



## PAMAS Water Analysis Online particle counters for automatic water quality control

IN THE WORLD OF PARTICLES PAMAS COUNTS

## **PAMAS Water Analysis**

## Application specific measuring Partikelmess-und Application specific measuring instruments for process and quality control

Potable water, process water or industry water is recycled and treated in many different processes. During these processes, the water cleanliness is controlled by means of particle counting to check and to prove their effectiveness.



Picture: SFC Umwelttechnik

There are plenty of application examples from real world for the use of optical particle counters for water quality control, like e.g.:

- control and verification of filtration in drinking water purification;
- verification of floc sizes (For drinking water purification, water is often treated by adding flocculents. These flocculation agents are used to gather solid contaminants to particulate agglomerates. Before the process of filtration or sedimentation commences, the floc size and quantity is analysed with the aid of a particle counter. Precise information about the particle size helps to verify and to determine if amount and quantity of the flocculation agents are sufficient for an efficient filtration or if the process needs to be modified.)
- particle counting of treated pool water during filtration (to investigate on the ideal filtration speed);

- use for scientific research (proof or disproof of assumptions in scientific investigations, e.g. for sea water analysis or for the development of tubing systems);
- particle analysis of injection water for oil recovery
- process water control, e.g. in thermal power plants, in glass production or in pharmaceutical industry

Since often processes are monitored, usually online particle counters are used for water quality control. Compared to laboratory instruments, the key benefit of online particle counters is that measurement runs automatically after pre-setting, by continuously delivering measuring results. As soon as predefined limits are exceeded, the online particle counter instantaneously gives an alert. The user could then intervene at an early stage and eventually take care of required actions to eliminate the contamination (e.g. by filtering or exchanging the water).

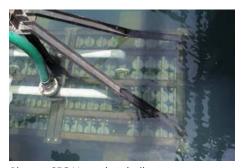
The extended PAMAS product range provides four online particle counters designed for water analysis:



Picture: Waternet

The **PAMAS WaterViewer** can be connected to several sampling points at the same time, so this is the ideal instrument for a fully automated analysis of multiple water lines. The instrument can be optionally equipped with an automated sensor flushing unit to remove deposit debris.

If the user intends to use the particle counter at different places, the purchase of a portable particle counter is more convenient than a fixed installation. The **PAMAS S4031** portable particle counter can be used for online and batch sampling. For the use in harsh environment (e.g. when analysing sea water), the system is also available in a rugged cased. This weather-proof casing protects the **PAMAS S4031 GO** from corrosion and from outside influences.



Picture: SFC Umwelttechnik

The **PAMAS FSA-2002** floc size analyser is especially designed for the use in coagulation and water treatment. Water is often treated by adding flocculents. The instrument analyses floc size and quantity before the process of filtration or sedimentation commences.

The fourth particle counting system for water analysis is the **PAMAS OLS4031** online particle counter. Equipped with 32 free adjustable size channels, this instrument provides a very differentiated particle analysis.

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