Checkliste Testomat® 808

Dear customers and service technicians,

This check list cannot replace your expertise or extensive experience in fault resolution. It is intended to support fast and systematic error diagnosis and error documentation. This list does not claim to be complete. We are therefore always grateful for any advice and information you may be able to provide. General user instructions can be found on the rear of this check list.

The Instrument Manufacturer

| Block 1 / Plant and instrument data | | | | | | | | | |
|--|----------------|--------------------------|-------|----------------------|---------------------|-----|-----------------------|---|---------------------|
| | | Testomat [®] 80 | 8 | | | | | | |
| | | Instrument type | | Instrument number | | Ind | dicator type | Software status | ; |
| Block 2 / Error message and error history | oropriately (2 | X) | | | | | | | |
| What error messages does the instrument (Keys "3" (Standby) and "4" (horn)=> Open | | | | | | | | | |
| Is the LED above key 4 flashing or lit? | | | Flash | ing | Lit | | | (LED) | |
| Are other LEDs lit? Which ones? | | | Yes | | No | | | | |
| | | | | | | | | (LED) | |
| Block 3 / Visual inspection and functional to | ark app | oropriately (2 | X) | If applicable | , values / comments | | | | |
| Is the correct mains voltage (according to the rating plate) being supplied to the instrument? | | | y Ye | S | No | | | | |
| Does water flow out of the discharge hose during analysis? | | | Ye | s | No | | | | |
| Are the measuring chamber and sight glasses clean? | | | Ye | s | No | | | | |
| Are the measuring chamber and water hoses watertight? | | | Ye | s | No | | | | |
| Does the indicator still have shelf life remaining? (See expiry date on the indicator bottle) | | | Ye | s | No | Ex | xpiry date: | | |
| Has the correct bottle size been set? | | | Ye | s | No | Si | Size: 100 ml / 500 ml | | |
| Is the water pressure within the prescribed limits (400 ml/min)? (See the instrument's rating plate) | | | | s | No | Sy | ystem pressu | ıre: | |
| Has the outlet been installed free of back pressure along its total length? (No "siphon effect"!!) | | | | s | No | | | | |
| Is the outlet hose clear? (Contamination by micro organisms or similar) | | | | s | No | | | | |
| Has it been ensured that fresh measuring water reaches the measuring chamber and that measurement is carried out within the flushing time of 10 seconds? | | | | s | No | | | | |
| Are the dosing pump hoses free of air bubbles? (Operate the pump manually / carry out a manual analysis) | | | Ye | s | No | | | | |
| CARRYING OUT A MANUAL ANALYSIS | | | | | | | | | |
| Does the indicator pump supply a dose when an analysis is triggered? | | | | | Yes | | No | | |
| Is the indicator properly mixed in the water during the dosing proce measuring chamber? Check the magnetic stirring bar! | | | | n the | Yes | | No | | |
| PROGRAMMING DATA / OPERATING C | ONDI | TIONS | | | | | | | |
| Is the Testomat instrument constantly supplied with mains power - during maintenance work/emergencies? (Occasional switching off only by means of the "Standby" or "Input keys!) | | | | | Yes | | | See "General instruc he Testomat [®] 808" | tions for operating |
| Please refer to "Error messages / Troubleshooting" in the operating instructions for further information on error messages and possible causes of faults. | | | | | | | | | |
| Further functional tests and service instructions can be found in the maintenance manual | | | | | | | | | |

If you have examined the instrument with the aid of the checklist and answered "Yes" to all questions in Block 3 it can be assumed that its functions are operating correctly.

We recommend that you carry out all tests contained in this checklist at every service and when faults have occurred.

General user instructions for Testomat® 808

Basic design of the instrument

As a monitoring instrument, the Testomat[®] 808 has been designed for permanently monitoring water by means of daily measurements. Several measurements per day are assumed under standard conditions of use. Should the instruments be operated with longer periods between analyses (interval times), attention must be paid to appropriate flushing times and flushing water volumes respectively. In case of non-compliance residual or mixed water from the hoses may be measured, leading to thresholds being exceeded. The indicator expiry date can also be exceeded under certain circumstances.

Long interval times often make little sense. It may be that avoidable problems arise instead of achieving desired savings. The water requirement per analysis also amounts to only 80 to 150 ml.

Switching off the instruments / Stopping the measurements

Interruptions to measurements should only be made using the functions, "Standby" (at the instrument) and "Stop" (external) provided for this purpose. Switching the instruments off by **disconnecting them from the mains does not make sense** because

 when disconnected from the mains, the instruments can stop with their measuring chambers full of water resulting in heavy soiling of measuring chamber, sight glasses and stirring rod

In this case, malfunctions due to an improper restart and unclear error messages cannot be excluded. However, if instruments are switched off for several days, care should be taken to ensure that measuring chambers are only filled with water and the restart is carried out in the same way as a first commissioning. At least the dosing pump should be operated manually until the hose is emptied of air.

Initial start-up of new plants

For new plants we recommend **flushing the pipelines** thoroughly before connecting the instrument. We recommend fitting a fine filter to the water supply hose - see our range of products. This filter should be cleaned or replaced at regular intervals because solid particles can clog the filter when operated for longer periods. If this is not noticed, malfunctions and error messages caused by the reduced flow of water cannot be excluded. In case of a correspondingly high concentration, particles can reach the solenoid valve despite the presence of a filter. This could compromise its function.

Operation/Indicator

The proper operation of Testomat instruments can only be assured **where original Heyl Testomat**[®] **indicators are used**. These indicators permit an exact analytic measurement of the smallest quantities of substances. As for all reactive chemical substances, their effectiveness is also influenced by environmental conditions.

The shelf life data which we have calculated are based on use and storage at room temperature $(15 - 25 \, ^{\circ}\text{C})$ and the exclusion of direct light. Deviating influencing factors and environmental parameters or those not tested by us can result in a variation in the shelf life threshold.

The indicator must be replaced upon the expiry of its shelf life in order to guarantee its reliable function. Please note the expiry date on the bottle's label.

Water inlet

Compliance with the water inlet pressure limits recorded on the rating plate is essential. Should the water flow be insufficient, (e.g. also in case the filter is soiled) there is no proper exchange of measuring water and therefore a clear analysis cannot be assured. The measuring process can be repeated several times and ultimately result in error messages.

Water outlet

In assembly, care should be taken to ensure a **discharge free of back pressure** as described in the operating instructions, "Water outlet".

