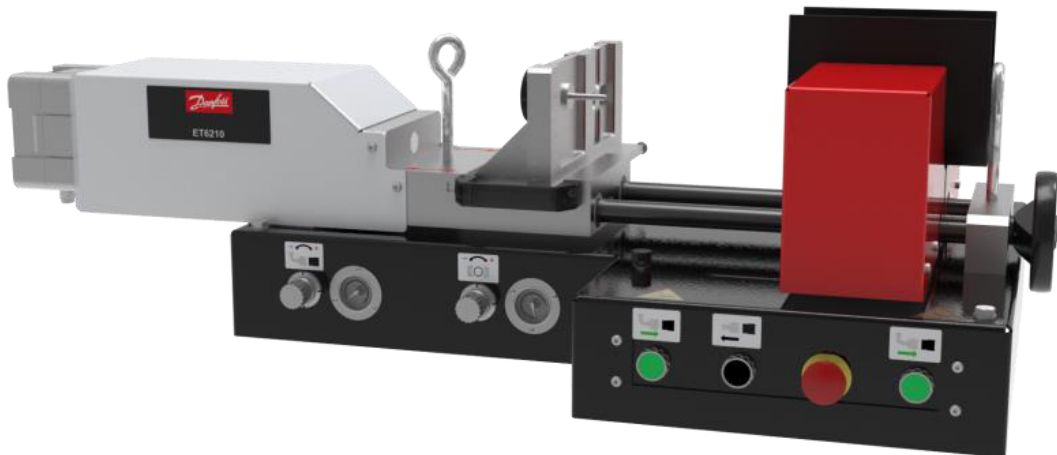


ENGINEERING  
TOMORROW

*Danfoss*

Operator's Manual

# ET6210 Nipple Inserter 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

ET6210

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

---

## 1 About this document

In this Operation Manual, the “nipple inserterET6210” 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

---

### 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

---

## 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 inserting nipples in hoses up to a specific permissible diameter (see Technical Data in chapter 3). The system components must be matched by the manufacturer. Uncrimped nipples may be removed from the hose by the machine.

Intended purposes include:

- Single user workplace for one person only
- single stroke with manual feed and withdrawal,
- 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;

## 2 Safety instructions

### 2.2 Intended use

---

- children and persons under age;
- 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
- Use of non-original machine inserts, adapter plates and centring pins
- Use of damaged or worn machine inserts, adapter plates and centring pins
- Assembly and disassembly of unapproved nipples and hoses
- The pre-set feed force must not be changed
- Machine operation with dismantled protection covers
- misuse of consumables and waste materials.

In particular unapproved tool inserts and work pieces may be overstressed by the assembly process in a manner so that this may result in a sudden failure. Chips or seriously accelerated work piece parts impose a high risk potential for operators, individuals and objects, even outside the working area.

#### **WARNING!**



#### **Risk for life and health!**

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.

- Always use the machine in compliance with its intended purpose.

## 2 Safety instructions

### 2.3 Product-specific risks

---

### 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 squeezing**

There is risk of getting squeezed between the protection cover and the chassis when shifting the clamping device.

- Keep sufficient distance to the clamping device.

There is risk of getting squeezed between the work piece and the clamping dies when cooperation the clamping device.

- Keep sufficient distance to the clamping device.

##### **Tilting hazard**

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

- Observe the machine's centre of gravity during transport.

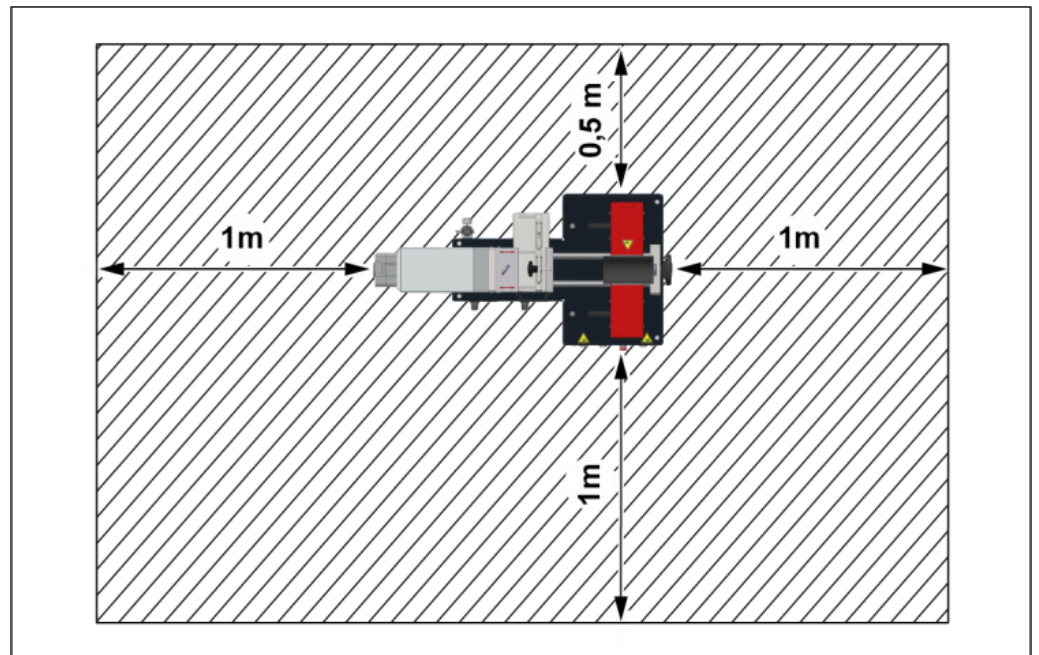
#### 2.3.2 Risk imposed by pneumatic system

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.

## 2.4 Safety

### 2.4.1 Working area



The working area is defined as the shaded area all around the machine (see illustration).

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

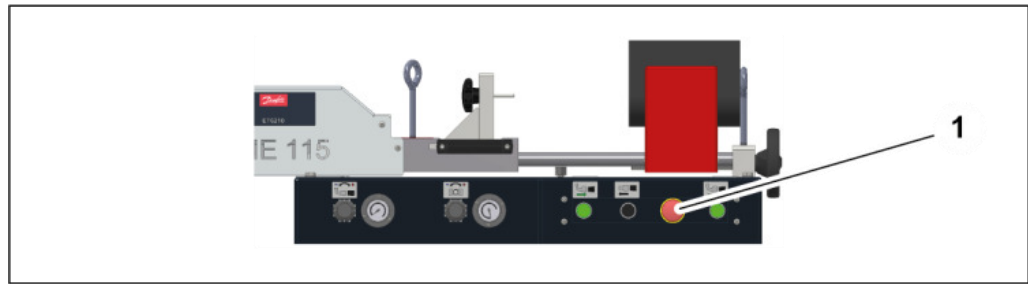
### 2.4.2 Emergency-stop button

The emergency-stop button for the machine is located on the control console.

## 2 Safety instructions

### 2.4 Safety

---



Immediately activate the emergency-stop button (1) in cases of emergency.

The machine adopts its basic position:

- the feed unit moves to the left
- the clamping device is opened completely.

Remedy the cause of the emergency stop first before unlocking the emergency-stop button.

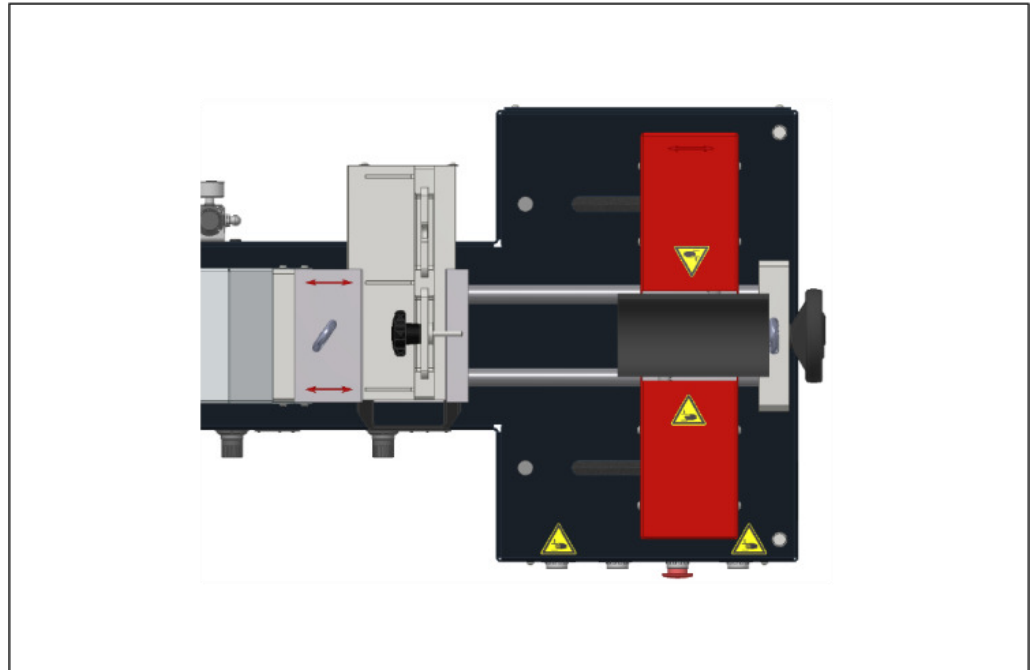
Do not pull the emergency-stop button for unlocking it, but release it by a turn.

## 2 Safety instructions

### 2.4 Safety

---

#### 2.4.3 Warning signs on the machine



#### **Hand injury**

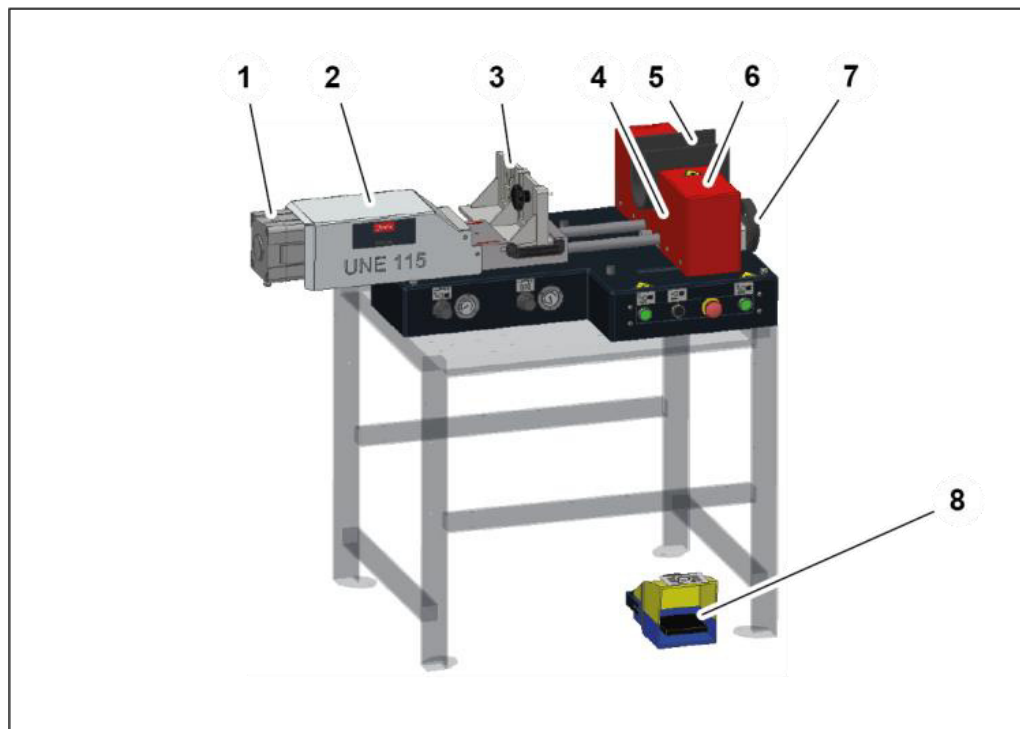
between the protection cover and the chassis, as well as on the clamping device.

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

## 3 Machine description

### 3.1 Design and function

#### Base machine



- (1) Feed unit
- (2) Feed unit protection cover
- (3) Machine slide
- (4) Clamping device
- (5) Rubber pad
- (6) Clamping device protection cover
- (7) Hand wheel
- (8) Foot switch

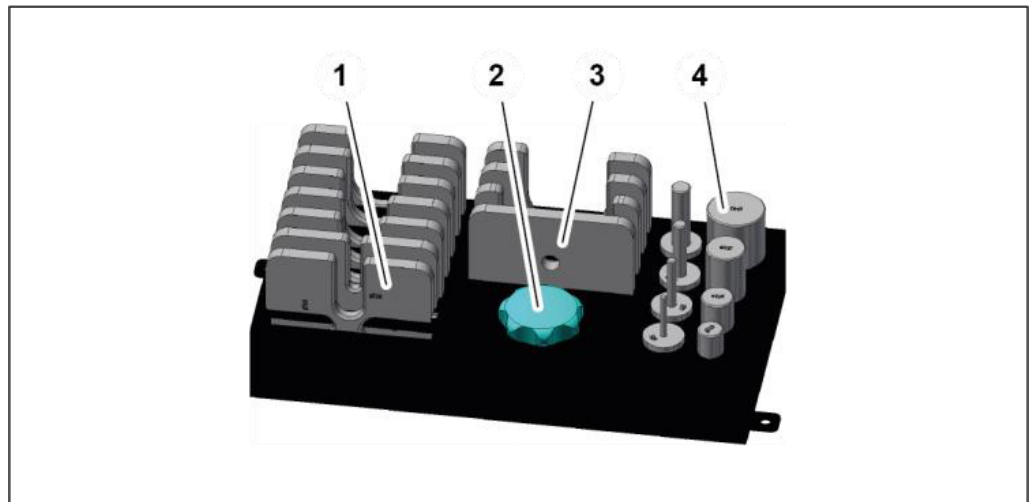
The feed unit (1) moved pneumatically, whereby the nipple is mounted on and/or dismantled from the hose. The pressure required for this is built up by the pneumatically driven cylinder. The machine slide (3) is fitted with different work piece inserts and adapter plates to position the nipple appropriately to the hose. The clamping device (4) is activated by the foot switch (8) and preloads the hose. The hand wheel (7) is used to pre-set the clamping device. The rubber pad (5) protects the hose against damage.

## 3 Machine description

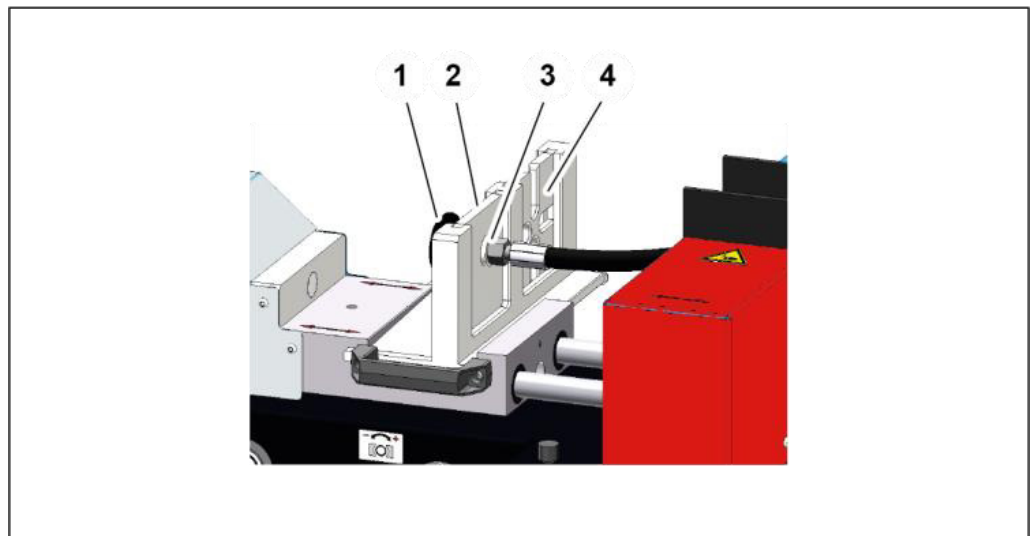
### 3.1 Design and function

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#### Work piece receptacles



- (1) Work piece inserts for bent nipples from  $\text{Ø } 8 - \text{Ø } 80 \text{ mm}$
- (2) Star knob
- (3) Stop plate
- (4) Centring pins from  $\text{Ø } 5$  to  $\text{Ø } 42 \text{ mm}$



The work piece inserts (4) and the stop plate (2) are mounted on the movable machine slide. The centring pins (3) are inserted in the holes of the stop plate (2) and fixed using the star knob (1).

#### Accessories

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

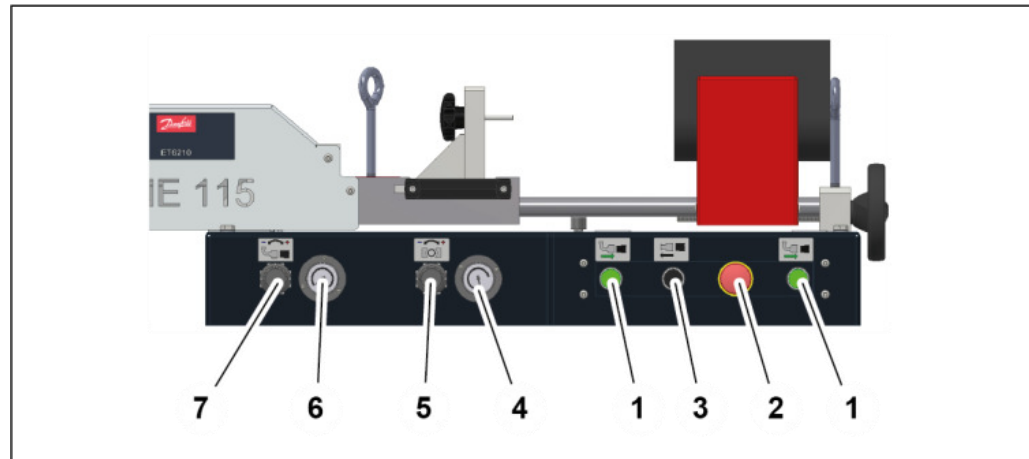


## 3 Machine description

### 3.2 Operation and display elements

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### 3.2 Operation and display elements



- (1) Two-hand operation button
- (2) Emergency-stop button
- (3) Work piece receptacle backwards  
(dismantling of uncrimped nipples)
- (4) Manometer clamping pressure
- (5) Clamping force pressure controller
- (6) Feed pressure manometer
- (7) Feed force pressure controller

## 3 Machine description

### 3.3 Technical data

---

#### 3.3 Technical data

##### Machine

Dimensions L x W x H 625 x 1185 x 320 mm

Weight approx. 100 kg

Noise level < 70 dB(A)\*

##### Function

Insertion force 8 kN( 8 bar)

Clamping force 8 kN( 8 bar)

##### Work piece capacity

Working area < 3", depending on the fitting, depending on the manufacturer

Max. 110 mm fitting and hose outside diameter

##### Pneumatic connection

Power rating 7 bar

##### Workbench

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

##### We recommend industrial flooring which meets the following structural requirements

Permanent floor loading approx. 0.07 kg/mm<sup>2</sup>

Floor carrying capacity min. 2.500 kg/m<sup>2</sup>

Floor quality B25

Evenness Max. unevenness 5 mm/m

## 3 Machine description

### 3.3 Technical data

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Inclination	max. 5 mm/m
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#### **Ambient conditions**

Ambient temperature	10 °C – 40 °C
---------------------	---------------

Air humidity	45 % – 65 %
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The \* data are theoretical/computed values, or values measured on a prototype. Actual values may vary slightly, depending on the machine.

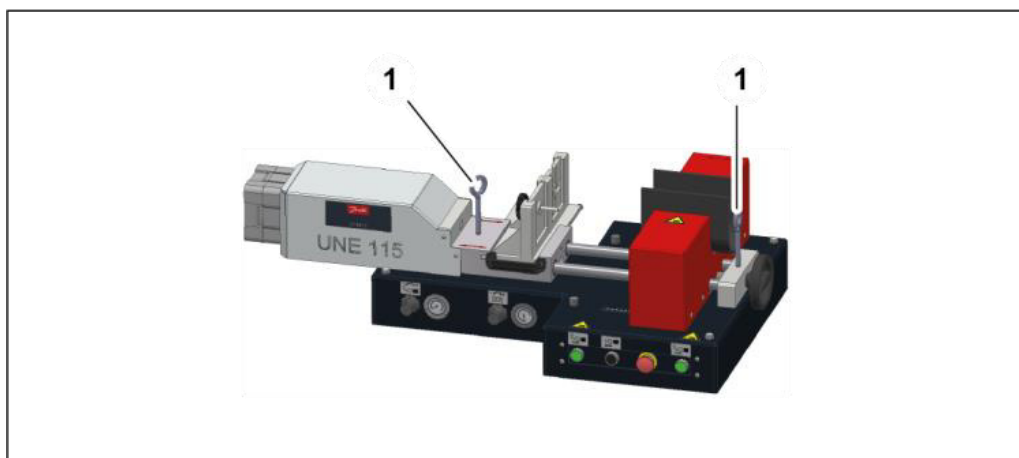
## 4 Transport and commissioning

### 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 lift truck or a crane. When a crane is used for transport, lifting gear with a sufficient length and lifting capacity has to be used. The lifting gear must be attached at the lifting lugs (1). 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.

- Only lift the machine at the designated points.

1. Lift the machine using the lifting lug (1) and transfer 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. Place the machine hanging on the lifting lugs onto the optionally supplied table.
2. Remove lifting lugs.



The lifting lugs are needed for other machine transports. Keep it safely.

3. Bolt the machine on the bench.

## 4 Transport and commissioning

### 4.3 Commissioning



The workbench must be sufficiently solid and stable.



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

4. Check the machine for damage.
5. Check the compressed-air hoses for damage.
6. Train the operating staff and record training sessions in “Declaration of trained staff”, Section 9.

#### WARNING!



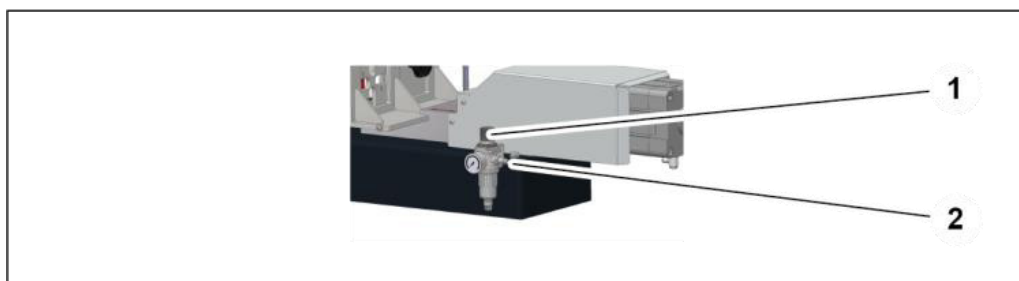
##### Risk of injuries!

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

- Simulate the nipple insertion 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 bar.



1. Establish the compressed air connection (2) between the grid and the compressed-air maintenance unit.
2. Check the pressure at the compressed-air maintenance unit (1) and adjust to 7 bar.

## 4 Transport and commissioning

### 4.3 Commissioning

---

#### 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 Push in/pull out nipples

---

## 5.2 Push in/pull out nipples

### 5.2.1 Prerequisites

Prerequisites for a correct pushing/pulling process:

- Work piece inserts and/or centring pins and work piece are compatible.
- The proper work piece insert and/or centring pin is mounted correctly in the machine slide.
- The pushing force and the clamping force have been set on the control panel:
  - Large hose diameter = large force
  - Small hose diameter = small force
- Clamping device and work piece are compatible.

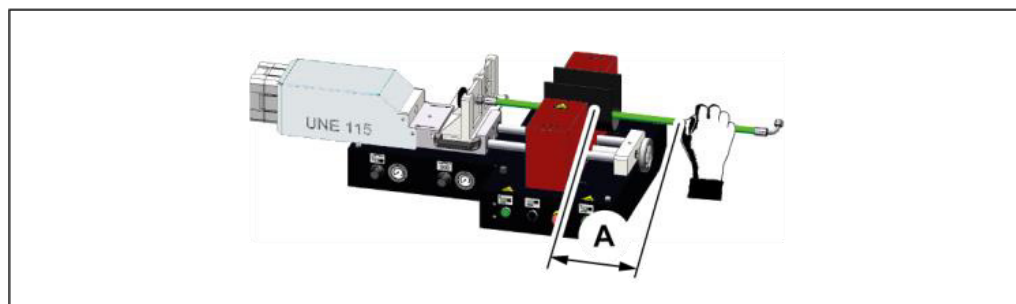


An approved lubricant may be applied for connecting the nipple and the hose more easily.

## 5 Operation

### 5.2 Push in/pull out nipples

#### 5.2.2 Nipple pushing operation mode



#### WARNING!



#### Risk of squeezing

There is risk of getting squeezed between the work piece and the clamping dies when cooperation the clamping device.

- Keep a minimum distance of 120 mm (A) to the clamping device.

1. Insert the rubber pad in the clamping device.
2. Measure the pushing depth on the nipple using a calliper.
3. Use chalk to mark the measured depth on the hose diameter.
4. Select the appropriate work piece insert and/or stop plate with centring pin and mount it in the machine slide.
5. Push the nipple hand-tight and straight on the hose.
6. Fix the nipple in the work piece insert and/or on the stop plate using the centring pin.
7. Insert the work piece in the clamping device and preload it using the foot switch.



Re-align the work piece manually, if required.

8. Clamp the hose using the two-hand trigger and push in the nipple at the same time.
9. Keep the two-hand trigger activated until the nipple is pushed in completely. Observe the mark.
10. Move the feed unit/machine slide back into the starting position.
11. Release the clamping device using the foot switch.

## 5 Operation

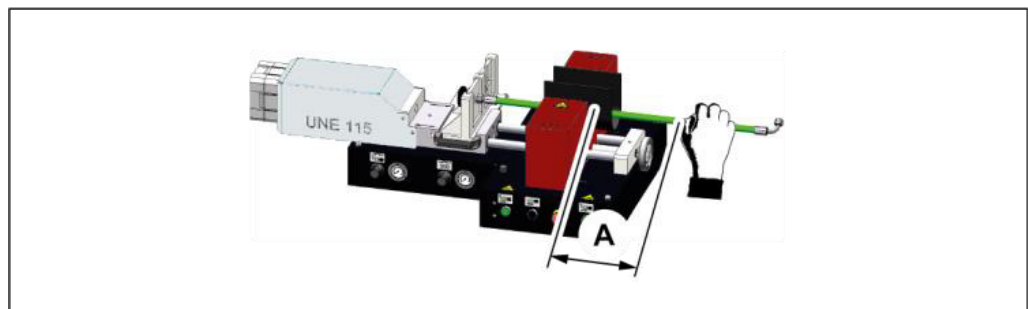
### 5.2 Push in/pull out nipples

12. Remove the work piece from the tool.



If a nipple was not pushed in correctly, it is possible to pull out the nipple again.

#### 5.2.3 Nipple pulling operation mode



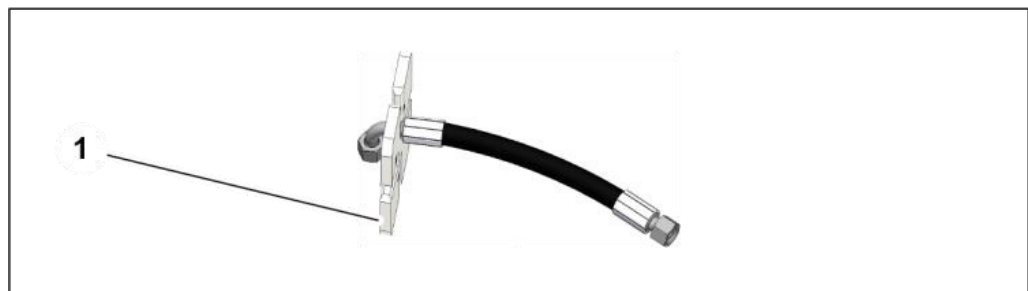
#### WARNING!



##### Risk of squeezing

There is risk of getting squeezed between the work piece and the clamping dies when cooperation the clamping device.

- Keep a minimum distance of 120 mm (A) to the clamping device.



1. Select the correct work piece insert (1). The work piece insert must match the fitting neck.
2. Mount the work piece insert in the machine slide.
3. Without work piece. Activate foot switch to close the clamping device.
4. Move the feed unit towards the clamping device.

## 5 Operation

### 5.3 Stop

---

5. Check the distance between the feed unit and the clamping device and change the clamping device position, if required.
6. Open the clamping device using the foot switch.
7. Insert the work piece in the clamping device and close it using the foot switch. The work piece is preloaded.
8. Briefly activate the two-hand trigger to reach the complete clamping force.
9. Activate the “Work piece receptacle backwards” button. The feed unit moves backwards and the nipple is pulled out from the hose.
10. Release the clamping device using the foot switch.
11. Remove the work piece from the tool.



The nipple may be inserted again

### 5.3 Stop

1. Finish the pushing/pulling process.
2. Deposit the work piece outside the machine.
3. Disconnect the machine from the compressed air supply.
4. Check the machine for contamination and outside damage.
5. Check work piece receptacles for damage.
6. Remove contamination, dust and chips using a vacuum.



Inform the fitter in case of damage or other irregularities.

## 5.4 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 machine.
- Do not use compressed air to clean the machine.

1. Use a soft cloth to clean the machine.

## 6 Maintenance

### 6.1 What you have to observe

---

## 6 Maintenance

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

### 6.1 What you have to observe

This Section describes action to be taken by you as the fitter regularly to ensure the troublefree use of the machine.

- Maintenance work may only be performed by qualified maintenance staff (fitter).
- Repair work on the machine or components may only be performed by appropriately qualified expert staff or UNIFLEX experts!
- During all maintenance work, the machine must be disconnected from the compressed air supply.

Machine out of service for maintenance work!  
Do not switch on!

- Welding, flame-cutting and grinding work on and in the machine and its environment must be approved in advance. There is a risk of fire. The machine 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.

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.

## 6 Maintenance

### 6.2 Maintenance schedule

Maintenance item	Weekly	Monthly	Every 6 months	Number of years
<b>Machine</b>				
Machine: Check for damage and wear.	X			
Work piece receptacles: Check for damage and wear.		X		
Check all bolted connections for secure fitting and retighten if necessary.				1
<b>Feed unit</b>				
Feed unit guides: Grease		X		
Machine slide: Check for damage and wear.		X		
<b>Compressed-air system</b>				
Compressed-air maintenance unit: Check.		X		
Pneumatic energy lines – hoses: Check for porosity and leaks.		X		
Pneumatic energy lines - bolted connections and hoses: Check for leaks.		X		
<b>Safety equipment</b>				
Emergency-stop button: Check function	X			
Fixed guards and covers: Check for completeness and correct installation.		X		
Foot switch enclosure: check for completeness. The case protects the pedal against unintentional activation.		X		
Warning signs on the machine: Check for readability. (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
Machine is not working	Compressed air supply disconnected	Connect compressed air
	Air pressure too low	Check air pressure and increase, if required
Hose is pulled out from the clamping device	Clamping pressure too low	Check clamping pressure and increase, if required
	Clamping without rubber pad	Place rubber pad between clamping device and hose.



## 8 Decommissioning, disposal

### CAUTION!



#### **Risk of injuries!**

Parts of the machine/unit may be under pressure and/or tension. Loosening components may impose a risk of injuries!

- De-pressurize the machine/unit before performing any work and check for potential sources of hazard.

### 8.1 Dismantling

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

- The device may only be dismantled by entrusted and qualified staff.
- Disconnect the machine/unit from the pressure supply before dismantling and depressurise it.
- Check the device 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.

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



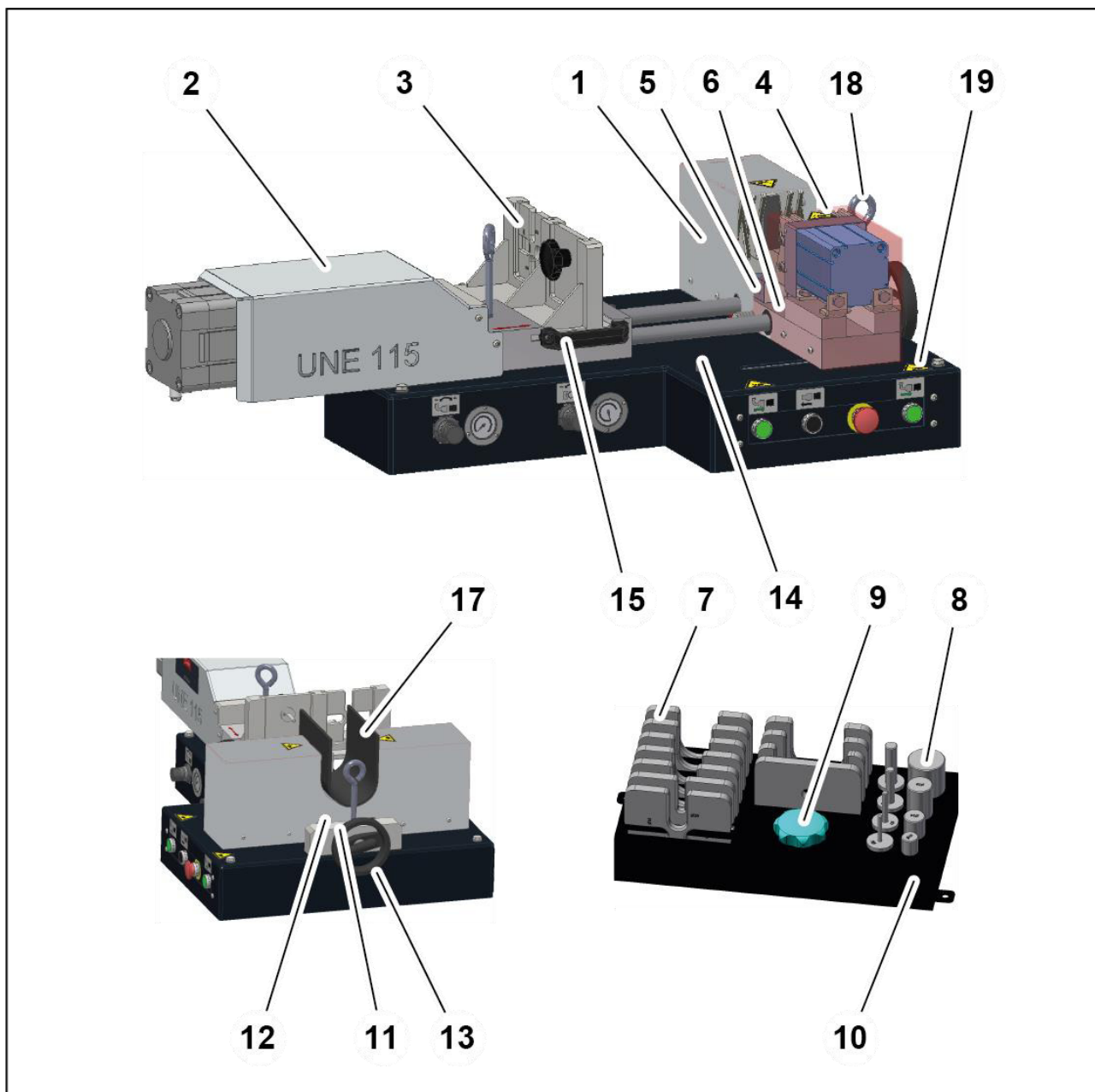
Individual machine/unit components may deviate in their features. Please indicate the serial number of the machine for spare part orders.

### 9.1 Accessories (retrofitable)

Accessories	Part code
Workbench	TU
Hard rubber wheels (set = 4 wheels, 2 with fixing brake)	778.2

Please contact our Sales department for ordering optional accessories.

## 9.2 Mechanical equipment spare parts list



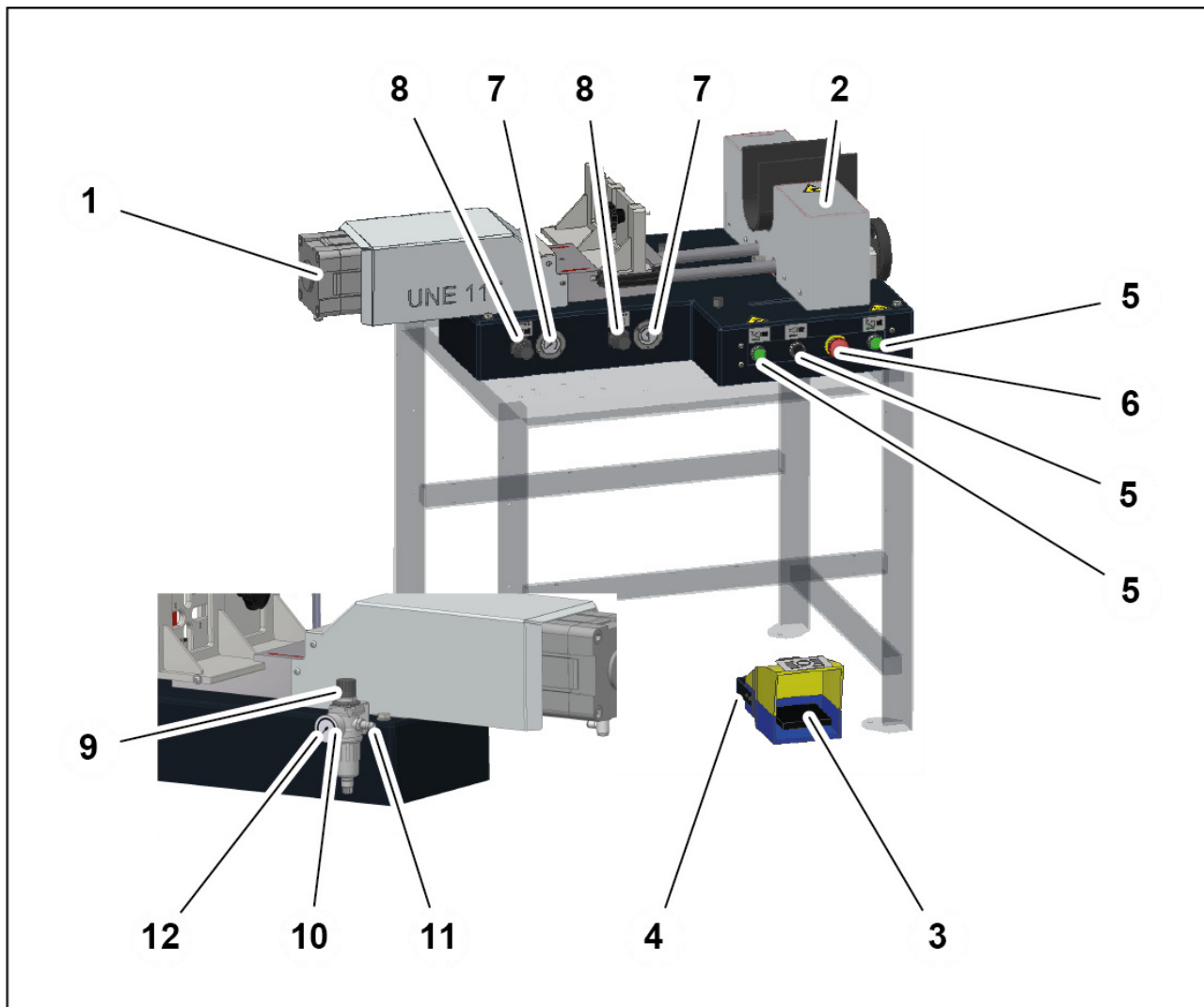
Item	Quantity	Part code	Designation
1	2	104.002.3	Clamping block lining
2	1	104.005.3	Feed unit lining
3	1	104.017.3	Machine slide
4	20	104.023.4	Jaw plate
5	1	104.033.4	Guard plate
6	2	104.015.4	Rod guide

## 9 Annex

### 9.2 Mechanical equipment spare parts list

Item	Quantity	Part code	Designation
7	1	104.1150	Work piece inserts, complete
7	1	103.100.4	Fork insert 8-14
7	1	103.101.4	Fork insert 16-22
7	1	103.102.4	Fork insert 24-27
7	1	103.103.4	Fork insert 31
7	1	103.104.4	Fork insert 37
7	1	103.105.4	Fork insert 39
7	1		Fork insert 43
7	1	103.107.4	Fork insert 58
7	1	103.117.4	Fork insert 65
7	1	103.118.4	Fork insert 80
7	1	103.108.4	Stop plate
8	1	104.1250	Centring pins, complete
8	1	103.109.4	Centring pin 5
8	1	103.110.4	Centring pin 7
8	1	103.111.4	Centring pin 10
8	1	103.112.4	Centring pin 14
8	1	103.113.4	Centring pin 19
8	1	103.114.4	Centring pin 24
8	1	103.115.4	Centring pin 29
8	1	103.116.4	Centring pin 42
9	1	104.043	Star knob
10	1	104.042.3	Work piece receptacle plate
11	1	104.003.4	Threaded rod
12	2	104.004.4	Guidance
13	1	504.009.4	Hand wheel
14	2	78 10 56 medium	Megi buffer
15	1	501.068	Strap grip
No picture	1	104.045	Hose protection
17	1	104.051.4	Rubber pad
18	2	323.120.3	Lifting lug
19	1	104.4100	Sticker set

### 9.3 Pneumatic equipment spare parts list

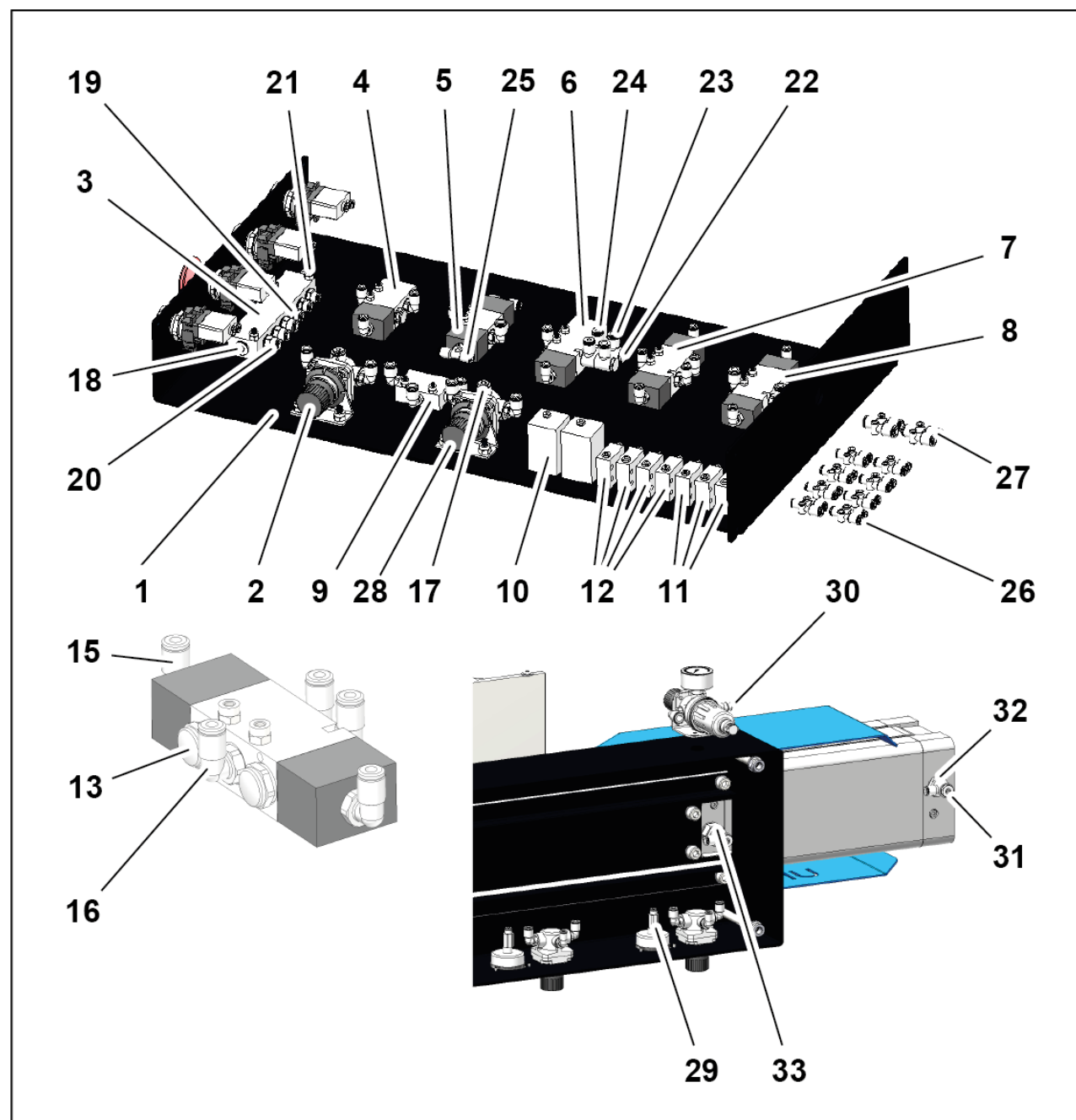


Item	Quantity	Part code	Designation
1	1	808.200	Compact cylinder
2	2	808.100	Cylinder
3	1	808.008	Foot valve
4	1	104.041.4	Foot valve plate
5	3	808.009	Pushbutton
6	1	808.010	Emergency-stop button
7	2	808.005	Manometer
8	2	808.002	Controller 0-10 bar
9	1	808.001	Filter controller
10	1	808.004	Manometer

## 9 Annex

### 9.3 Pneumatic equipment spare parts list

Item	Quantity	Part code	Designation
11	1	808.007	Mounting bracket
12	1	808.028	Angular screw-in connection G 1/4 - 8 mm



Item	Quantity	Part code	Designation
1	1	104.006.3	Pneumatic base plate
2	1	808.003	Compressed air controller 0 - 2 bar
3	1	808.011	Distributor block
4	1	808.012	3/2 directional valve

## 9 Annex

### 9.3 Pneumatic equipment spare parts list

Item	Quantity	Part code	Designation
5	1	808.013	3/2 directional valve
6	1	808.014	5/2 directional valve
7	1	808.045	5/2 directional valve
8	1	808.015	5/3 directional valve
9	1	808.016	Shuttle valve
10	2	808.017	NOT logic element
11	3	808.018	OR logic element
12	4	808.019	AND logic element
13	2	808.020	Sound absorber G 1/4
No picture	6	808.021	Damper G1/8
15	13	808.025	Angular screw-in connection G 1/8 - Ø 4 mm
16	21	808.026	Angular screw-in connection G 1/8 - Ø 6 mm
17	2	808.033	Screw plug G 1/8
18	1	808.034	Screw plug G 1/8
19	3	808.036	Straight screw-in connection G 1/8 - Ø 4 mm
20	3	808.037	Straight screw-in connection G 1/8 - Ø 4 mm
21	1	808.038	Straight screw-in connection G 1/8 - Ø 4 mm
22	2	808.039	Hollow screw, double G 1/8
23	2	808.040	Swivel ring piece G 1/8 - Ø 6 mm
24	2	808.041	Swivel ring piece G 1/8 - Ø 4 mm
25	2	808.042	T-type screw-in connection G 1/8 - Ø 4 mm
26	8	808.047	Y-type connection Ø 4 mm
27	2	808.048	Y-type connection Ø 6 mm
28	1	808.057	Controller 0.5 - 10 bar
29	2	808.022	Straight screw-in connection G 1/8 - Ø 4 mm
30	1	808.029	Coupling connector G 1/4 - NW 7
31	2	808.030	Throttle check valve G 1/4 - Ø 6
32	2	808.031	Reducing nipple G 1/2 to G 1/4
33	1	808.032	Reducing nipple G 1/2 to G 1/4

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### 9.4 Spare parts kit

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#### 9.4 Spare parts kit

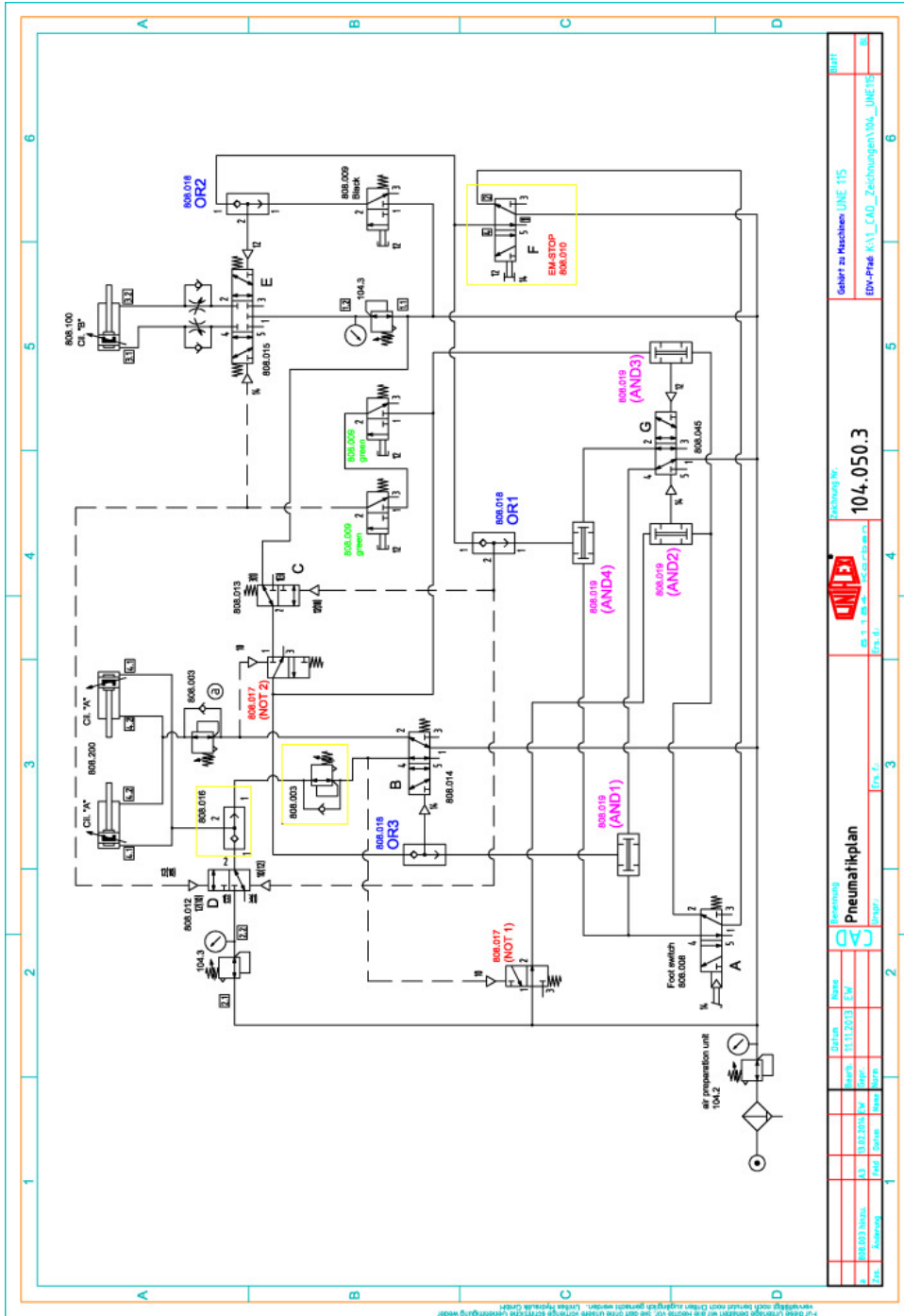
Quantity	Quantity per kit	Part code	Designation
1		104.1	Mechanical equipment spare parts kit
	2	104.015.4	Rod guide
	2	78 10 56 medium	Megi buffer
	2	104.049.4	Rubber mat
	1	104.051.4	Rubber pad
1		104.2	Maintenance unit spare parts kit
	1	808.001	Filter controller
	1	808.004	Manometer
1		104.3	Pressure setting spare parts kit
	1	808.002	Controller 0-10 bar
	1	808.005	Manometer
1		104.4	Operation spare parts kit
	3	808.009	Pushbutton
	1	808.010	Emergency-stop button



# 9 Annex

## 9.5 Pneumatic diagram

### 9.5 Pneumatic diagram





## 9 Annex

### 9.7 Declaration of qualified staff

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#### 9.7 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

### 9.7 Declaration of qualified staff

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## 9 Annex

### 9.7 Declaration of qualified staff

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## About Danfoss Power Solutions FC

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