

Automated detection of pathogens in industrial process water

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Project goal

Rapid on-site detection of legionella contamination in process water using molecular biology methods

- Centrifugal microfluidic cartridge for automated DNA extraction and PCR preparation
- Reduction of time-to-result from ~10 days (microbiology) to few hours enabling quick response
- No manual liquid handling except for sampling and filtration
- Full automation of complex DNA extraction and PCR preparation workflow
- Quantitative determination of bacterial contamination including positive and negative controls
- Complete workflow is based on commercially available standard instruments



LegionellaSlice XL cartridge with detachable PCR tubes that are transferred to a thermocycler for analysis

Workflow

