

Space and cost reduction through the use of UV solutions in plant manufacturing Jorgensen Engineering A/S Case Study

Cooperation between Jorgensen Engineering A/S and Excelitas Noblelight in the development of filling and packaging handling equipment to reduce space and cost due to highly efficient, chemical-free disinfection processes.

The challenge

Saving space in clean rooms and reliable, intensive disinfection are key factors when equipping machines in the food packaging industry. Especially when it comes to sensitive products, such as infant formula, efficient and highperformance systems are a must. Jorgensen Engineering A/S, a Danish company founded in 1933, develops and manufactures complete filling and packaging handling equipment to the food, infant formula and pharma industries. Depalletizing, lid handling, portioning, clinching, labelling, packaging - the complete machines are a turnkey solution for the overall filling and packaging production process.

An important process step in the production of infant formula is the disinfection of the empty cans, so that the filled powder remains durable and free of germs for as long as possible. To achieve this, UV light provides the can surface disinfection. The so-called UVC disinfection is a purely dry and chemical-free process, whereby at least 99.9%-99.999% of the germ pollution is reduced. Only a few seconds of the intense light is enough to kill germs such as bacteria, yeasts or molds on packaging materials. Jorgensen's machines are environmentally friendly, reliable, low-maintenance and easy to handle thanks to the use of the latest technology.

The solution

Every customer has different requirements in his production facility, as certain types of food require different treatment. Regardless of whether it is an existing production line or a newly designed machine, Jorgensen Engineering A/S tailors the turnkey solution based on their extensive experience, know-how and the customer's specific needs. For the disinfection process this means adjusting the speed of the conveyors and the UV dose.

However, one requirement is the same for almost every customer – the footprint should be as small as possible. This means the production line should take up as little space as possible. After all, maintaining a cleanroom is expensive since the ventilation air and the objects in the room must be kept ultra-clean.

With the installation of the new Noblelight UV module, the "BlueLight Hygienic System", users can reduce the space needed for disinfection by 60%. Due to innovative developments, the Noblelight system is the most powerful UV low pressure system on the market providing the highest kill rates. Compared to equivalent UV technologies, end users can reduce energy costs by 30%.



Excelitas Technologies

UV Technology
hng-uv@excelitas.com
www.noblelight.com

