

Options

n-Way Decontamination

How do You Protect your Samples from Contamination?

In aqua vita est (lat. in water there is life). When water is vital for your goods to grow, how do you separate your seed from germs? Finally there is a solution that separates good from bad. Liconel is the ultimate protection for your goods specially developed for automated incubators.



Options

www.liconic.com

Europe: Liconic AG, Liechtenstein
Liconic UK Ltd, Manchester

US & International: Liconic Inc, Woburn MA

LiCONiC n-Way Decontamination for Automated Incubators

Automated Incubators having robotics installed inside the incubation chamber require special precautions for thorough decontamination and for ensuring low contamination levels. Some reasons for this are:

- Robotics cannot routinely be removed for decontamination
- Restrictions on usage of low contamination materials
- Robotics may have structured surfaces
- Robotics does not withstand autoclave temperatures without potential harm to components
- Robotics is sensitive to some substances used for decontamination

What does n-Way Decontamination do?

n-Way Decontamination effectively eliminates contamination and keeps the incubation chamber free of unwanted germs (see www.liconic.com for complete list of contaminants), while being absolutely harmless to the valuable substances stored inside the incubation chamber and causing no harm to the sensitive parts of the robotics. Namely test were

- Bacteria
- Fungi
- Viruses
- Cells

n-Way Decontamination is non-toxic and ensures maximum protection for the goods stored inside the chamber.

How does n-Way Decontamination Work?

In cases where the use of heat may be limited, alternative approaches for decontaminating must be taken. A carefully selected combination of features result in an extremely efficient decontamination solution. n-Way Decontamination stands for such an intelligent mix of precautions:

- STEAM INJECTION eliminates the need for water pan and standing water
- LICONEL, the new alloy generates ions while avoiding corrosion
- EASY ACCESS, allows access hidden corners and eases the cleaning process

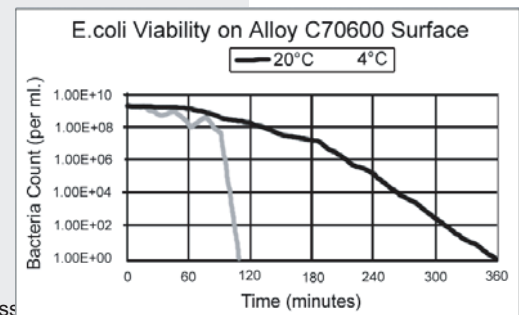
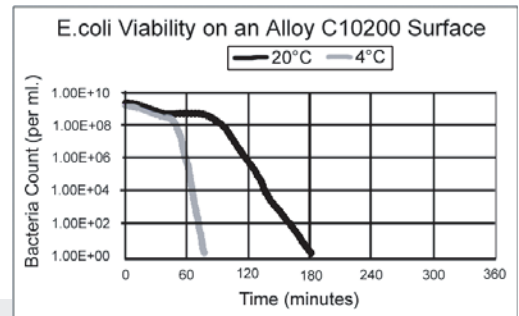
This unique combination makes the n-Way Decontamination best suited for automated incubators. The effectiveness of n-Way Decontamination has been shown in the laboratory with specially developed tests and large studies in various labs over the world.

Steam Injection

Water pans and ultrasonic evaporators are widely used for generating humidity in incubators. The use of ultrasonic evaporation is extremely critical, since harmful germs present in the water used for humidification, are not affected by the sonic dispersion and are evenly spread throughout the entire incubations chamber. Similar effects have been observed in commonly used solutions where humidity is generated by blowing air on a water surface. This is where the Steam Injection comes in. The LiCONiC steam generator heats the water on a 145°C surface leaving no chance to germ to survive. The water is evaporated completely germ-free inside the chamber. This results in a completely contamination-free humidification of the incubation chamber.

Liconel

The presence of Liconel at critical locations acts as a toxic barrier for germs. Liconel is used in areas where access for cleaning is restricted. Liconel works by generating ions from the surface in the presence of water. These ions inhibit the growth of micro organisms of the species being in the vicinity of the surface. The effect is widely known from copper. Other than copper Liconel provides a much better long-term stability and therefore minimizes the need of time-consuming maintenance procedures.



Pic.: Easy Access

Easy Access

Despite the fact that Steam Injection and Liconel will not allow germs being introduced nor to grow. Easy Access will still be wanted by the user. Easy Access is a clever mechanical solution to give access to hidden areas for cleaning. Easy Access also includes multiple design optimisation to avoid hidden areas where cleaning would not be possible.

What are the Benefits of n-Way Decontamination?

- Prevents unit from contamination
- Protects valuable goods in incubation chamber
- Lessens maintenance needs
- Eases cleaning process

Why n-Way Decontamination in Conjunction with Automation

Multi-range climate is frequently used in conjunction with automated storage system. n-Way Dencontamination works over the entire climate range used in laboaroty automation. n-Way Deconamination provides the the same protection for cooled and heated climate conditions.

When allowing manual access, the incubator door is opened and airborne pathogens may enter the incubation chamber. Plates and / or cassettes can introduce germs in the incubation chamber. n-Way Decontamination reduces the possibility for pathogens to settle and grow in the incubator.