PFAFF® Industrial

8303i

INSTRUCTION MANUAL

This instruction manual applies to machines from the serial number **2 816 207** and software version **0442/005** onwards.

296-12-19 320/002
Instruction Manual engl. 09.16

This instruction manual applies for all models and subclasses listed in **chapter 3 Technical Data**.

PFAFF Industriesysteme und Maschinen GmbH

Hans-Geiger-Str. 12 - IG Nord

D-67661 Kaiserslautern

Contents ..... Page

Contents ..... Page

Contents ..... Page

1 Safety

1.01 Directives

The machine was built in compliance with the European regulations specified in the declaration of conformity.
As a supplement to this instruction manual, please also observe the generally applicable, legal and other regulations and legislation – also in the country of use – and the valid environmental protection regulations! Always comply with the locally applicable regulations of the professional associations and other supervisory authorities!

1.02 General safety instructions

- The machine may only be operated after you have become acquainted with the associated instruction manual and only by operating personnel who have received appropriate training!
- Always follow the hazard and safety instructions attached to the machine!
- The machine may only be operated for its intended purpose and only with the associated safety covers, while adhering to all the relevant safety requirements.
- Isolate the machine by pulling out the mains plug from the power supply when replacing the feed rollers or hot air nozzle, when leaving the work station and for maintenance and adjustment work!
- The daily maintenance work may only be carried out by suitably qualified personnel!
- The machine must be isolated from the power supply and pneumatic supplies before any servicing work or repairs are performed! The only permitted exceptions are for adjustment work and functional tests by appropriately trained technical staff!
- Repairs and special maintenance work may only be carried out by technical staff or people with appropriate training!
- Work on electrical equipment may only be carried out by qualified technical staff!
- Work on parts and equipment under voltage is not permitted!
  Exceptions are regulated by the EN 50110 standards.
- Modifications and changes to the machine may only be made in compliance with all of the relevant safety requirements!
- Only the replacement parts approved by us for usage may be used for repairs! We warn you expressly that spare parts and accessories that are not supplied by us are also not tested and approved by us. Fitting and/or using these products may therefore have negative effects on features which depend on the machine design. We are not liable for any damage caused by the use of non-Pfaff parts.

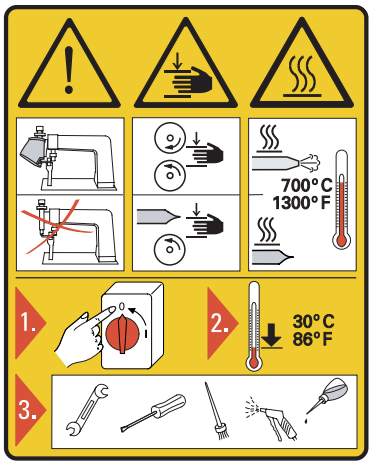
1.03 Safety symbols

Hazard point!
Special points of attention

Danger of hands being crushed!

Danger of burns from hot surface!

Fatal danger from electric voltage.



Caution!

Do not operate without finger guard and safety covers!

Turn off the main switch and **let the machine cool down before** any set-up, maintenance and cleaning work!

1.04 Special points of attention for the owner-operator

- This instruction manual is a part of the machine and must be made available to the operating personnel at all times.
- The instruction manual must have been read before the initial start-up.
- The operating personnel and technical staff must be instructed about the machine's safety covers and about safe working methods.
- The owner-operator may only operate the machine in a flawless condition.
- The owner-operator must ensure that no safety covers are removed or disabled.
- The owner-operator must ensure that only authorised persons work on the machine.
- The owner-operator must make sure there is no high-frequency sealing equipment being operated in direct proximity to the machine that exceeds the EMC limit values for the machine according to EN 60204-31.

Additional information can be requested from the responsible sales centre.

1.05 Operating personnel and technical staff

1.05.01 Operating personnel

Operating personnel are persons responsible for setting up, operating and cleaning the machine and for clearing faults in the sealing section.

The operating personnel are obligated to comply with the following points:

- The safety instructions provided in the instruction manual must be followed for all work!
- Any work method jeopardising machine safety must be refrained from!
- Tight-fitting clothing must be worn. The wearing of jewellery such as chains and rings is prohibited!
- Care must be taken to ensure that no unauthorised persons are located in the machine's hazard zone!
- Any changes occurring on the machine which impair its safety must be reported to the owner-operator immediately!

1.05.02 Technical staff

Technical staff are persons with technical training in electricity/electronics and mechanics. They are responsible for lubricating, servicing, repairing and adjusting the machine.

The technical staff are obligated to comply with the following points:

- The safety instructions provided in the instruction manual must be followed for all work!
- Turn off the main switch and secure it against reactivation before starting any adjustment and repair work!
- Never work on live parts and equipment! Exceptions are regulated by the EN 50110 standards.
- Reattach the safety covers following repair and maintenance work!

1.06 Danger warnings

A work area of 1 m must be kept free in front of and behind the machine to ensure unobstructed access at all times.

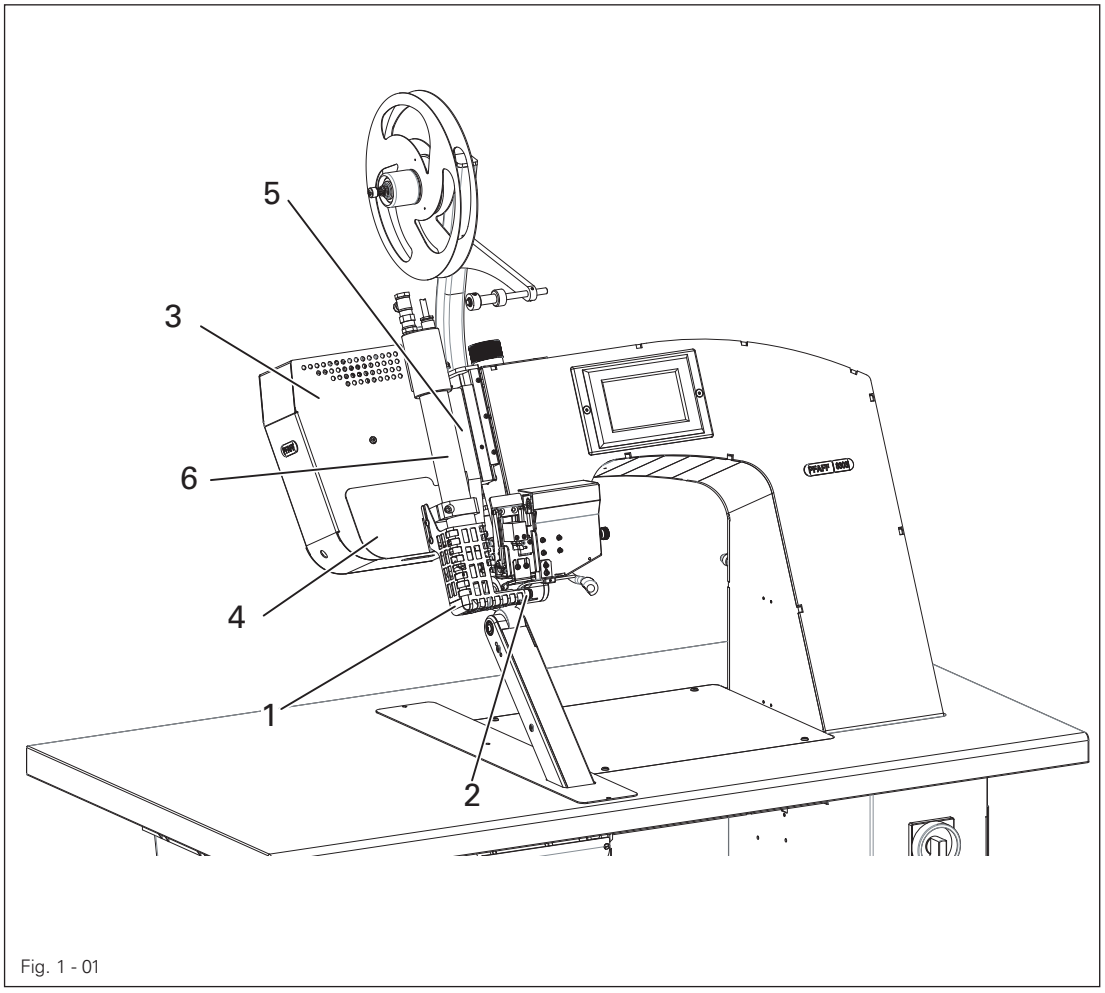


Fig. 1 - 01

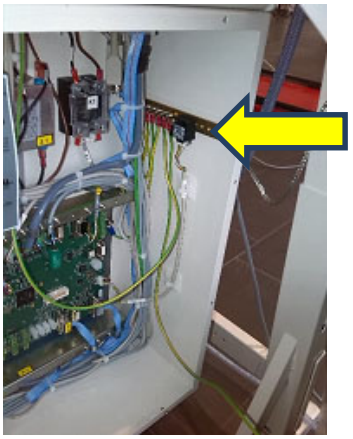
Do not operate the machine without the protective cover 1!
Risk of burns when touching the heating element 2!

Do not operate the machine without the safety covers 3, 4 and 5!
Danger of crushing when engaging and disengaging the heating element 2!

Do not reach into the swivel range of the heating element 2 and the swivel unit 6! Danger of crushing when engaging and disengaging the heating element!

1.07 Software safety cover

An OTE security dongle is essential for the operation of the PFAFF tape sealing machine **8303**i. This component is installed in the control box of the **8303**i.



The component is available in 2 versions:

1. **830**3iSTD part number 91-212151-93/001
2. **830**3iEXT part number 91-212151-93/002

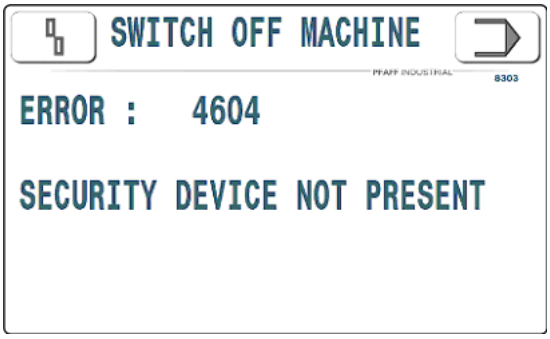
The 8303iSTD basic version is installed as standard in the 8303i. This activates the following functions:

- Manual sealing with **50** adjustable sealing parameter sets with power loss protection
- Switchable protection of the sealing parameters against unintentional changes by the operator
- Saving and loading of the manual sealing parameter sets onto and from an SD card
- Ironing function (hot and cold ironing)
- Single-pedal operation for standing work stations
- Configuring of the machine (sealing wheel diameter, fast/normal motors, posts from the front/in the middle or from the back etc.) per software and storage of these settings in the OTE security dongle.
- Service functions for setting up and maintaining the machine (troubleshooting)
- Production data (operating hours, piece counter, tape consumption)
- Software update with SD card

The 8303iEXT advanced version can be purchased for a surcharge. The component is installed in the control box instead of the 8303iSTD dongle. This activates the following additional functions:

- Dynamic sealing (with variable speed and assigned air volume)
- Sealing of segments and thus automatic tape cutting exactly at the end of the seam
- Linking of several sealing parameter sets to programs
- Linking of several programs to sequences
- Programs and sequences with dynamic sealing
- Saving and loading of the (linked) parameter sets onto and from an SD card

The following error message appears if the OTE security dongle is removed:



It indicates to the user that it is not possible to operate the 8303i tape sealing machine without the 8303iSTD or 8303iEXT dongle.

2 Proper Use

The PFAFF 8303i is a hot air sealing machine with post.

The machine is used to heat-seal seams on water-repellent and breathable membrane sheeting of all types, using a heat-sealing tape.

Any usage not approved by the manufacturer is deemed misuse! The manufacturer shall assume no liability for damage caused by misuse! Proper use also includes compliance with the operating, maintenance, adjustment and repair measures specified by the manufacturer!

3 Technical Data▲

3.01 PFAFF 8303i

Dimensions and weights

Length: ..... approx. 1250 mm
Width: ..... approx. 700 mm
Height (without tape reel bracket): ..... approx. 1400 mm
Passage width: ..... approx. 380 mm
Passage between the rollers: ..... approx. 20 mm

Working air pressure: ..... min. 5 bar
Air consumption: ..... 30 - 150 l/min

Sealing speed: ..... max. 7 m/min

Sealing temperature: ..... max. 720 °C

Connection data

Mains voltage (set for): ..... 230 V ± 10 %, 50/60 Hz, 1 phase
Power consumption: ..... approx. 3500 W
Heat output: ..... approx. 3300 W
Mains protection: ..... 16 A
Leakage current: ..... ≤ 5 mA ◆

Noise data

Noise emission level at workplace: ..... L_{pA} < 70 dB(A) ■
(Noise measurement in accordance with DIN 45 635-48-A-1, ISO 11204, ISO 3744, ISO 4871)

Ambient temperature

85% rel. humidity (condensation not permitted) ..... 5 - 40 °C

Net weight: ..... approx. 110 kg
Gross weight ..... approx. 200 kg

▲ Subject to alterations

■ K_{pA} = 2.5 dB

◆ Due to the use of network filters there is a nominal leakage current of ≤ 5 mA

4 Disposal of the Machine

- It is up to the customer to dispose of the machine properly.
- The materials used for the machine include steel, aluminium, brass and various plastics. The electrical equipment consists of plastics and copper.
- The machine must be disposed of in accordance with the locally valid environmental protection regulations, with a specialised company being contracted if necessary.

Please ensure that parts coated with lubricants are disposed of separately in accordance with the locally valid environmental protection regulations!

5 Transport, Packaging and Storage

5.01 Transport to the customer's premises

All machines are completely packed for delivery.

5.02 Transport within the customer's premises

The manufacturer assumes no liability for transport within the customer's premises or to the individual usage sites. Please ensure that the machines are only transported in a vertical position.

5.03 Disposal of the packaging materials

The packaging materials of these machines consists of paper, cardboard and VCI fleece. It is up to the customer to dispose of the packaging properly.

5.04 Storage

The machine can be stored for up to 6 months when not in use. It must then be protected from dirt and moisture. For longer storage periods, the machine's single components, especially its sliding surfaces, must be protected against corrosion, e.g. by an oil film.

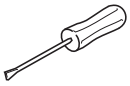
6 Work Symbols

Activities to be performed or important information in this instruction manual are emphasised by symbols. The symbols used have the following meaning:

Note, information

Cleaning, care

Lubrication



Maintenance, repairs, adjustment, service work
(only to be carried out by technical staff)

7 Operating Controls

7.01 Air shut-off valve

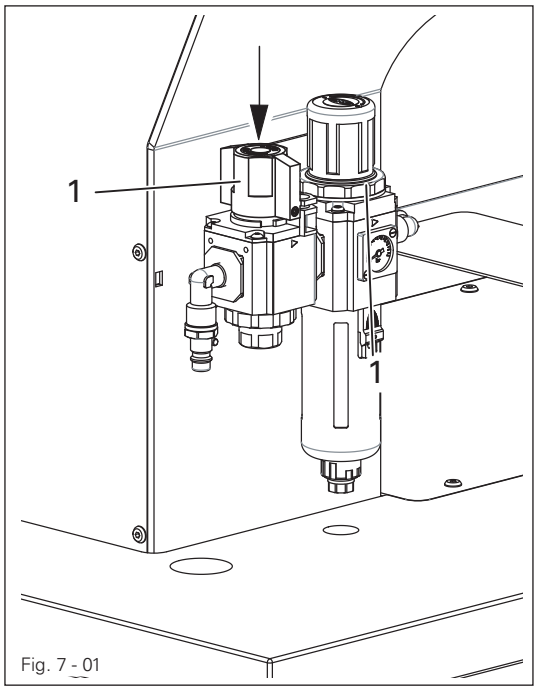


Fig. 7 - 01

- The compressed air supply is opened or shut off by pressing the air shut-off valve **1** downwards (see arrow) and turning it.

Before shutting off the air supply, please observe the notes in **chapter 8.03 Switching the machine on / off**!

7.02 Main switch

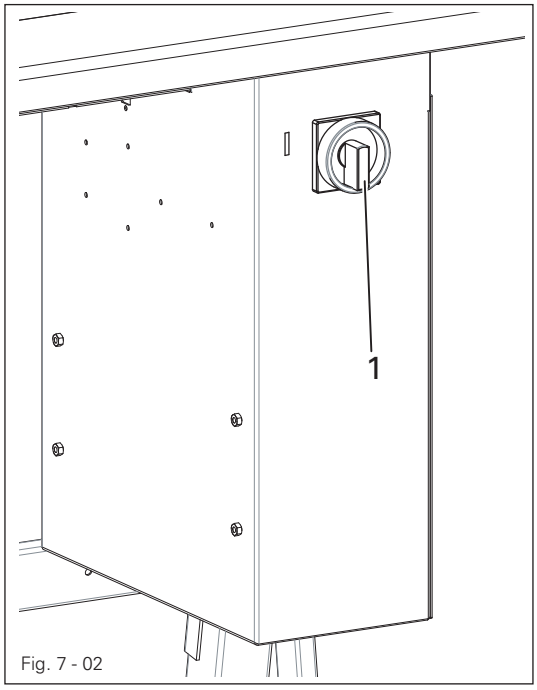


Fig. 7 - 02

- Turning the main switch **1** switches the machine on and off.

Position "**0**": Machine switched off
Position "**I**": Machine switched on

Before switching the machine on and off, please observe the notes in **chapter 8.03 Switching the machine on / off**!

7.03 Pedal

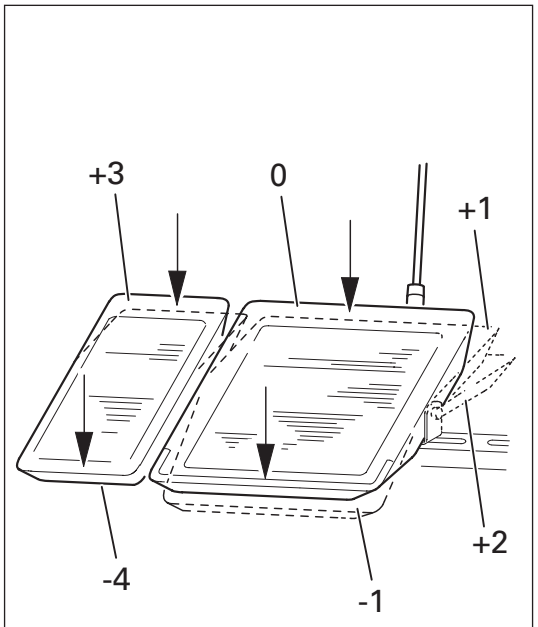


Fig. 7 - 03

- With the main switch turned on

0 = Neutral position
+1 = Lower top feed roller
-1 = Stop sealing process / raise top feed roller
+2 = Engage heating element / sealing start
+3 = Cut tape / switch between cold and hot ironing
-4 = Zone forwarding

7.04 Setting wheel for the roller clearance

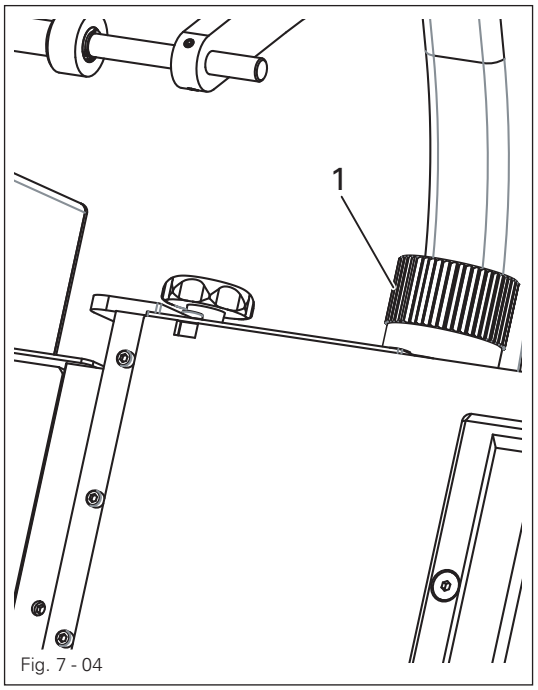


Fig. 7 - 04

- The clearance between the upper and lower feed roller is adjusted by turning the setting wheel **1**.
  The clearance is shown on the scale.

7.05 Control panel

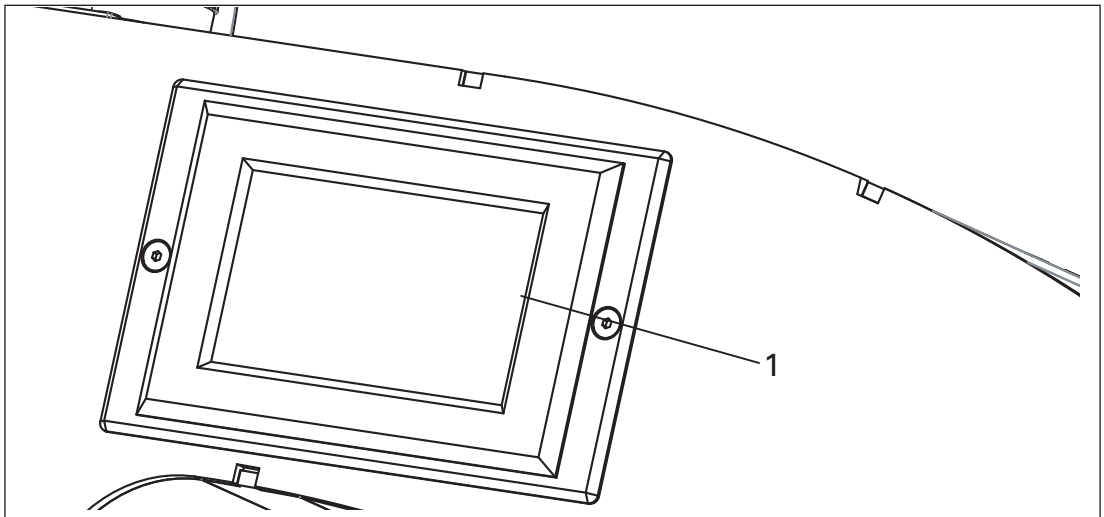
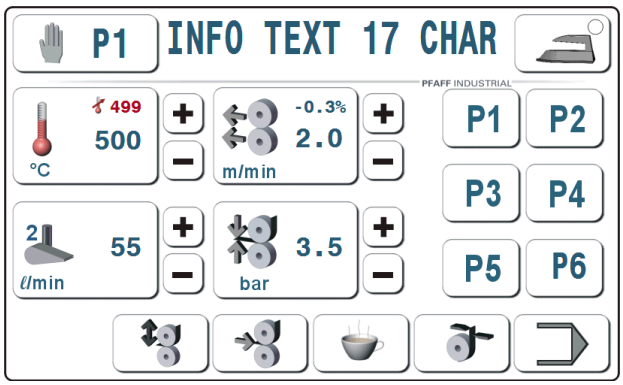


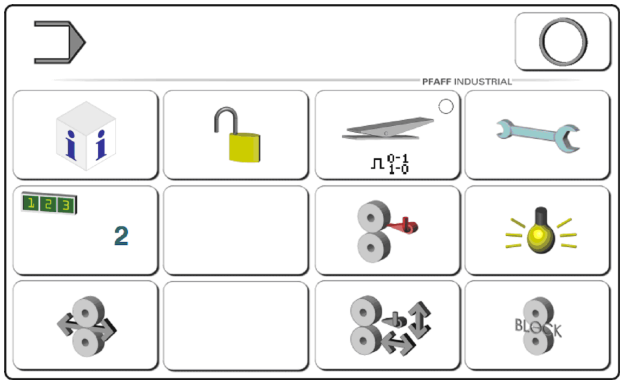
Fig. 7 - 05

The current operating statuses are indicated on the control panel **1**. The machine is operated with constant dialogue between the control unit and the operator; different pictograms and / or texts are displayed for this purpose according to the operating status of the machine. Pictograms or texts with a border represent functions that can be called up by pressing on the respective points on the monitor. Pressing the respective function causes its immediate actuation or activation/deactivation or another menu will appear (e.g. for entering a value). Switched-on functions are indicated by an integrated LED.
Pictograms or texts without a border are only used for display purposes and cannot be called up by pressing them.

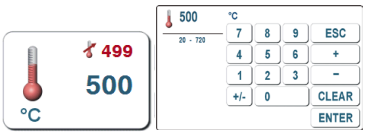
Presentation of functions (e.g. manual sealing)



Presentation of functions (e.g. input / settings)



7.05.01 Input functions



The temperature sealing parameter can be entered directly by pressing the key (e.g. temperature display).

or

The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key.

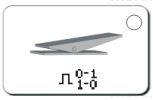
7.05.02 Key reactions

An acoustic signal sounds when a key is pressed. A dual acoustic signal sounds if it is not permitted to perform the function in the current machine status.

7.05.03 Display functions

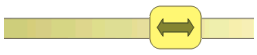
Keys that switch functions on or off are indicated with an LED.

Example

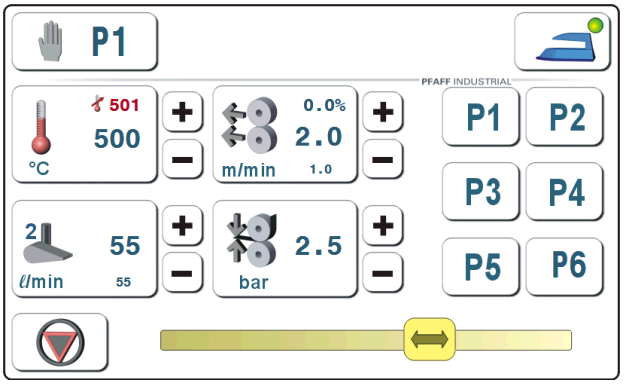


inactive

active



Dynamic processes are indicated with a slider
e.g. ironing



A flashing thermometer symbol indicates that the hot air temperature lies outside the desired limits for this function (warning or start interlocking).

The lock symbol indicates that certain functions are currently blocked for the user.

7.06 SD card reader and writer

An SD card reader and writer is installed in addition to the main switch. This allows the sealing parameter sets to be stored on an SD card and read back from there. In addition, the machine software can be updated with an SD card.

Note:
The SD card must be formatted for FAT32. The tested maximum capacity may be 64GB (large FAT32).

8 Set-up and Initial Commissioning

Check the machine for transport damage after unpacking it. Please notify the carrier and the relevant PFAFF agency in the event of any damage.

The machine may only be set up and started up by qualified personnel! All of the relevant safety regulations must always be complied with in this process!

8.01 Set-up

Suitable electrical and compressed air supply connections must be provided at the erection site, see **chapter 3 Technical Data**. The erection site must also have a firm and level subsurface and adequate lighting.

The table top is lowered for packaging purposes.
The adjustment of the table height is described below.

8.01.01 Setting the table height

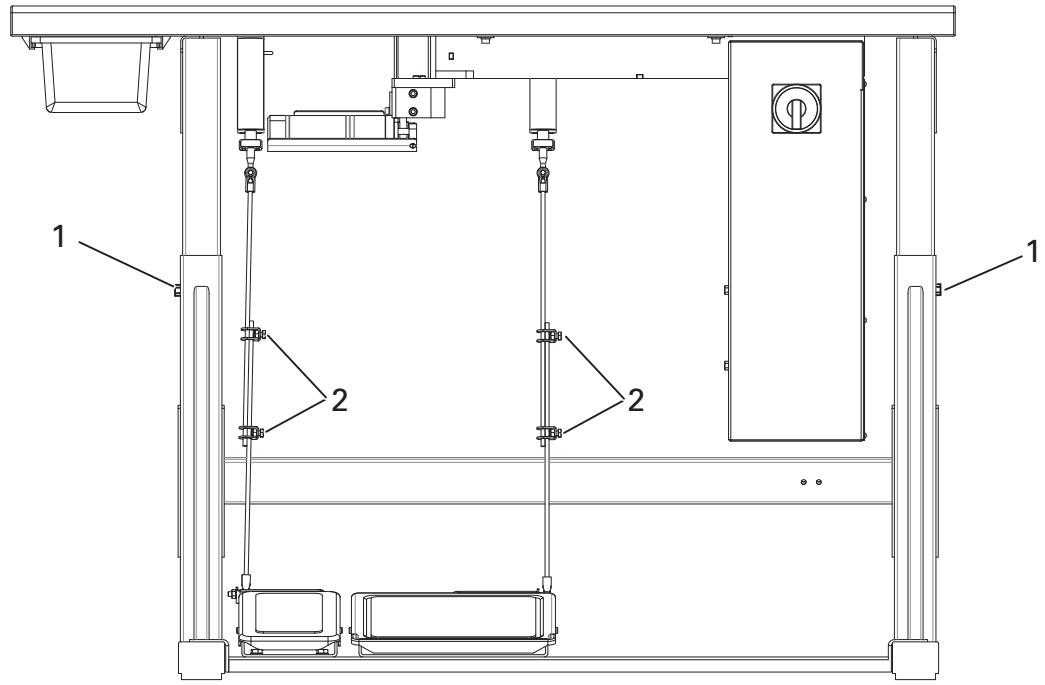


Fig. 8 - 01

- Loosen the screws **1** and **2**.
- Move the table top to the desired working height by pulling it out and pushing it in and align the table top horizontally.

Adjust the stand on both sides evenly to prevent it tilting.

- The stand must have all four feet firmly on the ground to make sure it is positioned securely.
- Firmly tighten the screws **1**.
- Adjust and tighten the desired pedal position on the screws **2**.

8.01.02 Mounting the sealing tape roller bracket

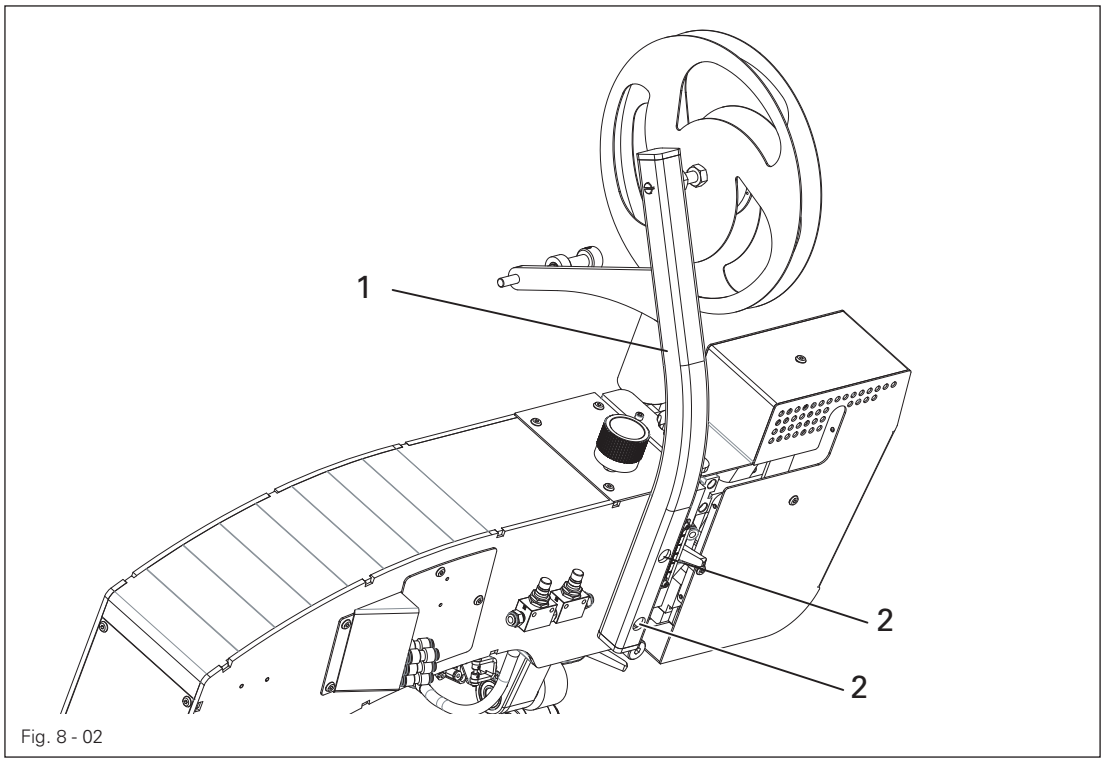


Fig. 8 - 02

- Mount the sealing tape roller bracket 1 with the screws 2.

8.02 Initial commissioning

- Clean the machine thoroughly before the initial commissioning, see also chapter 12 Maintenance and Care.
- Inspect the machine and in particular the electric lines and pneumatic connecting hoses for possible damage.
- Have technical staff check whether the machine's motor may be operated at the existing mains voltage.

Do **not** operate the machine if there are any differences!

The machine must only be connected to a grounded socket!

- Connect the machine to the compressed air system. The manometer should display a pressure of 6 bar. Adjust this value if required, see chapter 12.03 Checking the maintenance unit

The air should be completely oil-free and dry.

The quality of the compressed air influences the service life of the heating element in the air heater. A compressed air dryer with a prefilter upstream of the sealing machine and a downstream fine filter are to be installed if the air is very humid.

8.03 Switching the machine on/off

Work steps to switch on the machine:

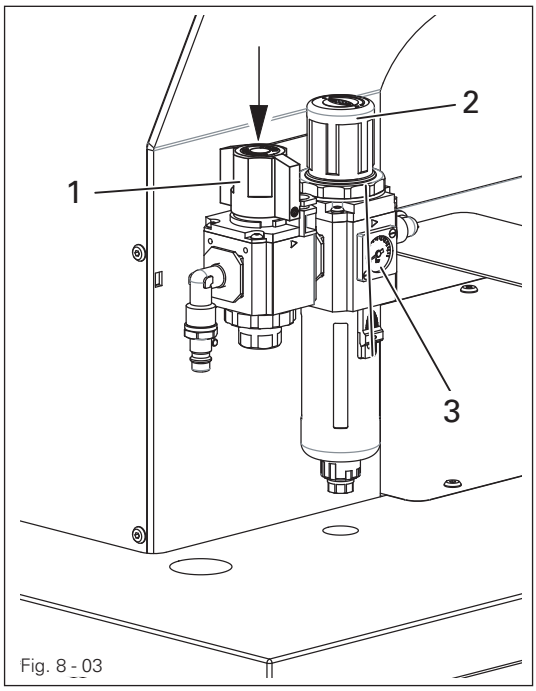
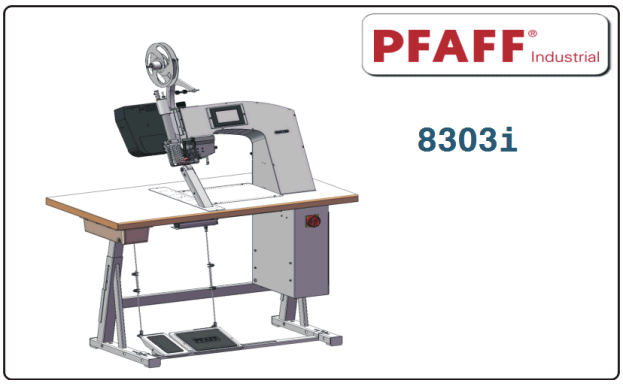


Fig. 8 - 03

- Open the air shut-off valve **1**, see **chapter 7.01 Air shut-off valve**.
- Pull up and turn the control **2** until the manometer **3** shows an air pressure of **6** bar.

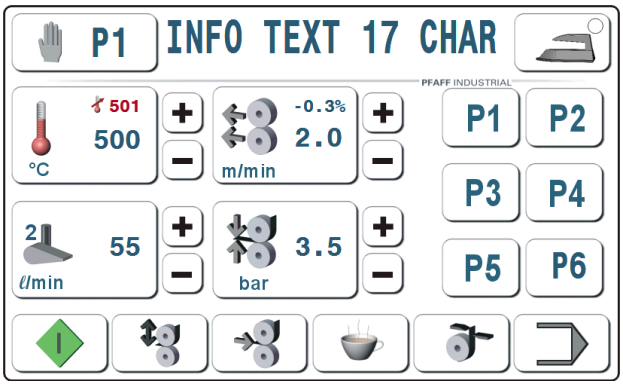
The compressed air must never be switched off while the machine is running. This will destroy the heating element!

- Switch on the machine, see **chapter 7.02 Main switch**.



- The key or entire control panel surface must be pressed to avoid the accidental start-up of the machine

- The last menu called up is then started (e.g. "**Manual sealing**").



Work steps to switch off the machine:

- Call up the "Pause" function and wait until the air blast is automatically switched off
- Close the air shut-off valve, see **chapter 7.01 Air shut-off valve**.

The compressed air must never be switched off while the machine is running. This will destroy the heating element!

- Switch off the machine, see **chapter 7.02 Main switch**.

9 Set-up

Observe and comply with all regulations and instructions in this instruction manual. Pay particular attention to all safety regulations!

All set-up work may only be carried out by appropriately instructed personnel.

9.01 Inserting the sealing tape

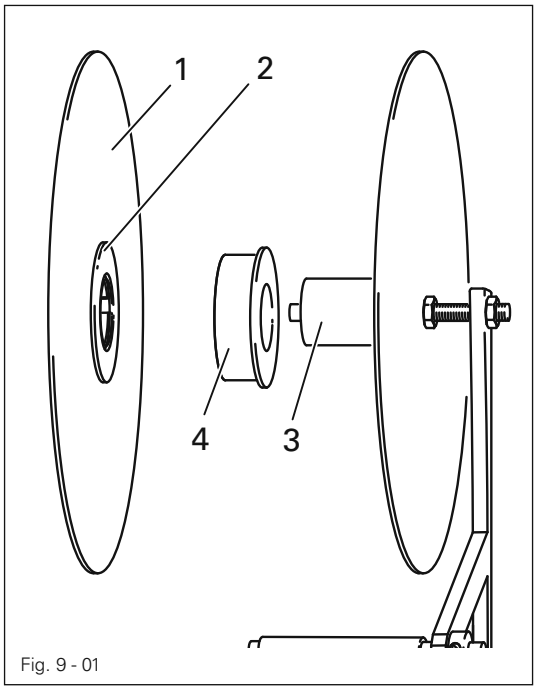


Fig. 9 - 01

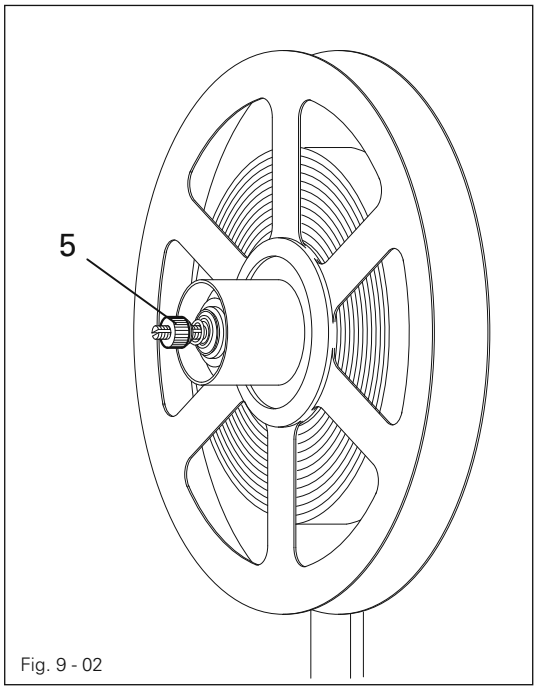


Fig. 9 - 02

The sealing tape roller bracket must be adjusted to the internal diameter of the sealing tape roller:

- With a small internal diameter, turn the front disc **1** so that the small disc **2** is opposite the bracket **3**. The sealing tape roller can be placed directly on the bracket.
- With a large internal diameter, turn the front disc **1** so that the large disc **2** is opposite the bracket **3**. Slide the attachment **4** onto the bracket **3** and then push the sealing tape roller onto it.

The sealing tape must not touch the inner wall of the sealing tape roller bracket when it is unrolling.

9.01.01 Adjusting the sealing tape brake

- Adjust the sealing tape brake with the nut **5** so that the sealing tape roller bracket cannot continue moving, but the sealing tape can be drawn off rapidly.

9.01.02 Inserting the sealing tape

The sealing tape should run in the centre of the feed rollers and be guided in a narrow channel but still run easily through the guide.

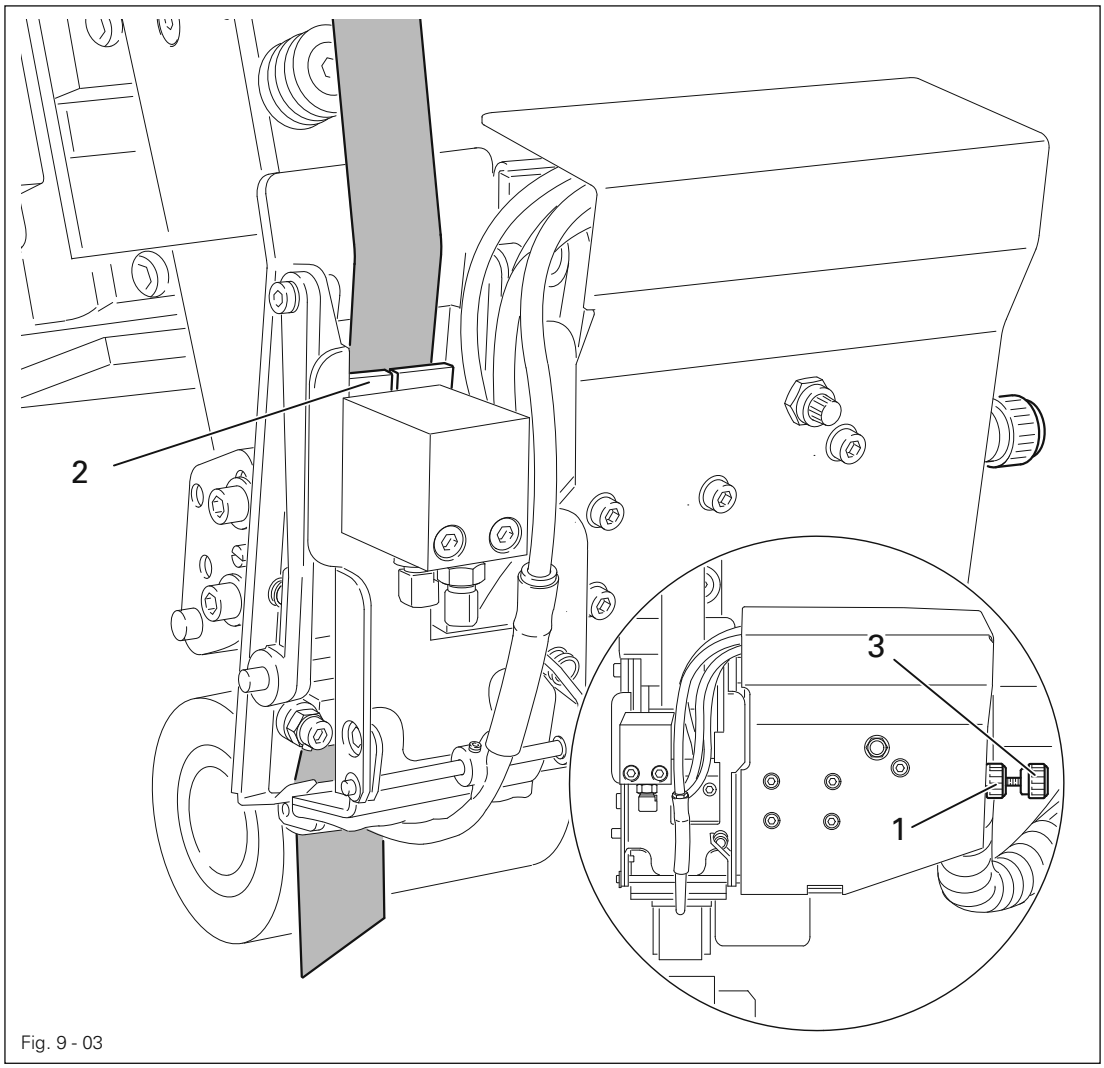


Fig. 9 - 03

With normal sealing tapes:

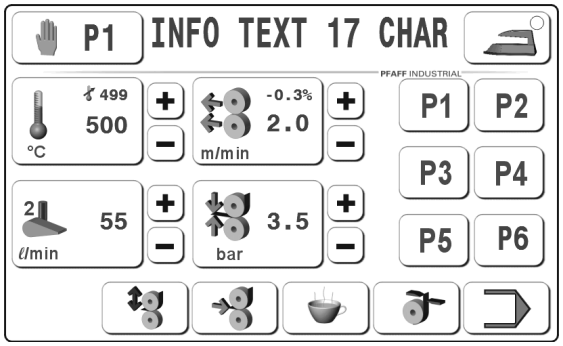
- Switch the machine on.
- Loosen the knurled nut **1** and adjust the width of the guide **2** above the knurled thumb screw **3**.
- Tighten the knurled nut **1**.
- Cut the sealing tape at a slant and feed it through the guide **2** until it becomes visible under the guide **2**.

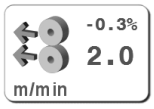
- Trigger a cutting operation.
  The sealing tape is fed in and cut.

Risk of injury from the tape cutter!
Do not place your fingers in the tape cutter!
Use tweezers!

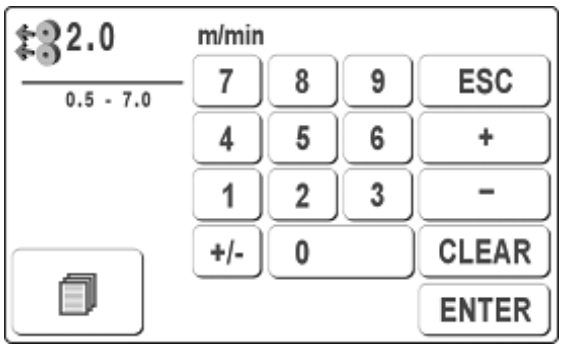
With very thin sealing tapes:

- Switch the machine on.
- Loosen the knurled nut 1 and adjust the width of the guide 2 above the knurled thumb screw 3.
- Tighten the knurled nut 1.
- Cut the sealing tape at a slant and feed it through the guide 2.

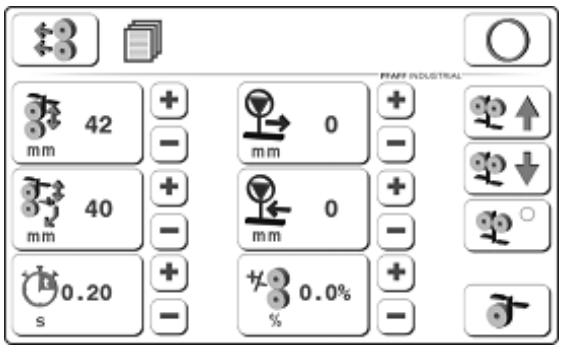




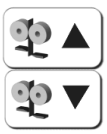
- Click on the feed roller speed key.



- Click on the other parameters key.



- Click on the fix tape key (function switched on).



- Check whether the sealing tape has been fed in with the insert tape key forward or back. If this is not the case, click on the fix tape key (function switched off), push the sealing tape and repeat the process.

- Trigger a cutting operation.
  The sealing tape is fed in and cut.

Risk of injury from the tape cutter!
Do not place your fingers in the tape cutter!
Use tweezers!

9.02 Selecting operating modes

A difference is made between the production and input modes on the Pfaff 8303i tape sealing machine.

The production mode is used for producing and is subdivided into the

Operating mode for the 8303iSTD basic version

- -Manual sealing, see chapter 10.04.
- -Ironing-cold ironing, see chapter 10.05.
- -Ironing-hot ironing, see chapter 10.06

Operating mode for the advanced functions with the 8303iEXT OTE security dongle

- -Dynamic sealing, see chapter 10.07.
- -Programmed sealing, see chapter 10.08.
- -Programmed dynamic sealing, see chapter 10.09.
- -Programmed sealing with sequence program. see chapter 10.10.

An ironing function can be used to to rework the applied taped with cold or hot air or to prepare the intended sealing section. The sealing process can be controlled using the main pedal or via the touch panel.

The input mode is used to enter values and settings and offers assistance with troubleshooting on the machine and various additional functions, see chapter 11 Input.

10 Sealing

The machine may only be operated by properly instructed personnel! The operating personnel must make sure that only authorised persons are in the danger zone of the machine!

The "sealing" mode is available for production in particular, in addition to the input menu (see **chapter 11 Input**). All relevant functions and settings for the sealing process are shown here on the display depending on the program selection and the machine status.
The program selection function can be used to select the following production types in "**sealing**" mode.

Production mode in the **8303**iSTD basic version (overview)

Manual sealing, see **chapter 10.04**

Ironing - cold ironing, see **chapter 10.05**

Ironing - hot ironing, see **chapter 10.06**

Production mode for the advanced functions with the **8303**iEXT OTE security dongle (overview)

Dynamic sealing, see **chapter 16.03**

Programmed sealing, see **chapter 16.04**

Programmed dynamic sealing, see **chapter 16.05**

Programmed sealing with sequence program. see **chapter 16.06**

10.01 Sealing principles

Certain conditions relating to the material and machine settings have to be fulfilled to achieve optimum sealing results.

The material to be processed must be
- suitable for processing with the machine in terms of thickness and properties and
- suitable for the sealing tape.

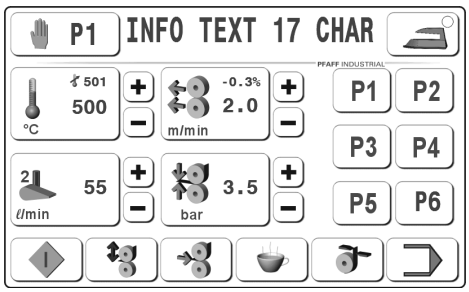
The material to be sealed must be clean and free of release agents, such as oil or silicone, in the seam zone.

The following basic conditions apply depending on the sealing machine:
- correct hot air temperature (sealing temperature);
- correct hot air nozzle position;
- correct hot air volume setting;
- correct selection of feed rollers (silicone or steel);
- optimum feed roller pressure on the material to be sealed (roller pressure);
- correct spacing of the feed rollers from one another and
- correct sealing speed (feed motion).

All sealing machine settings are always dependent on the type of material being sealed and the ambient temperature. Optimum settings can only be determined by means of test sealing processes as a result of the influence of the individual parameters on each other. All settings required for the sealing process are entered or displayed in the control panel.

Production mode in the 8303iSTD basic version

10.02 Description of the function keys



Manual sealing

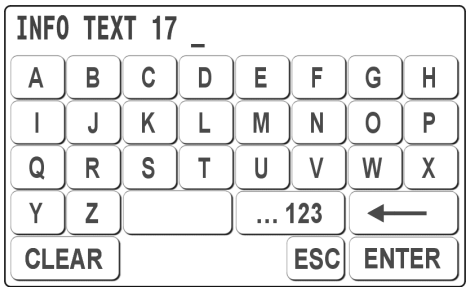
Description of the functions

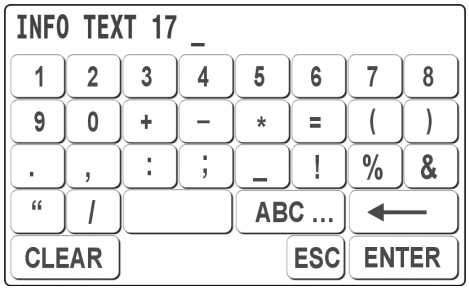
P1

Sealing parameters and program number selection
The function opens the menu for entering the program number or for selecting the sealing parameters, see chapter 10.03 Selecting sealing parameters.

INFO TEXT 17 CHAR

Comment
A new screen for entering a comment text is displayed by clicking on the field. A maximum of 17 characters can be entered and edited.





– This character appears as a cursor for text input.

... 123
ABC ...

These keys are used to switch from the input of alphanumeric characters to special characters and vice versa. The comment text is displayed later as information text in the sealing program selection and program management functions.

Delete individual characters.

CLEAR

CLEAR
Delete an entire line.

ESC

ESC
The input is cancelled without changing the value and you return to the previous screen input.

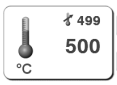
ENTER

ENTER
Confirm entry

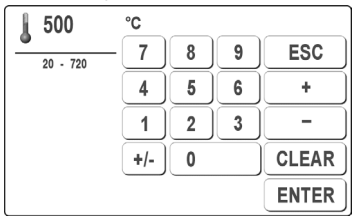
Ironing
This is used to switch on the ironing function. There is a choice of two ironing functions:
- Cold ironing, see chapter 10.05 Ironing-cold ironing.
- Hot ironing, see chapter 10.06 Ironing-hot ironing.

The pedal functions are used to switch between cold and hot ironing, see chapter 7.03 Pedal.

10.02.01 Setting the sealing temperature



These functions are used to change the sealing temperature
The temperature can be entered directly by pressing the key.



ESC
The input is cancelled without changing the value and you return to the previous screen input

CLEAR
Delete an entire line.

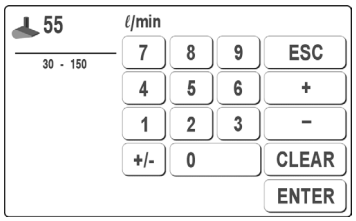
ENTER
Confirm entry.

The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key

If the temperature is changed, the machine cannot be started until the difference between the target temperature and actual temperature is within the temperature window of +/- 10 °C. The flashing of the thermometer symbol shows this status.

10.02.02 Setting the hot air volume

These functions are used to change the hot air volume
The hot air volume can be entered directly by pressing the key.

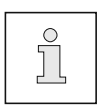


ESC
The input is cancelled without changing the value and you return to the previous screen input

CLEAR
Delete an entire line.

ENTER
Confirm entry.

The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key

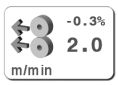


The selection of the hot air volume and nozzle type determine the heating control parameters.

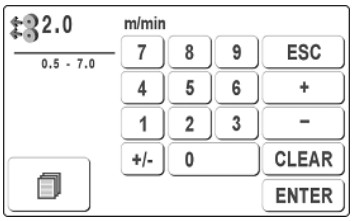
The current nozzle type (narrow 1, average 2, wide 3) is displayed.

The nozzle type can be set in chapter 11 Input under 11.01 Description of the function keys.

10.02.03 Setting the feed roller speed



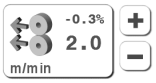
These functions are used to change the feed roller speed.
The feed roller speed for the bottom and top feed roller can be entered together by pressing the key.



ESC
The input is cancelled without changing the value and you return to the previous screen input.

CLEAR
Delete an entire line.

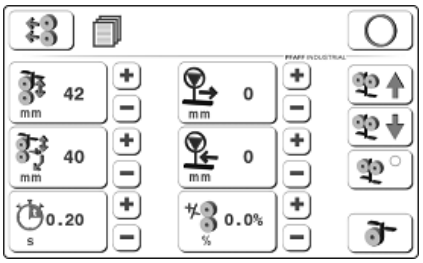
ENTER
Confirm entry.



The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key

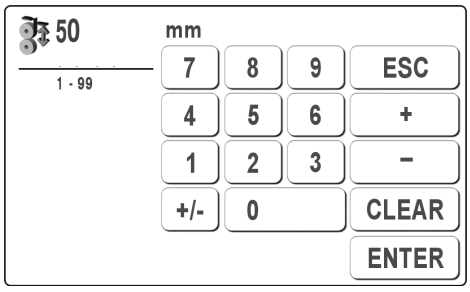
The maximum feed roller speed is dependent on the gear assembly and roller diameter used. The roller configuration "CONFIG" can be set in chapter 11 Input under 11.01 Description of the function keys.

Other parameters key.



Tape feed
The tape feed is the distance that the tape is fed after the cutting process before it is detected by the roller clamp. Only then can the tape be transported by the top roller at the desired sealing speed. The tape feed motor would be unable to do this.
The tape feed is set after the cutting process with the numeric keypad or the scroll keys.
If the tape is already in the home position, the changed values are implemented with all 3 rollers so that a new cutting process is not necessary

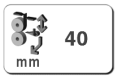
These functions are used to change the **tape feed**.
The tape feed can be entered directly by pressing the key.



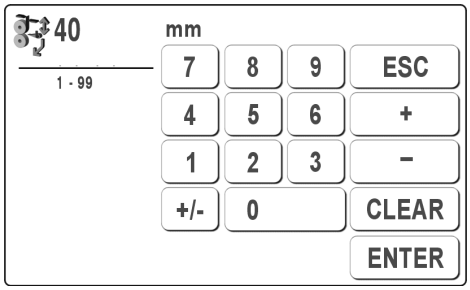
The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key

Disengaging distance

After cutting, a band on the length of the tape cut clearance remains that still needs to be applied. The hot air nozzle can disengage as soon as the rest of the tape has passed the nozzle and has therefore been heated. This distance is hereby entered.



These functions are used to change the **disengaging distance**.
The disengaging distance can be entered directly by pressing the key.

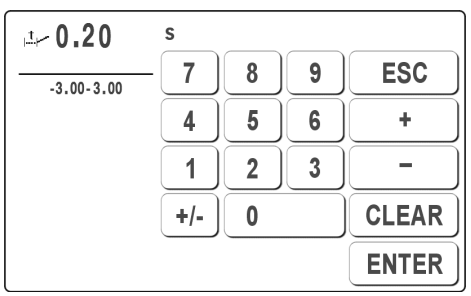


The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key

Start delay

The start delay is the holdoff time between engaging the nozzle and starting up the rollers. It can be entered as a positive and negative value.
A time => 0 begins when the nozzle is engaged and at the front. It is needed to activate the adhesive at the start of the tape.
If a negative holdoff time is entered, the time begins immediately with the engaging of the nozzle. This means with short times that the rollers can already start before the nozzle is completely engaged. This setting is required with thin tapes and high air volumes, otherwise the tape would burn at the start.

These functions are used to change the **start delay**.
The start delay can be entered directly by pressing the key.

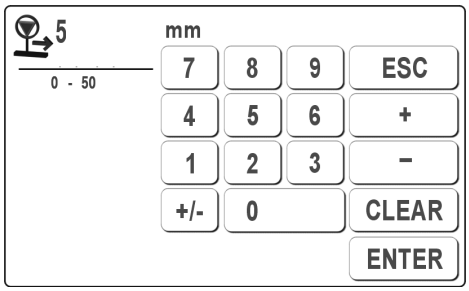


The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key

Follow-up movement after stop

If the sealing process is cancelled with the pedal or stop key, it may be useful for the rollers to continue to run a distance while the heating element disengages. This can avoid the tape burning.

These functions are used to change the set value.
The set value can be entered directly by pressing the key.

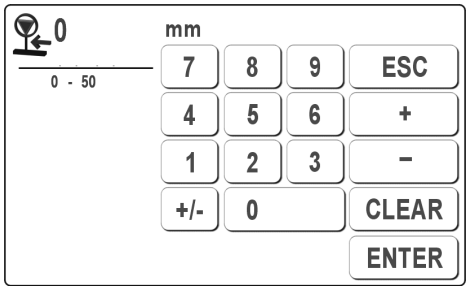


The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key

Reverse after stop

If the sealing process is cancelled with the pedal or stop key, it may be useful for the rollers to reverse a distance

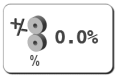
These functions are used to change the set value.
The set value can be entered directly by pressing the key.



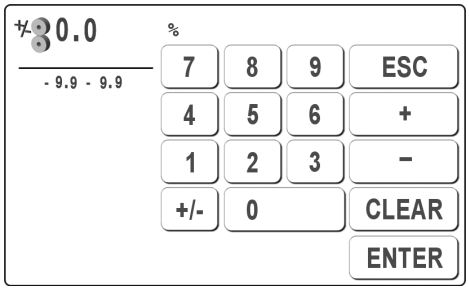
The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key

Differential

The difference in speed between the top and bottom feed roller can be entered by pressing the differential key. The bottom feed roller is the guide roller that turns at the set feed roller speed. The top feed roller can be set at a faster or slower speed. The input is made as a percentage value.



These functions are used to change the set value.
The set value can be entered directly by pressing the key.



The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key

Thread tape

These keys are used to thread the tape when the tape drive roller is switched on.

Fix tape

The tape drive roller is switched on or off with these keys.

Cut and feed tape

This key is used to cut the tape and feed it around the tape feed (reference cut).

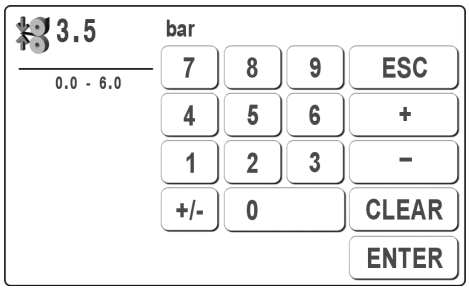
Back to start menu

This key takes you back to the start menu e.g. manual sealing.

This key takes you back to the set feed roller speed menu.

10.02.04 Feed roller pressure

These functions are used to change the feed roller pressure.
The feed roller pressure can be entered directly by pressing the key.



The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key

10.02.05 Opening / closing the feed rollers

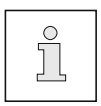
The feed rollers can be opened and closed with this key.

If the rollers are opened after the sealing process has been interrupted, the tape will be cut in the current software and hang loosely on the sealing material.

If the material between the closing rollers is thicker than 8 mm, a safety shutdown is activated that immediately opens the rollers again. The purpose of this safety shutdown is to prevent the operator's hand becoming trapped.

10.02.06 Starting the sealing process manually

The sealing process can be started manually or an interrupted sealing process can be continued again with the start key. This key works in parallel to the pedal.
The initiated sealing process can be ended with the cutting pedal. The tape is cut, the remaining tape is applied and then the machine stops automatically. The tape is finally fed in again and the 8303i is ready for the next sealing process.



The key appears only when the rollers are closed.

10.02.07 Interrupting the sealing process

The current sealing process can be interrupted with this key. The key works in parallel to the pedal.

The key appears only after the start of the sealing process.

10.02.08 Manually turning the rollers backwards

The drive rollers are started in reverse by pressing the – manually turn the rollers backwards – key in stop mode. They run as long as the key remains pressed. The rollers stop if the key is released.

The feed rollers are started in the same way in the sealing direction (forwards) when the cutting pedal is pressed in stop mode.

A function is available in input mode to test the movement of the rollers in both directions (rollers forwards-backwards), see chapter **11 Input** under **11**.01 **Description of the function keys.**

10.02.09 Pause key

The PAUSE function key is used to cool the machine down to a temperature below 60°C with an increased volume of air

10.02.10 Cutting the tape

This key is used to cut the tape and then feed it in again (tape in home position – also known as a reference cut). The length of the tape feed is set in the "other parameters key function as a submenu in the feed roller speed section, see pages **32** and **33**. If the tape is not in the home position before the sealing process, the key flashes and the sealing process cannot be started.

If the key is pressed after the sealing process is interrupted (stop key or pedal), the tape is cut and the sealing process is cancelled.

10.02.11 Input key

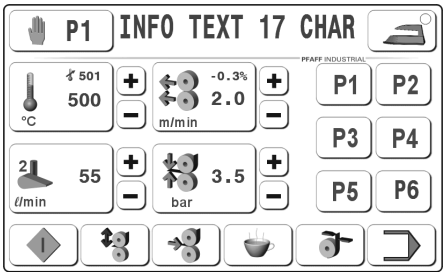
This function is used to call up the input menu, see chapter **11 Input** under **11**.01 **Description of the function keys.**

10.03 Selecting the sealing parameters

The sealing parameters are saved in the machine in 50 data sets P1..P50. P1..P6 can be selected directly with the corresponding keys.
The other data sets (P7..P50) can be selected individually with the program number selection function.
The sealing parameters of the individual data sets are saved in a battery-backed memory and remain saved when the machine is switched off

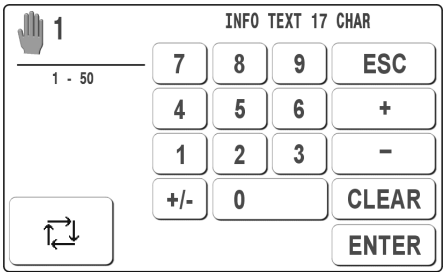
10.03.01 Selecting sealing parameters P1..P50

The corresponding sealing parameter data sets can be selected directly with the P1..P6 keys when the machine is in the initial state (after cutting the tape or an interruption with opening the feed rollers or cutting the tape key), see chapter 10.02.07 Opening / closing the feed rollers and chapter 10.02-12 Cutting the tape



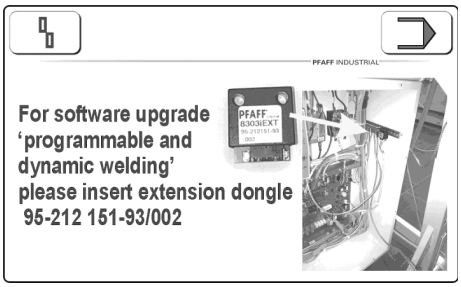
A new screen is opened to select a sealing parameter number P1..P50 by pressing the – program selection – key in manual sealing production mode. The current number and comment is displayed. A new data set can be selected using the numeric keys or scroll keys.

The current operating mode to which this data set is assigned is shown on the top left.
Only manual sealing can be set in the 8303iSTD basic version.



Operating mode P1 is manual sealing

The operating mode of the selected data set can be reassigned cyclically with the scroll key operating modes. It is only active if one of the above options is available.
The following message appears when pressing the scroll key operating modes in the basic version; these indicate that the optional 8303iEXT OTE security dongle must be installed for these functions.



10.04 Manual sealing

All relevant parameters for the sealing process can be entered or altered directly in the manual sealing mode, see chapter 10.02 Description of the function keys.
The manual sealing mode is selected with the program number selection function, see chapter 10.03 Selecting sealing parameters and program numbers.
The sealing process is started with the main pedal (or start key) and ended with the cutting pedal. The sealing parameters remain constant during the sealing process.
Direct input can only be made before or after the process (in STOP mode). The +/ - keys can also be used to adjust the parameters during the sealing process.

10.04.01 Process in manual sealing production mode

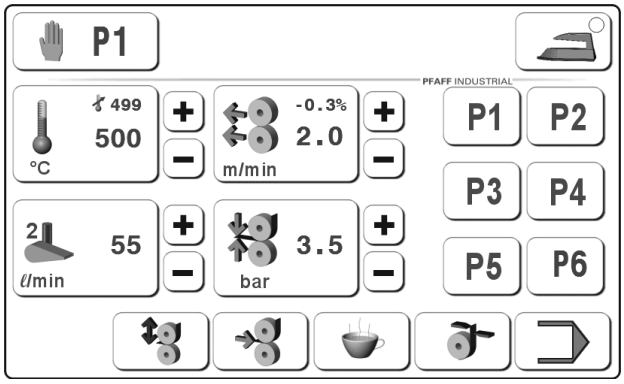


Figure 1: Production, basic manual sealing mode, feed rollers open

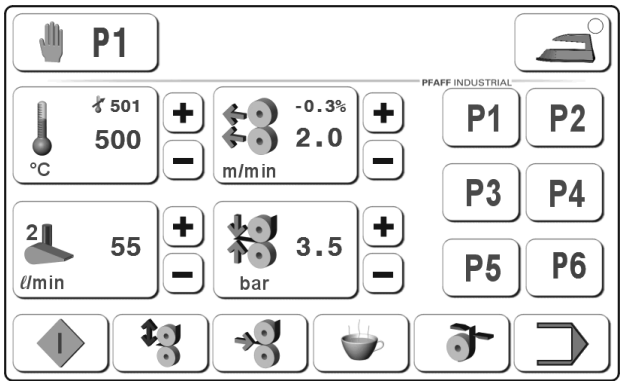


Figure 2: Production, manual sealing mode, feed rollers closed.

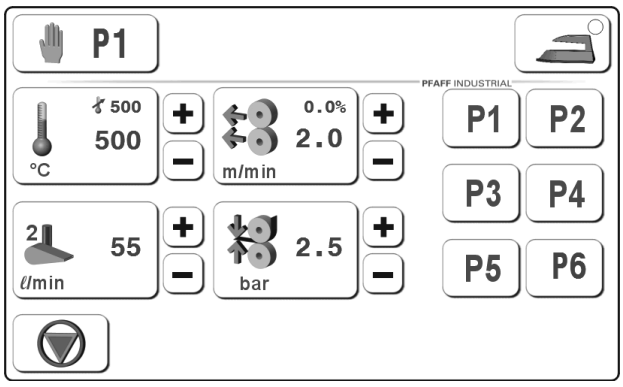


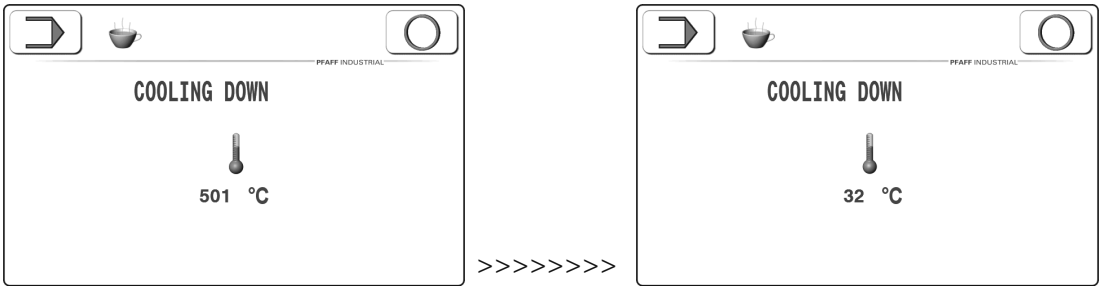
Figure 3: Production, manual sealing mode, sealing process is running.

All functions keys are explained in chapter **10.02 Description of the function keys**

The sealing process is controlled using the pedals and the , and keys. The tape can be fed with the key. The key is used to switch to ironing mode.
The rollers can be closed with the main pedal or the key when the machine is in the initial state. The roller backwards service functions is also available and you can switch to input mode.
The sealing process can be started with the main pedal or the key when the rollers are closed. Alternatively, the rollers can be opened with the main pedal or the key.
It is possible to switch to input mode with the key or to call up the roller backwards service function with the key.
The current sealing process can be interrupted with the main pedal or the key. The parameters can be changed with the + / − scroll keys in the current sealing process. The tape cutting cycle is initiated with the cutting pedal. The tape is cut and the sealing process finishes exactly at the end of the tape.

The corresponding sealing parameter data sets can be selected directly when the machine is in the initial state (after cutting the tape or an interruption with opening the rollers or. cutting the tape key) with the **P1 .. P6** keys.

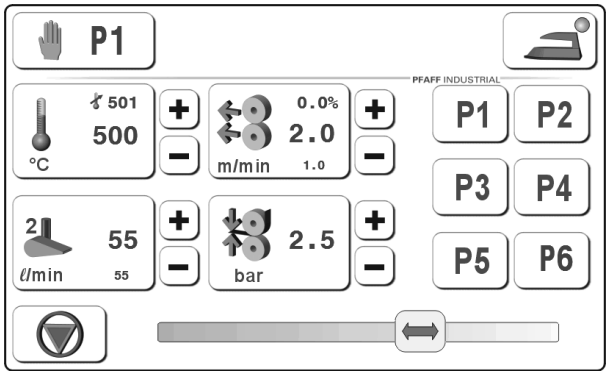
The PAUSE function key is used to cool the machine down to a temperature below 60°C with an increased volume of air



The red thermometer flashes while the temperature is still above 60 °C. The hot air is then turned off and the machine can be switched off.

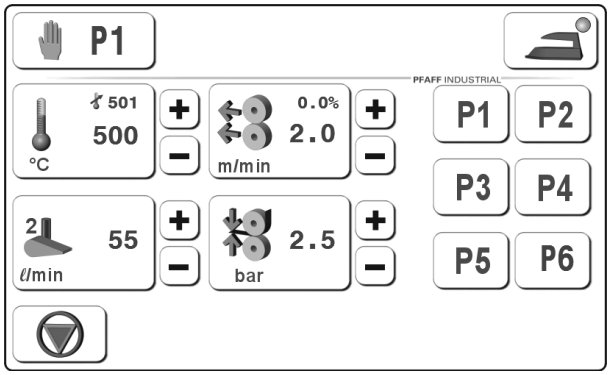
10.05 Ironing - cold ironing

The rollers are closed with the set roller pressure in cold ironing mode and the part without tape is run over with the nozzle disengaged. The speed can be adjusted infinitely with the pedal function. The differential is switched off. The cold ironing function is activated and deactivated with the iron by pressing the key in STOP mode. It is possible to switch between cold and hot ironing at any time by pressing the cutting pedal.



10.06 Ironing - hot ironing

The rollers are closed in hot ironing mode and the part without tape is run over with the nozzle engaged. All sealing parameters except the differential are used. The differential is switched off. The hot ironing function is called up from the cold ironing function by pressing the cutting pedal. It is possible to switch between cold and hot ironing at any time using the cutting pedal.



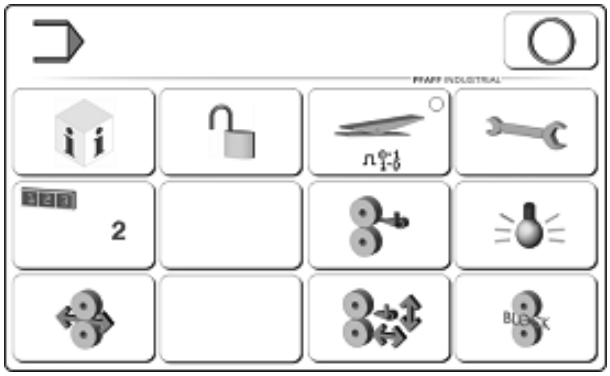
11 Input

The input mode contains the functions for displaying information, machine adjustment and configuration and for supporting service and adjustment work.

11.01 Overview of the functions in the input menu

● Switch the machine on.

● Call up the input menu.

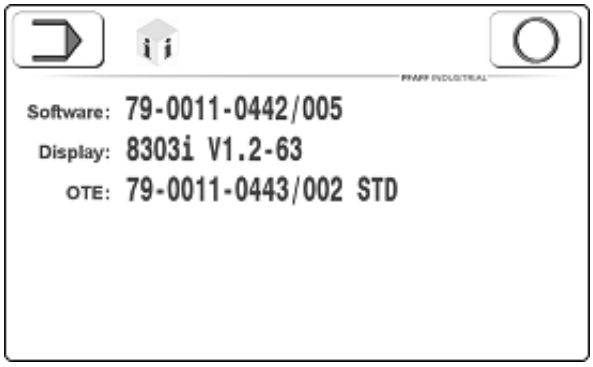


Description of the functions

Sealing mode
This function is used to change to the sealing mode.

Info
You can switch to the information menu item by pressing the touch field. The following information about the machine is displayed here:

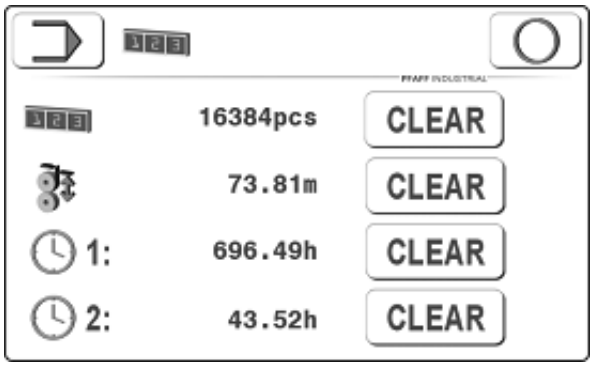
Software version	Current machine software 79-0011-0442/005
Control panel	Current touch panel firmware 8303i Machine type V1.2 User version V6.3 Touch panel firmware
OTE (OTE security dongle)	Current OTE dongle firmware and type 79-0011-0443/002 STD for 8303i basic version or 79-0011-0443/002 EXT for the advanced version



Daily piece counter, operating hours counter and tape consumption

Different operating data is displayed on this screen.

The sealed parts are counted with the daily piece counter. The counting starts as soon as the feed rollers are closed, the material has been transported and the tape has been cut in manual sealing mode.

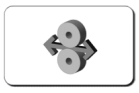


Tape consumption

Operating hours counter (switch-on duration)

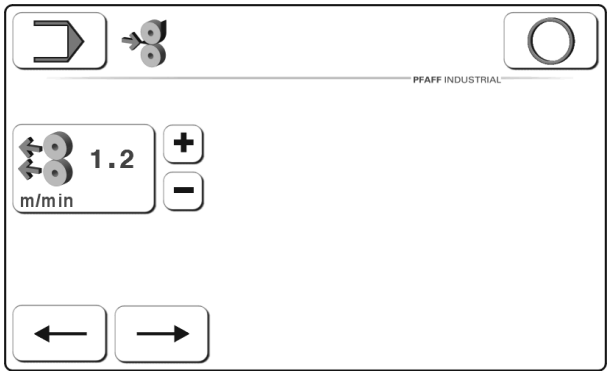
Production hours counter (sealing time)

All operating data can be reset with the respective "CLEAR" touch fields.



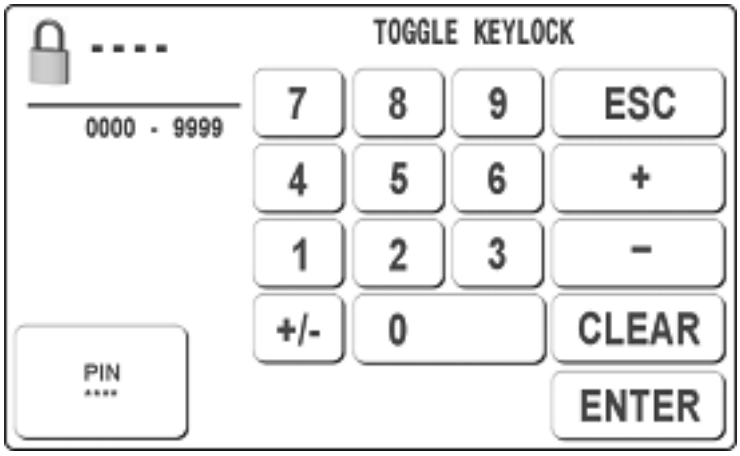
Feed rollers forwards / backwards

The rollers run forwards and backwards at the set speed as long as the arrow keys are pressed. The rollers can be opened and closed with the main pedal. The rollers run forwards and backwards with the last settings if the pedal is pressed depending on the direction that was previously selected.



Protect sealing parameters

This function can be used to protect the sealing parameters and settings against unintentional changes by the operator. The function is activated or deactivated with a secret pin (personal identification number).

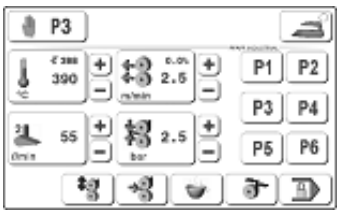


Enter the four-digit PIN to activate and deactivate the function. **** is displayed instead of the entered numbers. The protection function is switched over after entering the correct PIN.

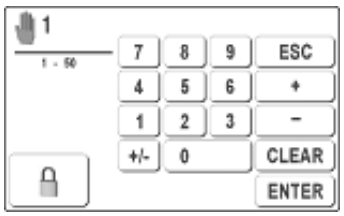
The PIN is **0000** when delivered from the factory.

The following functions are blocked for the user in protected mode:

All sealing parameters



Scroll key operating modes



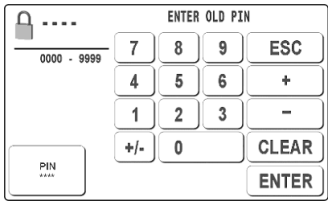
Settings menu

The following are permitted:

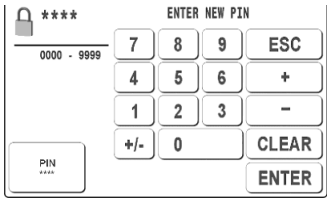
Selection of parameters P**1**..P**6**..P**50** and all other operating functions

The PIN can be changed with this function

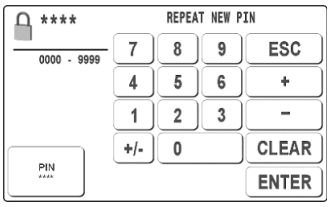
Enter current PIN



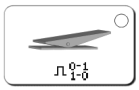
Enter new PIN

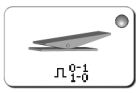


Repeat new PIN



If the PIN is forgotten, it can be reset to the value **0000** with the **RESET TO FACTORY SETTING** function (see **chapter 13.12: Resetting to factory setting)**.





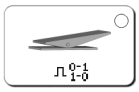
Main pedal mode

The main pedal mode is changed by pressing the touch field. The status is displayed with the appropriate LED.

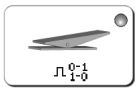
The machine operates in level mode as long as the pedal remains pressed in position +2.

The sealing process is switched on in flip-flop mode by pressing the main pedal and cancelled by pressing it again.

The flip-flop mode is only effective in manual and programmed sealing mode. Ironing and dynamic sealing always work according to the level mode principle.

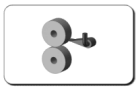


Level mode



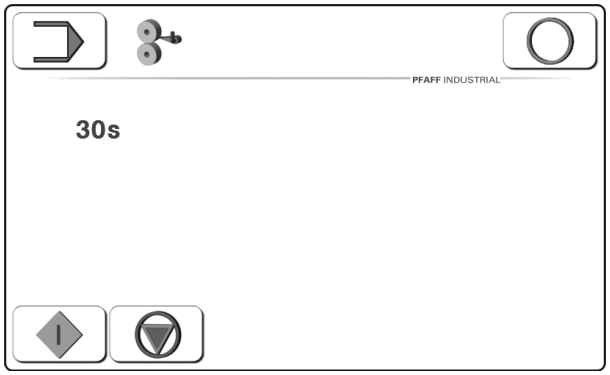
Flip-flop mode

The same tape cutting process is carried out in flip-flop mode after easing off the main pedal briefly, like when pressing the cutting pedal (single-pedal operation e.g. standing work station).



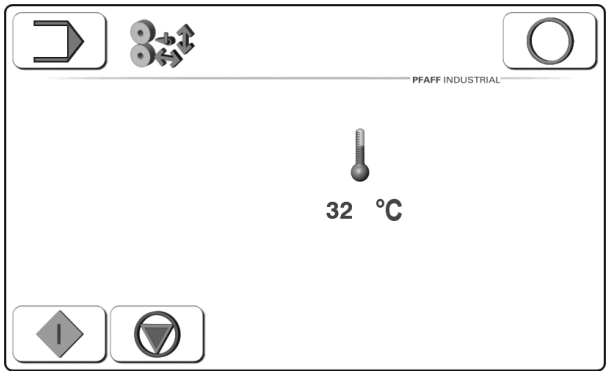
Preheat feed rollers

This function can be used to trigger the preheating of the feed rollers. The time is the same as for the automatic preheating of the feed rollers (Input – Settings – Automatic preheating of feed rollers).



Position the nozzle

This function is used to position the nozzle in front of the feed rollers. The heating control is switched off. The temperature symbols flashes as a warning if the air temperature is > 60 °C.



Lock the feed rollers

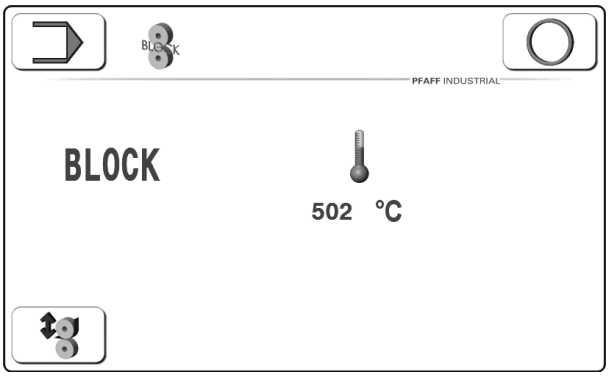
This function can be used to secure the roller drive in a fixed position. The drive regulator tries to maintain the position of the rollers regardless of any errors that may occur due to forceful turning.

This direction function can be used in the following situations:

- Replacing rollers, the rollers are usually open during this process
- Pulling material to the roller gap check, the rollers are closed at this point.

The blocked rollers can be opened or closed with the  key.

The temperature symbols flashes as a warning if the air temperature is > 60 °C.

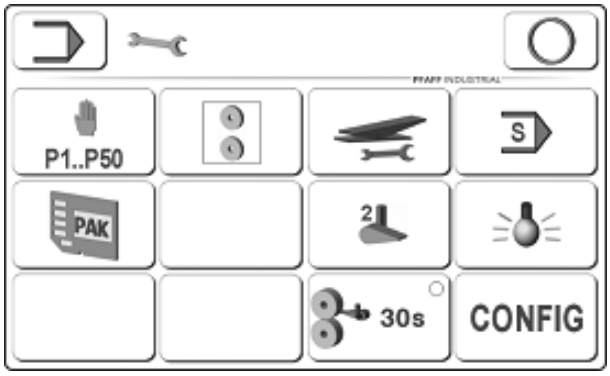


LED lighting on / off

The LED lighting is switched on or off with this key. The brightness of the LED lighting is adjusted in settings (one level down)

Settings

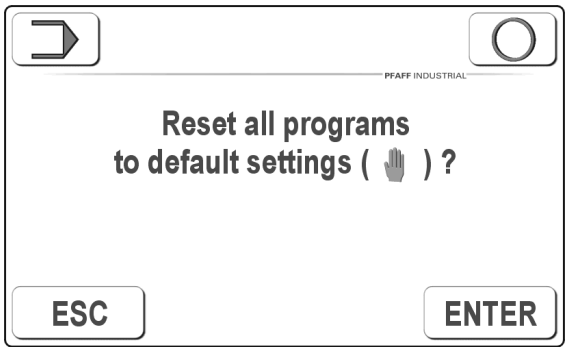
Pressing the – settings – touch field on the basic input mode screen opens another screen where the settings described below can be selected.

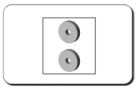


The settings submenu extends the input menu with the following functions

Reset all parameter data sets

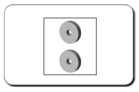
This key is used to reset the parameter data sets P1..P50 to default values:
This function is of use if new program linkages are then to be created or all program linkages are to be deleted.
The default settings are:
Manual sealing
20 °C, 1 m/min, 1bar, 30 l/min
Tape feed 42 mm, disengaging distance 40 mm,
Start delay 0.2 s, differential 0%,
Trailer 0 mm, reverse rotation 0 mm, no comment





Roller home position

This adjusts the home position of the feed rollers, top roller or bottom roller. The corresponding symbol is displayed depending on the home position selected



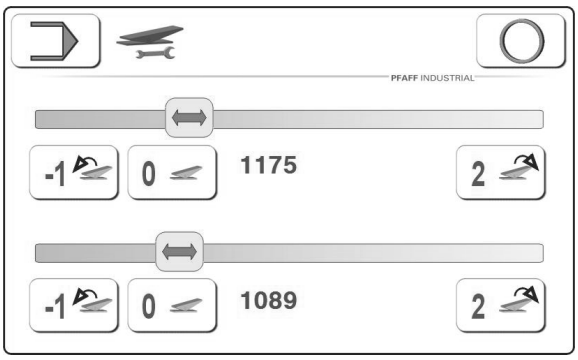
Top roller

Bottom roller

Pedal setting

This function can be used to check the pedal functions of the main and cutting pedal.
The slider should move to this position by pressing the corresponding pedal function. An assigned computer value is displayed below.

0..756	Position -1
928..1360	Position 0
(1632..2176	Position +1 not displayed)
3712..4096	Position +2



The top slider shows the position of the main pedal and the lower pedal shows the position of the cutting pedal.

Set nozzle type

The PFAFF 8303i can be equipped with various air nozzles. The various nozzles require a different electronic control. The nozzle type installed must be set.
The nozzle type is set cyclically by pressing the key.

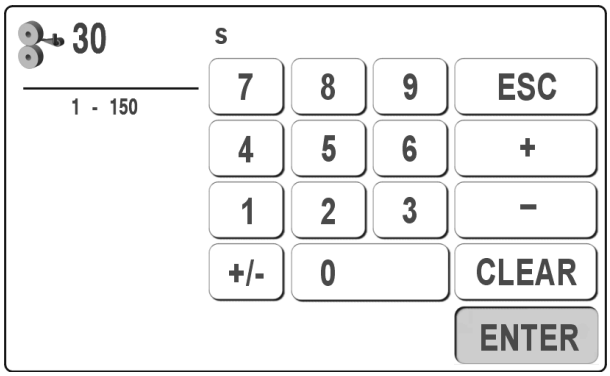
1 – narrow nozzle 2 – average nozzle 3 – wide nozzle

Automatic preheating of feed rollers

When the function is switched on, the function for preheating the feed rollers is called up when the machine is switched on and at the end of every break or heating process.
A screen opens to enter the time when switching from the machine being switched off to it being switched on
If the function is switched on, only the automatic function is switched off again by pressing the touch panel again.

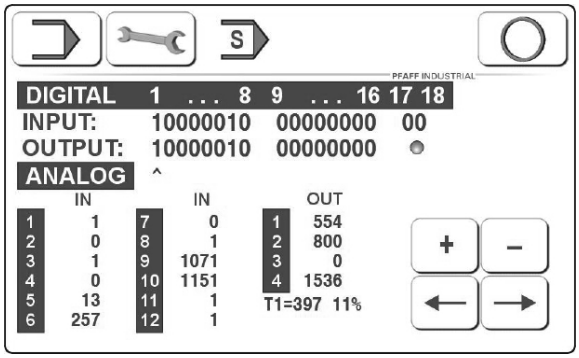
switched on

switched off



Service

The service provides assistance during the commissioning and with troubleshooting on the machine. The status of the digital and analog inputs and outputs are displayed in the initial state.

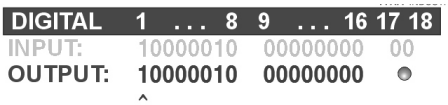


Display of digital inputs 1..18

Assignment of inputs to plugs:

Input 1	X2/PIN2	E1 -Bottom roller	Input 9	X6/PIN2
Input 2	X2/PIN3	E3 - Nozzle engaged	Input 10	X6/PIN3
Input 3	X3/PIN2		Input 11	X7/PIN2
Input 4	X3/PIN3		Input 12	X7/PIN3
Input 5	X4/PIN2		Input 13	X8/PIN2
Input 6	X4/PIN3	E13 - Footwear machine	Input 14	X8/PIN3
Input 7	X5/PIN2	E11 - Pressure controller	Input 15	X9/PIN2
Input 8	X5/PIN3		Input 16	X9/PIN3
Input 17	X10/PIN2		Input 18	X10/PIN3 Cold start

Inputs 1 (bottom roller) and 7 (pressure controller) are set in the example above.

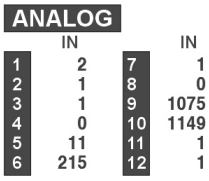


Display of digital outputs 1..16

Assignment of outputs to plugs:

Output 1	X1/PIN1	Y1 -Roller down	Output 9	X12/PIN1
Output 2	X1/PIN3	unused	Output 10	X12/PIN3
Output 3	X1/PIN5	Y3 - Engage nozzle	Output 11	X12/PIN5
Output 4	X1/PIN7	Y4 - Nozzle at front	Output 12	X12/PIN7
Output 5	X11/PIN1	Y11 - Tape cutter air blast	Output 13	X42/PIN1
Output 6	X11/PIN3	Y9 - Tape clamp (drive) closed	Output 14	X42/PIN3
Output 7	X11/PIN5	Y10 - Roller clamp open	Output 15	X42/PIN5
Output 8	X11/PIN7	Y8 - Tape cutter on	Output 16	X42/PIN7

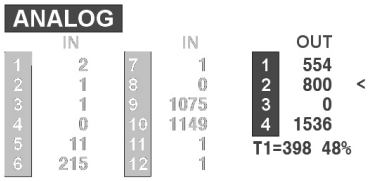
Outputs 1 (Y1 - roller) and 7 (Y10 - Roller clamp open) are set in the above example.



Display of analog outputs 1..12
(Value range 0..4095)

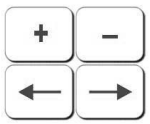
Assignment of analog inputs to plugs:

Analog 1	X16	0..10V - Voltage input
Analog 2	X17	0..10V - Voltage input
Analog 3	X18	0..20mA - Power input
Analog 4	X19	0..10V - Voltage input
Analog 5	X24/1-2	Internal - unused
Analog 6	X24/3-4	LED power - internal (unused)
Analog 7	X14	Nominal value transmitter1 SWG2 (unused)
Analog 8	X14	Nominal value transmitter2 SWG2 (unused)
Analog 9	X45	Nominal value transmitter2 SWG3 Cutting pedal
Analog 10	X14	Nominal value transmitter1 SWG3 Main pedal
Analog 11	X35	Temperature measurement 1 AD494 (unused)
Analog 12	X36	Temperature measurement 2 AD494 (unused)



Display and input of analog outputs
(Value range 0..4095)

Analog OUT 1	X22	0..20 mA Air volume (load resistance 270R)
Analog OUT 2	X23	0..20 mA Roller pressure (load resistance 560R)
Analog OUT 3	X24/1-2	PWM1 - unused
Analog OUT 4	X24/3-4	PWM2 – LED lighting



The +/- keys can be used to set the selected digital output or increase or decrease the selected analog value.

Use the arrow keys to move the selection symbol ^ or < to the desired outputs.

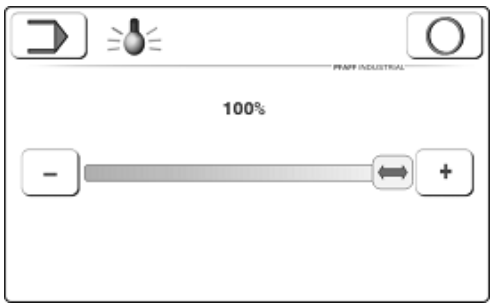
The digital and analog inputs are read and displayed cyclically. The arrow keys can be used to select one of the digital or analog outputs. The + key can be used to set the digital output and the - key can be used to reset the digital output. Process locks and feedback switches (digital inputs) are monitored and can lead to errors.
The values of the selected analog outputs are increased with the + key and decreased with the - key.

These keys are used to return to the basic input mode or the settings menu.

This key can be used to switch to production (e.g.manual sealing).

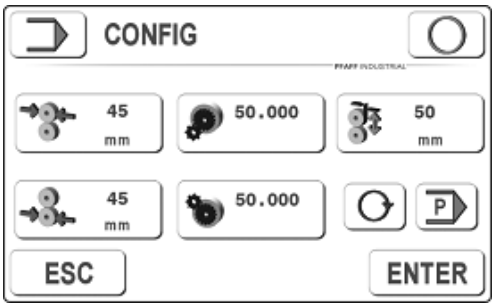
Set brightness of LED lighting

The brightness of the LED lighting can be increased with the [+] key and decreased with the [-] key.



Roller configuration

The roller parameters and tape cutter clearance are set with this menu (length of the tape cutter to the point of contact with the rollers = NIP nearest intermediate point).



Diameter of top roller

Diameter of bottom roller

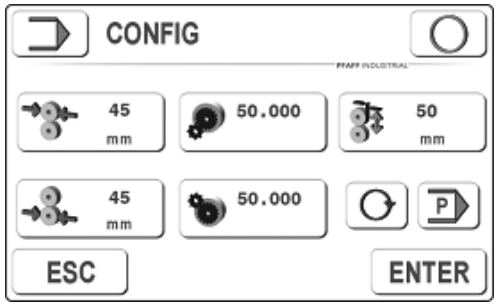
Gear factor of top roller

Gear factor of bottom roller

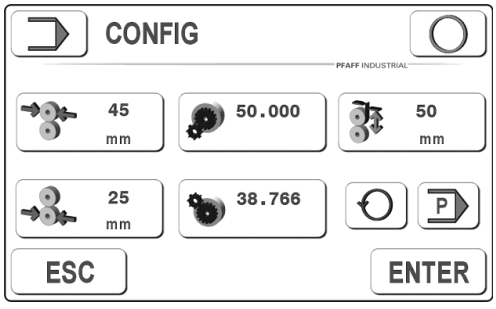
Enter tape cutter clearance

Change direction of rotation of bottom roller

Setting for normal post from the front or centre



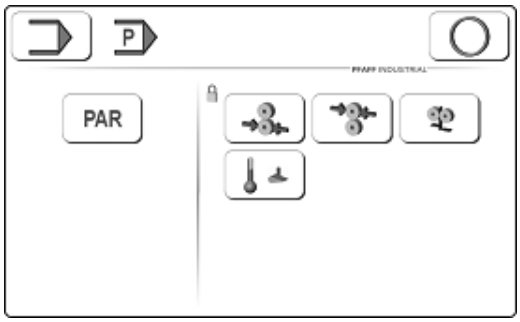
setting for narrow shoe post from the back



Set parameters

This key opens another menu:

The keys to the right of the vertical line lead to functions that are not accessible to the user and installer. They are protected with special passwords. The closed lock should illustrate this state.

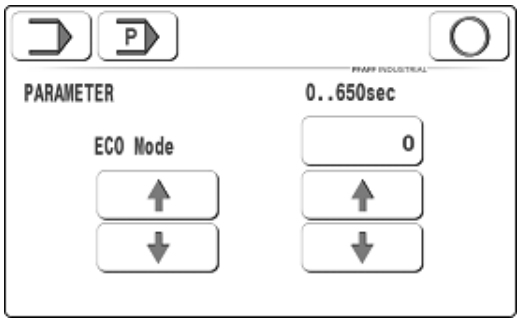


PAR

Set other parameters

This key takes you to the menu to set up other machine parameters. A separate function has been programmed for this so as not to overload the configuration screen.

Use the left arrow keys to select the parameter; the parameter can be changed using the scroll key or entering the value directly with the right arrow keys and the input field.



Note:

The settings take effect immediately on the selected parameters. This function should only be carried out by specially qualified people (in some cases after consultation with PFAFF).

Parameter	Value range	Init. value	Function
ECO Mode	0..650sec	0	0 – OFF 1..650 – Eco mode after 1..650 seconds
OpenRollersCutTape	0..2	2	0 – Roller opening without tape cutting 1 –Roller opening with key without tape cutting with pedal with tape cutting 2 – Roller opening always leads to tape cutting
TempStartWindow	5..20°C	10	Heating control start window in degrees Celsius Start possible if temp = target temp +/- start window
TempAlarmWindow	50..500 (0.1°C)	300	Temperature control monitoring window error in 0.1 degrees (only change after consultation)
VQLIM	+/- 2400	+500	Motor controller parameter (only change after consultation)
SD-CARD-DETECT	0..1	0	Evaluation of the CARD-detect signal (only change after consultation)

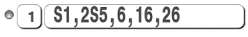
Back up and read back sealing parameters on SD card
This function can be used to back up sealing parameter sets P1..P50 on the SD card and read them from the SD card. All 50 parameter sets are always backed up or read back all at once in packages. This makes sense because of the links in the 8303iEXT advanced version. However, the function is also available in the 8303iSTD basic version.

Up to 30 of these packages can be stored on the SD card (file names 01.PAK to 30.PAK in the folder P8303 on the SD card).

An information text. which can be displayed later, can be assigned to the package currently in the memory before it is saved. The default information text is 8303.

Select a free package on the SD card. An LED next to the package number (4) marks the selection.

This key is used to then write the sealing parameter sets in the package 04.PAK on the SD card



If an existing packaged is marked,

it can be loaded into the memory with the "LOAD" key.

The "DEL" key deletes a selected package on the SD card.

These keys are used to select the package numbers

Note:
It is recommended that the sealing parameter sets are regularly backed up on the SD card. The software update, factory reset or low battery functions delete the parameter sets P1..P50 and reset them to the factory setting.

12 Maintenance and Care

12.01 Maintenance intervals

Clean the hot air nozzle	as required
Check the maintenance unit	daily, before start-up
Replace the feed roller	as required

12.02 Cleaning

Switch off the machine and let it cool down!
Risk of burns when touching the heating element!

- Remove sealing residues from the outlet slot of the hot air nozzle as required.

12.03 Checking the maintenance unit

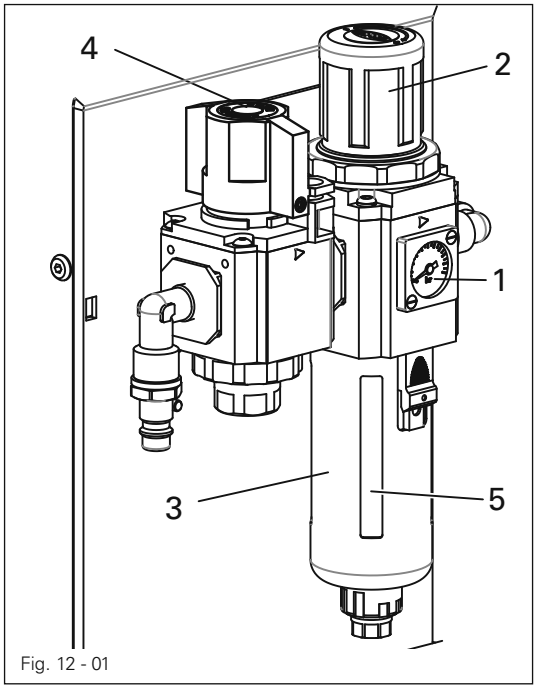


Fig. 12 - 01

Checking / setting the air pressure:

- Check the air pressure on the manometer **1** before every start-up.
- The manometer **1** must show a pressure of **6** bar.
- Adjust this value if needed.
- To do this, pull up the button **2** and turn it so that the manometer **1** shows a pressure of **6** bar.

Switch off the machine!
Detach the compressed air tube on the maintenance unit.

Emptying the water tank:

- The water tank **3** empties itself automatically after the compressed air tube for the maintenance unit has been removed and close the air shut-off valve **4**.

Cleaning the filter:

- Unscrew the water tank **3** and take out the filter **5**.
- Clean the filter **5** with compressed air or isopropyl alcohol (order no. **95-665 735-91**).
- Screw in the filter **5** and screw on the water tank **3**.

12.04 Replacing the feed rollers

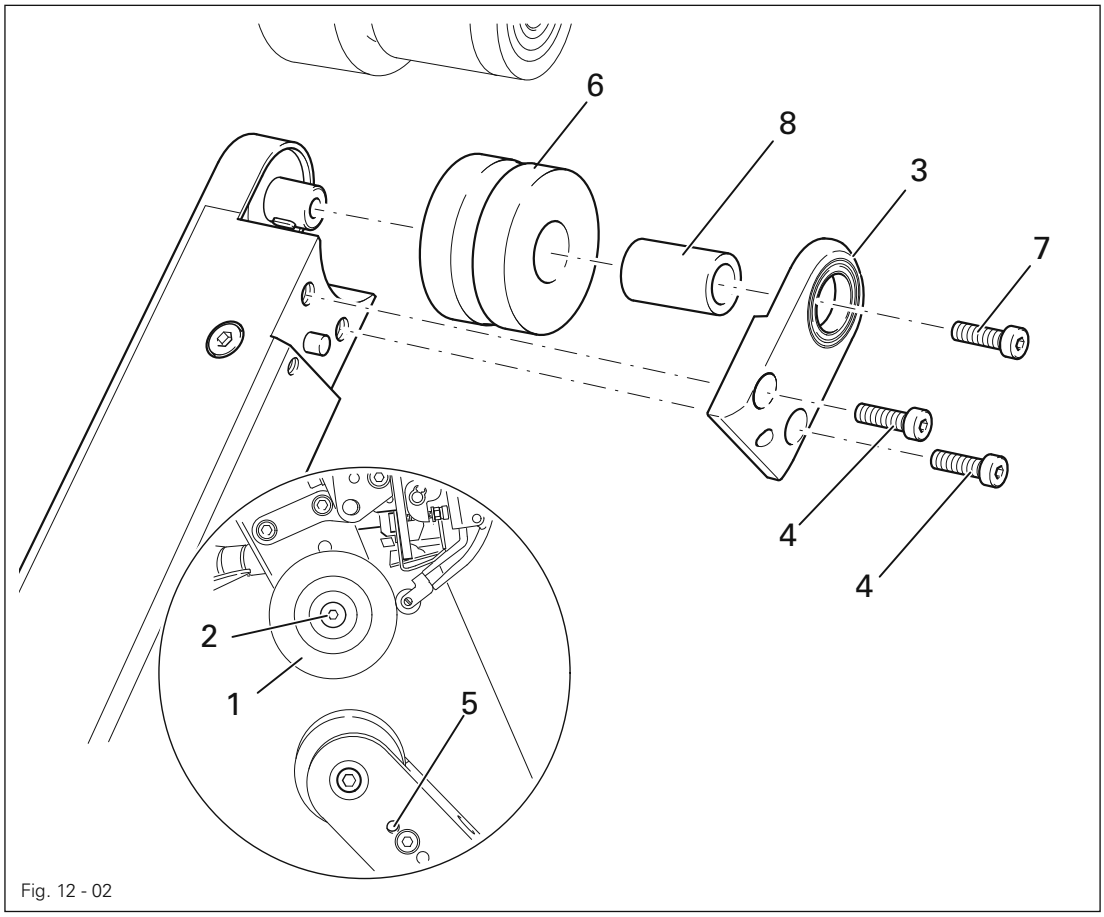


Fig. 12 - 02

- Switch on the machine and set the sealing temperature to the lowest value.

Let the heating element cool down!
Risk of burns when touching the heating element!

- Call up the input menu.

- Lock the feed rollers.
- Replace the feed roller **1** (screw **2**).
- Remove the cover **3** (screws **4**); use an Allen key through the hole **5** to help if required.
- Remove the feed roller **6** (screw **7**) with the sleeve **8**.
- Insert a new feed roller **6** with a sleeve **8** and tighten with the screw **7**.
- Attach the cover **3** (screws **4**).

The machine must be reconfigured if the diameter of the old and new feed rollers are different, see **chapter 13.10.01 Machine configuration**.

- Check the position of the feed rollers and adjust this if necessary, see chapter **13.03 Position of the feed rollers.**
- Switch the machine off.

13 Adjustment

13.01 Notes on adjustment

All adjustments in this manual are based on a fully assembled machine and may only be carried out by technical staff trained for this purpose. Machine covers, which have to be removed and replaced to carry out checks and adjustments, are not mentioned in the text. The order of the following chapters corresponds to the most logical work sequence for machines that have to be completely adjusted. Both the preceding and following chapters must be observed if only specific individual work steps are carried out.
The screws and nuts indicated in brackets ( ) are fastenings for machine parts, which must be loosened before any adjustment and tightened again afterwards.

Unless otherwise stated, the machine must be disconnected from the electric and pneumatic supplies for all adjustment work!
Risk of injury due to accidental machine start-up!

Let the machine cool down after it is switched off!
Risk of burns when touching the heating element!

13.02 Tools, gauges and other accessories

- 1 set of screwdrivers with knife widths of 2 to 10 mm
- 1 set of wrenches with jaw widths of 7 to 14 mm
- 1 set of Allen keys from 1.5 to 6 mm

13.03 Position of the feed rollers

Rule
The feed rollers 1 and 3 should be centred and parallel to each other.

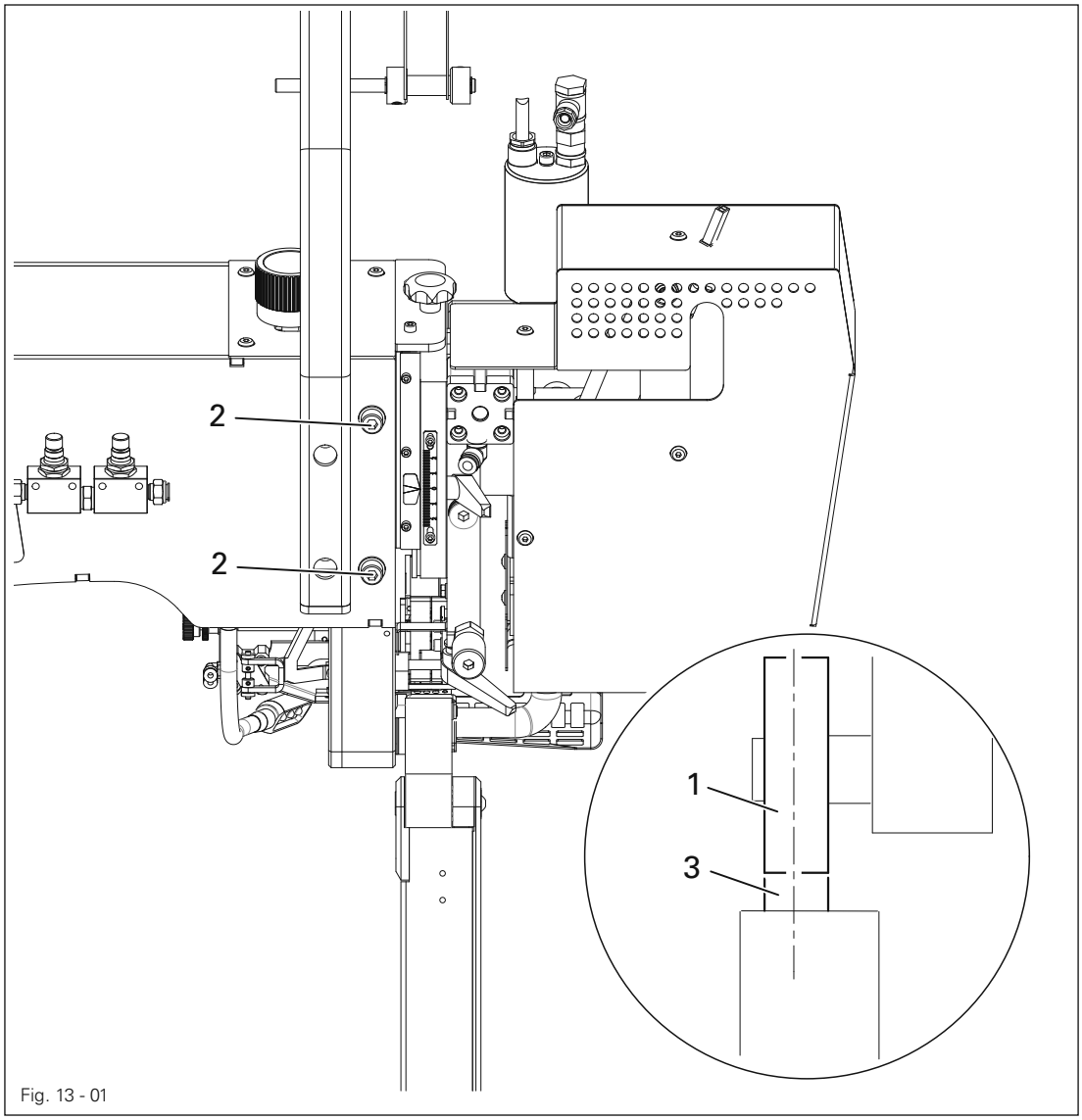


Fig. 13 - 01

● Adjust the feed roller **1** (screws **2**) according to the **rule**.

13.04 Settings on the hot air nozzle

13.04.01 Lateral alignment

Rule
The engaged hot air nozzle 3 should be in the centre of the feed roller 4 in the feeding direction.

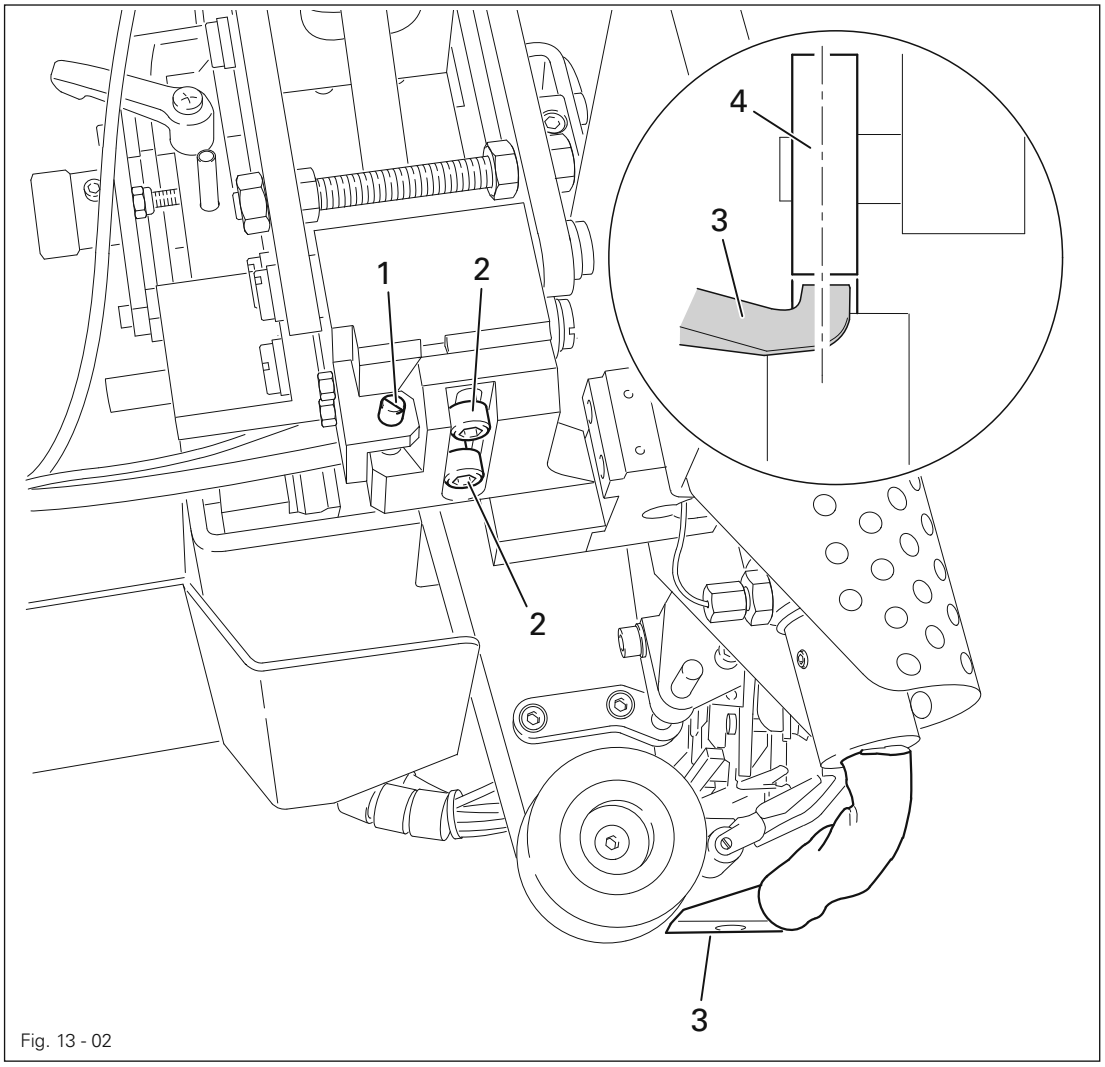
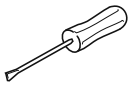


Fig. 13 - 02



- Switch on the machine and set the sealing temperature to the lowest value.

Let the hot air nozzle cool down!
Risk of burns when touching the hot air nozzle!

- Call up the input menu.

- Position the nozzle
- Turn the screw **1** (screws **2**) according to the **rule**.
- Switch the machine off.

13.04.02 Height setting and clearance to the feed rollers

Rule

1. The height setting of the hot air nozzle 5 is dependent on the material and can be adjusted in a range of 5 - 12 mm.
2. There should be a clearance of **1** - **2** mm between the hot air nozzle **5** and the material to be sealed.

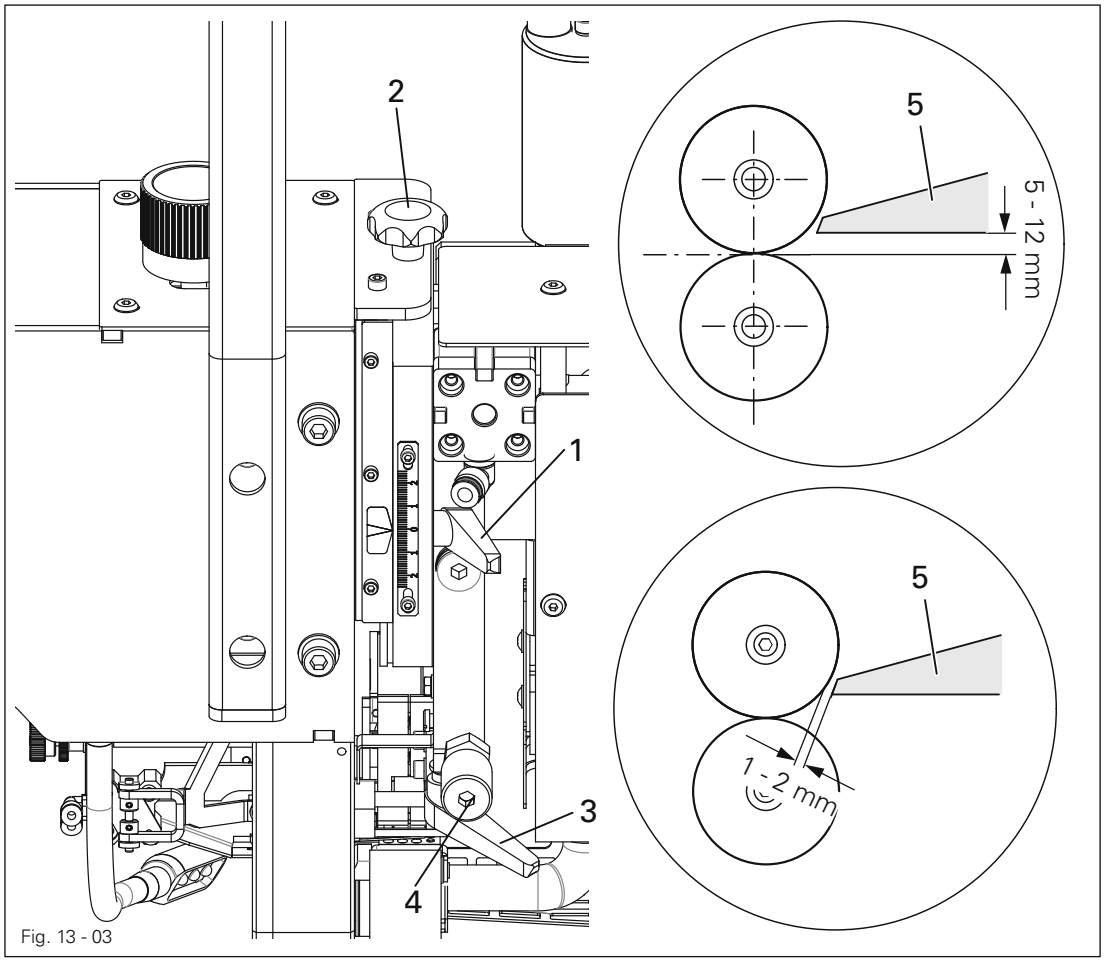
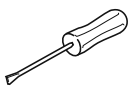


Fig. 13 - 03



- Switch on the machine and set the sealing temperature to the lowest value.

Let the hot air nozzle cool down!
Risk of burns when touching the hot air nozzle!

- Call up the input menu.

- Position the nozzle
- Loosen the clamp screw **1** and turn the screw **2** according to **rule 1**.
- Tighten the clamp screw **1**.
- Loosen the clamp screw **3** and turn the screw **4** according to **rule 2**.
- Tighten the clamp screw **4**.
- Switch the machine off.

13.04.03 Angle position

Rule
The hot air nozzle 1 should be aligned according to the magnifying glass in **Fig. 13-04**.

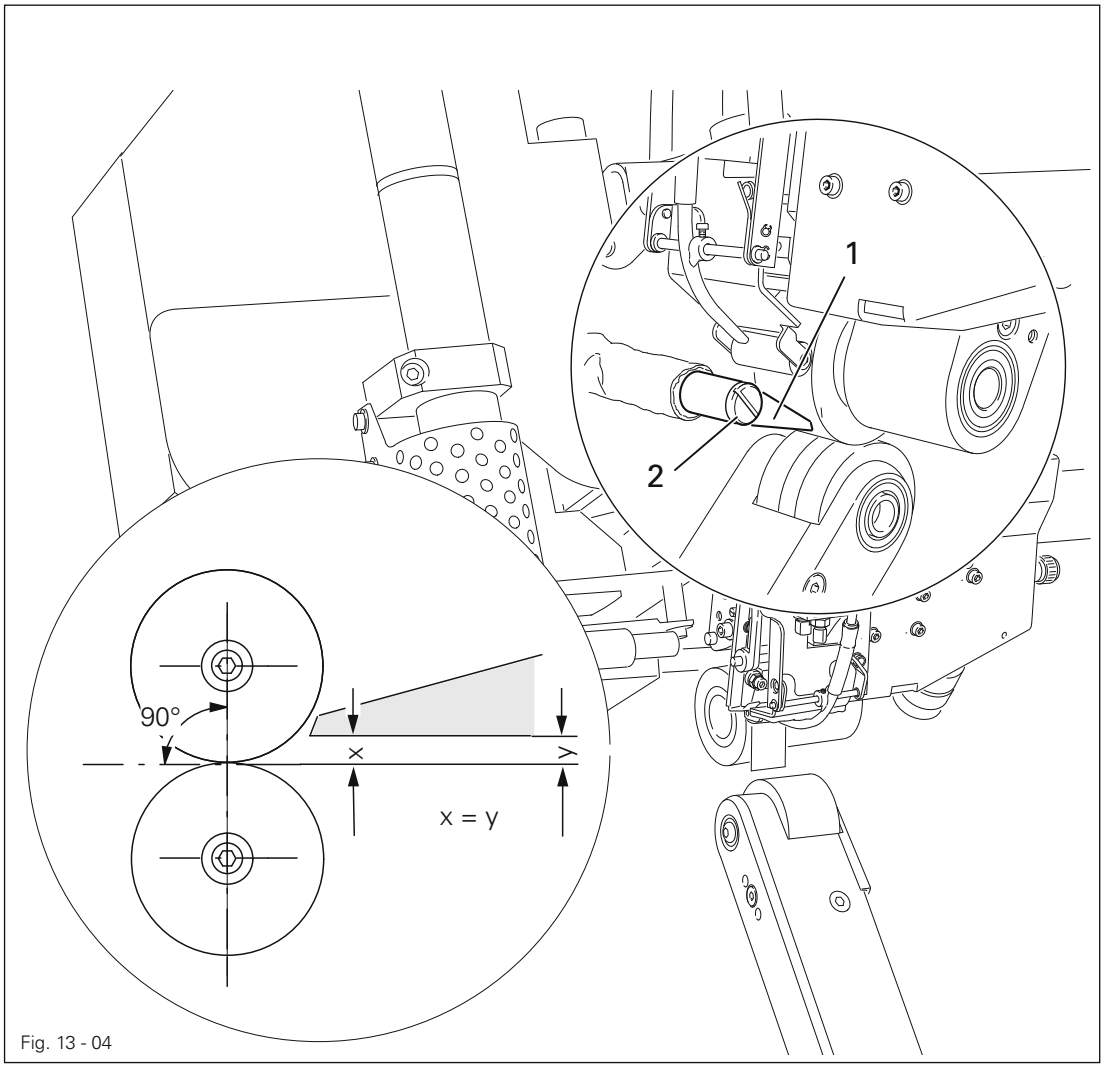
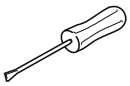


Fig. 13 - 04



- Switch on the machine and set the sealing temperature to the lowest value.

Let the hot air nozzle cool down!
Risk of burns when touching the hot air nozzle!

- Call up the input menu.

- Position the nozzle
- Adjust the hot air nozzle **1** (screw **2**) according to the **rule**.
- Check the height setting of the hot air nozzle, see **chapter 13.04.02 Height setting and clearance to the feed rollers**.
- Switch the machine off.

13.05 Replacing the heating cartridge

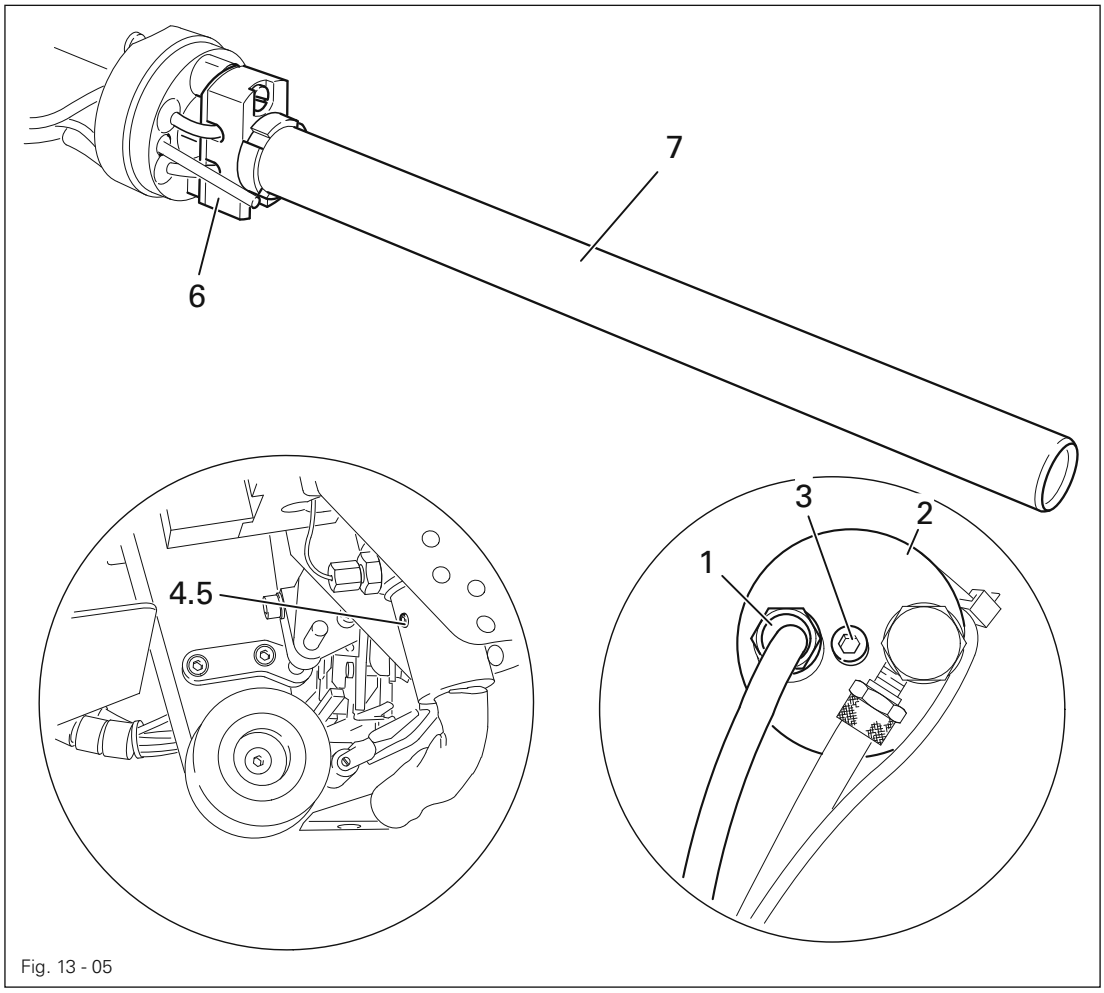


Fig. 13 - 05

Wait until the heating element has cooled down! Danger of burning!

Pull out the mains plug!

Fatal danger from electric voltage!

- Loosen the cable connection **1**
- Remove the cap **2** (screw **3**).
- Unscrew the screw **4** and loosen the screw **5** (below).
- Pull out the holder **6** together with the heating cartridge **7**.
- Pull the heating cartridge **7** out of the holder **6**.
- The installation is carried out in reverse order; please note that the screw **5** must only be tightened slightly (**max. 1 Nm**).

13.06 Replacing the temperature sensor

Rule
The temperature sensor **3** should be slid into the hot air tube up to the stop.

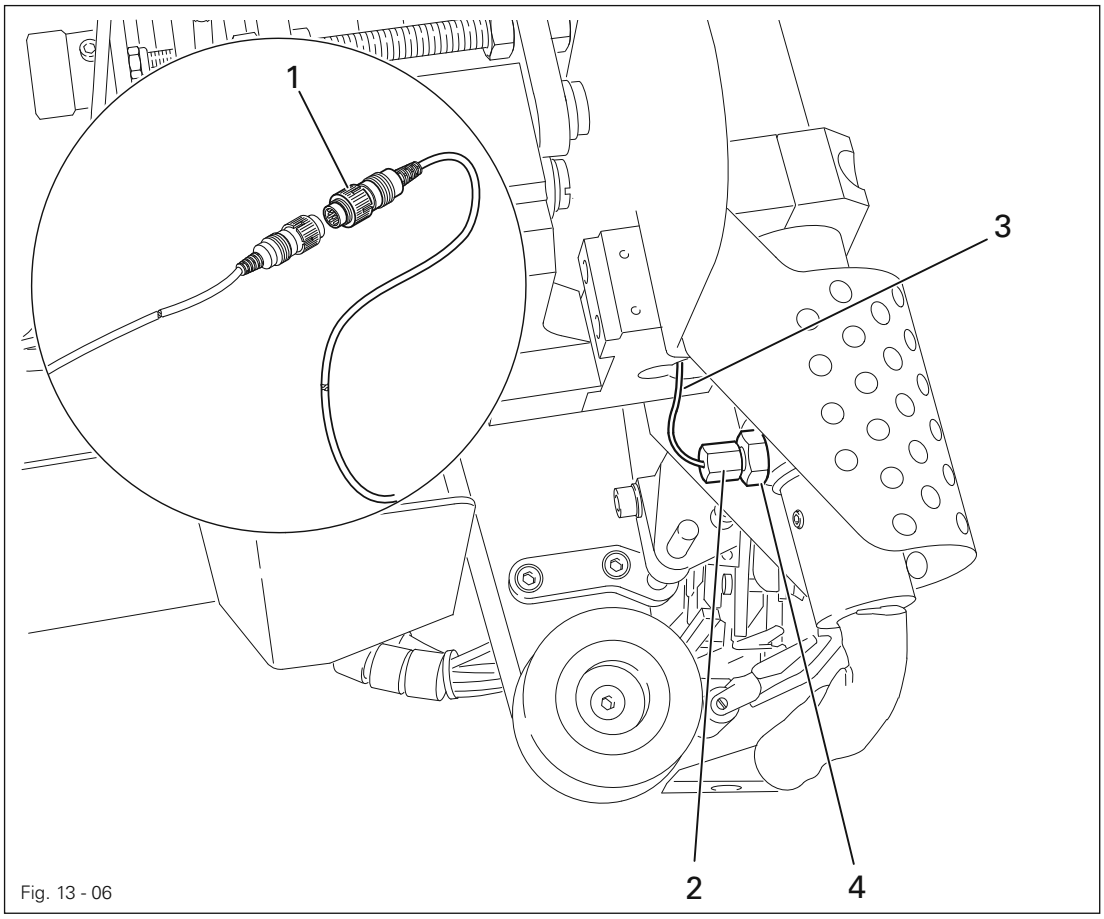
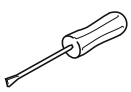


Fig. 13 - 06


Wait until the heating element has cooled down! Danger of burning!


Pull out the mains plug!


Fatal danger from electric voltage!



- Pull out the plug **1**.
- Pull out the nut **2** together with the temperature sensor **3**.
- Attach the new temperature sensor **3** together with the new nut **2**.
- Slide the temperature sensor **3** into the hot air tube up to the stop and fix it in this position by tightening the nut **4**.
- The continued installation is carried out in reverse order.
- Adjust the setting adjustments in chapter **13.04.02 Height setting and clearance to the feed rollers**.

13.07 Sealing tape cutter

13.07.01 Knife

Rule
The knife 2 should move easily and cut safely.

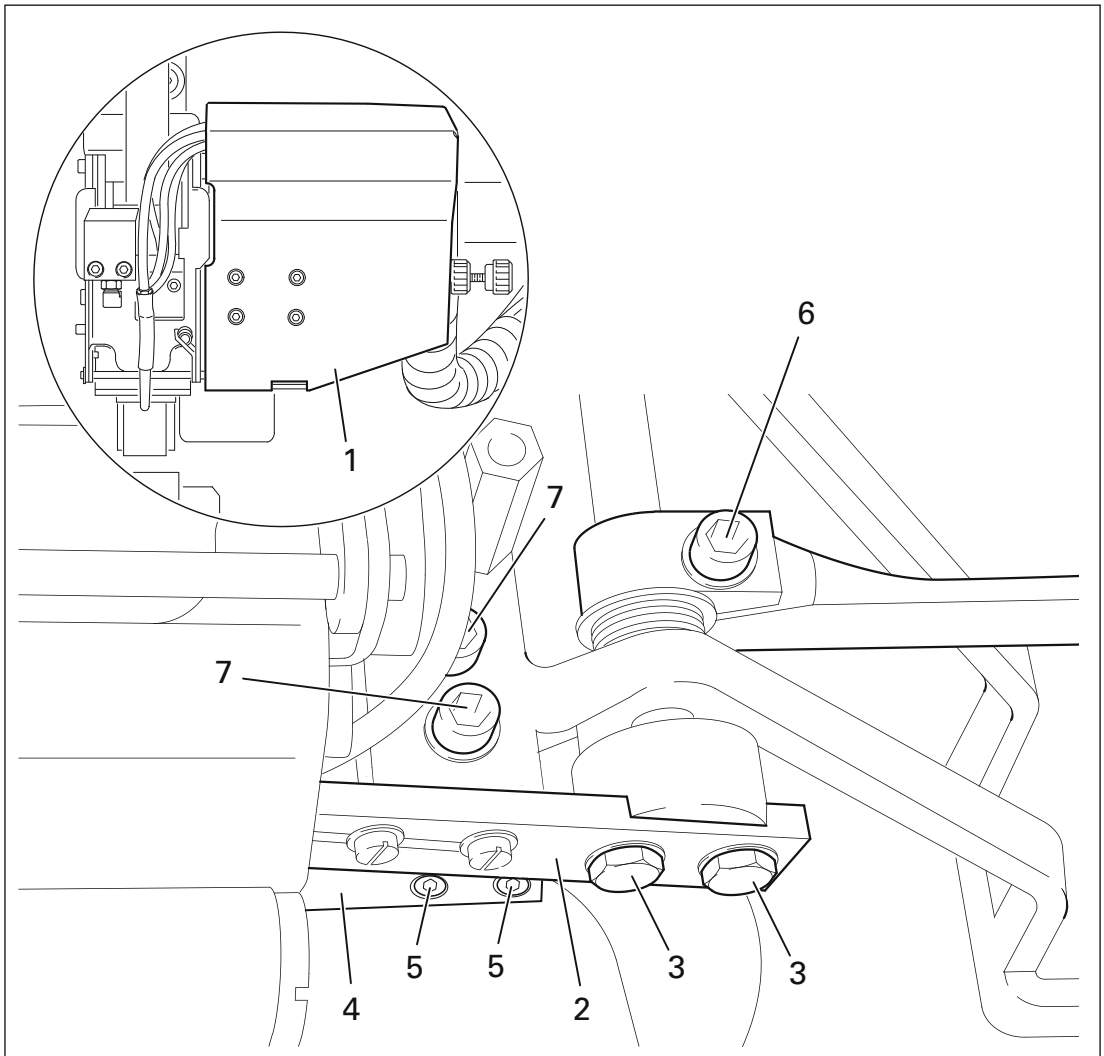
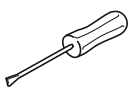


Fig. 13 - 07



- Remove the cover **1**.
- Remove the movable blade **2** (screws **3**) and stationary knife **4** (screws **5**).
- Attach the new blade.
- Adjust the blade pressure (screw **6**) and cutting angle (screws **7**) according to the **rule**.
- Carry out a test cut.
- Attach the cover **1**.

13.07.02 Air blast setting

Rule

1. The tape must not roll in during the tape insertion process.
2. The tape should be pressed through the air flow onto the top feed roller after the tape has been cut off.

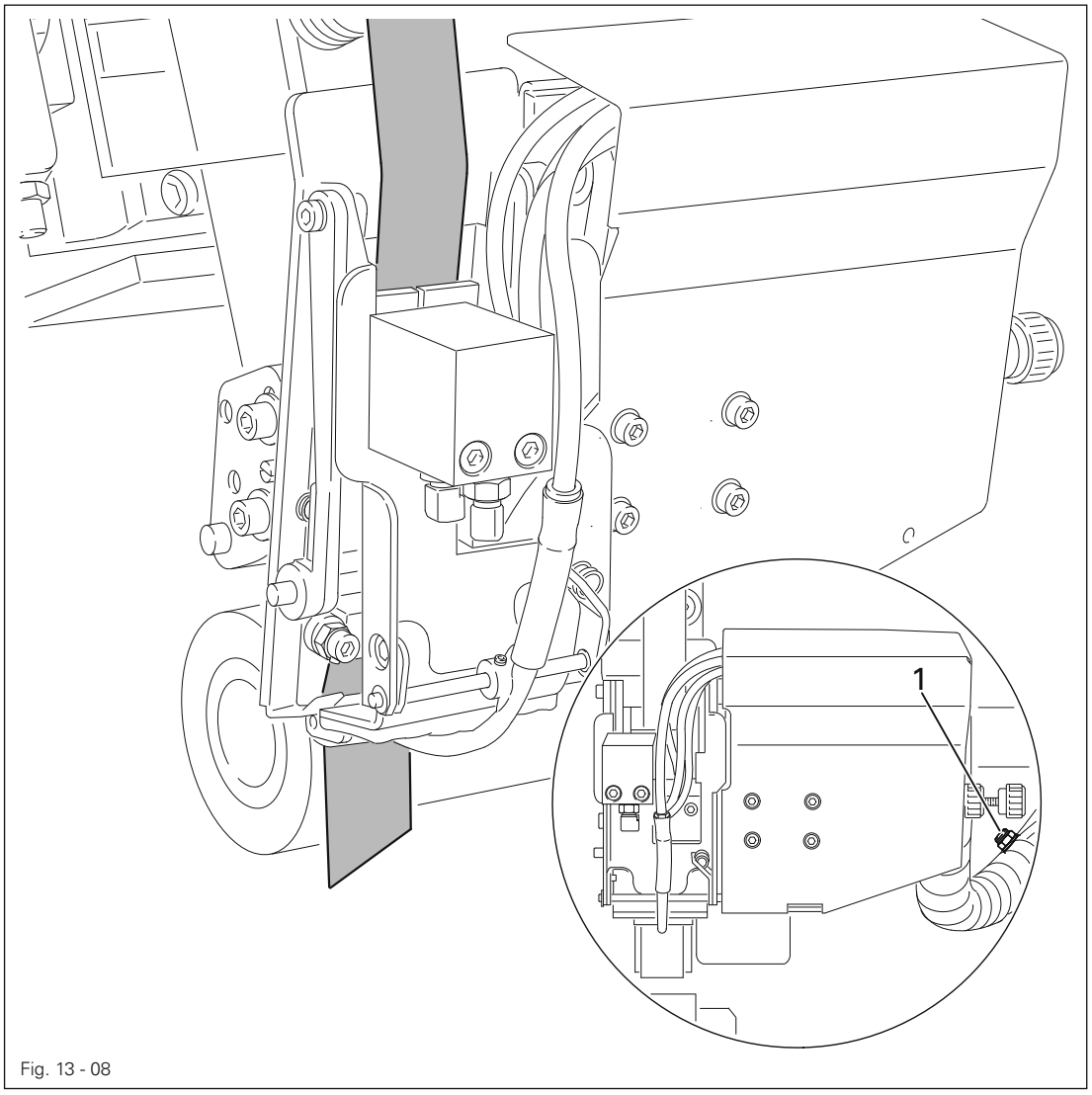
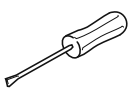


Fig. 13 - 08



● Adjust the throttle **1** according to **rules 1** and **2**.

13.08 Protective switch

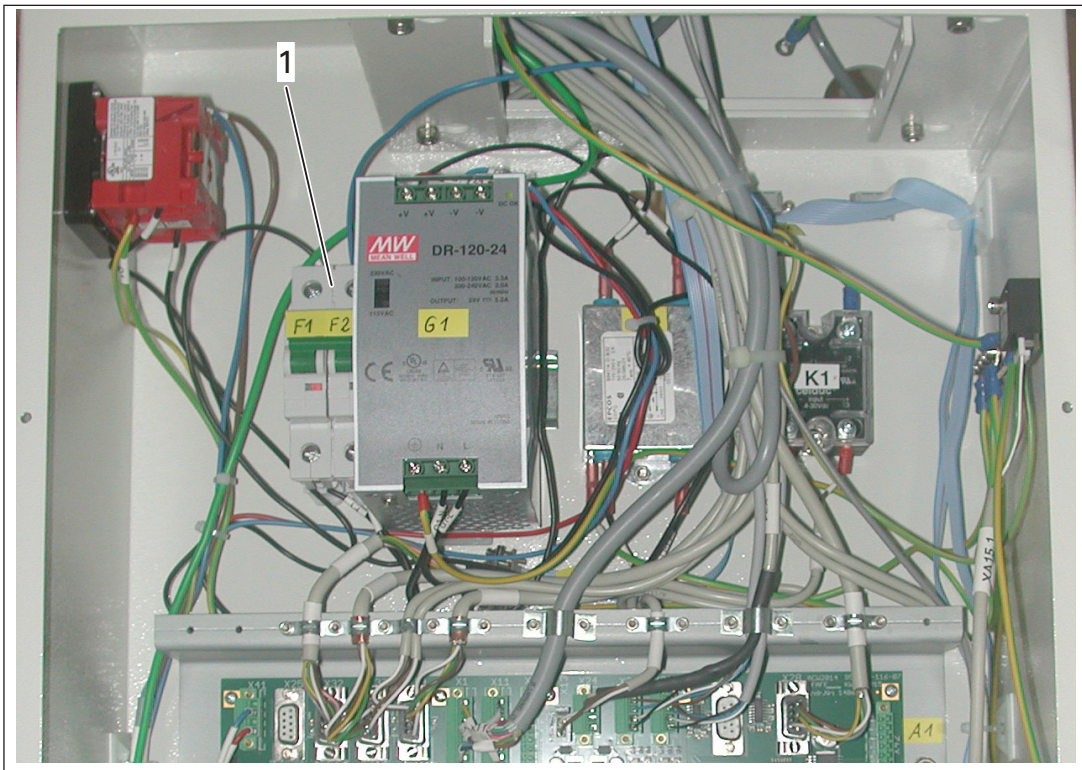


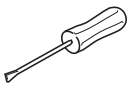
Fig. 13 - 09

The protective switch **1** is used to protect against major damage in case of a short circuit or overload.

Disconnect the mains plug!

Fatal danger from electric voltage!

First eliminate the cause of the fault before switching the machine on again!



- Eliminate the cause of the fault.
- Open the control box and reset protective switch **1**.
- Close the control box again.

13.09 Explanation of error messages

13.09.01 General errors

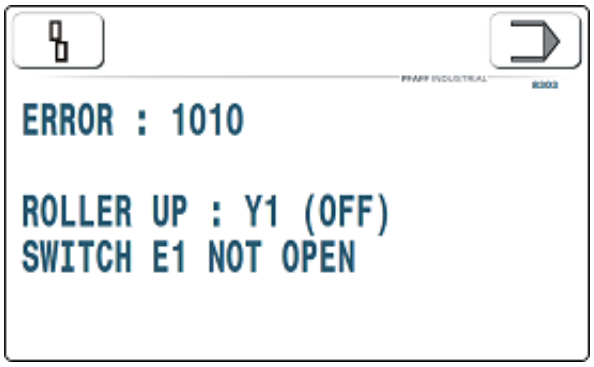
If the control unit detects an error caused by improper use, handling errors or breakdowns on the machine, the action that is currently being executed is cancelled and the error is displayed. The error is generally displayed with an error number and additional text that is of use when eliminating the error. The error numbers are divided into different groups.

The machine software returns to the point that the error occurred by pressing the – reset error – touch field. This is only of use if the cause of the error has been eliminated.

Pressing the – Input – touch field takes you to the service in input mode that will help you eliminate the cause of the error.

13.09.02 Errors when switching outputs

If an error occurs when switching an output, the relevant output is displayed with the desired switching state (OFF) or (ON). (OFF) means that the output should be switched off and (ON) means that the output should be switched on. The cause of the error is displayed on the next line. In the example, the input E**1** is set incorrectly. This means that the switch is not open.



13.09.03 Examples of errors and causes

ERROR : 1011

ROLLER DOWN : Y1 (ON)
SWITCH E1 NOT CLOSED

Close feed roller function is defective
Current status: Feed rollers are closed
The movement was too slow
-> Exhaust throttle on the opposite side of the cylinder is incorrectly set
Switch E1 reports the incorrect status
-> Switch E1 is incorrectly set
-> Switch E1 is defective, cable to E1 is defective
Current status: Feed rollers are open
An object thicker than 6 mm was detected between the rollers when closing them
-> Safety shutdown, no error
The feed rollers have not moved down
-> Valve Y1 is defective, cable to the valve is defective
-> Exhaust throttle on the opposite side of the cylinder is incorrectly set

ERROR : 1012

ROLLER DOWN : Y1 (ON)
SWITCH E1 NOT CLOSED
(NEEDS TO BE ADJUSTED)

Close feed roller function is defective
Current status: Feed rollers are closed and switch E1 is released again (E1 has been overrun).
-> Switch E1 incorrectly set or switch E has shifted.

ERROR : 1010

ROLLER UP : Y1 (OFF)
SWITCH E1 NOT OPEN

Open feed roller function is defective
Current status: Feed rollers are open
The movement was too slow
-> Pressure reducer set too low
Switch E1 reports the incorrect status
-> Switch E1 is incorrectly set
-> Switch E1 is defective, cable to E1 is defective
Current status: Feed rollers are closed
The feed rollers have not moved up
-> Valve Y1 is defective, cable to the valve is defective
-> Pressure reducer set too low

ERROR : 1032

HEATER SWING IN : Y3 (ON)
LOCKED BY ROLLER NOT DOWN
(SWITCH E1 NOT CLOSED)

The **engage nozzle** function is locked by the "rollers open" status.

ERROR : 1033

HEATER SWING IN : Y3 (ON)
LOCKED BY HEATER FORWARD

The **engage nozzle** function is locked by the "Y4 (ON) (= nozzle at front) status".

ERROR : 1031

HEATER SWING IN : Y3 (ON)
SWITCH E3 NOT CLOSED

The engage nozzle function is defective

Current status: Nozzle is engaged
The movement was too slow
-> Exhaust throttle on the opposite side of the cylinder is incorrectly set
Switch E3 reports the incorrect status
-> Switch E3 is incorrectly set
-> Switch E3 is defective, cable to E3 is defective
Current status: Nozzle is still disengaged
-> Valve Y3 is defective, cable to the valve is defective
-> Exhaust throttle on the opposite side of the cylinder is incorrectly set

ERROR : 1034

HEATER SWING OUT : Y3 (OFF)
LOCKED BY HEATER FORWARD

The **disengage nozzle** function is locked by the "Y4 (ON) (= nozzle at front)" status.

ERROR : 1030

HEATER SWING OUT : Y3 (OFF)
SWITCH E3 NOT OPEN

The disengage nozzle function is defective

Current status: Nozzle is disengaged
The movement was too slow
-> Exhaust throttle on the opposite side of the cylinder is incorrectly set
Switch E3 reports the incorrect status
-> Switch E3 is incorrectly set
-> Switch E3 is defective, cable to E3 is defective
Current status: Nozzle is still engaged
-> Valve Y3 is defective, cable to the valve is defective
-> Exhaust throttle on the opposite side of the cylinder is incorrectly set

13.10 List of outputs and inputs

13.10.01 Digital outputs

HW term	SW term	Function	Comment
OFF 1 X1/1	Y1	Roller off	Valve
OFF 2 X1/3	Y2	free	Valve
OFF 3 X1/5	Y3	Engage nozzle	Valve
OFF 4 X1/7	Y4	Nozzle at front	Valve
OFF 5 X11/1	Y11	Tape cutter air blast	Valve
OFF 6 X11/3	Y9	Tape clamp (drive) closed	Valve
OFF 7 X11/5	Y10	Roller clamp closed	Valve
OFF 8 X11/7	Y8	Tape cutter on	Valve

13.10.02 Digital input

HW term	SW term	Function
ON 1 X2/2	E1	Bottom roller
ON 2 X2/3	E3	Nozzle engaged
ON 3 X3/2	Unused	Terminal X3 not used
ON 4 X3/3	Unused	
ON 5 X4/2	E12	Unused
ON 6 X4/3	E13	Footwear machine coding input
ON 7 X5/2	E11	Pressure monitor
ON 8 X5/3	Unused	
ON 9 X6/2	Unused	Terminal X6 not used
ON 10 X6/3	Unused	
ON 11 X7/2	Unused	Terminal X7 not used
ON 12 X7/3	Unused	
ON 13 X8/2	Unused	Terminal X8 not used
ON 14 X8/3	Unused	
ON 15 X9/2	Unused	Terminal X9 not used
ON 16 X9/3	Unused	
ON 17 X10/2	E21	RESET1
ON 18 X10/3	E20	RESET2

13.10.03 Motors

HW term	SW term	Function	Comment
Bottom roller X34	DC motor 1	Bottom roller motor (master)	DC motor
Top roller X33	DC motor 2	Top roller motor (slave)	DC motor
Tape motor X32	DC motor 3	Tape feed	DC motor
X25	DC motor 4	Reserve	DC motor
X20	Unused	Reserve	Stepping motor

13.10.04 Analog outputs

HW term	SW term	Function	Comment
X24 / 1.2	PWM 1	Reserve	
LED X24/3.4	PWM 2	LED lighting	
AOUT1 X24	AIROUT	Control of air volume	Pressure regulating valve
AOUT2 X23	RPRESSUREOUT	Roller pressure setpoint	Pressure regulating valve

13.10.05 Analog inputs

HW term	SW term	Function
AE1 X35	TEMP1	Temperature sensor 1
AE2 X36	TEMP2	Temperature sensor 2
AE3 X16	Unused	Unused (0..10 V)
AE4 X17	Unused	Unused (0..10 V)
AE5 X18	Unused	Unused (4..20 mA)
AE6 X19	Unused	Unused (0..10 V)
Pedal X14	Pedal 1	Main pedal
Pedal X45	Pedal 2	Cutting pedal

13.10.06 General / system error numbers

Display text	Description	Response
ERROR: 4604 SECURITY DEVICE NOT PRESENT	OTE dongle is not available at power on	Switch off error
ERROR: 4613 AUTHENTICATION FAILED	OTE dongle does not match when switching on the control unit	Switch off error
ERROR: 47 BATTERY LOW	Battery voltage too low, battery-buffered data is at risk	Troubleshoot
ERROR: 48 BATTERY MEASUREMENT UNREADY	Battery measurement could not be carried out; battery-buffered data is at risk	Troubleshoot
ERROR: 49 PANEL SW-VERSION OLD	Panel software is no longer up-to-date	Troubleshoot
ERROR: 51 PANEL FOR ANOTHER MACHINE	Panel software is intended for another machine	Switch off error
ERROR: 102 CYCLIC AUTHENTICATION FAILED	OTE dongle is no longer available during operation	Switch off error
ERROR: 106 NO COMPRESSED AIR	Compressed air error	Troubleshoot
ERROR: 201 SPEED+DIFF TOO HIGH	Sealing speed (with differential) too high	Troubleshoot
ERROR: 1010 ROLLER UP: Y1 (OFF) SWITCH E1 NOT OPEN	Error Y1: open roller	Troubleshoot

Display text	Description	Response
ERROR: **1011** ROLLER DOWN: Y**1** (ON) SWITCH E**1** NOT CLOSED	Error Y**1**: close roller	Troubleshoot
ERROR: **1012** ROLLER DOWN: Y1 (ON) SWITCH E1 NOT CLOSED(NEEDS TO BE ADJUSTED)	Error Y1 Close roller – switch E1 is overrun	Troubleshoot
ERROR: **1030** HEATER SWING OUT: Y**3** (OFF) SWITCH E**3** NOT OPEN	Error Y**3**: disengage nozzle	Troubleshoot
ERROR: **1031** HEATER SWING IN: Y**3** (ON) SWITCH E**3** NOT CLOSED	Error Y**3**: engage nozzle	Troubleshoot
ERROR: **1032** HEATER SWING IN: Y**3** (ON) LOCKED BY ROLLER NOT DOWN (SWITCH E**1** NOT CLOSED)	Error Y3: engage nozzle, locked by open roller	Troubleshoot
ERROR: **1033** HEATER SWING IN: Y**3** (ON) LOCKED BY HEATER FORWARD	Error Y3: engage nozzle, locked by nozzle at front	Troubleshoot
ERROR: **1034** HEATER SWING OUT: Y**3** (OFF) LOCKED BY HEATER FORWARD	Error Y3: disengage nozzle, locked by nozzle at front	Troubleshoot
ERROR: **11010** DC**1**: UNDEFINED INSTRUCTION	Error DC1: wrong command	Troubleshoot
ERROR: **11013** DC**1**: START WITH MOTOR OFF	Error DC1: start when motor is switched off	Troubleshoot
ERROR: **11014** DC**1**: SYNC CMD MASTER	Error DC1: wrong command	Troubleshoot
ERROR: **11015** DC**1**: DRAG ERROR	Error DC1: contouring error	Troubleshoot
ERROR: **11016** DC**1**: OVERCURRENT	Error DC1: excess current	Troubleshoot
ERROR: **11017** DC**1**: ERR HOLDING TORQUE	Error DC1: standstill torque	Troubleshoot
ERROR: **12010** DC**2**: UNDEFINED INSTRUCTION	Error DC2: wrong command	Troubleshoot
ERROR: **12013** DC**2**: START WITH MOTOR OFF	Error DC2: start when motor is switched off	Troubleshoot
ERROR: **12014** DC**2**: SYNC CMD MASTER	Error DC2: wrong command	Troubleshoot
ERROR: **12015** DC**2**: DRAG ERROR	Error DC2: contouring error	Troubleshoot
ERROR: **12016** DC**2**: OVERCURRENT	Error DC2: excess current	Troubleshoot
ERROR: **12017** DC**2**: ERR HOLDING TORQUE	Error DC2: standstill torque	Troubleshoot
ERROR: **15010** DC**3**: UNDEFINED INSTRUCTION	Error DC3: wrong command	Troubleshoot

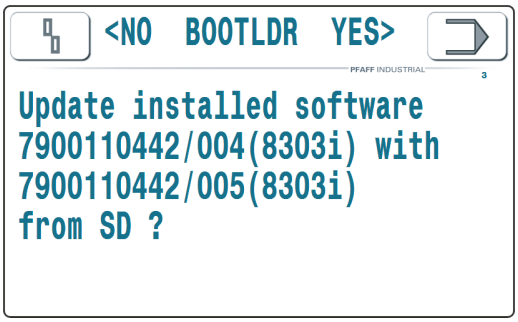
Display text	Description	Response
ERROR: 15013 DC3: START WITH MOTOR OFF	Error DC3: start when motor is switched off	Troubleshoot
ERROR: 15014 DC3: SYNC CMD MASTER	Error DC3: wrong command	Troubleshoot
ERROR: 15015 DC3: DRAG ERROR	Error DC3: contouring error	Troubleshoot
ERROR: 15016 DC3: OVERCURRENT	Error DC3: excess current	Troubleshoot
ERROR: 15017 DC3: ERR HOLDING TORQUE	Error DC3: standstill torque	Troubleshoot
ERROR: 14001 THERMOCOUPLE 1 BROKEN	Temperature control error: thermo element is defective	Troubleshoot
ERROR: 14002 TEMP. REGULATOR CIRCUIT NOT REACTING	Temperature control error: control circuit is not responding	Troubleshoot
ERROR: 14003 TEMP. WINDOW EXCEEDED	Temperature control error: leave temperature window	Troubleshoot
ERROR: 14004 TEMP. REGULATOR CIRCUIT NOT REACTING	Temperature control error: control circuit is not responding (heating)	Troubleshoot

13.10.07 Other messages (explanatory texts)

Display text	Description	Response
NEW OPERATING SOFWARE (RESET TO FACTORY SETTING)	Cold start after software update	Troubleshoot
RESET TO FACTORY SETTING	Cold start with (wire) jumper X10 PIN1-PIN3	Troubleshoot
PLEASE REMOVE X10 1 < - > 3 (ENABLE FACTORY SETTING)	Remove cold start (wire) jumper X10 PIN1-PIN3	Troubleshoot
PLEASE REMOVE X10 1 < - > 2 (OVERWRITE OTE)	Remove (wire) jumper X10 PIN1-PIN2 (overwrite OTE)	Troubleshoot
CRC-CHECKSUM-ERROR RESET TO FACTORY SETTINGS	Cold start because of data errors in the battery-backed memory (possibly check the 3.3 V battery)	Troubleshoot
WARNING.... CRC-CHECKSUM NOT VALID	Possible error during mains failure detection	Troubleshoot

13.11 Software update

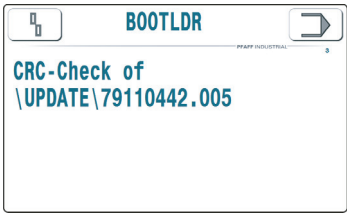
The software of the PFAFF 8303i tape sealing machine can be updated with an SD card.
If an SD card with a software update is inserted in the SD card reader (next to the main switch) before turning on the machine, a special program (boot loader) is activated that performs the software update.

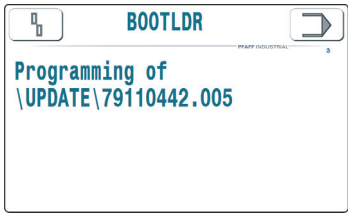


<NO The update is rejected with this function and the existing version is retained. The boot loader starts the previously installed machine software. No settings and sealing parameters are changed.

Note:
The process is repeated when the machine is next switched on if the SD card remains in the reader.

YES> The software update is activated with this function. The boot loader checks the update on the SD card and then programs the new machine software.

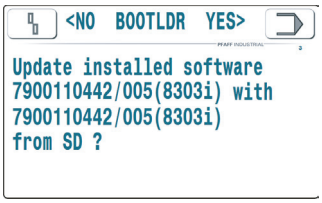




The machine then performs a factory reset and then reads back the stored configurations and settings from the OTE security dongle. The sealing parameter sets P1..P50 are reset, but can be read back again from an SD card at a later stage.

Note:
If the SD card remains in the reader, the boot loader detects that the versions of the installed machine software and the software on the SD are the same when the machine is next switched on. In this case, the update is not offered. The machine is then started up again.

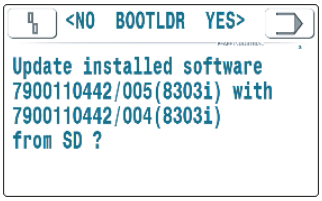
Should a software update be essential for whatever reason, tap on the touch panel when switching on the machine. The boot loader then appears with the same software version.



If the software update on the SD card is incomplete or faulty, the update process is cancelled without changing the previously programmed software. In addition, no settings and sealing parameters are changed.

It should go without saying that the machine must not be switched off during the software update. However, if the power fails during the update, the boot loader detects the faulty programming and prevents the machine starting up until the update has been successfully repeated.

ATTENTION:
The boot loader is activated when the versions of programmed software and the software on the SD card are different. It is therefore also activated when an SD card is inserted with an older version of software.



13.11.01 Software update of the touch panel

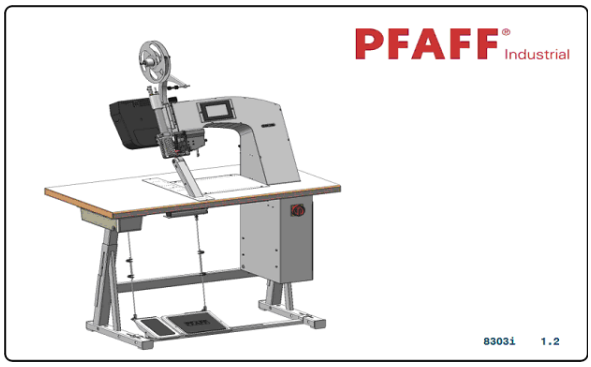
An update of the touch panel may potentially be required when updating the control software. A folder DWIN.SET containing update information for the touch panel can be found on the SD card with the new software.

Loosen the two Allen screws on the control panel when the machine is switched off.

Flip open the control panel and insert the SD card (engage).

Put the control panel back loosely in place and switch on the machine

The control panel initially displays a blue screen for a few seconds. Then all screen templates are displayed briefly in quick succession. The start screen then remains on the display.



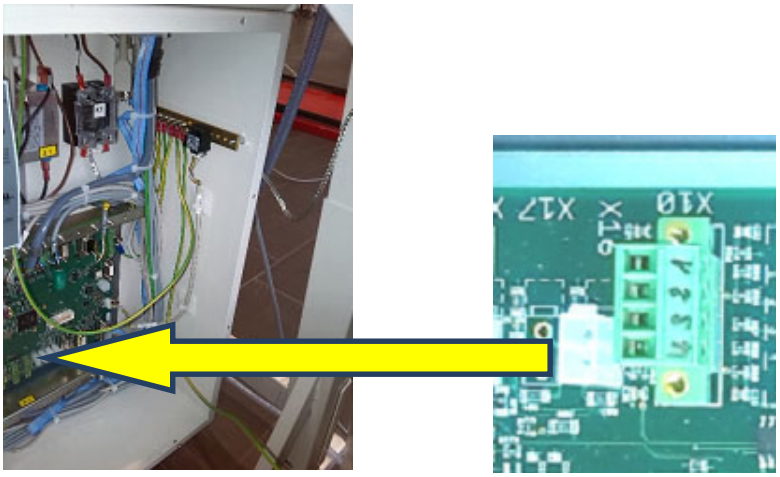
Switch off the machine again, remove the SD card from the control panel and mount the control panel on the housing using the two Allen screws.

13.12 Resetting to factory setting

The sealing parameter sets, settings and parameters for the 8303i are stored in a special battery-buffered module. The data is therefore retained when the machine is switched off.

Sometimes it may be useful to reset this data back to the factory setting.

A simple example is, for example, the function to protect the sealing parameters with a PIN. If a changed PIN is forgotten, it can be reset again to the initial value **0000** with the "Reset to factory setting" function



To do this, insert one or more wire jumpers on the spare terminal X**10** when the machine is switched on and the control box is open (observe the safety regulations), switch on the machine and remove the plug-in terminal upon request. This triggers the following functions:

X**10**:
1) Two (wire) jumpers **1**<->**2** and **1**<->**3** (complete reset):
- All sealing parameter sets P**1**..P**50** are reset
- All settings and configurations are reset to the default setting
- The saved settings and configurations in the OTE security dongle are also reset
- All settings and configurations must be checked and adjusted if necessary.

2) One (wire) jumper **1**<->**3** (partial reset):
- All sealing parameter sets P**1**..P**50** are reset
- All settings and configurations are reset to the default setting
- The saved settings and configurations in the OTE security dongle are read back and overwrite the respective values again.

3) Special case: one (wire) jumper 1<->2 (reset OTE security dongle):
- No sealing parameters, settings and configurations are changed
- However, the OTE security dongle is rewritten with the settings and values from the machine control unit.

Note:
The function 2) No (wire) jumper is automatically carried out after a software update.
The function 2) is recommended after replacing the control unit.
If a 8303iEXT OTE dongle is used on a standard machine, the function 3) must be carried out so that the settings on the 8303i are not lost.

13.13 Special functions of the OTE security dongle

The OTE security dongle mainly ensures that the PFAFF 8303i tape sealing machine is operated with an original PFAFF sealing machine control unit and with original PFAFF software. This is the only way to ensure the proper function of the machine.
The OTE security dongle also have a small flash memory. The main settings and parameters of the 8303i can be stored in it in an additional external memory with power loss protection.
After switching on the control unit, the data in the battery-buffered memory of the control unit and the data in the OTE dongle is checked and synchronised.
The following rules apply:

- If the data in the OTE is error-free, the data is imported from the OTE into the control unit (OTE has priority).
- If the data in the OTE is faulty or incomplete, the checked data in the control unit is copied into the OTE.
- If the data in the control unit is faulty, a factory reset is triggered and displayed. The error-free data is then read from the OTE or faulty OTE data is also reset.

Note:
The (wire) jumpers on the terminal X10 described in the previous section can override these rules.

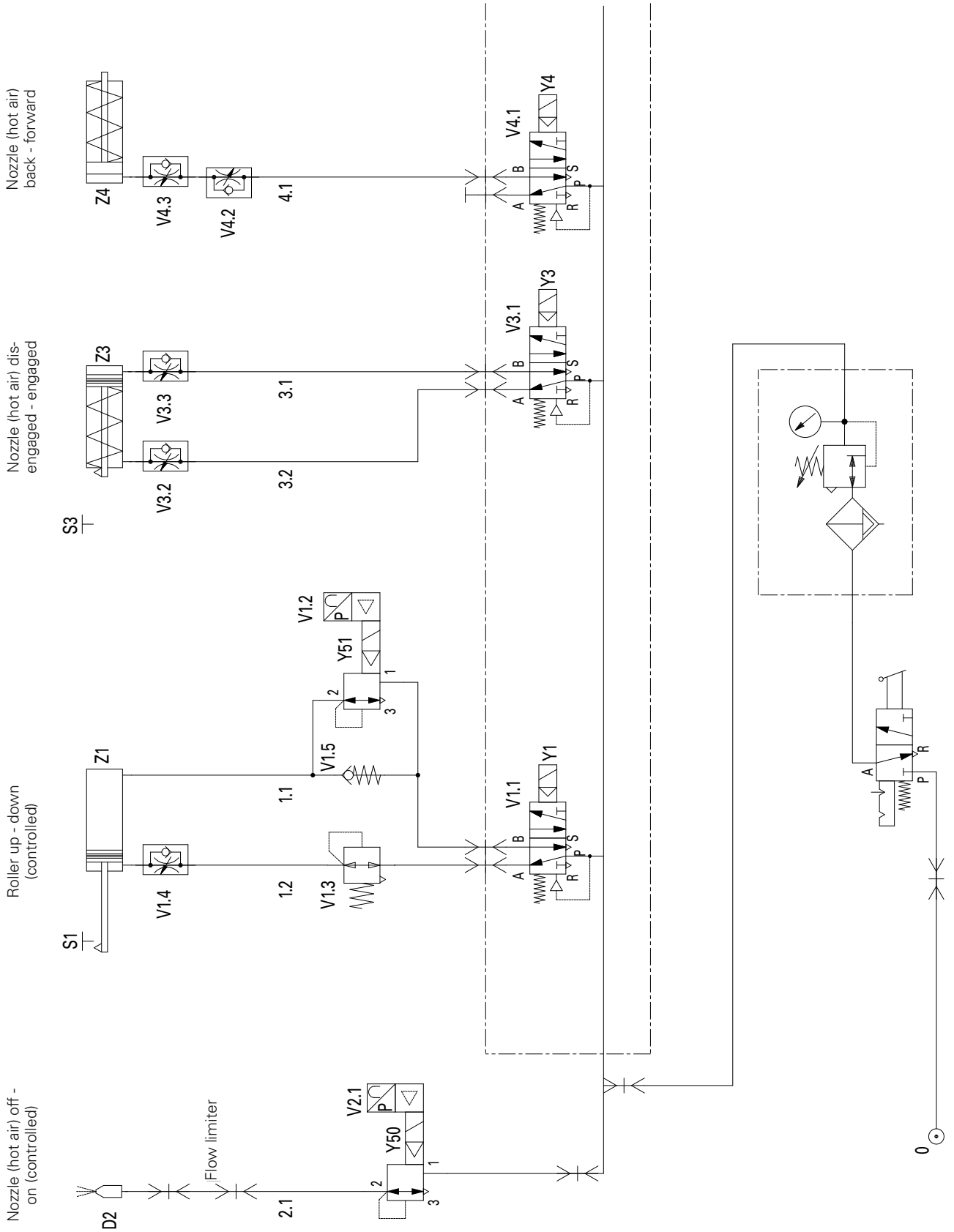
14 Pneumatic Circuit Diagram

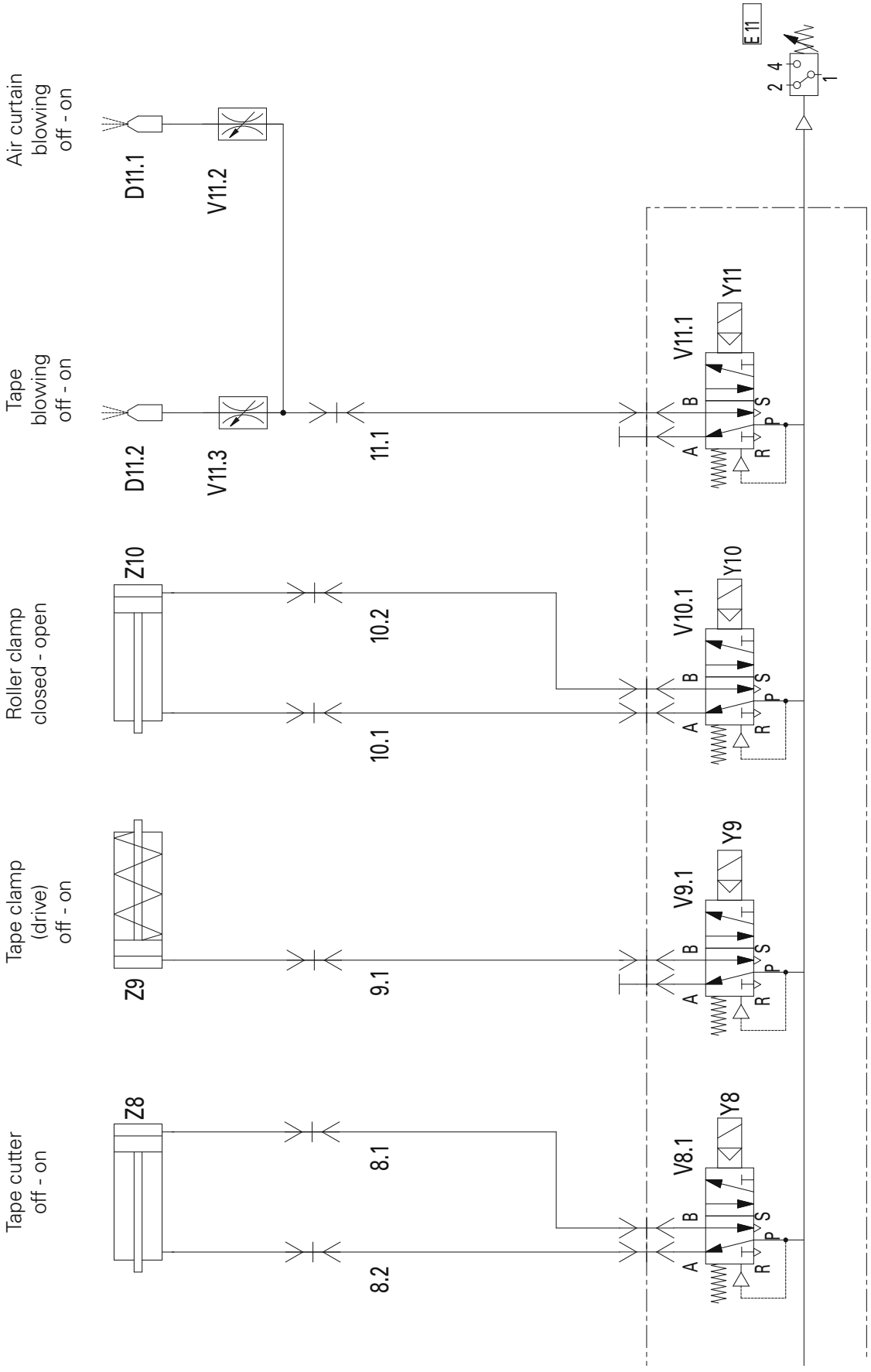
14.01 Reference list for pneumatic diagram 95-257 799-95

V 1.1 (Y1)	5/2-way valve (electrically operated)
V 1.2 (Y51)	Proportional valve for roller pressure
V 1.3	Pressure reducer
V 1.4	Check valve 1/8"
V 1.5	Pressure regulator M5
V 2.1 (Y50)	Proportional valve for air volume
V 3.1 (Y3)	5/2-way valve (electrically operated)
V 3.2	Exhaust throttle M5
V 3.3	Exhaust throttle M5
V 4.1 (Y4)	5/2-way valve (electrically operated)
V 4.2	Exhaust throttle M5
V 4.3	Exhaust throttle M5
V 8.1 (Y8)	5/2-way valve (electrically operated)
V 9.1 (Y9)	5/2-way valve (electrically operated)
V 10.1 (Y10)	5/2-way valve (electrically operated)
V 11.1 (Y11)	5/2-way valve (pneumatically operated)
V 11.2	Check valve
V 11.3	Check valve
Z 1	Cylinder, double-acting Ø32, lift 30
Z 3	Cylinder, double-acting Ø20, lift 50 with return spring
Z 4	Cylinder, double-acting Ø25, lift 30
Z 8	Cylinder, double-acting Ø12, lift 15
Z 9	Cylinder, double-acting Ø12, lift 3.8
Z 10	Cylinder, double-acting Ø12, lift 5
D 2	Hot air nozzle
D 11.1	Air blast nozzles (air curtain on the tape cutter)
D 11.2	Air tube on the tape cutter
S 1 (E1)	Cylinder switch on Z1
S 3 (E3)	Cylinder switch on Z3
E 11	Pressure control on maintenance unit

14.02 Pneumatic circuit diagram

The pneumatic diagram is drawn in the machine's home position. The power (air and electricity) is connected. The components are in a fixed state.



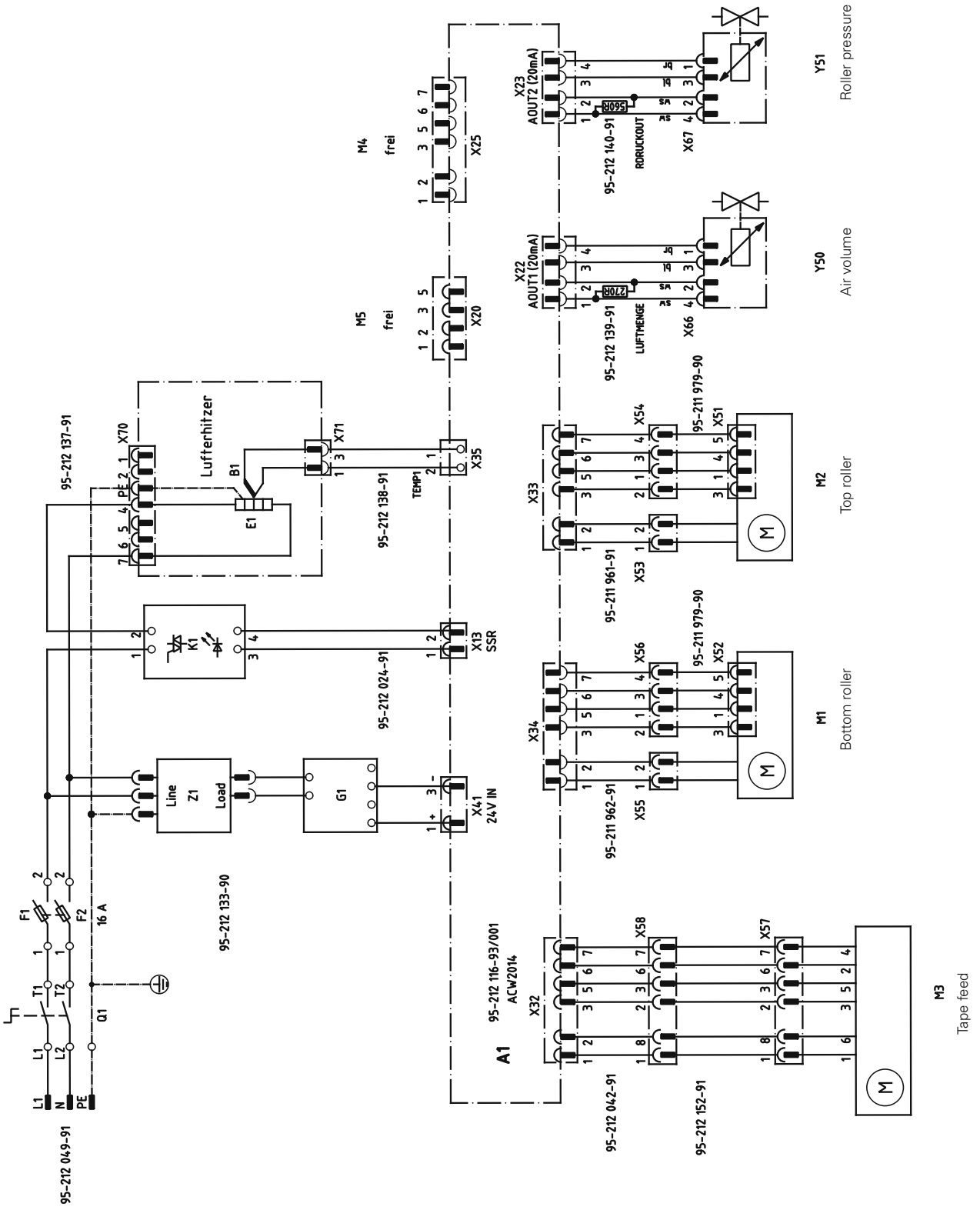

E11
2 4
1
Air curtain blowing off - on
D11.1
V11.2
Tape blowing off - on
D11.2
V11.3
11.1
V11.1
Y11
Roller clamp closed - open
Z10
10.2
10.1
V10.1
Y10
Tape clamp (drive) off - on
Z9
9.1
V9.1
Y9
Tape cutter off - on
Z8
8.1
8.2
V8.1
Y8
A
B
R
P
S

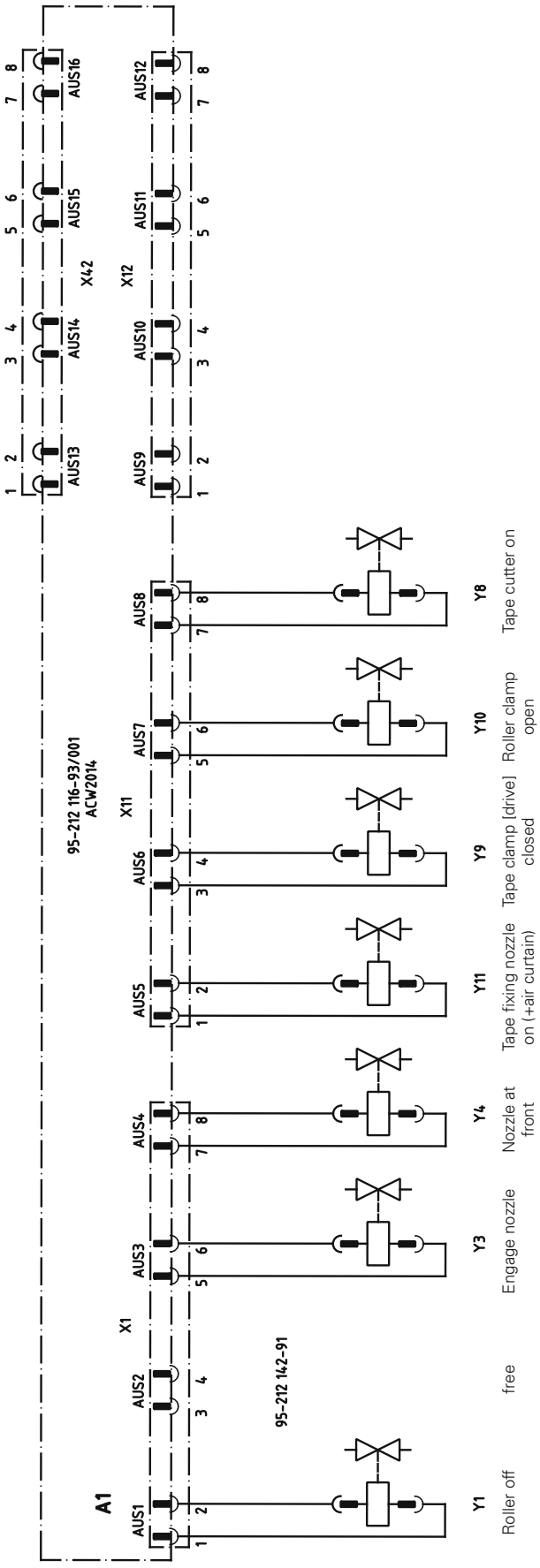
15 Circuit Diagrams

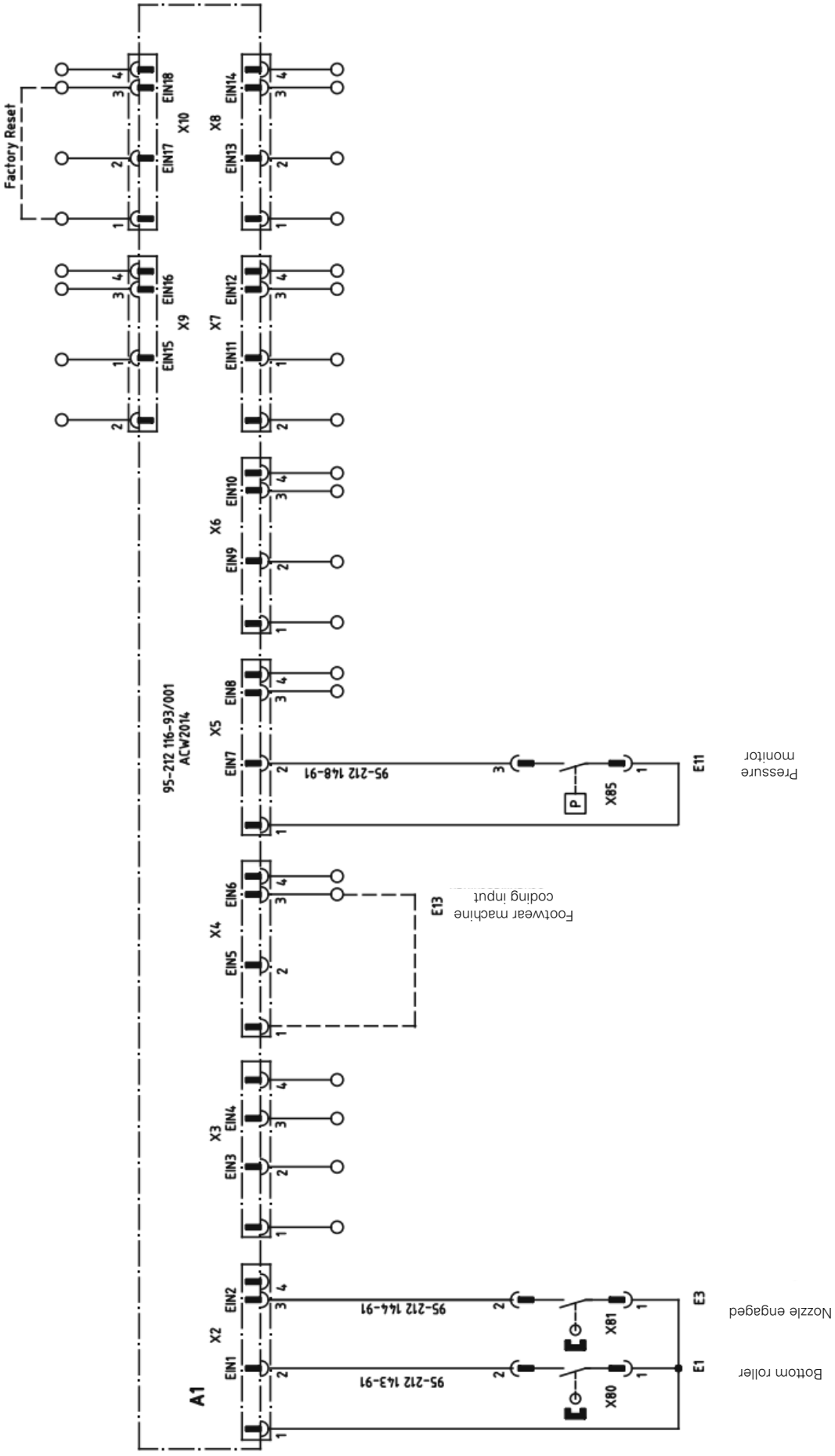
15.01 Reference list for circuit diagrams 95-212 130-95

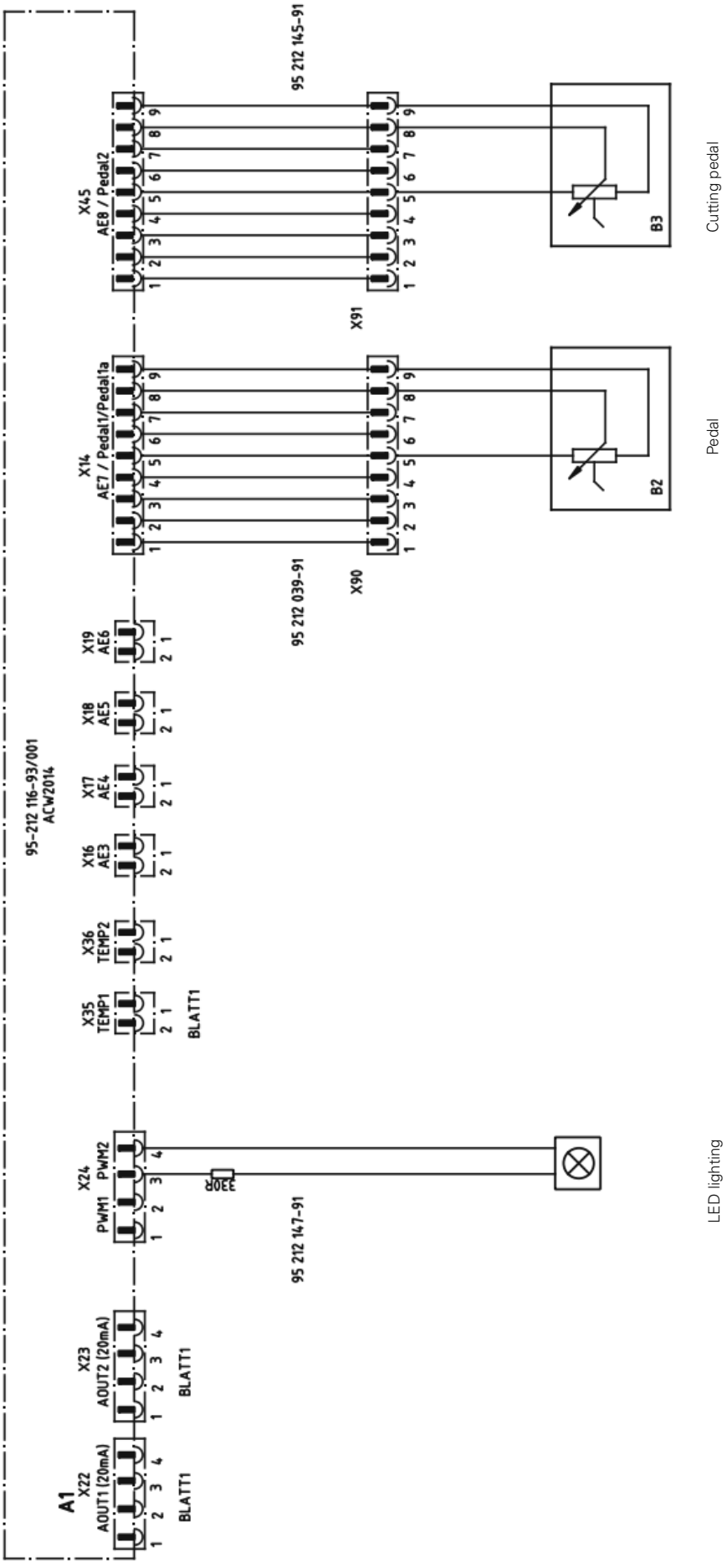
A1	Control device ACW 2014
A2	Control panel (BDF T1)
B1	Temperature sensor 1 (cartridge)
B2	Pedal
B3	Cutting pedal
M1	DC motor (bottom roller)
M2	DC motor (top roller)
M3	DC motor (tape feed)
E1	Bottom roller
E3	Nozzle engaged
E11	Pressure controller
E13	Footwear machine coding input
F1	Fuse 16A L1
F2	Fuse 16A L2
G1	Power supply –24V, 5A
K1	Solid state relay
Q1	Main switch
Y1	Roller down
Y3	Engage nozzle
Y4	Front nozzle
Y8	Tape cutter on
Y9	Tape clamp closed
Y10	Roller clamp closed
Y11	Tape fixing nozzle on
Y50	Air volume
Y51	Roller pressure
Z1	Mains filter

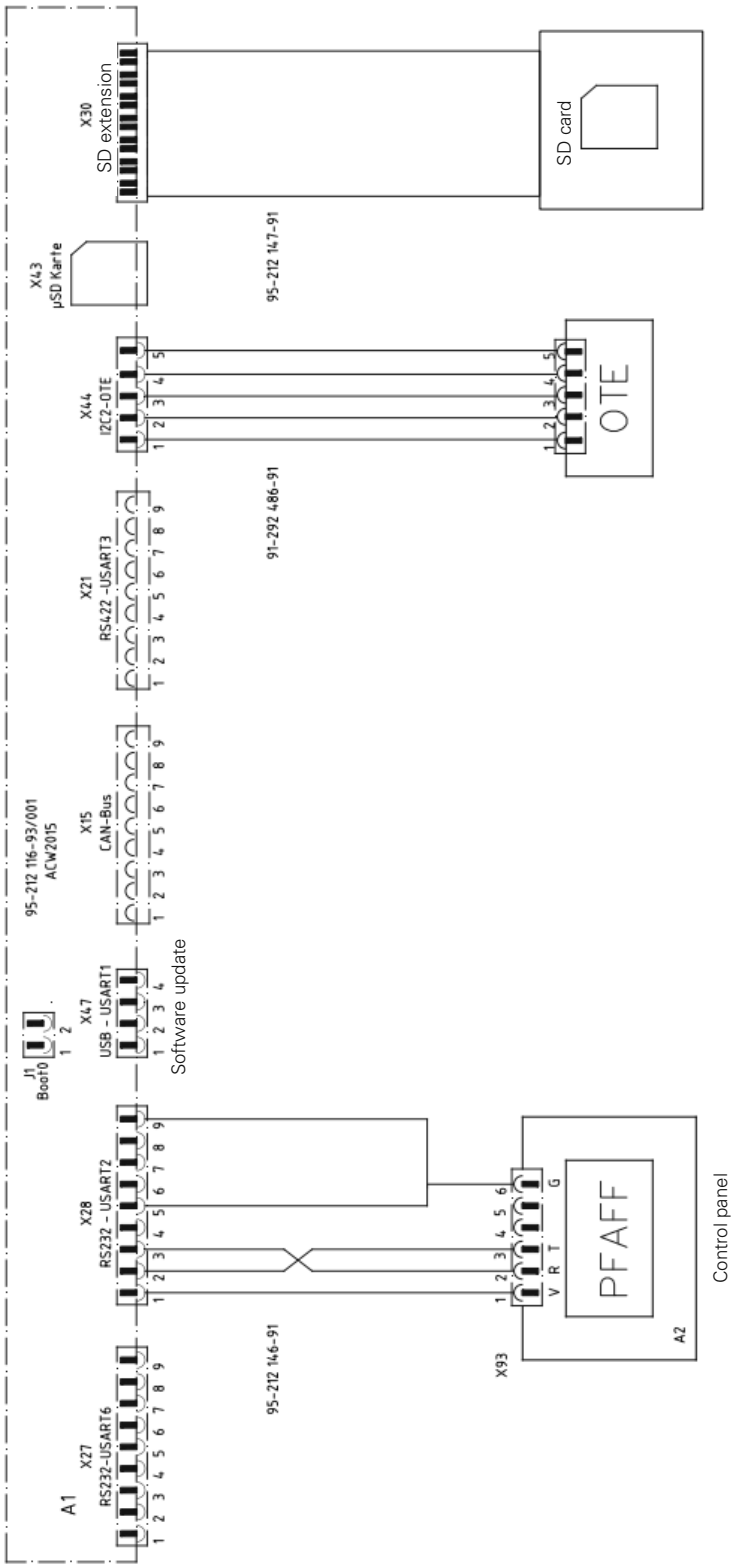
15.02 Circuit Diagrams 95-212 130-95




A1
95-212 116-93/001
ACW2014
95-212 142-91
X1
X42
X11
X12
AUS1
AUS2
AUS3
AUS4
AUS5
AUS6
AUS7
AUS8
AUS9
AUS10
AUS11
AUS12
AUS13
AUS14
AUS15
AUS16
Y1 Roller off
free
Y3 Engage nozzle
Y4 Nozzle at front
Y11 Tape fixing nozzle on (+air curtain)
Y9 Tape clamp [drive] closed
Y10 Roller clamp open
Y8 Tape cutter on

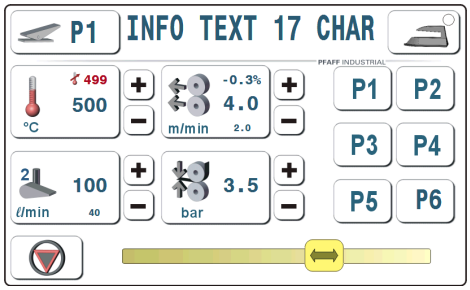

Factory Reset
A1
95-212 116-93/001
ACW2014
X10
X9
X8
X7
X6
X5
X4
X3
X2
EIN18
EIN17
EIN16
EIN15
EIN14
EIN13
EIN12
EIN11
EIN10
EIN9
EIN8
EIN7
EIN6
EIN5
EIN4
EIN3
EIN2
EIN1
95-212 148-91
95-212 144-91
95-212 143-91
X85
X81
X80
P
E11
E13
E3
E1
Pressure monitor
Footwear machine coding input
Nozzle engaged
Bottom roller


95 212 145-91
X45
AE8 / Pedal2
X91
B3
Cutting pedal
X14
AE7 / Pedal1/Pedal1a
X90
B2
Pedal
95 212 039-91
X19
AE6
X18
AE5
X17
AE4
X16
AE3
95-212 116-93/001
ACW2014
X36
TEMP2
X35
TEMP1
BLATT1
X24
PWM1 PWM2
LED lighting
95 212 147-91
X23
AOUT2 (20mA)
BLATT1
A1
X22
AOUT1 (20mA)
BLATT1

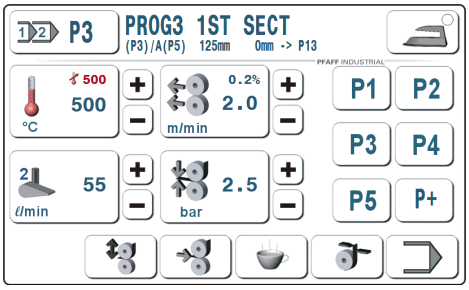

A1
X27
RS232-USART6
X28
RS232 - USART2
X47
USB - USART1
J1
Boot0
95-212 116-93/001
ACW2015
X15
CAN-Bus
X21
RS422 -USART3
X44
I2C2-OTE
X43
µSD Karte
X30
SD extension
Software update
95-212 146-91
91-292 486-91
95-212 147-91
X93
PFAFF
V R T G
A2
Control panel
OTE
SD card

16 Advanced functions with the 8303iEXT OTE security dongle

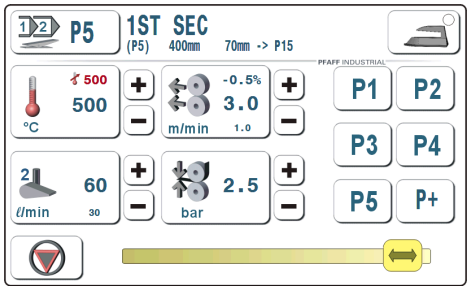
16.01 Description of the function keys



Dynamic sealing



Programmed sealing

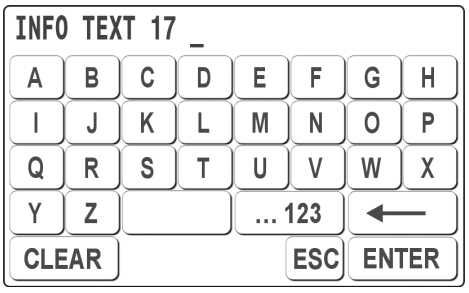


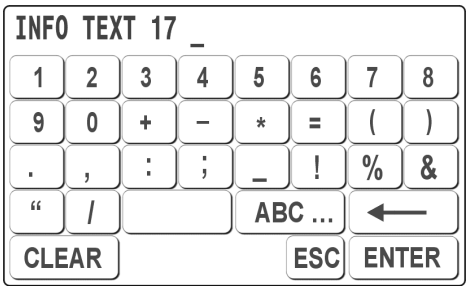
Programmed dynamic sealing

Description of the functions

Sealing parameters and program number selection
The function opens the menu for entering the program number or for selecting the sealing parameters, see **chapter 16.02 Selecting sealing parameters and program numbers**.

INFO TEXT 17 CHAR Comment
A new screen for entering a comment text is displayed by clicking on the field. A maximum of 17 characters can be entered and edited.





– This character appears as a cursor for text input.

These keys are used to switch from the input of alphanumeric characters to special characters and vice versa. The comment text is displayed later as information text in the sealing program selection and program management functions.

Delete individual characters.

CLEAR
Delete an entire line.

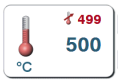
ESC
The input is cancelled without changing the value and you return to the previous screen input.

ENTER
Confirm entry.

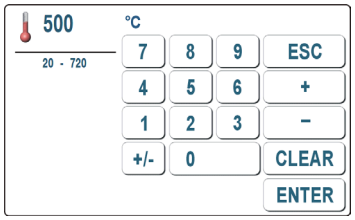
Ironing
This is used to switch on the ironing function. There is a choice of two ironing functions:
- Cold ironing, see **chapter 10.05 Ironing-cold ironing**.
- Hot ironing, see **chapter 10.06 Ironing-hot ironing**.

The pedal functions are used to switch between cold and hot ironing, see **chapter 7.03 Pedal**.

16.01.01 Setting the sealing temperature



These functions are used to change the sealing temperature
The temperature can be entered directly by pressing the key.



ESC
The input is cancelled without changing the value and you return to the previous screen input

CLEAR
Delete an entire line.

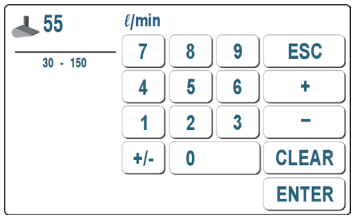
ENTER
Confirm entry.

The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key

If the temperature is changed, the machine cannot be started until the difference between the target temperature and actual temperature is within the temperature window of +/- 10 °C. The flashing of the thermometer symbol shows this status.

16.01.02 Setting the hot air volume (programmed sealing)

These functions are used to change the hot air volume
The hot air volume can be entered directly by pressing the key.



ESC
The input is cancelled without changing the value and you return to the previous screen input

CLEAR
Delete an entire line.

ENTER
Confirm entry.

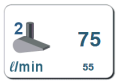
The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key

The selection of the hot air volume and nozzle type determine the heating control parameters.

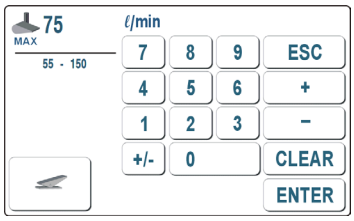
The current nozzle type (narrow **1**, average **2**, wide **3**) is displayed.

The nozzle type can be set in chapter **11 Input** under **11.01 Description of the function keys**.

16.01.03 Setting the hot air volume (dynamic and programmed dynamic sealing)

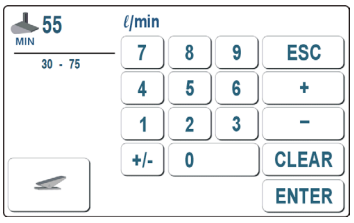


These functions are used to change the hot air volume
The limit values for the hot air volume (**max** and **MIN**) are entered by pressing the key.
The **max value** is shown as a large number. The **MIN value** is shown as a small number under the **max value**. Enter the **MAX value** first.



The toggle key is used to switch from **MAX** to **MIN** and vice versa.

Enter the **MIN value**.



ESC
The input is cancelled without changing the value and you return to the previous screen input

CLEAR
Delete an entire line.

ENTER
Confirm entry.

The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key. Only the **MAX value** can be changed with this function.

The selection of the hot air volume and nozzle type determine the heating control parameters.

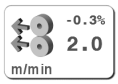
The **MAX value** is always greater than the **MIN value**.

The hot air volume is interpolated and adjusted in a linear manner from the **min** and **max value** from the current pedal position in sealing mode.

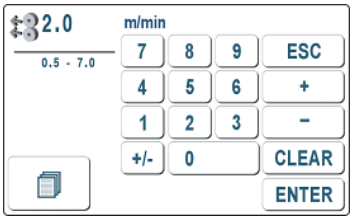
The current nozzle type (narrow **1**, average **2**, wide **3**) is displayed.

The nozzle type can be set in chapter **11 Input** under **11.01 Description of the function keys**.

16.01.04 Setting the feed roller speed (programmed sealing)



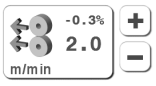
These functions are used to change the feed roller speed.
The feed roller speed for the bottom and top feed roller can be entered together by pressing the key.



ESC
The input is cancelled without changing the value and you return to the previous screen input.

CLEAR
Delete an entire line.

ENTER
Confirm entry.

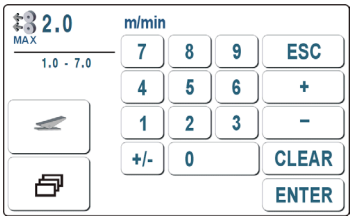


The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key

The maximum feed roller speed is dependent on the gear assembly and roller diameter used. The roller configuration "CONFIG" can be set in chapter **11 Input** under **11**.01 **Description of the function keys**.

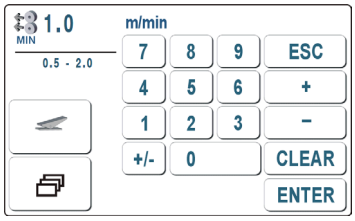
16.01.05 Setting the feed roller speed (dynamic and programmed dynamic sealing)

These functions are used to change the feed roller speed.
The limit values for the feed roller speed. (**Max** and **MIN**) can be entered by pressing the key. The **max value** is shown as a large number. The **MIN value** is shown as a small number under the **max value**. Enter the **MAX value** first.



The toggle key is used to switch from **MAX** to **MIN** and vice versa.

Enter the **MIN value**.



ESC
The input is cancelled without changing the value and you return to the previous screen input.

CLEAR

CLEAR
Delete an entire line.

ENTER

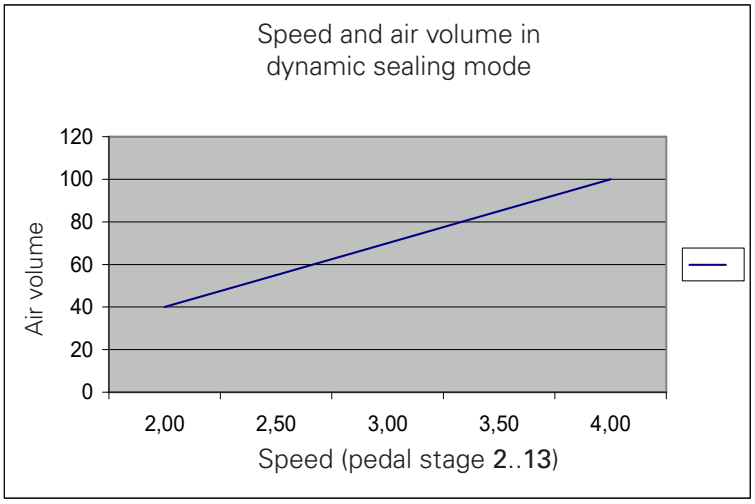
ENTER
Confirm entry.

The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key. Only the **MAX value** can be changed with this function.

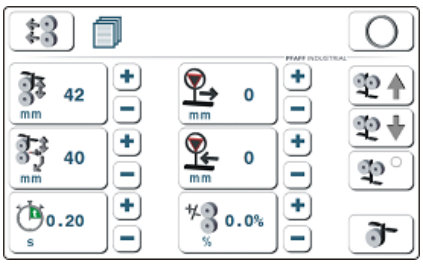
The **MAX value** is always greater than the **MIN value**.

The speed and air volume are interpolated and adjusted in a linear manner from the **min** and **max value** from the current pedal position in sealing mode.

The maximum feed roller speed is dependent on the gear assembly and roller diameter used. The roller configuration "**CONFIG**" can be set in chapter **11 Input** under **11.01 Description of the function keys**.

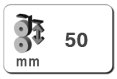


Other parameters key.

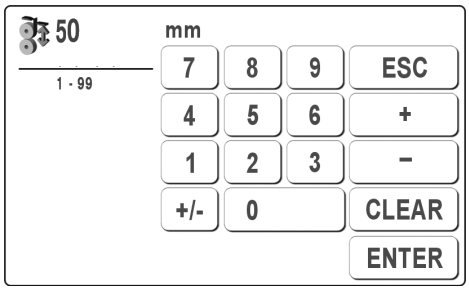


Tape feed

The tape feed is the distance that the tape is fed after the cutting process before it is detected by the roller clamp. Only then can the tape be transported by the top roller at the desired sealing speed. The tape feed motor would be unable to do this.
The tape feed is set after the cutting process with the numeric keypad or the scroll keys. If the tape is already in the home position, the changed values are implemented with all 3 rollers so that a new cutting process is not necessary



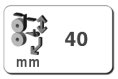
These functions are used to change the **tape feed**.
The tape feed can be entered directly by pressing the key.



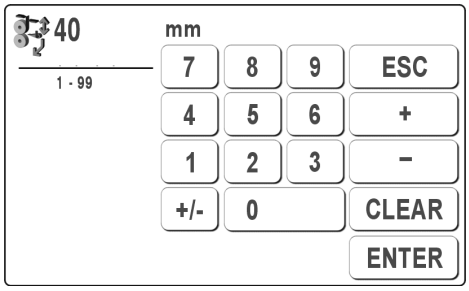
The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key

Disengaging distance

After cutting, a band on the length of the tape cut clearance remains that still needs to be applied. The hot air nozzle can disengage as soon as the rest of the tape has passed the nozzle and has therefore been heated. This distance is hereby entered.



These functions are used to change the **disengaging distance**.
The disengaging distance can be entered directly by pressing the key.

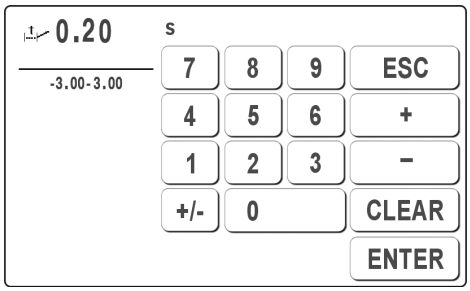


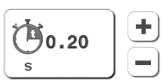
The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key

Start delay

The start delay is the holdoff time between engaging the nozzle and starting up the rollers. It can be entered as a positive and negative value.
A time => 0 begins when the nozzle is engaged and at the front. It is needed to activate the adhesive at the start of the tape.
If a negative holdoff time is entered, the time begins immediately with the engaging of the nozzle. This means with short times that the rollers can already start before the nozzle is completely engaged. This setting is required with thin tapes and high air volumes, otherwise the tape would burn at the start.

These functions are used to change the **start delay**.
The start delay can be entered directly by pressing the key.



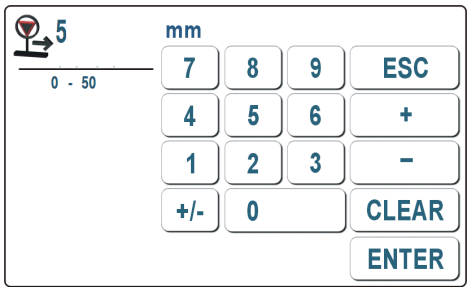


The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key

Follow-up movement after stop

If the sealing process is cancelled with the pedal or stop key, it may be useful for the rollers to continue to run a distance while the heating element disengages. This can avoid the tape burning.

These functions are used to change the set value.
The set value can be entered directly by pressing the key.

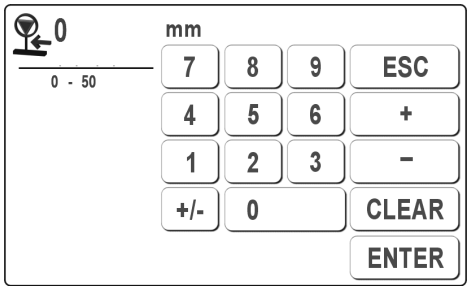


The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key

Reverse after stop

If the sealing process is cancelled with the pedal or stop key, it may be useful for the rollers to reverse a distance

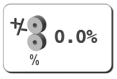
These functions are used to change the set value.
The set value can be entered directly by pressing the key.



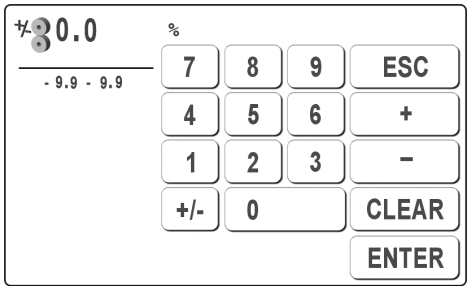
The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key

Differential

The difference in speed between the top and bottom feed roller can be entered by pressing the differential key. The bottom feed roller is the guide roller that turns at the set feed roller speed. The top feed roller can be set at a faster or slower speed. The input is made as a percentage value.



These functions are used to change the set value.
The set value can be entered directly by pressing the key.



The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key

Thread tape

These keys are used to thread the tape when the tape drive roller is switched on.

Fix tape

The tape drive roller is switched on or off with these keys.

Cut and feed tape

This key is used to cut the tape and feed it around the tape feed (reference cut).

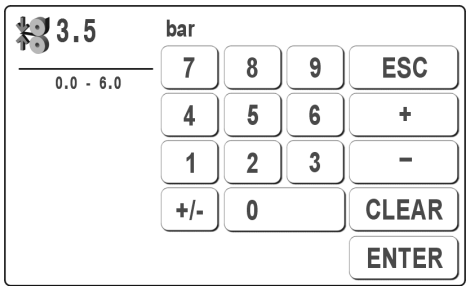
Back to start menu

This key takes you back to the start menu e.g. manual sealing.

This key takes you back to the set feed roller speed menu.

16.01.06 Feed roller pressure

These functions are used to change the feed roller pressure.
The feed roller pressure can be entered directly by pressing the key.



The respective setting value displayed next to it can be increased or decreased by pressing and holding the corresponding plus/minus key

16.01.07 Opening / closing the feed rollers

The feed rollers can be opened and closed with this key.

If the rollers are opened after the sealing process has been interrupted, the tape will be cut in the current software and hang loosely on the sealing material.

If the material between the closing rollers is thicker than 8 mm, a safety shutdown is activated that immediately opens the rollers again. The purpose of this safety shutdown is to prevent the operator's hand becoming trapped.

16.01.08 Starting the sealing process manually

The sealing process can be started manually or an interrupted sealing process can be continued again with the start key. This key works in parallel to the pedal.
The initiated sealing process can be ended with the cutting pedal. The tape is cut, the remaining tape is applied and then the machine stops automatically. The tape is finally fed in again and the 8303i is ready for the next sealing process.

The key appears only when the rollers are closed.

16.01.09 Interrupting the sealing process

The current sealing process can be interrupted with this key. The key works in parallel to the pedal.

The key appears only after the start of the sealing process.

16.01.10 Manually turning the rollers backwards

The drive rollers are started in reverse by pressing the – manually turn the rollers backwards – key in stop mode. They run as long as the key remains pressed. The rollers stop if the key is released.

The feed rollers are started in the same way in the sealing direction (forwards) when the cutting pedal is pressed in stop mode.

A function is available in input mode to test the movement of the rollers in both directions (rollers forwards-backwards), see chapter **11 Input** under **11**.01 **Description of the function keys.**

16.01.11 Pause key

The PAUSE function key is used to cool the machine down to a temperature below 60°C with an increased volume of air

16.01.12 Cutting the tape

This key is used to cut the tape and then feed it in again (tape in home position – also known as a reference cut). The length of the tape feed is set in the "Other parameters key" function on a submenu in the feed roller speed section, see pages **32** and **33**. If the tape is not in the home position before the sealing process, the key flashes and the sealing process cannot be started.

If the key is pressed after the sealing process is interrupted (stop key or pedal), the tape is cut and the sealing process is cancelled.

16.01.13 Input key

This function is used to call up the input menu, see chapter **11 Input** under **11**.01 **Description of the function keys.**

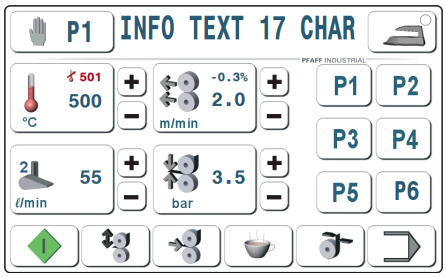
16.02 Selecting sealing parameters and program numbers

The sealing parameters are saved in the machine in 50 data sets P1..P50. P1..P6 can be selected directly with the corresponding keys.

The other data sets (P7..P50) can be selected individually with the program number selection function.
The sealing parameters of the individual data sets are saved in a battery-backed memory and remain saved when the machine is switched off

16.02.01 Selecting sealing parameters P1..P50

The corresponding sealing parameter data sets can be selected directly with the P1..P6 keys when the machine is in the initial state (after cutting the tape or an interruption with opening the feed rollers or cutting the tape key), see chapter **16.02.07 Opening / closing the feed rollers** and chapter **16.02-12 Cutting the tape**



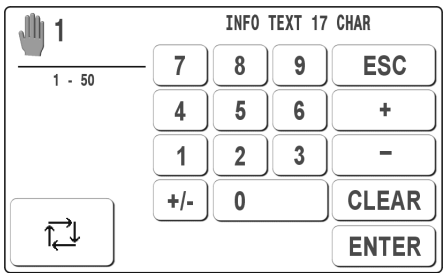
A new screen is opened to select a sealing parameter number P1..P50 by pressing the – program selection – key in manual sealing production mode. The current number and comment is displayed. A new data set can be selected using the numeric keys or scroll keys.

Dynamic sealing production mode (option).

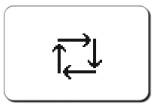
Programmed sealing production mode (option).

Programmed dynamic sealing production mode (option).

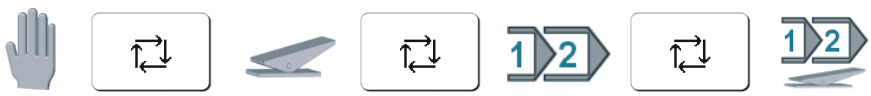
The current operating mode to which this data set is assigned is shown on the top left.
Only manual sealing can be set in the **8303iSTD** basic version.



Operating mode P1 is manual sealing



The operating mode of the selected data set can be reassigned cyclically with the scroll key operating modes. It is only active if one of the above options is available.



Manual Dynamic Program Dynamic program

16.03 Dynamic sealing

All the parameters necessary for the sealing process can be changed directly or indirectly in the dynamic sealing mode. The air volume and sealing speed can be varied infinitely within the set limits with the pedal function.
The dynamic sealing mode is selected with the program number selection function, see chapter **10.03 Selecting sealing parameters and program numbers.**
The pedal symbol next to data set number P1 shows that the dynamic sealing mode has been selected
The sealing process is started with the main pedal and ended with the cutting pedal. The air volume and sealing speed are calculated and issued according to the pedal position and limit values during the sealing process.
Direct input can only be made before or after the process (in STOP mode). The +/ - keys can also be used to adjust the parameters during the sealing process.
The dynamic sealing function is assigned to the data set P1..P50 just like in manual sealing mode and this remains saved even after the 8303i is switched off.

16.03.01 Process in dynamic sealing production mode

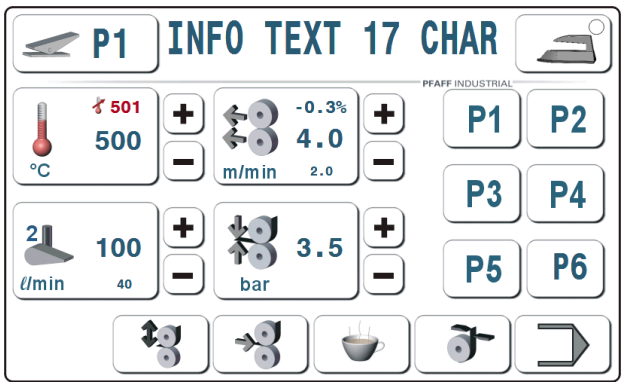


Figure 1: Production, basic dynamic sealing mode, rollers closed or open

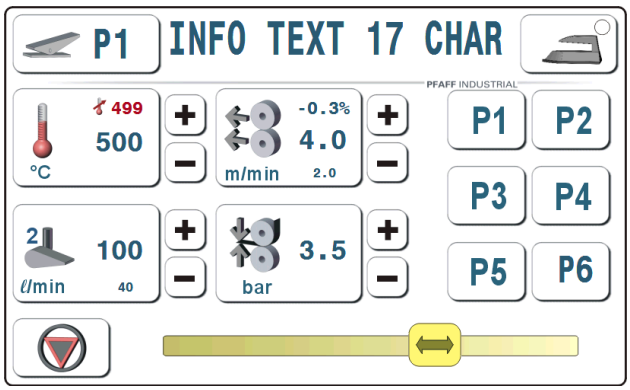


Figure 2: Production, dynamic sealing mode, sealing process is running

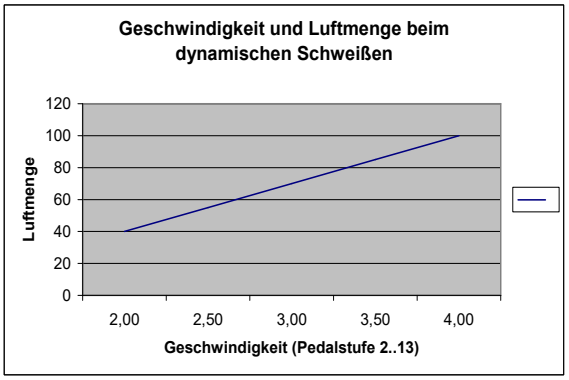


Figure 3:

All functions keys are explained in chapter **16.01 Description of the function keys**

The sealing process is controlled using the pedals. The tape can be fed with the key.
The key is used to switch to ironing mode.
The rollers can be closed with the main pedal or the key when the machine is in the initial state. The roller backwards service function is also available and you can switch to input mode .
The sealing process can be started with the main pedal when the rollers are closed.
The speed and air volume are set depending on the pedal stage, as shown in figure 3.

The current pedal position and the resulting sealing parameters are illustrated with a slider.
In contrast to manual sealing, the dynamic sealing process is not interrupted when the main pedal is in the neutral position. Sealing can therefore be carried out with minimum values without the sealing process being interrupted inadvertently. The machine can be STOPPED or interrupted with the STOP key or by reversing the main pedal.
Alternatively, the rollers can be opened with the main pedal or the key.
It is possible to switch to input mode with the key. A reverse rotation of the rollers can be started with the key.
The temperature and roller pressure, maximum speed and maximum air volume parameters can be changed with the +/− scroll keys in the current sealing process.
The tape cutting cycle is initiated with the cutting pedal. The tape is cut and the sealing process finishes exactly at the end of the tape.
The corresponding sealing parameter data sets can be selected directly when the machine is in the initial state (after cutting the tape or an interruption with opening the rollers or cutting the tape key) with the P1 .. P6 keys.
The PAUSE function is used to cool the machine down to a temperature of 60 °C with an increased volume of air and then it can be switched off.

16.04 Programmed sealing

Programs can be created with up to 12 sections by linking multiple data sets P1..P50 into one unit. It is possible to switch to the next linked data set via the sealing distance (length specification) or with the reverse function of the cutting pedal.
The sealing parameters of the individual sections remain constant during processing.
The tape is generally cut automatically at the end of the last section or at all times with the cutting pedal function.
The first section of the linked data set chain is selected after the cutting process or if the process is interrupted (reverse function of the main pedal).

16.04.01 Process in programmed sealing production mode (option)

Figure 1:

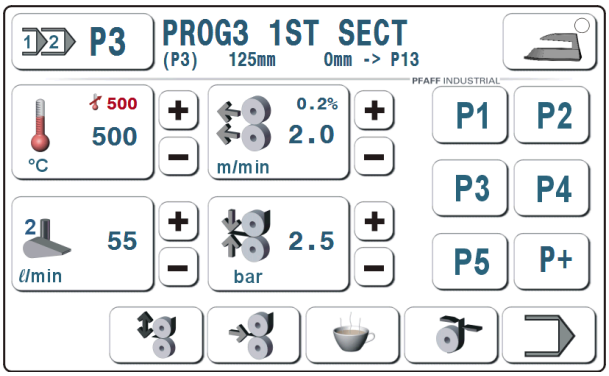


Figure 2:

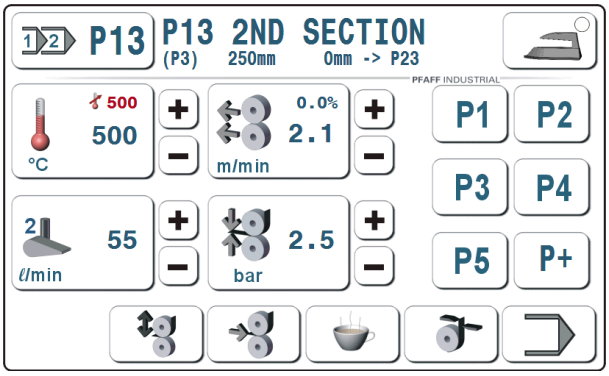


Figure 3:

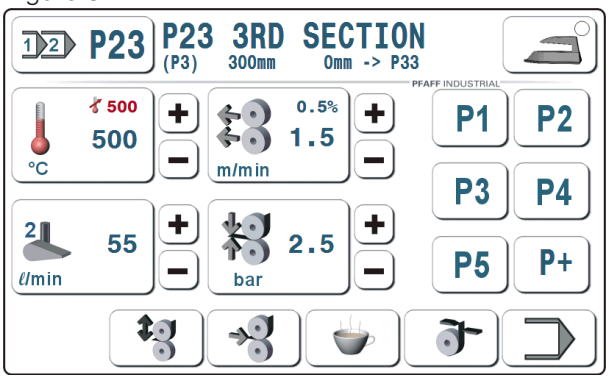
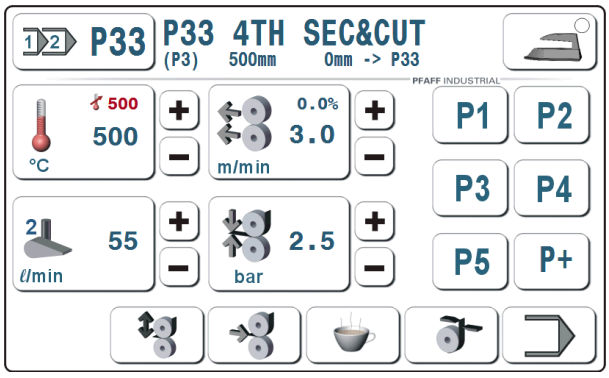


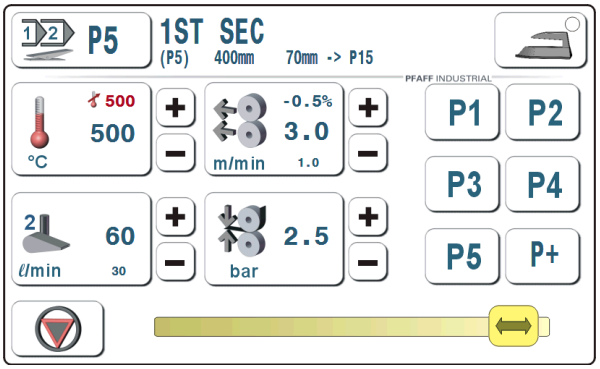
Figure 4:



All combined data sets (P3, P13, P23, P33 here) are displayed with the reconfigured P6 / P+ key. By way of example, (P3) 125 mm 0 mm -> P13 the starting section (P3), the target distance - 125 mm here, the distance covered so far in this section - 0 mm here and the following section - > P13 here is displayed in a 2nd comment line at the top edge
The sealing process is controlled using the pedals and with the , and keys. The tape can be fed with the key. The key is used to switch to ironing mode.
The rollers can be closed with the main pedal or the key when the machine is in the initial state. The roller backwards service function is also available and you can switch to input mode .
The sealing process can be started with the main pedal or the key when the rollers are closed. Alternatively, the rollers can be opened with the pedal or the key. Is it possible to switch to input mode with the key or to call up the roller backwards service function with the key. The current sealing process can be interrupted with the main pedal or the key. The parameters can be changed with the +/- scroll keys in the current sealing process.
The tape cutting cycle is initiated with the cutting pedal or after the last travel distance has been completed (P33 after 500 mm here) depending on the program data. The tape is cut to size and the sealing process finishes exactly at the end of the tape.
The process then moves back to the first section – (P3) here.
The corresponding sealing parameter data sets can be selected directly when the machine is in the initial state (after cutting the tape or an interruption with opening the rollers or cutting the tape key) with the P1 .. P5 keys.
The PAUSE function is used to cool the machine down to a temperature of 60°C with an increased volume of air and then it can be switched off.

16.05 Programmed dynamic sealing

Data sets are combined into one unit of up to 12 dynamic sections in programmed dynamic sealing mode just like in programmed sealing mode.
It is possible to switch to the next linked data set via the sealing distance (length specification) or with the reverse function of the cutting pedal.
The sealing parameters of the individual sections are calculated from the section limit values during processing and issued according to the pedal position.
The tape is generally cut automatically at the end of the last section or at all times with the cutting pedal function..
The first section of the linked data set chain is selected after the cutting process or if the process is interrupted (reverse function of the main pedal).



16.06 Programmed sealing with sequence program

It is possible to jump from one program chain to an alternative program chain after the tape cutting function by entering an alternative starting section. This means that any number of program and dynamic program sequences can be created.

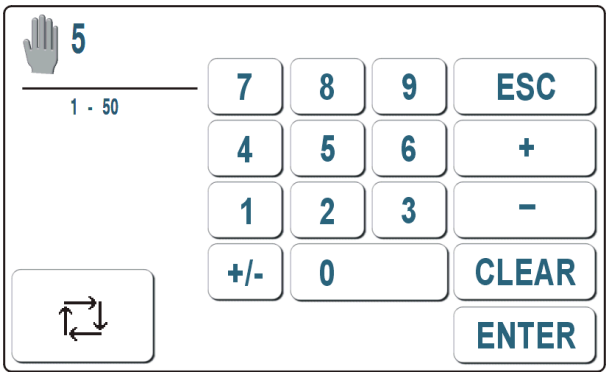
16.07 Linking sealing parameters P1..P50 to a program

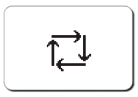
Programs can be created with up to **12** sections by linking multiple data sets P**1**..P**50** into one section. It is possible to switch to the next linked data set via the sealing distance (length specification) or with the reverse function of the cutting pedal.

Example:
In principle, all P**1**..P**50** parameter sets can be linked together in any sequence. However, we recommend the following procedure to simplify the operation:
The P**1**..P**5** parameter sets are always visible as quick selection keys. These should always therefore be selected as the starting section of a new program. The other sections can be selected in a simple numerical interrelation. e.g. P**1**->P**11**->P**21**->P**31**->P**41** etc.

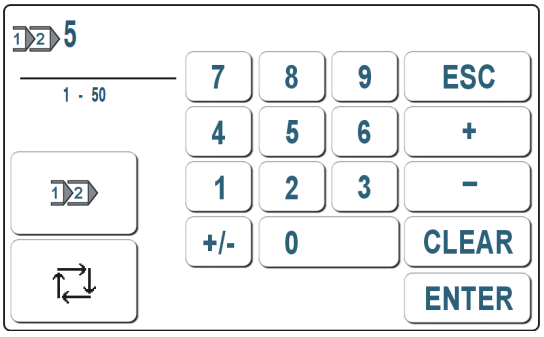
We can now create a program starting with P**5** followed by P**15**, P**25**, P**35** – i.e. **4** sections.

Select the starting section P**5**

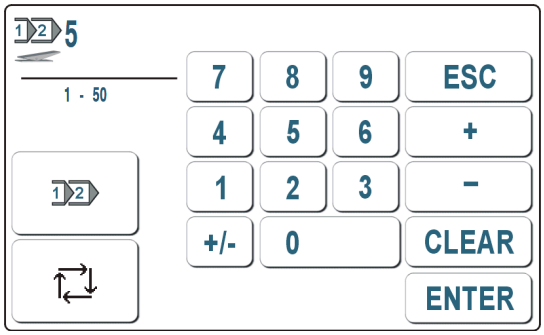




Press (**2**x) for program linkage
Press (**3**x) for dynamic program linkage

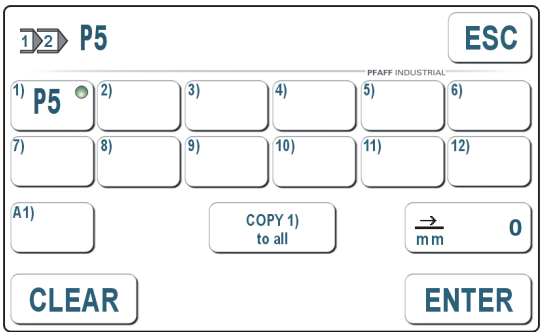


Program linkage

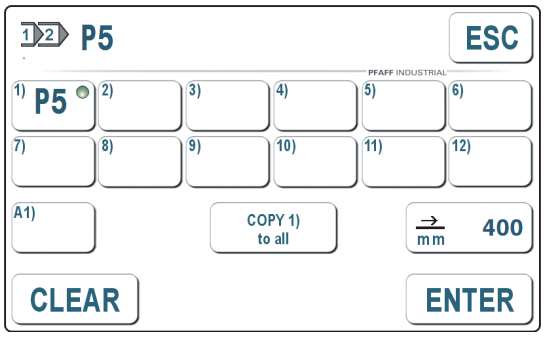


Dynamic program linkage

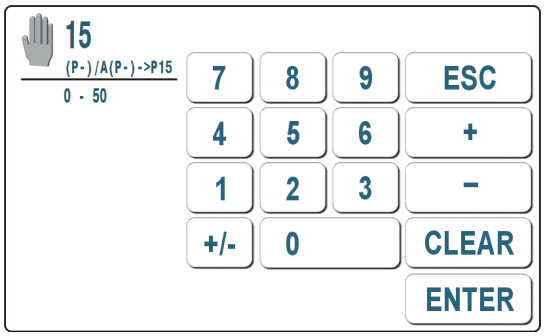
Call up program linkage

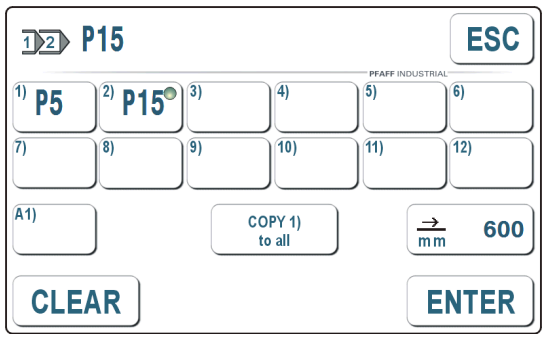


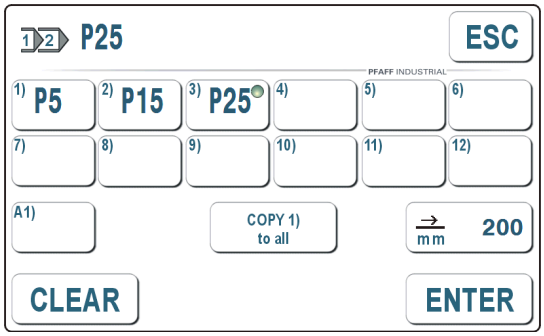
Press the key and enter the length of the selected section.
e.g. the selected section with the active LED field **1**
Press the section length **400** mm and press **Enter**

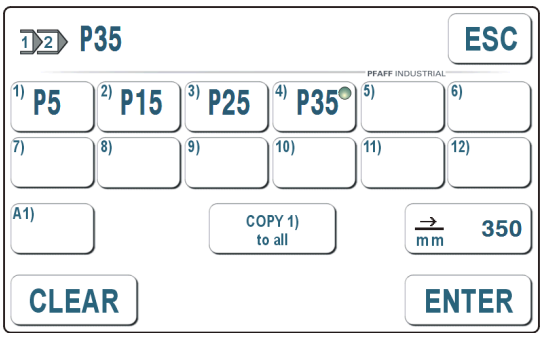


Enter the data sets **P15 P25 P35** and the desired section lengths in the fields 2) 3) 4) one after the other









Additional key functions:

COPY 1) to all

This function copies the sealing parameters of the starting section 1) (with the exception of the section length and comment) into all the sections involved (**P15, P25, P35** in this case).

CLEAR

Deletes all input fields on this form. This means that no changes are made to sections **P1.. P50**.

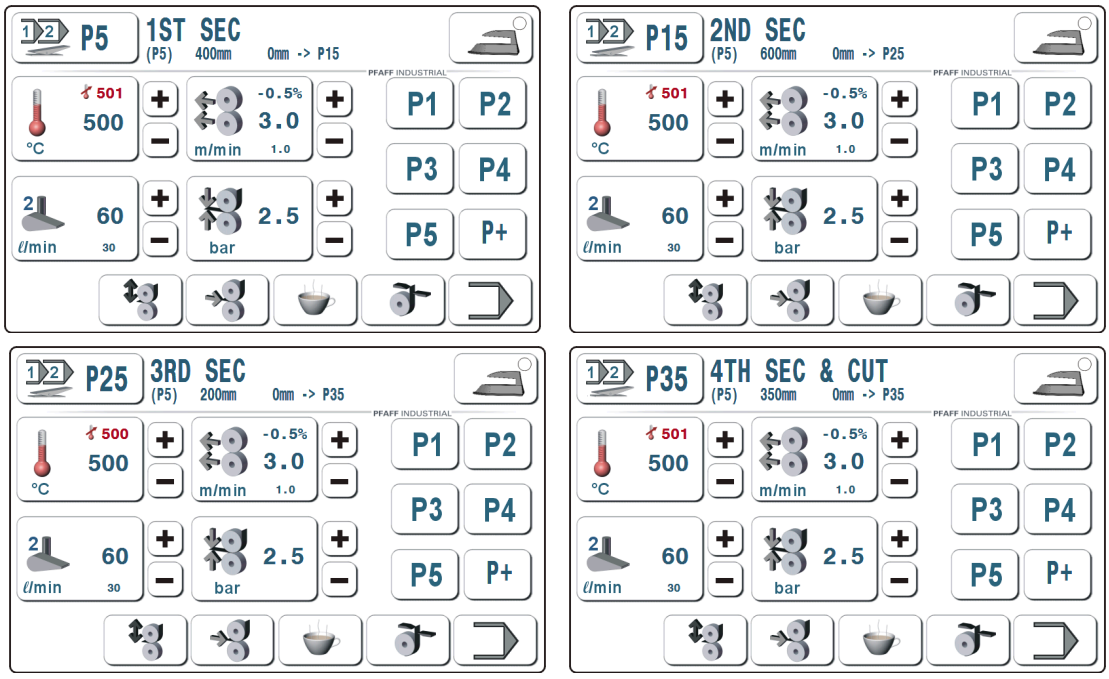
ENTER

Links the sections entered and thus creates the executable program.

ENTER

Pressing **Enter** again selects the program just created.

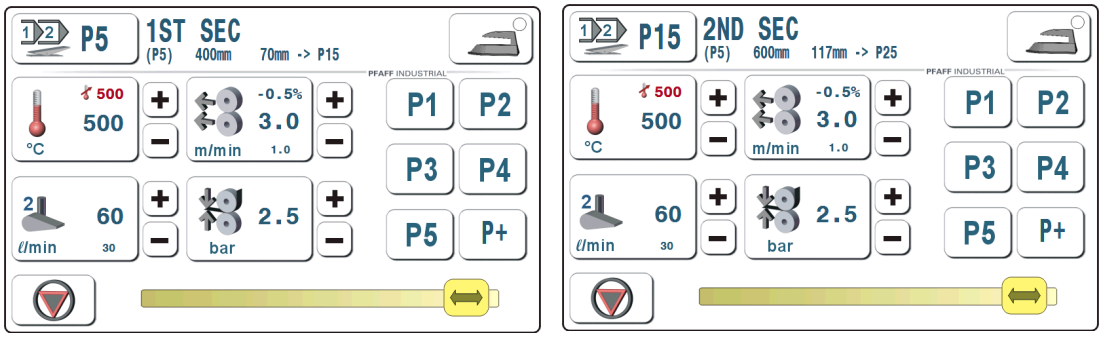
We can describe the individual sections with the comment function. The P+ key can be used to call up the linked sections one after the other.

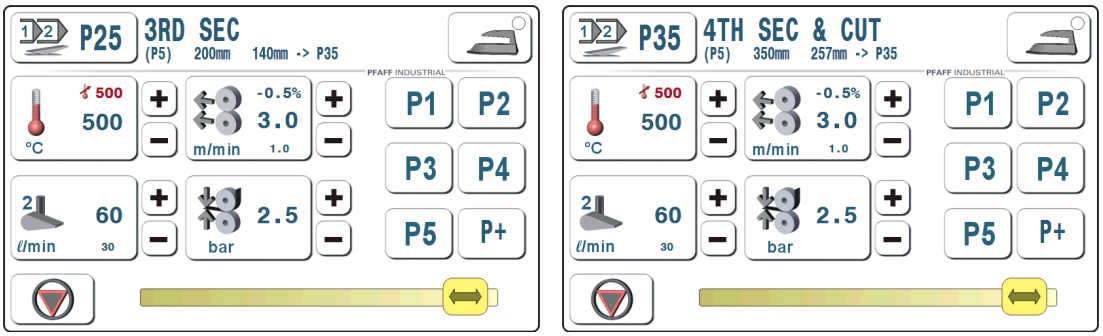


The following rules now apply:

- The sections are processed one after the other.
- The tape is cut in the last section in such a way that the cut edge rests on the end of the section
- The program moves back to the starting section (P5 in this case) after the cutting.
- If the cutting pedal is operated before the automatic cutting, the program is ended correctly and it moves back to the starting section (P5 in this case).
- If the program is cancelled by opening the rollers (reverse pedal) or pressing the roller key, it moves back to the starting section (P5 in this case).

During processing, the progress can be monitored using the status bar below the comment line:





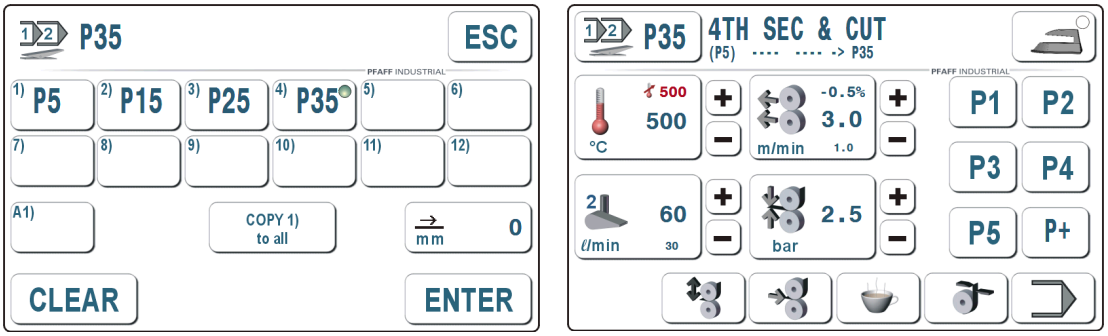
Section P5:
(P5) 400 mm 70 mm -> P15: Starting section P5 - distance 400 mm - currently 70 mm – continue with P15.

Section P15:
(P5) 600 mm 117 mm -> P25: Starting section P5 - distance 600 mm - currently 117 mm – continue with P25.

Section P25:
(P5) 200 mm 140 mm -> P35: Starting section P5 - distance 200 mm - currently 140 mm – continue with P35.

Section P35
(P5) 350 mm 257 mm -> P35: Starting section P5 - distance 350 mm - currently 257 mm continue with P35 i.e. cutting to the end.

The last section could also be carried out without a distance (i.e. distance P35 == 0)

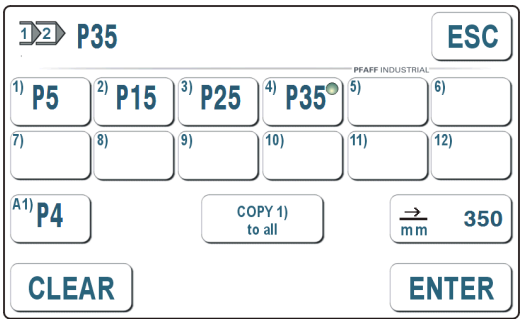


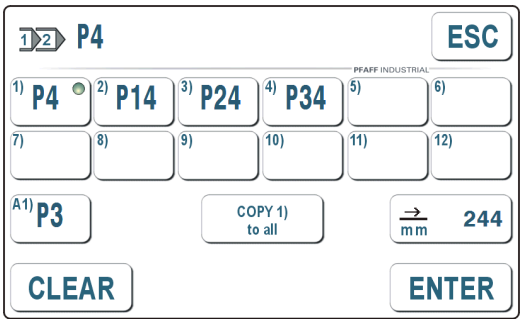
In this case, section P35 represents the following:
(P5) ---- ---- -> P35: Starting section P5 – no distance – current position not displayed, continue with P35 i.e. cutting – by the operator in this case with the cutting pedal

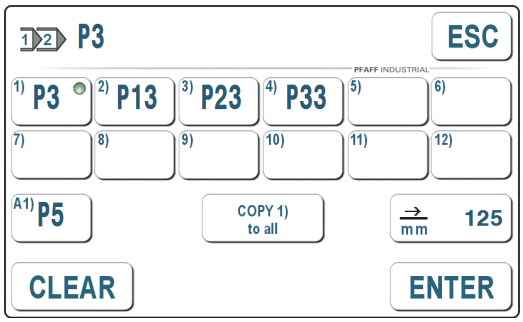
16.08 Linking linked programs to a sequence

If linked programs move to another starting program after the cutting, any complex sequences can thus be created. There is a field A1 in the linkage screen for the alternative start program:

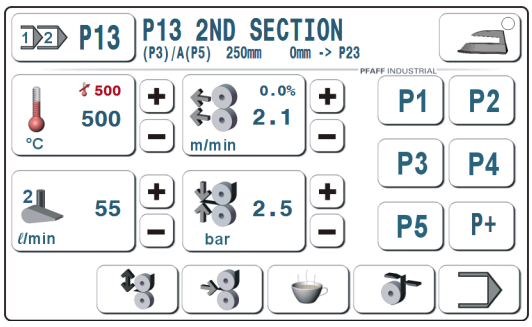
For example, the following linkages apply:







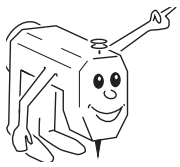
Starting with P5 - P15 - P25 – P35, the program stops in P35 after the cutting and moves to P4.
After starting with P4 – P14 P24 – P34, the program stops in P34 after the cutting and moves to P3.
After starting with P3 – P13 P23 – P33, the program stops in P33 after the cutting and moves to P5.



The linked sections of the entire sequence are called up one after the other with the P+ key.
The display in section P13 represents the following, for example:
(P3)/A(P5) 250 mm 0 mm - >P23
Starting section P3 distance 250 mm currently 0 mm – continue with P23 – new start program P5 after the cutting

The following rules apply for the sequences:

- The sections are processed one after the other.
- The tape is cut in the last section in such a way that the cut edge rests on the end of the section.
- The program moves to an alternative starting section after the cutting (e.g. P4 for P5-P15-P25-P35).
- If the cutting pedal is operated before the automatic cutting, the program is ended correctly at this point and it moves back to the alternative starting section (P4 for P5-P15-P25-P35).
- If the program is cancelled by opening the rollers (reverse pedal) or pressing the roller key, the program moves back to the "normal" starting section (P5 for P5-P15-P25-P35 in this case).



Notes

PFAFF® Industrial

Europäische Union
Wachstum durch Innovation – EFRE

PFAFF Industriesysteme
und Maschinen GmbH

Hans-Geiger-Str. 12 - IG Nord
D-67661 Kaiserslautern

Tel.: +49-6301 3205 - 0
Fax: +49-6301 3205 - 1386
E-mail: info@pfaff-industrial.com

Gedruckt in der BRD / Printed in Germany