

Reference Remkes poultry processor

Use of residual heat, more refrigeration and a lower energy bill



Request by Remkes

Install a first-class refrigeration system that expands the refrigeration capacity but also complies with the requirement of sustainable production. The challenge was to become the market leader in terms of quality, reliability and innovation.

More refrigeration generally leads to higher energy consumption. At Pluimveeslachterij Remkes' poultry processor in Epe, however, precisely the opposite has been achieved: more refrigeration and a lower energy bill. The company has succeeded in setting up a system which uses what is known as 'residual heat' to heat water.

At most companies, the heat produced during refrigeration is simply released into the atmosphere. Now Pluimveeslachterij Remkes makes good use of the heat that would otherwise be lost. "We need hot water for defeathering the chickens and cleaning the installations," says project leader Jos Koedijk at Remkes. "We use seventy cubic metres of water at 68 degrees Celsius for this every day. The water is



heated using an ammonia heat pump." The installation of Remkes' new refrigerating installation in 2013 meant that it was possible to recover the residual heat. The refrigeration capacity was increased from 600 kW to 1,000 kW, an innovation which was needed



for the substantial expansion of the factory, which dates from 1928. The original refrigerating installation dated from 1986 and had insufficient refrigerating capacity for the envisaged increase in production.

“But we wanted more than just more refrigerating capacity,” says Koedijk. “We are constantly on the lookout for improvements. We have customers throughout Europe and further afield and are committed to being

Jos Koedijk,
Project Leader at Remkes:

“We wanted more than just more refrigerating capacity.”



at the forefront when it comes to quality, reliability and innovation. That is why we not only wanted a first class refrigerating installation, but also to meet the requirement of sustainable production. Sustainable production is becoming increasingly important, particularly in the food processing industry. More and more large customers require this of their suppliers and we are happy to be able to meet their wishes. We were confident that ENGIE Refrigeration would be able to provide us with the expertise we needed in this field.”

Heat recovery is comparatively new in the Dutch business sector. ENGIE has built a special refrigerating installation for Remkes that runs on ammonia and CO₂. These are natural refrigerants which, unlike many synthetic refrigerants, are environmentally friendly. In combination with the aforementioned ammonia heat pump, this installation is able to heat water to high temperatures.

“Even if energy prices are low, this leads to an annual saving of more than forty thousand euros,” says Koedijk. “And we are eligible for the Energy Investment Allowance, so we also benefit from a tax advantage as a result of this energy-efficient investment. The payback period is, furthermore, less than five years. Thanks to ENGIE technology, we can take advantage of this financial advantage and meet market requirements. ENGIE more than met our expectations.”



The ENGIE solution

A special refrigeration system that runs on the natural refrigerants ammonia and CO₂. In combination with the ammonia heat pump, the system can heat the water to high temperatures.

More information?

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