

MOBILE TUBCLEANER

Hoefnagel Tubcleaning of entrepreneur Gerrit Hoefnagel turned out to be the most innovative company in the Province of Flevoland in the national innovation Top 100. The company finished 27th, ahead of various other companies in the province.

Introduction

Until now, almost all the tubs (crates) in the fish-processing industry were still cleaned by hand. It's true this is done with the aid of a high-pressure sprayer, but it is still a time-consuming tiresome job. Often frozen to the bone, people in raincoats perform this job outside on the premises surrounded by tubs, waste water and a lot of foam. Other staff walk through the water and spread the bacteria that it contains through the company. This was the inspiration to set up an automatic washing unit with a conveyor system.

The mobile tub cleaner of Hoefnagel Tubcleaning is a trailer that has been fully equipped to clean tubs in, for example, the fish industry.

A forklift truck is used to place the tubs in the rear half of the trailer, where they are then automatically cleaned as they pass through the washing unit. The tubs can be cleaned with cold or hot water. They can also be disinfected after they have been cleaned. The trailer contains a large boiler for hot water, an 8000-litre water tank and a collection tank for the dirty water. Entrepreneur Gerrit Hoefnagel thought of the tub cleaner when working in the fish-processing industry in Urk. The method is so new that a patent has only just been applied for and awarded. The tub cleaner can also be used in other sectors.

Depending on the nature and degree of dirtiness, 40 to 80 standard (500-litre) tubs can be cleaned per hour. There is enough space on the belt for maximum twelve tubs. The tubs can, if necessary, be cleaned with heated water (the cleaning temperature can be variably set; not too hot so as not to coagulate any proteins), so that optimum cleaning is effected.



Keeping the containers clean is too important to do this half-heartedly. "What ends up in the container is the food that the customer, the consumer, eats," says Hoefnagel. It has been calculated that a company normally spends considerably more per tub on man-hours, cleaning agents, electricity and water in comparison to cleaning a tub in the trailer. Treating the tubs with a disinfectant will keep the containers bacteria-resistant for approximately one hundred hours.

In the first instance, Hoefnagel Tubcleaning focuses on the fish industry. The customer itself rinses out the containers for reuse, but Hoefnagel Tubcleaning is employed for the daily, weekly or fortnightly full clean. Other potential target groups include meat processors, the chicken industry, vegetable processors and the salad industry. "Each branch of industry has its own kind of contamination that requires a different method of cleaning. In the future, we will take advantage of this," said Hoefnagel.

A demonstration can always be discussed. At some stage, the intention is to filter and recycle the waste water. This is the next step in the development of the tub-cleaning service.

For the cleaning of the tubs, low-foaming cleaning agents are used from the Labaz cleaning package. For the CIP-systems and industrial (crate) washing systems, a range of cleaners has been developed that are characterised by their foam-inhibiting character. The range includes alkaline and acid cleaners and can be used for the most diverse types of contamination that can occur in the present-day food industry.



Disinfection is, of course, vital in the food industry. Controlling total hygiene within a manufacturing process partly depends on proper disinfection. The product range comprises agents based on quaternary ammonium compounds, aldehydes, hydrogen peroxide, chlorine and disinfectant A80 for the different applications. Of course, all disinfectants are approved by the Pesticides Approval Committee (College voor Toelating van bestrijdingsmiddelen, CTB).

For the cleaning of tubs in the fish industry, Hoefnagel Tubcleaning uses the Labaz Foodline SX-42 and SX-24A. Foodline SX-42 is a non-foaming strongly alkaline cleaning agent that is excellent at removing, for example, fats. We recommend using hot water. The Foodline SX-24A is a non-foaming alkaline chlorous cleaning agent. This product has an excellent fat- and protein-dissolving capability. The optimum temperature for cleaning with this product is between 40°C and 45°C.

Besides the Labaz Foodline SX-24A, Foodline SX-10 can also be used for removing fats and proteins. Gerrit Hoefnagel, however, consciously uses Labaz Foodline SX-24A, because this cleaning agent is suitable for use with aluminium.



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