

> VERIFICATION OF WATER
HYGIENE IN PROFESSIONAL
QUALITY SYSTEMS
ISO 22000/HACCP

BACTIQUANT®-WATER
– TOTAL BACTERIA IN MINUTES

mycometer
rapid microbiology – on-site technology

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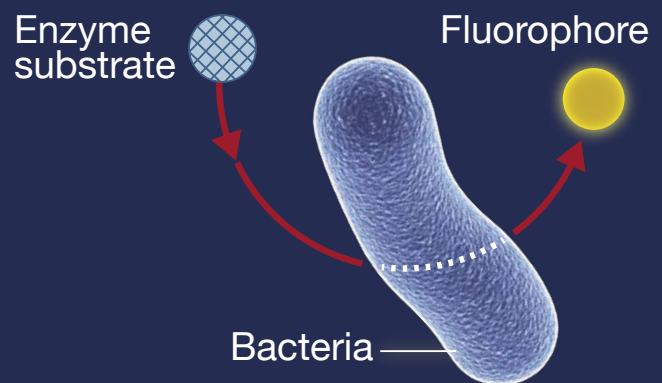
ROBUST TECHNOLOGY FOR USE ON-SITE

- Use the technology for on-site assessment of total bacterial load in water samples
- Get timely results and reduce downtime of critical water systems
- Respond quickly and maintain control



EASY SAMPLING AND ANALYSIS

- The analysis is based on a highly sensitive fluorescence technology
- The fluorescence signal is directly proportional to the content of bacteria
- The Bactiquant®-water is a patented technology in use worldwide



FOR OUR CUSTOMERS WATER HYGIENE QUALITY CONTROL IS AN INDISPENSABLE REQUIREMENT

Condair, a customer of Mycometer since 2006, has developed a comprehensive hygiene system, HACCP, under ISO 22000. This HACCP system is based on firm instructions and procedures for the sale, manufacture, installation and service of humidification systems.

Condair service engineers carry mobile Bactiquant®-water equipment for rapid evaluation of water hygiene quality.

The field equipment allows for on-site evaluation of feed water quality, post-treatment verification of cleaning and disinfection as well as rapid bacteriological trouble shooting.

Condair is the world's leading manufacturer of commercial and industrial humidification and evaporative cooling products and systems, setting standards with regard to energy efficiency and hygienic solutions. Condair export to over 50 countries throughout the world.

Service technician from Condair is conducting a water hygiene verification on-site.

The portable analysis equipment saves valuable time and lowers logistical costs.

All technicians using the system are certified users and have been trained according to the standards and protocols described by Mycometer.



BACTIQUANT®-WATER IS USED IN THE WORLDS LARGEST EVAPORATIVE COOLING SYSTEM



Condair has designed, manufactured and supplied a spray evaporative cooling system that conditions the air across a 15-hectare site in the Saudi Arabian city of Medina by up to 10°C.



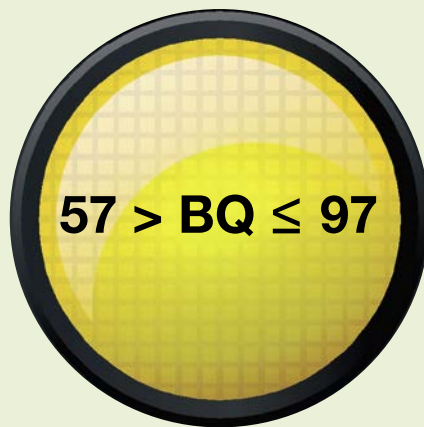
HYGIENE MANAGEMENT PLAN

Measuring hygiene quality of the water has been a major focus of the entire Hygiene Management Plan. Twenty technicians are trained and certified to use the Bactiquant rapid test. Cleaning, flushing and disinfection of the system are controlled and managed according to BQ results.

TRANSLATING ANALYSIS RESULTS INTO OPERATION



**Acceptable
water quality**



**Disinfect
system**

Change bacteria filter
if pressure loss is more
than 0,6 bar



**Disinfect
system**

Change bacteria filter
if pressure loss is
more than 0,6 bar –
Biofilm cleansing

The operational threshold values is based on an extensive study of 974 water samples analysed in parallel using an HPC method (CFU/ml – DS/EN ISO 6222) and the Bactiquant method (BQ- value).

CFU/ml (DS/EN 6222)	BQ - value (Sensitivity 95%)
200	57
500	84
1000	97

ON-SITE APP SUPPORTED ANALYSIS AND REPORTING

Mycometer provide an App for on-site analysis. The App takes the technician through the analysis routines, registers the analysis parameters and automatically sent a custom made report to the management, customer or Back office.



TESTIMONIAL



In all adiabatic humidifiers, water hygiene is a very important issue. Water is atomized, evaporated and absorbed in the surrounding air - and if the water contains bacteria's they will also be transferred to the air. As a supplier of professional humidification solutions to many different industries where hygiene is critical, we need to have a rapid, robust and reliable tool to test our systems in the field. With the BQ test we are able to prove, that the water we add to the air is safe for humans and products. Hygiene tests in the field - on site, is an essential part of the verification procedure of our certified ISO 22.000 HACCP Hygiene Management System. With success, we have been using the BQ test equipment since 2006 and have more than 90 certified users throughout our organization in Europe and North America. It's a great tool for our field technicians, not only for verification of hygiene level, but also to do on site diagnosis on contaminated systems. Instead of waiting days for results, we can proceed and act immediately and make sure that our systems are safe, when we leave the customer. This saves us a lot of money and time every year, and - best of all - our customers are happy and feels safe."

LEO RASMUSSEN, SENIOR TECHNICAL ADVISER

Condair Technology & Innovation Group.

> HAZARD ANALYSIS AND CRITICAL CONTROL POINTS (HACCP)

HACCP is a systematic approach to reduce the risk of biological, chemical and physical hazards in production processes. The HACCP approach has been successfully applied to water quality management in the past two decades. The HACCP approach is based on the identification of critical control points, establishing critical limits, corrective actions and procedures for ensuring the HACCP system is working as intended. ISO 22000 specifies the requirements for a quality management system based on the HACCP principles.