



## Conversion of cast iron pumps for frozen foods factory

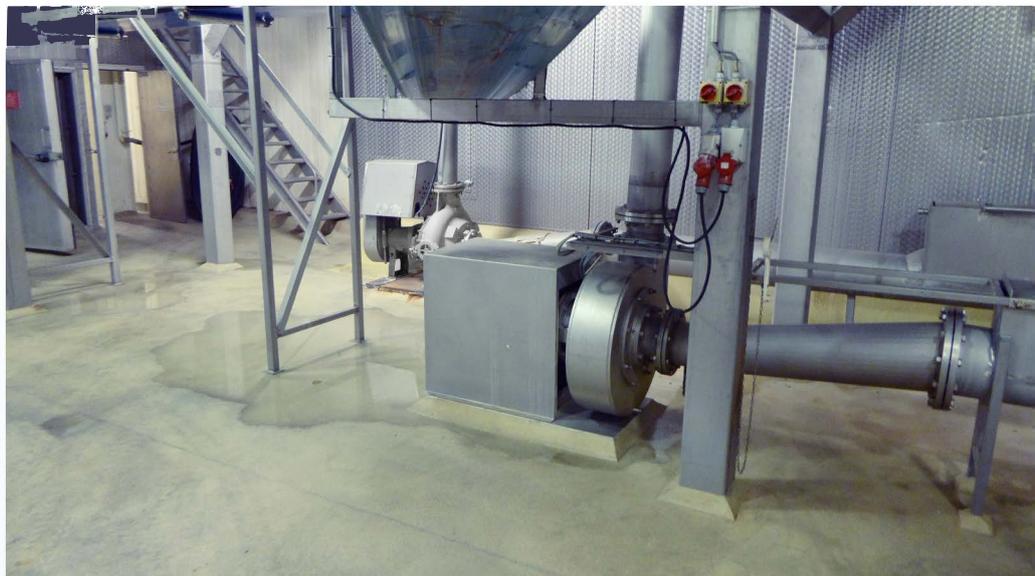


**d'**Arta is a frozen food company with roots in the centre of Flanders. This region is one of the richest agricultures in Europe and counts for about 30% of the total European yield of frozen vegetables. In addition to the location in Ardoorie (Belgium) and the production site Dardico in Portugal, a new branch in the United Kingdom is scheduled.

At d'Arta they are constantly working to keep the time between harvesting and freezing the vegetables as short as possible. In this way the highest level of freshness can be guaranteed.

### Drastic reduction in Total Cost of Ownership thanks to cutting off maintenance costs

On the production line where the carrots are cut, there were two cast iron 8 inch product pumps. These pumped the cut carrots with a hydro transport to the blancher. When cutting carrots a typical



acid is released. This acid attacked the cast iron pumps very strongly, causing corrosion. As a result, the maintenance budgets for this line rose sharply, since parts were replaced on a regular basis.

After the umpteenth change of the impellers - due to the loss of head because of wear and tear - d'Arta looked for a solution. That is why they approached us, to see if we could offer an alternative with a higher reliability to this problem. After a company visit and

selection with our CAPDATA pump selection package, we recommended the 8 inch VPCP product pumps. These product pumps, which are a reference in the field of minimal product damage, perfectly met the requirements of d'Arta. Mainly because all parts that are in contact with the liquid are made of stainless steel.

Together with the product pumps, the cast-iron return pumps were also replaced by Packo MCP pumps, which mainly guarantee a very quiet and

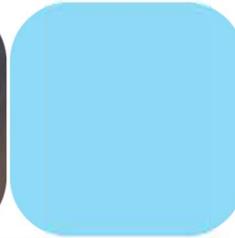
highly efficient operation.

This conversion had a drastic impact on the Total Cost of Ownership (TCO) of the D'Arta pump park. As the excessive maintenance budget dropped to a minimum, the TCO could be reduced to merely the purchase, conversion and energy consumption.

The energy consumption was also reduced by the use of pumps with better efficiency, above all by the use of high-efficiency motors. All these different factors also resulted in a low payback period for the conversion.

### What are the advantages for d'Arta

d'Arta, pioneering in the field of innovative production



*"Delivering a product pump that can work for 17 years and 70000 operating hours without maintenance, that is proof of the quality of the Packo pumps!"*

Johan Masschelin  
Technical manager  
steam and cooling installations



techniques within the deep-frozen vegetable industry, decided in the early 2000s to resolutely opt for a standardization of the pumping plant within the production environment. At this occasion, Packo was chosen as the permanent supplier.

The first step was to switch from cast iron pumps in the blanching line to Packo stainless steel pumps. In addition to high material resistance, our pumps also have very low NPSH values, so that cavitation was reduced to a minimum on this application with hot water (min. 95 ° C).

In addition to the 8 blanchers, also a part of the water treatment plant, CIP and many other installations were carried out with the MCP or ICP Packo pumps. The 6, 8 and 10 inch Packo product pumps largely take care of the vegetable flow within the factory. This type of hydro transport has the advantages that it is easy to clean due to the semi-closed system and there is no

risk of influx of foreign objects. Large distances can easily be bridged and an energetic advantage towards conveyor belts must not be forgotten.

A point of attention is that if the pump is not properly adjusted, it will cause a lot of product damage due to a too low or too high flow rate.