

BactoSense TCC

Automated flow cytometer for online monitoring of the microbial cell number in water



Safe drinking water is a permanent challenge

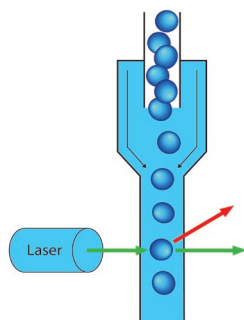
From ground water to drinking water – there are many steps in its treatment which make it possible for us to “freely drink from a water tap and from most wells”. However, what is our protection against bacterial contamination? – It is monitoring. So which methods ensure the quality of water?

HPC
(Heterotrophic plate count)



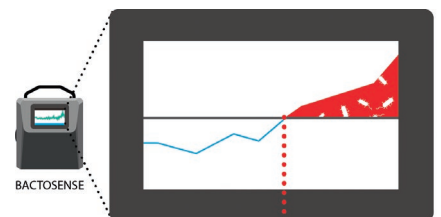
Since 1883
manually / 3 days

FCM (Flow Cytometry)



Since 1968
manually / 3 h

NEW FCM online



Since 2017
automatically / within 20 minutes

BactoSense TCC – innovation for your processes



[1] Safe, precise, and fast thanks to automated sample preparation

With its integrated, microfluidic sample dispenser, the BactoSense reduces the workload on the laboratory and the lab technicians. Staining of the sample, mixing, incubating (1 & 2) and measuring (3 & 4) is fully automated. The results are available after only 20 minutes (5). 99.9% of the microbial cells larger than > 100 nm can be detected with the BactoSense. In addition to TCC (Total Cell Count) the ratio of HNA/LNA can also be seen.

[2] Extensive connection options

The instrument provides a USB port for exporting data (5), has an integrated web interface for remote control via Ethernet and has an alarm system with a defined limit (5). In case of a contamination, the alarm can be viewed directly and simply on one's computer at the office.

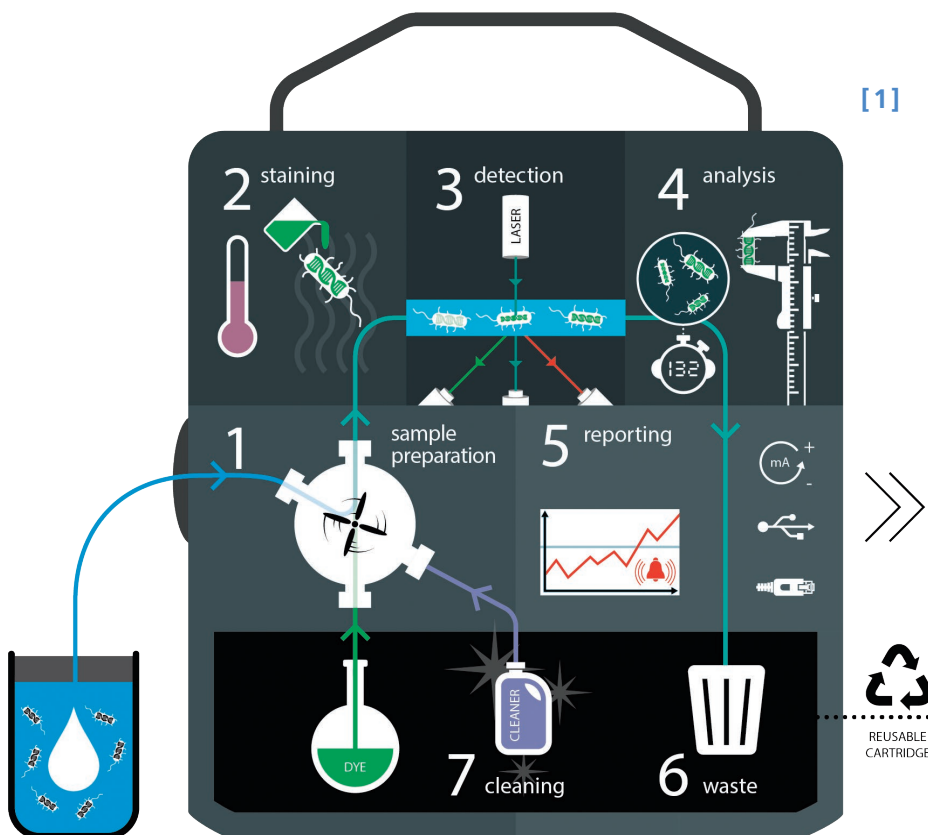
[3] No contact with chemicals and no waste thanks to the cartridge system

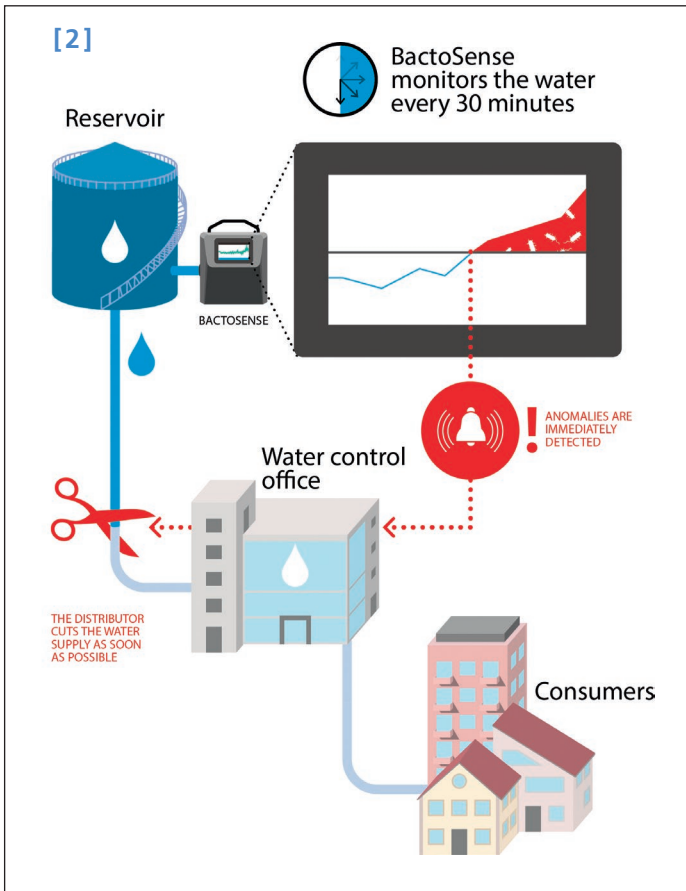
If test samples are prepared in the laboratory, specially trained staff are necessary for direct contact with toxic substances. In the case of BactoSense, all necessary chemicals and waste products are enclosed in the hermetically sealed cartridge which can be recycled (6 & 7). This allows for safe handling and waste disposal. After approximately 1'000 measurements, the cartridge can be exchanged within a few minutes.

[4] Robust and compact design for more flexibility

The quality of measurement BactoSense delivers is as exact as those of a laboratory instrument and it is suited for industrial applications. Since the BactoSense has protection class IP65, it can be mounted directly on the wall or a table in a water supply plant. The BactoSense is compact, provides versatile applications and is easy to transport.

[1]





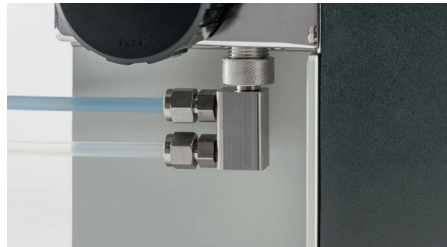
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[3] BactoSense cartridge

[5] Online or manual sampling for optimal monitoring

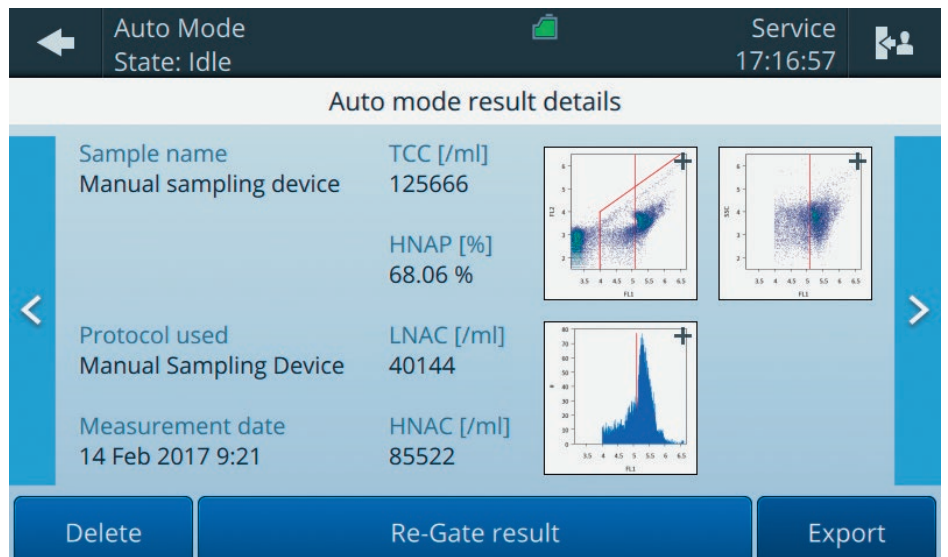
It is the first time that continual biological monitoring of water in field service is possible – either fully automated by connecting the BactoSense to the source of water or by manual sampling.



[5] Online connection/manual sampler

[6] Easy to use thanks to an intuitive integrated touch screen

A large touchscreen serves as user interface. The measuring interval (30 min to 6 h) and further settings can be programmed simply and quickly. The internal data base permanently stores all measured data which can be retrieved and visualized. Each measurement shows the characteristic finger-prints of the samples.



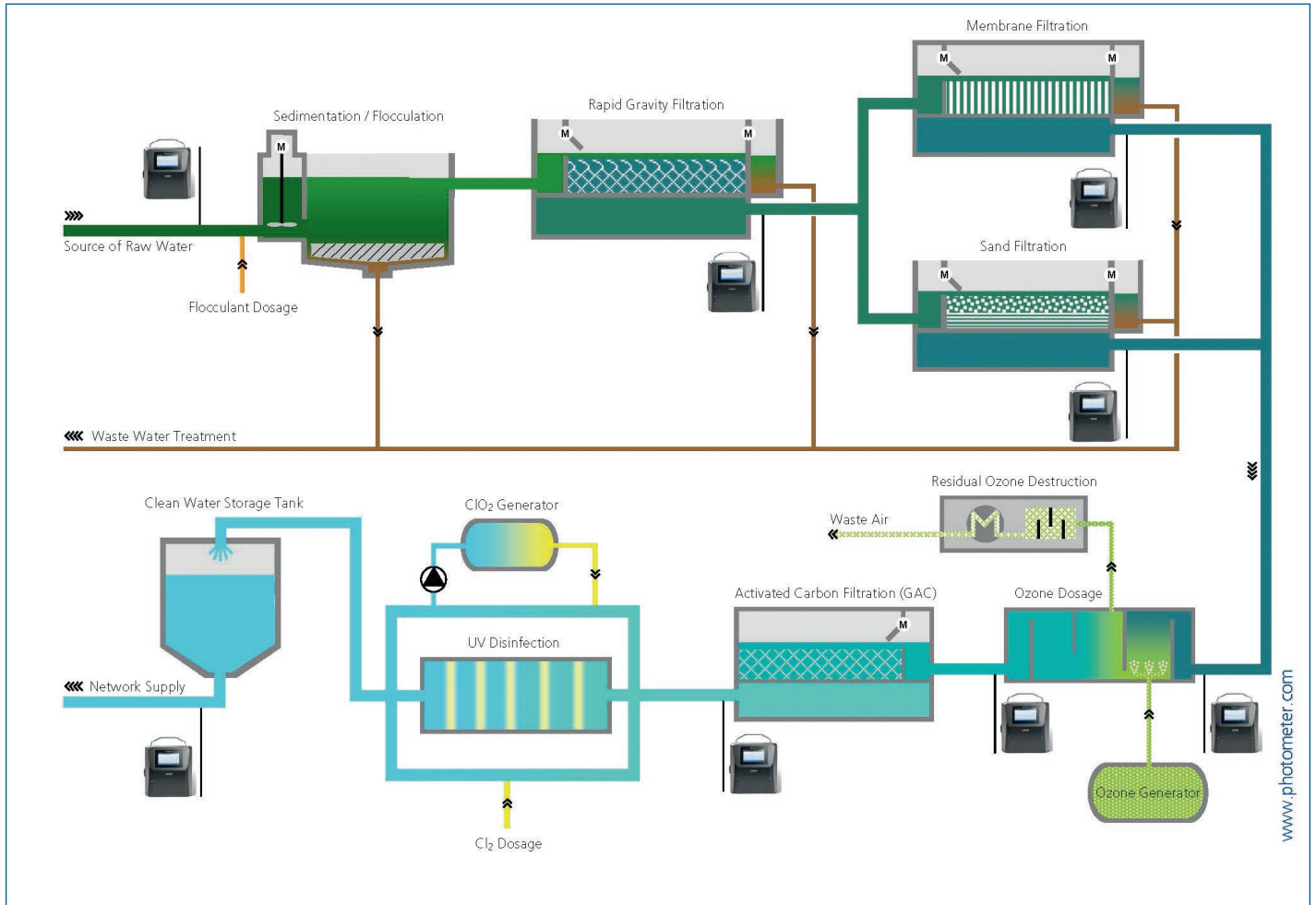
[6]

Innovation for your processes

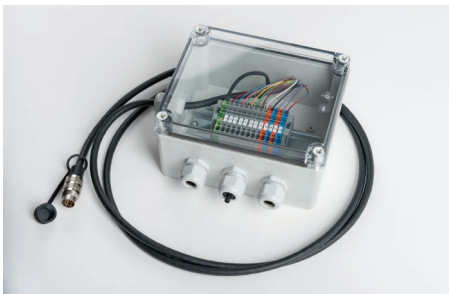
Applications in water treatment

This diagram shows the various applications for BactoSense in the water treatment process.

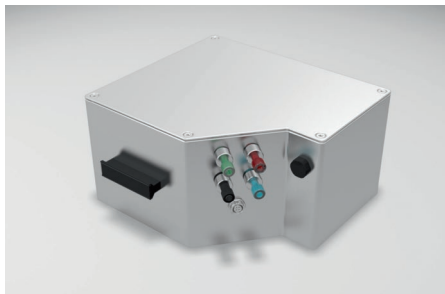
BactoSense is a mobile online flow cytometer which delivers important information about the process steps. Thus, the sub-processes can be continually optimized.



Accessories



I/O box



Cartridge replacement



Cleaning set



photometer.com/3bb2

Your agency:



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47400 Petaling Jaya, Selangor Darul Ehsan, Malaysia.

Email: nog@nog.com.my

Web access: <http://www.nog.com.my>

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PROCESS-PHOTOMETER