

Reduction of contamination risks in personnel and material flow

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Food production and preparation has become more and more complex throughout the years. With the introduction of dried and refrigerated foods, the need for stricter contamination control processes has grown. EU and HACCP directives have led to significant improvements in food production processes. However, the new and more stringent regulations require even greater microbial control.

If pathogens such as salmonella, E. coli bacteria, listeria, campylobacter or pseudomonas come into contact with food, this can have serious consequences, resulting in lost profit and even loss of brand image.

There are numerous mechanisms by means of which microorganisms can penetrate critical areas, where they either adhere to surfaces or spread. Removing these pathogens before they can penetrate a critical area is an important step in a risk-based contamination control program.

Special products – such as the permanent floor covering from basan – prevent the majority of pathogens and contaminants from penetrating critical hygiene areas.

These special polymer floor coverings are used in diverse areas in the food production

sectors*, such as refrigerated foods, dried foods and packaging. Possible applications include:

- all entrances to food preparation areas, to prevent penetration of microbial contamination;
- all exits and all corridors, to reduce the risk of cross-contamination;
- the critical areas, to reduce the number of airborne microbes.

Two versions are available: One is designed more for personnel flow and the other for forklift traffic.

The floor coverings contain an integral antimicrobial additive. They have been tested successfully on 50 frequently occurring organisms, including salmonella, E. coli, listeria, campylobacter, pseudomonas, A. Niger (black mould) and algae. The BioMaster additive also helps to combat MRSA.

The actual functioning principle is based on a naturally hard surface and a high degree of short-range electromagnetic forces (Van de Waals). Therefore, up to 99% of the particles, ranging in size from more than 100 micrometers to less than 0.2

micrometers, are attracted, collected and detained.

The contamination is held on the surface until it is cleaned. Cleaning is normally carried out with the usual mops.

Selecting the right size

It is important to select permanent floor coverings of the right size for optimal effectiveness and durability. Several factors must be taken into account, such as:

- the degree of contamination
- the number of employees and transport vehicles
- the frequency of wet cleaning
- the available space

The polymer coverings, only 3 mm thick, can be installed quickly and inexpensively on top of the existing floor. Often it is not even necessary to glue down the floor covering, which facilitates later removal.

Regular measurements of the effectiveness of the floor coverings can be conducted by basan. The results are documented in a certificate. This makes it possible to monitor the function of the floor coverings over a period of many years.