

Fig. 7

### Production of an individual impression tray

Assemble the flask (Fig. 2/g) with the high adaptor ring (Fig. 2/k) and the model disc (Fig. 2/n), place the model on top and put on the holding ring (Fig. 2/f). Then place the ERKOPLAST-disc in the holding ring and cover it with the 120 mm cover ring (Fig. 2/e, 7 and 8). High models require the low adaptor ring (Fig. 2/j). The model can now be placed inside the flask, however, the space between the model and the flask has to be filled with lead granulate, foam rubber or ERKOGUM material. For lower models with high retro molar areas the oblique model disc (Fig. 2/o) should be used. The extra space is filled as described above.

The various applications of the machine are described in the "ERKOPRESS-technique" booklet.

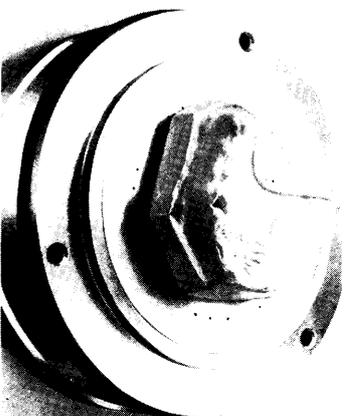


Fig. 8

**Important**  
Prolonged operation of the IR radiator heats the housing of the machine.  
**Attention – Hot.**

### Trouble shooting

- Air blows from the flask. No adaption or the disc is torn.
- The plastic is heated too much.
  - Pressed with low adaptor ring and spaces between model are not sufficiently filled out with lead granules.
  - Too low pressure. In this case check the main pressure and raise it.
  - Bubbles on some discs mean too much heat. Discs may have absorbed humidity. Here the discs should be dried before using.



Fig. 9

### Maintenance

The water separator at the filter pressure regulator should be checked once a week. If water is collected, the pin at the bottom of the glass should be pushed to release the water. This should be a daily routine, if much water is collected.

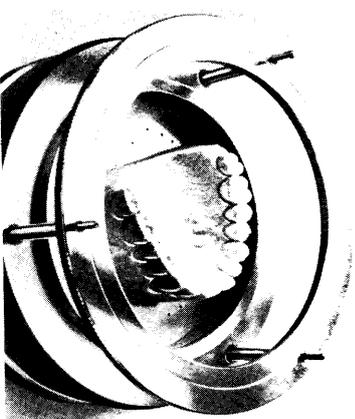
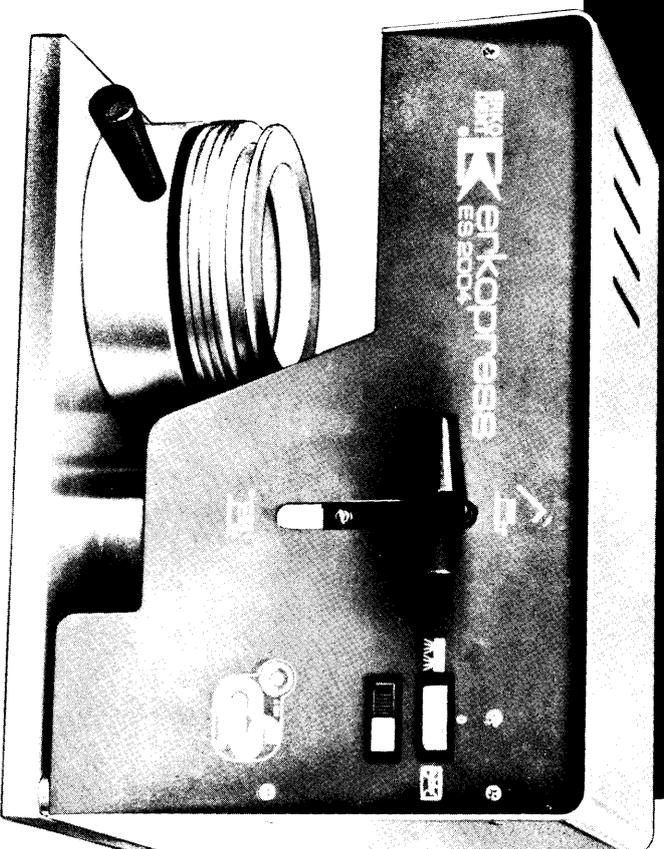


Fig. 10

Subject to change without notice.

# erkopress

## ES 2004



## Operating instructions



**ERKODENT®**  
Erich Kopp GmbH Dentalfabrikation  
D-7293 Pfalzgrafenweiler

P.O. Box 1140, Telephone 74 45 / 20 93, Telex 764 395 erkop d

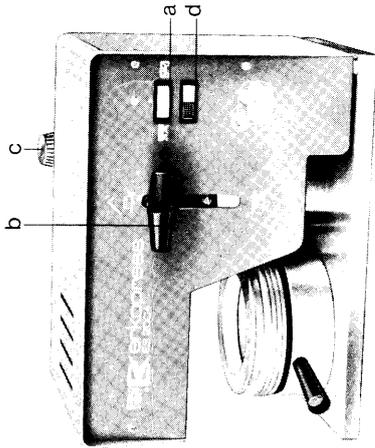


Fig. 1

**Specifications**

- Height 270 mm
- Width 360 mm
- Depth 230 mm
- Weight approx. 11 kg
- Main supply 220 V / 50 Hz
- Operating pressure max. 5 bar
- Minimal air system pressure 6 bar
- Maximal input pressure 10 bar
- Interior hose diameter 6 mm

**Delivery**

ERKOPRESS thermoforming machine model ES 2004 complete with flask and introductory package with foils of different kinds and sizes.

**Description (fig. 1)**

- a switch for the infra-red heater and blow cylinder
- b device for protective shield
- c regulator with airfilter
- d control lamp for infra-red heater and blow cylinder

**Description of the flask (fig. 2)**

- e foil cover ring ø 120 mm
- f holding ring with 3 pins
- g flask base
- h foil supporting ring ø 70 mm
- i foil cover ring ø 70 mm
- k adaptor ring (high)
- l adaptor ring (low)
- m die disc for 1, 3 and 7 dies
- n model disc
- o model disc (oblique)



Fig. 3

**Installation instructions**

The ERKOPRESS ES 2004 can be connected to any compressed air system in the laboratory or the dental office. The system pressure should at least be 6 bar and should never exceed 10 bar. If the system produces more than 10 bar a filter regulator has to be installed.

The ES 2004 should be set up in a dry place to ensure that water damage is impossible. When operating the ES 2004 all safety regulations should be observed. The machine is proved according to the regulations of the VDE and meets with the safety regulations according to the standards of the European Community.

**Working instructions**

1. Connect machine to a compressor air line with a high pressure flexible hose (Fig. 1/c).
2. Connect machine to a 220 V (110 V) AC outlet.
3. Check actual operating pressure, 4 bar, max. 5 bar, at the pressure gauge.
4. Switch on infra-red heater, press button (Fig. 1/a), (turn to the left [Fig. 1/d], pilot lamp flashes green).
5. The prepared flask is then placed under the heating element. The pin on the left side and the rearward ledge on the bottom plate hold the flask in the right position.
6. As soon as the right plastification of the disc has been reached, move the flask as far as possible to the right side of the machine.
7. Put device for protective shield down (Fig. 1/b).
8. Switch on the blow-head (Fig. 1/a) (switch turned to the right – pilot lamp [Fig. 1/a] flashes white).
9. Led foil or disc cool down.
10. Turn switch (Fig. 1/a) to "0" (mid-position).
11. Lift device for protective shield, (Fig. 1/b) take out the flask.

**Attention! No function of the machine, when device for protective shield isn't put down correctly.**

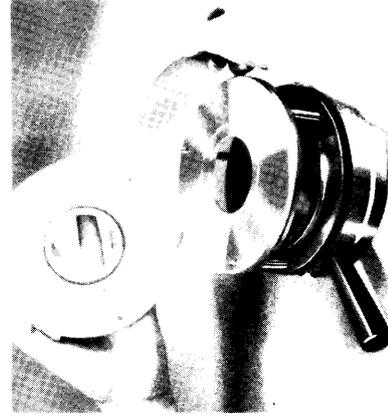


Fig. 4

**Application Fields**

The ERKOPRESS ES-2004 is used in the dental thermoforming technique. In this machine foils and discs to 120 mm diameter can be used.

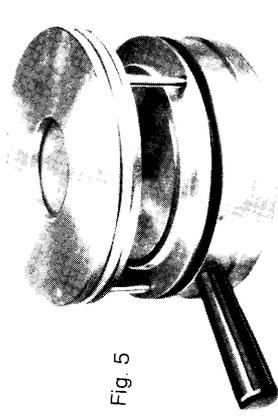


Fig. 5

**Practical Examples**

To form 1 – 3 copings it is sufficient to use 70 mm discs. Place the high adaptor ring into the flask. Then put the die disc with one or three screws on top. The die base is pushed into the ERKOGUM mass inside the screw (Fig. 3). A foam rubber disc can be used to improve the adaptation. There should be a distance of 5 mm between the cervical edge and the die model disc. This can be adjusted by turning the screw up or down. Place the holding ring with three pins (Fig. 2/f) loosely into the base of the flask until the pins meet the resistance of the "0" ring. On top of the holding ring place the supporting ring (Fig. 2/h) for 70 mm discs into the short pins, so that the recess faces up. Place the disc possibly with a UFZ spacer foil underneath it, into the recess. Then put the cover ring (Fig. 2/i) on top with the "0" ring facing the disc (Fig. 4, 5, 6).

The whole flask is placed under the heating element. As soon as the correct plastification of the disc is reached (see instructions in the sample folder), move the flask to the right under the blow cylinder and operate the switch. For seven dies the appropriate die disc (Fig. 7) is used. A 120 mm disc is placed directly into the holding ring (Fig. 2/f) and covered with the cover ring of 120 mm diameter (Fig. 2/e).



Fig. 6

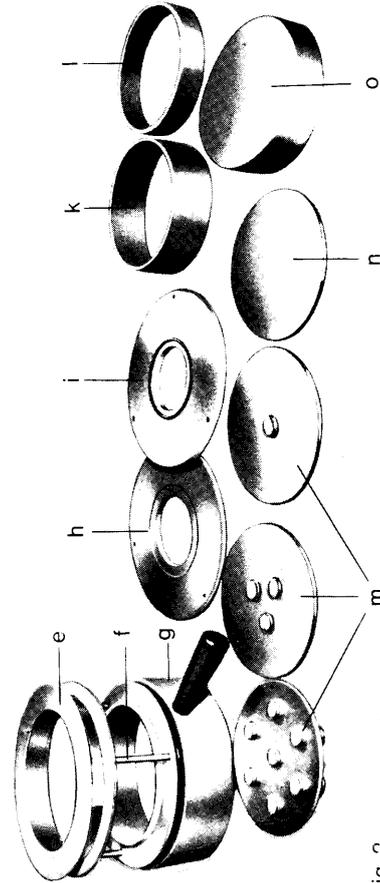


Fig. 2