Hematocrit determination

1. Take out the HK-capillaries from the donator and fill with blood
2. Insert capillaries
3. Fix by finger pressure and tighten knurled-screw.
4. Read out the hematocrit values

1 Electricity supply

As a power source the stabilized short circuit proof power supply unit can be used. This can be attached at the socket (1). The electric circuit of the cells is interrupted thereby.

1.1 Control display

If the tension of the accumulator for the next centrifugation procedure is no longer sufficient, then the green control lamp (2) shines up. The hematocrit determination which has been done at last still shows perfect values.

2 Rotor

A rotor is available:

- rotor for hematocrit determination (recognisable at the % index).
3 Capillaries

3.1 Hematocrit-micro capillaries (capacity ca. 9 µl)

The capillary must always be completely filled and non-porous, since otherwise the regulation is not accurate.

1.2 Insert the capillaries

To inserting the capillaries the clamping piece must be in the upper position. In addition, you have to untighten the knurled-screw (3). The clamping piece then bounces up. Insert the capillaries between the clamping piece and the gasket piece. Screw-in the clamping piece with knurled-screw (4). The capillaries are tightened and sealed thereby. Close cover firmly.

Please put the blood capillaries (60 µl) always symmetrically to each other to ensure a calm (balanced) run of the rotor and to avoid to impair the life span of the equipment. In case of an odd number of capillaries please insert an empty capillary as counterweight.
4 Centrifugate

You can only centrifugate if the cover is closed firmly. Please convince yourselves before closing the cover that the clamping piece (6) is depressed and the rotor is locked.

**Start:** Press the start button (5).

**Centrifugation period:** ca. 3 minutes. The speed of rotation of the rotor during this time is constantly 11500 min\(^{-1}\).

Press the start/stop button again after the desired time. The rotor stops automatically by the electrical countercurrent brake. With opening of the cover the rotor stops automatically.

Please note that at a shortened centrifugation period the result is not correct. In order to achieve an accurate hematocrit value the capillary has to be centrifuged again.

5 Read off the hematocrit value

After stop of the rotor the hematocrit value can be read off at the %-scales attached on the rotor (e.g. 45% correspond to 0.45).

Please take out the capillaries after the centrifugation and read off to avoid that the blood will dry on the gasket pieces (3).

6 Cleaning

For cleaning and disinfecting of the equipment please only use plastic-friendly disinfectants on aldehyde basis (e.g. Korsolin 3%). Otherwise we recommend to accomplish a stability examination in an inconspicuous place of the cover before the disinfection.

With these disinfectants the areas which can be cleaned are to be wiped off damp.

Please note that the six pieces of gaskets always must be clean so that the capillaries are surely sealed (remove blood remainders occasionally with cotton sticks or a brush).