

APPLIED SCIENCES/BIOTECHNOLOGY



INNOVATION

ENGINEERING

OPTIMIZATION

At-line Process Analytics made easy – MultiBioAnalyzer

At-line Process-Analytics

Detailed understanding of manufacturing processes is essential for producing high quality biotechnological products. This understanding is greatly enhanced by analytical services, which enable you to substantially improve your process development and control in both, fermentation and downstream processing.

Moreover, approval of biotechnological products increasingly relies on such process analytical data as highlighted by the FDA introducing the Process Analytical Technology Initiative. Meeting these requirements, however greatly increases the demand for time-critical analytical services at your direct disposal.

The MultiBioAnalyzer: Platform for at-line analysis

The Bayer Technology Services MultiBioAnalyzer represents such a versatile analytical platform. It addresses the need for simple, easy and timely detection of a variety of analytes directly at-line at your facility. Running multiple modes of biochemical assays it will greatly speed up and facilitate your process analytics.

It is one system for all assay tasks where quick and quantitative results of multiple analytes are key and is easy to use even for inexperienced personnel. The MultiBioAnalyzer is hence characterized by:

- Versatility
- Speed
- Ease of Operation
- Robustness
- GxMP compliance



The MultiBioAnalyzer by Bayer Technology Services

Implementation of virtually any assay possible

The system provides you with a unique range of possible assay procedures. Diverse assay technologies like:

- Immunoassays
- Enzymatic assays
- DNA-assays

can be implemented and detect analytes that indicate:

- Product quantity and quality
- Purity of product and quantity of byproducts
- Cell viability and proliferation
- Media degradation and consumption



Bayer Technology Services
Powering Your Performance

Substantial reduction in response times

You will benefit from fast detection of numerous analytes in parallel by the MultiBioAnalyzer. Optimized assay procedures greatly reduce your response times and enable an efficient feedback for controlling your process. This rapid and in-depth analytical power can thus be summarized as:

- Parallel detection of numerous analytes
- Up to 6 samples can be analyzed in parallel
- Time-to-results usually less than 90 min
- Absorbance, luminescence and time-resolved fluorescence read-outs at the same time
- Comprehensive results-report

Exceptionally simple interaction

Design of the MultiBioAnalyzer is extraordinarily focused on the interface with the operator, which is completely self-explanatory. Assay procedures, which prompt the operator through all necessary steps, require virtually no training. The interaction with the MultiBioAnalyzer is characterized by:

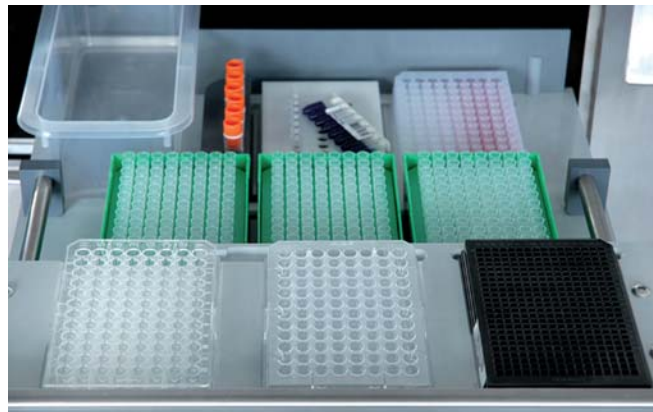
- No specific sample preparation necessary
- Preformatted assay reagents and consumables including all necessary standards and controls
- On-board PC with touch sensitive LCD-Monitor as interface to operator
- Select → Load → Start-Concept
- Usually less than 5 min presence of operator per run necessary
- Extensive sensory system anticipating errors and ensuring robust performance without supervision



Drawer for easy loading of samples and assay consumables

Robust performance and low maintenance

All materials that come into contact with assay reagents or samples are single-use disposables, which significantly reduce maintenance and increase reliability of the results. Easy cleaning and chemical sterilization are further aspects of the MultiBioAnalyzer.



Detail of drawer with samples, assay reagents and consumables

Simple set-up and maintenance of the instrument at your facility is further provided by:

- Absence of fluidic system
- Simple electrical connection
- Chemical resistant casing

Our comprehensive services

Next to providing and supporting the instrument and reagent kits, you will benefit from the comprehensive services Bayer Technology Services offers, such as:

- Custom assay development and implementation according to your specifications
- Services on full automatic integration of the instrument into your system
- Feasibility and parameter finding studies
- Instrument and reagent kit qualification according to GxMP guidelines
- Preventive maintenance and trouble-shooting
- Local technical services