

Delivery form Erkopress 300 Tp/300 Tp-ci
please check concerning completeness

Piece: Article:

- 1 **Erkopress 300 Tp**
with pressure regulator/water separator
- 1 **Erkopress 300 Tp-ci**
with integrated compressor and reserve
compressed air

Order number:

171 000

171 500

with accessories as follows:

- 1 **foil securing ring** 170 050
- 1 **foil reception** 171 023
- 1 **granules collecting device** 171 025
- 1 **model plate** 170 026
- 1 **form pot** 171 021
- 1 **brush for granules, incl. magnet** 188 510
to embed the models into the granules,
magnet to collect scattered granules
- 1 **replacement protective foil** 188 506
for display
- 1 **power supply cable** 170 001
- 1 **filling granules (subsequent supply)** 110 852 (1.3 kg)
(supplied with Erkopress 300 Tp/Tp-ci, 1.8 kg)
high-grade steel granules (magnetic)
with rounded edges
- 1 foil trial package including list of contents
- 1 machine documents (folder), instructions, thermoforming technique
manual, material card, ERKODENT program, guarantee card,
declaration of conformity (if applicable)

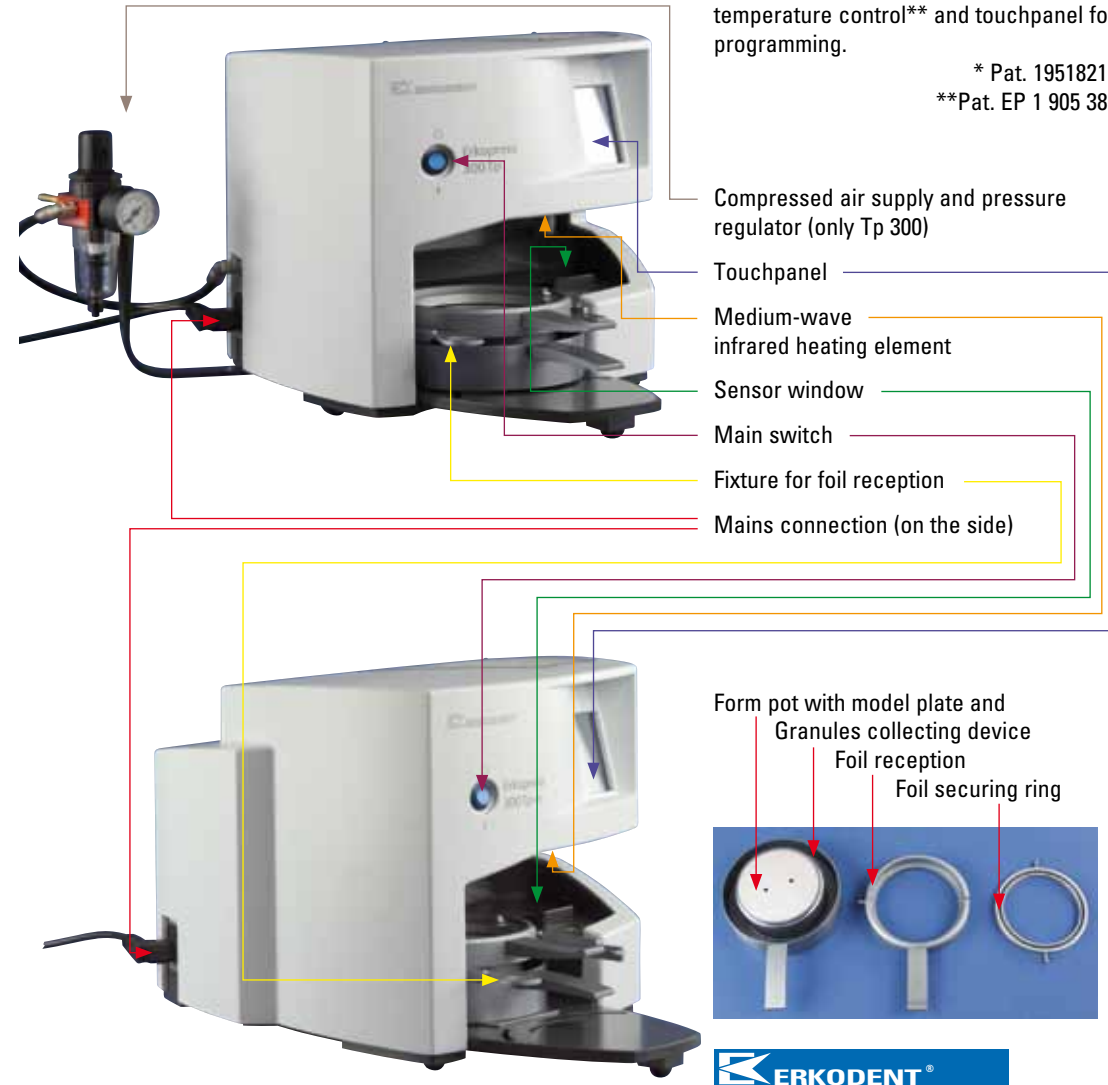
Instructions:

Erkopress 300 Tp Pressure forming unit for connection to the compressed air system available.

Erkopress 300 Tp-ci Pressure forming unit with integrated compressor and reserve compressed air.*

The function of the two units is identical. The units are equipped with a touchless temperature control** and touchpanel for programming.

* Pat. 19518211
**Pat. EP 1 905 380



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Technical data:

Measurement:

Erkopress	300 Tp	300 Tp-ci
height	320 mm	320 mm
width	350 mm	350 mm
depth	430 mm	510 mm
weight	16.7 kg	20.9 kg

Electricity: voltage:	230/240, 50 Hz	230/240, 50 Hz
	115/100, 60 Hz	115/100, 60 Hz
watt:	340 W	480 W

Fuse:	230/240 V	2 x T-2 A	2 x T-2,5 A
	100/115 V	2 x T-6,3 A	2 x T-6,3 A

Heater technique:

medium-wave infrared heater
230/240 V, 50 Hz or 115/100 V, 60 Hz
280 W

Temperature sensor:

touchless infrared sensor
measuring range up to 240 °C

Foil measures: diameter	120 mm
thickness	0 - 6.0 mm

Form pot:	inner diameter	101 mm
	inner height	42 mm

Pressure technique:

Erkopress 300 Tp
operating pressure 3-6 bar
min. system pressure 6 bar
pressure regulator and water separator

Erkopress 300 Tp-ci
with integrated compressor and
reserve pressure 6 bar
operating pressure up to 6 bar
noise level, compressor < 74 db(A)



Spare sealing foil cylinder
110 857



Spare sealing for foil securing ring
110 857

Security

Before starting please read instructions for use. The operator of the machine is responsible for the compliance with regulations for accident prevention concerning technical security. The construction of the Erkopress 300 Tp/Tp-ci unit complies to legal standards.

ATTENTION! Security hints

Always disconnect the unit from the mains supply before carrying out cleaning, maintenance and repair work. Do not touch heater - hot surface! Do not put your hands in the housing. Only operate the machine under supervision. Do not keep highly inflammable materials in direct area of the machine.

Usage as directed

The Erkopress 300 Tp/Tp-ci unit should only be used with suitable dental thermoforming material in diameter 120 mm and thickness of up to 6 mm for forming on suitable models. In case of non-observance, we cannot take any liability or guarantee for damages.

Cleaning and maintenance

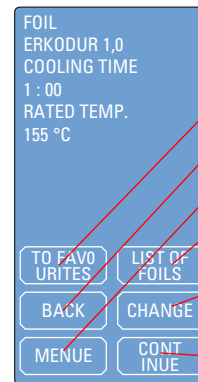
The unit should be cleaned with a damp cloth. Do not use any solvents or other cleaning agents. To ensure that the unit maintains its full function, the rubber seals require replacing once a year when the unit is permanently in use. The new seals should be firmly pushed into position.

Maintenance of the Erkopress 300 Tp and 300 TP-ci please see page 10.

Installation instructions

The Erkopress 300 Tp-ci is connected to electricity independently of a compressed air equipment.
The Erkopress 300 Tp is connected to the compressed air equipment available and to the power supply system.
The appliance should be installed in dry and dust-free conditions and where required stored temporarily.

Functions of display, - selected foil -



- save foil as favourite
- one program step back
- back to the basic display
- back to the foil list, select another foil
- change cooling time and rated temperature for this foil
- to thermoforming



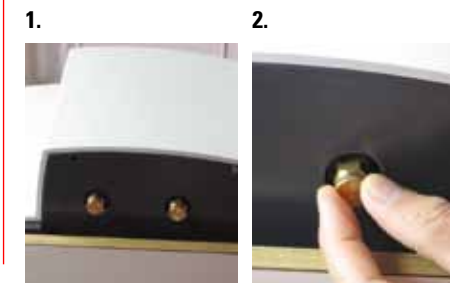
Maintenance Erkopress 300 Tp

The condensation water level in the water separator (page 2) must not exceed the marking "max". To drain water press the black drain for water removal upwards with a suitable cup.

Maintenance of the Erkopress 300 Tp-ci

The integrated compressed air system can create condensation water. In order to avoid a damaging of the system this potentially existing condensation water should be drained **monthly**.

There to pull the backside of the unit as far across the table edge that the two drain screws will be freely accessible (1.). Drain the water into an appropriate receptacle by slowly opening (rest compressed air!) the screws (2.).



Trouble shooting:

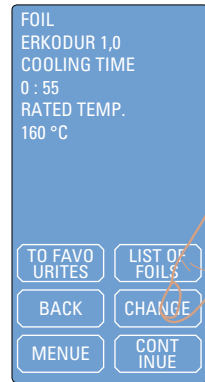
mistake	possible reasons	possible elimination
machine not ready to use, no display in the touch panel	wall socket, machine plug or fuses defective, temperature lower than 15 °C	check wall socket, machine plug, fuses, operating temperature > 15 °C
heater does not glow	heater, switch for heater or circuit board defective	exchange heater, switch for heater or circuit board - after-sales service (ass)
program reacts absurdly	system crash, program faulty	switch machine on and off, renew factory settings (ass)
absurd temperature indication	sensor window soiled, sensor defective	clean sensor window, exchange sensor (ass)
adaptation not sufficient	granules on sealings, hole in the foil, sealings used, system pressure too low	remove granules from sealings, exchange sealings, correct possible kink in the compressed air line, minimum system pressure 6 bar
compressor does not build up pressure (only 300 Tp-ci)	temperature lower than 15 °C, internal compressed air system leaky, pressure regulator/compressor defective	operating temperature > 15 °C. repair internal compressed air system (ass)

Change factory settings for foils

The rated temperature and the cooling time can be changed for one single thermoforming process or constantly, in the latter case as favourite.

The changes are done in the window "selected foil" or "favourite", see "select foil" or "save favourite".

1. Select change



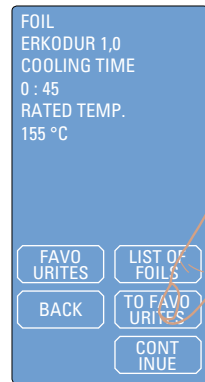
2. Enter rated temp. and confirm (ok)



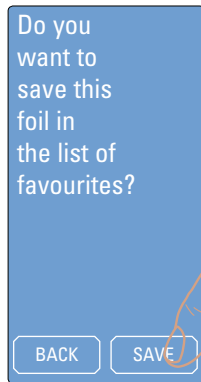
3. Enter cooling time and confirm (ok)



4a. Select to favourites



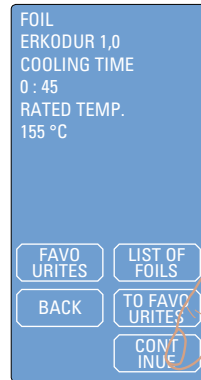
5. Select save



The display changes now to the 2. display see "thermoforming", continue as described there.

The foil with the changes is saved as favourite in the list of favourites.

4b. Select continue

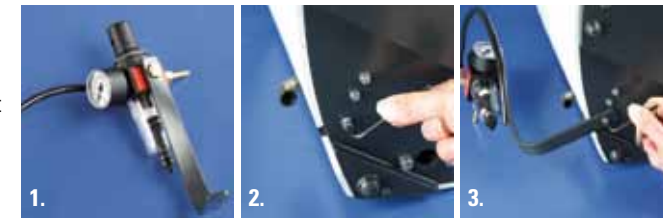


The display changes now to the 2. display see "thermoforming", continue as described there. The changes are only kept for one thermoforming process.

Putting into operation

Erkpress 300 Tp (1. - 4.):

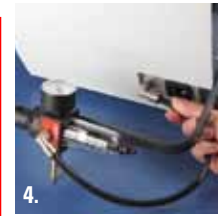
Assemble pressure regulator with water separator, thereto put the unit on its back side. Fix the holding bow with the supplied screws. Position the appliance, insert the power supply cable in the machine and the wall socket.



Erkpress 300 Tp-ci: Position the appliance, insert the power supply cable in the machine and the wall socket.

Unplug the appliances when not in use.

A reliable operation of all functions is only guaranteed at a unit temperature of $\geq 15\text{ °C}$.



Recommendation

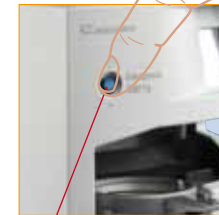
Use the machine only with granules (illustr.). Fill the granules in the form pot, smooth the granules, excessive granules will fall in the surrounding granules collecting device.



Switch on appliance

Attention: Program language ex works is German!

Switch on main switch.



Main switch

The touch panel shows at first "ERKODENT" and then "Sensor window clean? (Sensorfenster sauber?)".

If necessary, please see instructions on how to select your language. Please check if the sensor window is dusty or dirty. This leads to measuring mistakes. If necessary, clean with a damp cloth (no cleaning agents).

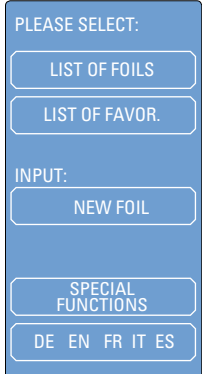
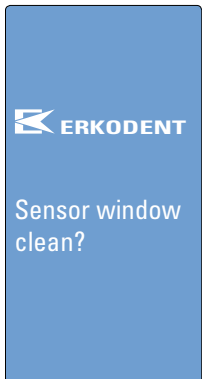
After a few seconds automatically the basic display will be seen.

The requested function can be selected by slightly pressing the finger on the framed functional fields of the touchpanel or by using a blunt plastic tip.



Sensor window

The touchpanel is protected by an adhesive-free foil. A replacement protective foil is supplied along with the machine.



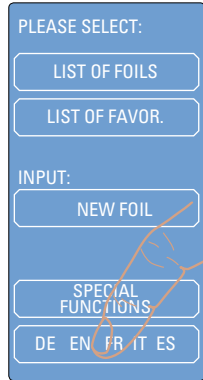
Select language

For any further use of the machine, the language that was selected last time is used.

„ERKOFLEX (-BZ) ISOFOIL“ signifies Erkoflex (-bz) with isolating foil.

„ERKOFLEX (-BZ) ISOFOIL“ signifies Erkoflex (-bz) without isolating foil.

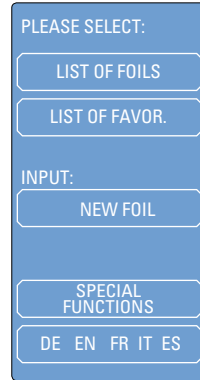
1. Select field of languages



2. Select language



3. Basic display will be seen

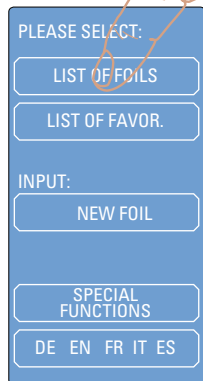


Select foil

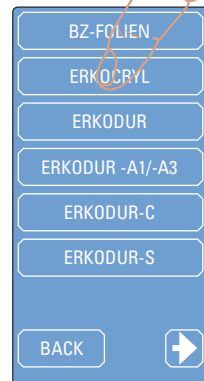
The list of foils contains all foils of the ERKODENT range of products that can be used on this machine and that have been available at the time of production of this unit. New foils can be added with the functional field “new foil”, please see “enter new foils”. If the range of foils will change considerably, ERKODENT will supply a program update.

Example shown here: Erkodur, thickness 1 mm

1. Select list of foils



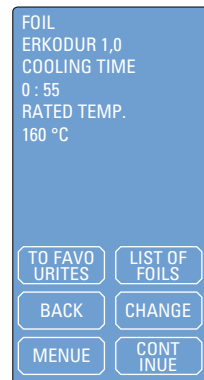
2. Select Erkodur



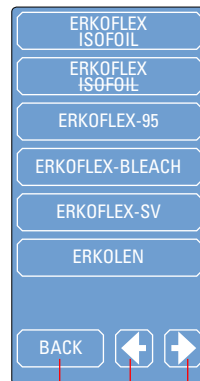
3. Select Erkodur 1.0 mm



4. Display, foil selected



Thumb list of foils



one page forward or back

one program step back

Functions of the display
 ◀ “foil selected” see page 9.

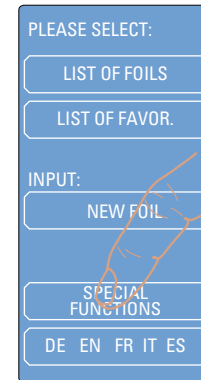
Next step “save favourite”, page 4 or “thermoforming” page 5.

Special functions

The special functions allow to switch on and off the heating and the compressed air (Tp 300-ci, integrated compressor) independently of the program.

To determine the rated temperature (thermoforming temperature) of an unknown foil, select “heating on” (2.) and clamp the foil in the foil frame as mentioned under “thermoforming”. As soon as the foil frame clicks into place under the heating (a), it will be switched on and the sensor will measure the temperature of the foil. If it is intended to afterwards thermoform the foil, select “pressure on” (3.) and thermoform as described under “thermoforming”.

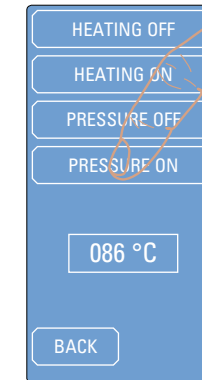
1. Select special functions



2. Select heating on



3. Select pressure on



To check the thermoformability, pull the foil out (c) and check with a blunt instrument. If permanent impressions result, generally the foil is ready for thermoforming (d). The heating switches off, if the foil is pulled out of the heating area, if “heating off” is selected or if the sensor measures >240 °C.

The temperature shown on the display is the temperature measured at last. If the foil is ready for thermoforming, this temperature corresponds to the rated temperature.

To determine the cooling time, the time beginning with the adaptation is measured. For the first time select “pressure out” after app. 1 minute, the cylinder moves upwards, the foil can be pulled out, **attention: risk of burning!** The correct cooling time is achieved if the foil on the surface has app. room temperature. The foil can now be saved, as described under “enter new foils”.

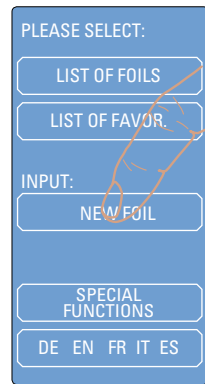


Enter new foils

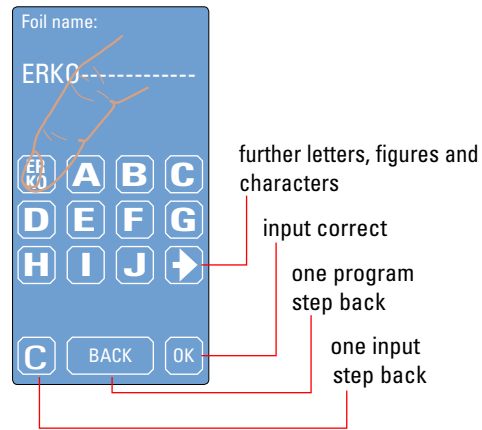
New foils can be future ERKODENT foils or foreign foils. If ERKODENT launches a new foil, the necessary data will be found on the label of the box (for example: ERKO-XY, thickness 2.0 mm, rated temperature 135 °C, cooling temperature 1:30 min.). The foil can be saved under "new foil".

In case of foreign foils the rated temperature and the cooling time need to be determined with the help of the special functions. All new saved thermoforming foils are lined up and saved in the list of favourites and selected via this list.

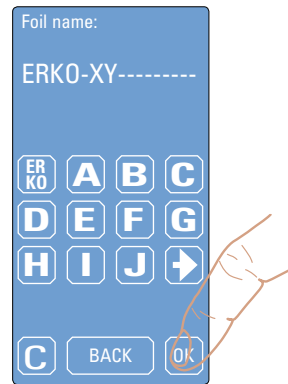
1. Select new foil



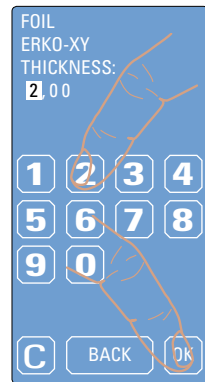
2. Enter ERKO-XY



3. Confirm ERKO-XY (ok)



4. Enter thickness and confirm (ok)



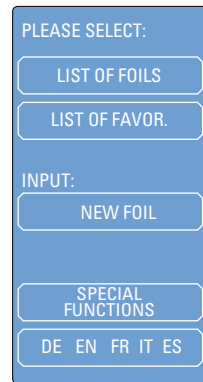
5. Enter rated temp. and confirm (ok)



6. Enter rated cooling time and confirm (ok)



7. Basic display



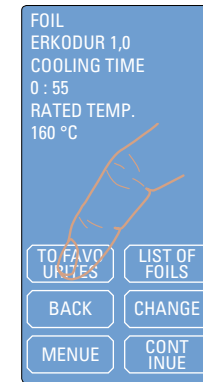
The new foil is now saved in the list of favorites.

Save favourites

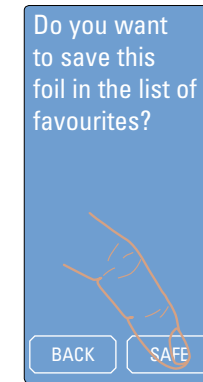
The list of favourites allows a quicker selecting of often used foils. To save a foil in the list of favourites, this foil is selected out of the list of favourites as described under "select foil". New foils, either future ERKODENT foils or foreign foils, are entered with the functional field "new foil" and are saved in the list of favourites.

After having selected the requested foil from the list of foils you will see display 1. To save the foil as favourite, select "to favourites".

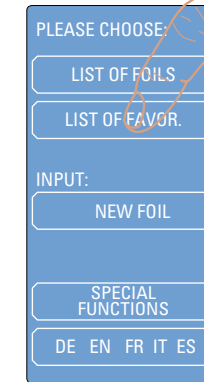
1. Select to favourites



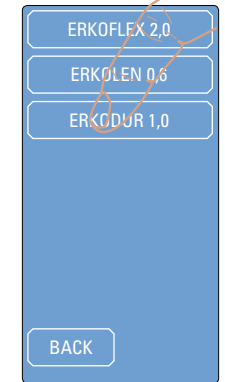
2. Select save



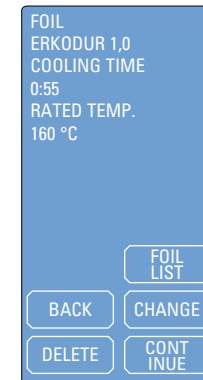
3. Select list of favor.



4. Select favourite

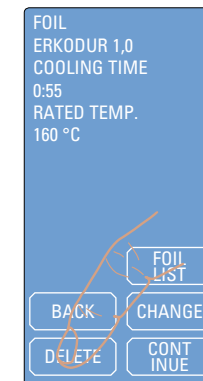


5. Favourite is displayed

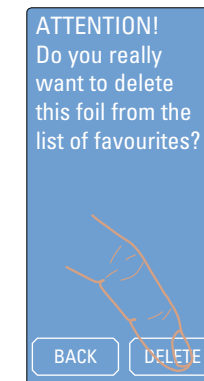


Delete favourites

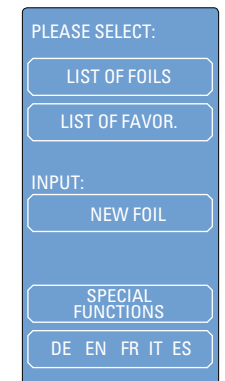
1. Select delete



2. Select delete

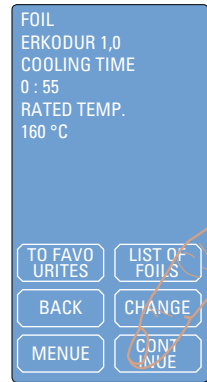


3. Basic display, favourite is deleted



Thermoforming

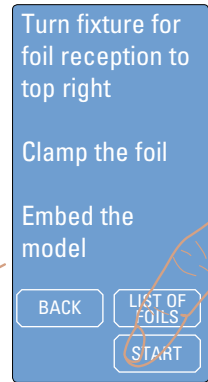
1. Correct foil selected?
Yes, continue



to 1. Correct foil selected? If not, please choose "list of foils" and select a new one. The display offers further functions which are described in section "functions of display, selected foil" (see page 10).

To start the following thermoforming process please select "continue".

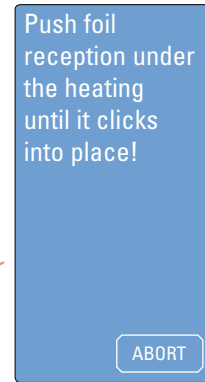
2. Execute and select start



to 2. Turn fixture for foil reception upwards and then to the right (a) until it clicks into place. Put in the selected foil Erkodur 1.0 mm and clamp with the foil securing ring (b). Embed the model now or during the heating process in the granules. (c). Push form pot with model backwards into the appliance as far as it will go.

Please select "start".

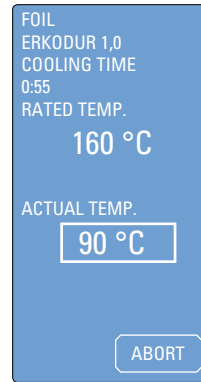
3. Execute and heat foil



to 3. Place foil reception with plate onto the fixture and push it under the heating until it clicks into place (e/f). If "start" is already selected, the heating switches on in the engaging area. The functional field "abort" stops the standby mode or the heating process and leads back to display 2.

If the foil is pulled out of the heating contact, this display is shown as well.

4. Display during the heating process

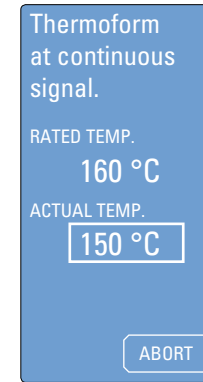


to 4. The actual temperature shows the temperature of the foil in the measuring area.

When reaching the rated temperature, the heating switches off.

Thermoforming

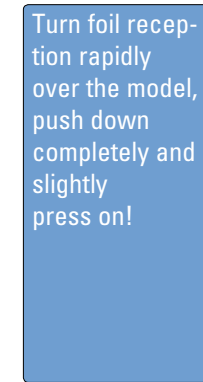
5. Display 10 °C before rated temp.



to 5. 10 °C before reaching the rated temperature, you will hear a signal.

Depending on the selected foil the heating process around the last 10 °C may be of varying length.

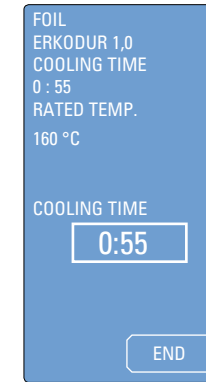
6. Display in case of continuous signal



to 6. When reaching the rated temperature, you will hear a continuous signal and the heating switches off.

Now thermoform by pivoting the foil reception at the grip cavity as far as it will go leftwards and pressing it downwards onto the form pot. The form pot has to be placed at the stop position at the very back, otherwise the cylinder will not disengage. At the same time the contact protection (red) will be pulled downwards and disengage the cylinder (g).

7. Display after thermoforming



to 7. The cooling time corresponding to the selected foil now runs backwards. The cooling time can be interrupted with the functional field "end".

After the complete cooling time is finished the cylinder moves upwards. Pull out the form pot at the grip, in doing so the contact protection will automatically swing upward (h).

8. Display end of cooling time



to 8. Take off the foil securing ring and take out model with foil through the foil reception (i/j).

The functional field "continue" guides back to the display "selected foil" to the foil just used.

