From Waste to DataPCR Analysis Workflow Solution







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The entire solution from a single source

Your result within 3 hours - simple and automated

Together with Endress+Hauser, Analytik Jena developed a wastewater monitoring workflow for biological parameters. It covers the entire process chain – from sampling to scalable nucleic acid extraction and quantitative real-time PCR.

"The workflow is easy to manage, especially concerning filtration — and this is crucial **from the perspective of the routine laboratory**."

Dr. Christina Meinert-Berning, Ruhrverband, Germany

"We are confident that we can form the basis for a wastewater-based monitoring system with our model project."

Dr. Jens Schoth, EGLV, Germany



Sample Collection

- Sample Collection: Endress+Hauser Liquistation CSF34
- Fully automated collection of representative samples
- Complies with worldwide water regulations
- Menu-guided sample programming and tool-free maintenance



Easy and Flexible Enrichment by Filtration

- Use the method which is most common (40% of users in Germany) and as efficient as the reference method (ultracentrifugation)
- Stay flexible and cost-efficient modular and transportable system, no centrifuge needed
- Filter now and extract later using nucleic acid preservation medium



Efficient Automated Nucleic Acid Extraction

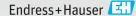
- Desorption of collected nucleic acids using the small-footprint **SpeedMill PLUS**
- Reproducible results and elimination of human errors using automated extraction on the InnuPure C16 touch or the CyBio FeliX eXtract
- Safe workspace and reduced risk of contamination due to closed devices
- Extraction process omitting hazardous chemicals



Data Acquisition using Gold Standard Analytics

- Quantitative real-time PCR, reference method for nucleic acid-based detection accepted by governmental bodies, performed on the qTOWER³
- The methodology includes calibration standards and all process controls for reliable quantitative analysis (positive, negative, no template, internal)
- A fully operational **software package** for data analysis included





Liquistation CSF34

Fully automated sample collection (over individual period, e.g. 24 h) by automatic water sampler **Liquistation CSF34.**







InnuPure C16 touch or CyBio FeliX

Reproducible extraction of DNA and/or RNA on the InnuPure C16 touch or on the CyBio FeliX, depending on the throughput.



Highly sensitive target detection using real-time cycler from the **qTOWER**³ family in combination with specific real-time qPCR assay (by third party).



The filter membrane is homogenized using the **SpeedMill PLUS**.



Watch our video "From waste to data"





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