You Are in Safe Hands

Health I Hygiene I Sanitation

Our state-of-the-art purpose-built wash plant was the culmination of two years research and development work. WISE worked specifically on the design and manufacture of the WISE washing machine focussing on the needs of the industry to develop a complete closed loop process to wash, sanitize, certify and return clean cups to venues

The WISE wash plant is HACCP certified to offer peace of mind that all cups are compliant for the beverage service industry, including periodic bacterial testing consistent with industry standards.

To manage this process involves employing local crew to operate and run the wash plant, thus creating and maintaining positions within the Australian Economy.

To ensure the cups are hygienically clean our partner in the design and manufacture, MEIKO have produced a paper on the virucidal effectiveness of the processing procedure of rack type dishwashing machines and flight type dishwashing machines (continuous systems).

Our game changing machine is capable of the complete sanitization of 10,000 of our cups per hour, whilst consuming only 92 litres of water in doing so. This is the WISE point of difference, none of our competitors have this capability as standard dishwashers do not sanitise or dry the cups sufficiently.

Flight type dishwashing machines for the processing of reusable cups must process properly. To do this, they must bring cups into an exceptionally clean condition which can be experienced by the consumer. In addition they must also treat these reusable cups in such a way that they cannot pose any risks of infections because cups could be contaminated with many problematic germs during their previous use.

The technology includes machines that can differ considerably in their technical detail. For example, they can work with a different number of water tanks (single-tank dishwashers / multi-tank machines). To protect consumers against the transmission of pathogens through poorly processed cups, the processing conditions, prevailing on the wash ware itself, and some other special technological details are decisive.

- The mechanics, i.e. the standardised supply of water and cleaning solution during cleaning, rinsing and during pre-rinsing
- The correct dosage of all chemical components - detergent as well as rinse aids
- A dosing system that not only ensures the exact concentrations of the products, but also the standardised preparation of the application solution and their availability on the wash ware, especially during a short contact time
- The exact temperature control on the wash ware, the constant and safe maintenance of the required minimum temperature on the items to be washed during the single processing phases.

Cleaning and Disinfection Process

For the flight type dishwashing machines from MEIKO, these requirements are met, among others, by the special nozzle technology and the application system of water with detergents or rinse aids in the washing arms of the machines. In addition, the special double-walled thermal insulation of the rinsing chambers helps to maintain the required temperature level.

All flight type dishwashing machines from MEIKO have one reprocessing cycle in common, which adheres to the following minimum parameters:

- Pre-cleaning with water of at least 50°C
- Main cleaning with the detergents, recommended by MEIKO at pH 9 to pH 13 and a surface temperature of at least 60°C on the wash ware
- Rinse aid recommended by MEIKO on the dishes with a surface temperature of 60°C to 70°C (which requires a water temperature at the nozzle outlet of at least 82°C),
- If necessary, post-drying (at a decreasing temperature from 70°C to 50°C)
- The total duration of the process is at least 120 seconds and is specified by the respective program.

Virucidal Activity Against Enveloped Viruses

Corona viruses belong to the group of enveloped viruses. They usually cause mild respiratory and intestinal infections in humans. The newly emerging strain is an exception in this point because it can also cause a life-threatening respiratory infection. In terms of its danger, it roughly corresponds to the classic flu caused by the Influenza A virus.

As an enveloped virus, however, the new pathogen is no more resistant to disinfectants and processes or heat exposure than all other enveloped viruses. Nor is there any special thermal resistance for it, as is known for all corona viruses.

On the contrary, it can be assumed that corona viruses exposed to temperatures of 60°C to 70°C are already sensitive. The high effectiveness of alkaline detergents against enveloped viruses has been proven in numerous studies. This applies particularly to detergents with a high fat-solving capacity and to cleaning solutions in the temperature range of 50°C and higher.

Basket and belt transport machines from MEIKO therefore fulfill the prerequisites for inactivating Corona viruses as well as all other enveloped viruses, provided that they are used as intended and function perfectly, as well as maintenance and repair according to the manufacturer's specifications.

Conclusion

Due to the known properties of Corona viruses and other enveloped viruses, if the flight type dishwashing machines from MEIKO are used as intended and the detergents and rinse aids recommended by MEIKO are taken, a virucidal activity against enveloped viruses can be assumed if the following minimum parameters are observed:

- Use of rack and flight type dishwashing machines maintained according to the manufacturer's specifications
- Use of the specified washing program with a total washing time of at least 120 seconds
- Maintaining a cleaning temperature of at least 60°C on the wash ware
- Maintaining a temperature of at least 60°C to 70°C in the rinse cycle on the wash ware
- Use of the alkaline detergents and rinse aids recommended by MEIKO

Wise
It's in your hands

www.itsinyourhands.com.au