 This document is a short overview of essential points in maintenance and calibration. This document is a **supplement** to the full s::can manual, and does **not** replace the manual. Please consult also the instructions in the manual!

**QUICK REFERENCE GUIDE**  
**chlori::lyser – Calibration and Function Check**

**1. Calibration**

- A calibration procedure has to be performed after installation, after changing the membrane cap, the electrolyte or after cleaning of the gold-electrode (see also document “Troubleshooting”)
- Calibration type: Span calibration **[A]** (adjustment of the slope in the medium)
  - only one sample necessary
- Performing calibration in moni::tool: **[B]**
  - Go to Service/Sensor/Calibration
  - Select Parameter: FCI or TCI and Calibration type: Local
  - Click on Sample and enter the Laboratory Result
  - Click on Perform Calibration
- Performing calibration with con::lyte: **[C]**
  - Go to Calibration/Param. Calibration
  - Change Calib. to Local
  - Current value is shown
  - Enter Sample and press Calibrate!
- No zero-point adjustment necessary (precalibrated ex-works)
- Allow appropriate conditioning time (min. 20 min) at first start up
- Make sure the sensor is clean and properly assembled before performing calibration
- Calibration can be performed directly in the medium
  - For highest accuracy make sure to have the same conditions during the calibration as for the normal operation (temperature, flow, pH)
  - If performing a calibration outside of the flow cell, make sure that the sensor is not in direct contact with the wall or bottom of the container and that also the outer steel ring of the sensor is submersed in the medium **[D]**
- Take sample from the medium at the same time when pushing the sample button in the calibration menu of the s::can software
- Analyse the sample concentration as fast as possible and enter the lab value in the calibration menu and perform calibration
- If warning “slope too high” or “slope too low” occurs refer to the section “Troubleshooting”

Reference methods

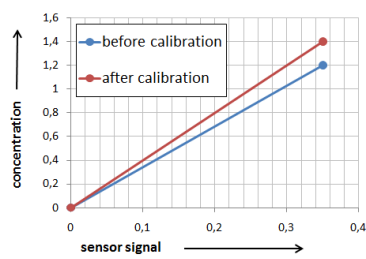
- s::can recommends the following reference methods: **[E]**
  - DPD method for Free Chlorine with liquid reagents for E-507-1, E-507-2
  - DPD method for Total Chlorine with liquid reagents for E-507-3, E-507-4
  - For highest precision, s::can recommends to use a photometer for measuring the chlorine value
  - Always make sure that the conditions for the reference methods are observed (e.g. pH value)
  - Be aware, that those methods have cross sensitivities (e.g. ammonium)
  - Perform Zero-Point calibration of the photometer before testing
  - Be aware that all reference methods are limited in accuracy (e.g. DPD method for Free Chlorine: accuracy of a measurement value = max. +/- 0.23mg/L FCI)

**2. Function Check**


- s::can recommends to perform a check of accuracy and cleaning of the sensor tip following the table below.
- Use reference method for checking the actual level of the concentration.
- If accuracy is not satisfying, perform calibration.
- If accuracy is not satisfying after calibration, refer to “Troubleshooting”.
- If accuracy of zero-point is not satisfying after calibration, refer to “Troubleshooting”.

Check of accuracy	Cleaning	Check of Sensor Integrity	Remarks
1 month	3 months	6 months	Interval times may vary depending on the pH and the chlorine value

**A**



**B**

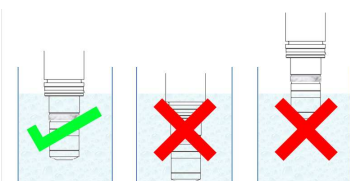


**C**

```

Local cal.: FCL
Calib.: local
Type: Span
Act. Value: 0,34
Sample: 0,41
Lab: -----
Calibrate!
    
```

**D**



**E**

