# Effective deep cleaning of a meat factory – where should you begin?

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n order to maintain food safety and comply with legislation, any establishment where food is stored or processed needs to maintain the highest level of hygiene possible. For some sites this task can be more challenging than other establishments. Facilities where meat is processed or cooked can often be difficult to keep clean and hygienic, as the slaughtering and meat preparation will inevitably lead to high levels of waste that is both attractive to pests and ideal for microbial activity.

For meat processing facilities where animals are slaughtered, the process begins usually at the rear of the site. Here the floor surfaces and the fabric of the building can be of a more rugged nature, allowing waste to accumulate in gaps and cracks. The rear entrance is also a gateway for pest species to be able to enter the facility. In these areas it is very much about the daily cleaners ensuring that residues are properly disinfected and removed, and that areas around sluices and drains are properly cleaned and disinfected.

Moving on from the dirty end into the low-



and high-care areas, the amount of waste and type generated can be different, as can the distribution of it. For example, in contrast to the abattoir section, the cooking areas will generate less obvious mess, but instead residues that are airborne, oily and adhesive. These residues can coat and accumulate in high level areas such as beams and on top of lights and ledges.

These will need to be tackled in a different

way with other techniques and with an alternative product. In-house cleaners need to be well equipped and highly trained to be able to deal with the vast array of cleaning challenges and locations which often require the use of specialist access and cleaning equipment, to ensure that it is carried out in a safe and controlled manner.

Given the complexity of the task it can be highly advantageous for site mangers to use external specially trained professionals. Benefits of this can come from technicians who have more experience in dealing with different establishments and cleaning challenges. Additionally, out-sourced experts can often appraise the clean-up operation with a fresh perspective to that held by longer term in-house cleaners. Other benefits are that the site can be refreshed by intensive deep cleaning which can then form a standard that can be maintained by the regular cleaning staff.



#### The fight against grime

Food waste and other debris are a significant source of potentially hazardous microbial material that will attract pests that can contaminate the production environment. The most powerful tools in the prevention of the spread of pathogenic Continued on page 9

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bacteria are regular cleaning and preventing pests, particularly rodents and flies. Proper, effective proofing around the fabric of the building and the use of fly screening to doors and windows is essential, while the regular routine cleaning can significantly help prevent build up of bacterial and fungal growth and areas for pests to refuge. Getting the building 'watertight' can prevent countless issues, and it is best to prevent rather than to react.

Rodents are known to spread infections such as salmonella, hantavirus and Weil's disease. They can contaminate food with their urine, hairs and droppings, and can also cause significant damage by gnawing through walls, doors, equipment and even electrical cables. Their feeding and nesting habits are also destructive and highly undesirable inside a meat factory.

Daily cleaning alone will not eliminate all build-ups of grime and bacteria, and most meat processing factories need to have an expert supplier to completely inspect and then deep clean their facilities. In an ideal situation a critical appraisal of the cleaning system should be undertaken, wherein frequency of cleaning and the hazard analysis and critical control points plan (HACCP) should be reviewed.

In this process it is often wise to use ATP or in some cases microbiological swabbing to validate the cleaning efficiency and to



identify areas of improvement. Systematic contour mapping of the site can often indicate key areas of process that may need attention.

#### Innovations in deep cleaning

Once the site is deep cleaned, ULV disinfectant fogging can be used to sanitise food production areas and process equipment. Fogging is a technique which enables treatment of large areas in a short

space of time. Foggers generate a fog formed of Ultra Low Volume (ULV) droplets, measuring 5-50 microns ( $\mu m$ ) in diameter.

This means they are small enough to hang in the air long enough to tackle pathogens. They also land underneath, on top and on the sides of surfaces where they can come into contact with pathogenic microbes that might otherwise be missed by manual cleaning methods. If your site is not up to the standard it should be, make sure you call in the experts.

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