

Tool catalog

TruBend Center 5030 and 7030



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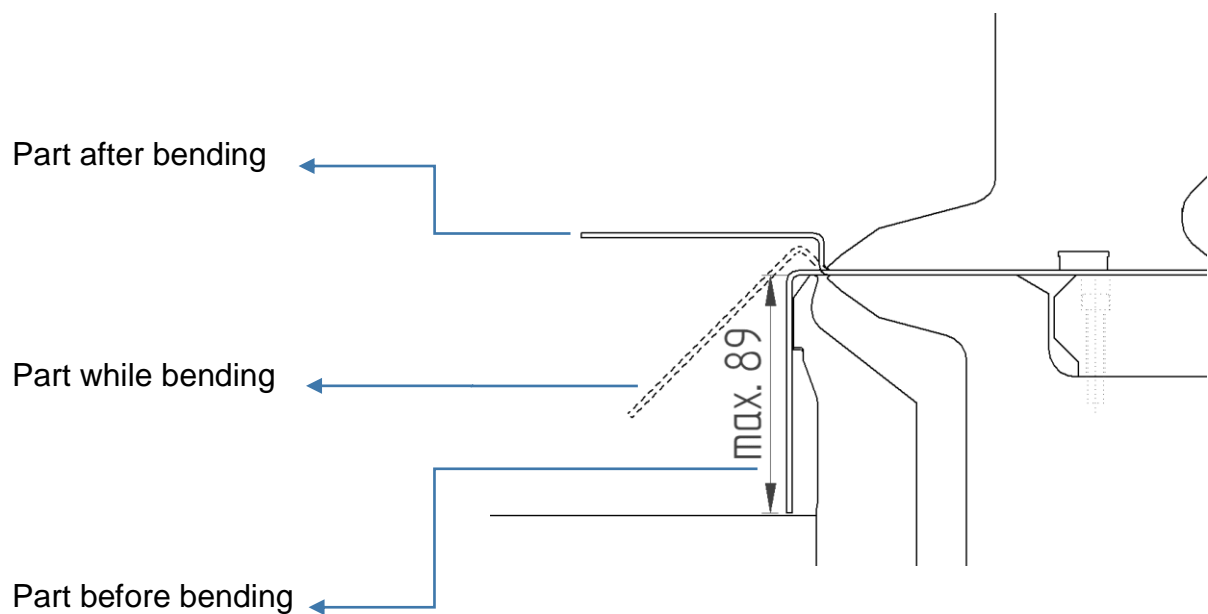
1 Introduction

The following tool catalog should provide you with an overview of the tool types of the TruBend Center 5030 and TruBend Center 7030.

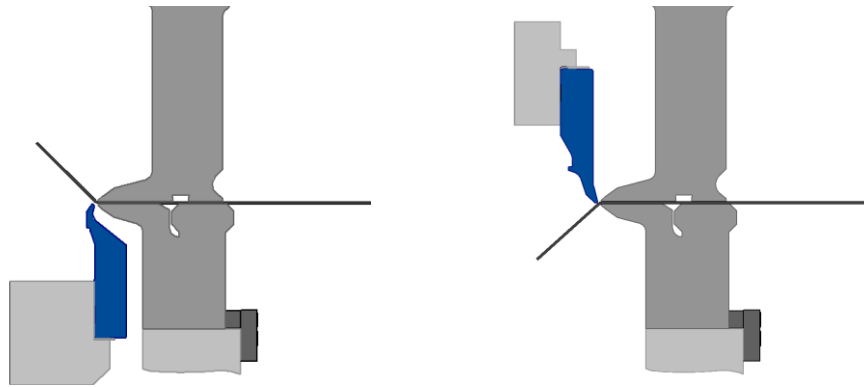
For each tool type you get the tool geometry dimensions and an overview of all the possible side lengths, depending on the application.

Explanation:

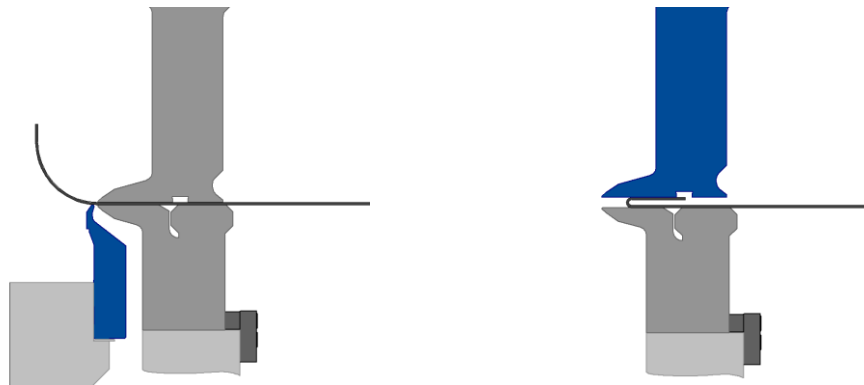
In the following sketches, the parts are shown before, while and after bending. The maximum length is indicated. See the following example:



2 Panel bending methods

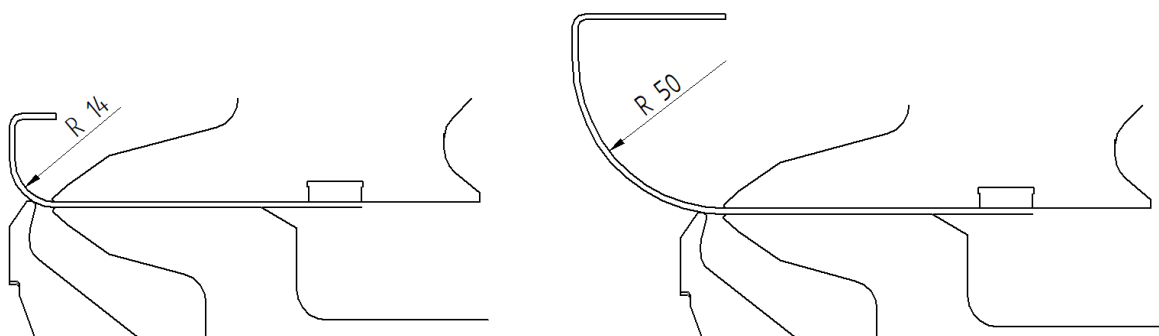


Bending method: positive and negative bends

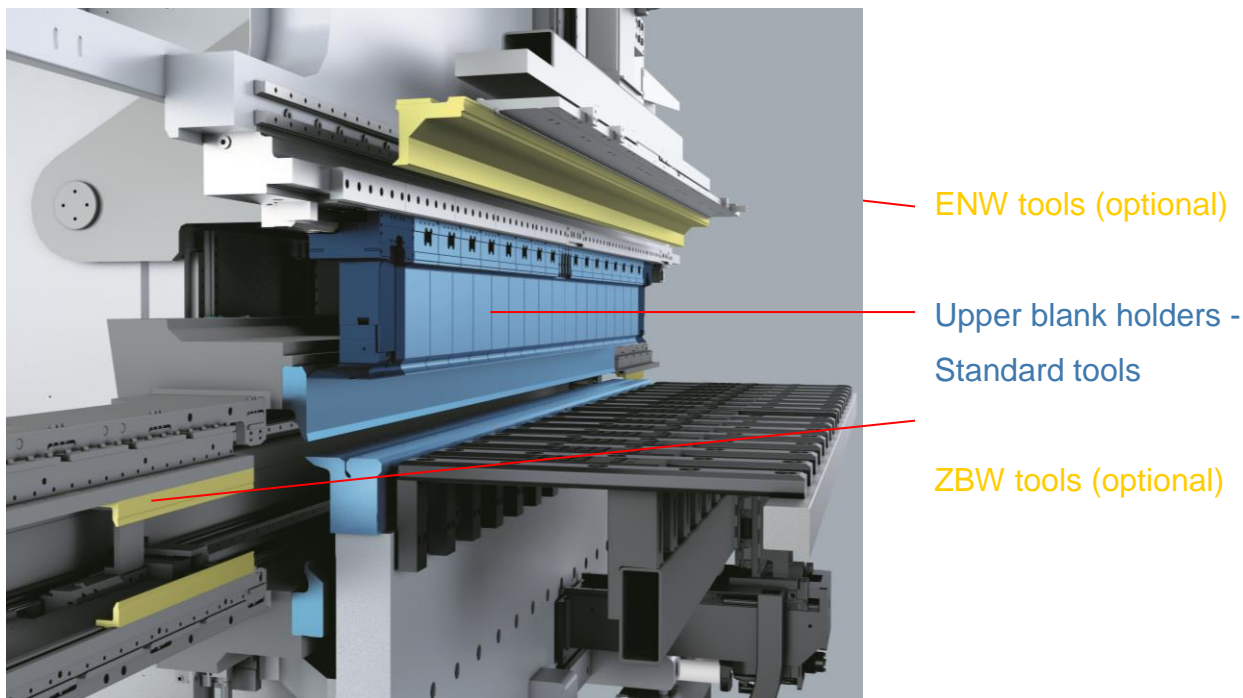


Bending method: radius bending and folding

Another panel bending advantage is that different radius can be made in one tool setup without loading other tools, or, put in another way, using the same tools. It is only the number of bending steps that is increased.



3 Tool overview



Overview of the tools for the TruBend Center 5030

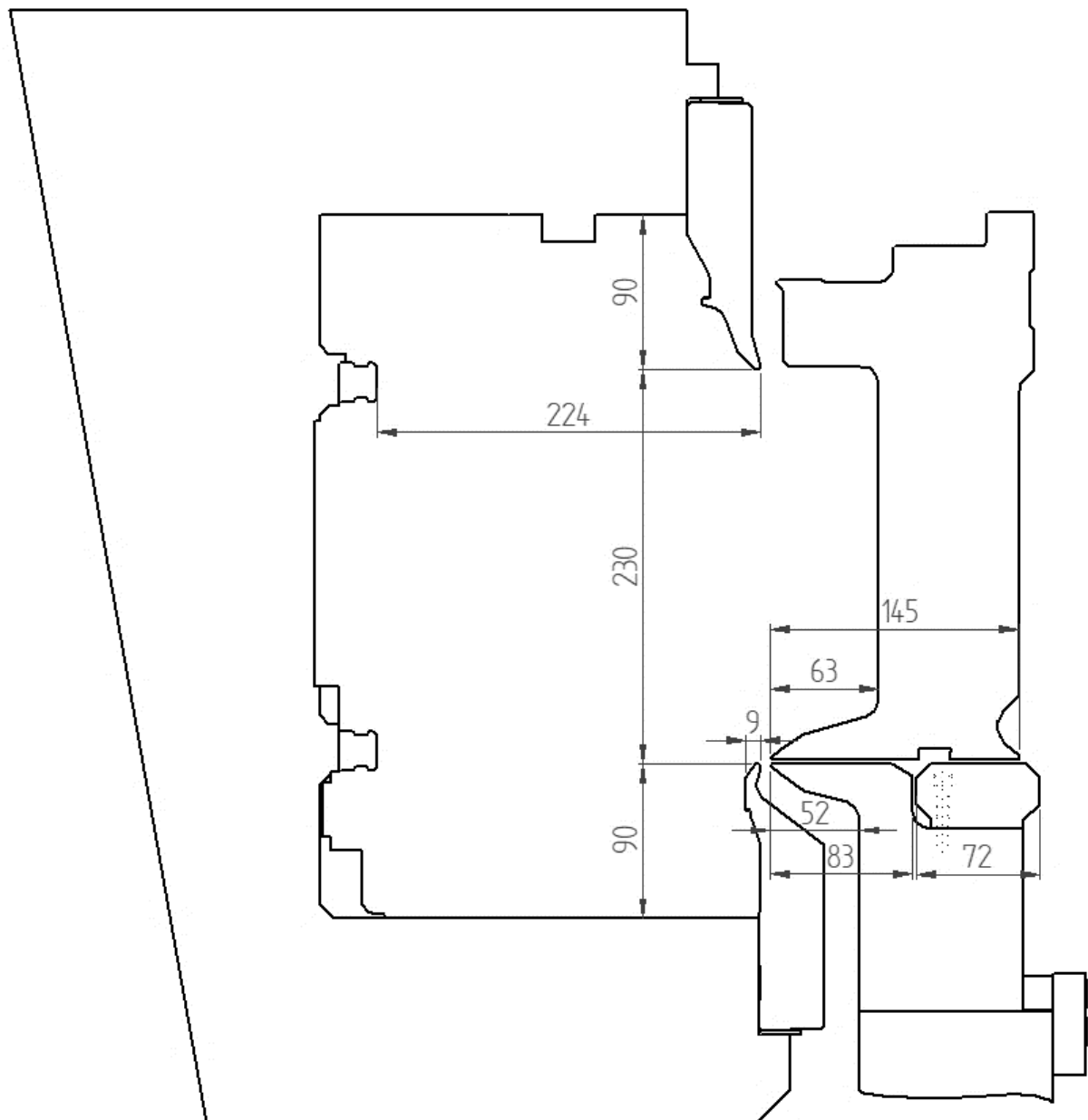
Depending on the application, extra blank holder tools (ENW) or extra bending tools (ZBW) can be loaded automatically on the machine. These functions are available as options depending on the machine type.

TruBend Center 5030 and 7030

4 Bending space and blank holders

Overview of blank holders

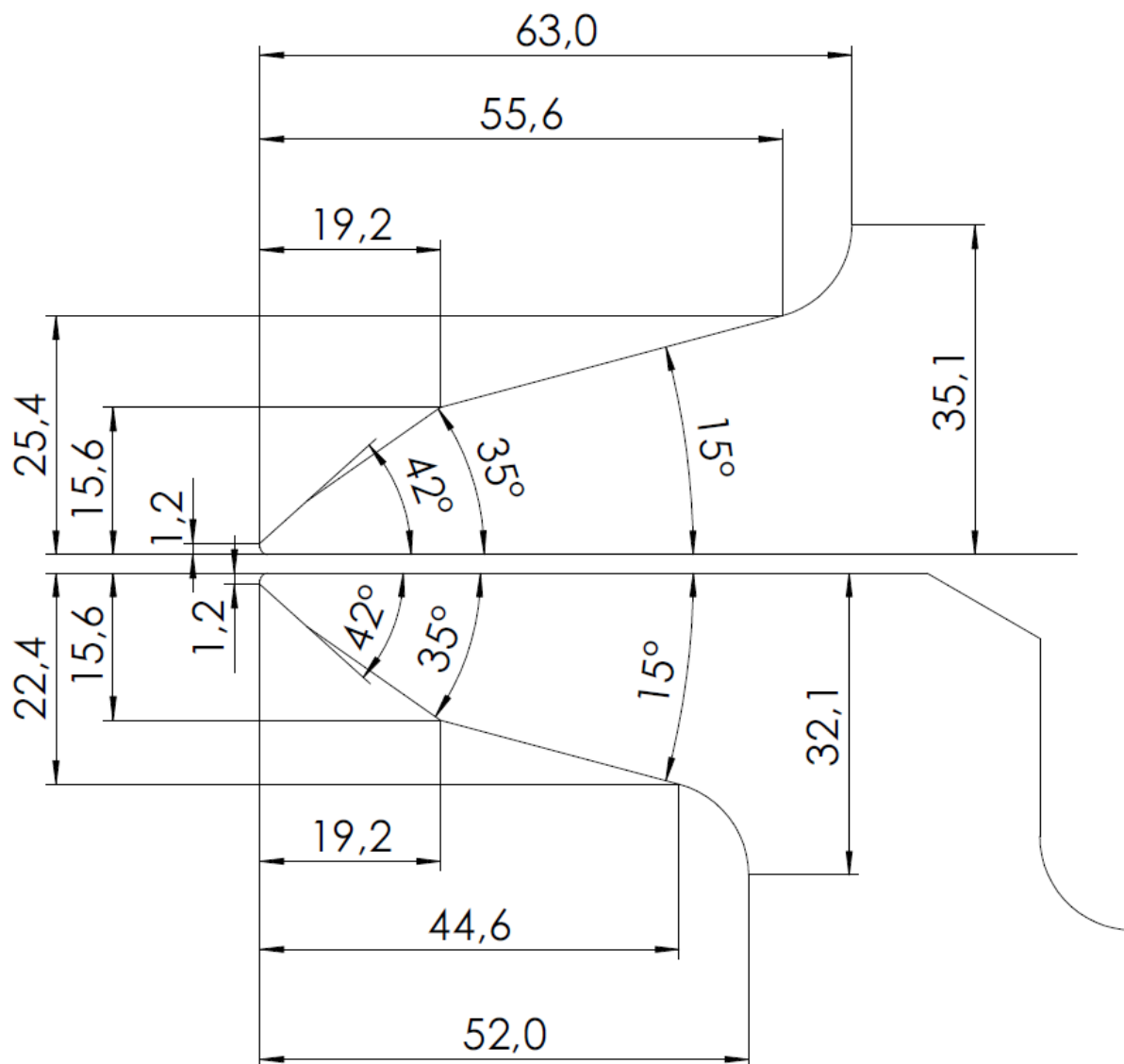
The following figure shows the overview of the bending space of the TruBend Center 5030 and 7030 with the bending frame, the bending tools and the blank holders.



TruBend Center 5030 and 7030

Detail view of the blank holders

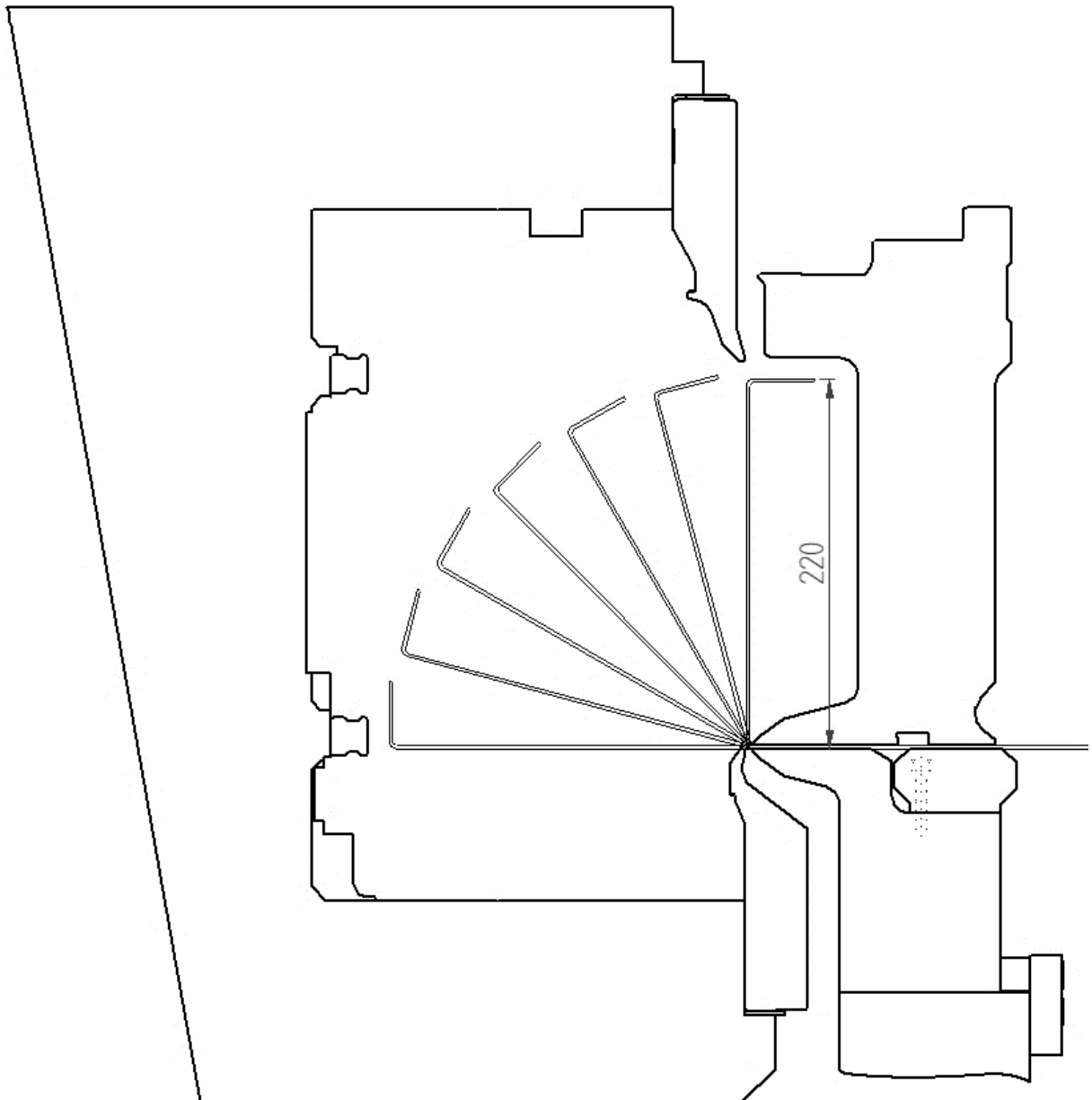
The following figure shows the exact dimensions of the blank holders



TruBend Center 5030 and 7030

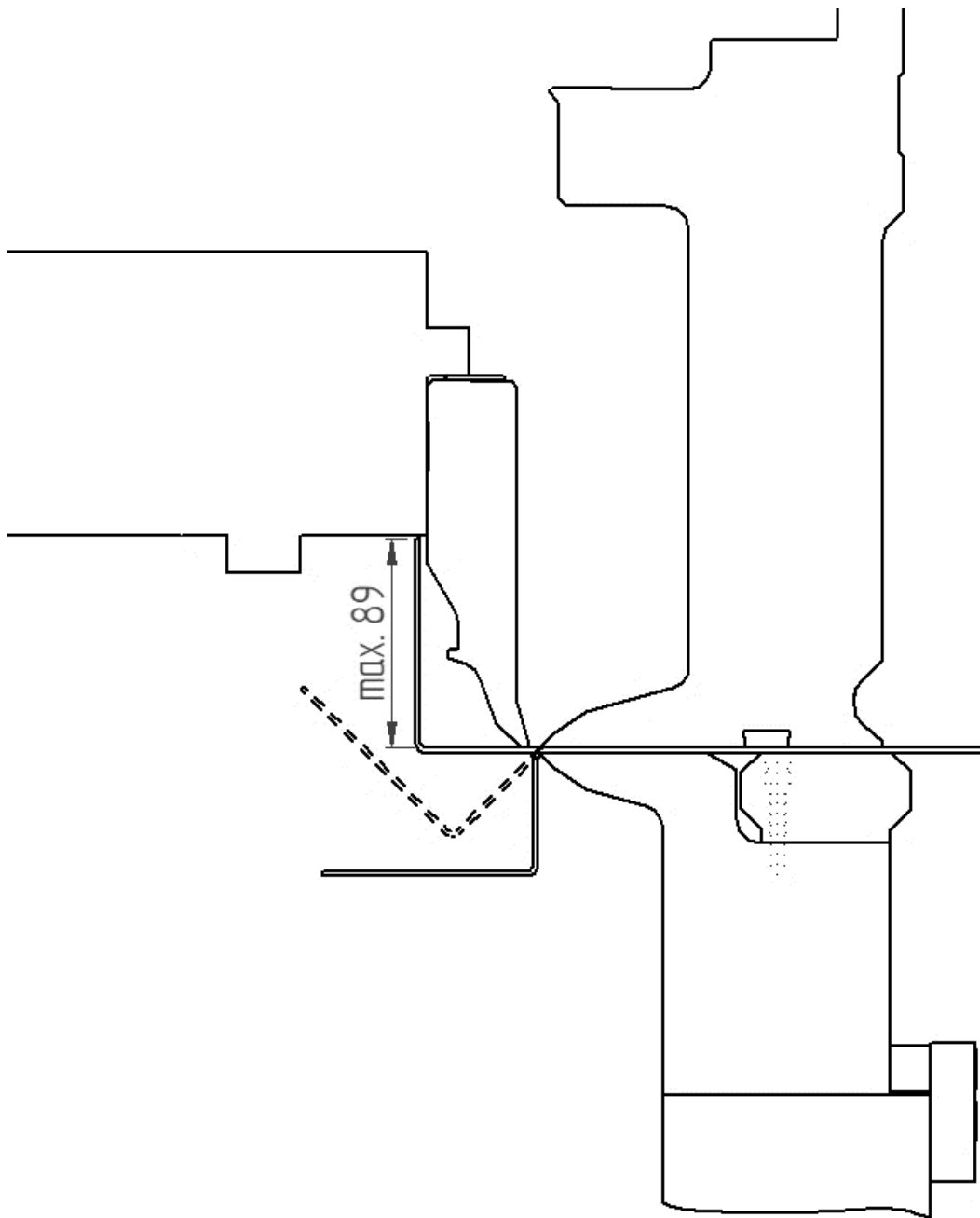
Box height

The maximum box height of the TruBend Center is 220 mm. This corresponds to the maximum length of the flange.



Negative bend with Z bends at 90°

The following figure shows the maximum side length of the first bend in a Z bend. If the 89 mm of first bend is reduced, then shorter side lengths of the 2nd bend is possible.

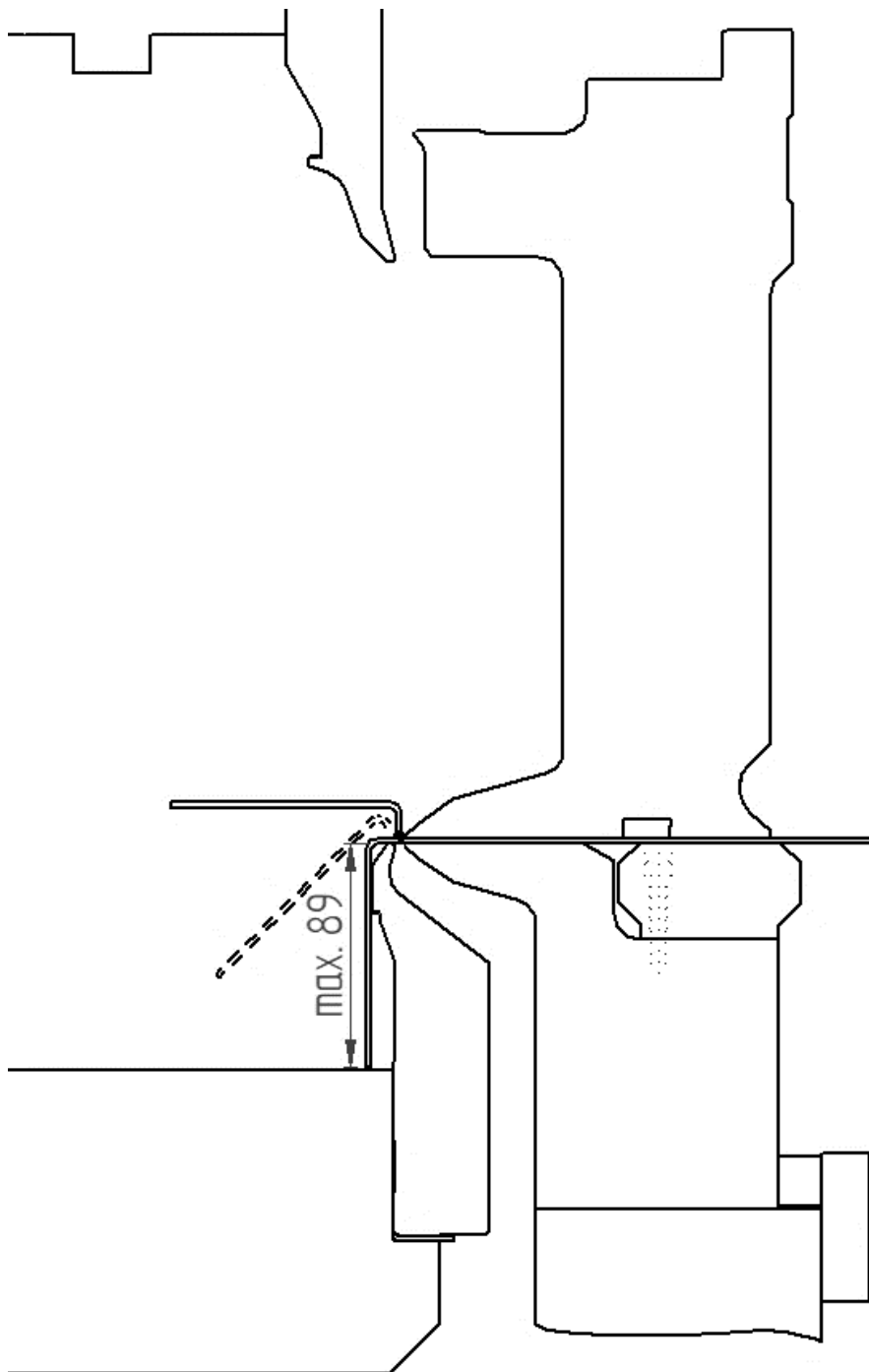




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Positive bend with a Z bend at 90°

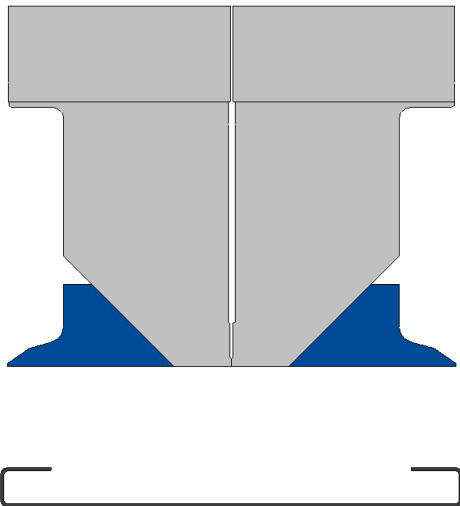
The following figure shows the maximum side length of the first bend in a Z bend, when a bend with a 89 mm flange is made.



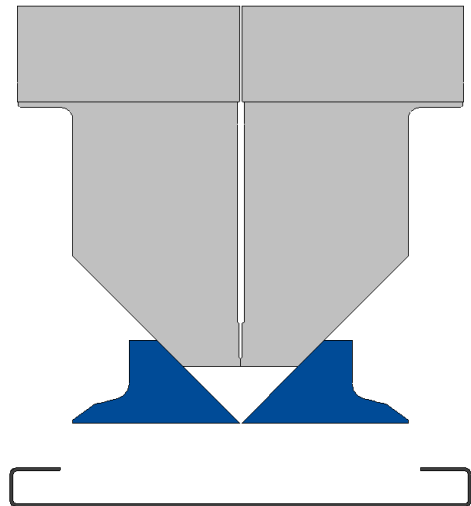
TruBend Center 5030 and 7030

Horn tool

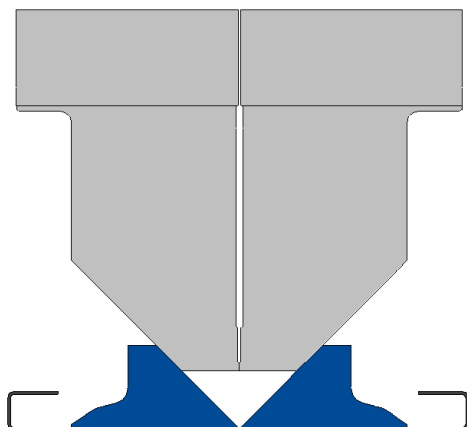
The TruBend Center 5030 and 7030 are equipped with movable horn tools. The following figures show the schematic sequence.



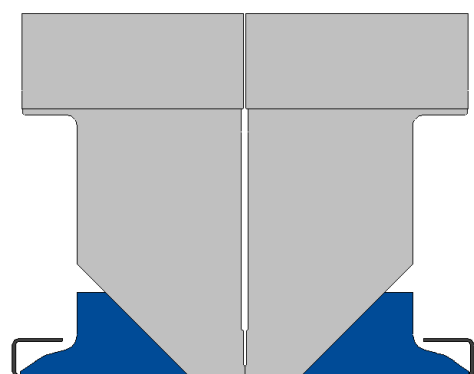
Home position



Retracted horn tools



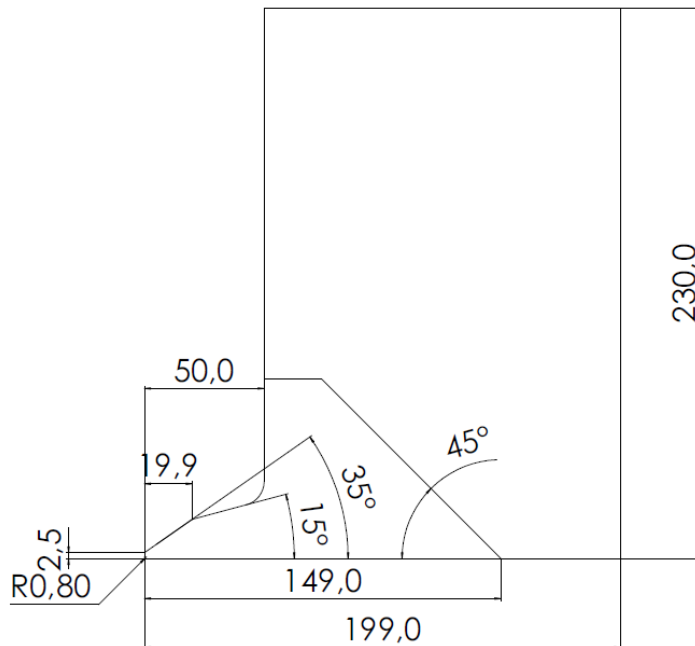
Inserting the horn tools



The horn tools in position

TruBend Center 5030 and 7030

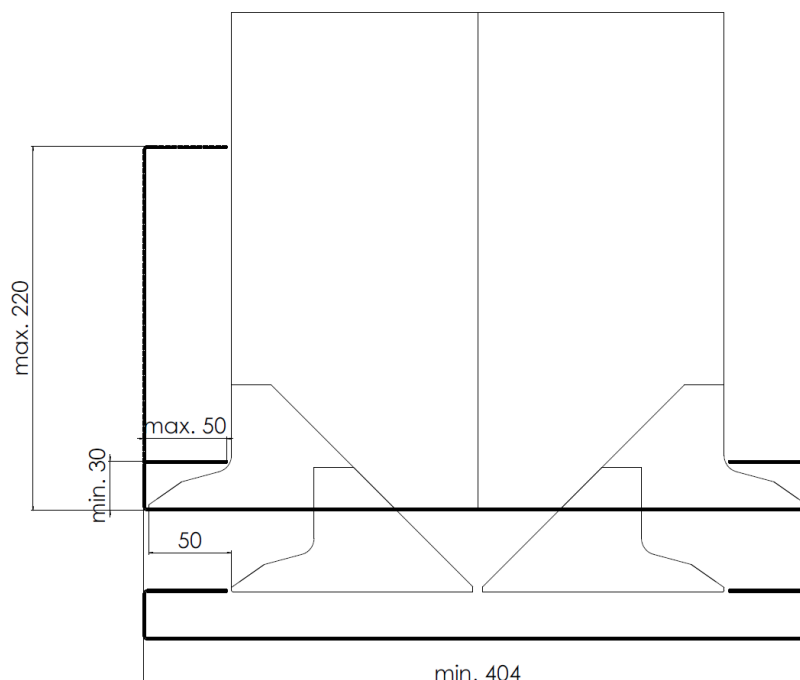
Dimensions:



Side lengths:

With max. 50 mm, a min. height of 30 mm is possible.

If this is reduced to < 50 mm, smaller side lengths are also possible.



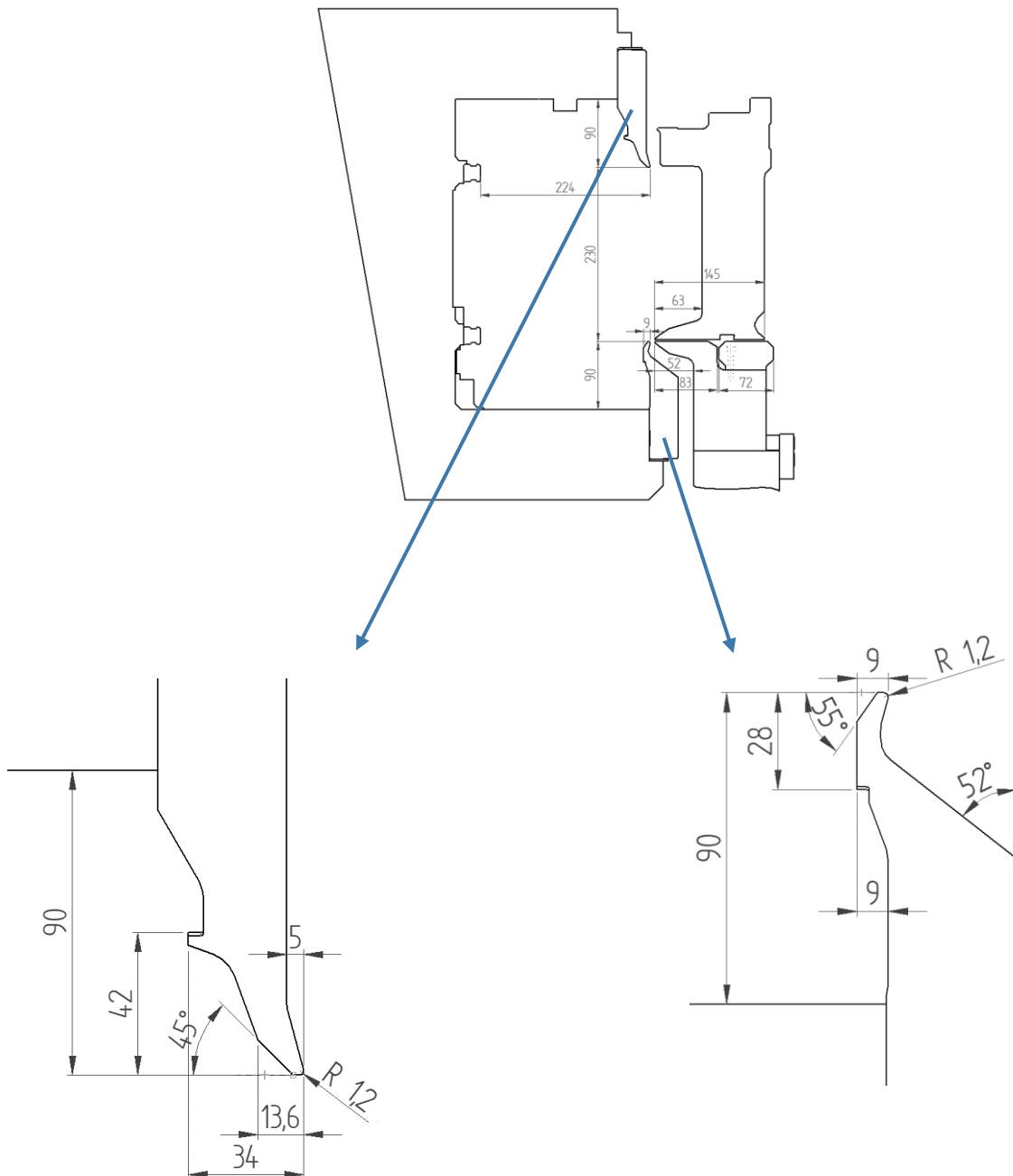


TruBend Center 5030 and 7030

5 Bending tools

90° Standard bending tools

The TruBend Center 5030 and 7030 are equipped with upper and lower standard bending tools which permit to obtain 90° bends. These are mounted on the bending frame.



Dimensions of the upper and lower bending tools

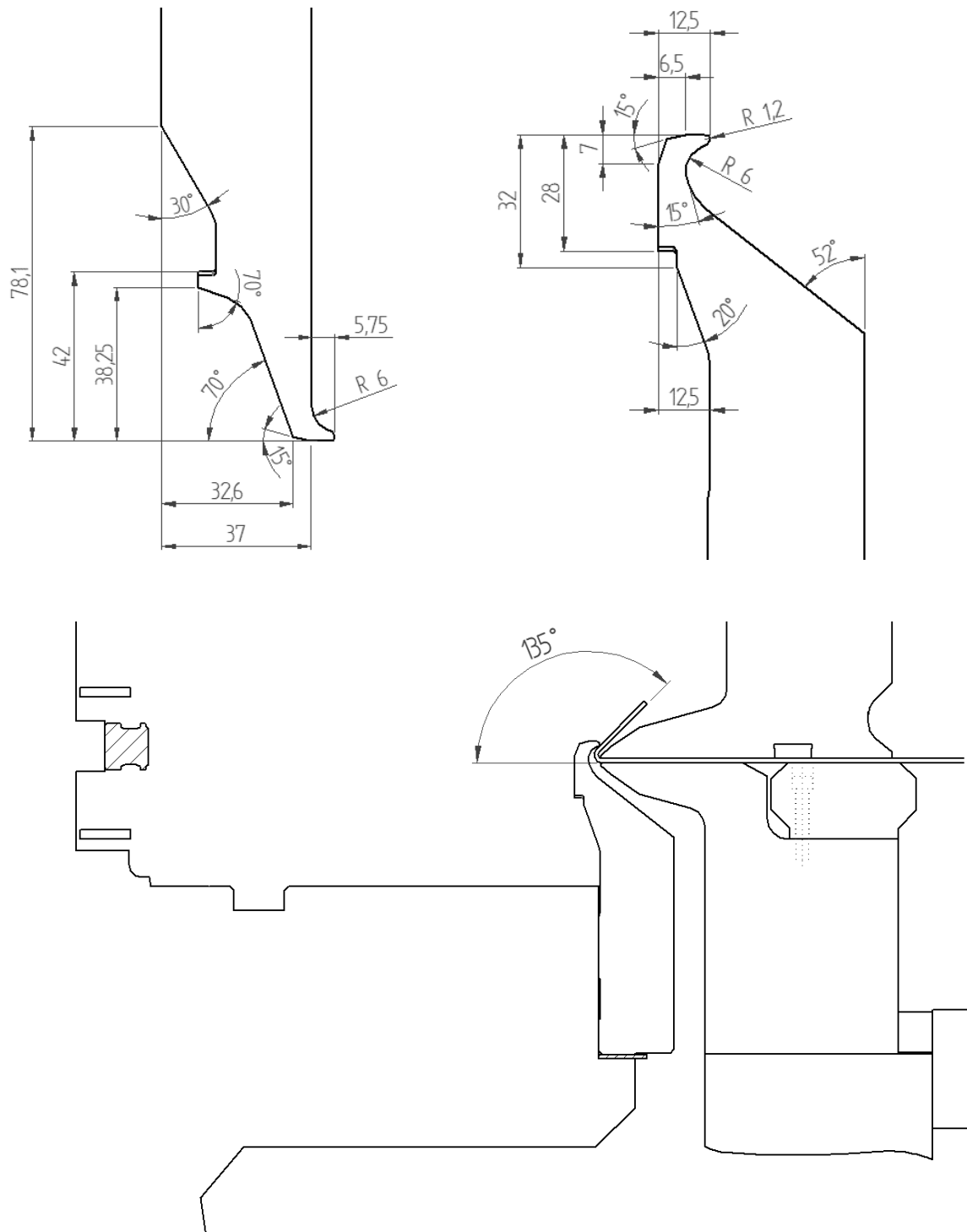


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135° Optional bending tools

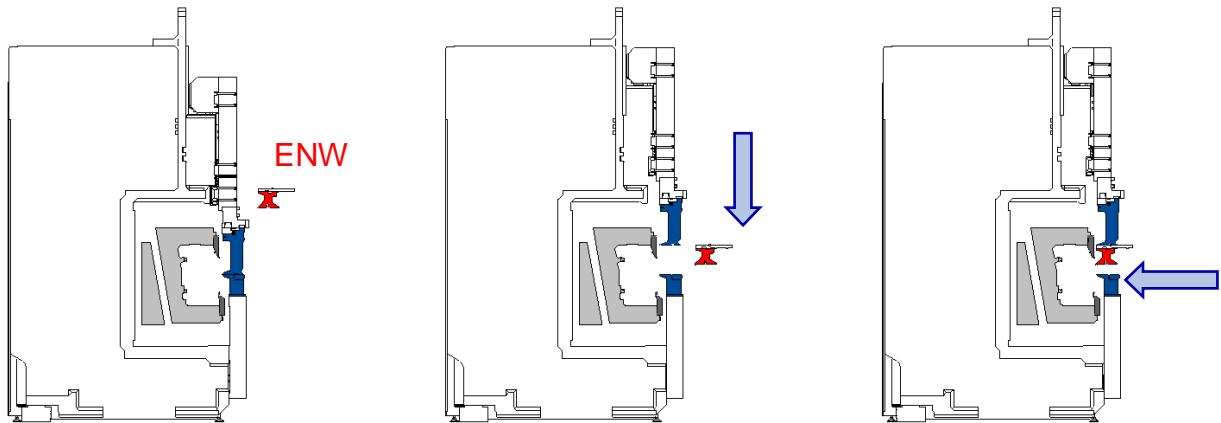
The 135° upper and lower bending tools are available as option.

These bending tools permit to obtain a 135° bends in a single operation.

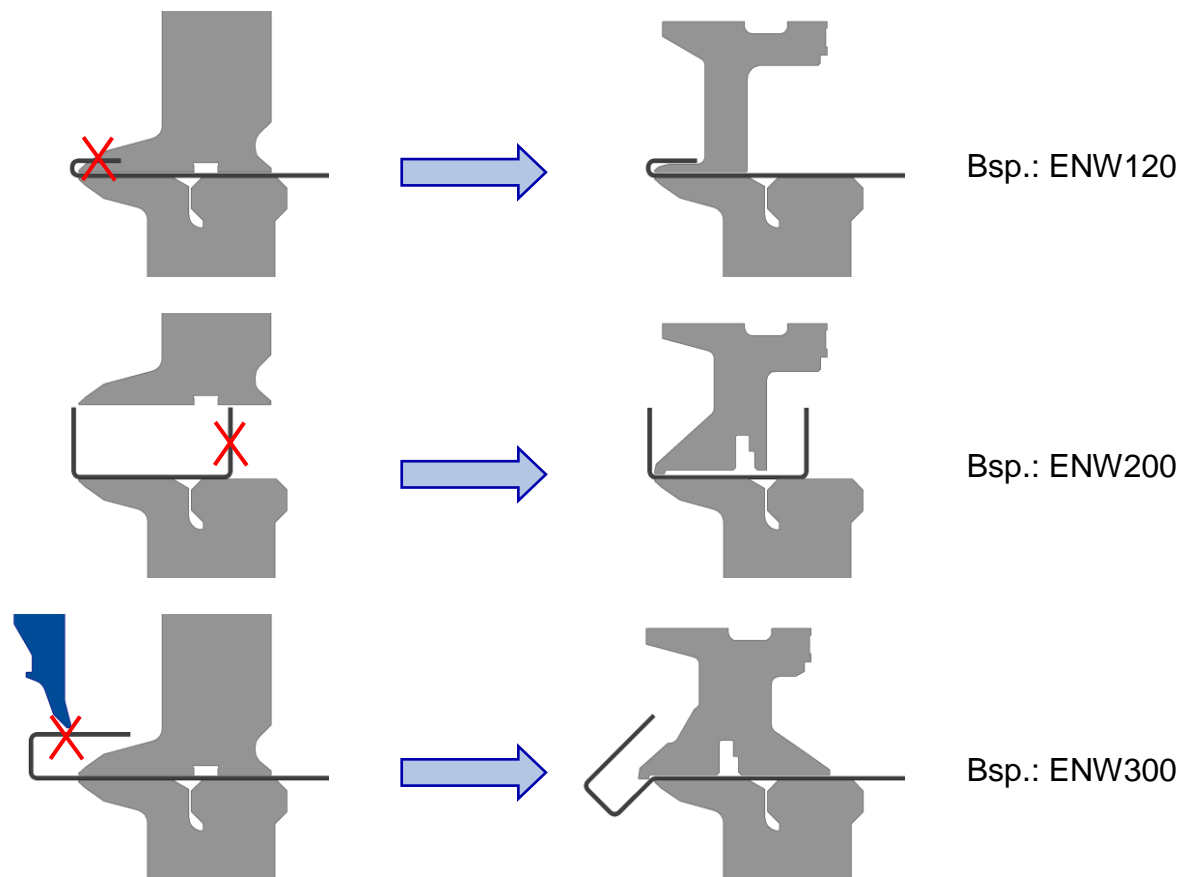


6 Extra blank holder tools - ENW

The extra blank holder tools are needed to provide the machine with enough additional blank holder tools. If necessary, these are automatically placed under the standard blank holders.



The typical applications are seen in the following figure:



Not possible with standard blank holders

Possible with an extra blank holder tool

Tool catalog

TruBend Center 5030 and 7030

TRUMPF



There are 4 types of ENW tools available:

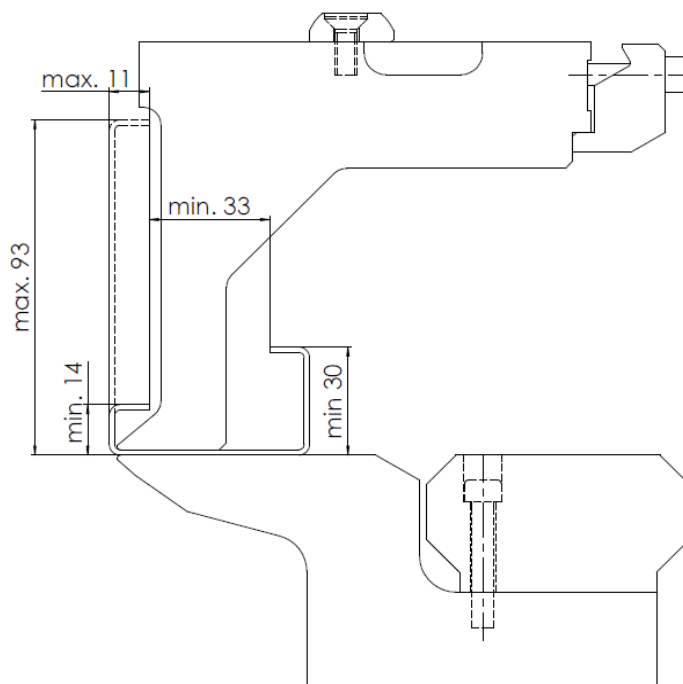
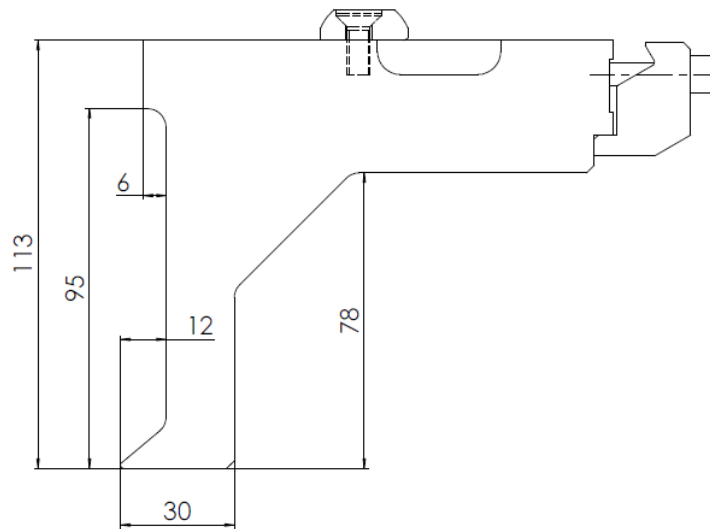
- ENW110-30, ENW 110-40, ENW110-50
- ENW120
- ENW200
- ENW300



TruBend Center 5030 and 7030

Extra blank holder tools: ENW 110-30

MAX THICKNESS	
MAXIMAL DICKE	
R= 400 N/mm ²	1,5 mm
R= 700 N/mm ²	1,2 mm
R= 220 N/mm ²	1,5 mm

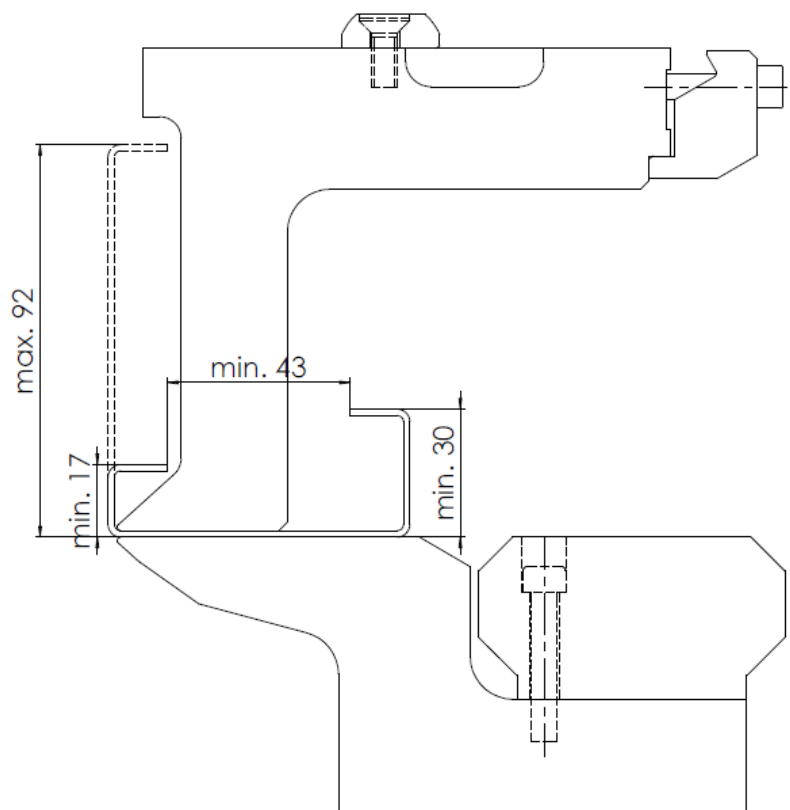
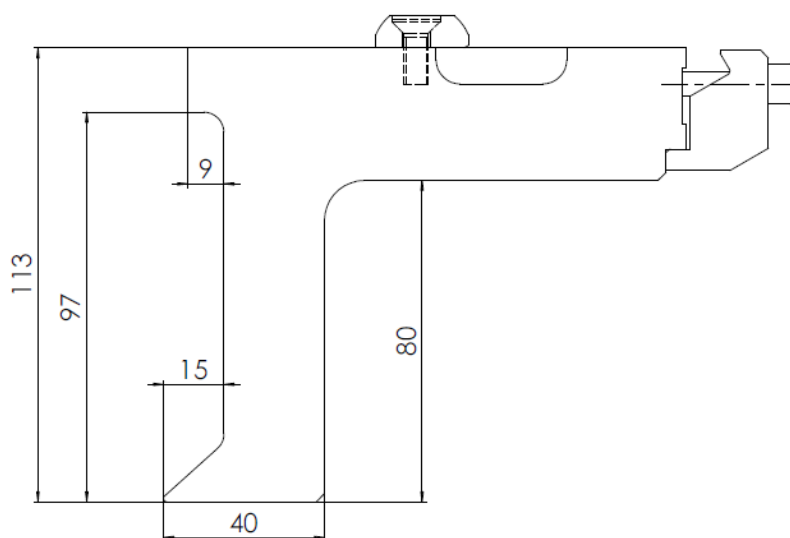




TruBend Center 5030 and 7030

Extra blank holder tools: ENW 110-40

MAX THICKNESS	
MAXIMAL DICKE	
R= 400 N/mm ²	2,0 mm
R= 700 N/mm ²	1,5 mm
R= 220 N/mm ²	2,0 mm

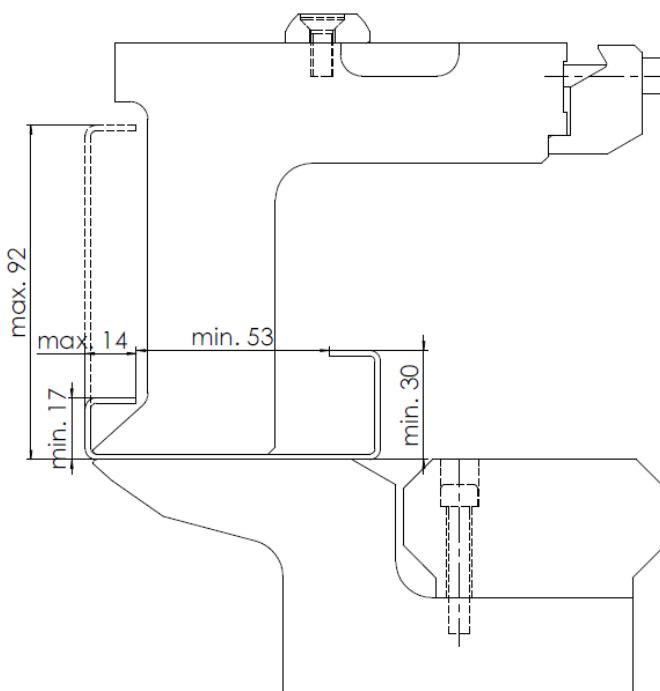
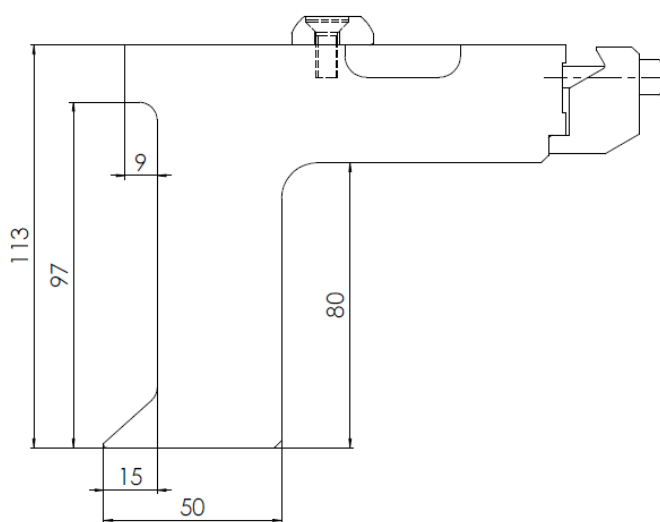




TruBend Center 5030 and 7030

Extra blank holder tools: ENW 110-50

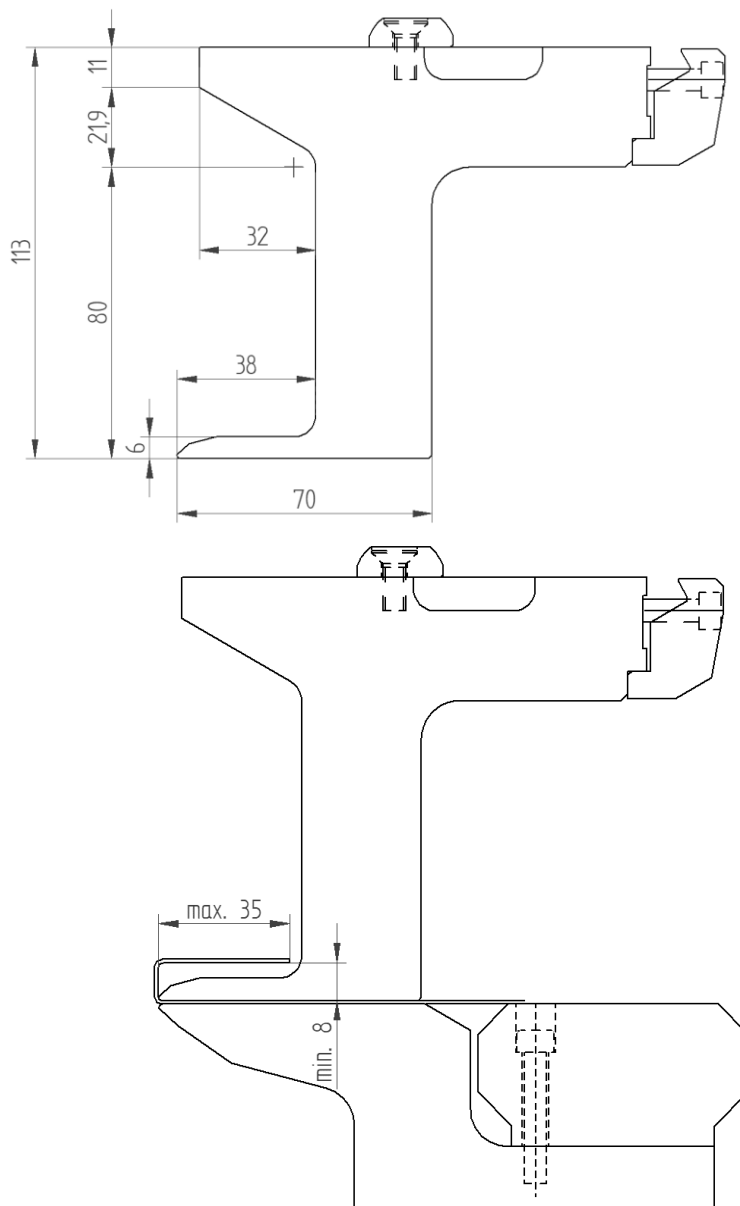
MAX THICKNESS	
MAXIMAL DICKE	
R= 400 N/mm ²	3,0 mm
R= 700 N/mm ²	2,0 mm
R= 220 N/mm ²	3,0 mm



TruBend Center 5030 and 7030

Extra blank holder tools: ENW 120

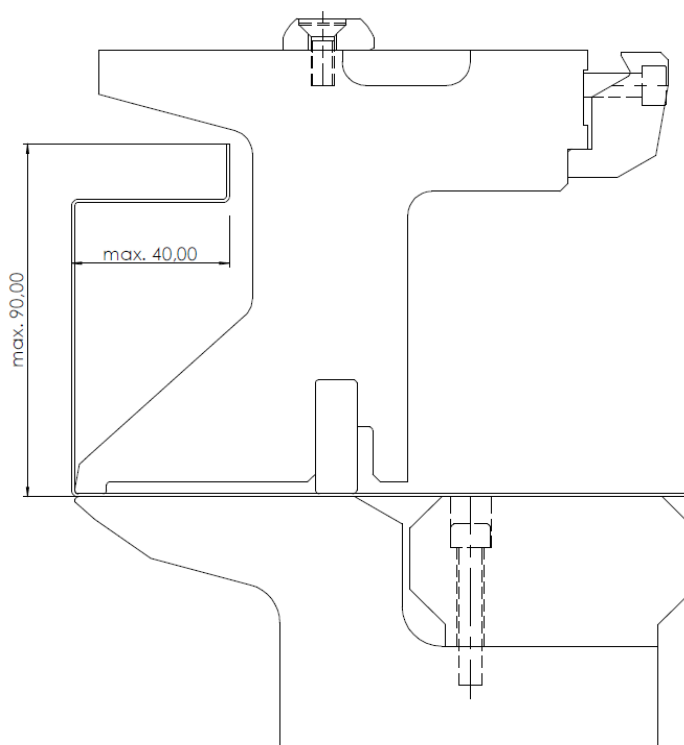
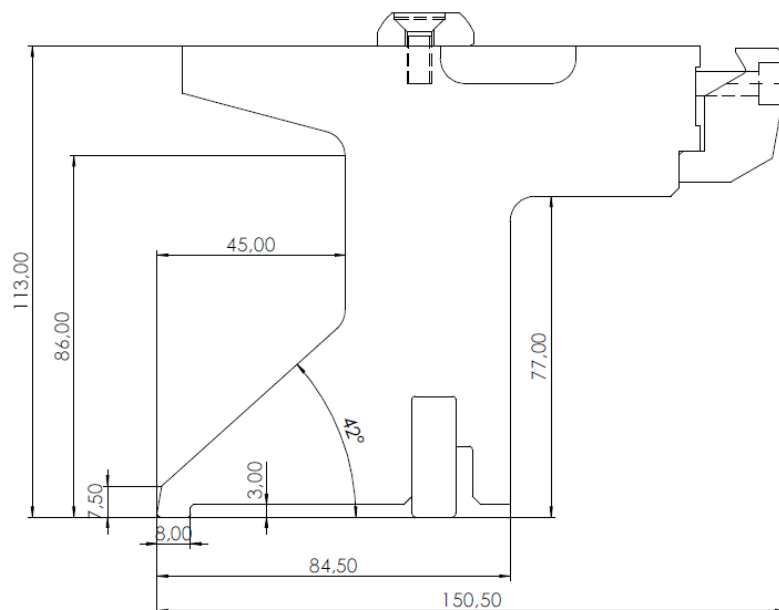
MAX THICKNESS	
MAXIMAL DICKE	
R= 400 N/mm ²	1,2 mm
R= 700 N/mm ²	1,0 mm
R= 220 N/mm ²	1,2 mm

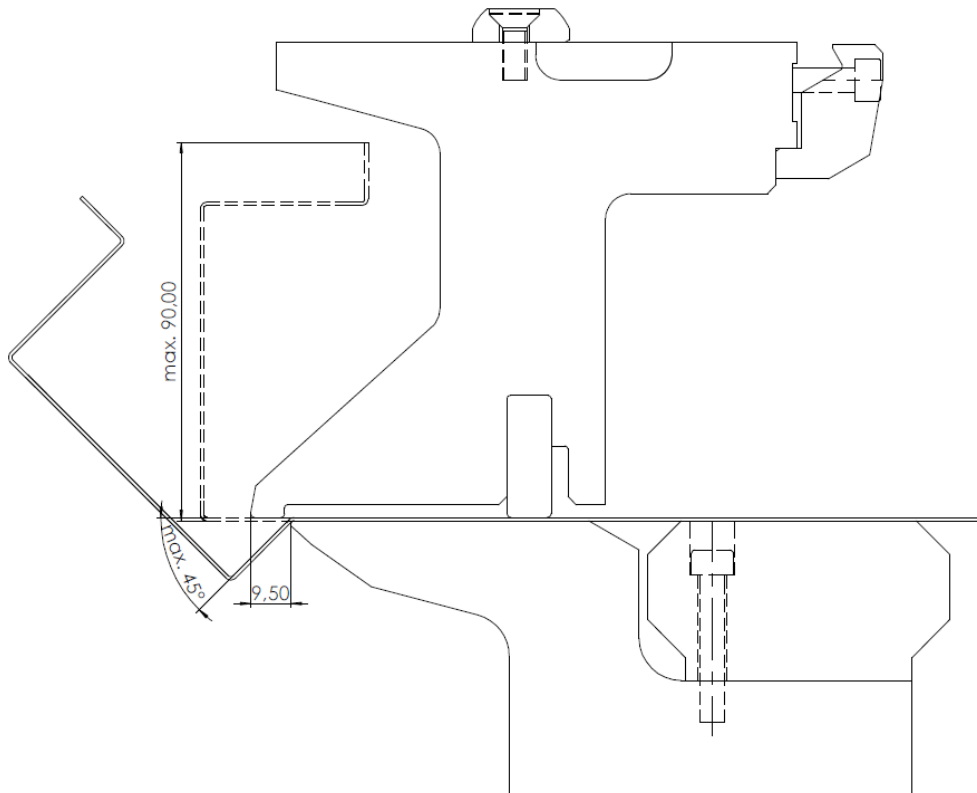


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Extra blank holder tools: ENW 200

MAX THICKNESS	
MAXIMAL DICKE	
R= 400 N/mm ²	1,5 mm
R= 700 N/mm ²	1,2 mm
R= 220 N/mm ²	1,5 mm

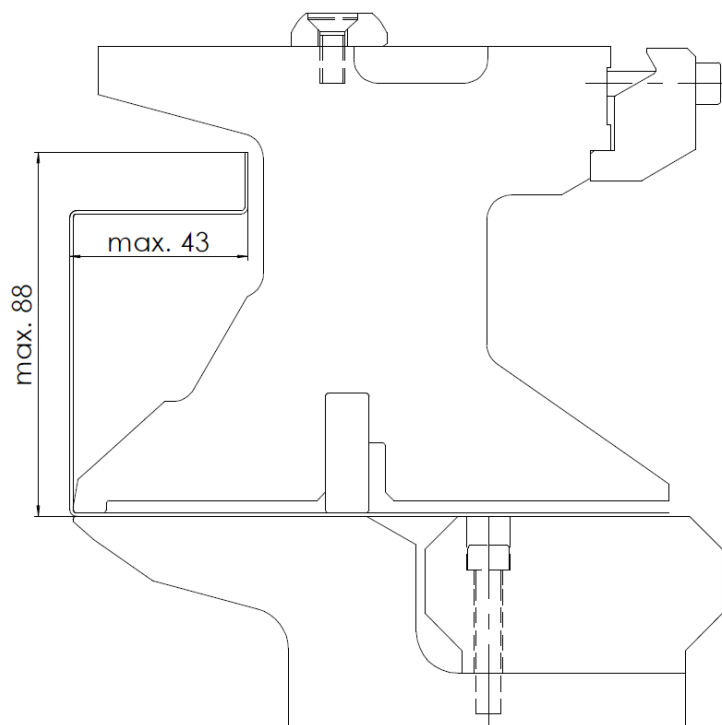
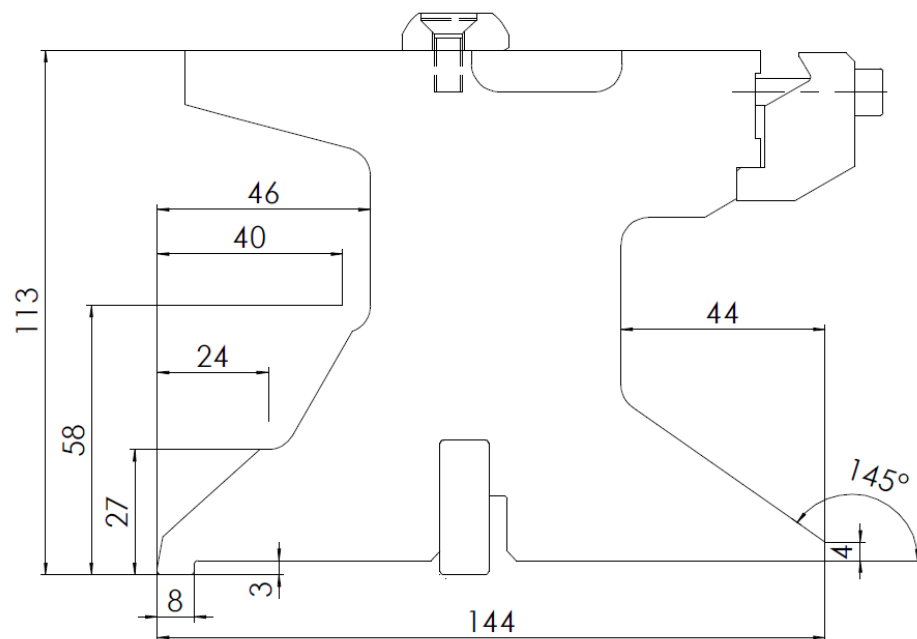




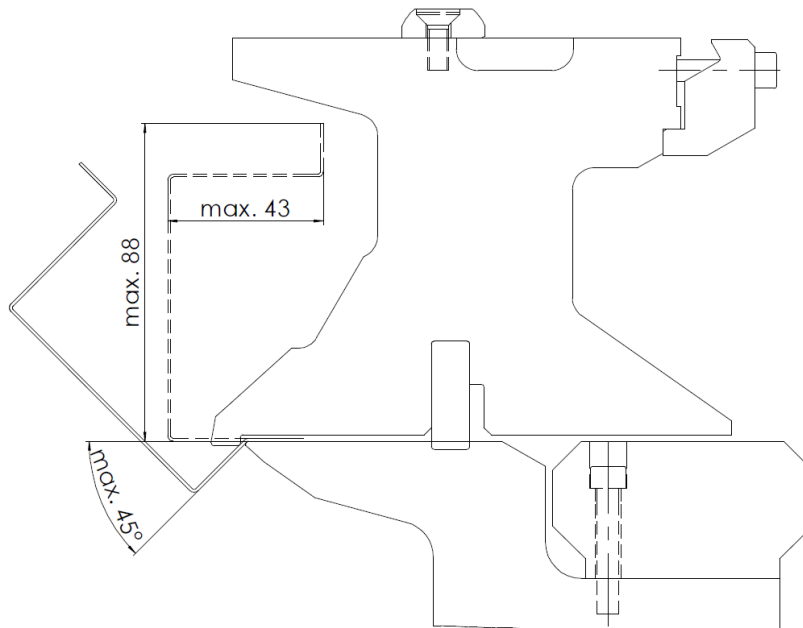


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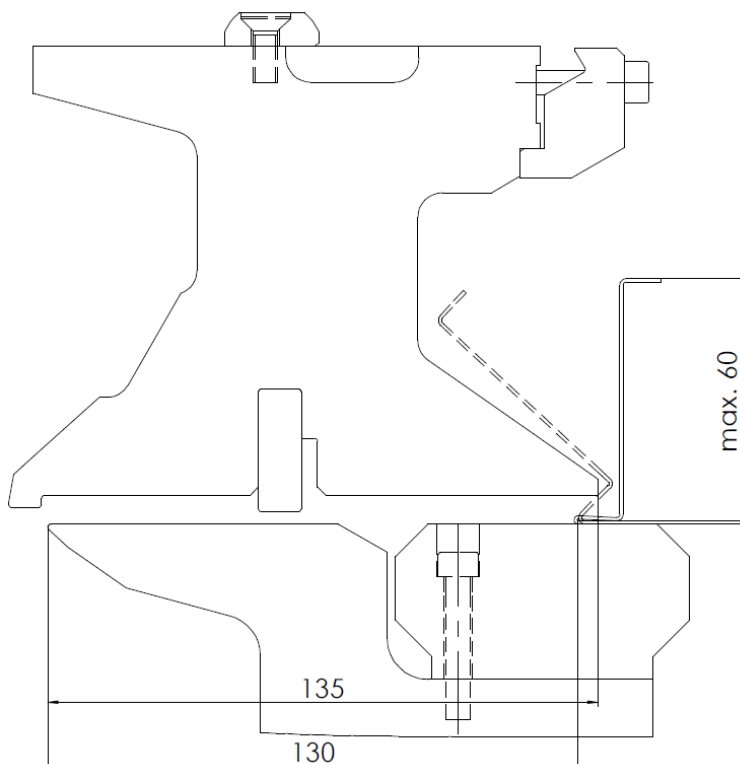
Extra blank holder tools: ENW 300



MAX THICKNESS	
MAXIMAL DICKE	
R= 400 N/mm ²	2,0 mm
R= 700 N/mm ²	1,5 mm
R= 220 N/mm ²	2,0 mm



MAX THICKNESS	
MAXIMAL DICKE	
R= 400 N/mm ²	1,5 mm
R= 700 N/mm ²	1,2 mm
R= 220 N/mm ²	1,5 mm



MAX THICKNESS	
MAXIMAL DICKE	
R= 400 N/mm ²	1,5 mm
R= 700 N/mm ²	1,2 mm
R= 220 N/mm ²	1,5 mm



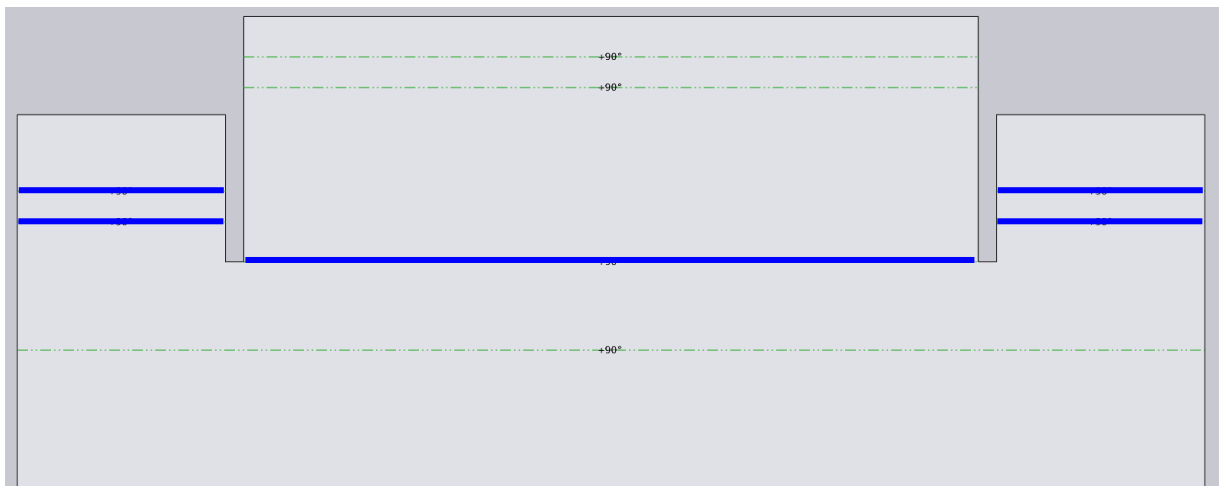
TruBend Center 5030 and 7030

7 The extra bending tool - ZBW

The extra bending tool function is necessary to be able to bend interrupted bends or flanges on the TruBend Center 5030 and 7030. If needed the ZBWs go to the parking position in the bending area to perform the bend.

An example of a part bent with ZBW tools:

The bends marked in blue are only possible with ZBWs



There are 4 types of ZBW tools available:

- ZWB100
- ZBW200
- ZBW300
- ZBW400



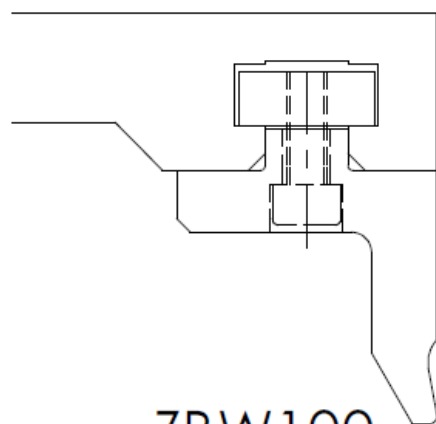
TruBend Center 5030 and 7030

Extra bending tool: ZBW 100

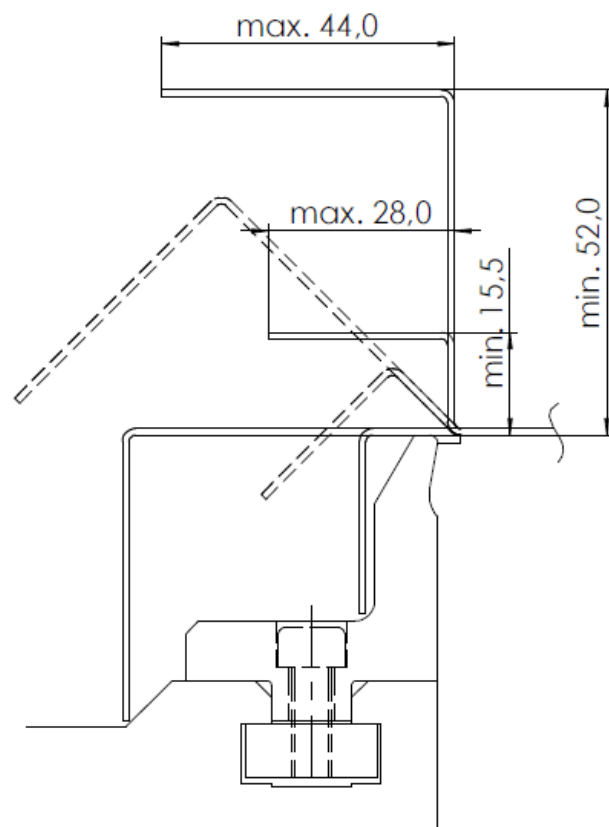
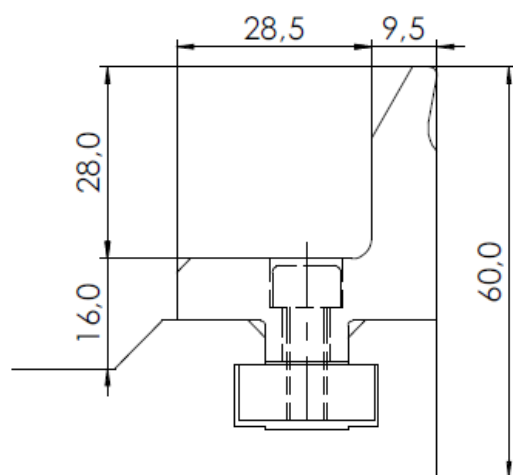
Maximale Dicke:

Maximum thickness:

R= 220 N/mm ²	1,5mm
R= 400 N/mm ²	1,5mm
R= 700 N/mm ²	1,2mm



ZBW 100





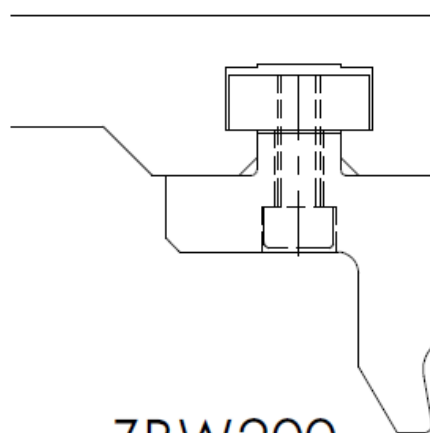
TruBend Center 5030 and 7030

Extra bending tool: ZBW 200

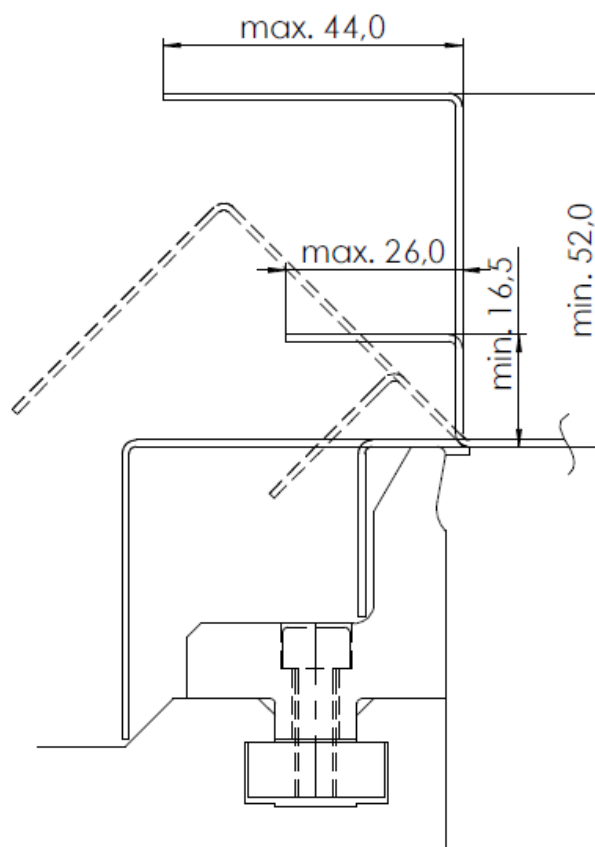
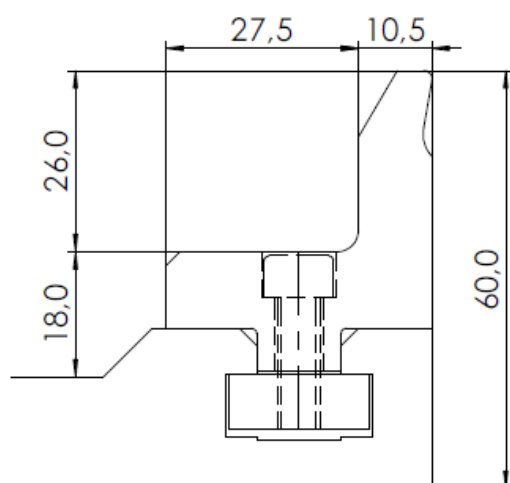
Maximale Dicke:

Maximum thickness:

R= 220 N/mm ²	2mm
R= 400 N/mm ²	2mm
R= 700 N/mm ²	1,5mm



ZBW200





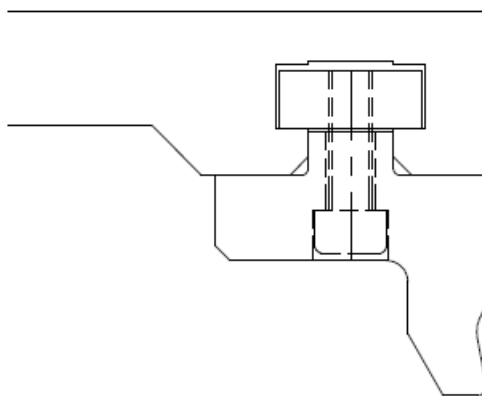
TruBend Center 5030 and 7030

Extra bending tool: ZBW 300

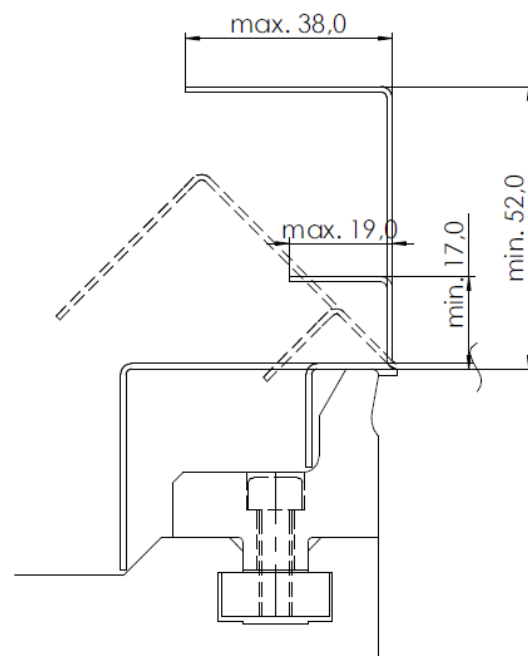
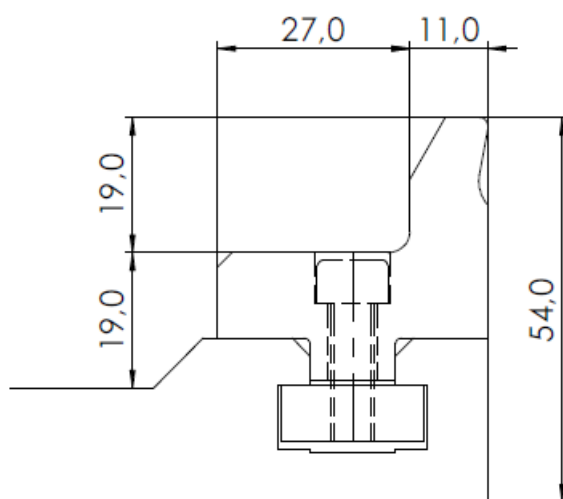
Maximale Dicke:

Maximum thickness:

R= 220 N/mm ²	2,5mm
R= 400 N/mm ²	2,5mm
R= 700 N/mm ²	1,8mm



ZBW300





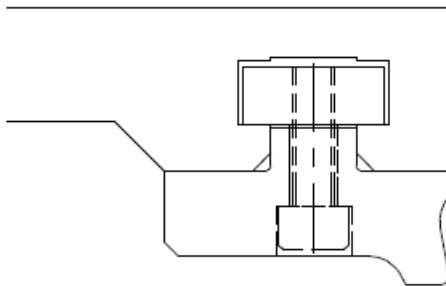
TruBend Center 5030 and 7030

Extra bending tool: ZBW 400

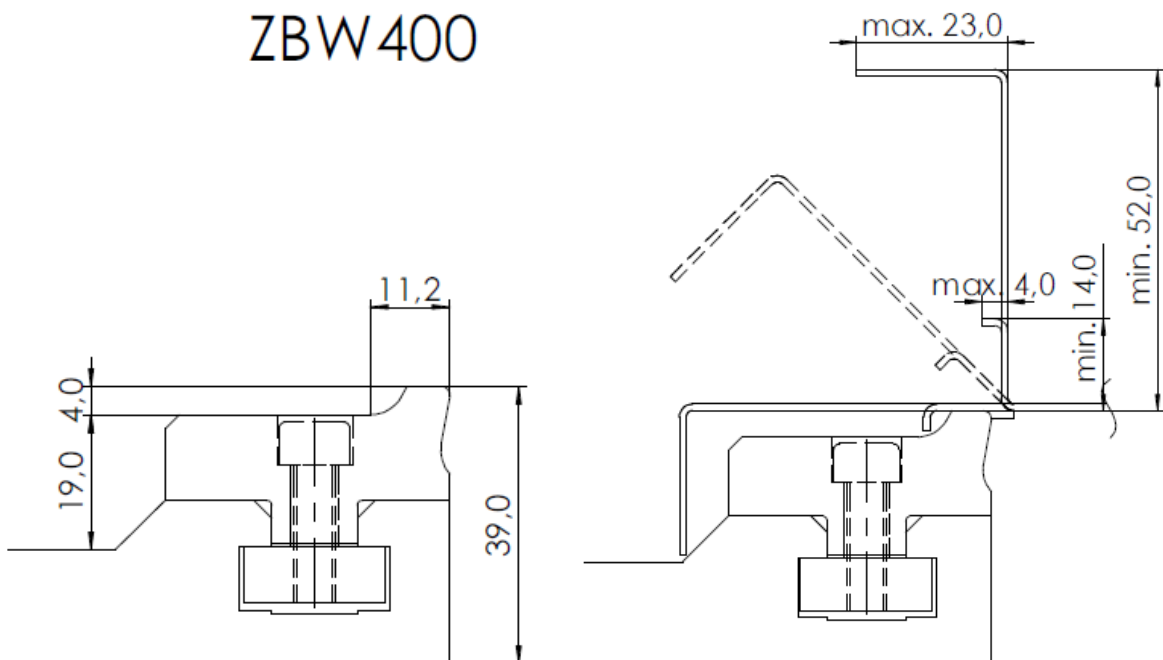
Maximale Dicke:

Maximum thickness:

R= 220 N/mm ²	3mm
R= 400 N/mm ²	3mm
R= 700 N/mm ²	2.2mm



ZBW 400

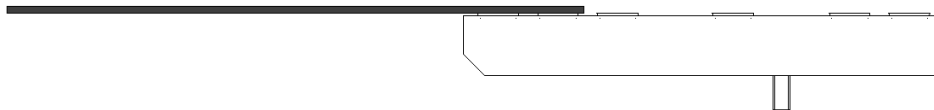
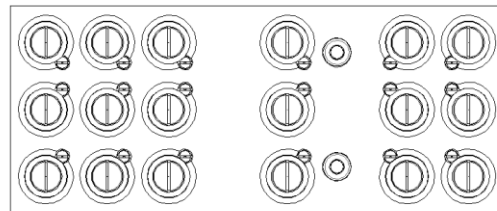
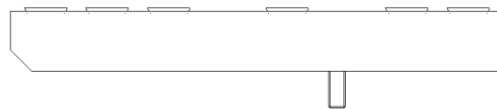


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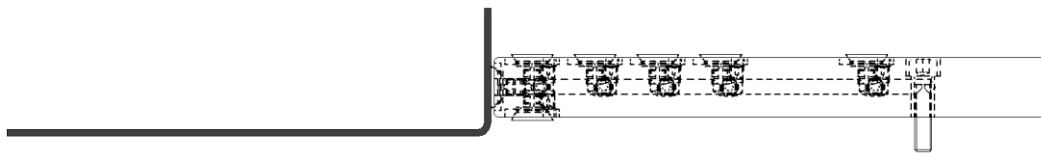
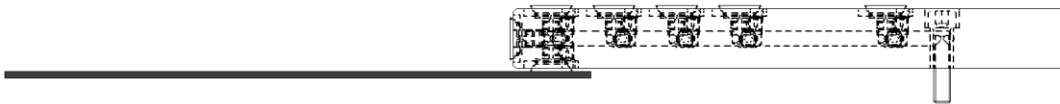
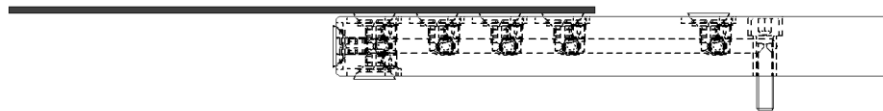
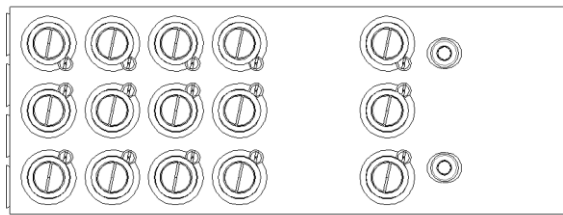
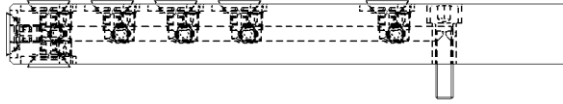
8 Manipulator modules

The TruBendCenter 5030/ 7030 is equipped with “Surface vacuum” modules. These modules are used to grip and move the metal sheet on the working table. As shown below, magnetic modules or pliers are also available as option.

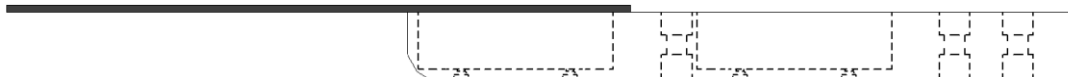
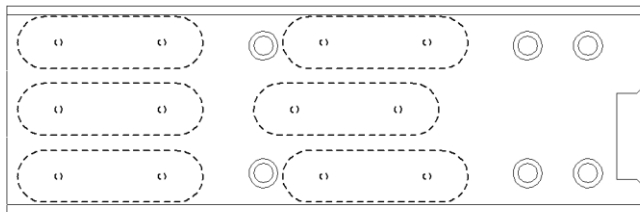
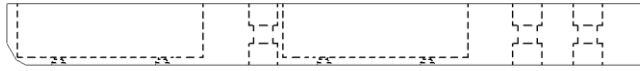
Surface vacuum



3-Surface vacuum

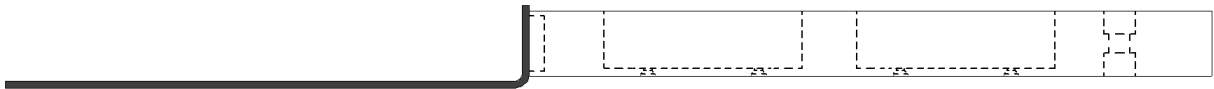
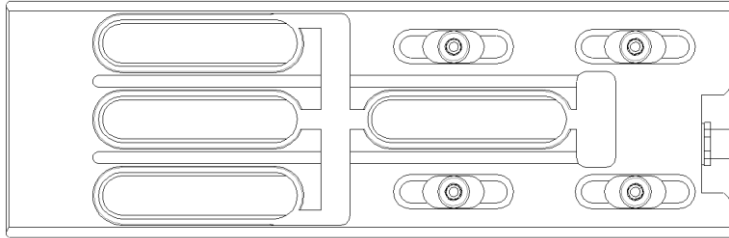


Standard magnet modules

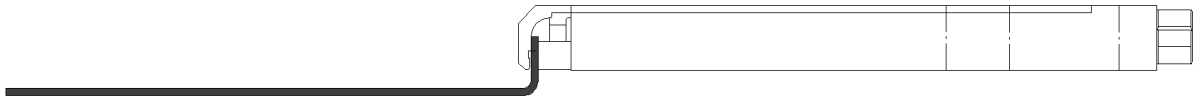
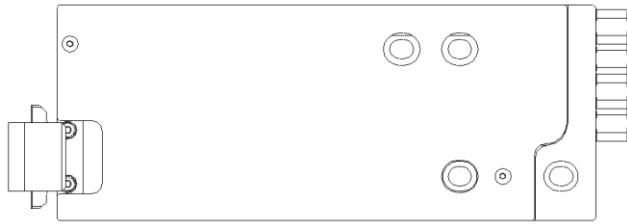




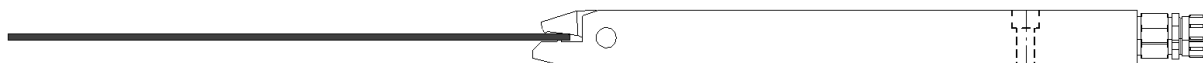
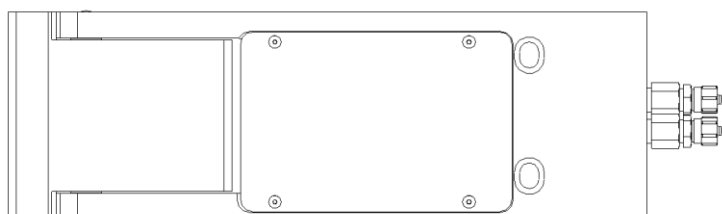
2-Surface magnet modules



Vertical pliers



Horizontal pliers



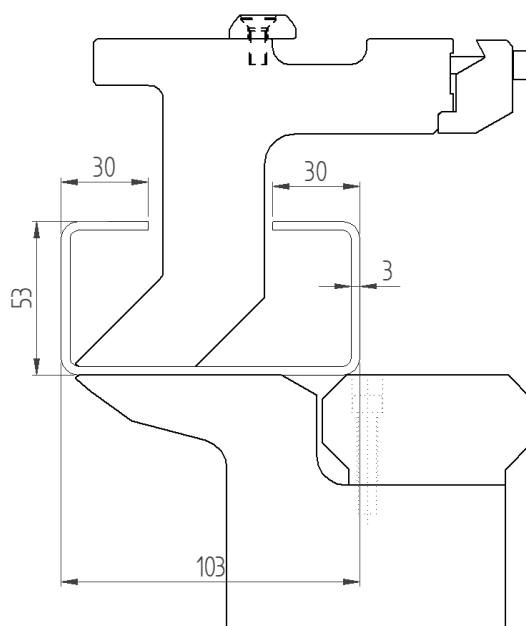
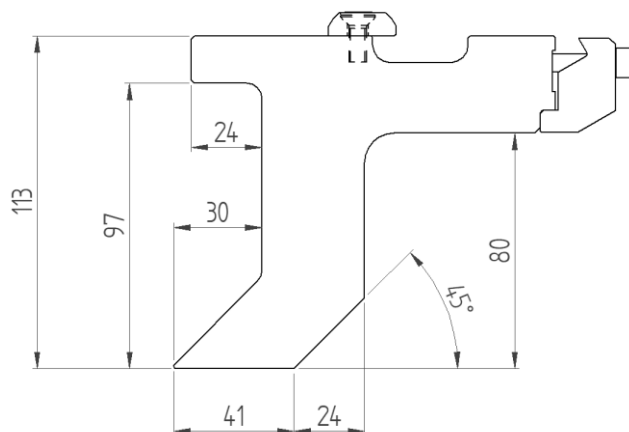
9 Special tools

On request, we can also produce special designs of the upper blank holder, ENW or ZBW tools, for example:

Special blank holder tools: ENW 110-001S

Maximale Dicke:
Maximum thickness:

R= 400 N/mm ²	3mm
R= 700 N/mm ²	2mm
R= 220 N/mm ²	4mm





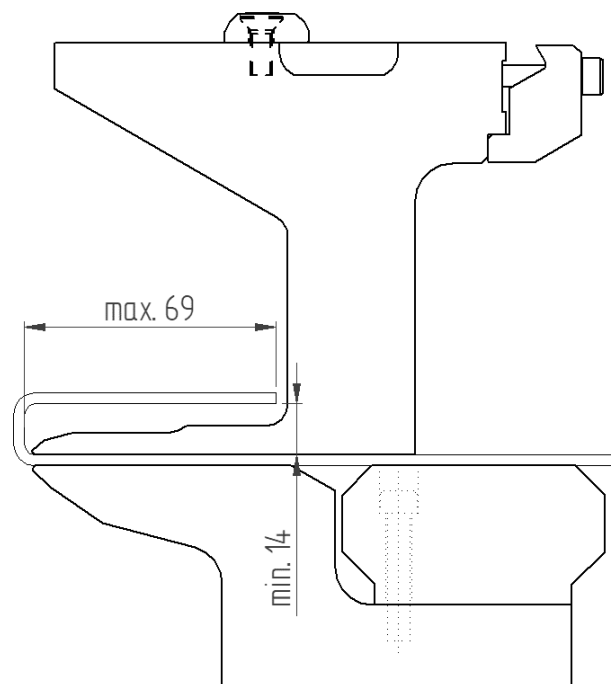
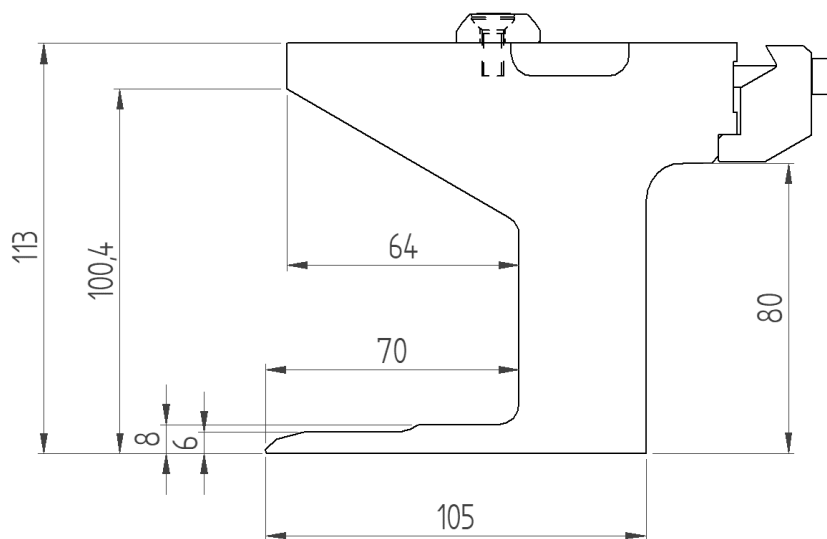
TruBend Center 5030 and 7030

Special blank holder tools: ENW 120-001S

Maximale Dicke:
Maximum thickness:

R= 400 N/mm ²	1,2 mm *
R= 700 N/mm ²	1 mm *
R= 220 N/mm ²	1,2 mm *

* Used only to complete the bend



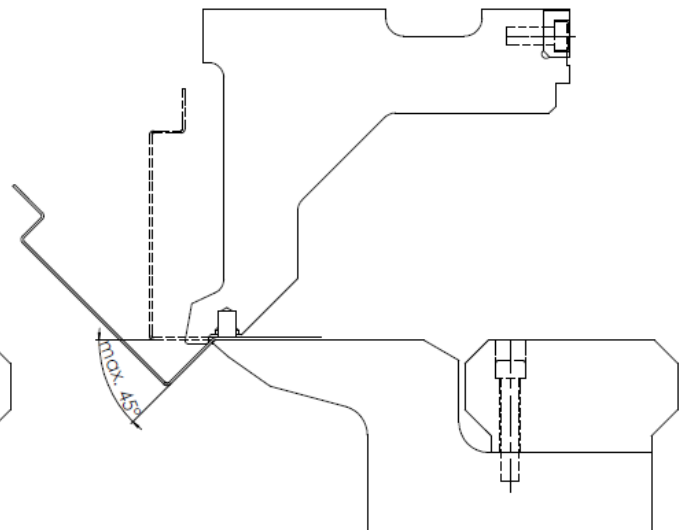
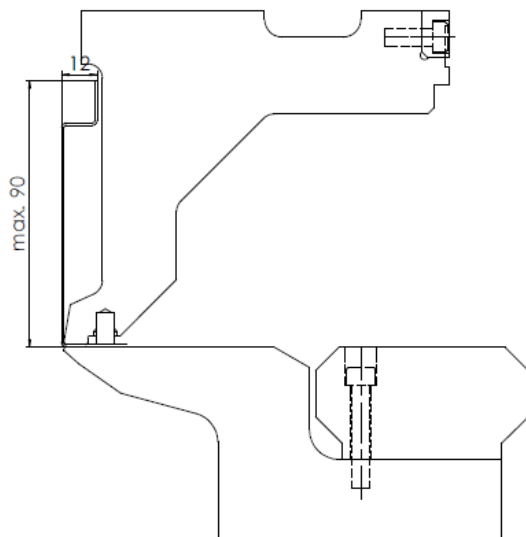
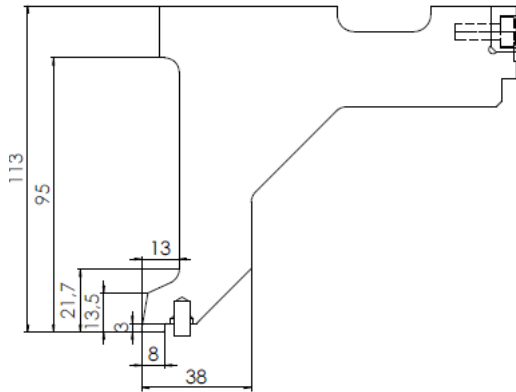


TruBend Center 5030 and 7030

Special blank holder tools: ENW 200-001S

Maximale Dicke:
Maximum thickness:

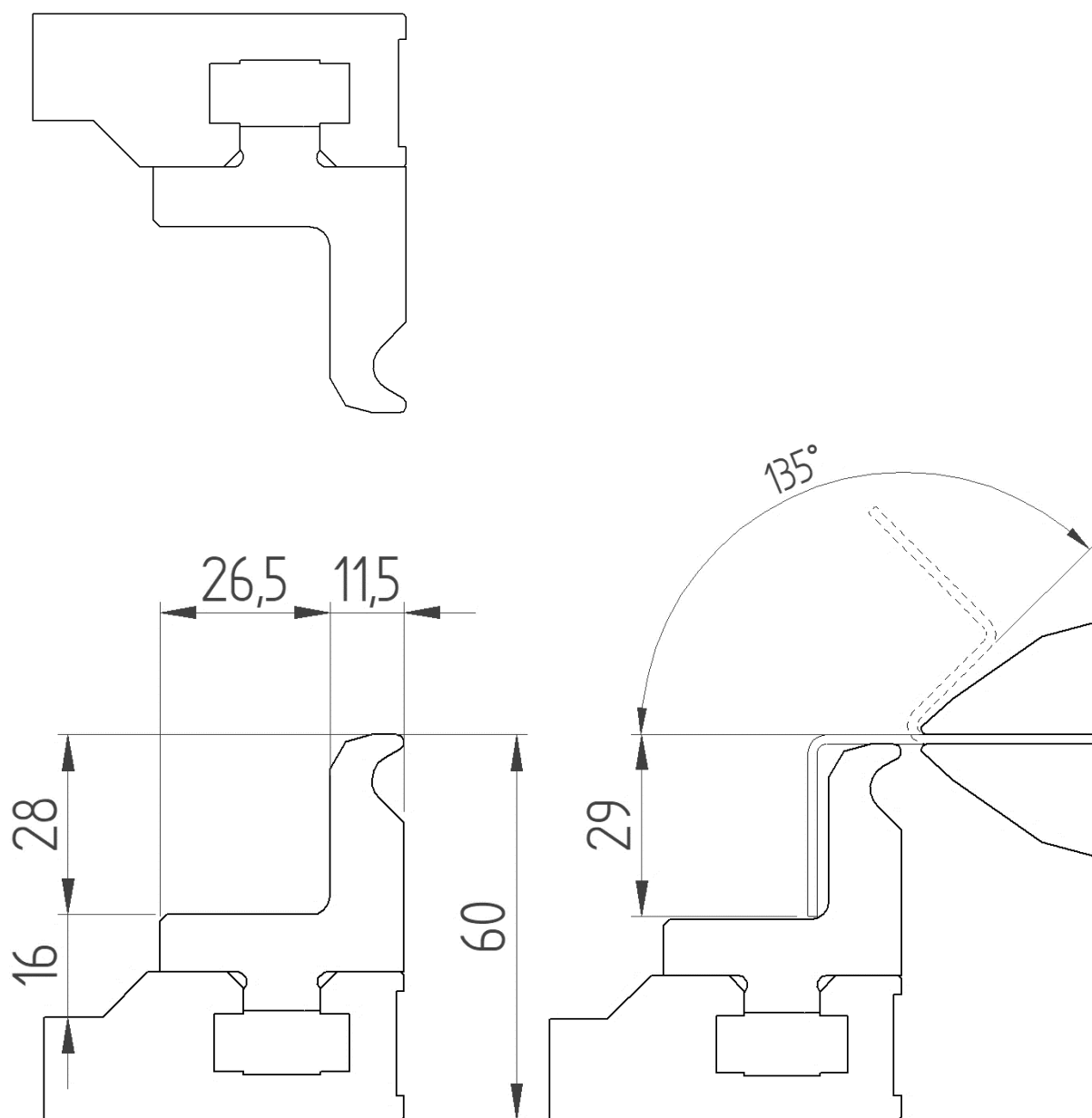
R= 400 N/mm ²	1,2 mm
R= 700 N/mm ²	1 mm
R= 220 N/mm ²	1,2 mm



Special bending tools: ZBW-001S

Maximale Dicke:
Maximum thickness:

R= 400 N/mm ²	1,5 mm
R= 700 N/mm ²	1,5 mm
R= 220 N/mm ²	2 mm



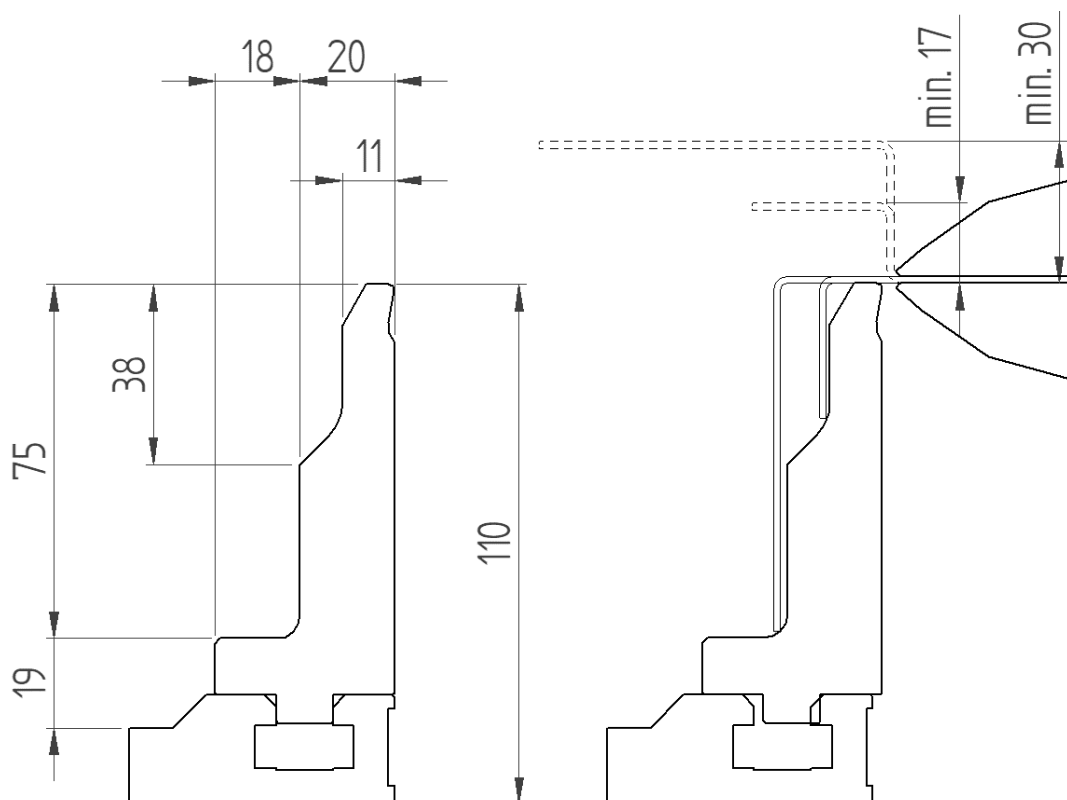
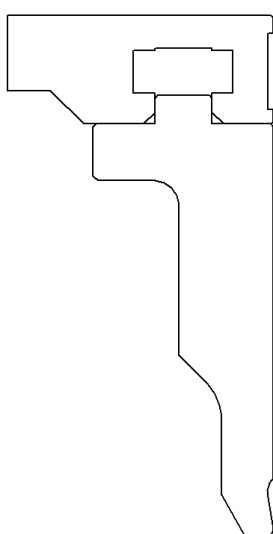


TruBend Center 5030 and 7030

Special bending tools: ZBW-002S

Maximale Dicke:
Maximum thickness:

R= 400 N/mm ²	2 mm
R= 700 N/mm ²	2 mm
R= 220 N/mm ²	1,5 mm



10 Material numbers

Tool type	Spare part number*	Material number*
ENW110-30 - Length 1125mm	2365011	2365011
ENW110-40 - Length 1125mm	2364979	2364979
ENW110-50 - Length 1125mm	2364350	2364350
ENW120 - Length 1125mm	2365012	2367505
ENW200 - Length 1125mm	2364521	2364521
ENW300 - Length 1125mm	2365014	2367511
ENW110-30 - Length 2085mm	2366553	2366553
ENW110-40 - Length 2085mm	2366552	2366552
ENW110-50 - Length 2085mm	2366551	2366551
ENW120 - Length 2085mm	2366554	2366554
ENW200 - Length 2085mm	2366555	2366555
ENW300 - Length 2085mm	2366556	2366556
ENW110-30 - Length 3123mm	1913003	1949304
ENW110-40 - Length 3123mm	2005525	2035742
ENW110-50 - Length 3123mm	1953983	2035743
ENW120 - Length 3123mm	1993412	1949305
ENW200 - Length 3123mm	1953984	1949306
ENW300 - Length 3123mm	1973895	1949307
ZBW100 - Length 940mm (1 set)	2005522	1949288
ZBW200 - Length 940mm (1 set)	1973896	1949289
ZBW300 - Length 940mm (1 set)	2005523	1949290
ZBW400 - Length 940mm (1 set)	2005524	1949302

*Material number for delivery with the machine order

*Spare part number for reorder via retrofit.tws@de.trumpf.com