



Conveying

cleaning excellence

Murray McDonald, director of Duplex Cleaning Machines, discusses modern cleaning systems that can reduce production downtime and minimise the spread of bacteria.

IN FOOD MANUFACTURING, the conveyor belt system is usually at the centre of operations. The costs associated with its disruption include loss in time, money, resources and product. Inefficient cleaning methods are one of the core ways that a conveyor belt can be disrupted, interfering with the streamlined manufacturing process.

Today, there is no need to use outdated and ineffective cleaning methods. For sophisticated and safety-conscious food factories, using traditional tools such as rags, scrubbing brushes and hoses are no longer an ideal fit.

On a smooth conveyor belt, the main cleaning issues stem from the removal of sticky products. These can pick up soil causing a 'domino effect' which sees the spread of soiling from one conveyor area to the next. Your cleaning methods need to be specific to these core needs.

CONTINUOUS CLEANING

Cleaning conveyor belts has traditionally been a difficult, time-consuming task that was carried out by hand and required the conveyor system to be shut down. Minimising disruption and down time associated with cleaning is a major feature of the latest cleaning techniques.

Food manufacturing businesses should be investing in automated cleaning systems that allow the conveyor belt to be cleaned while produc-

tion is in progress. These automated cleaning systems are fixed permanently to the conveyor belt, so, instead of investing time and effort in cleaning in the middle or the end of the day, cleaning can be a continuous, automated process.

A common issue with manual conveyor-belt cleaning is a build up of product or food scraps. Continuous cleaning reduces conveyor-belt breakdowns and clogging because there is no need to stop and start the process.

STEAM VAPOUR

Steam is the number one cleaning method for many commercial facilities. High temperature steam is the most effective means of killing bacteria and removing all grime, stains and matter build up.

When conveyor belts are in progress, crumbs and small pieces of food fall onto the main production line, as well as hard to reach nooks and crannies. Steam vapour penetrates through to spaces that manual cleaning cannot reach. These awkward areas are ideal spots for the harbouring of bacteria, which can lead to high bacteria levels, putting food product at risk.

Steam, which can also be used in conjunction with a vacuum and hot-water injection, is suited to the needs of conveyor belt cleaning because it is a dry system. This eliminates electrical hazards as well as moisture build up, which can be detrimental to any food production process.

The combination of hot water and chemicals is a common cleaning method for conveyor belt systems. However, bacteria can become resistant to chemical disinfectants and hot water alone is not sufficient to get the job done. High temperature steam vapour is essential to ensure high-level cleanliness.

FLOOR CLEANING

The cleaning of conveyor belts can see excess product fall onto the floor which can be transferred from one part of a factory to another via high-level foot traffic. The 3000-year-old cleaning method of the mop and bucket or broom should no longer be used in any commercial setting. They are simply inefficient cleaning tools and in most cases only spread dirt, bacteria and product build up contaminating other areas.

For large commercial facilities, such as a food manufacturing business, scrubbing machines are now fitted with the ability to wash, scrub, disinfect and dry floors. It is important for floors to dry in moments to eliminate the need for hours of down time, OH&S hazards and moisture build up.

Conveyor belt cleaning and cleaning of associated areas now include modern and innovative techniques. These techniques can reduce production costs and associated risks, which should be at the top of the agenda for the food manufacturing industry. **F&D**

ABOUT THE AUTHOR

Murray McDonald is director of Duplex Cleaning Machines and has over 20 years experience in improving cleaning standards for thousands of commercial facilities. Visit www.duplexcleaning.com.au.



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