KEBA efficiency by innovation



"Automation by innovation" is KEBA's motto. The Linz-based company is convinced that energy efficiency and innovation go hand in hand. For product development, KEBA's experts monitor industrial trends, develop top-quality solutions and are always on the lookout for opportunities for improvement. The company demonstrates the same high level of innovation in its own building and production technologies though continuous optimisation and the most modern technologies. The Facility Management is constantly finding new ways to further increase energy efficiency – which also increases competitiveness, working conditions and motivation.

Solutions for the future: 50 years of automation and 10 years of e-mobility

For more than 50 years, KEBA has developed and manufactured innovative automation solutions for the industrial, banking, logistics and service sectors. The company's youngest business area is energy automation, including innovative control systems for biomass heating and heat pumps as well as charging infrastructure for electric vehicles. KEBA's automation experts presented the company's first charging station prototype as early as 2009 – when electromobility was just getting started. Since then, KEBA has become one of the top manufacturers of e-charging stations worldwide.

What was achieved?

Thermal renovation

- Full thermal insulation
- Roof refurbishment
- Replacement of windows, doors and gates
- Savings: 203 MWh/year

LED lighting

- 2011: start of the retrofit to LED
- 2016 2018: large office and production areas converted
- 60 % of the outdoor lighting
- Savings: 32 MWh/year

Manufacturing systems

- Central humidification and dehumidification system
- Replacement of measurement and regulation technologies and building control centre
- Optimisation of the compressed air system
- Optimisation of the refrigeration systems
- Modern surface mounting technologies

E-mobility

- 7 company-owned electric vehicles
- 41 charging stations
- 190 kW available, with dynamic load management



Competitiveness and efficiency through innovation

KEBA's headquarters, located in the Linz-Urfahr industrial park, has steadily grown throughout the company's history. Over time, additional buildings were acquired. The site now comprises 10 buildings that house offices, R&D, training workshops, manufacturing and logistics. After their acquisition, a number of the buildings were refurbished and equipped with modern, state-of-the-art building technologies and manufacturing systems. Innovation is very important for KEBA. In addition to thermal renovation and investments in efficient refrigeration technology and compressed air systems, a range of innovative energy efficiency measures were implemented. The main building, inaugurated in 2003, is not only an architectural trademark, with its passive house technology it also stands for environmental awareness and safe handling of raw materials and energy. The two floors of office space are cooled with groundwater. An automated lighting system and optimal daylight usage save energy and create a pleasant atmosphere for employees. Integrated green spaces bring nature into the building and help reduce heating and cooling demand.

In 2018, KEBA performed a comprehensive refurbishment of the ventilation in its production facilities: The ventilation systems were replaced, a central humidification-dehumidification system was installed, and the building control technology was modernised – including an optimisation of the measurement and regulation systems. The goals behind these measures were to continue meeting the high industrial indoor environment standards for electronic component manufacturing, achieve a homogeneous indoor climate and improve working conditions in general.









"We combine energy efficiency projects with already existing business and economic measures, making it possible and feasible to implement many innovative ideas."



Doris Breiteneder, KEBA Facility Management



More than low operating costs

KEBA is convinced that energy efficiency offers much more than just lower operating costs. Constant improvements of the thermal standards, the smart shading systems and the optimisation of the ventilation and air conditioning systems create a good indoor environment and a comfortable work environment – which increase the motivation and productivity of employees. Where it used to be too cold in winter and too hot in summer, the temperatures are now pleasant all year round, offering KEBA staff an enjoyable workspace.

LED: better light and no failures

The company has installed around 1,000 LEDs in recent years. The main arguments for making this switch are, obviously, lower energy consumption and the reduction in maintenance costs. The latter is especially relevant in production, where replacing lamps is difficult and costly due to high ceilings and necessary interruptions in production.

Smart charging of electric cars

Thanks to the electric cars in its fleet and its 41 charging stations, KEBA can test new developments in the field of energy automation (e.g. load management systems for e-charging infrastructure) under real-life conditions. Employees are also welcome to use the charging points for their private vehicles. 190 kW of charging power is available. Almost 700 kW would be needed for maximal charging speed at all stations. A dynamic KEBA load management system regulates the consumption by shifting and prioritising. This flattens the load curve and ensures optimal use of the available charging capacities.

Green - a matter of course

Further energy optimisation of its buildings is at the very top of KEBA's agenda. The use of tried and tested technologies is already foreseen, such as expanding the existing groundwater cooling system. In addition, KEBA continues to move towards e-mobility, especially in its own vehicle fleet.

Impressum: OÖ Energiesparverband, Landstraße 45, 4020 Linz, www.esv.or.at ZVR: 171568947





The company – key facts & figures

KEBA Group

Founding year 1968

Business areas

- Industrial automation
- Banking, logistics and service automation
- · Energy automation

Locations

25 (including Austria, Germany, Switzerland, The Netherlands, Romania, Czech Republic, Turkey, South Korea, USA, China, Japan, Taiwan, India)

Employees

around 1,750

Annual turnover

373.5 million Euro (2019/2020)

Export rate

88 %

R&D

16.6%

Legal structure

Owner-managed corporate group

ENERGY TRANSITION

LEADERS