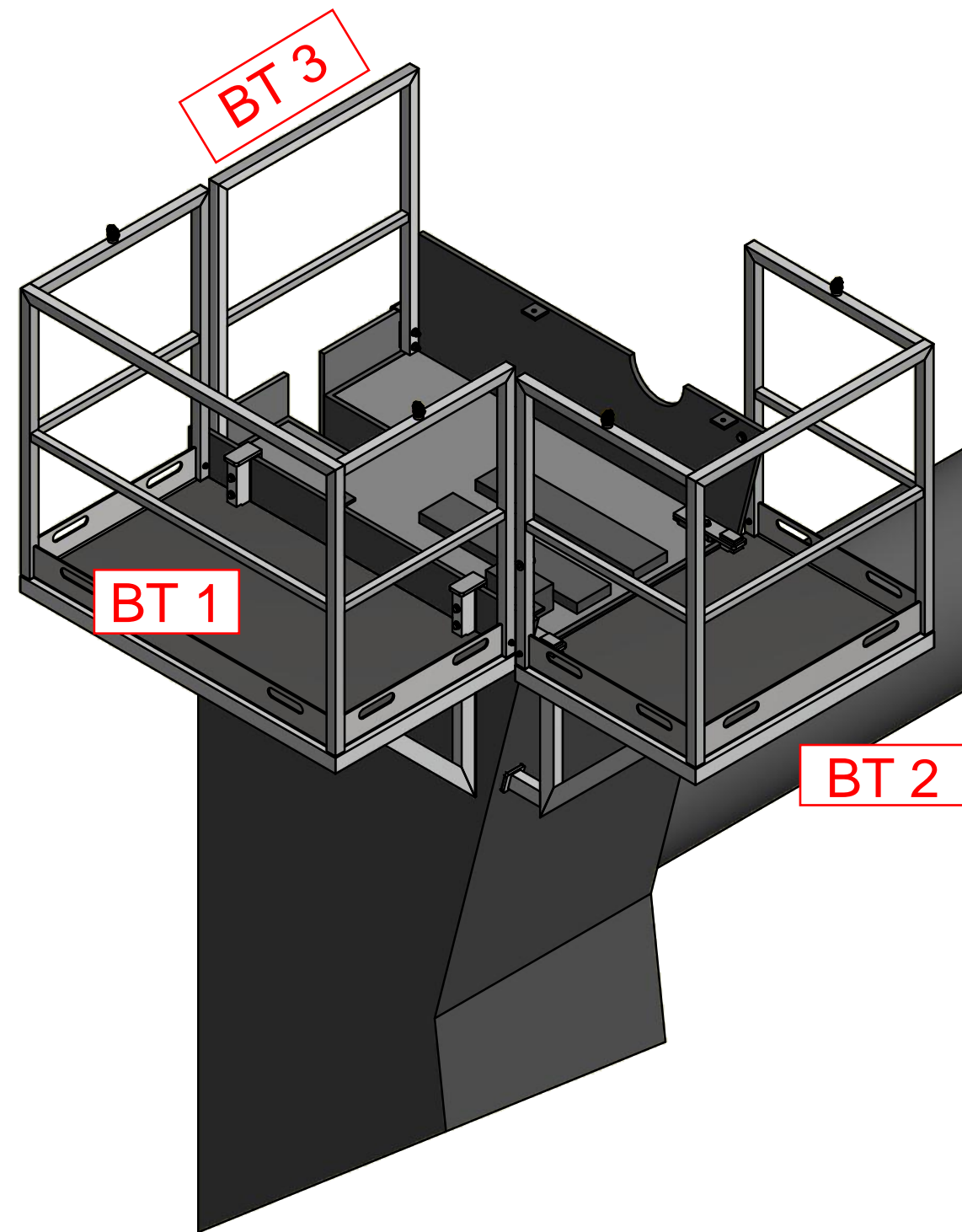
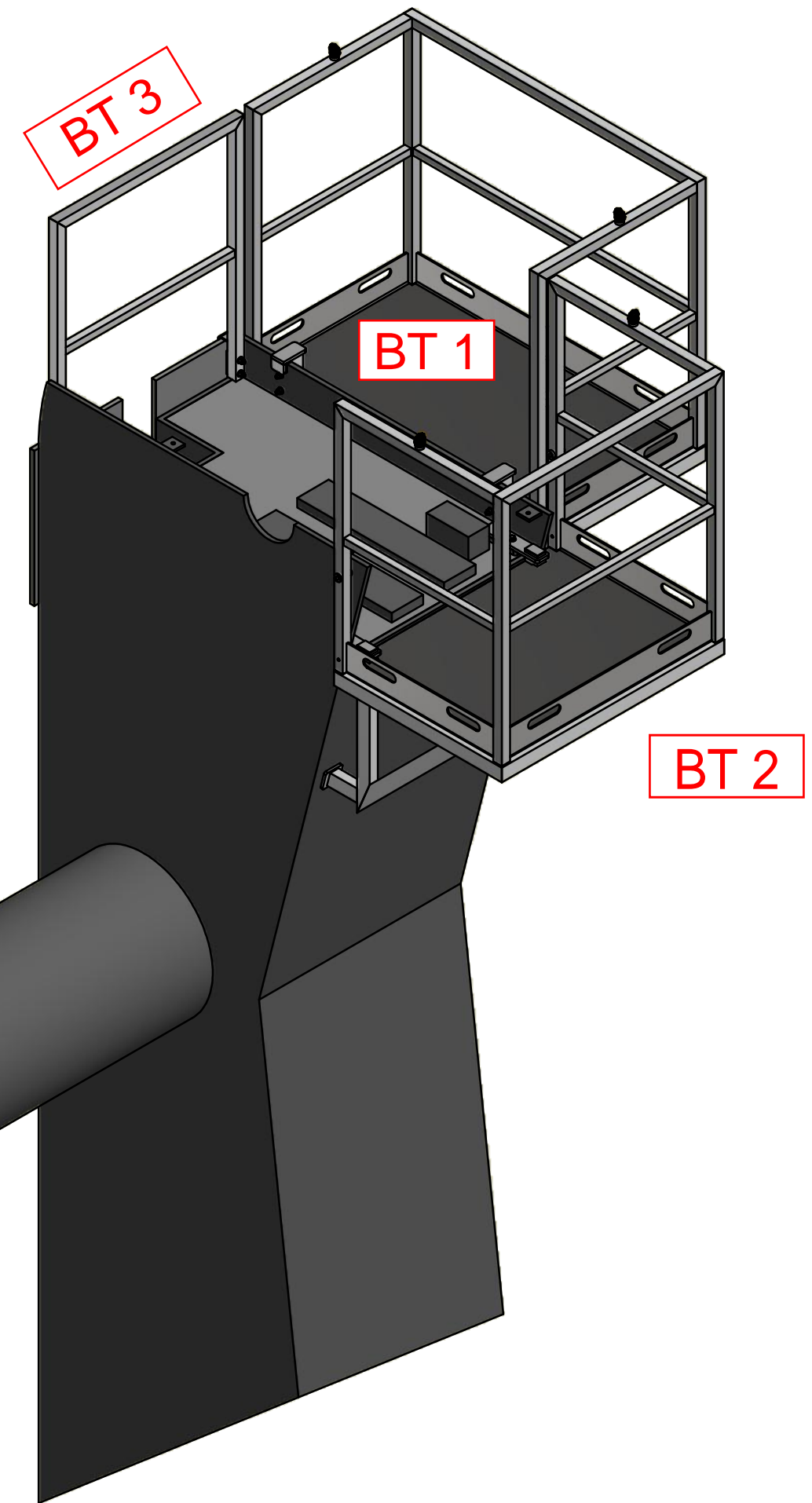


Eingehängen der Bühnenteile am linken Pylon mittels Hubsteiger und Kran



Eingehängte Bühnenteile am rechten Pylon



Halbschale des Drehlagers am Pylonkopf



Je Pylon sind drei Einhängeteile vorhanden:

- BT 1: Langes Bühnenelement mit Geländer
- BT 2: Kurzes Bühnenelement mit Geländer
- BT 3: Einzelnes Geländerelement

| | gezeichnet | bearbeitet | geprüft | freigegeben | Werkstoff | Masse | Blatt | Format |
|-------|------------|------------|---------|-------------|--------------------------------|-------|-------|--------|
| Name | T. Lühr | - | | | - | - | 1 / 1 | A2 |
| Datum | 15.03.2018 | - | | | Schutzvermerk DIN - 34 - 1 - D | | | |

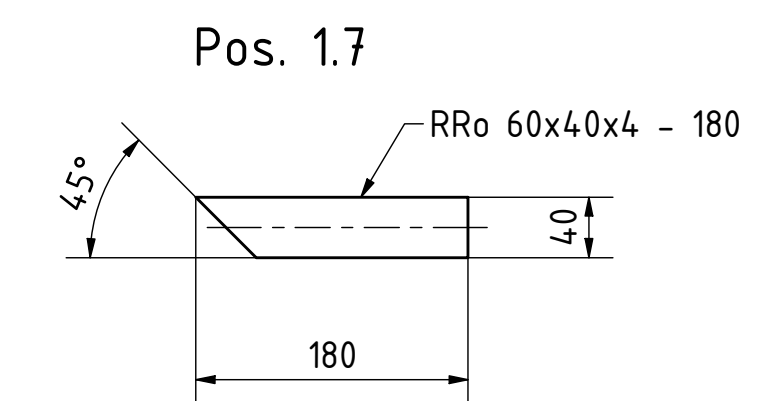
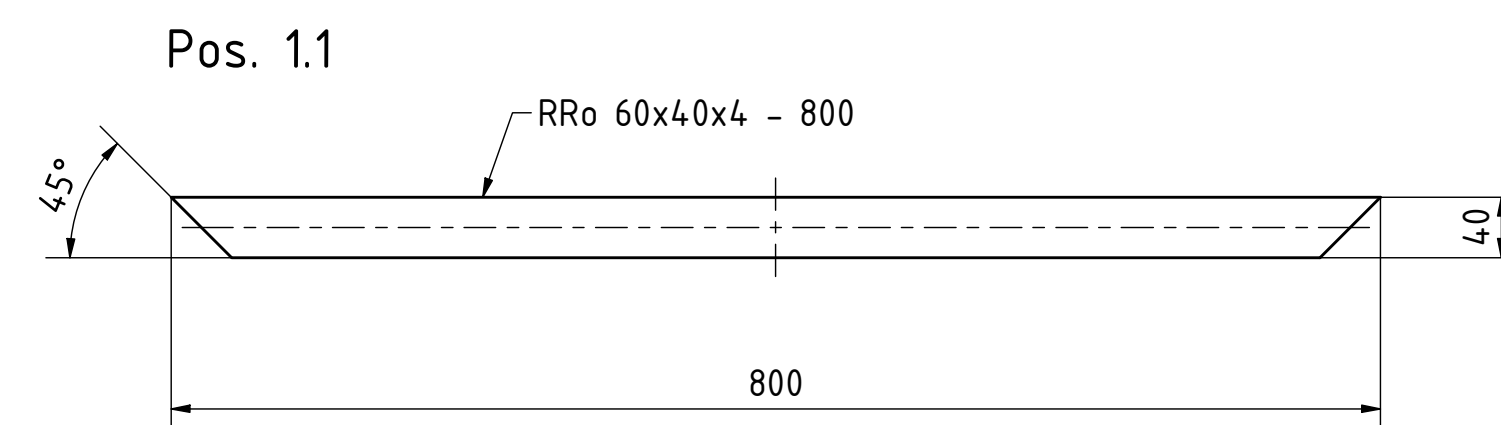
| | | |
|---|--|----------|
|  KARL WREDE <i>Stahl- und Maschinenbau GmbH</i> Standort Itzehoe IZET - Fraunhoferstraße 3 D-25524 Itzehoe Tel: +49 (0) 4821 778-474 Fax: +49 (0) 4821 778-105 info@karl-wrede.de www.karl-wrede.de | Benennung | |
| | Isometrische Ansicht | |
| | 5.222 - 10000 - TC-Hydraulik - Wartungsbühne | |
| | Projekt | |
| Zeichnungsnummer | | Revision |
| Z-5.222-10000-IS-OA-A | | A |

| | | | |
|--|----------------------|---|---------|
| Auftraggeber | ISO 2768-mH | ISO 13715 | Maßstab |
| | Tolerierung ISO 8015 |  | |
| TC-Hydraulik GmbH | | | |
| Zeichnung Z-5.222-10000-IS-OA-A - TC-Hydraulik - Wartungsbühne/CAD-Zeichnung | | | |

Technical drawing of a table showing dimensions and a section line A-A. The overall width is 1400, the width of the table top is 1360, and the width of the base is 1000. The section line A-A is indicated by arrows pointing to the right.

[illegible]

Technical drawing of a mechanical part, likely a bracket or support. The drawing shows a side view with a central vertical section and a horizontal section at the top. Dimensions are indicated: a vertical dimension of 60 on the left, a vertical dimension of 65 on the left, a horizontal dimension of 30 at the top right, and a horizontal dimension of 30 at the top right. The part features a central vertical section with a curved profile and a horizontal section at the top. The drawing includes a dashed line indicating a hidden edge. Labels 'a4' and 'alle' are present, with 'a4' pointing to a specific feature and 'alle' pointing to the bottom edge. The drawing is a technical sketch of a mechanical part, likely a bracket or support. It shows a side view with a central vertical section and a horizontal section at the top. Dimensions are indicated: a vertical dimension of 60 on the left, a vertical dimension of 65 on the left, a horizontal dimension of 30 at the top right, and a horizontal dimension of 30 at the top right. The part features a central vertical section with a curved profile and a horizontal section at the top. The drawing includes a dashed line indicating a hidden edge. Labels 'a4' and 'alle' are present, with 'a4' pointing to a specific feature and 'alle' pointing to the bottom edge.



Technical drawing of a rectangular plate. The plate has a length of 1400 and a thickness of 0.7. The material is specified as RRo 60x40x4 - 1400. The drawing shows a 45° chamfer on the top-left corner. A dashed line indicates the centerline of the plate.

Technical drawing of a mechanical part, showing two views: a front view (top) and a side view (bottom).

Front View (Top):

- Overall length: 809
- Overall diameter: 40
- Central hole diameter: $\phi 18$
- Distance from left end to hole center: 125
- Distance from hole center to right end: 60
- Material specification: RRo 60x40x4 - 809

Side View (Bottom):

- Overall width: 60
- Overall length: 809
- Sloped top surface with a height of 17 at the right end.

Technical drawing of a rectangular plate with a hole. The plate has a width of 30 and a height of 80. A hole with a diameter of 9 is located 56 from the bottom edge. The hole is centered horizontally.

Technical drawing of a rectangular plate with dimensions and a hole. The drawing includes a top view and a side view. The top view shows a rectangle with overall dimensions of 1366 mm by 776 mm. A hole with a diameter of 155 mm is located 37.5 mm from the top edge and 155 mm from the left edge. The hole has a depth of 35 mm. The side view shows the plate's thickness of 13 mm and the hole's depth of 35 mm. The hole is labeled with a diameter symbol and the letter 'Y'.

Technical drawing of a rectangular plate with dimensions and hole locations. The drawing shows a rectangular plate with a width of 920 and a height of 155. The plate has four holes, one in each corner. The holes are located at a distance of 155 from the corners. The holes have a diameter of 35. The plate has a thickness of 6. The drawing also shows the following dimensions: 895, 857, 770, 750, 593, 175,5, 53, 36, 0, 1000, 1355, 1529, 1604, and R6 (all e).

RRo 60x40x4 - 820

60

45°

820



22.5°

Technical drawing of a cylinder with the following dimensions: diameter $\varnothing 18$, height 25, length 60, and a chamfer of 1,5x45.

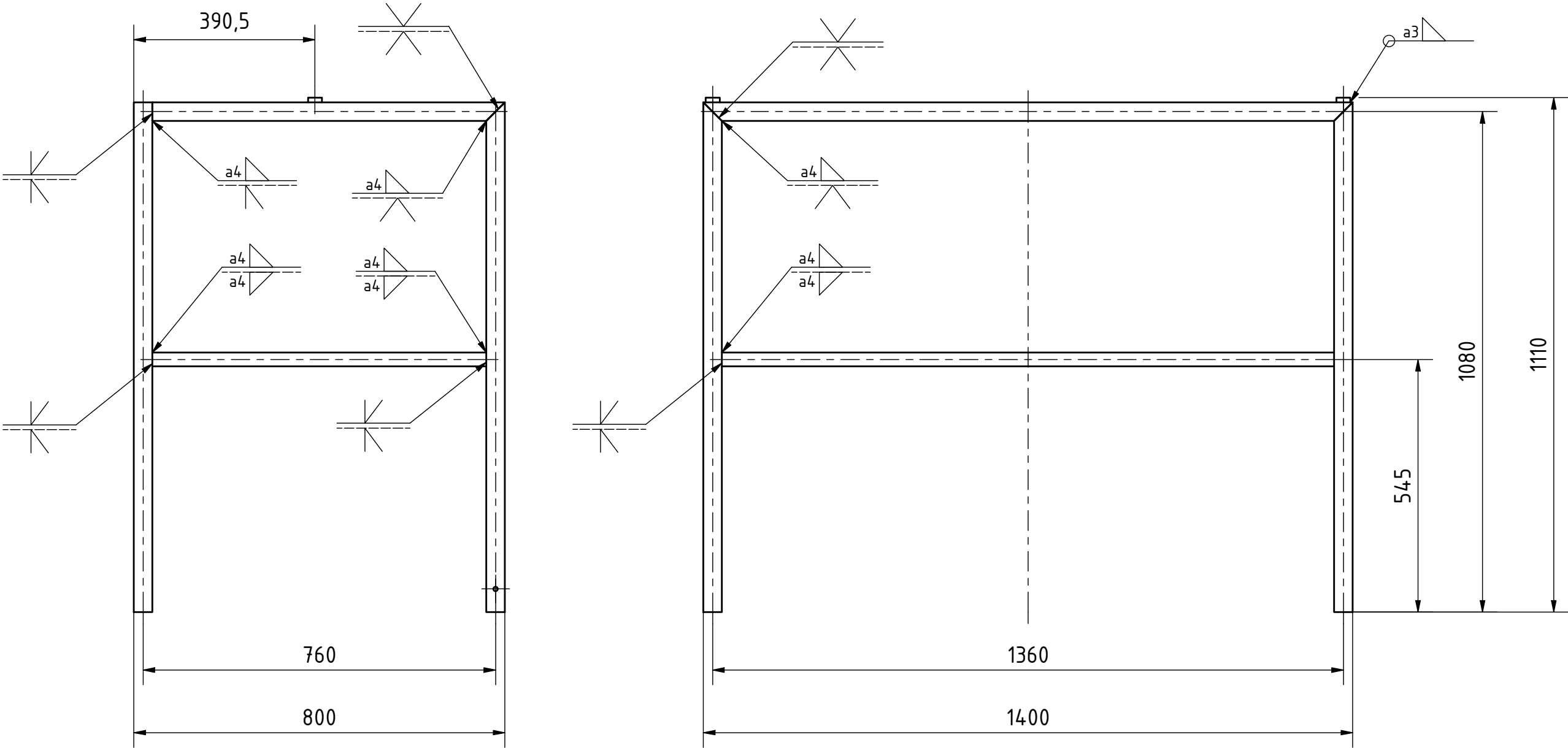
Technical drawing of a mechanical part with dimensions: 41, 52, 33, and 53.



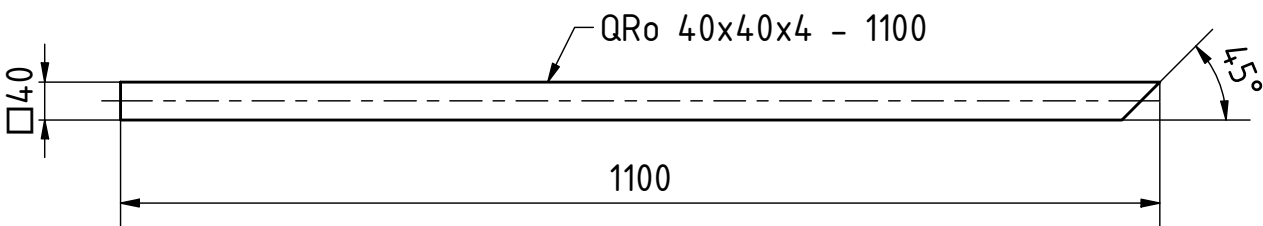
| | | | | | |
|------|------|------------------|-----------------------------|-----------|---------|
| 1.13 | 4 | Durchführung | Ro Ø18x2,5 - 60 | AlMgSi | 0 kg |
| 1.12 | 2 | Blech | Bl 12x44x60 | AlMg3 | 0,2 kg |
| 1.11 | 2 | Blech | Bl 12x60x112 | AlMg3 | 0,1 kg |
| 1.10 | 1 | Tränenblech | TrBl 6x89x1605 | AlMg3 | 22,6 kg |
| 1.9 | 2 | Aufnahme gebohrt | RRo 30x30x3 - 80 | AlMgSi | 0,1 kg |
| 1.8 | 2 | Aufnahme | RRo 30x30x3 - 80 | AlMgSi | 0,1 kg |
| 1.7 | 2 | Rechteckrohr | RRo 60x40x4 - 180 | AlMgSi | 0,3 kg |
| 1.6 | 1 | Rechteckrohr | RRo 60x40x4 - 960 | AlMgSi | 2 kg |
| 1.5 | 2 | Rechteckrohr | RRo 60x40x4 - 820 | AlMgSi | 1,5 kg |
| 1.4 | 2 | Rechteckrohr | RRo 60x40x4 - 809 | AlMgSi | 1,5 kg |
| 1.3 | 2 | Rechteckrohr | RRo 60x40x4 - 700 | AlMgSi | 1,4 kg |
| 1.2 | 1 | Rechteckrohr | RRo 60x40x4 - 1400 | AlMgSi | 2,8 kg |
| 1.1 | 2 | Rechteckrohr | RRo 60x40x4 - 800 | AlMgSi | 1,6 kg |
| Pos. | Men. | Benennung | Norm-Kurzbez./Zeichnungsnr. | Werkstoff | Masse |

| | | | | | | | | |
|--|------------|------------|------------|---|--------------------------------|--|-------|---------|
| | | | | Stückliste | | | | |
| | gezeichnet | bearbeitet | geprüft | freigegeben | Werkstoff | Masse | Blatt | Format |
| Name | T. Lühr | A. Meyer | T. Lühr | J. Wrede | | 41 kg | 2 / 7 | A1 |
| Datum | 16.04.2018 | 24.09.2019 | 16.10.2019 | 16.10.2019 | Schutzvermerk DIN - 34 - 1 - D | | | |
|  KARL WREDE Stahl- und Maschinenbau GmbH Standort Hzeboe IZET - Fraunhoferstraße 3 D-25524 Hzeboe Tel: +49 (0) 4821 778-474 Fax: +49 (0) 4821 778-105 info@karl-wrede.de www.karl-wrede.de | | | | SBG Rahmen lang 5.222 - 20353 - TC-Hydraulik - Arbeitsbühne Projekt Zeichnungsnummer EZ-5.222-20353-00.00-A Revision A | | | | |
| Auftraggeber | | | | ISO 2768-mH Tolerierung ISO 8015 | | ISO 13715  | | Maßstab |
| TC Hydraulik GmbH | | | | Zeichnung J. Wrede 2022-2003-TC-Hydraulik <small>Copyright © 2003-2022 Karl Wrede Stahl- und Maschinenbau GmbH</small> | | | | |

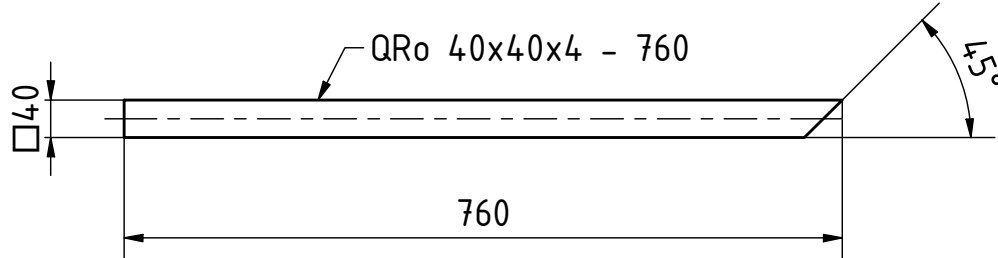
SBG Pos. 2



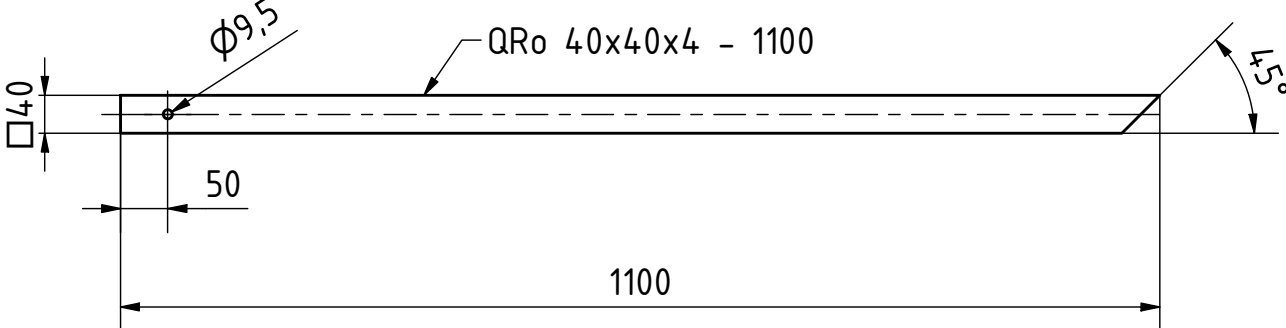
Pos. 2.1



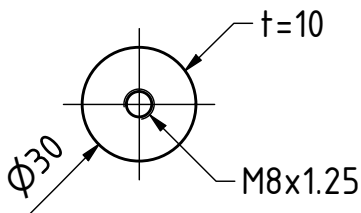
Pos. 2.4



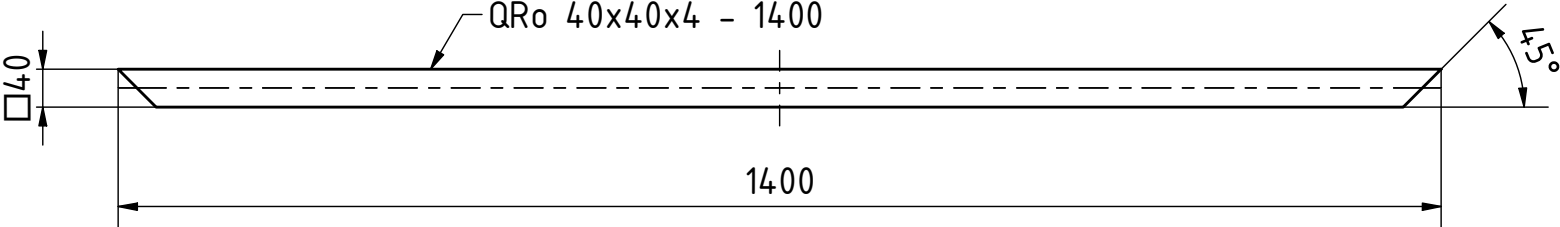
Pos. 2.2



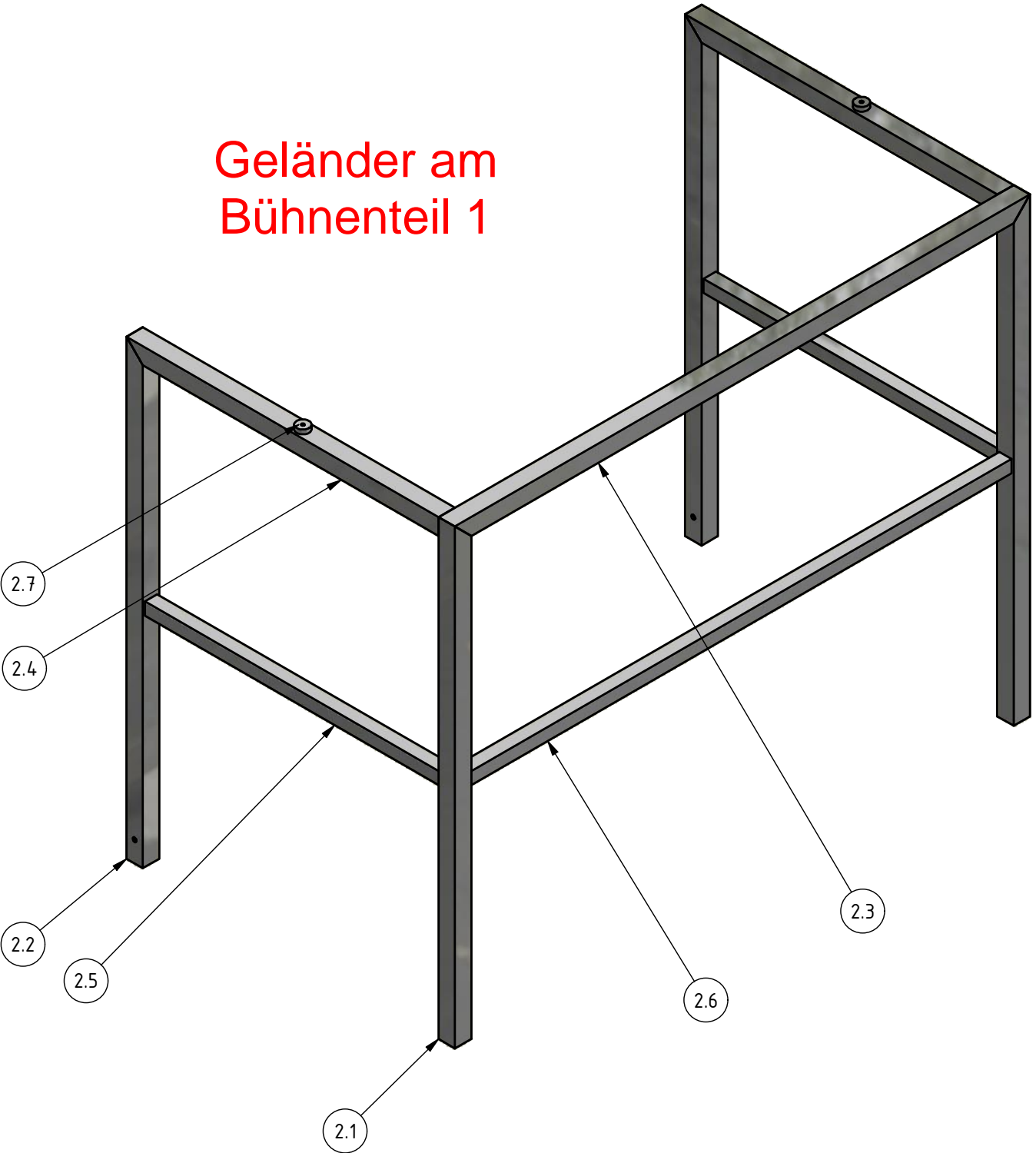
Pos. 2.7



Pos. 2.3

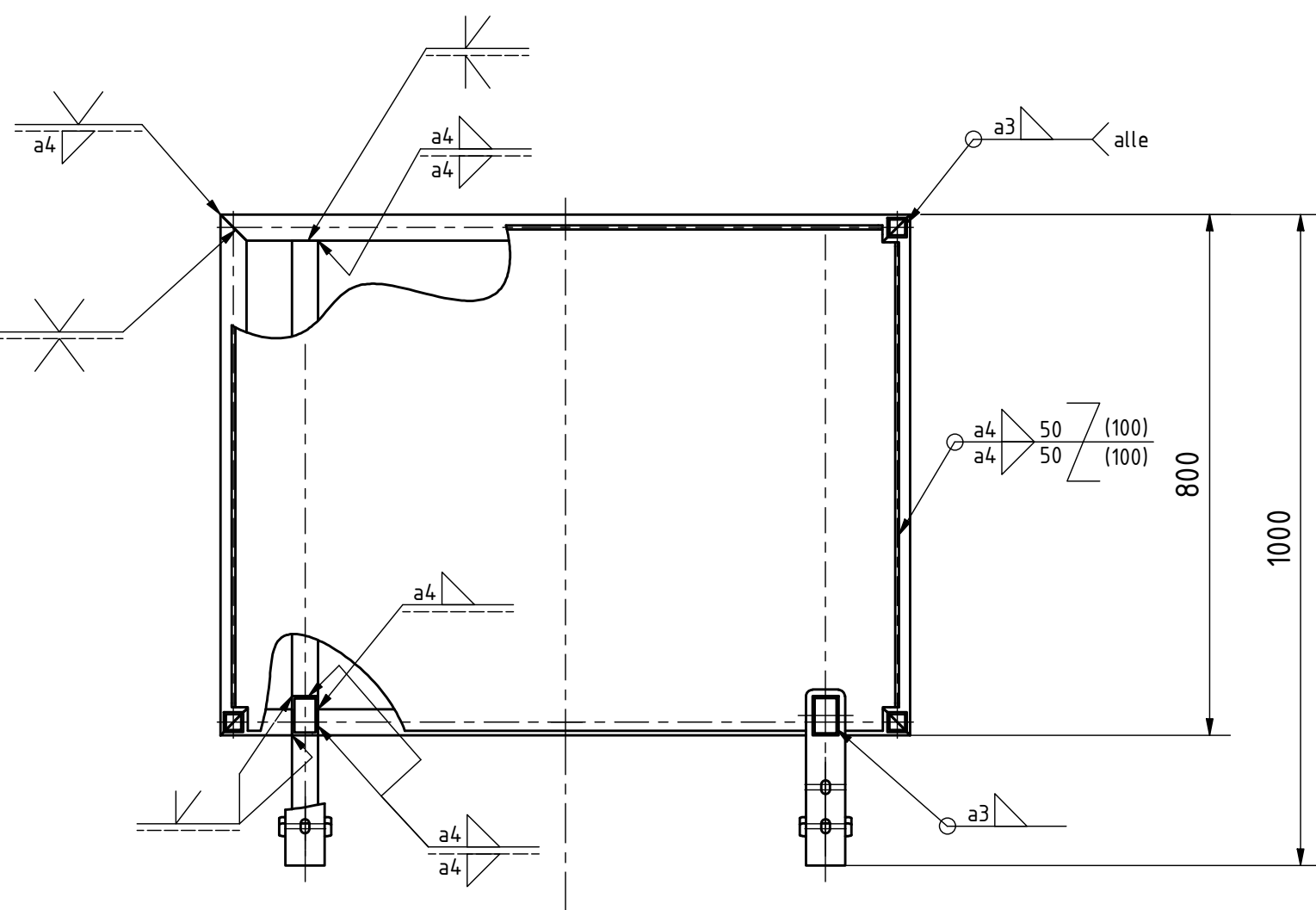
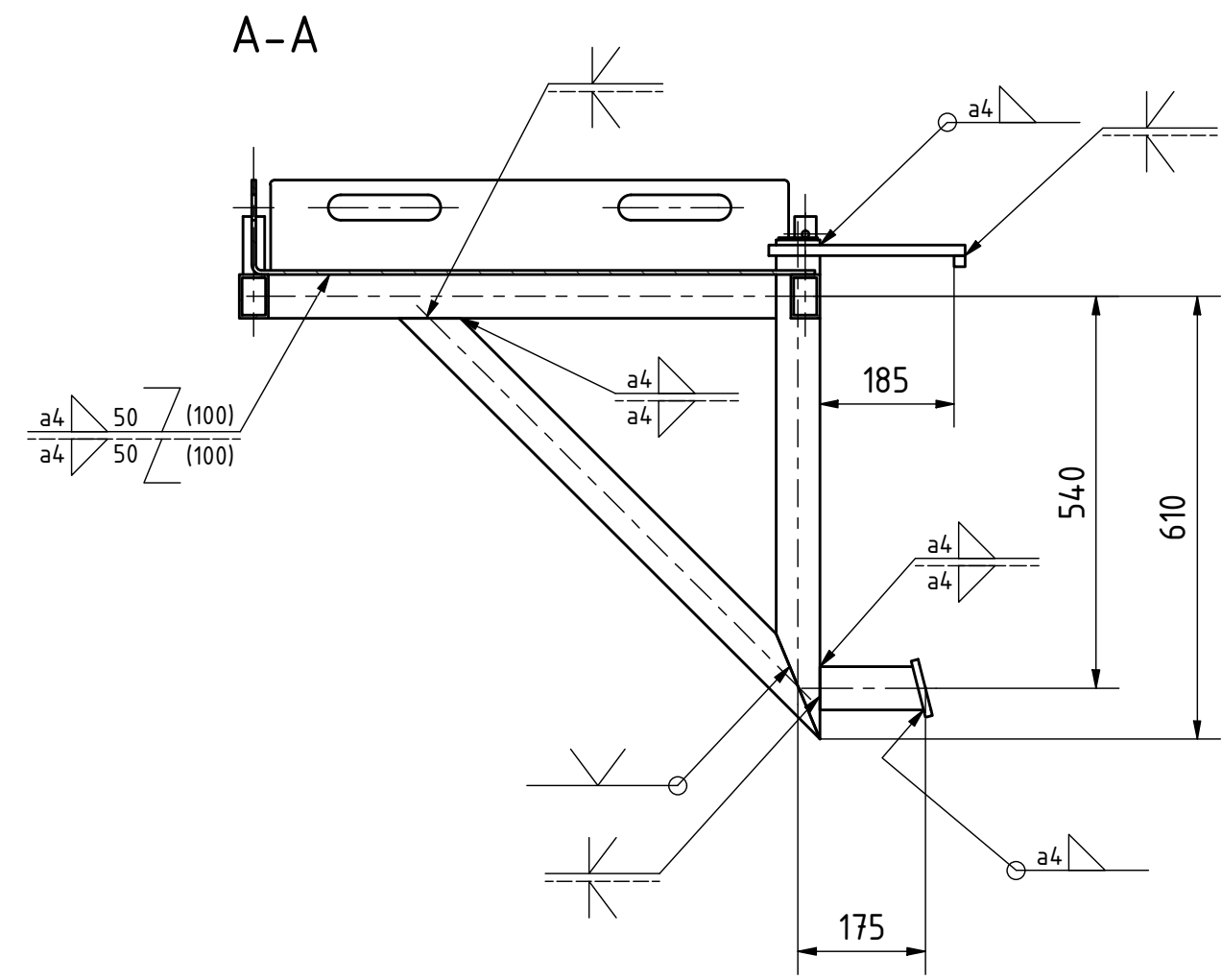
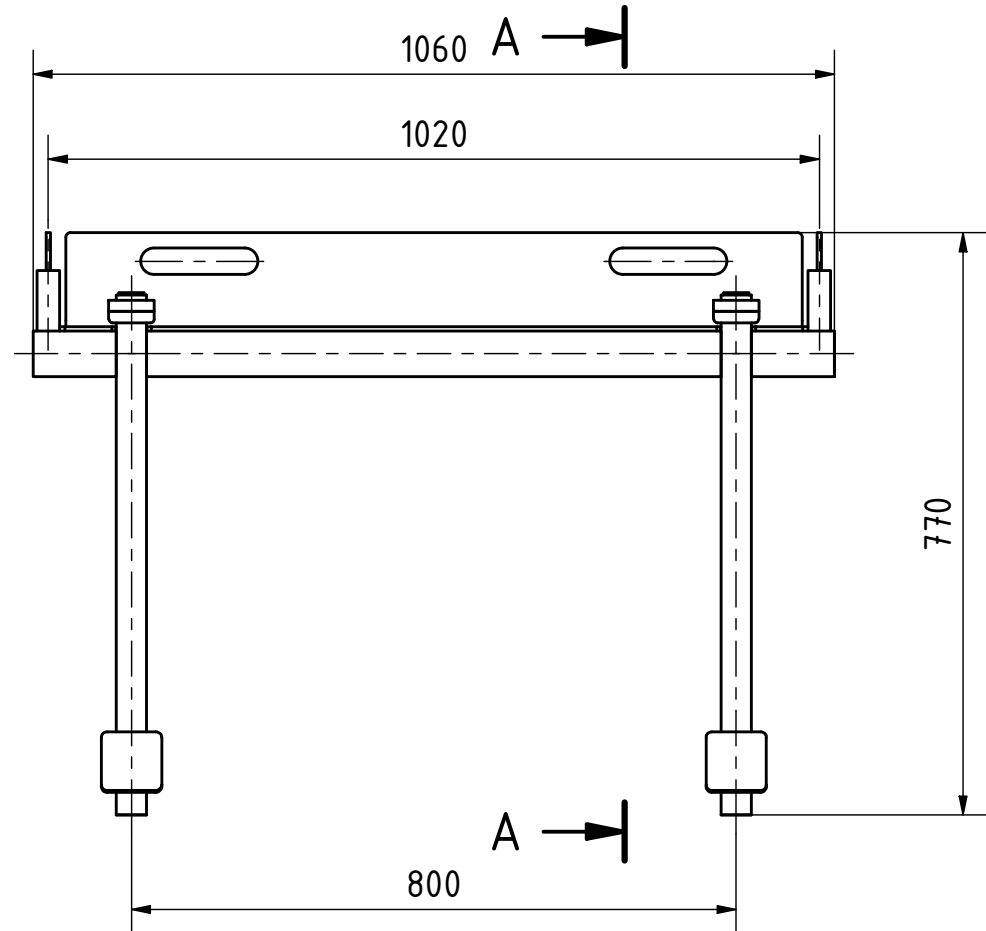


Geländer am
Bühnenteil 1

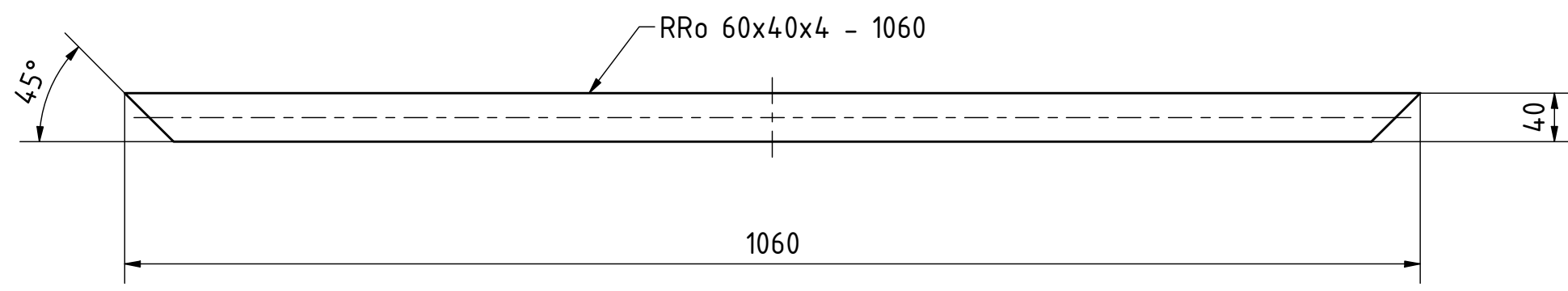


2x fertigen

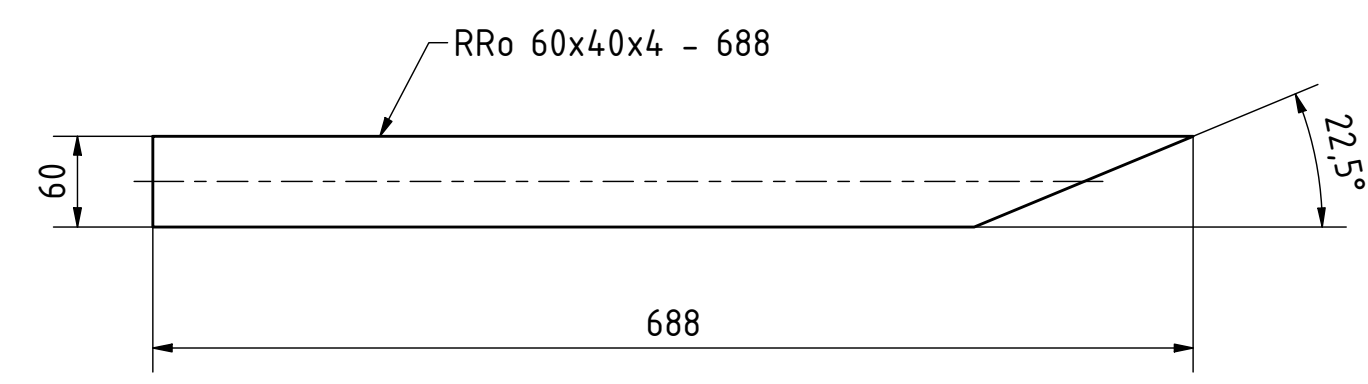
| | | | | | | | |
|--|------------|-----------------------------|-----------------------------|--|--------------------------------|--|----------------------|
| 2.7 | 2 | Distanzronde | Bl 10xØ30 | | AlMg3 | 0 kg | |
| 2.6 | 1 | Knieleiste lang | QRo 30x30x3 - 1320 | | AlMgSi | 1,2 kg | |
| 2.5 | 2 | Knieleiste kurz | QRo 30x30x3 - 720 | | AlMgSi | 0,7 kg | |
| 2.4 | 2 | Handlauf kurz | QRo 40x40x4 - 760 | | AlMgSi | 1,2 kg | |
| 2.3 | 1 | Handlauf lang | QRo 40x40x4 - 1400 | | AlMgSi | 2,2 kg | |
| 2.2 | 2 | Geländerpfosten mit Bohrung | QRo 40x40x4 - 1100 | | AlMgSi | 1,7 kg | |
| 2.1 | 2 | Geländerpfosten | QRo 40x40x4 - 1100 | | AlMgSi | 1,7 kg | |
| Pos. | Men. | Benennung | Norm-Kurzbez./Zeichnungsnr. | Werkstoff | Masse | | |
| Stückliste | | | | | | | |
| | gezeichnet | bearbeitet | geprüft | freigegeben | Werkstoff | Masse | |
| Name | T. Lühr | A. Meyer | T. Lühr | J. Wrede | - | 14 kg | |
| Datum | 16.04.2018 | 24.09.2019 | 16.10.2019 | 16.10.2019 | Schutzvermerk DIN - 34 - 1 - D | | |
| <div>KARL WREDE Stahl- und Maschinenbau GmbH Standort Itzehoe IZET - Fraunhoferstraße 3 D-25524 Itzehoe Tel: +49 (0) 4821 778-474 Fax: +49 (0) 4821 778-105 info@karl-wrede.de www.karl-wrede.de</div> | | | | Benennung SBG Geländer lang 5.222 - 20353 - TC-Hydraulik - Arbeitsbühne Projekt Zeichnungsnummer EZ-5.222-20353-00.00-A | | | Revision A |
| Auftraggeber TC Hydraulik GmbH | | | | ISO 2768-mH Tolerierung ISO 8015 | | ISO 13715  | Maßstab - |
| | | | | Zeichnung /F15-Karl Wrede/5.222 - 20353 - TC-Hydraulik - Arbeitsbühne/CAD-Zeichnungen/EZ-5.222-20353-00.00-A.dwg | | | |



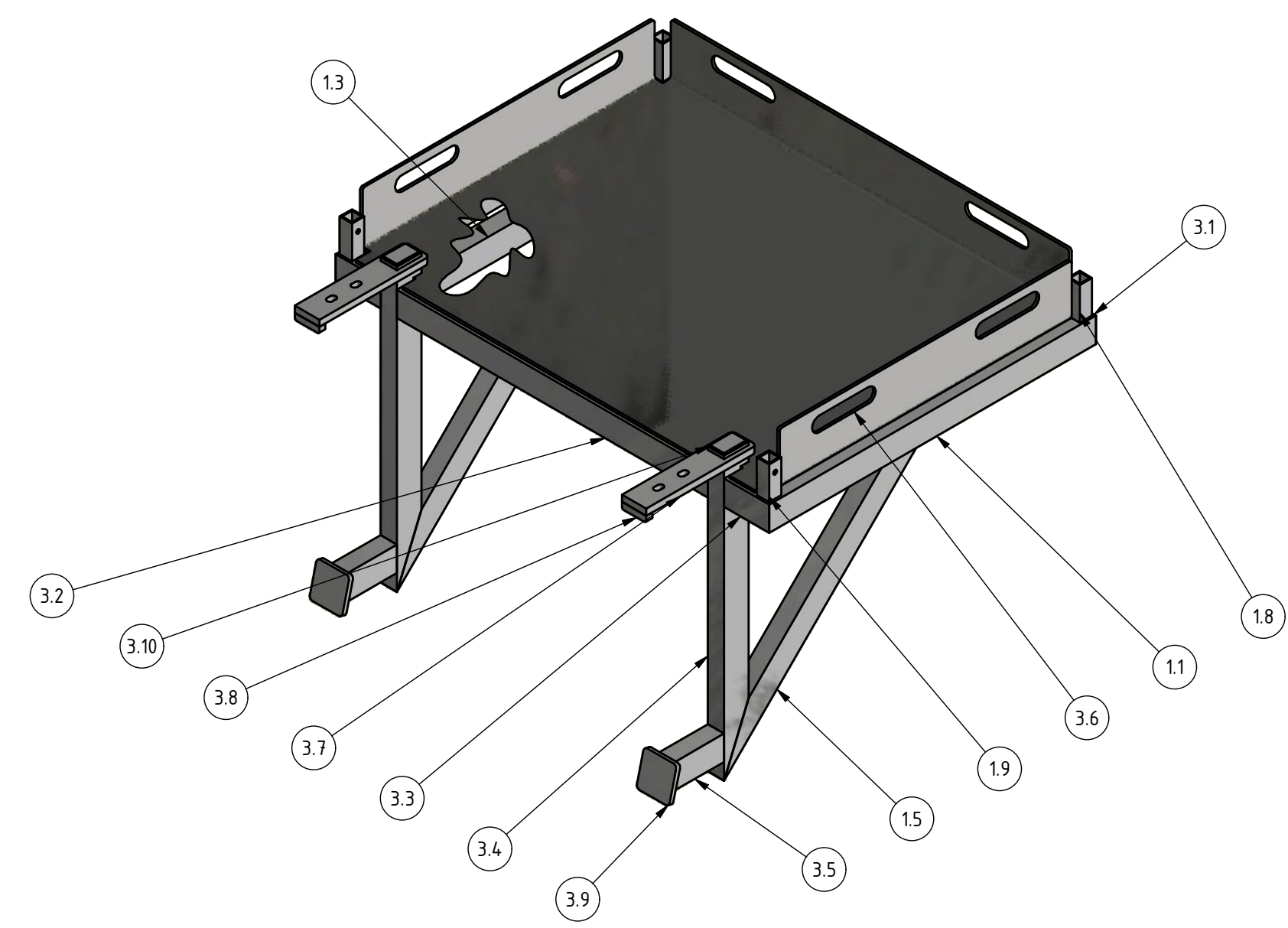
Pos. 3.1



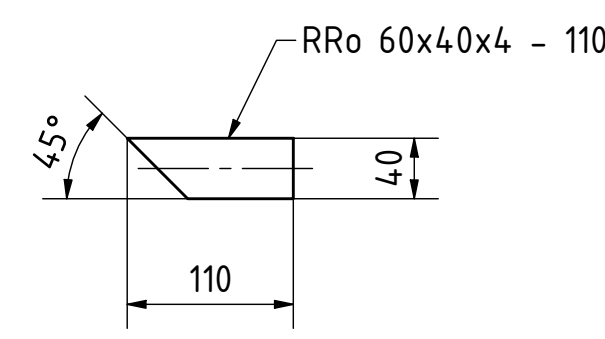
Pos. 3.4



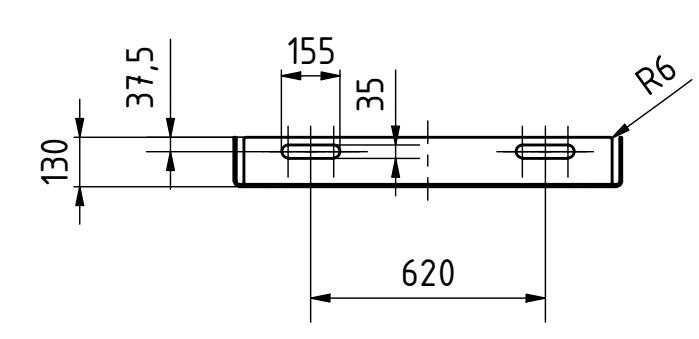
Bühnenteil 2
- kurz -



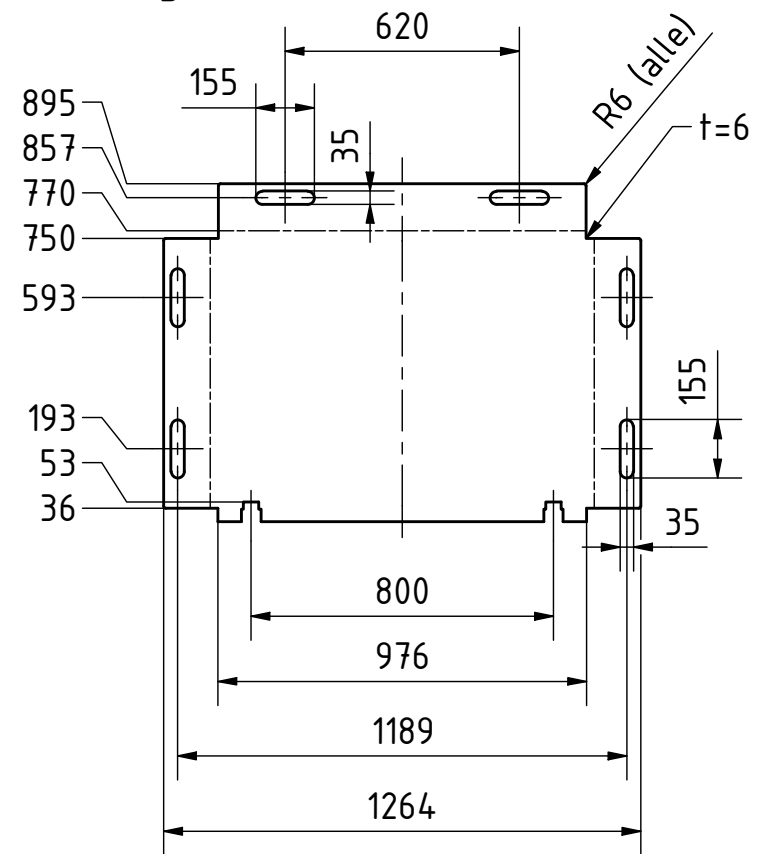
Pos. 3.3



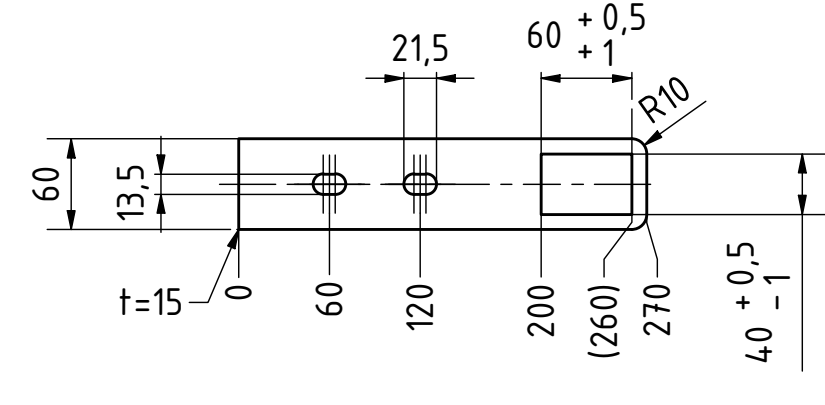
Pos. 3.6



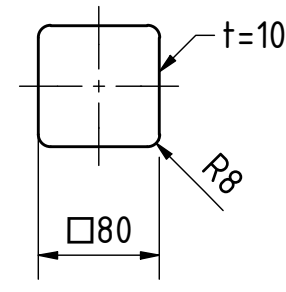
Pos. 3.6 - Abwicklung
gewählte Matrize für Abwicklung: V50



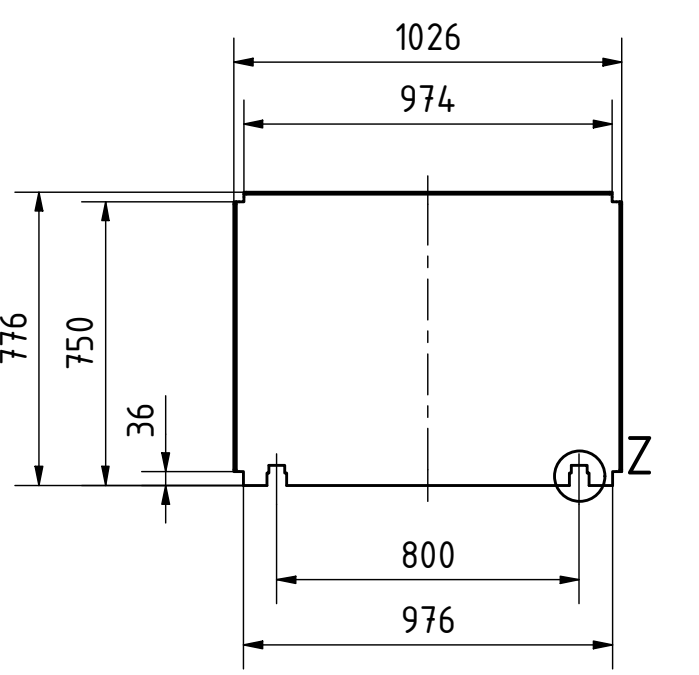
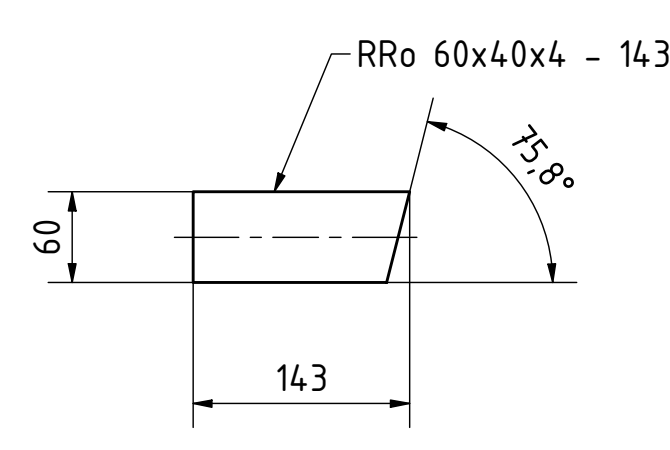
Pos. 3.7



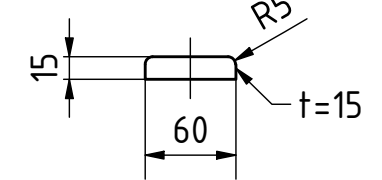
Pos. 3.9



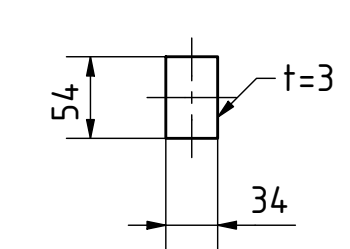
Pos. 3.5



Pos. 3.8



Pos. 3.10

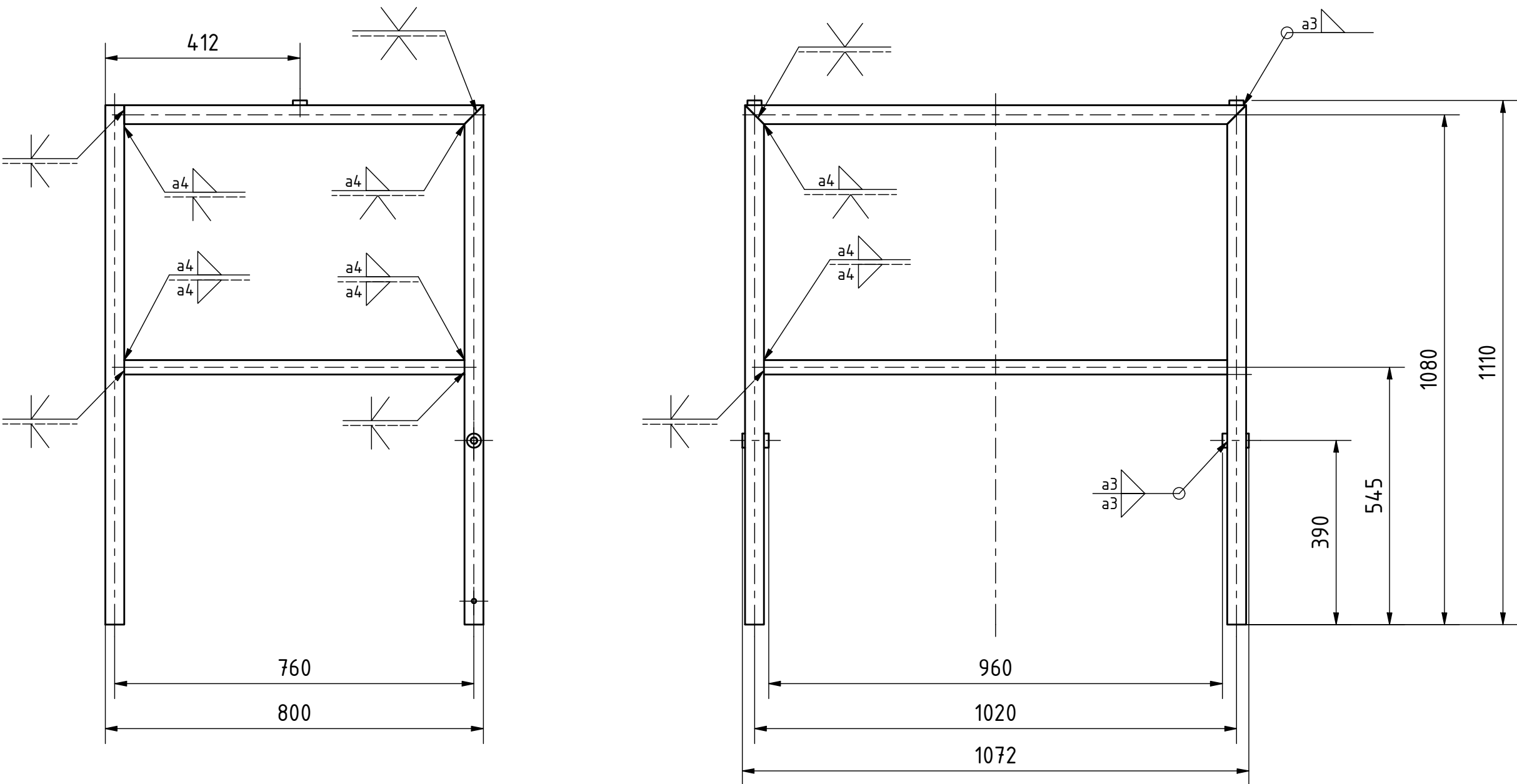


2x fertigen

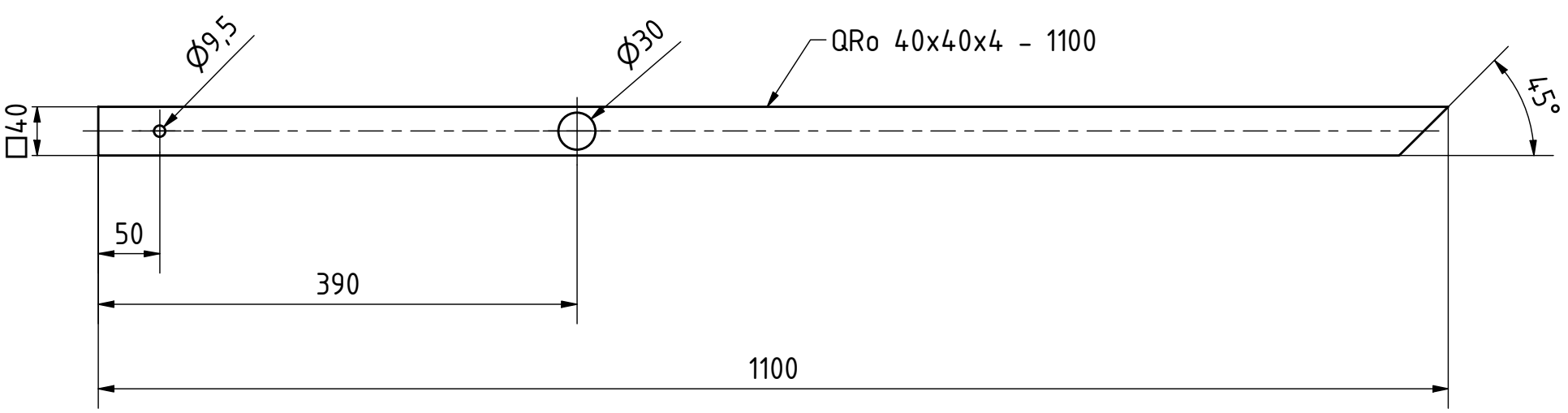
| | | | | | |
|------|------|------------------|-----------------------------|-----------|---------|
| 3.10 | 2 | Deckel | Bl 3x34x54 | AlMg3 | 0 kg |
| 3.9 | 2 | Stützfuß | Bl 10x80x80 | AlMg3 | 0,2 kg |
| 3.8 | 2 | Kralblech | Bl 12x15x60 | AlMg3 | 0 kg |
| 3.7 | 2 | Adapterblech | Bl 12x60x267 | AlMg3 | 0,6 kg |
| 3.6 | 1 | Tränenblech | TrBl 6x896x1265 | AlMg3 | 17,5 kg |
| 3.5 | 2 | Rechteckrohr | RRo 60x40x4 - 143 | AlMgSi | 0,3 kg |
| 3.4 | 2 | Rechteckrohr | RRo 60x40x4 - 688 | AlMgSi | 1,3 kg |
| 3.3 | 2 | Rechteckrohr | RRo 60x40x4 - 110 | AlMgSi | 0,2 kg |
| 3.2 | 1 | Rechteckrohr | RRo 60x40x4 - 760 | AlMgSi | 1,6 kg |
| 3.1 | 1 | Rechteckrohr | RRo 60x40x4 - 1060 | AlMgSi | 2,1 kg |
| 1.9 | 2 | Aufnahme geböhrt | RRo 30x30x3 - 80 | AlMgSi | 0,1 kg |
| 1.8 | 2 | Aufnahme | RRo 30x30x3 - 80 | AlMgSi | 0,1 kg |
| 1.5 | 2 | Rechteckrohr | RRo 60x40x4 - 820 | AlMgSi | 1,5 kg |
| 1.3 | 2 | Rechteckrohr | RRo 60x40x4 - 700 | AlMgSi | 1,4 kg |
| 1.1 | 2 | Rechteckrohr | RRo 60x40x4 - 800 | AlMgSi | 1,6 kg |
| Pos. | Men. | Benennung | Norm-Kurzbez./Zeichnungsnr. | Werkstoff | Masse |

| | | | | | |
|---|------------|------------|------------|-------------|-------------|
| Stückliste | | | | | |
| | gezeichnet | bearbeitet | geprüft | freigegeben | Werkstoff |
| Name | T. Lühr | A. Meyer | T. Lühr | J. Wrede | - |
| Datum | 16.04.2018 | 25.09.2019 | 16.10.2019 | 16.10.2019 | 36 kg |
| Schutzvermerk DIN - 34 - 1 - D | | | | | Blatt 4 / 7 |
| Benennung | | | | | Format A1 |
| SBG Rahmen kurz | | | | | |
| 5.222 - 20353 - TC-Hydraulik - Arbeitsbühne | | | | | |
| Projekt | | | | | |
| EZ-5.222-20353-00.00-A | | | | | Revision A |
| Zeichnungsnummer | | | | | |
| TC Hydraulik GmbH | | | | | Maßstab - |
| Auftraggeber | | | | | |
| ISO 2768-mH | | | | | ISO 13715 |
| Tolerierung ISO 8815 | | | | | |
| Zeichnung 9 | | | | | |

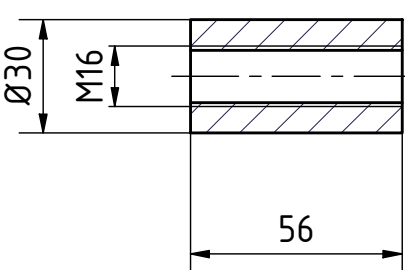
SBG Pos. 4



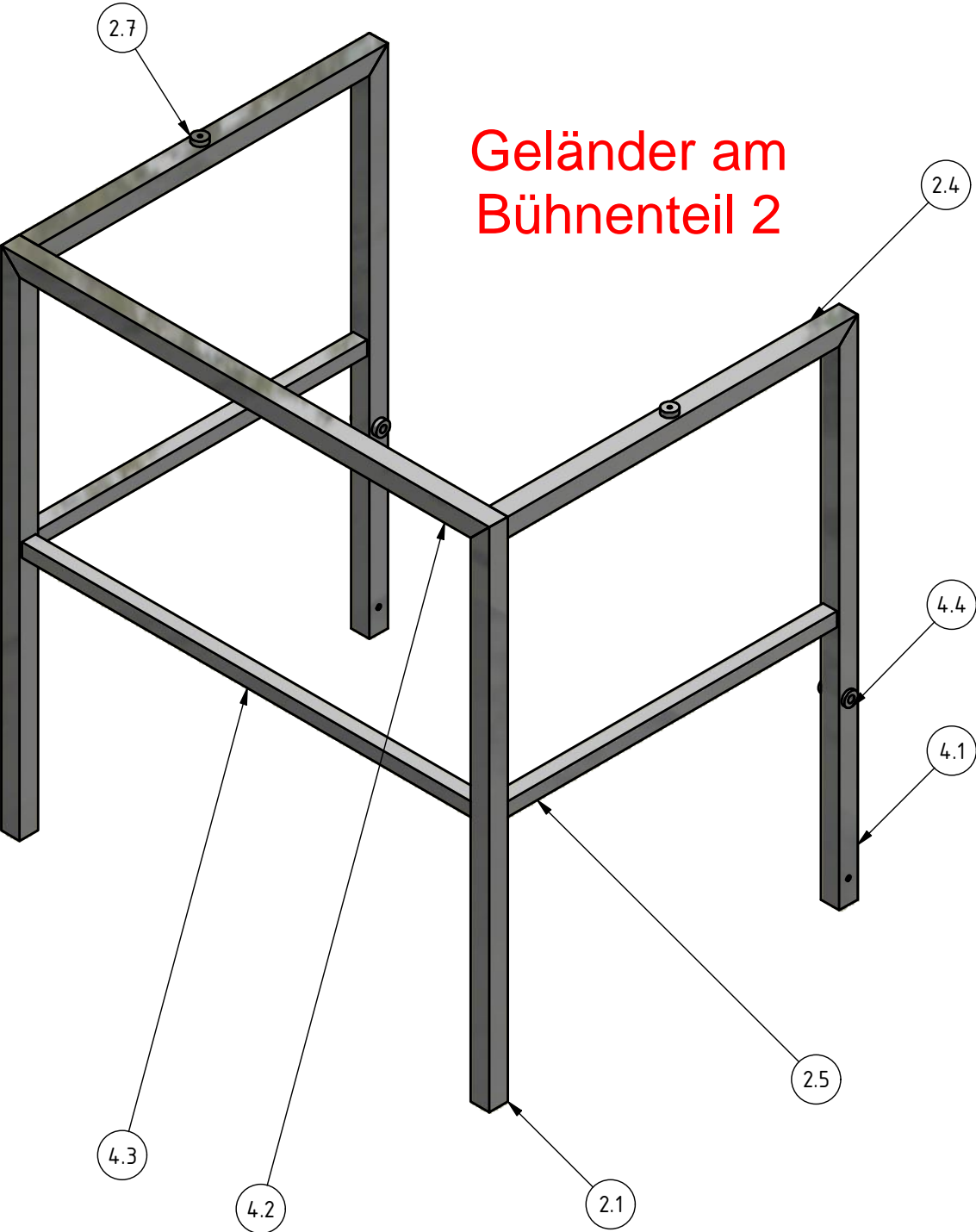
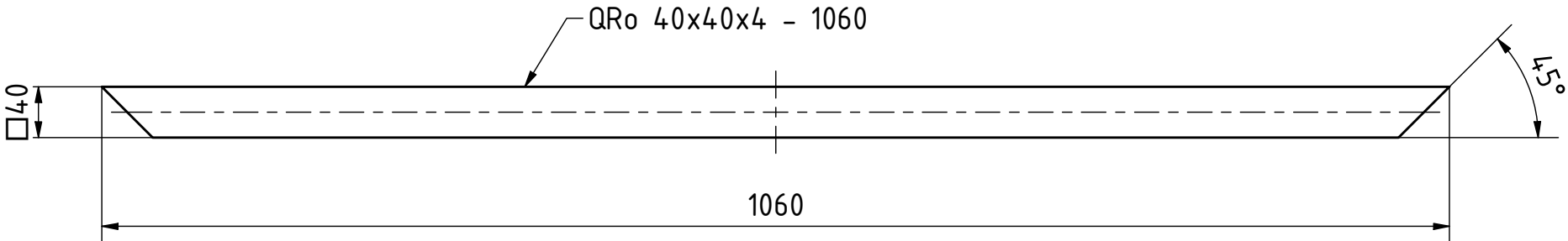
Pos. 4.1



Pos. 4.4



Pos. 4.2

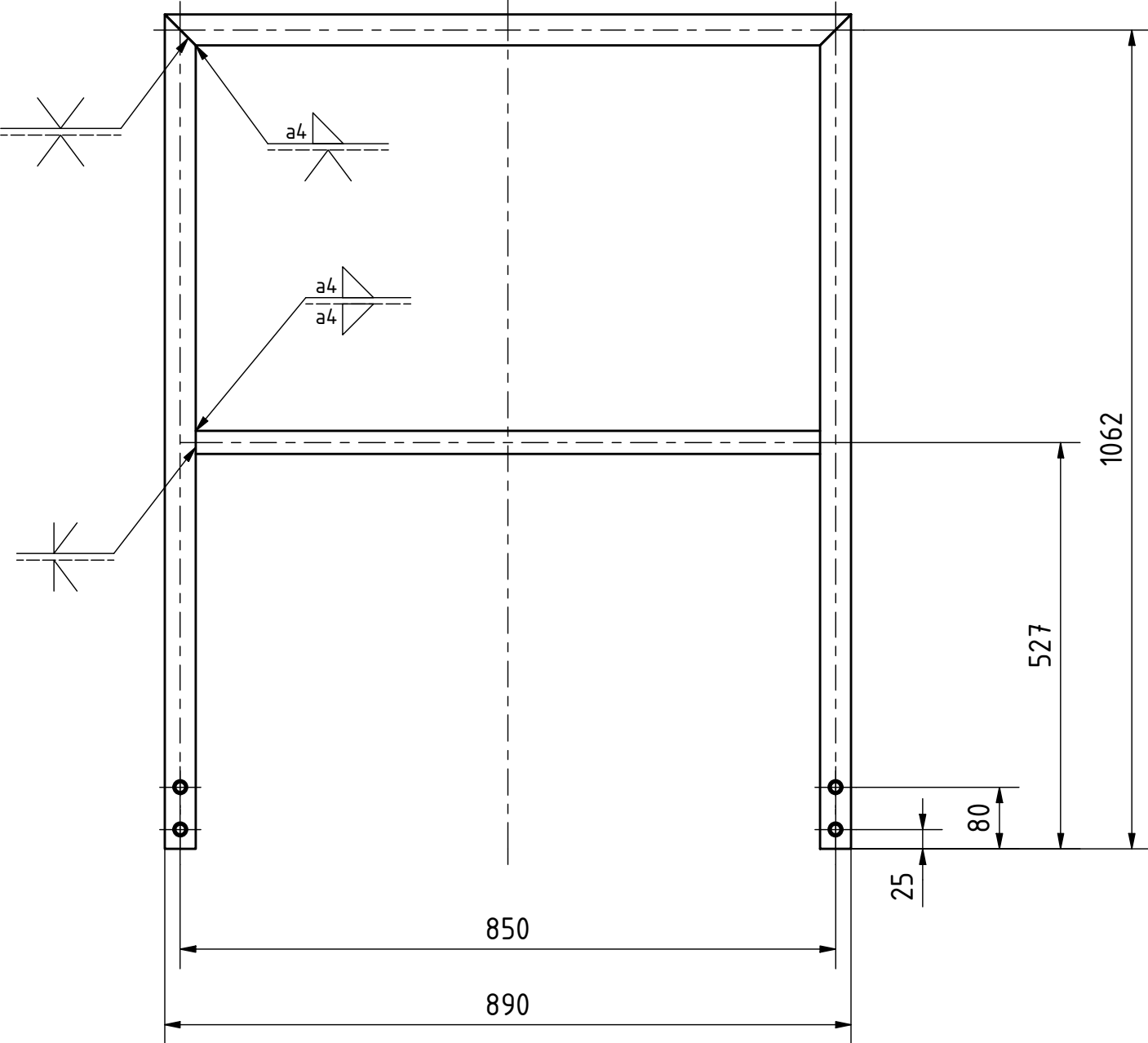


Geländer am
Bühnenteil 2

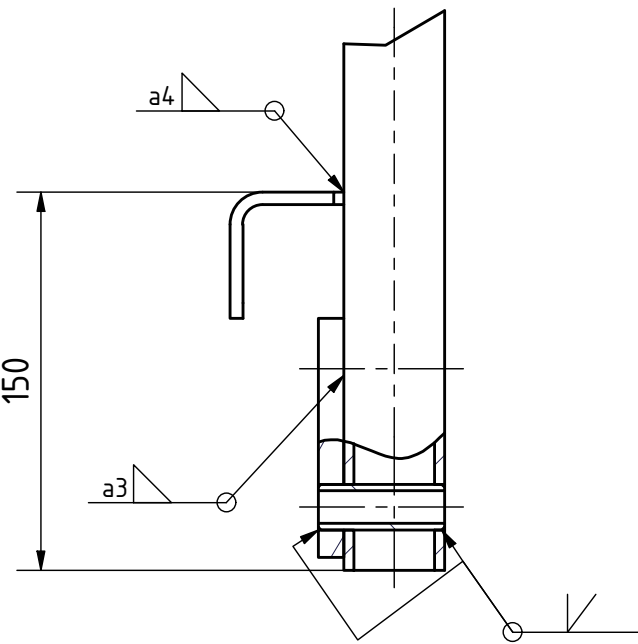
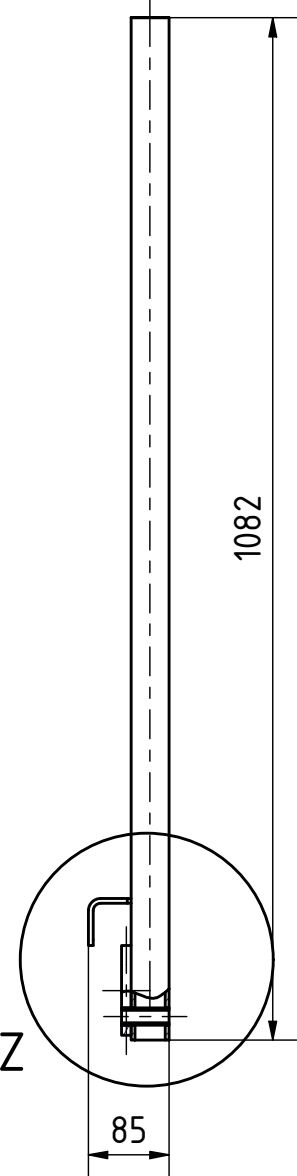
2x fertigen

| | | | | | |
|---|------------|---------------------------|--|-------------|-----------|
| 4.4 | 2 | Gewindestelle | Rd Ø30x56 | AlMg3 | 0,1 kg |
| 4.3 | 1 | Knieleiste | QRo 30x30x3 - 980 | AlMgSi | 0,9 kg |
| 4.2 | 1 | Handlauf | QRo 40x40x4 - 1060 | AlMgSi | 1,6 kg |
| 4.1 | 2 | Geländerpfosten mit Welle | QRo 40x40x4 - 1100 | AlMgSi | 1,7 kg |
| 2.7 | 2 | Distanzronde | Bl 10xØ30 | AlMg3 | 0 kg |
| 2.5 | 2 | Knieleiste kurz | QRo 30x30x3 - 720 | AlMgSi | 0,7 kg |
| 2.4 | 2 | Handlauf kurz | QRo 40x40x4 - 760 | AlMgSi | 1,2 kg |
| 2.1 | 2 | Geländerpfosten | QRo 40x40x4 - 1100 | AlMgSi | 1,7 kg |
| Pos. | Men. | Benennung | Norm-Kurzbez./Zeichnungsnr. | Werkstoff | Masse |
| Stückliste | | | | | |
| | gezeichnet | bearbeitet | geprüft | freigegeben | Werkstoff |
| Name | T. Lühr | A. Meyer | T. Lühr | J. Wrede | - |
| Datum | 16.04.2018 | 25.09.2019 | 16.10.2019 | 16.10.2019 | 13 kg |
| Schutzvermerk DIN - 34 - 1 - D | | | | | |
| Benennung | | | | | |
| SBG Geländer kurz | | | | | |
| 5.222 - 20353 - TC-Hydraulik - Arbeitsbühne | | | | | |
| Projekt | | | | | |
| Zeichnungsnummer | | | | | Revision |
| EZ-5.222-20353-00.00-A | | | | | A |
| Auftraggeber | | | ISO 2768-mH Tolerierung ISO 8015 | | ISO 13715 |
| TC Hydraulik GmbH | | | Zeichnung | | Maßstab |
| | | | /F15-Karl Wrede/5.222 - 20353 - TC-Hydraulik - Arbeitsbühne/CAD-Zeichnung/12.5.22-20353-00.00-A.dwg | | - |

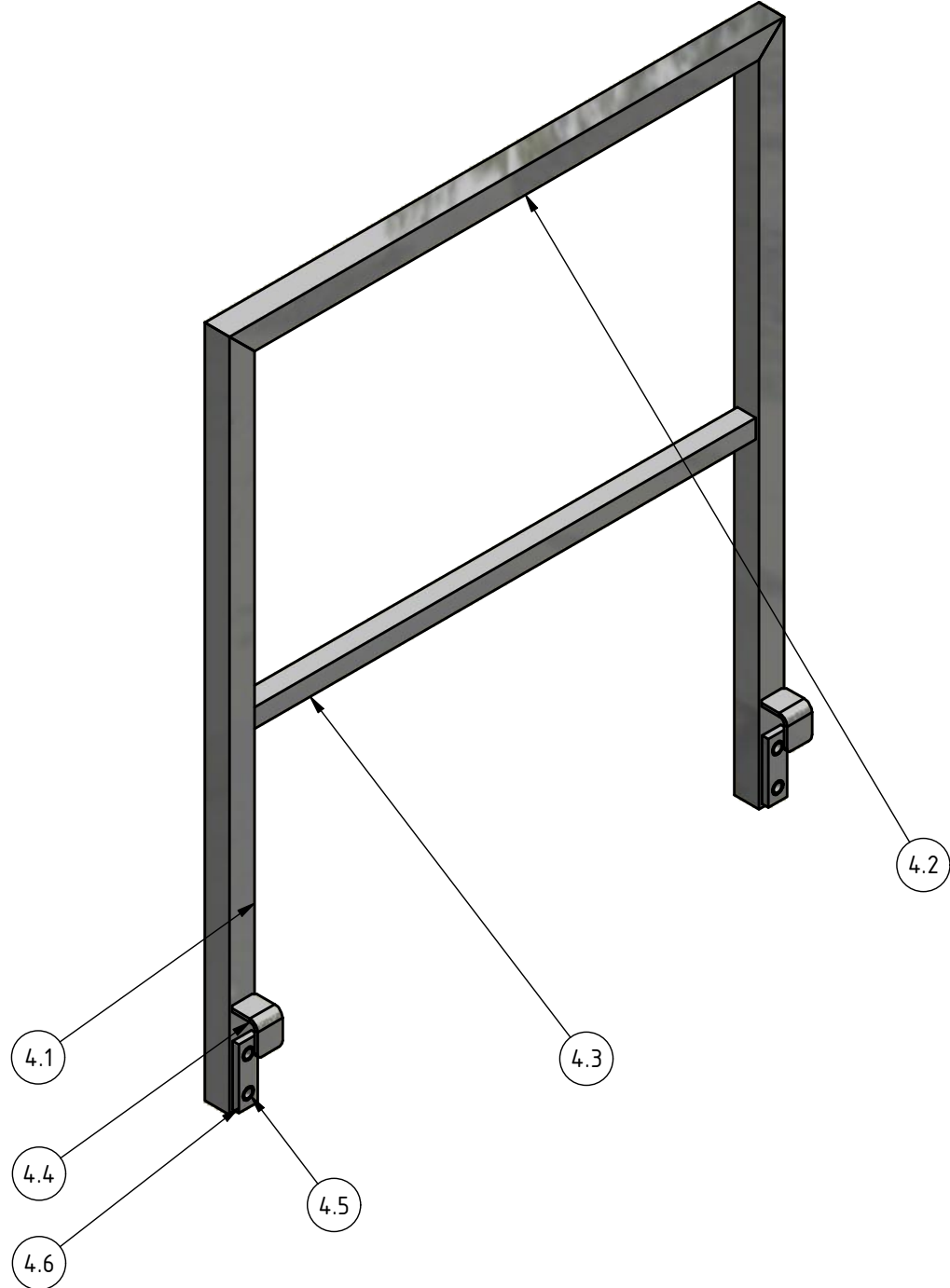
SBG Pos. 5



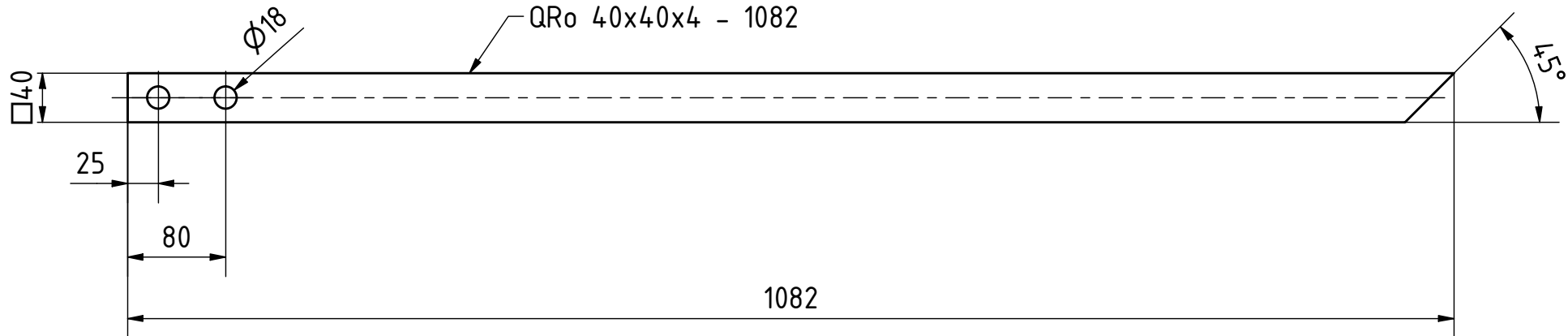
Z



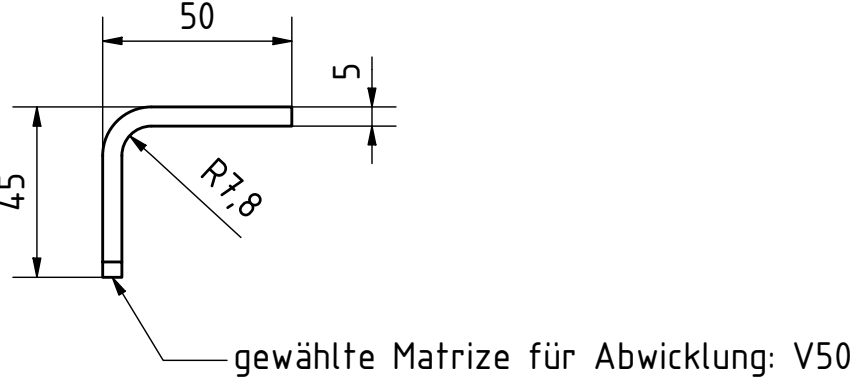
Bühnenteil 3
- zus. Geländerelement -



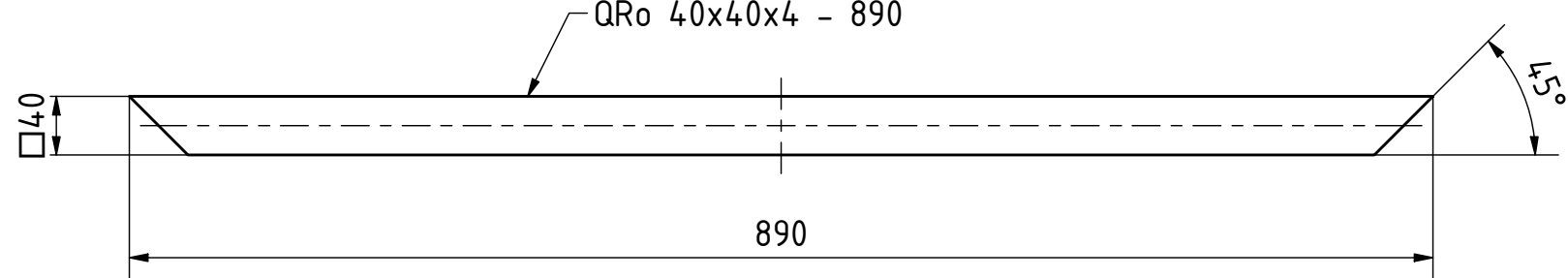
Pos. 5.1



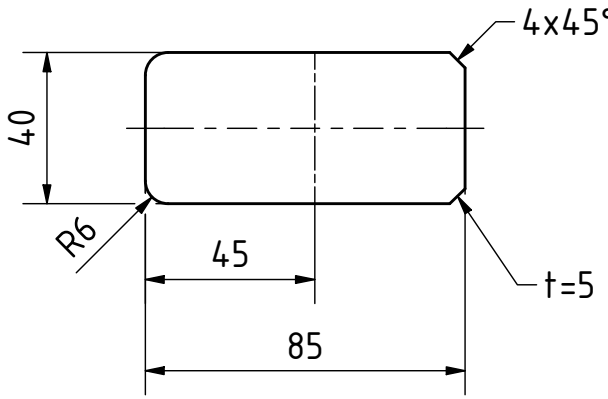
Pos. 4.4



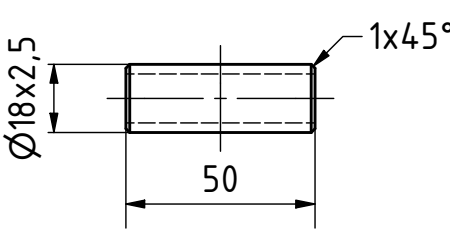
Pos. 5.2



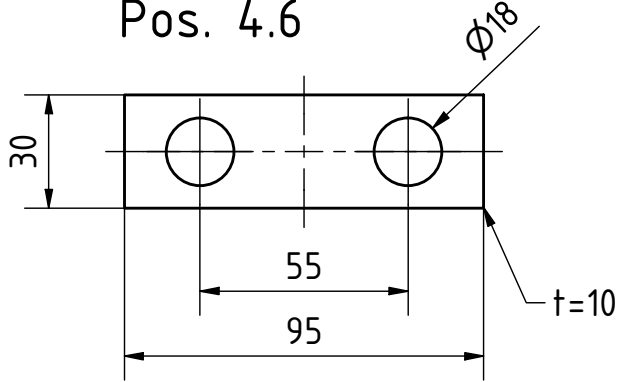
Pos. 4.4 - Abwicklung



Pos. 4.5



Pos. 4.6

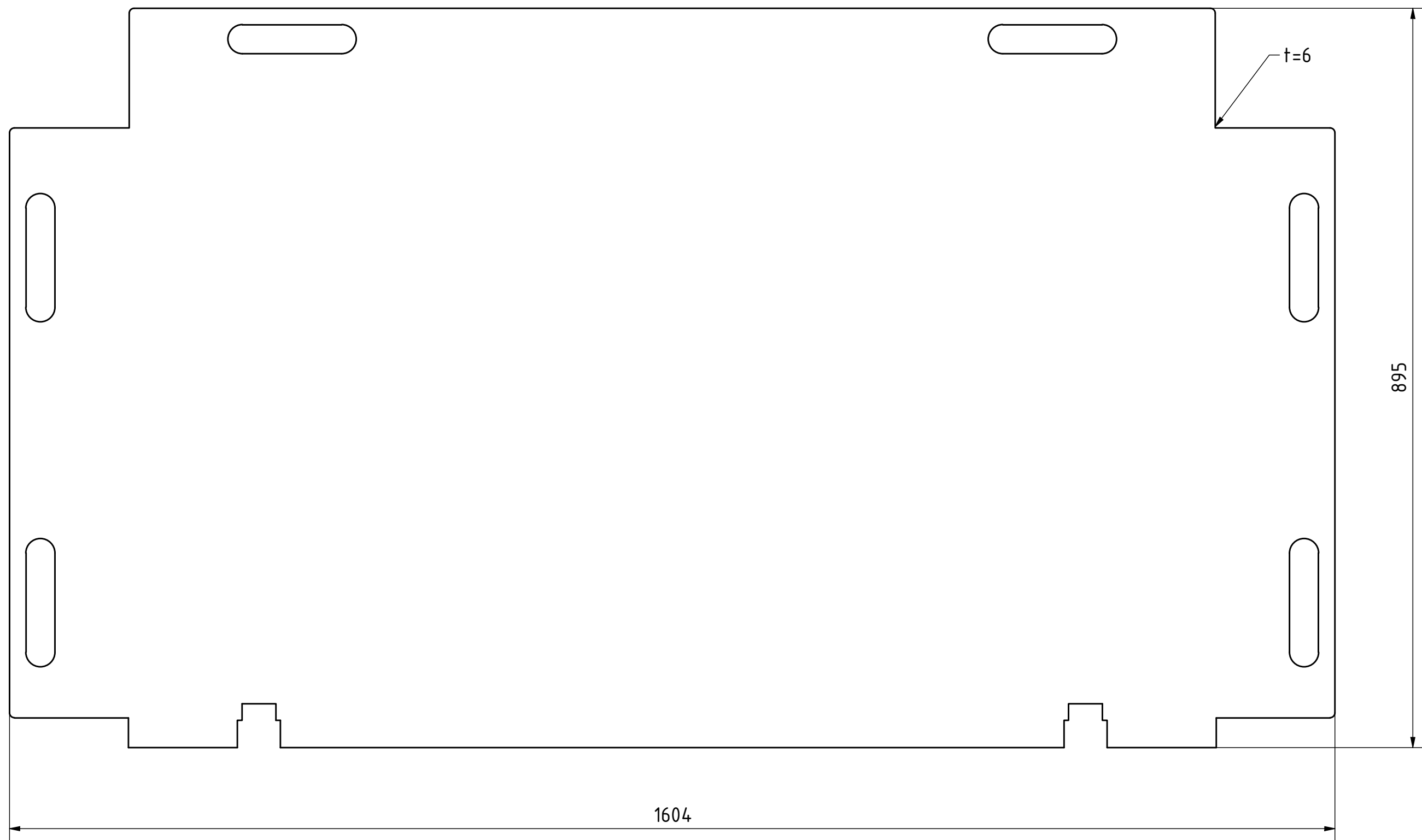


2x fertigen

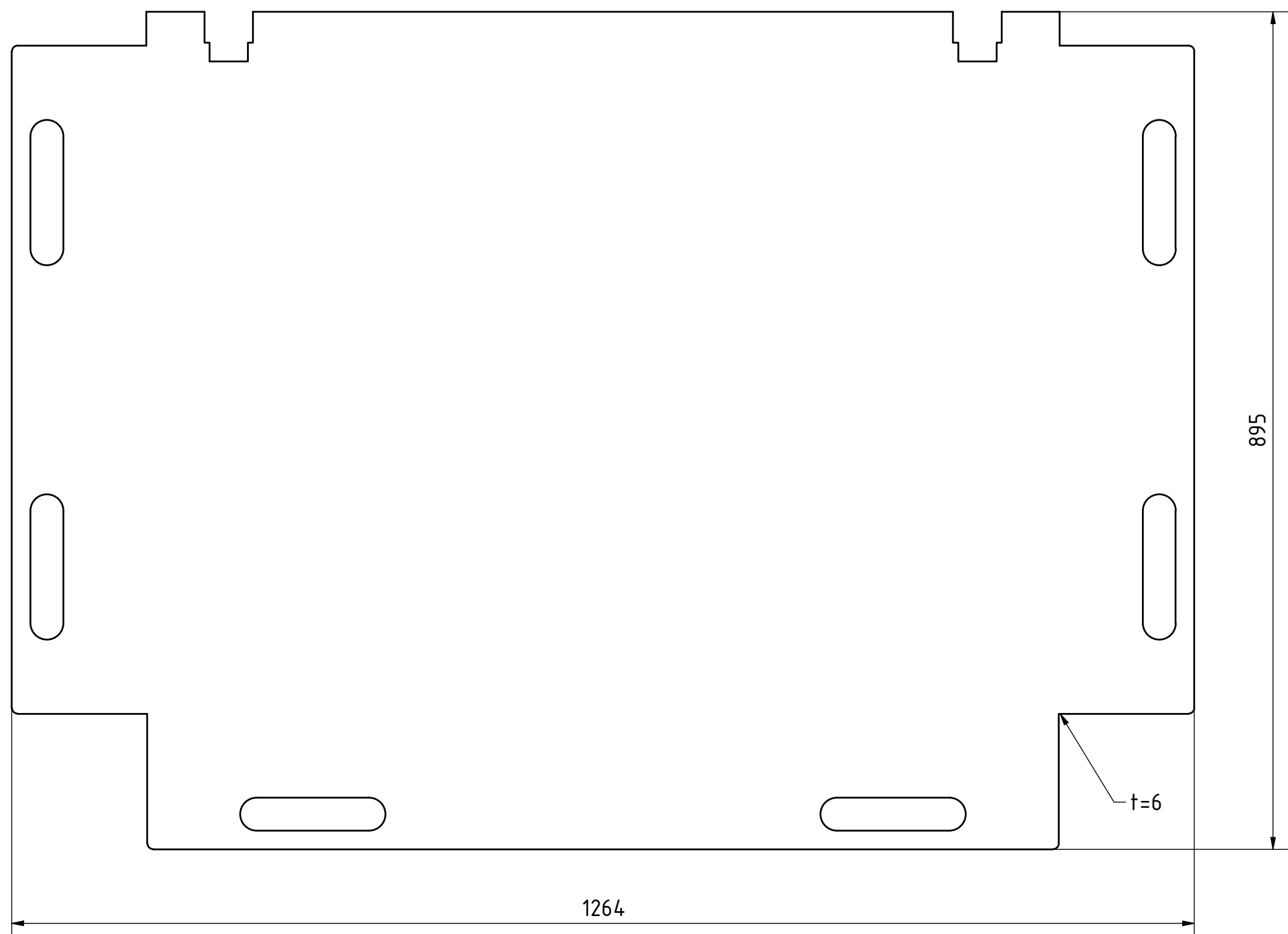
| | | | | | |
|--|------------|----------------|-----------------------------|----------------------|--------------------------------|
| 4.6 | 2 | Distanzblech | Bl 10x30x95 | AlMg3 | 0,1 kg |
| 4.5 | 4 | Einschweißrohr | Ro 18x2,5 - 50 | AlMg3 | 0 kg |
| 4.4 | 2 | Stecklasche | Bl 5x40x85 | AlMg3 | 0 kg |
| 4.3 | 1 | Knieleiste | QRo 30x3 x3 - 810 | AlMgSi | 0,7 kg |
| 4.2 | 1 | Handlauf | QRo 40x40x4 - 890 | AlMgSi | 1,4 kg |
| 4.1 | 2 | Pfosten | QRo 40x40x4 - 1082 | AlMgSi | 1,7 kg |
| Pos. | Men. | Benennung | Norm-Kurzbez./Zeichnungsnr. | Werkstoff | Masse |
| Stückliste | | | | | |
| Name | gezeichnet | bearbeitet | geprüft | freigegeben | Werkstoff |
| T. Lühr | A. Meyer | T. Lühr | J. Wrede | - | 6 kg |
| Datum | 16.04.2018 | 25.09.2019 | 16.10.2019 | 16.10.2019 | Schutzvermerk DIN - 34 - 1 - D |
| Benennung | | | | | |
| Geländersegment | | | | | |
| 5.222 - 20353 - TC-Hydraulik - Arbeitsbühne | | | | | |
| Projekt | | | | | |
| Zeichnungsnummer | | | | | |
| EZ-5.222-20353-00.00-A | | | | | |
| Revision | | | | | |
| A | | | | | |
| Auftraggeber | | | | ISO 2768-mH | ISO 13715 |
| TC Hydraulik GmbH | | | | Tolerierung ISO 8015 | Maßstab |
| | | | | Zeichnung | - |
| /F15-Karl Wrede/5.222 - 20353 - TC-Hydraulik - Arbeitsbühne/CAD-Zeichnungen/12-5.222-20353-00.00-A.dwg | | | | | |

t=6

Pos. 1.10
2x fertigen

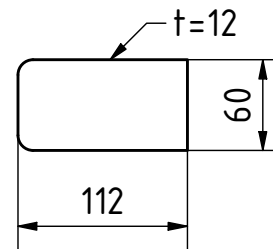


Pos. 3.6
2x fertigen

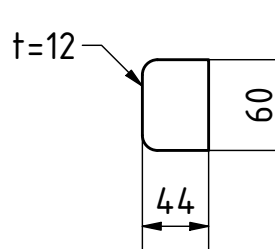


t=12

Pos. 1.11
4x fertigen

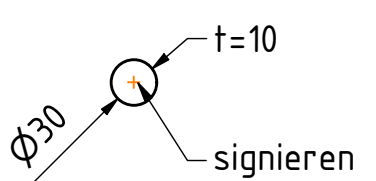


Pos. 1.12
4x fertigen



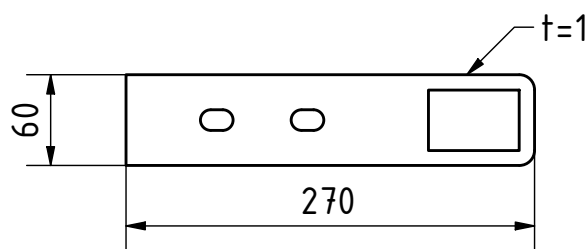
t=10

Pos. 2.7
8x fertigen

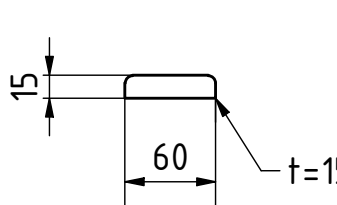


t=15

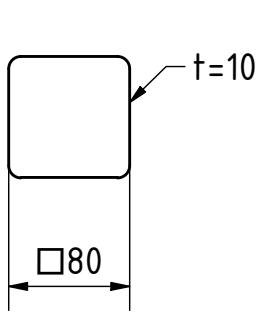
Pos. 3.7
4x fertigen



Pos. 3.8
4x fertigen

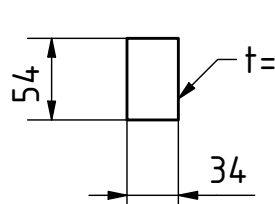


Pos. 3.9
4x fertigen



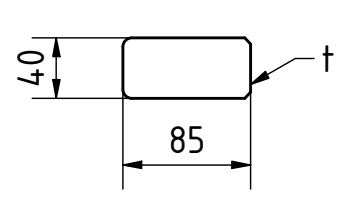
t=3

Pos. 3.10
4x fertigen

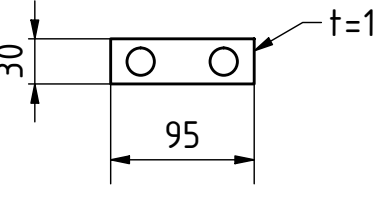


t=5

Pos. 4.4
4x fertigen



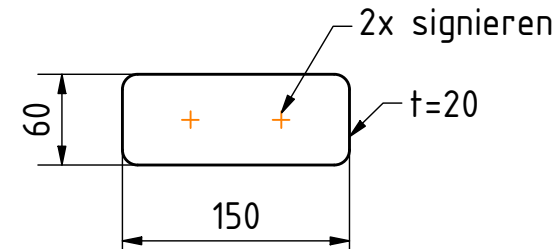
Pos. 4.6
4x fertigen





Bodenplatte

S235JR
t=20

Pos. 6
4x fertigen



Anzahl gilt für die Fertigung von zwei Bühnen/Geländern.
Material AlMg3, außer extra gekennzeichnete

| | gezeichnet | bearbeitet | geprüft | freigegeben | Werkstoff | Masse | Blatt | Format |
|--|-------------------|------------|------------|--|--------------------------------|--|-------|-----------------------|
| Name | T. Lühr | A. Meyer | T. Lühr | J. Wrede | - | 1 kg | 7 / 7 | A1 |
| Datum | 16.04.2018 | 25.09.2019 | 16.10.2019 | 16.10.2019 | Schutzvermerk DIN - 34 - 1 - D | | | |
|  KARL WREDE Stahl- und Maschinenbau GmbH Standort Ilzeho IZET - Fraunhoferstraße 3 D-25524 Ilzeho Tel. +49 (0) 4821 778-474 Fax: +49 (0) 4821 778-105 info@karl-wrede.de www.karl-wrede.de | | | | Benennung Zuschnittplan 5.222 - 20353 - TC-Hydraulik - Arbeitsbühne Projekt Zeichnungsnummer EZ-5.222-20353-00.00-A Revision A | | | | |
| Auftraggeber | TC Hydraulik GmbH | | | ISO 2768-mH Tolerierung ISO 8015 | | ISO 13715  | | Maßstab 1:5 |
| Zeichnung | | | | *ISO-Norm WZ 2001 - 01:2016 Karteigenschaften ISO 1215-01:2015-01:01-A-4-4 | | | | |