**ebm-papst is carrying out a retrofit to bring the ventilation systems at its German locations up to the latest state of the art, including replacing its existing EC fans. By upgrading 161 systems in all, the company will achieve energy savings totaling around 10 percent.**

At the end of 2022, ebm-papst took a close look at its own ventilation systems as part of its sustainability strategy and decided to upgrade them. The Breuell & Hilgenfeldt retrofit service center handled the planning and design, while Pfänder GmbH was responsible for replacing the systems at the Mulfingen location.

**A special retrofit**

The inventory identified 136 air handling units (AHUs) and 25 refrigerating plants that were suitable for retrofitting. One unusual aspect was that many of the installed fans were already working with EC motors. This was partly because the systems at the relatively new Hollenbach site only went into operation in 2007, and partly because some of the older systems had already been upgraded to the latest EC technology a few years ago. However, replacing EC with EC also makes perfect sense from an energy point of view. Depending on the installation situation, energy savings of up to 12 percent can be achieved. Other advantages include easy replacement, as the installation sizes are generally identical, and the fact that no adjustments need to be made to the control cabinet because EC technology is already in use.

**A greater degree of intelligence**

Using the latest generation of fans offers even more advantages. Integration into the building management system, installation of sensors to enable demand-driven use, and even data-driven added value such as predictive maintenance. In the case of the Mulfingen retrofit, gateways from ebm-papst neo were installed in many systems. These gateways can read the data from the fan and can monitor running times or measure current consumption, for example. The gateways can communicate directly to the ebm-papst neo cloud via LTE, enabling them to identify and exploit additional potential for savings.

“Our technology is also great for us,” says Klaus Geißdörfer, CEO of the ebm-papst Group. “And with this retrofit project, we are underscoring our ambition to lead ventilation technology into a new era.”



Figure 1: For the retrofit at ebm-papst, a total of 161 systems with fans suitable for replacement were identified. This picture is from Mulfingen.



Figure 2: In many systems, EC fans were replaced with the latest generation of EC fans.

# Pictures Lukas Zwiesele for ebm-papst

# Characters approx. 2,300, including headings and sub-headings

# Tags EC technology, AHU, ambient air, retrofit, replacement, upgrade, energy savings,

Link https://mag.ebmpapst.com/home-retrofit

<https://youtu.be/spTKE3e9kqg>

**About ebm-papst**

The ebm-papst Group, a family-run company headquartered in Mulfingen, Germany, is the world’s leading manufacturer of fans and motors. Since it was founded in 1963, the technological leader has set international industry standards with its core competencies in motor technology, electronics, digitalization, and aerodynamics. ebm-papst offers sustainable, intelligent, and tailor-made solutions for virtually every requirement in ventilation and heating technology.

In the 2022/23 financial year, the Group generated turnover of EUR 2.540 billion. It employs just under 15,000 people at 30 production sites (including in Germany, China, and the U.S.) and in 50 sales offices worldwide. ebm-papst sets the benchmark in almost all sectors, such as ventilation, air conditioning and refrigeration technology, heating technology, information technology, mechanical engineering, intralogistics, and medical technology.