



ENGINEERING
TOMORROW



Case story | VLT® AutomationDrive FC 302

Brewing up **real change**

The situation

Industry terms like “smart maintenance” and the “factory of tomorrow” have become part of the everyday lexicon.

They are terms which represent the end goal for any business – a highly efficient and well-run operation. But that’s not to say they come without hurdles: the shift from theory to practice for food and beverage manufacturers transitioning to a smart factory model... well, it can feel like more of a giant leap than a step.

However, despite the challenges, brewing company HEINEKEN Netherlands Supply decided that to secure a more solid and sustainable future, it had to step into unknown territory and embrace innovation...

...Using Danfoss VLT® drives with integrated condition-based monitoring (CBM) capabilities to reach its goals.

Edge

computing in the drive ensures smart and simple condition-based monitoring

The challenge

With the European beer market expected to grow 15.2% by 2025, HEINEKEN understands that to meet demand its production line must always be up to task – with all assets expected to deliver a consistently reliable and excellent performance. However, prior to Danfoss Drives' input, the brewery faced costly and lengthy disruptions whenever a machine fault occurred, with operations taking place in harsh, wet conditions and all applications containing concealed motors – making them difficult to access when issues arise.

Danfoss was tasked with helping the brewery to:

- Increase uptime
- Lower overheads
- Improve management of spare parts and stock
- Access new levels of machine data
- Boost application and system performance

“Condition-based monitoring is a great addition to an already very good drive. Now, HEINEKEN is standardized on the VLT® AutomationDrive FC 302.”

Jan Brouwers, Detail Engineer at HEINEKEN's Den Bosch brewery

The solution

In August 2019 Danfoss Drives proposed HEINEKEN install VLT® drives with embedded intelligence, connectivity, and sensor capabilities. Condition-based monitoring signals were then integrated into the brewery's maintenance system via edge computing.

The brewery also received 4-20 mA vibration sensors from Hansford Sensors, and Danfoss provided additional support with project scoping, commissioning, and training, as well as holding workshops to determine the best solution for HEINEKEN's needs.

The VLT® drives also support pre-existing communication interfaces and software such as fieldbus, local control panels, and VLT® Motion Control Tool MCT 10, meaning HEINEKEN did not have to invest in a new parallel system as part of the upgrade.

The outcome

The VLT® Motion Control Tool MCT 10 plug-in proved to be a real game changer, enabling seamless commissioning with consistent parameter settings. And so, with the power to gather more critical application data in real time than ever before – and thanks to the efforts of Danfoss Drives – HEINEKEN was able to optimize its Den Bosch production line while solving all its pain points and building a total value proposition.

In addition, Danfoss Drives' digital expertise enabled HEINEKEN to go and retrofit the rest of its drives in the rest of its facilities with condition-based monitoring functionality.

In conclusion, the Den Bosch upgrade shows that condition-based monitoring is no longer a premium product meant for a few critical assets, but an affordable solution available for all – thanks to Danfoss Drives' innovative and forward-thinking approach.

15.2%

expected growth
in European
beer market
by 2025

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