

## Reference from Lutèce

# Greater cooling capacity and lower production costs thanks to a new refrigeration system



## Lutèce's question

We want to store our mushrooms without any loss of quality, bearing in mind the fact that the synthetic coolant R22, which has been banned since 2015, cannot be replenished.

The energy consumed by mushroom processor Lutèce has dropped spectacularly. And the quality of the company's stored mushrooms is remarkably high. Thanks to the technology in its new refrigeration system, Lutèce has been able to maintain its position as a renowned international supplier of mushrooms. 'Our costs have fallen dramatically,' says Jos van Osch, Manager Technical Service and Engineering at Lutèce.

### 300 tons of top quality

Top quality is the trademark of Lutèce, a company that supplies mushrooms to sixty countries. Refrigeration is therefore an essential link in the company's business processes. In the buffer cells, three hundred tons of mushrooms are stored before production. Immediately after harvesting, the mush-



rooms must be refrigerated at approximately five degrees so that the quality is preserved.

'We wanted to be able to store the mushrooms without losing quality, but that became more and more difficult,' reveals Van Osch. 'Last summer, the hot weather made it extremely difficult to keep the cooling cell at a constant five degrees. The refrigeration systems were installed 25 years ago and had



become obsolete. We had to use thermostats to regulate the temperature in the different zones in the cooling cell. We found it difficult to keep all the zones at five degrees, and we had to adjust them all the time.'

### Phasing out and saving energy

Lutèce tried to find another solution, also with maintenance in mind. Because maintenance of the system would start to become problematic in 2015. The old refrigeration systems used the synthetic R22 refrigerant, but this substance will be prohibited from 2015 onward. 'We wanted new refrigeration systems that could effortlessly preserve the

quality of the mushrooms. We asked ENGIE Refrigeration (formerly known as Cofely Refrigeration) to help us find a solution,' continues Van Osch. 'ENGIE proposed refrigeration systems that use ammonia, a natural refrigerant.'

'That was a good choice. Because our energy consumption has now dropped, yet our refrigeration capacity has increased from 400 kWh to 600 kWh. We now expect to save 35,000 euros on energy every year. With the old refrigeration system, our total costs were 2.14 euros per ton of product. That's now 1.56 euros. Added to that,

while the new system was being installed, production continued as normal because ENGIE had drawn up an excellent schedule for the installation.'

Forty Lutèce employees followed a special training course organised by ENGIE and learned how to work safely with ammonia. This type of training is necessary because ammonia is very flammable. 'ENGIE is certified to work with ammonia and to train us to work safely,' says Van Osch. 'There are very few suppliers that can actually do that.'

The Lutèce employees who operate the refrigeration units are very enthusiastic about the new systems. And hot summers are no longer a problem. 'Thanks to the capacity of the new system,' says Van Osch, 'it can now be operated from the workplace, where employees can read and, where necessary, immediately adjust the temperature on a screen. That is a much faster working method and is also more effective.'

'And it's not just ENGIE's new technology that we're happy with. They provide excellent service too. If we have a problem, they send a technician straight away. So we never have to stop our production process. And our own customers are satisfied too. They appreciate the fact that we're using natural refrigerants and saving energy. Because, like us, they too feel very strongly about sustainability and the environment. Lutèce is helping to make the world more sustainable, and we're happy to show it.'

Jos van Osch, technical services and engineering manager at Lutèce:

"We are very pleased with the service too; our production is never interrupted."



### ENGIE's solution

Cooling systems that use the natural coolant ammonia.

#### More information?

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