

MALDI-TOF



## **MALDI Biotyper**<sup>®</sup>

Your confirmation / identification solution for water microbiology

Not for use in clinical diagnostic procedures.

### When speed and accuracy matter – Saving days in your confirmation process

The Bruker MALDI Biotyper method is designed to rapidly:

- Confirm microorganisms -Confirm the preliminary presumptive result of an alternative or a reference method
- Identify microorganisms -Determine the identity of an isolate from a variety of agar plates

One system, one set of consumables, one method, one workflow - for bacteria, yeasts and molds

Innovation with Integrity

# Confirmation and identification of microorganisms by their molecular fingerprint

The **MALDI Biotyper** identifies microorganisms using **MALDI-TOF** (Matrix-Assisted Laser Desorption Ionization / Time of Flight) **Mass Spectrometry** to determine the unique proteomic fingerprint of an organism.

The characteristic spectrum pattern of this proteomic fingerprint is used to reliably and accurately identify a particular microorganism by matching thousands of reference spectra from microorganism strains.

Integrating the MALDI Biotyper into routine testing workflows results in a significant consolidation of resources, as it replaces multiple traditional and biochemical identification methods, and eliminates the burden of multiple steps, workstations and metrology requirements of DNA sequencing.

### Fast confirmation of pathogens and quality indicators

Using the same workflow and the same consumables, confirmation of pathogens and quality indicators can reliably be performed in no time, from various agar plates. The flexible and low cost workflow encourages convenient testing of multiple colonies in one run, gaining crucial time for confirmation of coliforms, *E. coli, Enterococcus* spp., *Legionella* spp. and the opportunistic waterborne pathogen *L. pneumophila, Pseudomonas aeruginosa, Salmonella* spp., *Sulfite-Reducing Anaerobes (Clostridium)*, etc.

A fast confirmation result allows for timely actions to monitor and control the **quality and safety of drinking and recreational waters**.

### Identification available within minutes

The identification at the species level of bacterial isolates enables the **characterization of biofilms in drinking water distribution, cooling water systems and towers**.

*L. pneumophila* is of major importance to public health, and its colonization on surfaces is mediated within multispecies microbial communities. According to the **ISO 11731** for enumeration of *Legionella* spp., the **MALDI Biotyper** is a recognized method for the identification of *Legionella* species.

### Easily fitting into your workflow

Implementing the system in the laboratory workflow can directly translate to significant cost savings by accelerated testing. The MALDI Biotyper system can be employed in all of the beforementioned application fields with **one single easy workflow for bacteria**, **yeasts and molds**, providing rapid and reliable identification of microbial contaminants. The results can then automatically be transferred to the LIMS.

#### **Flexible**

In addition to using the standard MALDI Biotyper Reference Library, the open concept of the system offers the flexibility to build your own reference library with sitespecific contaminants.



MALDI Biotyper<sup>®</sup> is a registered trademark of Bruker Daltonik GmbH in the European Union and the USA.

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