

# Streamline your microbial detection workflow with the Milliflex® platform.



## Milliflex® platform overview

Looking for reliable bioburden testing that won't keep you waiting for the accurate results you need? The unique Milliflex® filtration device combined with the Milliflex® Plus vacuum pump ensures reliable and accurate results to monitor the microbiological quality of liquid samples with no membrane handling. Add the Milliflex® Quantum rapid microbial detection system to detect colonies much faster than traditional methods. The Milliflex® Quantum system uses a non-destructive fluorescent viability stain, enabling identification. In order to fully optimize your workflow, additional accessories and services are available.

www.merckmillipore.com/milliflex



## Milliflex® Plus vacuum pump



## Services Optimize your QC lab workflow and ensure regulatory compliance

Microbiological monitoring and testing in the pharmaceutical industry is a highly regulated and thus very complex field. In our long history of serving the pharmaceutical industry by pioneering and refining groundbreaking solutions, we have gained the regulatory and technological expertise to offer you a comprehensive range of professional, best-in-class services.



#### Milliflex® filter units

Ready-to-use, sterile Milliflex® filter units combine a funnel and a gridded membrane filter in one device. They can be used in conjunction with either agar or liquid media (see "a complete solution for bioburden testing" section). The Milliflex® system is designed to reduce the risk of false positive and false negative results, while optimizing the testing workflow.

- No membrane handling
- Perfect contact between membrane and culture media
- 100 % integrity testing during manufacturing
- Microbial recovery testing for every batch
- Sealed membrane prevents sample bypass and optimizes rinsing efficiency
- Meets regulatory requirements

### MilliSnap® automated system to detach the Milliflex® funnel

Designed to simplify your workflow, the MilliSnap® plug and play system is a hands-free method for separating your Milliflex® funnel and transferring the membrane to the media cassette. The unique convex shape of the Milliflex® membrane combined with the MilliSnap® system ensures proper contact between membrane and media.

- Standardized, reproducible, hands-free membrane transfer procedure
- Quick and efficient separation of the funnel from the membrane
- Easy access in both laminar flow hoods and safety cabinets



#### ▶ Feasibility

Compatibility assessment of our customer product sample with our technology performed in our state-of-the-art lab.

#### On-Site Evaluation

If you would like to try one of our innovative rapid technologies, we can support you during an on-site evaluation with training, method advice and rental of equipment.

#### Testing Procedure

We will design for you an optimized testing procedure applying our expertise in filtration, method suitability and regulations.





Conventional (left) versus
Milliflex® rapid image analysis (right)

## Milliflex® Rapid microbiology detection and enumeration system

The Milliflex® Rapid microbiology system is an automated solution for the rapid detection and enumeration of microbial contamination in filterable samples throughout the manufacturing process. The Milliflex® rapid system uses ATP imaging technology to detect viable, culturable organisms in a fraction of the time of traditional methods.

- Detection times for most organisms range between 4 48 hours
- Based on the standardized Milliflex® filtration technology
- Combines ATP\* Bioluminescence with an innovative image amplification system (\*adenosine triphosphate)
- Image analysis for enumeration of microorganisms

## Milliflex® Quantum system rapid and non-destructive

The Milliflex® Quantum system is a rapid fluorescent-based technology designed for fast quantitative detection of microorganisms over a broad range of filterable matrices. This non-destructive method also allows you to identify any detected microorganisms using your current ID methodology.

- Detection times for most organisms range between 8 48 hours
- Easy-to-use and simple workflow requires minimal training
- Compatible with any ID technology
- Results comparable to compendial method, facilitating validation
- Economical, robust system
- Compact hardware





The Milliflex®
Quantum system
is a Bronze 2012
Stevie® Award Winner
(granted by the ABA).

#### Method Development Consultancy

Our microbiology experts can train and support you during your method development, including experimental design and analysis of data.

#### Validation Protocols

Save precious time with our pre-written, comprehensive validation protocols from validation master plan to final report.

#### Installation & Training

Get your system up and running quickly with our installation and training service.

#### A complete solution for bioburden testing

#### Rinse fluids

These fluids are manufactured according to pharmacopoeial formulations. They are packaged in convenient test volumes, in bottles combining a screw cap with a septum.



#### Prefilled Agar cassettes

A complete range of agar-based media in ready-to-use cassettes manufactured and QC tested according to pharmaceutical requirements.



#### Liquid ampoule media

Milliflex® filter units can also be used in combination with Milliflex® liquid media cassettes and liquid ampoule media.



- Convenient, single test 2 mL plastic ampoules
- Avoids the waste and spoilage associated with bulk packaged media
- Broad range of general and selective media formulations



#### ▶ PQ Consulting

Accelerate your PQ with valuable tips, proven techniques. data analysis and regulatory

#### Maintenance Agreements

#### ▶ IQ/OQ Services

#### **Seminars**

# The Milliflex® platform provides bioburden testing solutions for almost any product in any process

- Traditional and rapid solutions
- State-of-the-art and proven membrane filtration devices
- Wide range of high quality culture media
- Highly accurate, robust and easy-to-use instruments



We provide information and advice to our customers on application technologies and regulatory matters to the best of our knowledge and ability, but without obligation or liability. Existing laws and regulations are to be observed in all cases by our customers. This also applies in respect to any rights of third parties. Our information and advice do not relieve our customers of their own responsibility for checking the suitability of our products for the envisaged purpose.

#### For more information on our products: www.merckmillipore.com/milliflex



Find contact information for your country at: www.merckmillipore.com/offices

For Technical Service, please visit: www.merckmillipore.com/techservice



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