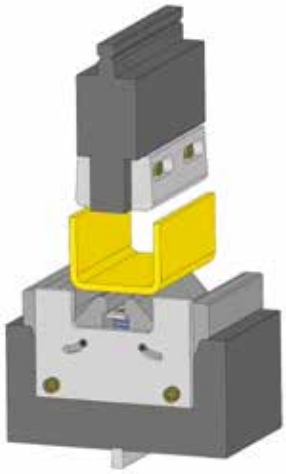
PRECISION BENDING SOLUTIONS

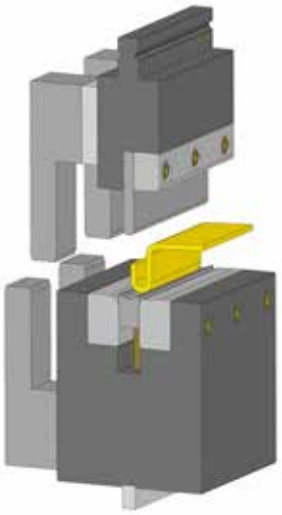
SPECIAL TOOLS

STE-SPECIAL TOOLS

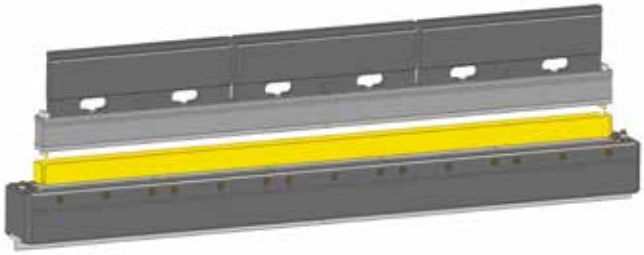
3D-models special tools



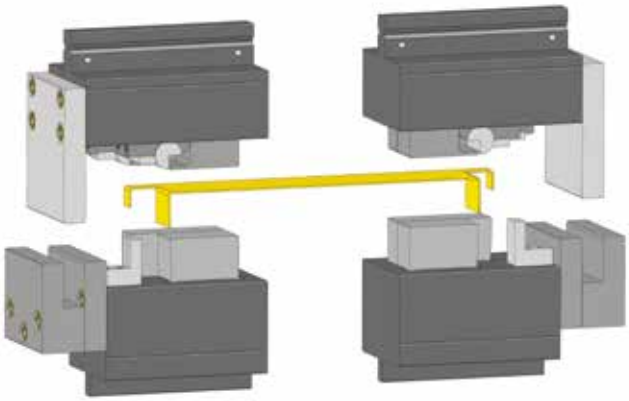
U-bending tool with rotating rollers



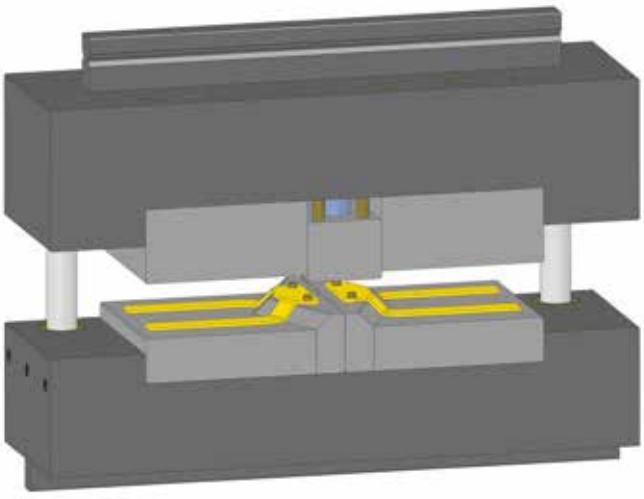
U-bending tool with back guide



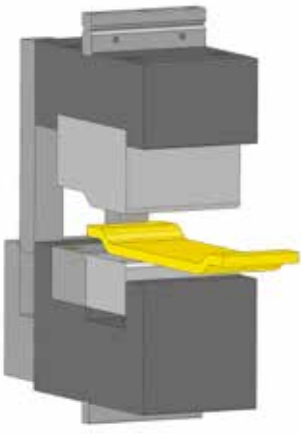
U-bending tools for all sided bending in one stroke



Forming tool with spring loaded hold-down device and rotating rollers to produce four 90° bendings in one stroke

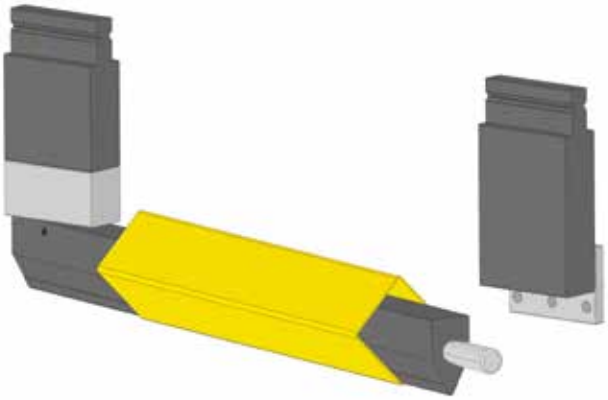


Pillar guided Z-embossing tool with spring loaded hold-down device - two parts in one stroke

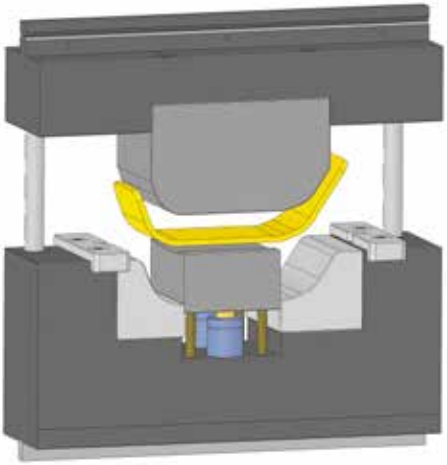


Z-embossing tool with back guide

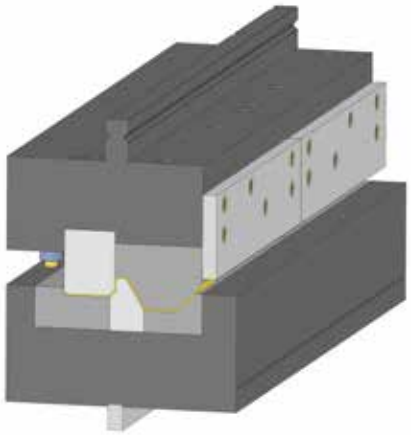
3D-models special tools



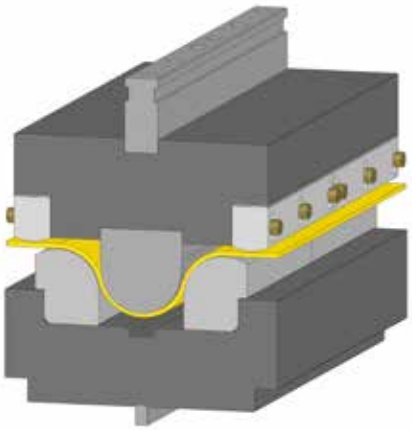
Special Rotax for production
of closed profiles



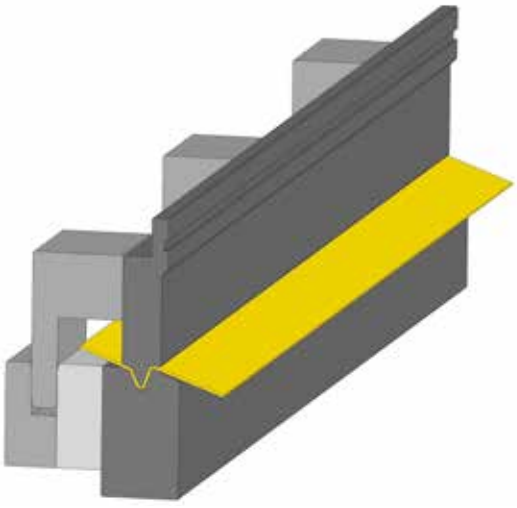
Pillar guided tool for bending
two different radii in one stroke



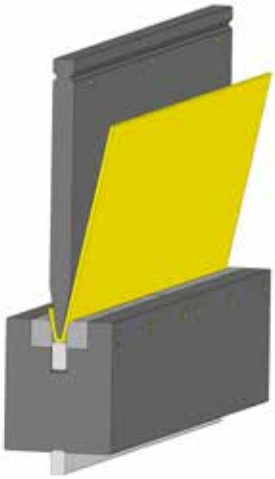
Multiple embossing tool



Round beading tool with
adjustable bending strips



Embossing toll with back guide
for asymmetrical V-contour



Tool for 20° profile with
spring loaded ejector

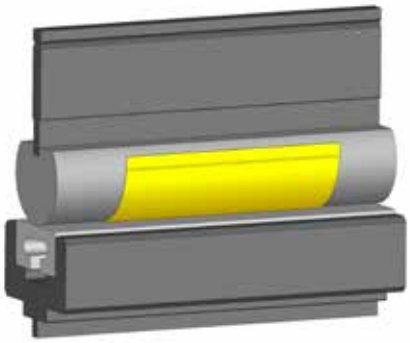
3D-models special tools

Two-station tool for V-profile production

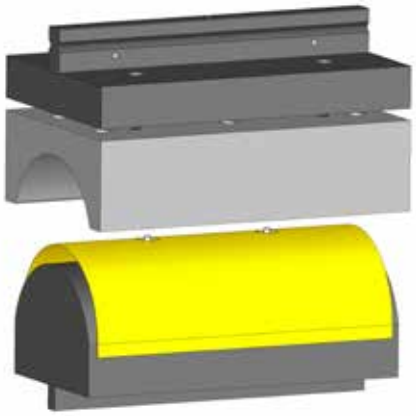
Station 1: Embossing tool with lateral guide

Station 2: U-bending tool with spring loaded ejector

Two-station tool for case cover production

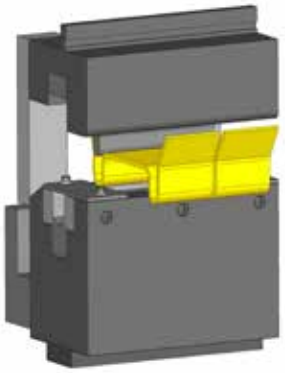


Station 1: Radius tool with PU-insert
for mark free bending of a 180° radius

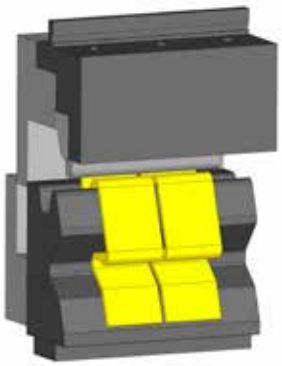


Station 2: Calibration tool with inserted embossing-stamps
for embossing two depressions in the radius at the same time

Two-station tool for production of a holder



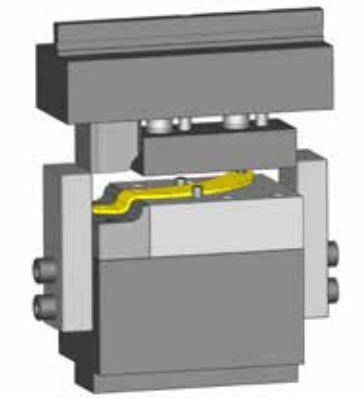
Station 1: U-bending tool with back guide
and spring loaded ejector



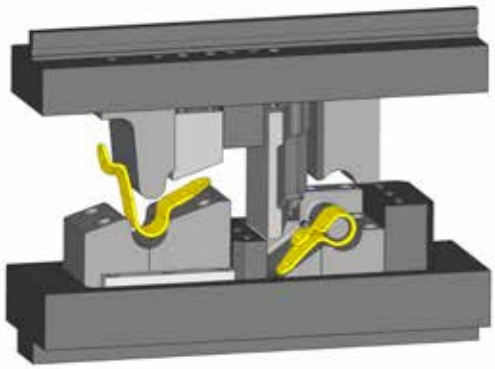
Station 2: V-embossing tool with back guide,
adjusted to the prior U-bending

3D-models special tools

Two-station tool for clamp production

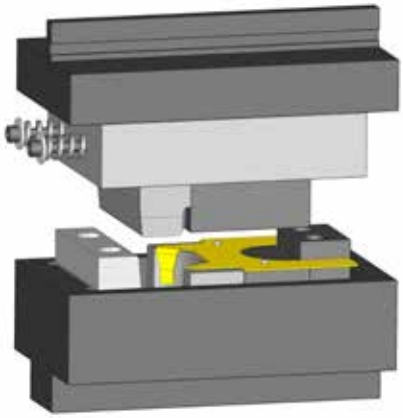


Station 1: Z-embossing tool for clamp shaping with spring loaded hold-down device and lateral support

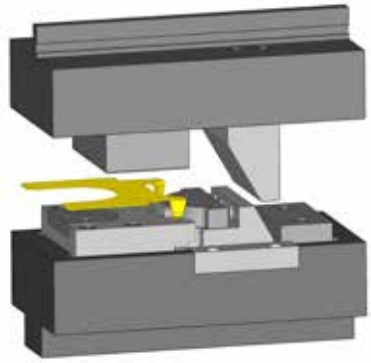


Station 2: Tool for embossing a radius (left) and roll into a clamp shape (right), with spring loaded hold-down devices and integrated supports

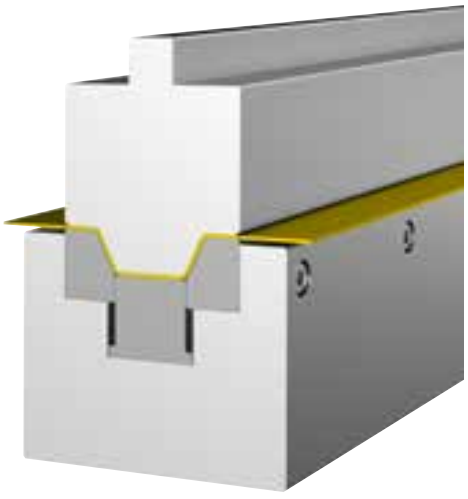
Two-station tool for production of a holding plate



Station 1: Embossing tool for two 90° flanges with 3D-contour



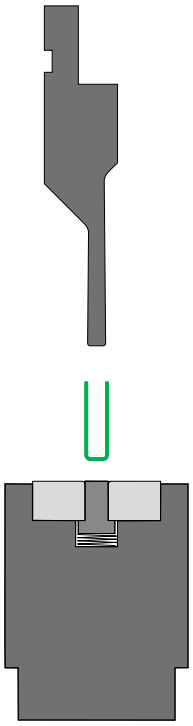
Station 2: Bending tool for folding of two short straps at the already bended flanges with the help of movable gate valves

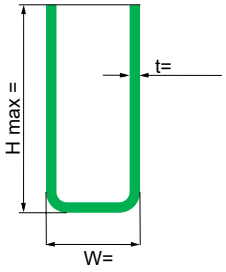


U-bending tools

ADVANTAGES

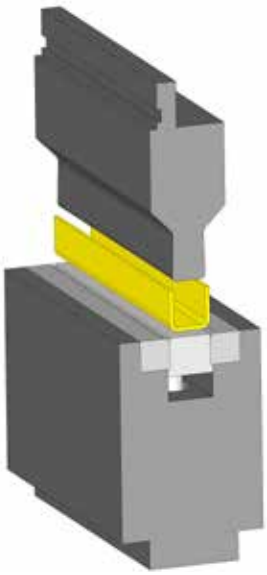
- Production in one step
- Easy removal of the profiles
- Small inside measurements with high flanges of the profiles possible
- Process stability
- Reducing of marks through spring loaded ejector
- Active components are hardened
- Functional test and adjustment through test bends - with your sample sheets





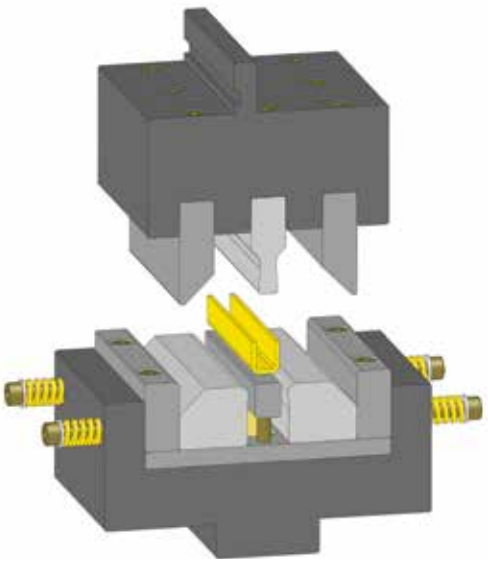
Examples for U-bending tools

- Other shapes and layouts are manufactured individually according to your specifications



U-bending tool with wide inner dimensions

U-bending tool with small inner dimension and cut-out for 90° bend

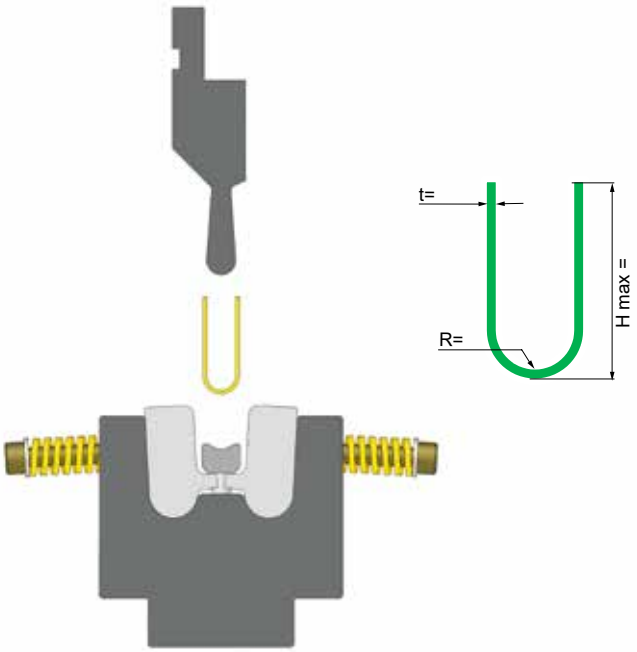


U-bending tool with gate valve technology, to compensate the spring-back of the material

U-bending tools with movable bending strips

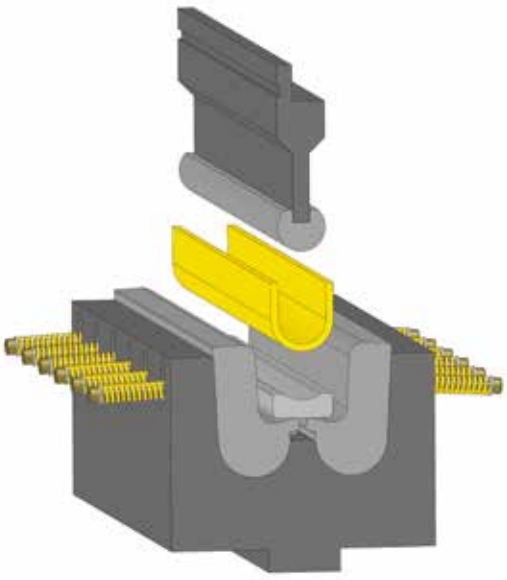
ADVANTAGES

- Production in one step
- Easy removal of the profiles
- Small inside measurements with high flanges of the profiles possible
- Process stability
- Movable bending strips to compansate the spring-back of the profiles
- Reducing of marks through spring loaded ejector or counterholder
- Active components are hardened
- Functional test and adjustment through test bends - with your sample sheets

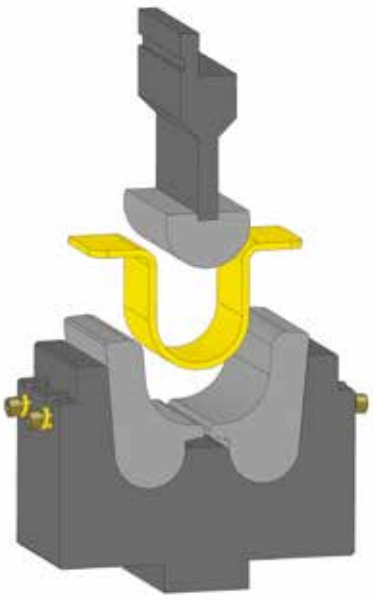


Examples for U-bending tools with movable bending strips

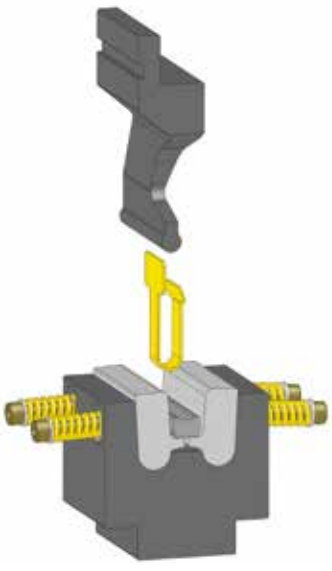
- Other shapes and layouts are manufactured individually according to your specifications



U-bending tool with strips for overbending



U-bending tool with strips for overbending for big radius

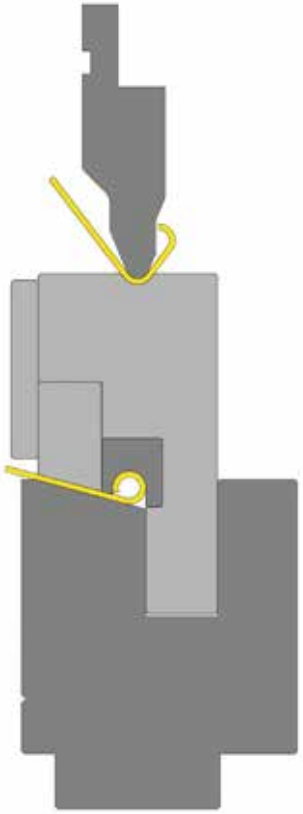


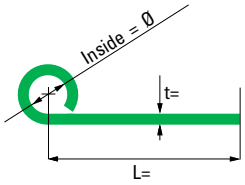
U-bending tool with strips for overbending for small U-profile

Hinge tools

ADVANTAGES

- Production in two or three strokes
- Reducing of marks through spring loaded hold-down-device
- Active components are hardened
- High repeatability through integrated backgauge
- Functional test and adjustment through test bends - with your sample sheets



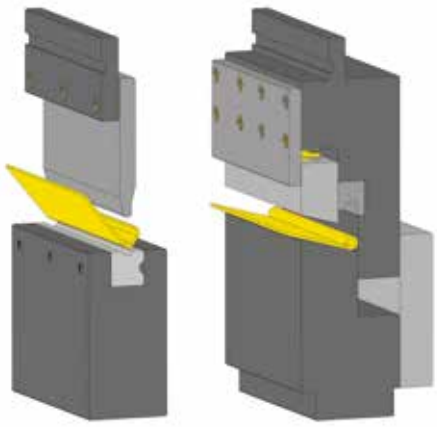


SUITABLE FOR

- Material thickness up to 4,0 mm
- minimum inside Ø:
  2,5 mm x material thickness for steel and aluminium
  3,0 mm x material thickness for stainless steel

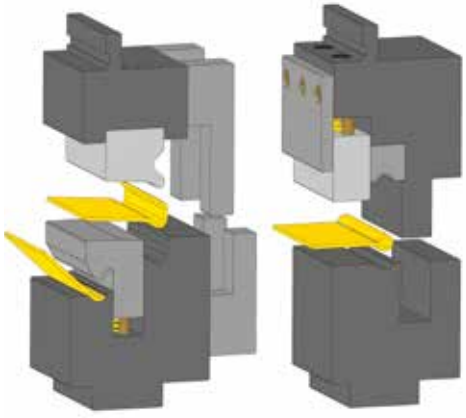
Examples for hinge tools

- Other shapes and layouts are manufactured individually according to your specifications



Two station hinge tool

Station 1:	Station 2:
Pre-bending of the profile in two strokes	Roll in the profile in one stroke



Pre-bending of the profile in two strokes

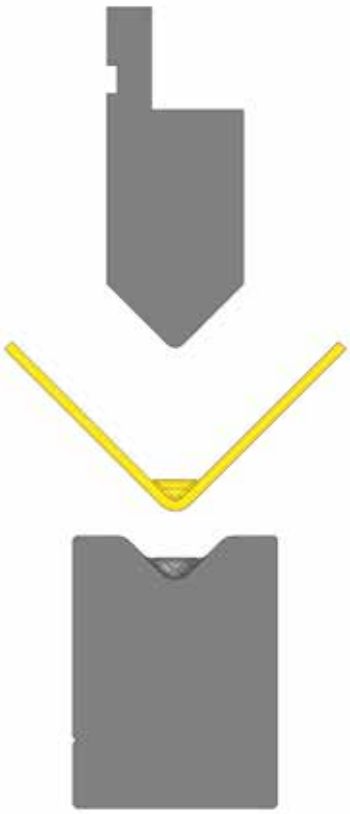
Station 1:	Station 2:
Pre-bending of the profile in two strokes	Roll in the profile in one stroke

Hinge tool for production in one station with two strokes

Beading tools

ADVANTAGES

- Production in one step
- All our constructions consider your materials resistance and yield stresses
- Transfer of freeform surfaces or 3D contours 1:1 from customer drawings or data sets
- Realization of the tools with integrated beadings adjusted to the sheet quality and thickness
- Design of angles, form and design of the beadings according to customer specification
- Active components are hardened
- Functional test and adjustment through test bends - with your sample sheets

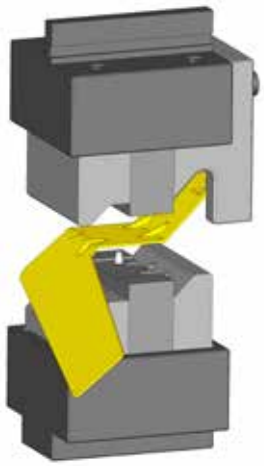


SUITABLE FOR

- Material thickness up to 5,0 mm
- All forms of beading independent of the bending angle

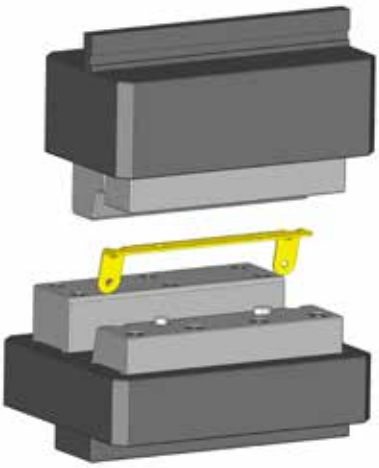
Examples for beading tools

- Other shapes and layouts are manufactured individually according to your specifications



Special tool for Z-profile, guided and spring loaded, for four stiffening beads in one stroke

Special tool for Z-profile, back guided, for four stiffening beads in one stroke

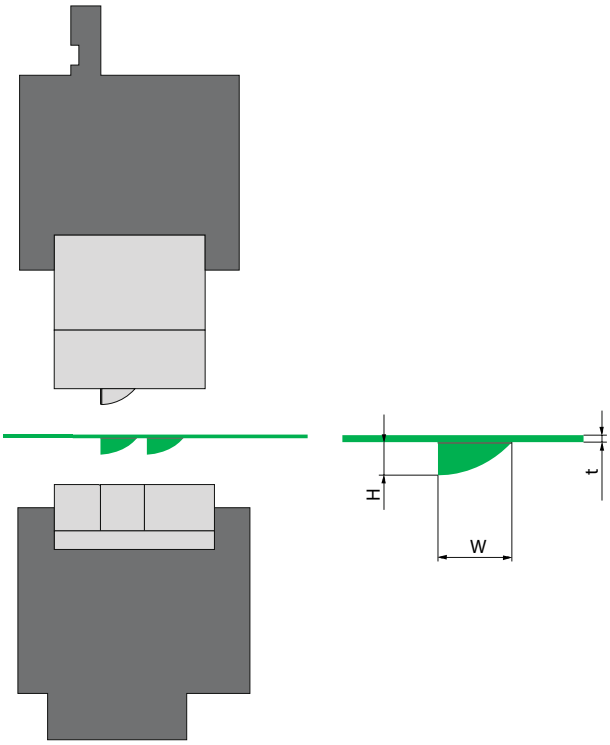


Bead embossing tool for two beads near the bending line, with hold-down device and supports, in one stroke

Louvre tools

ADVANTAGES

- Production in one stroke
- One tool suitable for different sheet thickness and materials
- Only minimum deformation of the sheet through spring loaded hold-down device
- Active components are hardened
- Functional test and adjustment through test bends - with your sample sheets

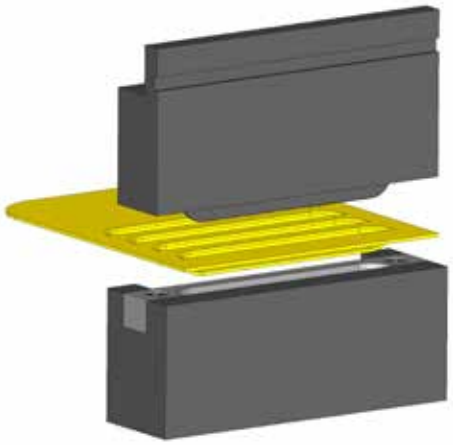


SUITABLE FOR

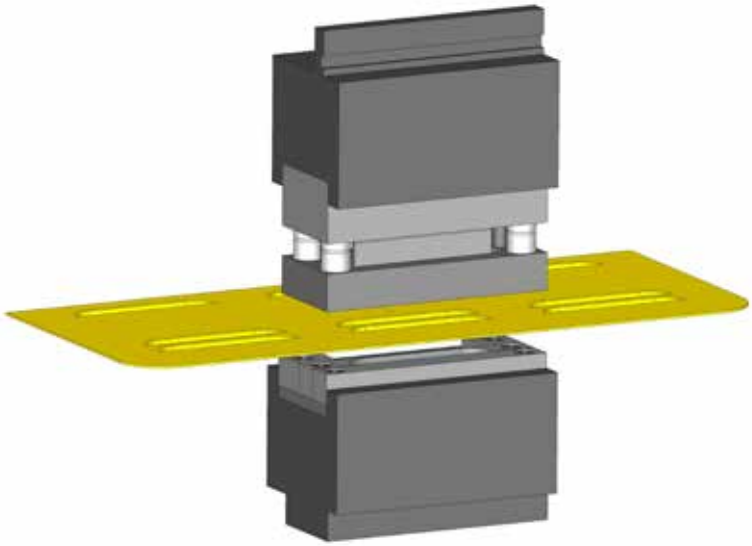
- Material thickness up to 4,0 mm
- Close-pitch adjacent air-slots

Examples for louvre tools

- Other shapes and layouts are manufactured individually according to your specifications



Louvre tool in simple design, without hold-down device

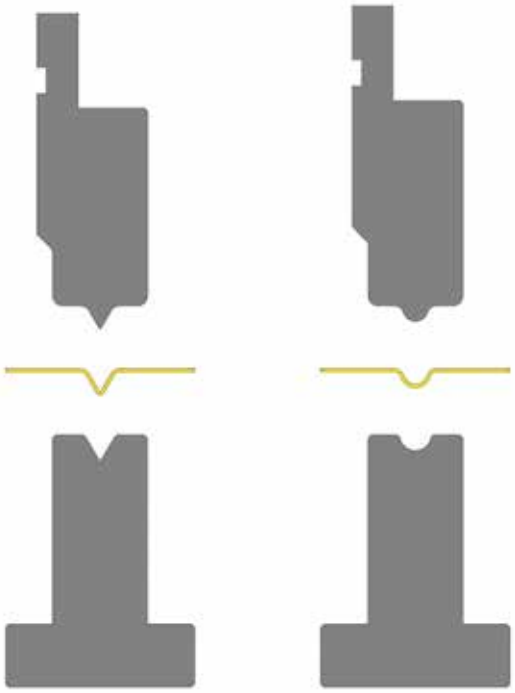


Louvre tool with spring loaded hold-down device, for minimum deformation of the sheet

Beading tools for long beadings

ADVANTAGES

- Production in one stroke
- One tool suitable for different sheet thickness and materials
- Active components are hardened
- Functional test and adjustment through test bends - with your sample sheets

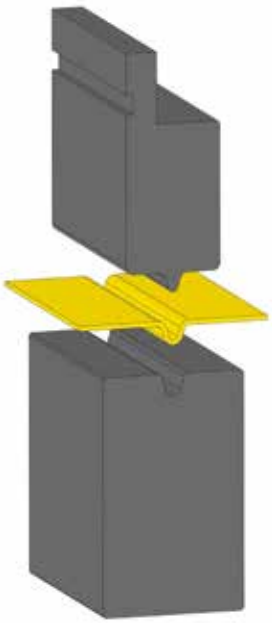


SUITABLE FOR

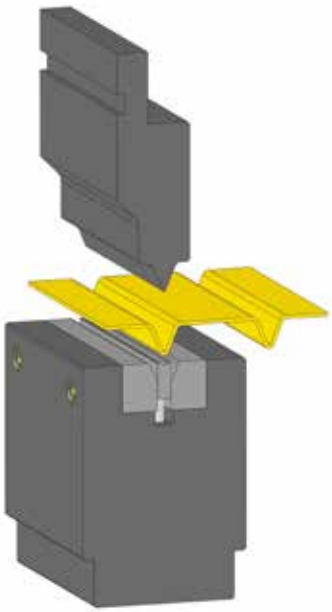
- Various material thicknesses, depending on the profile geometry and press force of your press brake

Tool for small round bead

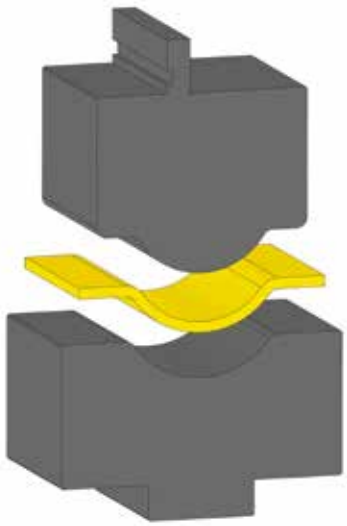
- Other shapes and layouts are manufactured individually according to your specifications



Tool for small round bead



Tool for long V-bead with spring loaded ejector

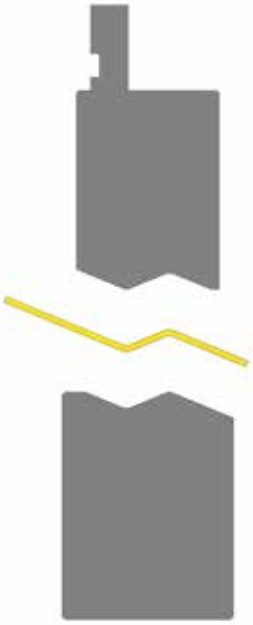


Tool for big round bead

Z-bending tools

ADVANTAGES

- Production in one stroke
- One tool suitable for different sheet thicknesses and materials
- Active components are hardened
- Functional test and adjustment through test bends - with your sample sheets

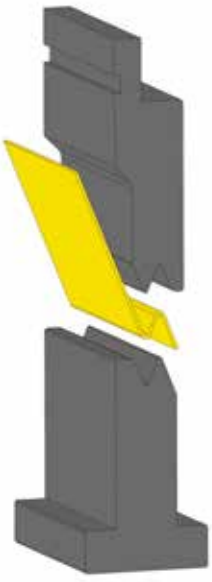


SUITABLE FOR

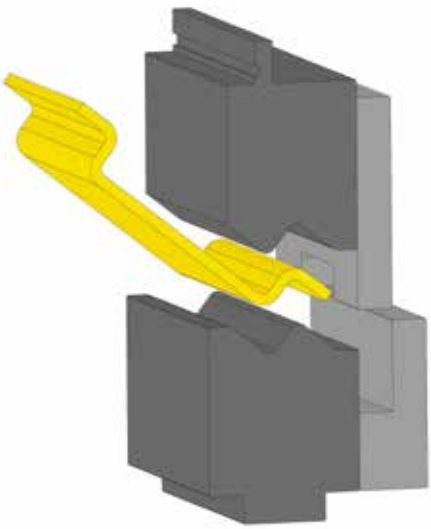
- Various material thicknesses, depending on the profile geometry and press force of your press brake

Examples for Z-bending tools

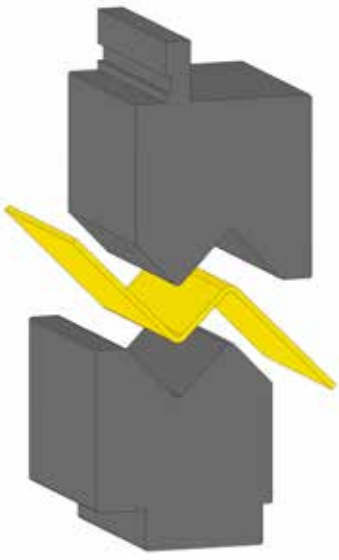
- Other shapes and layouts are manufactured individually according to your specifications



Z-bending tool for thin materials and sharp angles



Z-bending tool with back guide for thick materials



Z-bending tool for big Z-step

Radius embossing tools

ADVANTAGES

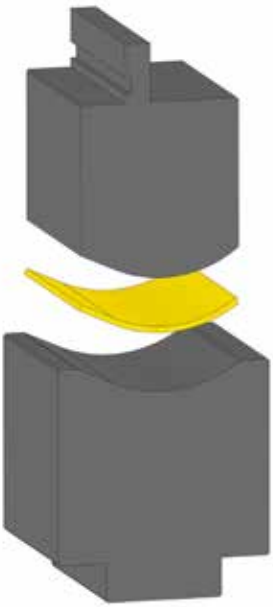
- Production in one stroke
- One tool suitable for different sheet thicknesses and materials
- Active components are hardened
- Functional test and adjustment through test bends - with your sample sheets

SUITABLE FOR

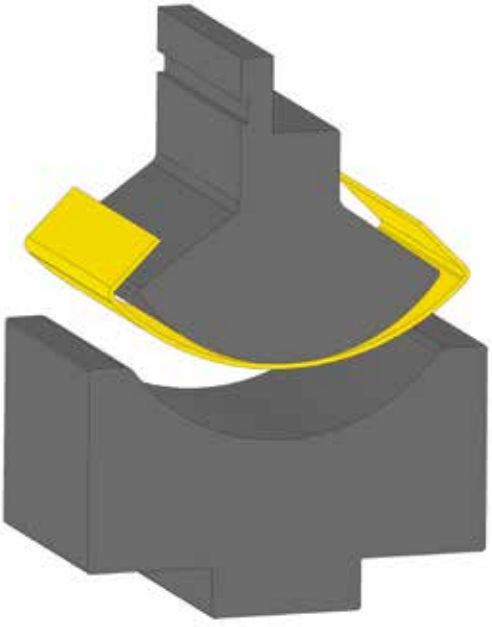
- Various material thicknesses, depending on the profile geometry and press force of your press brake

Examples for radius embossing tools

- Other shapes and layouts are manufactured individually according to your specifications



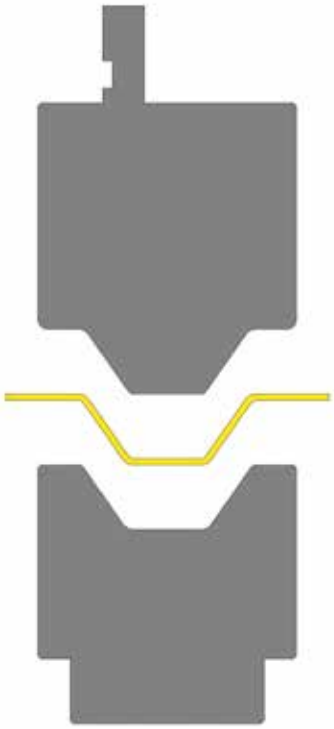
Radius embossing tool for radii with straight flanges



Radius embossing tool for big radii and prebended flanges

Double radius embossing tool

Trapezoidal bending tools



ADVANTAGES

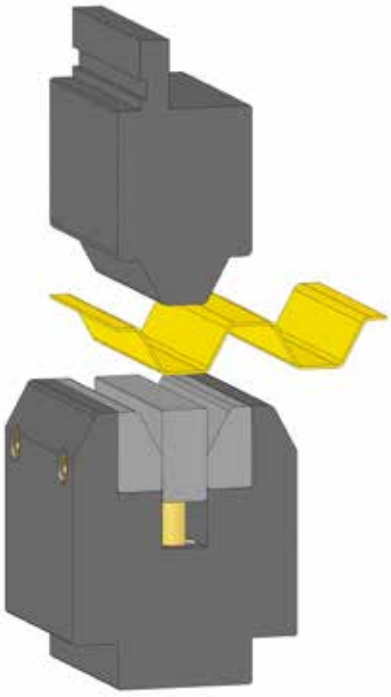
- Production in one stroke
- One tool suitable for different sheet thicknesses and materials
- Active components are hardened
- Functional test and adjustment through test bends - with your sample sheets

SUITABLE FOR

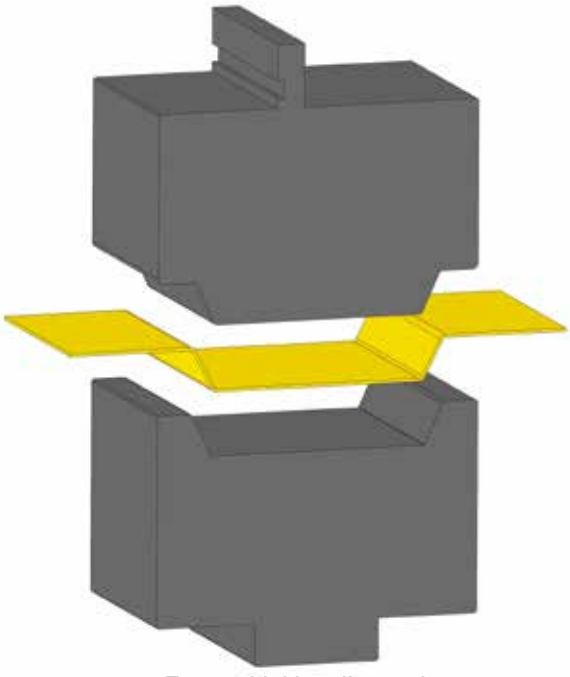
- Various material thicknesses, depending on the profile geometry and press force of your press brake

Examples for trapezoidal bending tools

- Other shapes and layouts are manufactured individually according to your specifications



Trapezoidal bending tool
with spring loaded ejector



Trapezoidal bending tool
for big a profile

Flattening tools

ADVANTAGES

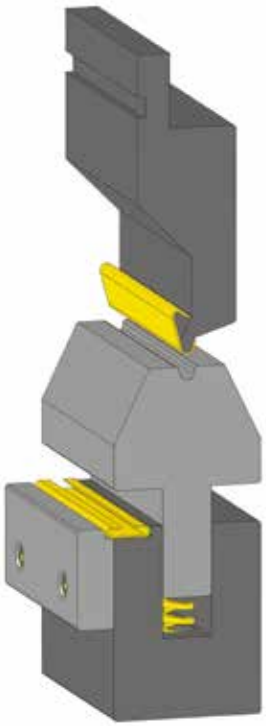
- Production of the flattening area in two strokes
- Active components are hardened
- Functional test and adjustment through test bends - with your sample sheets

SUITABLE FOR

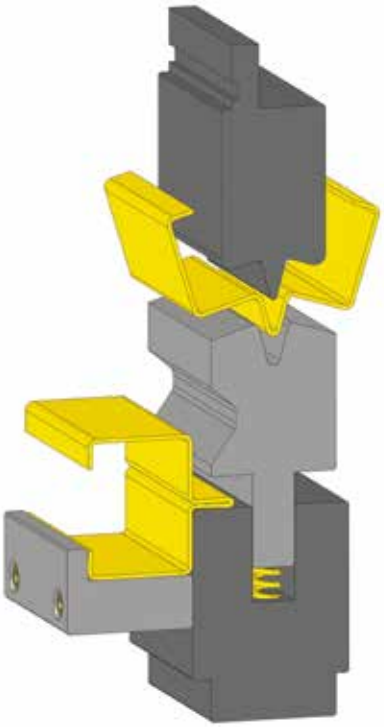
- Material thickness up to 3,0 mm

Examples for flattening tools

- Other shapes and layouts are manufactured individually according to your specifications



Flattening tool
for small C-profile



Flattening tool
for big C-profile and centered flattening