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# www.unibieger.com



# TECHNICAL OPERATING INSTRUCTIONS UNIBIEGER

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### Content

1	Purpose of this manual	2
2	Intended use	2
3	Applications	2
4	Product components	3
5	General product features	4
6	Overview of the structure	4
7	Execution of the bend of the fold in 3 steps	4
8	Quality difference to the current standard	5
9	Maintenance of the Unibieger	5
10	Available sizes	5
11	Disposal	5
12	Warranty and Guaranty	5
13	Recommendation	6

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#### 1 Purpose of this manual

This manual is intended to provide instructions for the proper use and safe operation of the folding pliers (called "Unibieger").

#### 2 Intended use

The intended use of the Unibieger folding pliers is to fold thin sheets of 0.5mm to 0.85mm thickness. The material to be processed should be aluminum. The use of soft thin sheets of steel is also possible, but this decision is to be made by the expert on the construction site. When proper used applications of unibieger is designed in the way that no part will break. In case of misuse, parts may wear out; This damage is outside of the warranty, but replacement parts are available on request.

Materials that are suitable for processing:

Alunminium, copper, titanium zinc, Roofinox (stainless steel) Uginox, zinc sheet (with and without coating) and others

#### 3 Applications

The folding pliers (UniBieger) are for folding prefabricated pliable metal sheets, and are available for purchase in a wide range of widths. Standard web widths result from the basic size of the material cut to size. The most common application is in the web width of 420mm, this dimension results from the cut of 500mm width.

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## 4 Product components

Part	Name	Picture	Quantity
1	Main hinge		1
2	Double deflection		1
3	Lower Hinge		1
4	Axle of rotation		4
5	E-Clip	3	8
6	Washer	0	2
7	Mounting screw M6		8
8	Upper Handle		1
9	Lower Handl	3	1

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#### 5 General product features

The Unibieger folding pliers consist of three aluminium profiles that are moved via two rotary axes. The first axis is used to clamp the sheet metal and the second axis is used to bend the fold.

The height of the fold is set at 22mm, there is no limit to the width (the correct size for each folding path), the bending angle is 16° and is reached at the end of the bending process. With the u-shaped handles the tool is swivelled from the basic position over the angle of rotation by ~180° and thus the fold is bent.

#### 6 Overview of the structure

Fig. 1. Folding pliers ASM → Page 5

## 7 Execution of the bend of the fold in 3 steps

see Video →





preparation		Sheet metal & unibieger in starting position
Step 1	13.511.00	Unibieger attached to the sheet
Step 2		Sheet metal clamped
Step 3		Sheet metal bent
separation		Unibieger tilted
separation		Unibieger separated from the metal sheet

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#### 8 Quality difference to the current standard

**Current situation on construction sites:** For bending folds, the specialist on the construction site currently has a limited selection of folding pliers of different widths available. Above all, this does not allow for reproducible folding process in consistent quality. **Solution:** With the UniBieger folding pliers, the quality of the fold is excellent and reproducible and the time spent on a fold is many times less than before.

#### 9 Maintenance of the Unibieger

The folding pliers must be lubricated weekly at the rotary axes.

Lubricant: silicone oill, PTFE spray, WD 40

#### 10 Available sizes

The UniBieger folding pliers are currently offered in two model variants.

**Model W** for the application on the **workbench** in widths of 260mm and 420mm.

With the designation 260W and 420W.

**Model T for** the application on the **eaves** with widths of 420mm, 520mm, 570mm. With the designation 420T and 520T and 570T.

On request "almost" all widths can be ordered; a minimum order quantity is required though.

#### 11 Disposal

At the end of the product's lifetime please dispose the device in accordance to local regulations.

#### 12 Warranty and Guaranty

Unibieger comes with a 12-month warranty on all mechanical components. The warranty is granted if the following conditions are met:

- Using according to the operating instructions
- Application according to the stated field of activity
- Regular maintenance of the Unibieger (see instructions)

**Quality guaranty**: All UniBieger pliers are made using state of the art technology, ensuring high reliability and a long life.

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#### Storage of the Unibieger

The Unibieger should be protected from dust, dirt and weather influences → otherwise warranty will be void

#### 13 Recommendation

The professional craftsman must be able to deliver reproducible quality in the shortest amount of time possible.

With the UnieBieger they are now able to fulfill this promise.

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