Best practice cleaning

in the food and beverage processing industry

*Murray McDonald**

Cleaning practices are critically important in the food and beverage industry. In this article Murray McDonald brings you up to date with current best practice.

Over the last 10 years, best practice cleaning methods have changed in many industries. Unlike other manufacturing industries, the food and beverage processing sector is getting rid of outdated methods due to a stronger focus on reducing cross-contamination, reducing bacteria build-up and increasing productivity.

For sophisticated and safety-conscious food factories, using traditional tools such as rags, scrubbing brushes and hoses are no longer an ideal fit. The following are best practice cleaning methods to follow for the food and beverage processing industry.

Wet vs dry cleaning

Traditional cleaning methods include hosing down chemical, scraps, oils and grease. The main flaw with this method is that it doesn't agitate the surface, which is fundamental to getting deep within the surface, including any pores and crevices. A process that combines a 4-in-1 approach of washing, scrubbing, steaming and drying food processing equipment and surfaces is ideal. These steps allow for not only sterilisation (if steam temperature is high enough) but a mechanical agitation, which allows for the removal of food scraps, dirt and grime.

When looking at a steam cleaning processes, it's important that 'dry' steam is used. The dry component significantly reduces the risk of residue build-up or the occurrence of moist/wet floors, which can lead to slips and falls.

Another critical factor when it comes to wet vs dry cleaning is that some processing equipment shouldn't get wet. Wet equipment can lead to machinery faults and rust.

Automated and interval cleaning

Traditionally, cleaning could only be done either before production or after, and if it occurred during production hours, machines would need to be turned off for the cleaning to occur.

Inline cleaning systems are modern methods that allow for food and beverage processing equipment to be steamed, vacuumed and removed of any waste in one process, without the need to stop and swap equipment or tools. This greatly reduces the risk of contamination further down the production line. Surfaces receive a deep clean while production is occurring rather than a wipe down at the end. It also reduces resources, labour and downtime.

Validation of cleaning processes

An increase in regular ATP testing is becoming a standard in many food and beverage processing factories. ATP testing allows for microorganisms to be detected and subsequently prevent contamination.

Using invisible or fluorescent lights is becoming a popular auditing tool in industries where contamination prevention or infection is paramount. Some microorganisms can be detected under fluorescent light.

A cleaning audit can also be taken one step further when using florescent tools. Areas to be cleaned in a factory can be marked with an 'invisible marker'. Once cleaning has occurred, a fluorescent torch can be used to see if the invisible markers are still present. If invisible marks are still present, then the surface has not been adequately cleaned.

Stricter infection control procedures

Implementing procedures to 'safeguard' a food and beverage processing environment is almost becoming just as important as the cleaning itself.

An example of a safeguarding process can be seen in the use of ultraviolet (UV) light methods. UV light continues to protect and sterilise an environment post cleaning. If a surface is contaminated during production hours, this leaves 12 hours or more for microbes to grow while the factory is closed for the day or in non-production hours. UV light will reduce the risk of this contamination from occurring by acting as a 'night watch' for bacteria during production downtime.

**Murray McDonald has over 20 years' experience in the distribution of food and beverage processing equipment and is Director of Duplex Cleaning Machines. Duplex is an expert in the distribution of cleaning machine products in Australia and New Zealand and has solved cleaning issues and improved cleaning standards in thousands of industrial facilities.*

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