

Improved safety thanks to automatic lubricating system

After five years, it was time for the Belgian supermarket chain Colruyt to replace the chains on its conveyor belts, and they decided it was the perfect occasion to switch to an automatic lubricating system. The new chains are expected to last at least a few years longer. In addition, this type of lubrication is much safer and more efficient. “And the chains have never looked better”, says Karel Willems, Maintenance Engineer at Colruyt in Halle.

“If chains, bearings, or cogs require regular lubrication, an automatic lubricating system can be the solution,” states Kurt Malfroot, Sales Engineer at Van Meeuwen Lubrication in Belgium. The same applies to cases where application occurs at places that are difficult to reach, or if high risk is associated with performing the lubrication. “However”, he immediately adds, “the most important aspect is that the correct lubricant is used for the application. If the wrong product is used, try as you might, even when you set up an automatic system, the desired results will never be achieved.”

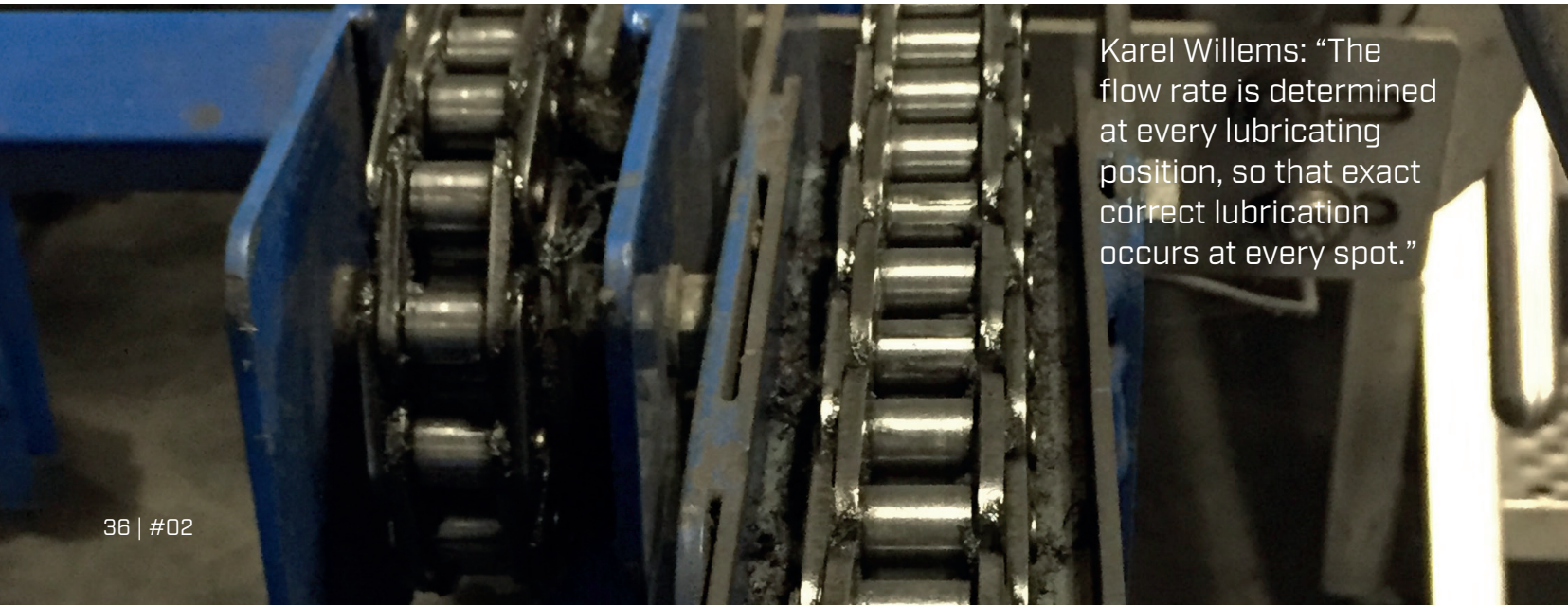
The lubricating system itself also requires periodic maintenance. “Compare it to a car: whether it is expensive or cheap, it

will always require service at regular intervals. This also applies to automatic lubricating systems. If you perform maintenance regularly, both the lubricating system and the installation it is used on will have a much longer lifespan.”

Increased risk

A longer lifespan for its assets was one of the main reasons to switch to an automatic lubricating system for such systems as the chain conveyors in the crate cleaning department.

Vegetable and fruit crates are collected on pallets from the supermarket chain stores and brought to the depot in Halle, where they are sometimes stored at an outdoor facility. Next,



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they are placed on a chain conveyor belt in the washing department. “The crates are often wet and water drips on the chains as they are transported. The chains started to develop rust spots, and often got stuck. Stacks of crates would sometimes topple over, and outages happened often. The conveyor belt would come to a standstill quite regularly, which was a waste of time and money”, says Willems.

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Manual lubrication, which was performed every fortnight, was a time-consuming task that always required two engineers. “In advance of the task, a risk analysis had to take place because this was an increased risk situation. One of the engineers worked in a safety zone surrounded by fences to apply the oil to the correct spots with spray cans, while the second engineer manually guided the machine to achieve perfect lubrication. If the wrong belt was activated, this would result in an incident. Luckily that never happened.”

Clean slate

After five years, with outages happening and the chains knotting up more and more often, it was time to replace the chains. Willems: “To start over with a clean slate, Van Meeuwen recommended the installation of an automatic lubricating

system at the same time as replacing the chains. This ensured that the new chains would last a number of years longer than the existing chains. It was one of the reasons we decided to switch to automatic lubrication.”

Van Meeuwen will be installing even more automatic lubricating systems for Colruyt in the near future. Options are being studied for the chains for cable lifts used for vertical transportation, and cranes in the high-rise warehouse.

Never better

The new system has been in use for approximately four months now. Bel-Ray No-Tox® Food Grade Chain Lubricant provides the perfect protection in a very wet environment. It penetrates right to the core of the chain and as a result, runs extremely smoothly. It retains its excellent lubricating properties, and is approved for use in the food industry. The oil is now applied automatically in pre-set doses at strategic positions determined by Van Meeuwen. Willems: “The installations are no longer stopped in order to lubricate them, and the two engineers who performed this manual assignment in the past can now focus on other tasks.”

Willems is very happy that spray cans are no longer used. “It was expensive, bad for the environment, and a great deal of oil was wasted because it was impossible to aim precisely. The new system is much more accurate. The flow rate is determined for every lubricating position, so that exact correct lubrication occurs at every spot. The chains have never looked better.”

