



New system cleans industrial packaging 90% more efficiently

The Danish company SEMI-STAAL A/S has developed a system which can clean returned packaging from industrial enterprises using considerably less water than other systems, and less than a tenth of the normal energy consumption. The new solution can save Danish businesses millions of DKK.

Every year, companies like Dansk Supermarked, Danish Crown, Tulip and Arla spend millions of DKK on cleaning crates and pallets used to transport food and other products. These companies are helping protect the environment by recycling industrial packaging, but the process can be made more eco-friendly and more cost-effective for companies if it is as resource-efficient as possible.

Therefore there is great potential in the industrial cleaning system developed by SEMI-STAAL A/S with support from the Danish Environmental Protection Agency (Danish EPA) under the Ministry of Environment's efforts to promote eco-efficient technology. The company's new drying system reduces water waste by up to 65% when the returned packaging is cleaned. At the same time, the system only uses 5-10% of the normal energy consumption by centrifuging the packaging.

"Our centrifuge system dries the packaging much better than was previously possible, and this means that we can reduce water consumption considerably because more of the water can be reused," said Nicolai P Meyendorff, Managing Director of SEMI-STAAL A/S, and he continued:

"There are also savings of 85-90% on energy consumption compared with the traditional drying systems, and this means that companies having to clean tens of thousands of crates every day can save a lot of money using our system. There's a very quick pay-back on the investment".

Demand for environmentally friendly solutions

SEMI-STAAL A/S has been developing and producing industrial cleaning and logistics systems for returned packaging for more than 35 years. In the past decades, particularly in Scandinavia, the company has been seeing increasing requirements for eco-friendly solutions, where water and energy consumption are crucial in qualifying as a supplier. Therefore, two years ago SEMI-STAAL started development of the new washing and drying system.

The solution they developed to dry up to 4,000 crates an hour is currently undergoing the final tests before being launched on the market. So far results have been positive on all fronts. In addition to reducing energy and water consumption, the system is 15-20% quieter than other cleaning systems. The drying system is expected to be placed on the market in 2013.

Sales in Denmark and abroad

There are other drying systems for industrial packaging on the market, but SEMI-STAAL A/S is the only company which can offer a complete solution which is also one of the most resource-efficient, especially with regard to water and energy consumption. Therefore, SEMI-STAAL has already received its first enquiries from several Danish and European companies which are interested in buying the system, as Nicolai P. Meyendorff said:

"We see considerable potential in developing and expanding our own business through sales of the new centrifuge solution. We expect that this alone will increase revenues by tens of millions of DKK in the years to come as well as many new jobs. The solution is also attractive on the international market, and can contribute to lower operating costs as well as an improved ergonomic environment for employees at many Danish workplaces, which until now have had to use less effective solutions".

Fact box

The new system from SEMI-STAAL has been developed and tested with support from the Danish EPA's efforts to promote eco-efficient technology.

Read more at www.ecoinnovation.dk or www.semistaal.dk