Instructions

The assembly

01 Place the joint and screw the glass boiler-cooler on the red support.
02 Link a piece of silicone tube from the water network to the lower piping of the cooling gel and another piece from the upper outflow of the cooling gel to the drainage.
03 Check the thermometer and make sure that the column of mercury is not interrupted then put it into its place (see photo behind).
04 Link a piece of silicone tube from the back exit valve of the device to the drainage and close the valve.
05 Connect the device through the supplied cable to the 110-230V network.

The calibration of the device

06 Open the water network valve in order to start the cooling process.
07 Pour a little of reference wine in the top funnel rinsing with it the boiler-cooler glass and once the process is finished empty it. Then fill it up to the inscribed mark.
The calibration of the device

08 Turn on the back switch and the front red led will light up. It will indicate the presence of electric current in the device.
09 Press the front On/Off button once only. The green led will turn on indicating that the sample will start heating up.
10 Wait for the column of mercury to rise and stabilize (for approx. 6-8 min). Write down the read results of the thermometer and interrupt the boiling process by pressing again the On/Off button.
11 Open the drainage valve of the device and pour, at least 3 times, the content of a glass of water inside the boiler-cooler glass to rinse and cool it down.
12 Fill it again with distilled water up to the inscribed mark and follow steps 9 - 11 again.
13 Use the circular slide rule and apply the temperatures according to the instructions on its back.
14 At this time the device is now calibrated and ready to be used.

The technique applied

15 Repeat step 7 with the sample which is to be analyzed and continue with steps 9, 10, 11 and 13.

Observations

- The control of water temperature will be done once/twice a day and the one from reference wine periodically according to the user’s decision (it is advised every 15 days).
- Be sure to cool down the device after every sample and rinse it with the new sample to be analyzed.
- Do not press the On/Off button without having liquid inside the boiler-cooler glass.
- In case of overheating the green led will blink and the device will stop heating. To recover the normal working operation rinse the device using 2-3 glasses of water and the device will be ready again.
- For beers, ciders and other hydroalcoholic solutions that could contain gas and cause foam, make sure to eliminate the gas and introduce a drop of antifoaming silicone for its boiling.
- It is advisable to clean the device once per month with a mix of some drops of sodium hydroxide 4% with distilled water.
- During boiling process avoid boiling bubbles to go up inside the cooler thus can lead to a wrong reading.