

# 1, 2, 3... THUMBS UP FOR UV-C

Keeping microbes out of your food production facility is a never-ending battle. But have you considered adding UV light to your arsenal?

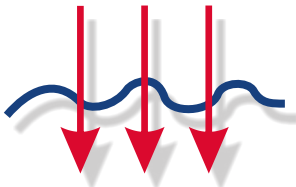
## WHAT IS UV-C

UV-C is one of three types of radiation emitted as light waves. We can't see it, though, because its wavelength is not in the range of visible light. Although the sun's UV-A and UV-B radiation can damage our skin cells, UV-C is not absorbed into the skin. If used correctly in an industrial setting, UV-C light poses no exposure hazard to us.



## Why UV light is a good choice for disinfection

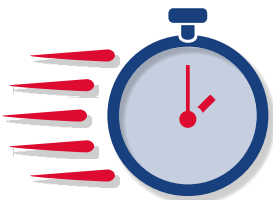
### It is effective



UV-C easily penetrates the protective barrier found around microorganisms and disrupts their DNA structure. This prevents the organisms from replicating. Since the action does not target a specific chemical marker, UV disinfection is effective against a broad range of bacteria, viruses, moulds, algae and parasites. No chemical agents have to be used, so no residual is left behind. That makes it useful for disinfection of air, water and surfaces - and especially effective against airborne transmission of pathogens.

1

### It works fast



UV-C radiation kills microbes within a few seconds of exposure. The reduction in microbial load depends on the area being exposed and the power of the light source. However, an area of 0.5 m<sup>2</sup> can typically be cleared almost completely in slightly more than a minute at the standard dosage recommendations. Continuous exposure ensures that the area stays clean.

2

### It is proven



The sterilisation properties of UV light have been known for more than 130 years already – in fact, Niels Finsen received the Nobel Prize for showing that UV light is effective against *Mycobacterium tuberculosis* causing skin lesions. UV light has been used in water treatment since 1910 and today it is used at more than 6000 water treatment plants across Europe and North America. It works well against the parasites *Giardia* and *Cryptosporidium*, which cause diarrhoeal disease and are notoriously difficult to kill.

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