

Effective Decontamination of Footwear Soles

It has long been suggested (or required) to locate footbaths or foot mats containing disinfectant at all entrances and exits at food, dairy and beverage production and finished product storage areas.

A 2013 peer-reviewed article in *Food Protection Trends* (FPT) reviews the chemical decontamination of footwear soles to limit microbial transfer. Four different treatments were studied, including an isopropyl alcohol (IPA) and quaternary ammonium compound (QAC), known as Alpet® D2, from Best Sanitizers.¹ In the summary it says, "Results of this study demonstrate that use of IPA QAC for decontamination of footwear may provide a significant barrier against the spread of microorganisms by foot traffic." The Alpet D2 spray had a 2.34-log CFU reduction compared to no treatment. Also mentioned is that this sanitizer readily evaporates, reducing moisture transfer to floors.

Introducing the HACCP SmartStep™ Footwear Sanitizing System

Best Sanitizers has recently brought to market a foot-operated unit that uses compressed air to deliver a finely atomized mist of Alpet D2 surface sanitizer to the bottom of employees' footwear. This mist provides ample coverage to footwear soles, yet uses only 0.2 ounces of chemical, which minimizes chemical waste and improves moisture control. This delivery method, combined with Alpet D2's proven efficacy and highly evaporative properties, creates an effective solution for processing plants where reducing pathogens and controlling moisture is critical.

The innovative design of the HACCP SmartStep, designed to meet Hazard Analysis and Critical Control Points (HACCP) programs, also addresses two concerns mentioned in the FPT research, "If not adequately maintained, footbaths can harbor microorganisms and can contribute to rather than reduce spread of microorganisms." Additionally, by providing ample coverage, the HACCP SmartStep also mitigates another problem: "Results of this study suggest that inadequate sanitation occurs on footwear soles having brief exposure time typical of workers who walk through footbaths without stopping."

SmartStep features a compact footprint (10 × 21.5 × 17 in. – 39 × 85 × 67 mm) and can go practically anywhere in the processing facility. Multiple units can be placed throughout the plant wherever microbial reduction from footwear is needed.

The collection basin is easily accessed for cleaning. Versatile

options include units with or without a handle, a combined scrubber-sanitizer unit, and a stand-alone scrubber with a handle. The basic SmartStep unit has a list price of \$1,590.

Additional information about Alpet D2 sanitizer

Alpet D2 is the original ready-to-use, no-rinse alcohol/quat sanitizer/disinfectant for food contact surfaces. It has the following characteristics:

- 58% IPA/quat formula
- Kills 99.999% of tested bacteria and viruses, including *Escherichia coli* and *E. coli O157:H7*, *Salmonella enterica* serotype Choleraesuis and *Salmonella typhimurium*, *Listeria monocytogenes* and *Pseudomonas aeruginosa*



- NSF and Environmental Protection Agency registered
 - Kosher certified and Pareve
 - 60 seconds to sanitize, 5 minutes to disinfect
 - Highly evaporative and ideal for dry processing and low-moisture environments
- All products from Best Sanitizers are available from Weber Scientific.

Reference

1. Burnett, S.L., S.J. Eglund, P.J. McKelvey and E.K. Cook. 2013. Chemical decontamination of footwear soles to limit microbial transfer in a dry environment. *Food Prot Trends* 33(2):74-81.