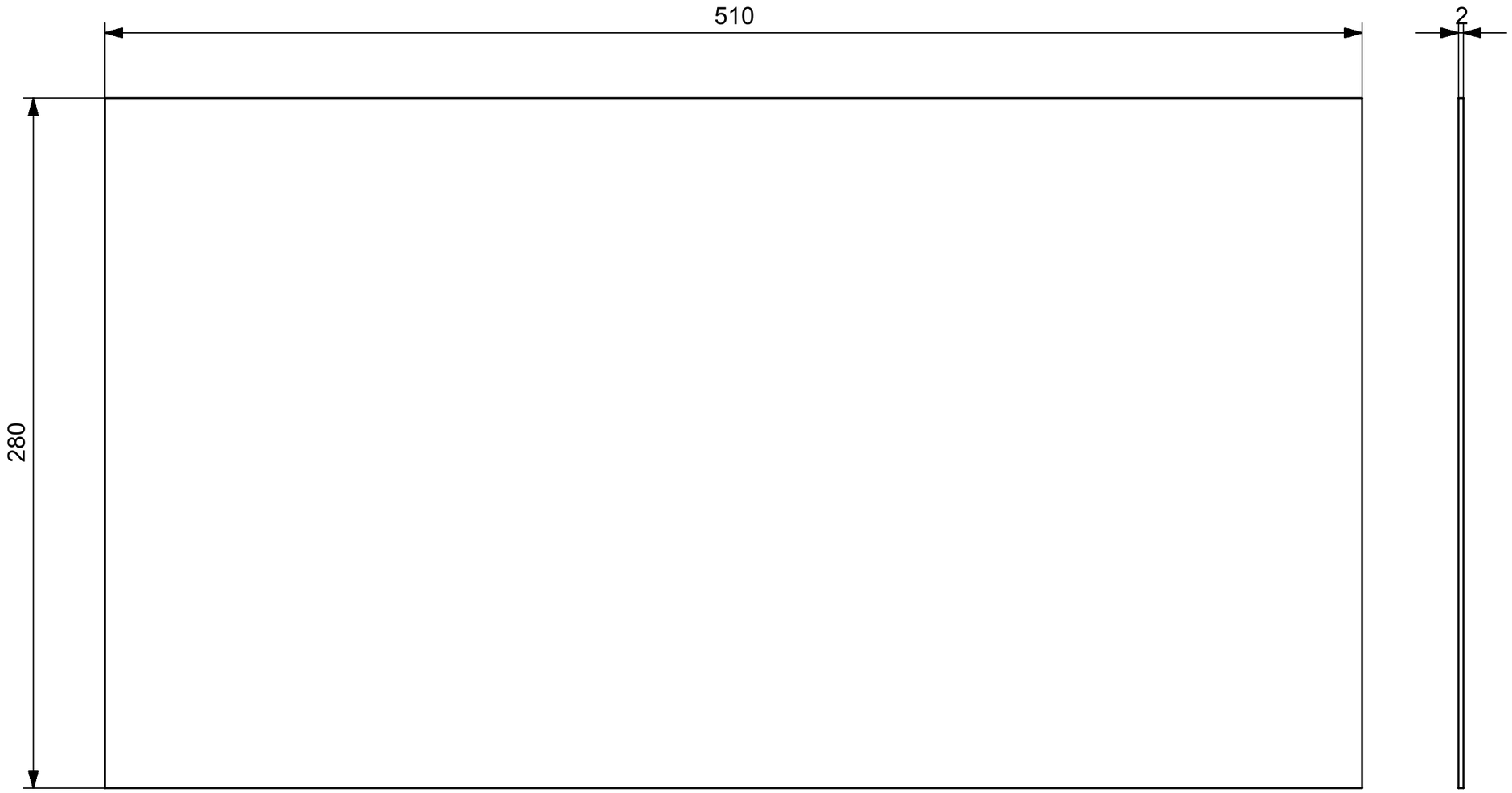

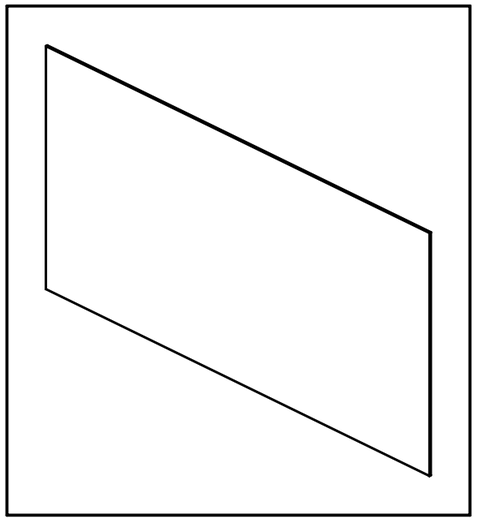

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:2 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Chute Plate	
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly	Projekt / project: Glass Crusher — rev.
			Cover	
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity	Dateiname / file name
			1	M_Chute_Plate_dwg

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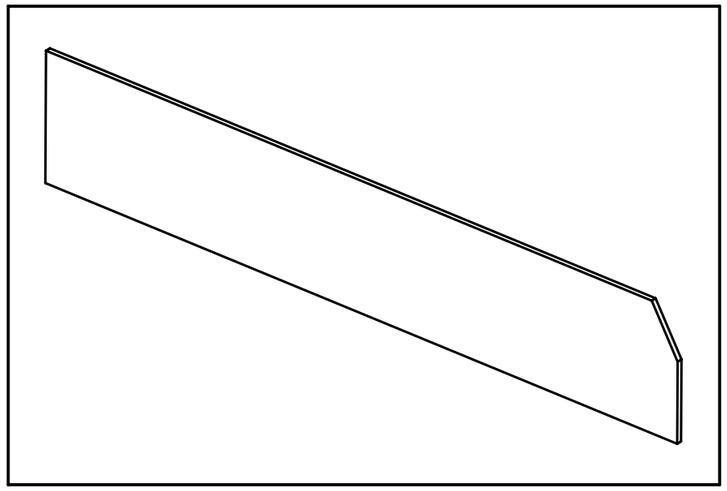

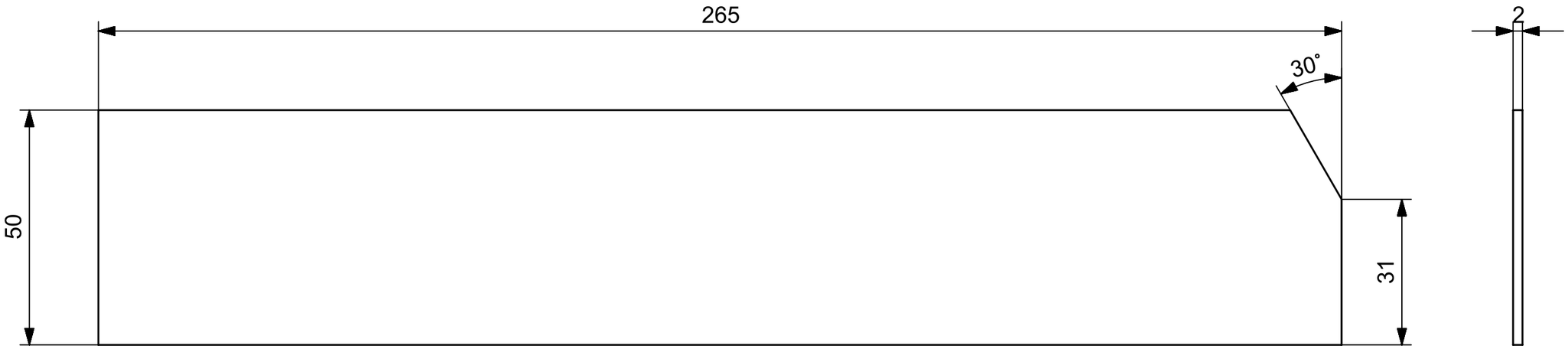

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:1 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Chute Side Rail	
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly: Cover	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 2	Dateiname / file name: M_Chute_Side_dwg

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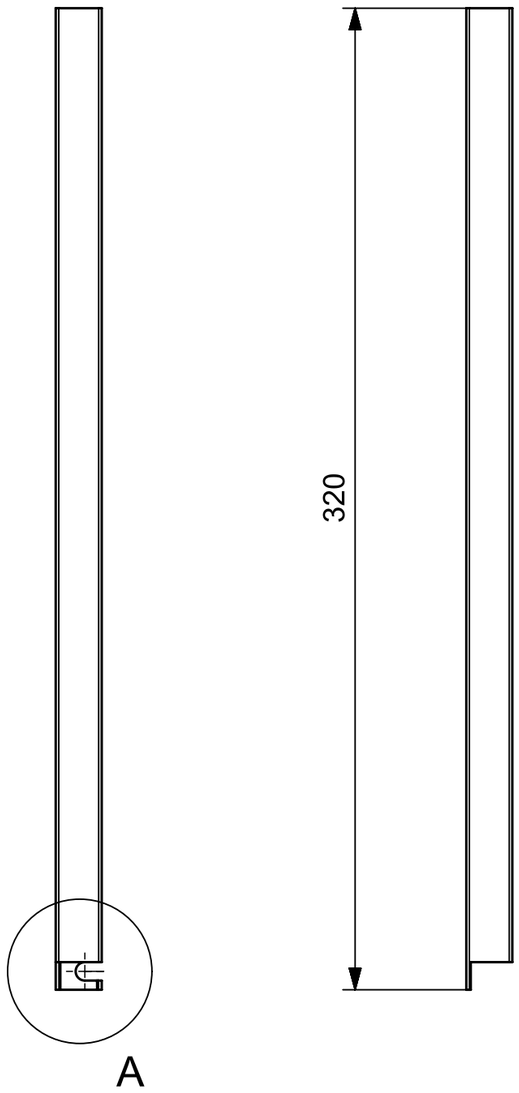

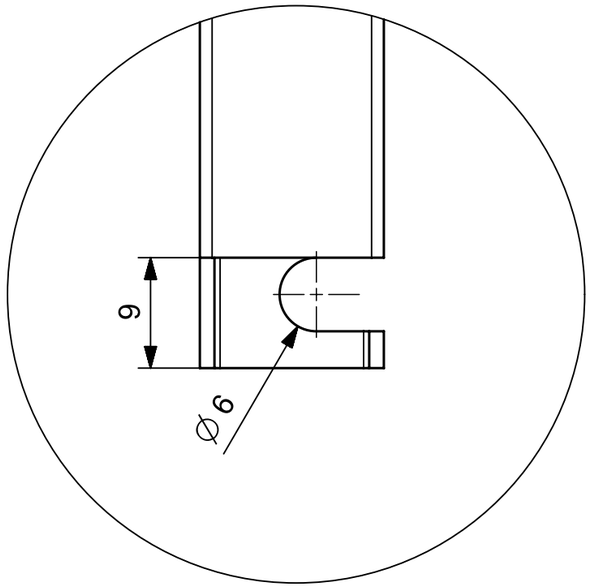

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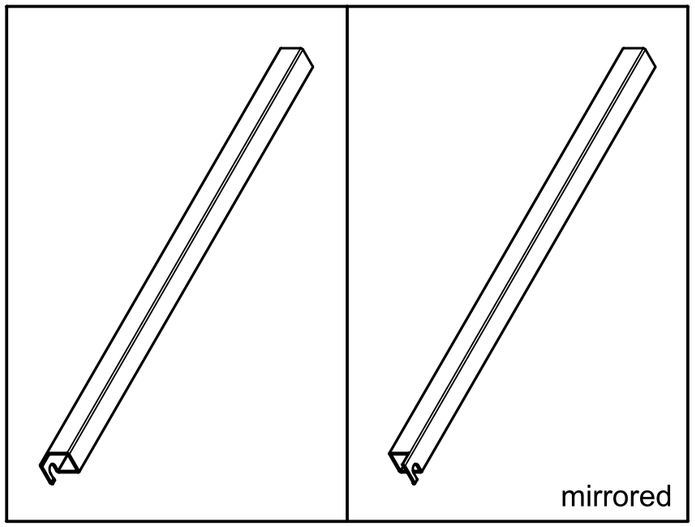

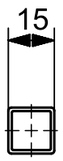

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:2 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Cover Support	
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly: Cover	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 2 (1 mirrored)	Dateiname / file name: M_Cover_Support_dwg

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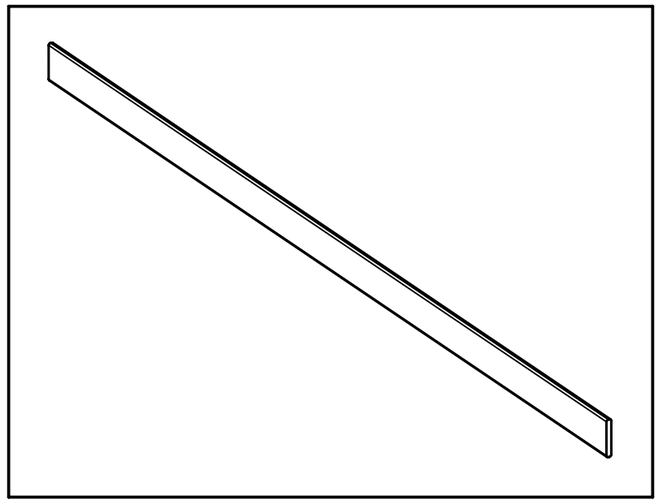

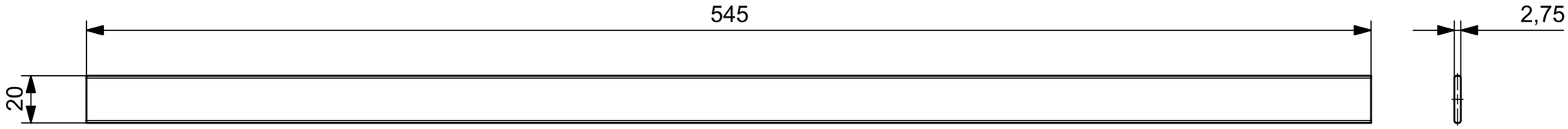

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:2
			Anti-Rust Coating	Format / size: A3
			Name / part name	Einheit / unit: mm
			Cover Crossbar	Blatt / sheet: 1/1
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly: Cover	Projekt / project: Glass Crusher; rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 1	Dateiname / file name: M_Cover_Crossbar_dwg

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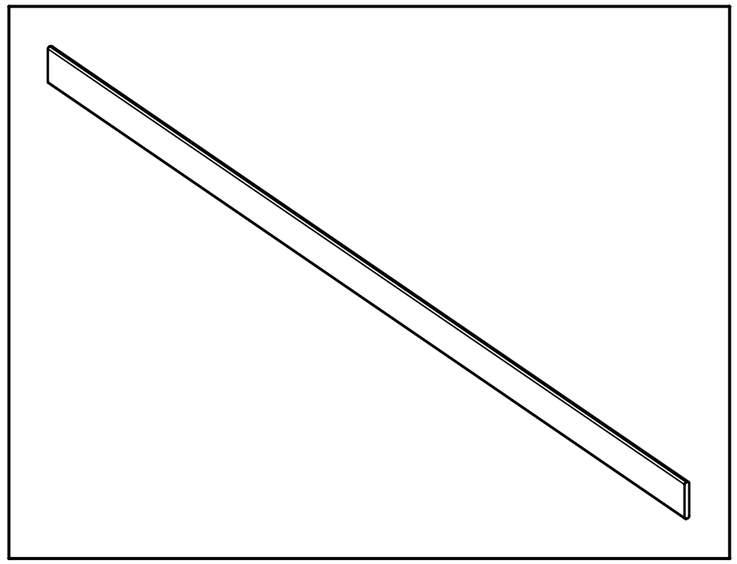

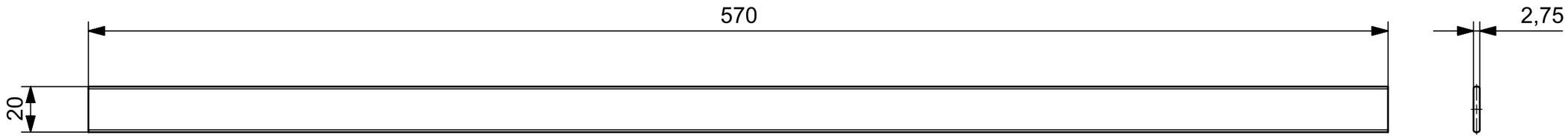

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	
			Anti-Rust Coating	
			Name / part name	
			Cover Strut	
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly	
			Cover	
ETH zürich			Stueckzahl / quantity	
Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			2	

Mst. / scale	Format / size
1:2	A3
Einheit / unit	Blatt / sheet
mm	1/1
Projekt / project	rev.
Glass Crusher	
Dateiname / file name	
M_Cover_Strut_dwg	

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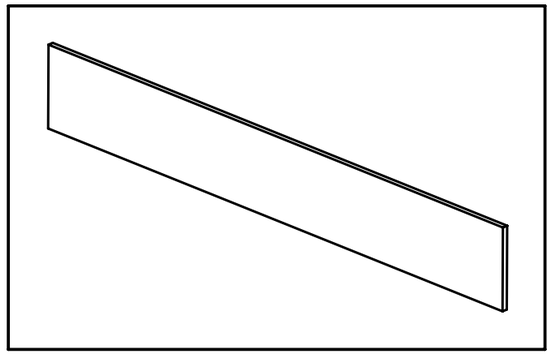

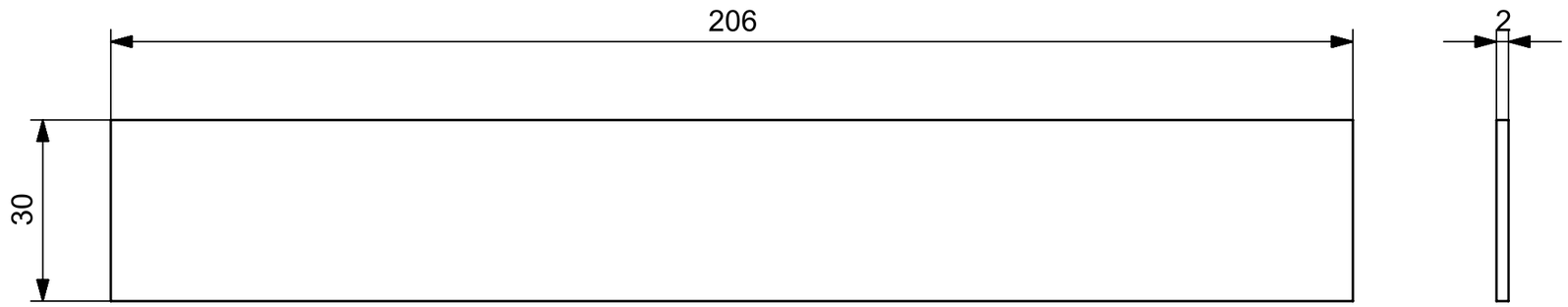

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Mild Steel	
			Oberflaechenbehandlung / surface treatment	Mst. / scale: 1:1 — Format / size: A3
			Anti-Rust Coating	
			Name / part name	Einheit / unit: mm — Blatt / sheet: 1/1
			Chute Support	
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly: Cover	Projekt / project: Glass Crusher — rev.
ETH zürich — Eidgenoessische Technische Hochschule Zuerich, Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity: 2	Dateiname / file name: M_Chute_Support_dwg

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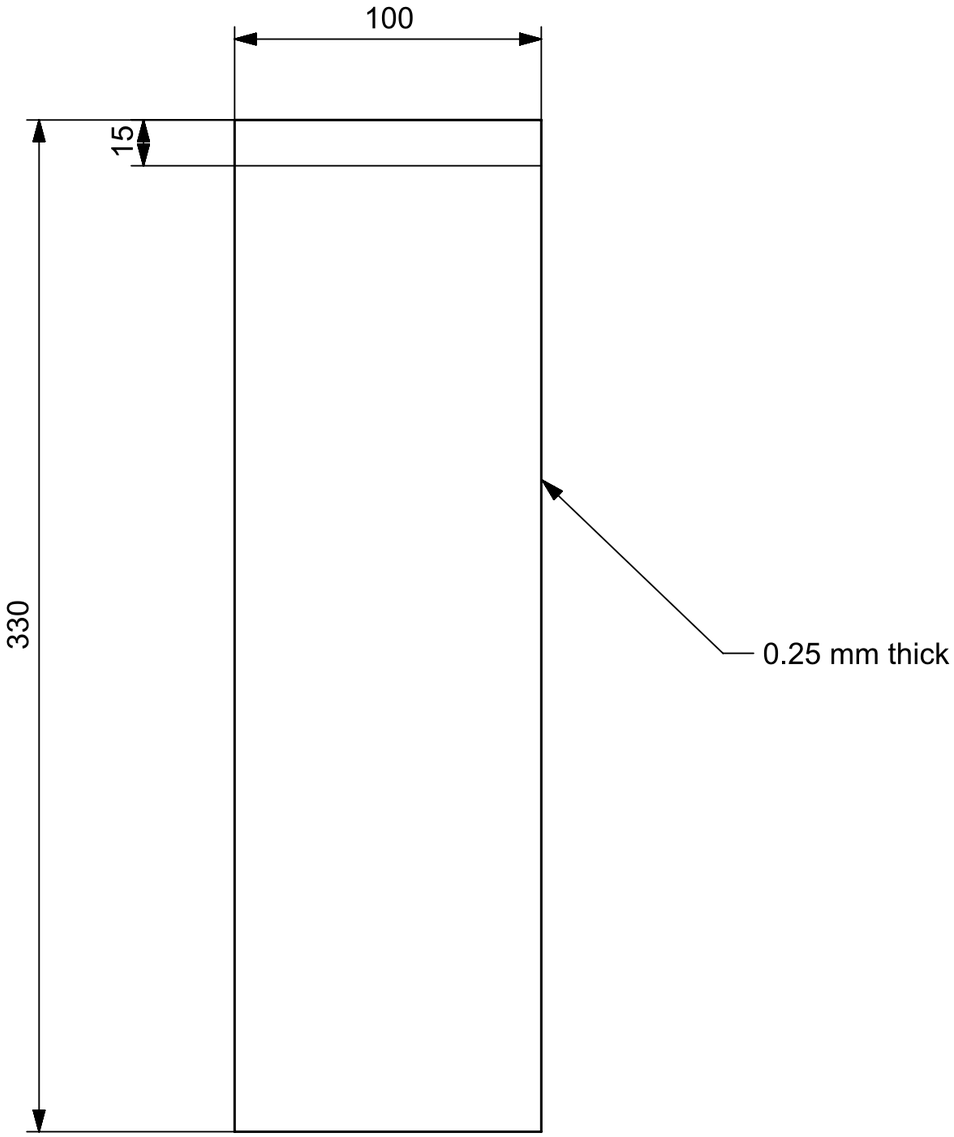

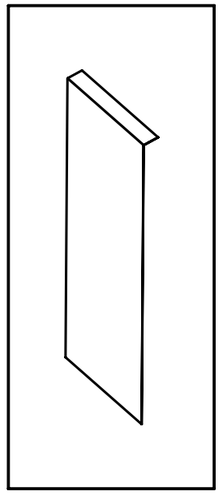

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Soft Plastic	
			Oberflaechenbehandlung / surface treatment -	Mst. / scale: 1:2 — Format / size: A3
			Name / part name Protective Front Flap	Einheit / unit: mm — Blatt / sheet: 1/1
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly Cover	Projekt / project: Glass Crusher — rev.
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity 6	Dateiname / file name M_Front_Flap_dwg

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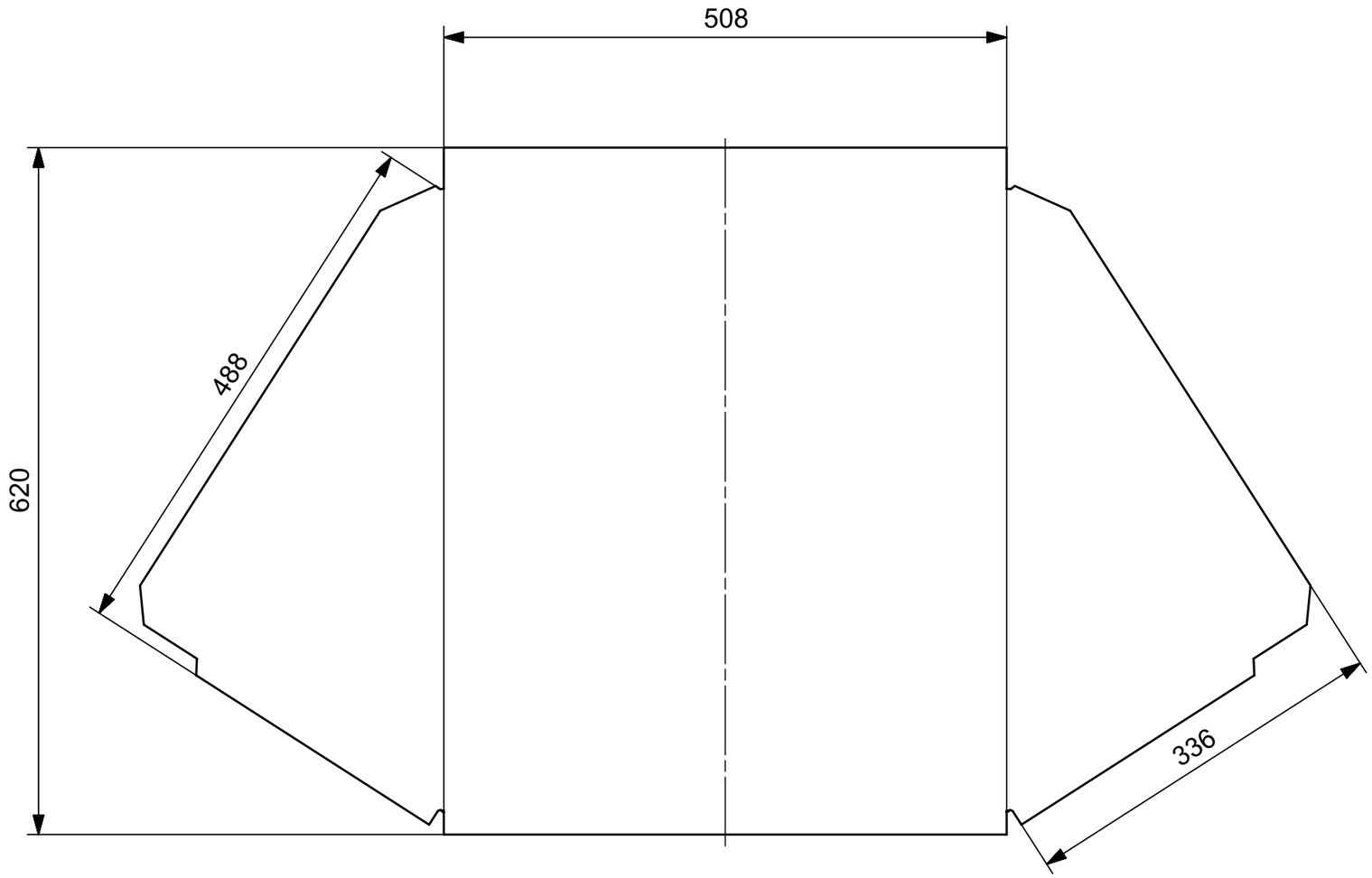

These dimensions serve as a guideline only.
To ensure that the cover properly fits the crusher,
it must always be made to measure.

Aenderungsstand / change state			Werkstoff / material	
revision	date	name	Rubber	
			Oberflaechenbehandlung / surface treatment -	Mst. / scale 1:5 — Format / size A3
			Name / part name Soft Cover	Einheit / unit mm — Blatt / sheet 1/1
gezeichnet von designed by	02.04.2024	P. COLBACH	Baugruppe / parent assembly Cover	Projekt / project Glass Crusher — rev.
ETH zürich Eidgenoessische Technische Hochschule Zuerich Swiss Federal Institute of Technology Zurich			Stueckzahl / quantity 1	Dateiname / file name M_Soft_Cover_dwg

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