



Universal machines  
for chipless coldforming  
of sheet metal and profiles

## Application areas in industries





## **ECKOLD forming technique means:**

- Forming of sheet metal and profiles without any impact of heat
- Precise and chipless
- One and the same machine is used for bending profiles and forming sheet metal, for manufacturing new parts as well as for doing repairs and most precise adjustments.
- Tools can be mounted and changed within seconds
- Optimal utilization of the machines
- Intelligent ECKOLD technology is unique throughout the world
- Extreme robustness and longevity
- High pressure combined with a very sensitive control
- Variable due to the wide range of appropriate tools

# Kraftformer KF 675 *magnum*

## Views



## Characteristic features and advantages

- New, contemporary design
- Free choice of stroke speed from 150 up to 600 strokes/min.
- Adjustable reverse position
- 25 storable processing programs
- Repeatable results realised by storable processing programs
- Repeating accuracy of the lower ram position of 0,1 mm
- Monitoring of tools
- Electronic fault tracing

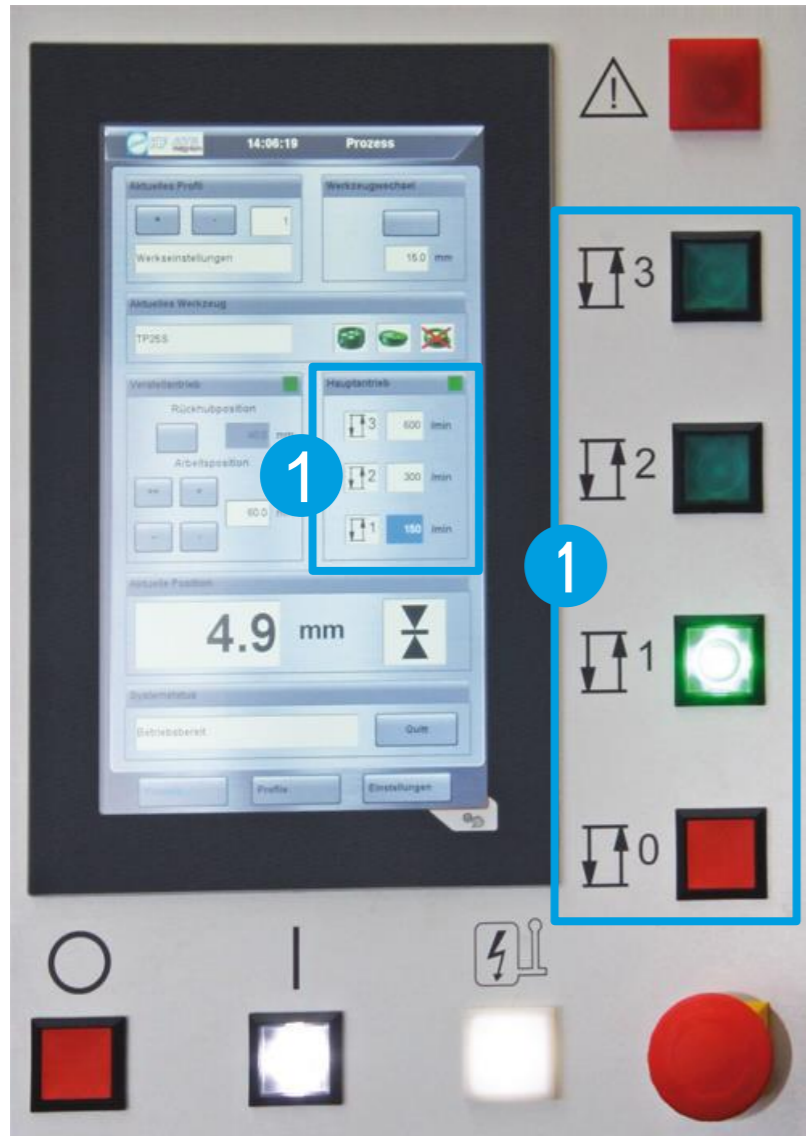




## New, contemporary design

Further optimizations:

- Easy to maintain
- Better accessibility of lubrication points



## Modern user interface

The most important features and advantages

### 1 Free choice of stroke speed

- This can individually be entered and/or saved.
- Factory setting is 150, 300 and 600 strokes/min.



## Modern user interface

The most important features and advantages

### 2 Adjustable reverse position

- Opens the ram e. g. for a better removal of components
- Repeatable results by defined working position
- Repeating accuracy of the lower ram position of 0.1 mm

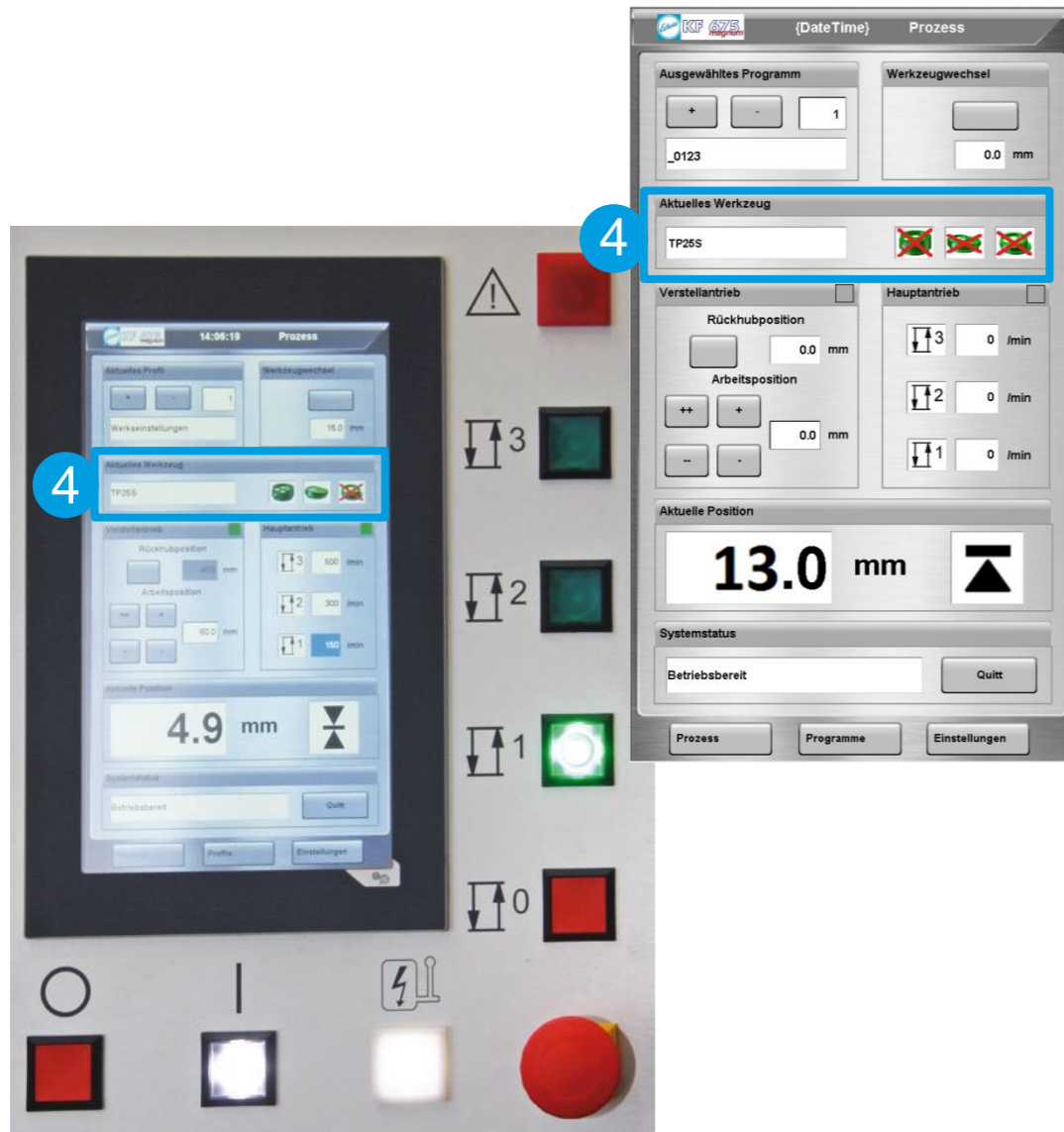


## Modern user interface

The most important features and advantages

### 3 25 storable processing programs

- Repeatable results by storable processing programs
  - Selected program
  - Description
  - Tool
  - Return stroke position
  - Speed
  - Working position



## Modern user interface

The most important features and advantages

### 4 Monitoring of tools

- Display on shortlist
- Mounting instruction for required spacers and/or reducing adapters

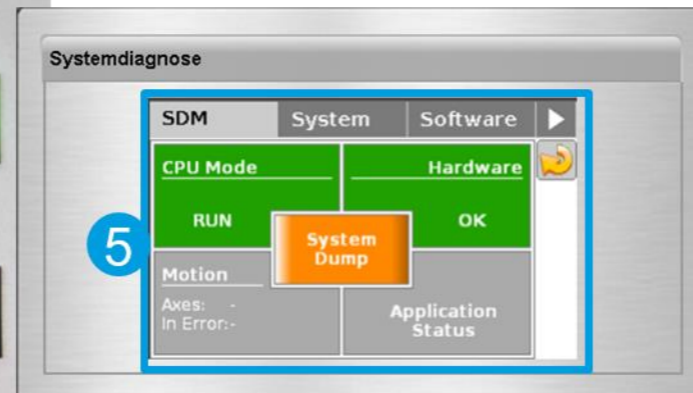


## Modern user interface

The most important features and advantages

### 5 Electronic fault tracing

- Display of system messages and fault indications



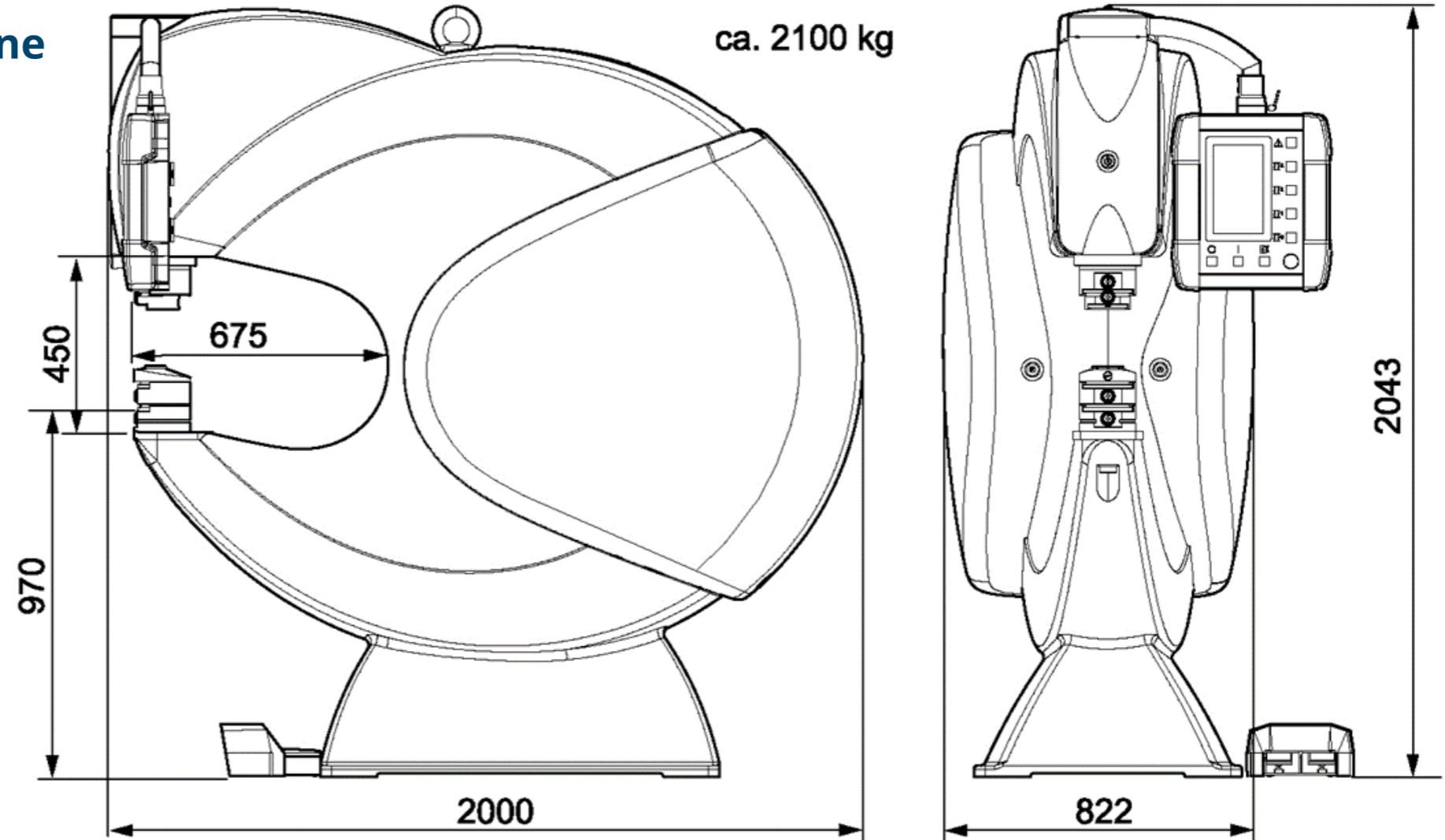
## Control cabinet

for controlling the servo drive

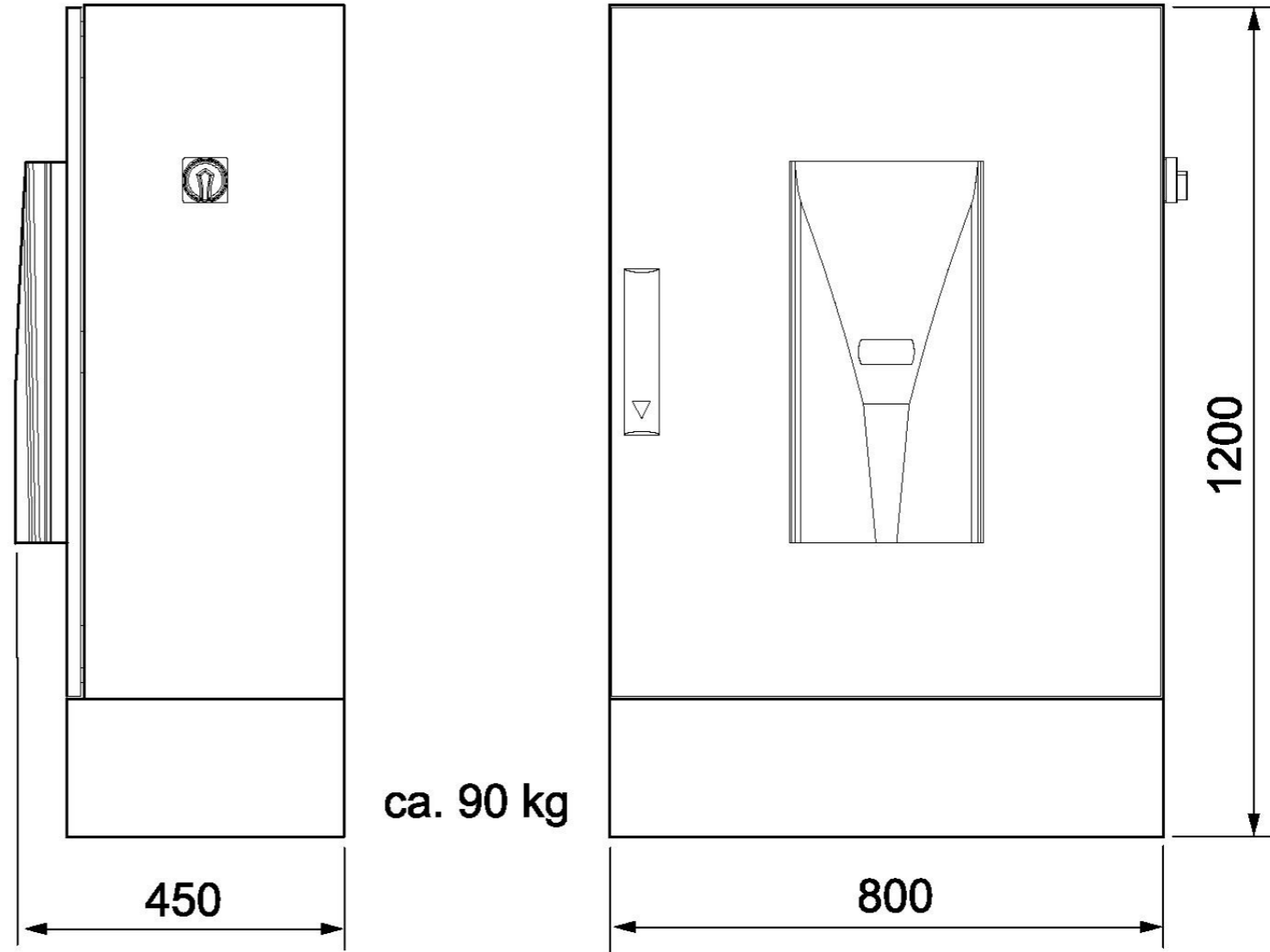
- Easy to maintain
- Compact construction



## Dimensions of the machine



## Dimensions of the control cabinet



Parameters		KF 675 magnum
Throat horizontal		675 mm
Throat vertical		450 mm
Working stroke		max. 8 mm
Adjustable range of ram adjustment		0 – 80 mm
Working strokes per minute		150 – 600
Mains supply		200 – 240 V / 380 – 500 V / 3 Ph / 50 – 60 Hz
Rated capacity		6.0 kW
Control voltage		24 V DC
Max. fuse protection of supply line		35 A at 380 V / 25 A at 500 V
Weight of Kraftformer, net		~ 2.100 kg
Weight of control cabinet, net		~ 90 kg
Steel sheet	(Rm = 400 N/mm <sup>2</sup> )	6.0 mm*
Stainless steel	(Rm = 600 N/mm <sup>2</sup> )	4.0 mm*
Aluminium	(Rm = 250 N/mm <sup>2</sup> )	6.0 mm*

\* These specifications refer to sheet metal in deep-drawing quality and with an FWA/FWR tool ø 80 mm at 80% material overlap.

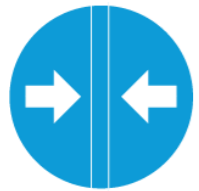
## Tools

A large variety of forming tools ensures universal use.

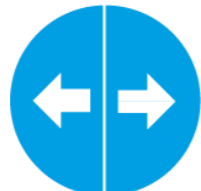


## Tools

Shrinking



Stretching



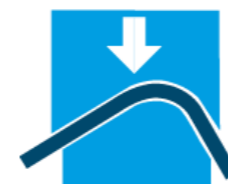
Embossing



Planishing



Reforming



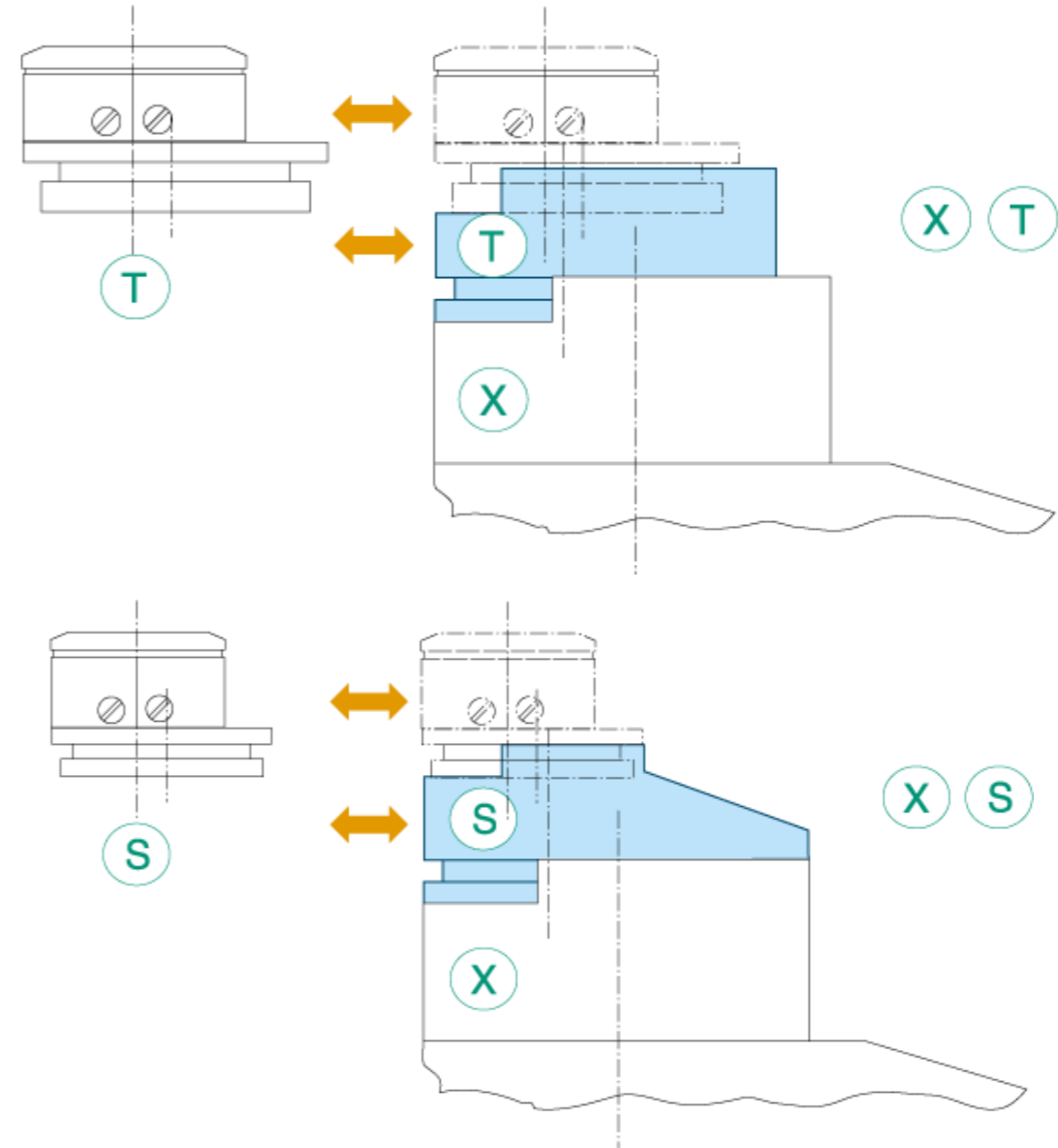
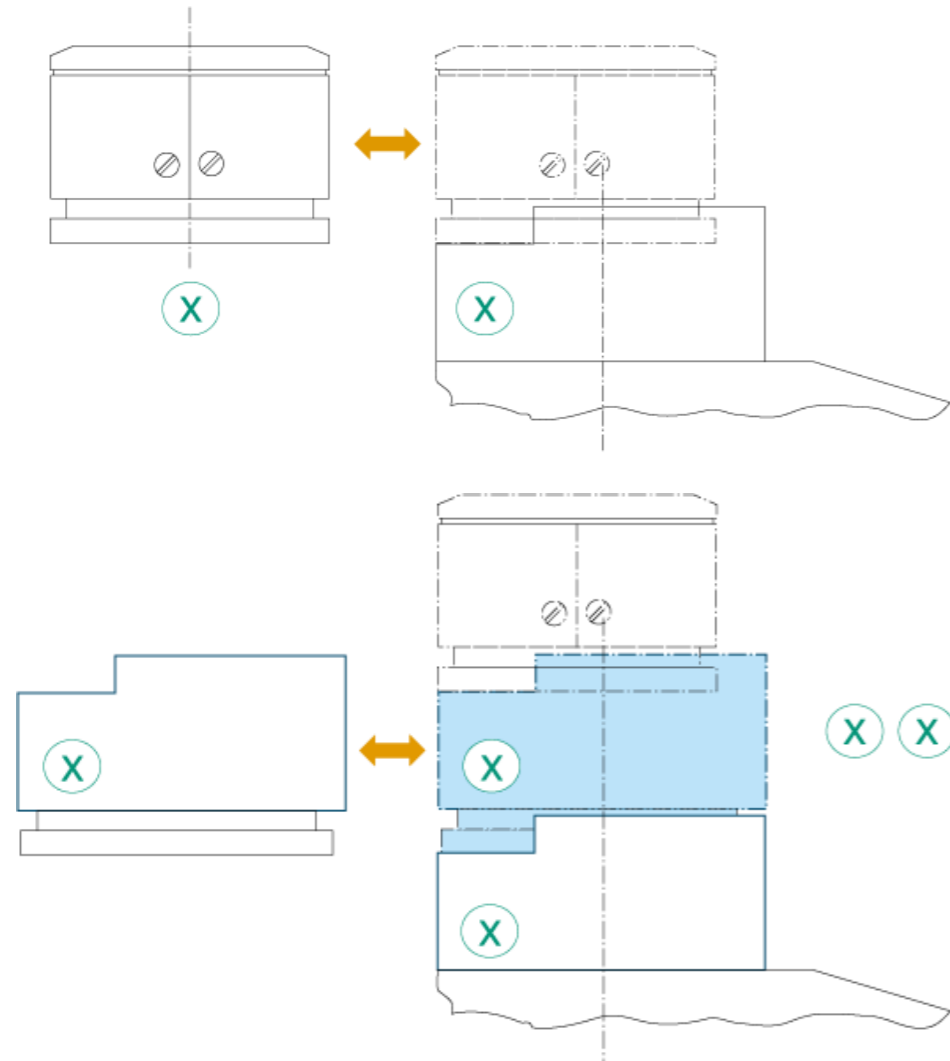
Flattening



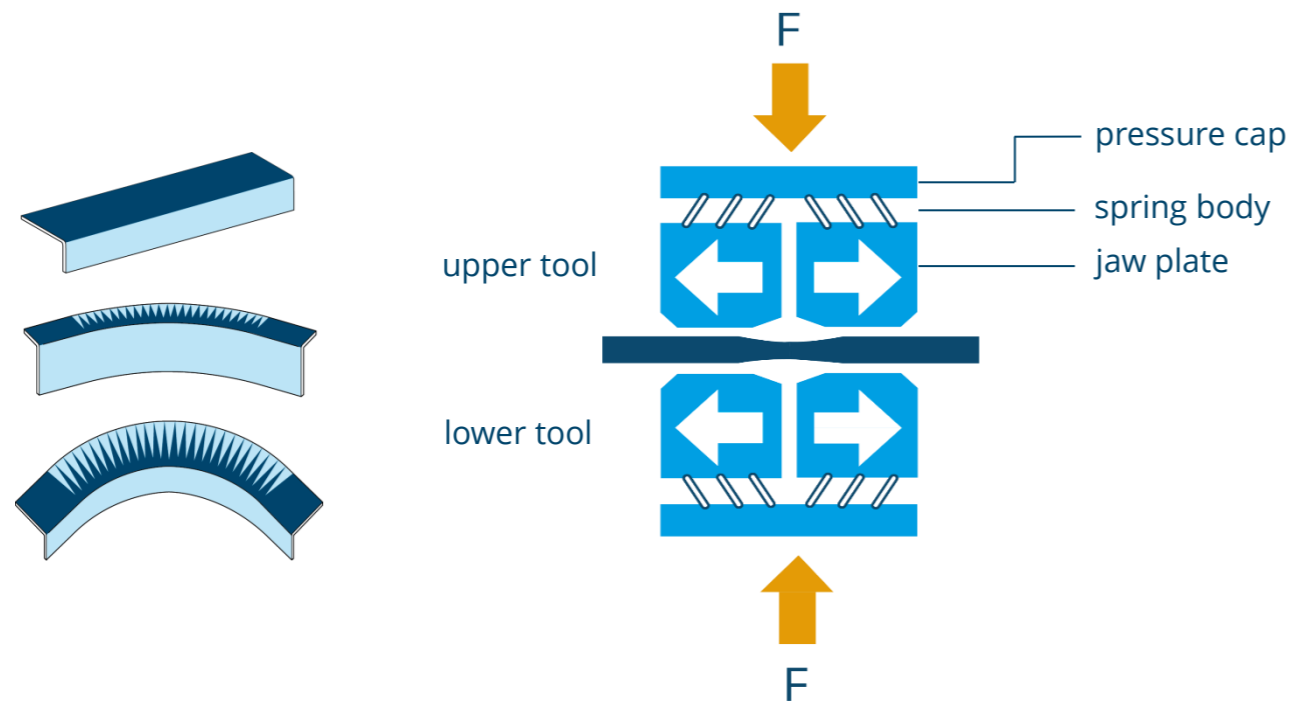
Straightening



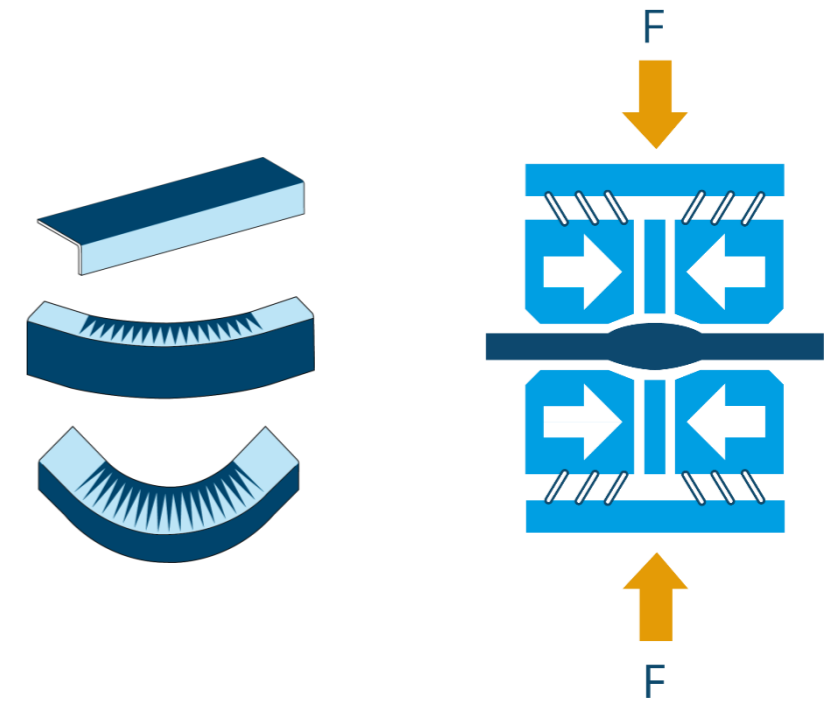
## Tool change



## Arbeitsprinzip Strecken und Stauchen



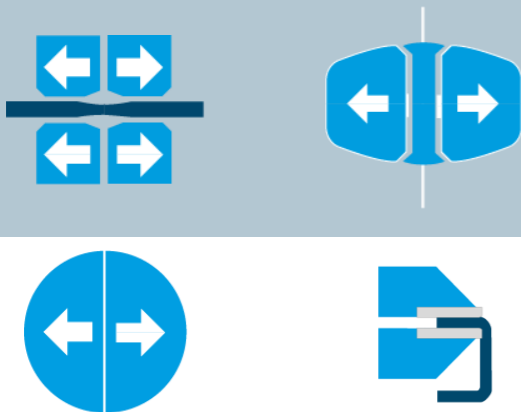
**Forming by partial stretching**



**Forming by partial shrinking**

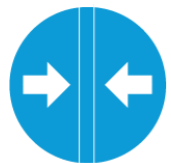
## Range of application: stretching

- Forming by precisely controlled stretching (extension) of the working area



## Range of application: shrinking

- Forming profiles, bending sheet metal and removing wrinkles by precisely controlled shrinking of the working area



## Range of application: embossing

- Doming (embossing) of sheet metal



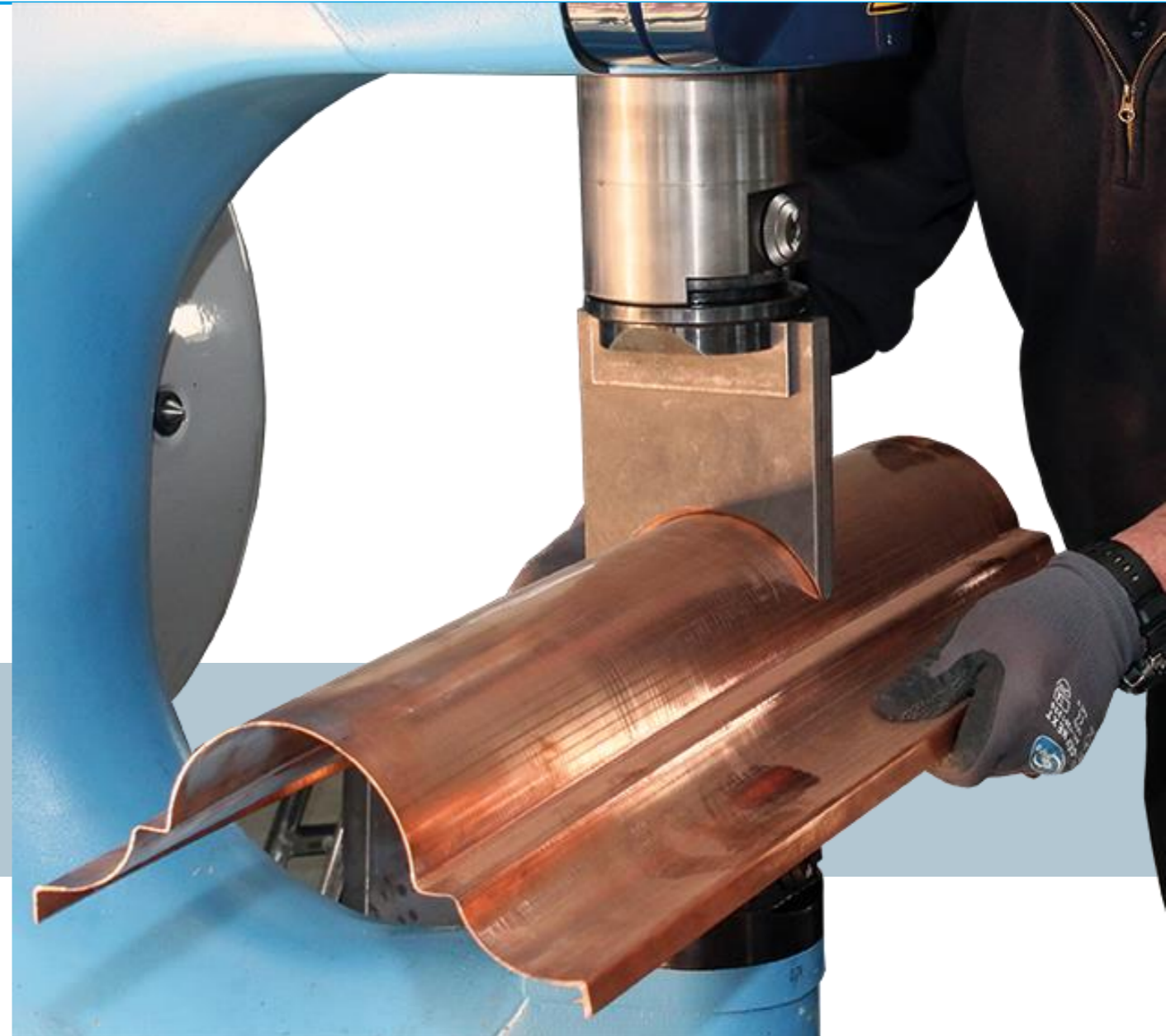
## Range of application: planishing

- Planishing of preformed metal parts
- Rubber-cushioned impact surfaces ensure a low noise level and central working.



## Range of application: reforming

- Reforming of large radii



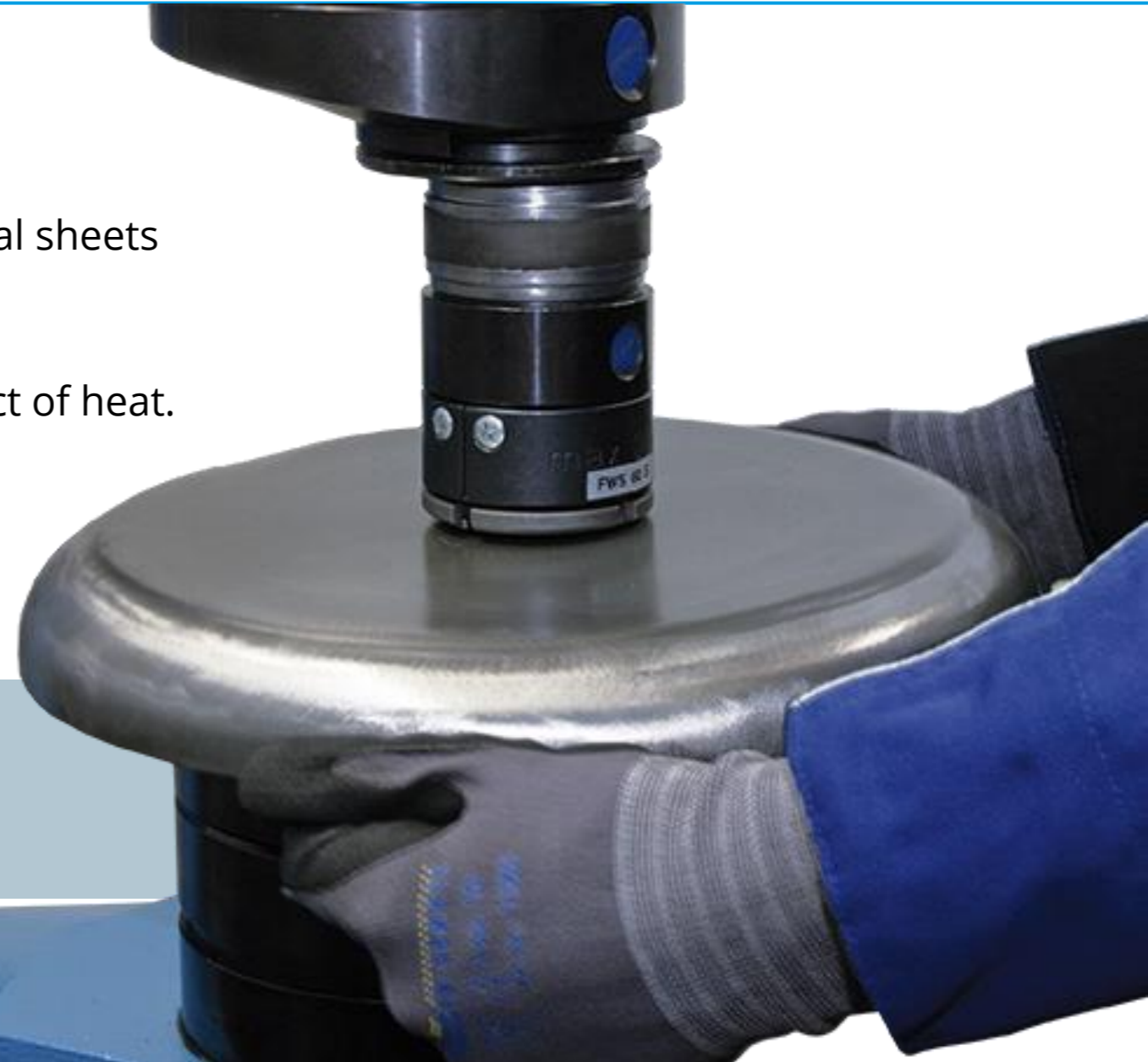
## Range of application: reforming

- Reforming of small radii



## Anwendungsbereich Spannen

- Central shrinking removes tensions and dents from metal sheets and pressed parts
- This is being done quickly and precisely without any impact of heat.
- Suitable for steel sheets up to max. 2.0 mm thickness and light metal up to max. 3.0 mm thickness



## Range of application: straightening

- The straightening tool replaces the manual labour done by the worker regarding the straightening of warped and deformed parts.



## Target sectors



## ECKOLD Kraftformer

- Wide range of machines
- Machines differ in terms of the maximum sheet thickness that can be formed, throat depth, number of strokes, pressure control and equipment

KF 170 PD



KF 800



KF 324



KF 340



KF 470



KF 675



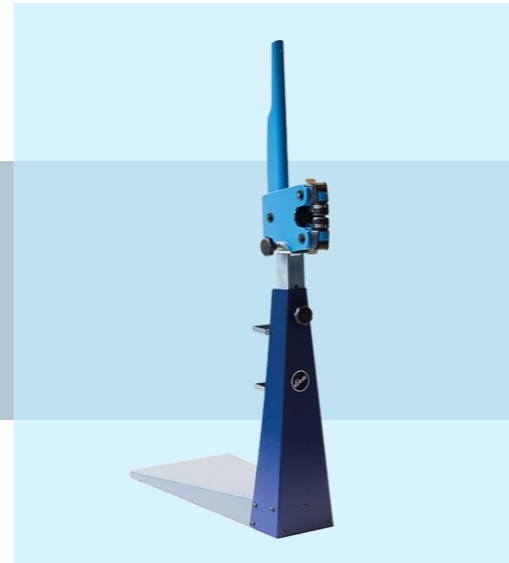
## ECKOLD Handformer

- Can be used in workshops, on construction sites and in industrial series production
- Globally unique and extremely versatile

HZ 52



HF 100



HF 100 PA



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**Thank you for your  
attention.**