

ENGINEERING  
TOMORROW

*Danfoss*

Operator's Manual

# ET6310 Marking Machine



## Imprint

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**This Operating Manual of the machine is a translation; the original is in German.**

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## EC Declaration of Conformity

In accordance with EC Machinery Directive 2006/42/EC.

The following machine

ET6310

was developed, designed and manufactured in compliance with EC Directive 2006/42/EC, in the sole responsibility of

**UNIFLEX-Hydraulik GmbH**  
Robert-Bosch-Strasse 50 - 52  
D-61184 Karben

The following standards, codes and specifications have been applied:

- EC Directive 2006/42/EC
- EN ISO 12100: 2010

This declaration are invalid when the machine is modified or if unauthorized and unapproved third-party components are used without our prior approval.

Entity authorised for documentation: Uniflex-Hydraulik GmbH, Technical Documentation Dept.

Karben, 17.10.2022



Managing Director Harald von Waitz

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## 1 About this document

### 1.1 Target groups

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## 1 About this document

In this Operation Manual, the “embossing machine ET6310” is consistently referred to as machine.

This Operation Manual includes important notes on how you operate your machine/unit safely, properly and economically.

Use not in compliance with the intended purpose may result in hazard to the operator's health and life and/or in the risk of damage to/the machine/unit. Consequently, please only use the machine/unit

- in good order and condition,
- in accordance with its intended purpose,
- in a safety-conscious manner, with awareness of risks and hazards,
- in compliance with all notes included in this Operation Manual.

The machine/unit may only be operated by staff who

- has read the Operation Manual,
- has understood it,
- has been instructed in the operation of the machine/unit, and
- has signed in the Annex.



Figures may include accessories/options. Customer-specific equipment may vary.

The product images shown are for reference only and may differ from the product delivered.

### 1.1 Target groups

The target groups of this Operation Manual are:

#### **Owner**

An owner is a natural person or entity using the device himself/herself/itself, or on whose behalf the device is used. An owner may appoint a representative to exercise the owner's rights and obligations.

The owner has to make sure that

# 1 About this document

## 1.1 Target groups

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- national provisions, occupational safety regulations and applicable environmental protection regulations are fully complied with;
- persons working on the machine/unit are adequately qualified;
- persons working on the machine/unit are suitable for operating the machine/unit;
- the Operation Manual has been read and understood. One hardcopy of the Operation Manual must always be kept at a designated place where the machine/unit is used.
- persons working on the machine/unit are aware of potential risks;
- the operating staff is familiar with the location as well as with operating the fire alarm and fighting means. Free access to this equipment must be ensured.
- personal protection equipment is worn (safety footwear, protection gloves and safety glasses).

### **Machine/unit fitters**

Machine/unit fitters must be at least 18 years old and have completed training for the task, i.e. they must have attended a specialist vocational training.

#### A fitter

- must observe the instructions in the Operation Manual;
- must inform the owner on failures and damage.

### **Operator**

An operator is a person charged with and instructed in the proper operation of the machine/unit by the owner or the otherwise contractually obliged person.

#### The operator

- must observe the instructions in the Operation Manual;
- must inform the owner on failures and damage.
- must not perform and maintenance or repair work on the machine/unit.

## 1 About this document

### 1.2 Storage

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### 1.2 Storage

The Operation Manual is part of the machine/unit and must be kept near the machine/unit at all times. Upon disposal of the machine/unit, the Operation Manual must also be handed over.

### 1.3 Name plate

The name plate is fixed on the machine back.



## 2 Safety instructions

### 2.1 Presentation of warnings

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## 2 Safety instructions

### 2.1 Presentation of warnings

Warning notes in the Operation Manual warn against risks involved with the handling of the machine/unit. Risk levels are identified as follows:

**HAZARD!**

The signal word HAZARD identifies an imminent hazard resulting in serious injuries or death. This warning is supplemented by a triangular hazard symbol.

**WARNING!**

The signal word WARNING identifies a potentially hazardous situation, which might result in serious injuries or death. This warning is supplemented by a triangular hazard symbol.

**CAUTION!**

The signal word CAUTION identifies a potentially hazardous situation, which might result in light injuries. This warning is supplemented by a triangular hazard symbol.

**ATTENTION!**

The signal word ATTENTION identifies a potentially hazardous situation, in which the product or property in the environment may be damaged. This warning is supplemented by a hazard symbol or an exclamation mark.

### 2.2 Intended use

This machine is intended for industrial use; it is only suitable for the permanent marking of hose sleeve of non-hardened metals up to a permissible diameter, see "Technical Data" in Section 3.

Intended purposes include:

- Single user workplace for one person only,
- Manual input and retrieval,
- Operating temperatures between 10 °C and 35 °C,
- Operation in a closed operation room,
- The machine must not be operated by persons not capable of operating the machine without any risk. These may include:
  - persons with physical or mental disabilities,
  - children and persons under age,

## 2 Safety instructions

### 2.3 Product-specific risks

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- persons with a restricted capability for the operation of machines (e.g. under the influence of drugs, alcohol or narcotics).

Use of the control in compliance with the intended purpose also includes compliance with the instructions in this Operation Manual.

#### **Use for other than the intended purpose**

Any other use is considered as being not in compliance with the intended purpose, in particular:

- Design modifications of the machine,
- Use in explosive environments,
- misuse of consumables and waste materials.

<b>WARNING!</b>	
	<p><b>Risk for life and health!</b></p> <p>Use not in compliance with the intended purpose imposes risks for life and health. Consequences resulting from use for other than the intended purpose shall be under the sole responsibility of the owner.</p> <ul style="list-style-type: none"><li>• Always use the machine in compliance with its intended purpose.</li></ul>

## 2.3 Product-specific risks

The machine/unit is designed in accordance with the latest state of technology. Nevertheless, the machine/unit may impose risks:

### 2.3.1 Risks posed by mechanical equipment

#### **Risk of shearing**

When the embossing procedure is triggered, there is a risk of shearing between the steel type holder and the work piece.

- Keep sufficient distance to the steel type holder.

## 2 Safety instructions

### 2.3 Product-specific risks

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#### **Risk of squeezing**

When the embossing procedure is triggered, there is a risk of getting squeezed on the moving parts of the machine.

- Keep sufficient distance to the movable parts of the machine.

Sudden rotational movements when embossing elbow fittings impose a risk of squeezing in the area of the two-hand control

- Only single-piece, approved elbow fittings may be embossed (see "Technical data" in Section 3).

During the embossing procedure triggered by the two-hand control, there is a risk of squeezing between the operator's head and the hand wheel.

- The cover must be checked for damage.
- The cover must be closed.

#### **Tilting hazard**

The risk of tilting mainly exists while the machine is being transported.

- Observe the machine's centre of gravity during transport.
- Use the threaded holes for the lifting lugs.
- Use suitable lifting gear.

#### **2.3.2 Risk imposed by pneumatic system**

Risks are imposed by all pneumatic lines and connections. Pneumatic systems are subject to special safety provisions.

- After the machine is deactivated, the given and potentially hazardous residual energy has to be considered.
- Use correct hoses and hose clamps.
- Only work in the permissible pressure range.

#### **2.3.3 Risks imposed by noise**

The noise level meter acc. to IEC 804, Class 2, was calibrated before measuring.

The operation of the machine causes noise emissions of dB(A) at the workplace. Noise protection is required.

The machine owner must provide for appropriate protection, e.g.

## 2 Safety instructions

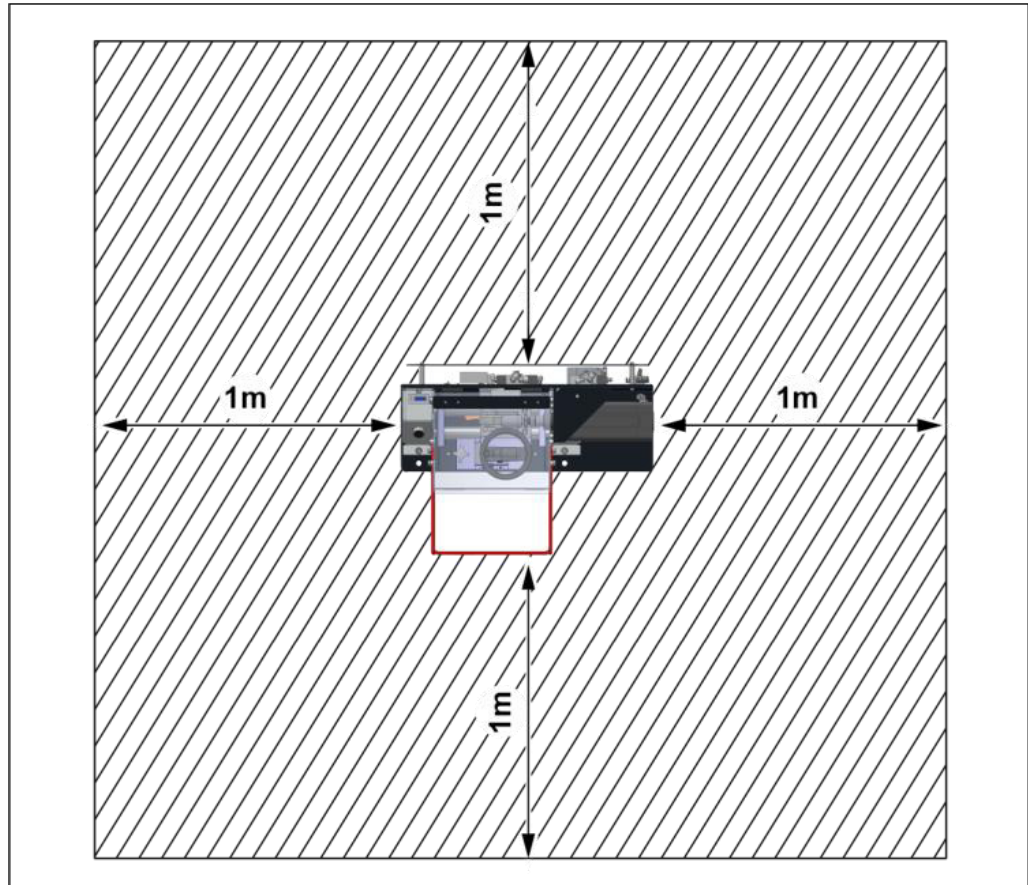
### 2.3 Product-specific risks

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- instruct staff to wear ear protection;
- provide information/instructions on risks;
- identify hazardous areas;
- provide health monitoring

## 2.4 Safety

### 2.4.1 Working area



The working area is defined as the area 1 metre all around the machine (shaded).

- Keep the working area free from trip hazards.
- Use ducts for lines and cables.
- Provide good illumination.

## 2 Safety instructions

### 2.4 Safety

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#### 2.4.2 Warning signs on the machine

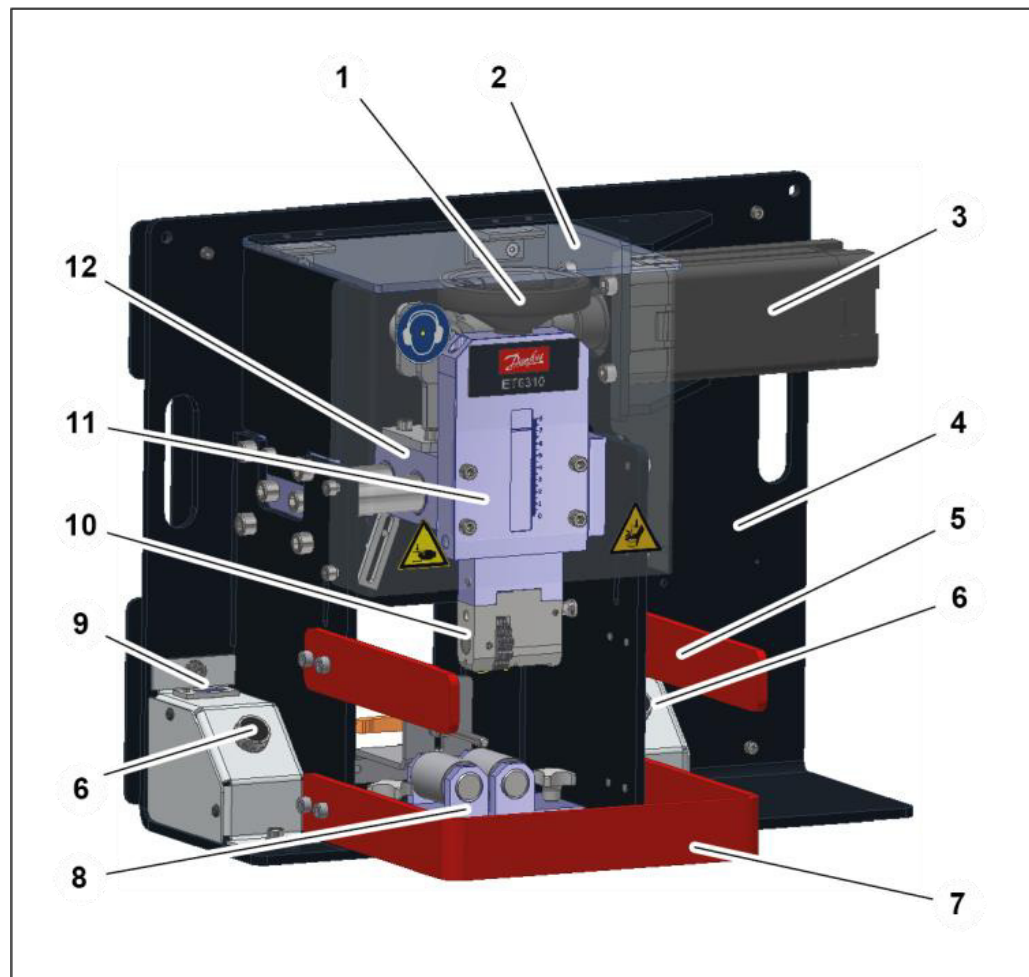


	<p><b>Hand injury</b> on the guide carriage</p>
	<p><b>Risk of squeezing</b> on the steel type holder</p>
	<p><b>Risk of hearing damage</b> Wear ear protection</p>

Illegible or missing warning signs must immediately be replaced by the operator.

## 3 Machine description

### 3.1 Design and function



- (1) Hand wheel
- (2) Cover
- (3) Cylinder
- (4) Chassis
- (5) Top protective plate
- (6) Two hand control
- (7) Safety bracket
- (8) Bearing block
- (9) Digital counter
- (10) Steel type holder
- (11) Vertical guide

## 3 Machine description

### 3.1 Design and function

---

#### (12) Guide carriage

The steel type holder (10) is adapted to the diameter of the work piece to be embossed by turning the hand wheel (1) when the cover (2) is open above the vertical guide (11). The bearing blocks (8) can be adjusted to three different positions depending on the work piece. As a result, the work piece is fixed on the bearing blocks (8).

By actuating the two-hand control (6), the guide carriage (12) is moved horizontally. During embossing, the work piece circumference is rolled against the steel types.

The digital counter (9) records each embossing procedure.

#### **Accessories**

The machine can be fitted with accessories. A list of the available accessories is included in the Annex, Section "Accessories".



## 3 Machine description

### 3.2 Technical data

---

#### 3.2 Technical data

##### Machine

Dimensions L x W x H 600 x 460 x 500 mm

Weight approx. 75 kg

Noise level 95 dB(A)\*

##### Function

Drive unit Pneumatic

Embossing depth ~ 0.5 mm\*

Suitable steel types 26 (depending on type holder)

##### Work piece capacity

Working area Ø 11.5 - 90 mm

The maximum work piece length must not exceed 260 mm.

Single-piece elbow fitting The elbow length must not exceed 110 mm. With the guard attached, it must be possible for the fitting to be rotated completely in the machine.

##### Pneumatic connection

Air pressure 7.5 bar

Air consumption approx. 7.5 NI/min with 15 embossing operations/min

Connection type 8 mm IQS plug connector

##### Workbench

Solid, plane workbench with a carrying capacity of approx. 500 kg

## 3 Machine description

### 3.2 Technical data

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#### **We recommend industrial flooring meeting the following structural requirements**

Permanent floor loading	Approx. 0.07 kg/mm <sup>2</sup>
Floor carrying capacity	Min. 2500 kg/m <sup>2</sup>
Floor quality	B25
Evenness	Max. unevenness 5 mm/m
Inclination	max. 5 mm/m

#### **Ambient conditions**

Ambient temperature	10 °C – 35 °C
Air humidity	45 % – 65 %

The \* data are theoretical/computed values, or values measured on a prototype. Actual values may vary slightly, depending on the machine.

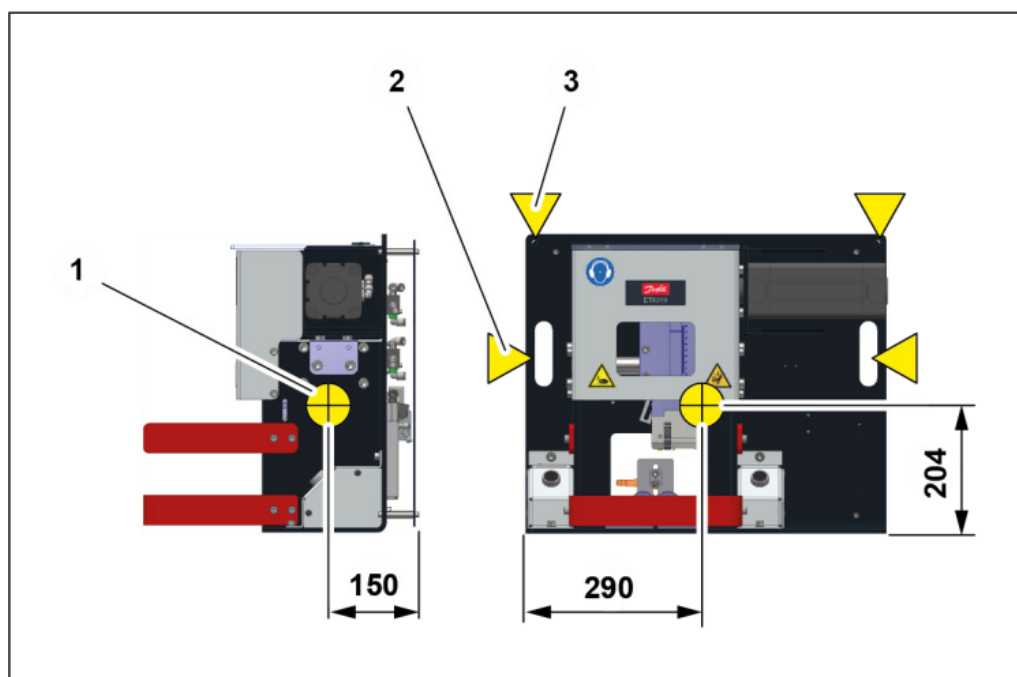
## 4 Transport and commissioning

### 4.1 Transport

## 4 Transport and commissioning

### 4.1 Transport

The goods should be transported in the original packaging. During transport, the goods must be secured safely within the packaging. All applicable laws and regulations relating to securing loads shall be observed during transport.



The machine may only be unloaded and transported by means of a crane or manually. When a crane is used for transport, lifting gear with a sufficient length and lifting capacity has to be used. For machine weight, please refer to "Technical data" in Section 3.

### WARNING!



#### Danger from falling loads!

Risk of injury from falling loads.

- Do not stand under suspended loads.

## 4 Transport and commissioning

### 4.2 Intermediate storage of machine/unit

---

#### WARNING!



#### Danger from tilting machine!

The machine may tilt if it is transported improperly. There is a risk of being injured.

- Consider the machine's centre of gravity (1).
- Only lift the machine at the designated points.

#### WARNING!



#### Danger from increased load weights!

The weight of the machine is approx. 75 kg.

- Transport the machine with two persons.
- Use transport aids.

1. Attach the lifting lugs at the designated points (3).
2. Lift the machine by the lifting lugs (3) using a crane, or alternatively lift the machine manually by two persons at the handles (2), and transport it to the installation site.

### 4.2 Intermediate storage of machine/unit

If the machine/unit cannot be mounted immediately upon delivery, it must be protected against:

- Contamination,
- Weather influences,
- Mechanical damage.

The machine/unit components may only be stored in closed rooms and under the following conditions:

- temperature between 10°C and 35°C,
- maximum air humidity 80% (non-condensating).

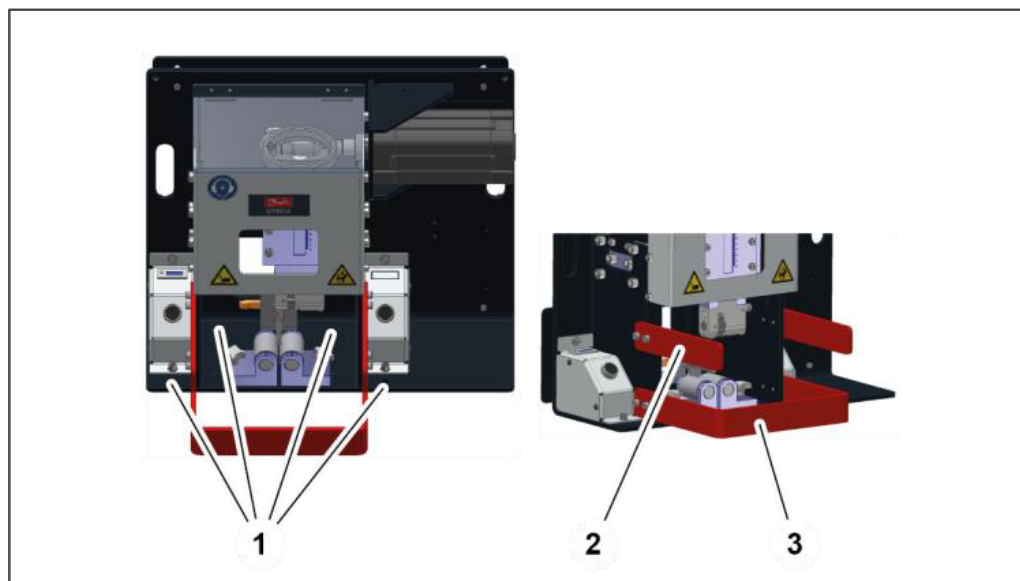
### 4.3 Commissioning

The machine is commissioned by the customer's fitter.

1. Lift the machine manually and place it on the optionally supplied table.

## 4 Transport and commissioning

### 4.3 Commissioning



2. Use appropriate bolts to mount the machine on the four holes Ø 13 (1) in the machine bench.



Place the machine in a way so that it is easily accessible for maintenance work from all sides.

3. Attach the top protective plate (2) and safety bracket (3) using the bolts provided.
4. Check the machine for damage.
5. Train the operating staff and record training sessions in “Declaration of trained staff”, Section 9.

#### WARNING!



##### Risk of injuries!

Machine components might loosen during transport. Such components might be flung out during the embossing process. There is a risk of being injured.

- Simulate the embossing process several times without a work piece.
- Check the machine for atypical noise.

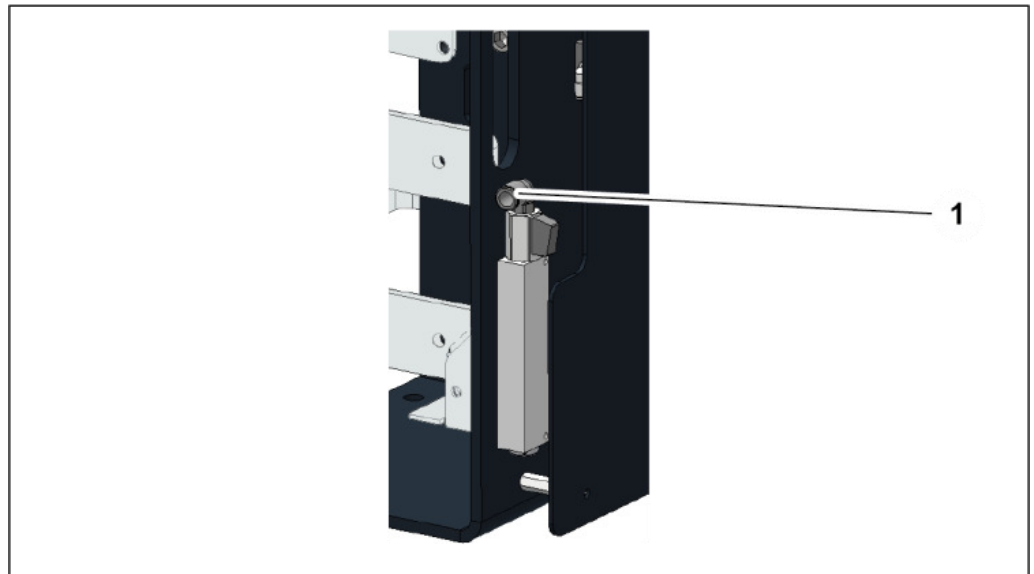
#### 4.3.1 Connection of compressed air

The compressed air connection must supply 7.5 bar.

## 4 Transport and commissioning

### 4.3 Commissioning

---



1. Establish the compressed air connection between the grid and distributor block unit (1).

#### **ATTENTION!**



#### **Damage to the machine**

Contaminated compressed air may cause damage to the machine.

- Only use clean, oil-free and water-free compressed air.

## 5 Operation

### 5.1 What you have to observe

---

## 5 Operation

### 5.1 What you have to observe

The operator has received the Operation Manual from the owner, has read and understood it and will observe it.

#### **Before starting and/or re-starting**

- Ensure sufficient illumination of the working area of the machine.

#### **During operation**

- Observe the safety instructions on the machine.
- Make sure that no other persons stay in the working area.
- Use appropriate aids to handle heavy workpiece.
- Each movement of the hand must be observed.
- Eating, drinking and smoking at the workplace is prohibited.
- Wear close-fitting clothes.
- Do not wear watches or jewellery.

## 5 Operation

### 5.2 Embossing the work piece

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## 5.2 Embossing the work piece

### 5.2.1 Prerequisites

Prerequisites for a correct skiving process:

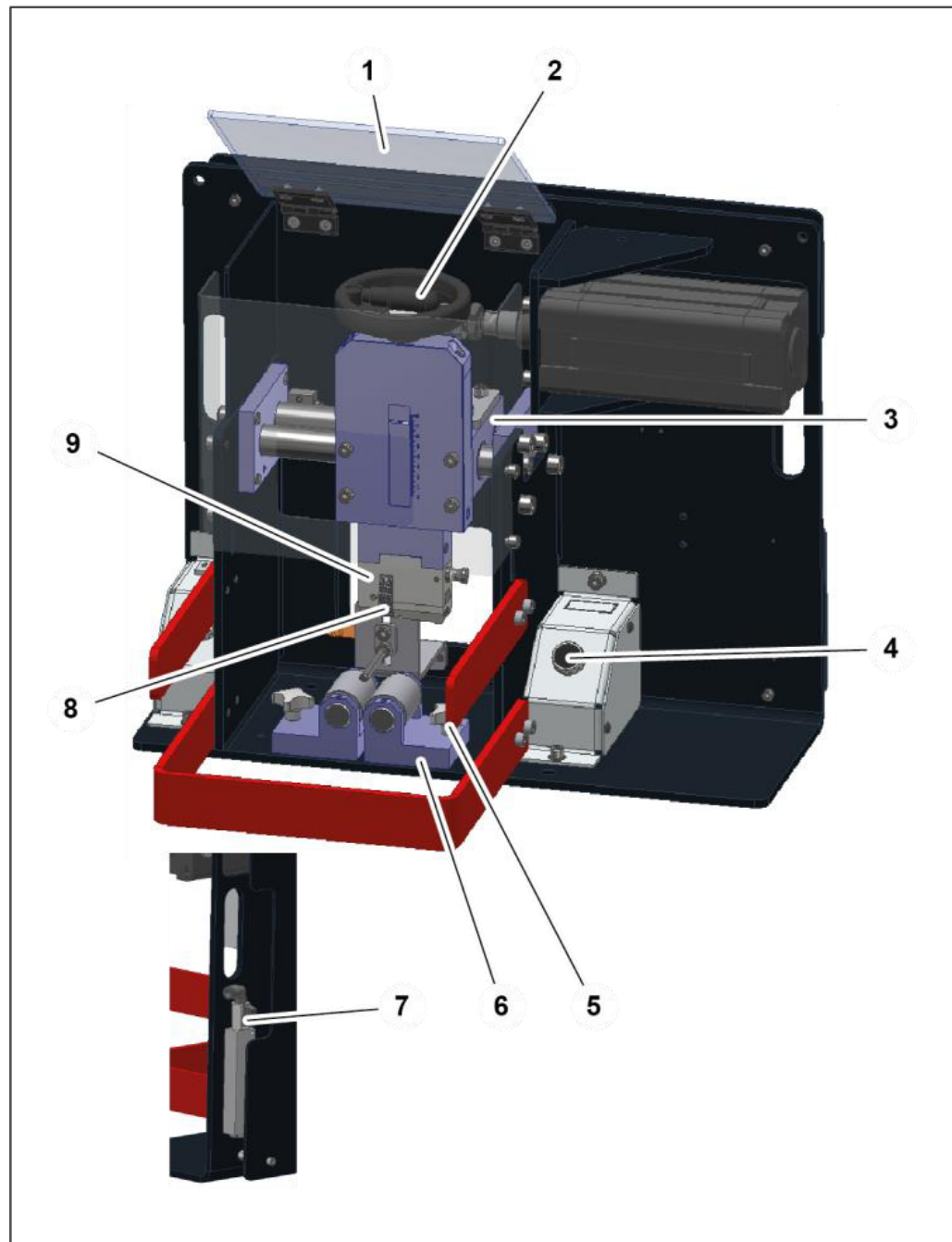
- Bearing blocks are set to the diameter of the work piece.
- Steel types are mounted correctly in the steel type holder.
- Steel type holder is mounted correctly in the stamp holder.



## 5 Operation

### 5.2 Embossing the work piece

#### 5.2.2 Embossing



1. Set the bearing blocks (6) to the requested work piece size - three positions are available.



Adjust the position of the bearing blocks and the sleeve diameters. Large sleeve diameter = large distance of bearing blocks. Small sleeve diameter = small distance of bearing blocks.

## 5 Operation

### 5.2 Embossing the work piece

---

2. Unscrew the star knob screw (5).
3. Displace the bearing blocks (6) to the requested position and secure them using the star knob screw (5).
4. Position the work piece on the bearing blocks (6).
5. Close the ball valve (7) by approx.  $\frac{3}{4}$  turn.
6. Actuate the two-hand control (4) until the steel type holder (9) is positioned centrally above the work piece.
7. Hold the cover (1) open with one hand and with the other hand turn the hand wheel (2) until the steel types (8) come into contact with the work piece.
8. Remove the work piece from the machine.
9. Turn the hand wheel (2) counter-clockwise by one quarter of a turn.
10. Open the ball valve (7) completely
11. Actuate the two-hand control (4) until the guide carriage (3) stays in the end position.
12. Position the work piece on the bearing blocks (6).
13. Actuate the two-hand control (4).
14. Remove the work piece from the machine.
15. Check the embossing depth after the first embossing process. Correct the embossing depth by turning the hand wheel (2).



The set value may be read on the scale of the vertical guide to be re-used for identical work pieces later.

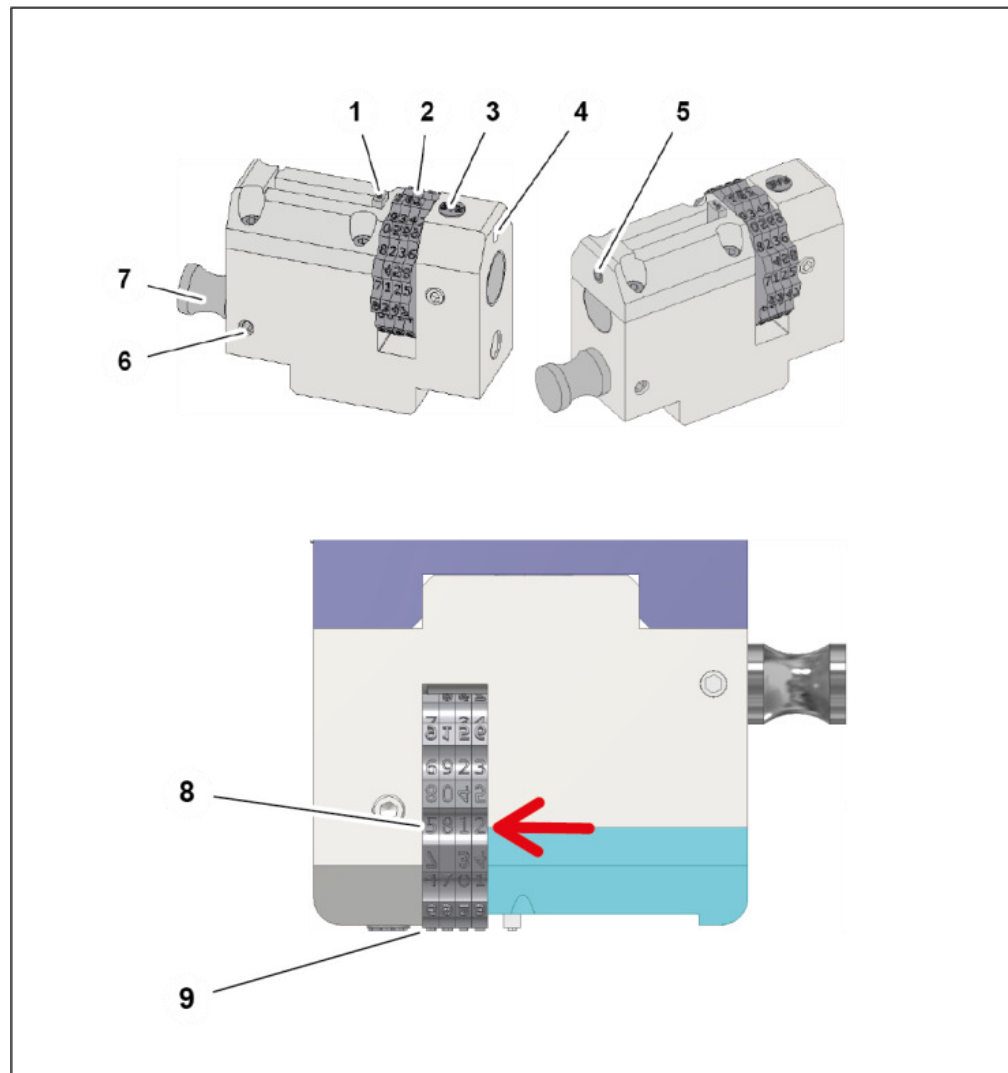


Place the elbow fitting on the bearing blocks and turn the elbow fitting radially by 360° in order to simulate the embossing process. The elbow fitting must not come into contact with the protective plate and safety bracket.

## 5 Operation

### 5.2 Embossing the work piece

#### 5.2.3 Embossing with steel type holder, single-row with 4 wheels



1. Insert steel types (1) in steel type holder. Space types allow a space to be left between the markings.
2. Tighten the clamping screw (5).
3. Loosen the clamping screw (6).
4. Loosen retaining pin (7).
5. Adjust the daisy wheels (2).  
The setting of the type wheels (8) represents the markings to be embossed.
6. Fix the retaining pin (7).
7. Tighten the clamping screw (6).
8. Loosen the clamping screw (4).
9. Insert the block (3).

## 5 Operation

### 5.2 Embossing the work piece

10. Tighten the clamping screw (4).

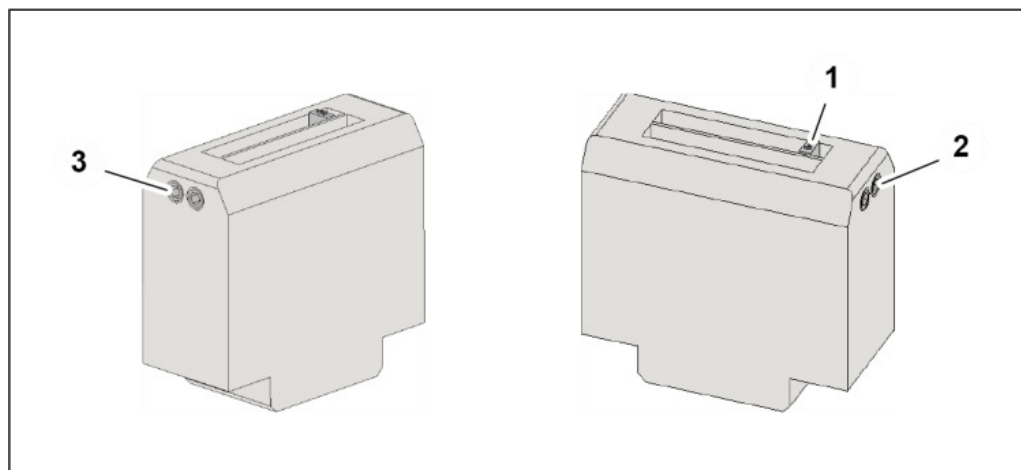


Make sure that clamp has been installed correctly and securely.



Check the correct (non-reversed) arrangement of the types by metallic mirror.

#### 5.2.4 Embossing with steel type holder, double-row without wheels



1. Insert steel types (1) in steel type holder. Neutral types allow a space to be left between the markings.
2. Tighten the clamping screws (2).
3. Loosen the clamping screws (3).



Make sure that clamp has been installed correctly and securely.

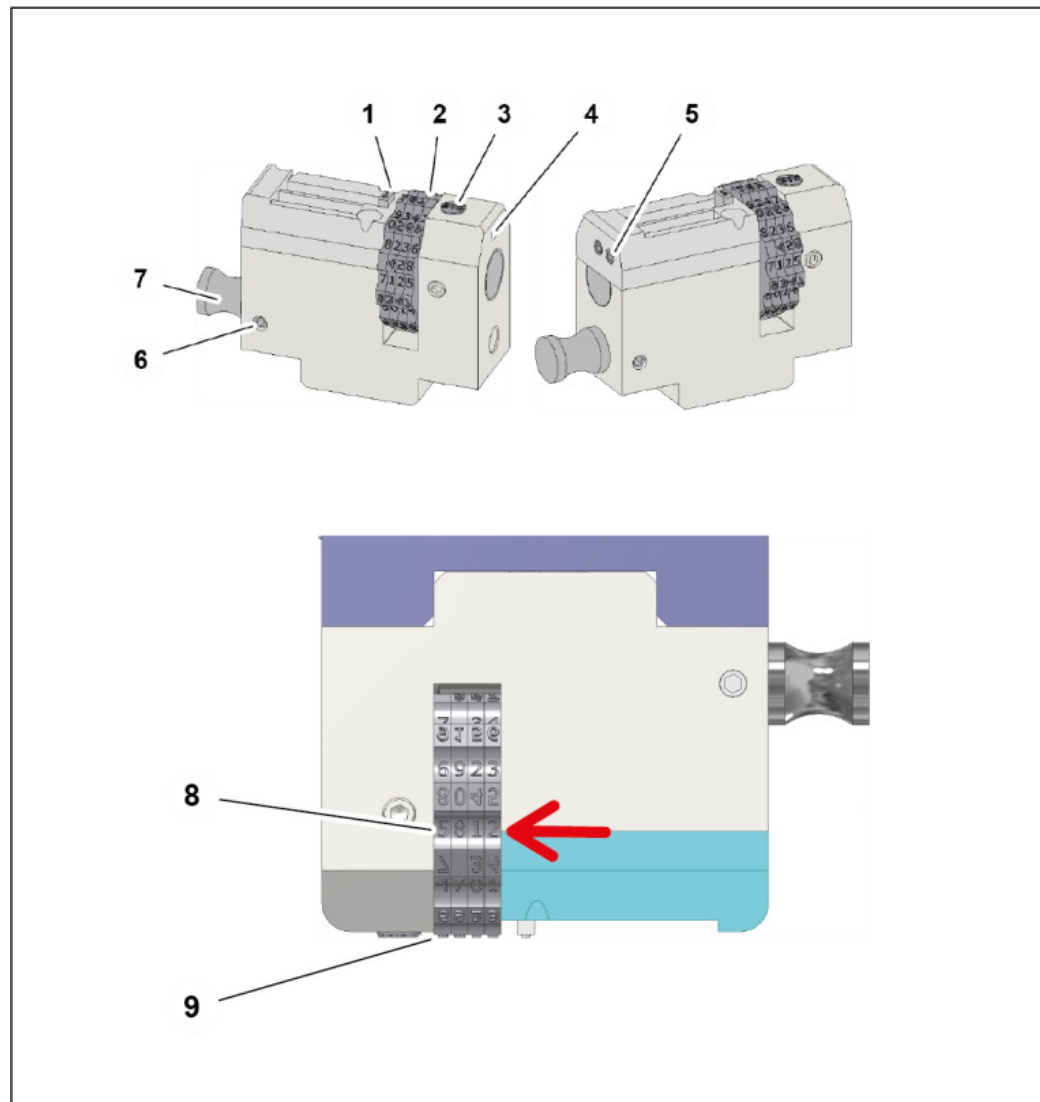


Check the correct (non-reversed) arrangement of the types.

## 5 Operation

### 5.2 Embossing the work piece

#### 5.2.5 Embossing with steel type holder, single-row with 4 wheels



1. Insert steel types (1) in steel type holder. Space types allow a space to be left between the markings.
2. Tighten the clamp levers (5).
3. Loosen the clamping screw (6).
4. Loosen retaining pin (7).
5. Adjust the daisy wheels (2).  
The setting of the type wheels (8) represents the markings to be embossed.
6. Fix the retaining pin (7).
7. Tighten the clamping screw (6).
8. Loosen the clamping screw (4).
9. Insert the block (3).

## 5 Operation

### 5.2 Embossing the work piece

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10. Tighten the clamping screw (4).

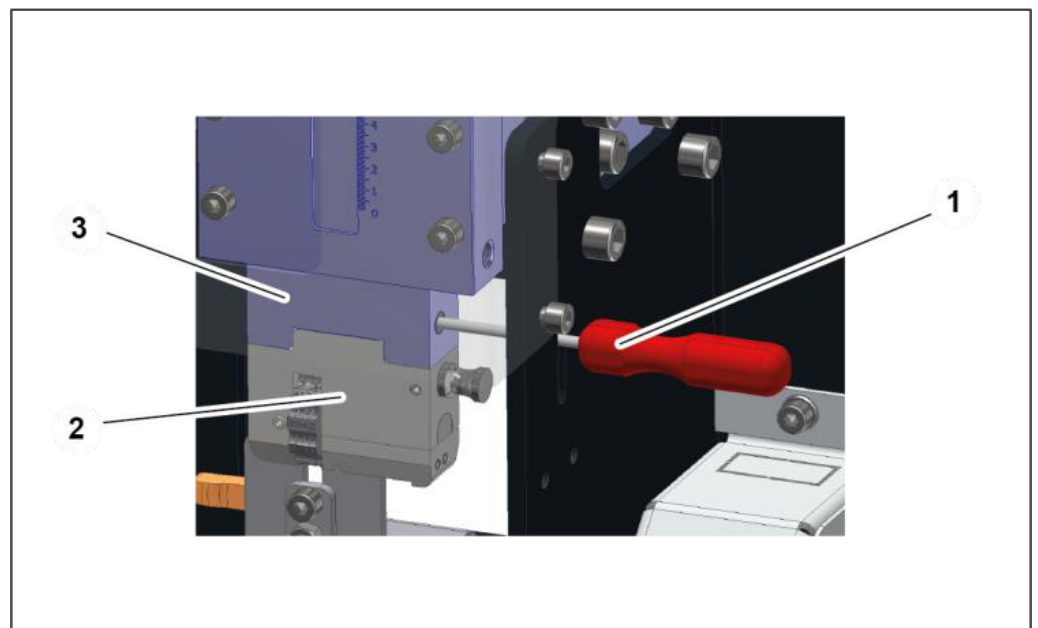


Make sure that clamp screws have been installed correctly and securely.



Check the correct (non-reversed) arrangement of the types by metallic mirror.

#### 5.2.6 Steel type holder replacement



#### Positioning the steel type holders

1. Move the guide carriage to the right into the end position.
2. Use the wrench (1) to push the locking pin in the stamp holder (3) to the left and hold it.
3. Use the retaining bolt to insert the steel type holder (2) into the mounting hole.
4. Remove the wrench to relief the pressure on the locking pin - the steel type block is now fixed.

## 5 Operation

### 5.2 Embossing the work piece

---

#### **Removing the steel type holder**

1. Hold the steel type holder (2) with one hand.
2. Push the locking pin in the steel type holder (2) with the wrench (1) in the other hand and hold it.
3. Remove the steel type holder (2).
4. Remove the wrench (1) to relief the pressure on the locking pin.

## 5.3 Cleaning

### ATTENTION!



#### **Risk of damage to machinery!**

If the machine is cleaned with a steam jet or compressed air, dirt and water may ingress in the machine and cause serious damage.

- Do not use a steam jet to clean the device.
- Do not use compressed air to clean the machine.

1. Use a soft cloth to clean the machine.
2. Remove metal abrasion on embossing types and daisy wheels using a brass brush.



## 6 Maintenance

### 6.1 What you have to observe

---

## 6 Maintenance

Regular maintenance will ensure the continuous operation reliability of the machine/unit.

### 6.1 What you have to observe

This section describes activities to be performed by you as the operator at regular intervals to ensure smooth operation of the machine/unit.

- Maintenance work may only be performed by qualified maintenance staff (fitter).
- Repair work on the machine/unit or components may only be performed by appropriately qualified expert staff or UNIFLEX experts!
- Welding, flame-cutting and grinding work on and in the machine/unit and its environment must be approved in advance. There is a risk of fire. The machine/unit must be cleaned from dust and inflammable substances. Adequate ventilation must be ensured.

### 6.2 Maintenance schedule

If not specified otherwise, inspections listed in the maintenance schedule are visual inspection. Replace defective parts immediately.

If you work in 2 shifts, the check frequency has to be doubled. If you work in 3 shifts, you proceed as with 2-shift operation.

Record maintenance work performed in the maintenance log.

Maintenance item	Daily	Weekly	Monthly	Every 6 months	Number of years
<b>Machine</b>					
Machine: Check for damage and wear.			X		
Retaining bolt: Check for damage.			X		

## 6 Maintenance

### 6.2 Maintenance schedule

Maintenance item	Daily	Weekly	Monthly	Every 6 months	Number of years
Check all bolted connections for secure fitting and retighten if necessary.					1
<b>Safety equipment</b>					
<p>Before starting work with two-hand control:</p> <p>check for function The embossing process must only be triggered when both buttons are pressed at the same time. If the left and right buttons are pressed with a time difference of more than 0.5 seconds, the embossing process must not be triggered. If the embossing process does trigger in this situation, the control block of the two-hand control must be replaced.</p>	X				
Protective screens: clean using a household window cleaner.		X			
Protective screens: replace no later than five years after manufacture (see year of construction).					5
Warning signs on the machine: Check legibility (see "Warning signs on the machine" in Section 2).				X	




The replacement of wear parts must be recorded in the maintenance log!

## 7 Troubleshooting

Error	Cause	Remedy
Guide carriage runs sluggishly	Guide is adjusted incorrectly	Readjust the play at the two cylinder-shaped linear guides. Release the bolts (4x M12), switch to idle stroke and tighten one after the other
	Close the slide bearing	Check slide bearing for wear and replace if necessary
Embossing not sufficient	Embossing depth is set incorrectly	Correct the embossing depth by turning the hand wheel
Two-hand control does not work	Buttons not pressed at the same time	The buttons must both be pressed within 0.5 seconds of each other.
	Limit switch not adjusted correctly	Check the position of the limit switch and adjust if necessary
Embossing process not performed correctly	Air pressure too low	Open the ball valve completely, check air pressure for min. 7.5 bar
Cylinder moves out of end position when two-hand control is released	End position damping is set to be too strong	Reduce the end position damping of the pneumatic cylinder

## 8 Decommissioning, disposal

<b>CAUTION!</b>	
	<p><b>Risk of injuries!</b></p> <p>Contact with consumables, e.g. oils, greases, test media, imposes a risk of injuries for the skin and eyes!</p> <ul style="list-style-type: none"><li>• Observe supplier's protection and safety instructions (see data sheet).</li><li>• Wear personal protection equipment.</li><li>• Do not eat, drink or smoke when handling hydraulic oil.</li><li>• Ensure good ventilation.</li></ul>

### 8.1 Dismantling

This section describes activities to be performed by you as the operator at regular intervals to ensure the safe dismantling of the machine/unit.

- The machine/unit may only be dismantled by entrusted and qualified staff.
- Check the machine/unit for mechanical tension and consider it during dismantling.

### 8.2 Recycling

The machine/unit contains metal, hydraulic hoses, electric cables and electronic components, depending on the type.

As regards disposal, the applicable national environmental protection and waste disposal regulations have to be complied with.

### 8.3 Consumables and waste

Observe applicable national environmental protection and waste disposal regulations.

## 8 Decommissioning, disposal

### 8.3 Consumables and waste

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Return consumables, e.g. oils, greases, test media, to supplier - they are hazardous waste. Also observe the information given on the safety data sheet.

## 9 Annex



Individual machine/unit components may deviate in their features. Please indicate the serial number of the machine for spare part orders.

## 9 Annex

### 9.1 Accessories (retrofitable)

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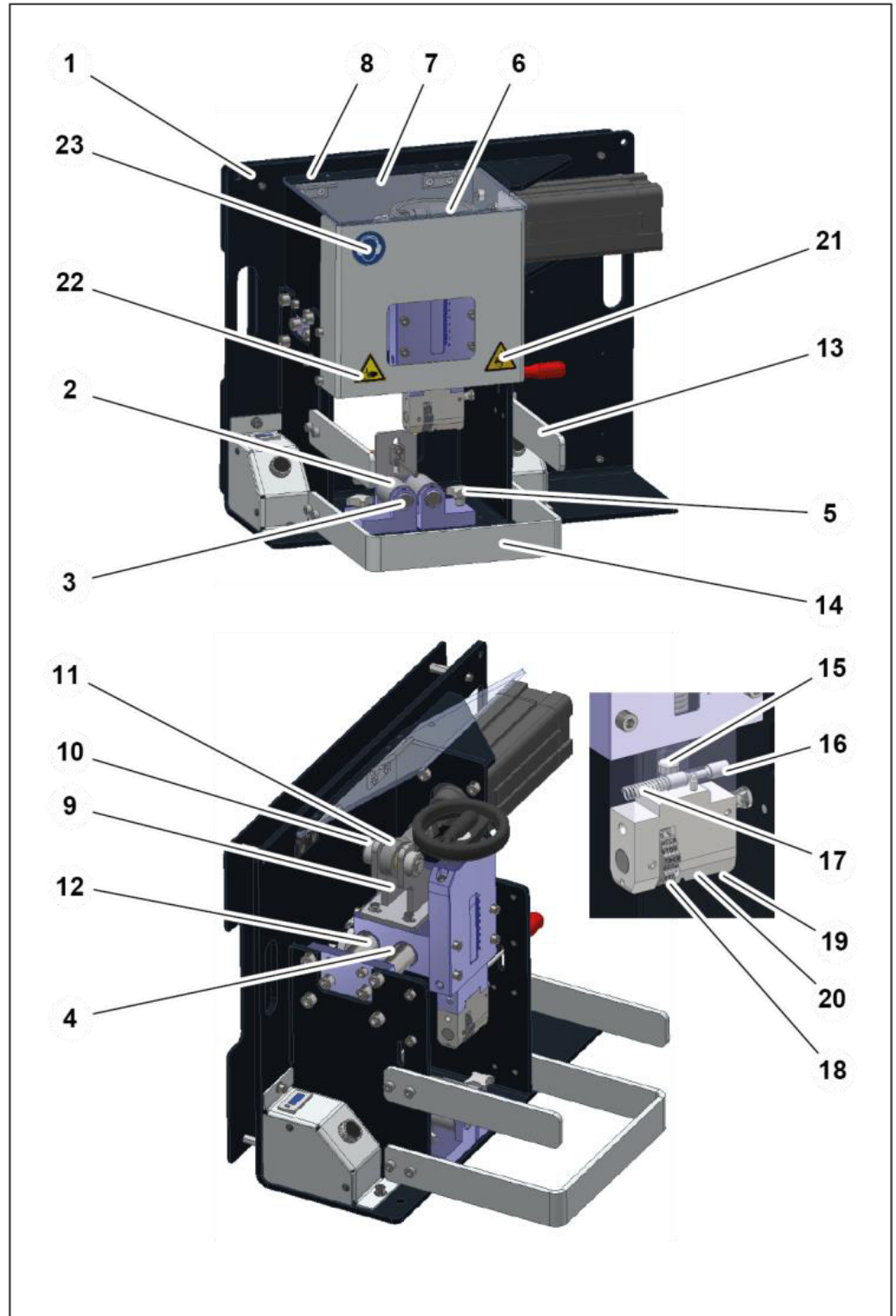
#### 9.1 Accessories (retrofitable)

Accessories	Part code
Workbench	TU
Steel type holder, single-row with 4 wheels	508.1001.3
Steel type holder, double-row without wheels	508.1002.3
Steel type holder, single-row with 4 wheels	508.1003.3
Embossing type set	UPTS 100
Die wrench	239.017.4

Please contact our Sales department for ordering optional accessories.

## 9.2 Spare parts list

### 9.2.1 Mechanical equipment





## 9 Annex

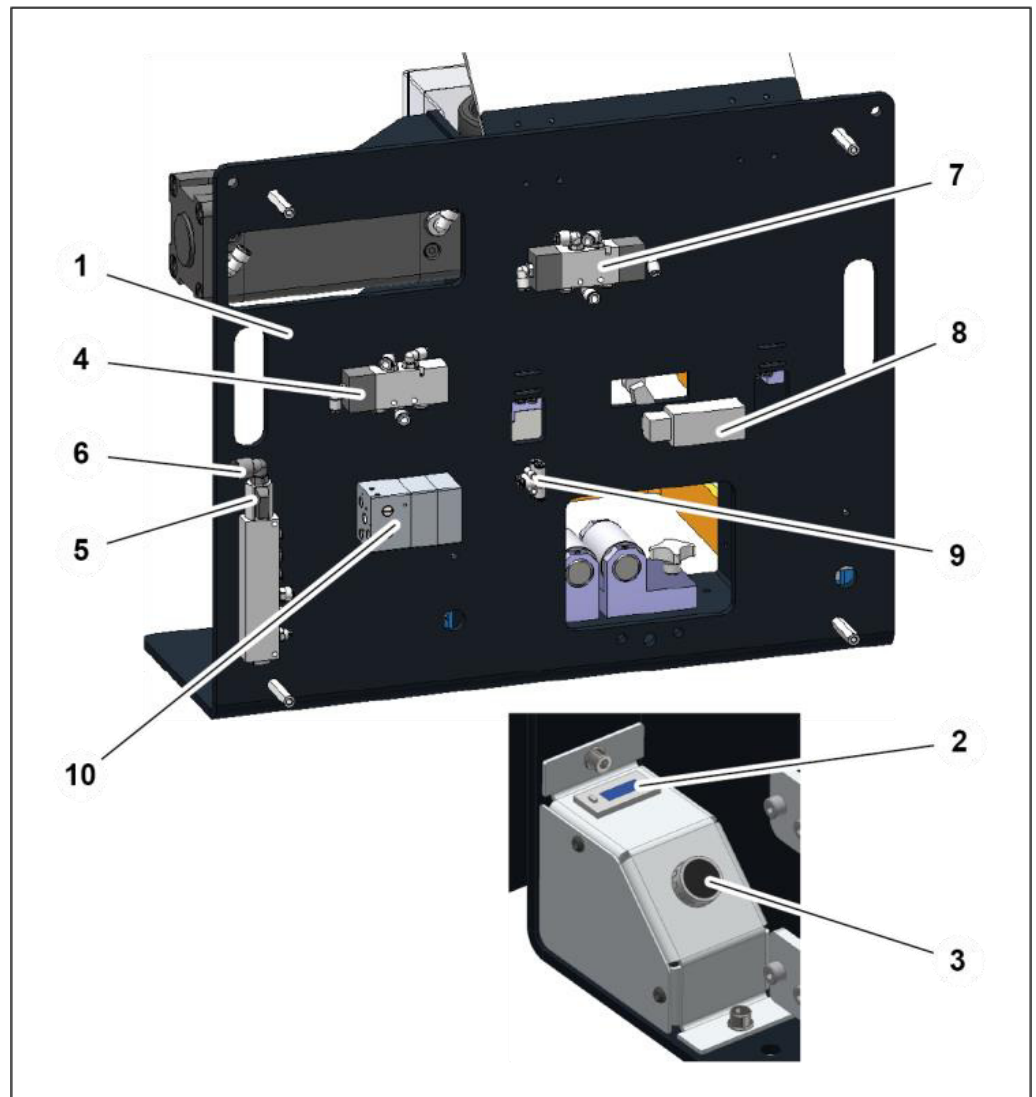
### 9.2 Spare parts list

Item	Quantity	Part code	Designation
1	1	508.061.3	Chassis
2	2	508.019.3	Roller
3	4	777.062	Slide bearing
4	2	233.111	Rubber-metal buffer
5	2	232.036	Star knob screw
6	1	504.026	Hand wheel
7	1	508.071.4	Top cover
8	2	414.032	Hinge
9	1	508.065	Joint head of bearing block
10	2	777.627	Adjusting ring
11	1	508.073	Joint head with internal thread
12	4	777.176	Slide bearing
13	2	508.070	Protective plate
14	1	508.053	Safety bracket
15	1	232.504.4	Retaining bolt
16	1	235.008.4	Locking bolt
17	1	D-195A-21	Pressure spring
18	4	506.064.4	Type wheel (accessory)
19	1	506.065.4	Block "bar" (accessory)
20	1	506.067.4	Block "PSI" (accessory)
21	1	716.4	Warning of hand injuries sign
22	1	715.4	Squeezing risk warning sign
23	1	777.214	Ear protection instruction sticker

## 9 Annex

### 9.2 Spare parts list

#### 9.2.2 Pneumatic equipment



Item	Quantity	Part code	Designation
1	1	808.301	Cylinder
2	1	888.140	LED digital counter
3	2	808.009	Pushbutton
4	1	808.014	5/2 directional valve
5	1	600.011	Ball valve
6	1	808.067	Angular screw-in connection
7	1	808.045	5/2 directional valve
8	1	888.141	Limit switch
9	2	808.046	T connection
10	1	808.162	Control block of two-hand control

## 9 Annex

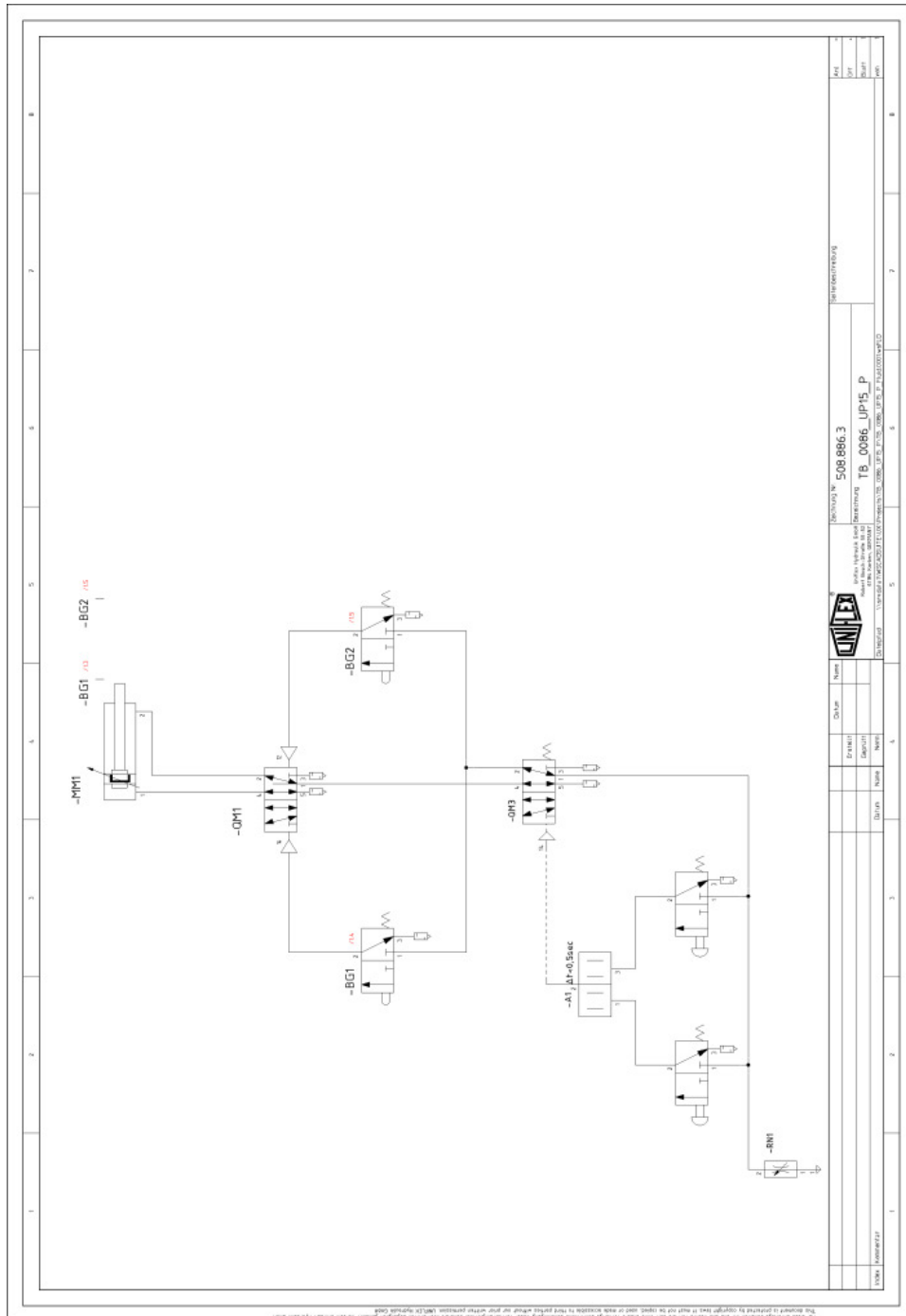
### 9.2 Spare parts list

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# 9 Annex

## 9.3 Pneumatic diagram

### 9.3 Pneumatic diagram



### 9.4 Maintenance log



## 9 Annex

### 9.5 Declaration of qualified staff

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#### 9.5 Declaration of qualified staff

I herewith declare that I have attended an internal training for the operation of the UNIFLEX machine and have been informed on all safety-related details. In addition I declare that I have read and understood this Operation Manual completely.

City	Date	Name	Signature

City	Date	Name	Signature

City	Date	Name	Signature

City	Date	Name	Signature

City	Date	Name	Signature

City	Date	Name	Signature

## 9 Annex

### 9.5 Declaration of qualified staff

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## About Danfoss Power Solutions FC

We sincerely appreciate your choice in selecting this product as part of the range of tooling products distributed by Danfoss.

Danfoss hoses, fittings, and tooling provide the ultimate fluid conveyance solutions for a variety of equipment and applications around the world. We proudly engineer to support a sustainable future for tomorrow.

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