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How

Who we

Who we are. How we think. How we act. 2017/2018

## ebmpapst

#### Milestones ebm-papst



1963 Founding of Elektrobau Mulfingen GmbH & Co. KG by Gerhard Sturm and Heinz Ziehl.



Takeover of PAPST Motoren GmbH in St. Georgen.

Development of

the first compact fan in EC/DC technology. 

> 1997 Purchase of Landshut plant from ALCATEL.



1998 Development of the first centrifugal and axial fans with integrated electronics. This development forms the basis for our EC fans and other products.



2007 ebm-papst passes the one billion euro sales mark. Gerhard Sturm becomes Chairman of the Advisory Board.



2010 GreenTech reflects ebm-papst's commitment to resource efficiency and sustainability in products, processes and production.





Contraction of the second

2013 ebm-papst

2016 ebm-papst acquires Spanish electronics specialist IKOR.



2017

Opening of new Hollenbach distribution center. As well as a digital think tank in Osnabrück.

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#### Foreword from the Managing Directors

Our success has many faces. Our employees' performance, the partnerships with our customers, our suppliers' input and our cooperation with experts and scientists are the basis of our technological leadership. Together, we create value and bring forth market-oriented products and solutions. Sustainability and innovation are the guiding principles behind our actions – and they drive our 800 engineers to continuously develop new, energy-efficient customer solutions. In our production facilities, we have directed our vision towards the future by implementing digitally interconnected processes. Doing so, we can inspire our markets and customers more efficiently and quickly. Our actions are always based on our obligation to uphold the values and basic principles of the ebm-papst Code of Conduct.

<sup>r</sup> Stefan Brand

Wame Thomas Wagne

Hans Peter Fuchs

Dr. Bruno Lind

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#### The DNA of ebm-papst

As a family-owned company, ebm-papst is immune to the short-term dictates of stock market-driven quarterly thinking. Profitability and liquidity safeguard our corporate existence and have top priority. With our EC technology, we are the technology leader in the fan and drive sectors. But our focus is on the future. Many of our innovative solutions are completely consistent with digitalization.

As the global market leader, we are present in all relevant regions with our own qualified sales team, application development and production sites. We rely on harmonized interplay with our partners, all qualified suppliers. Our diversification activity always targets our core competencies of motor technology, electronics and ventilation technology and can be quickly implemented in the existing sales network to take advantage of synergies.

We commit to environmental and resource preservation, and are extremely aware of our social responsibility to the regions in which we are active, as well as to our employees. We actively make our contribution in these areas.



#### Passion for ventilation and drive engineering

We move air intelligently and quietly, setting new standards in drive engineering in the process. We strive for perfect application solutions for a wide variety of sectors. In addition to major product series, we produce to satisfy individual customer requirements. Ventilation systems and the perfect harmonization of motor technology, aerodynamics and electronics are our core areas of expertise. We take an integrated view of entire applications and include the relevant requirement in our developments. In line with the Internet of Things, our development work is focused on interconnection and digital processes.



#### Expertise for our sectors

As the worldwide innovation leader for fans and motors, ebm-papst and its over 20,000 different products provide the right solution for virtually every ventilation or drive engineering task. Knowledge of our customers' needs and our experience in their industries, enable us to develop highly specialized solutions that stand out from the competition. Our products can be used for applications ranging from household appliances and automotive to industrial air technology.





#### Where to find us

The company headquarters are located in Mulfingen, Germany. When the two plants in Niederstetten and Hollenbach are included, this is the Group's largest location. Here, in the Hohenlohe region, which is the home of the Air Competence Center, we focus on ventilation, air conditioning and refrigeration. The product portfolio contains axial fans, centrifugal fans and blowers.

In the global world of drives and tubeaxial fans, St. Georgen in the Black Forest (plus the Lauf and Herbolzheim sites) is considered a pioneer and technology leader. The location provides intelligent system solutions for the automotive industry and industrial drive engineering. In the industrial air technology sector, ebm-papst St. Georgen offers a wide range of axial, centrifugal and diagonal fans.

By a series of strategic purchases in the heating sector and with start-ups, ebm-papst Landshut has developed from supplying heating and condensing technology to providing entire system solutions in recent years. Applications for gas and oil heating devices and fuel cells are as much a part of the product portfolio as house-hold appliance solutions for dryers or refrigerators, for example.

# ebmpapst





#### At home throughout the world

As an internationally operating company, we have to be in a position to react ever more quickly to the local requirements of the various regional markets. This is why we are establishing development centers as well as production sites in core regions such as China and the US above and beyond our global sales network.

In this way, our local customers will have a development partner that can optimally satisfy their individual needs directly at their doorsteps. We have a workforce of around 8,000 employees at our development and production facilities outside Germany.



#### **Closeness creates markets**

With an export share of more than 75 per cent and presence in 46 countries, we are actively doing business around the world.

Engineers are on hand at all our sales offices in the various countries to offer advice on the entire product range and to liaise with our development centres. Our international sales organization supports the efforts of our customers to sustainably attain global climate targets. This means concentrating not just on energy efficiency, quality and ecological aspects, but also on industrial safety and economic viability.

We also involve our partners in an active transfer of knowledge and invest in comprehensive training measures and courses.



#### Sustainable value chain

Our 26 production facilities in Europe, Asia and North America are committed to efficient resource utilization. To live up to this promise, we are constantly looking into and improving our manufacturing processes. We do not merely satisfy the binding global quality and environmental standards, we actually surpass these in every respect.

And we expect the same from our suppliers. The philosophy behind our products is: We only build low-emission, energy-saving motors and fans. They have long service lives and comply with the applicable regulations. In addition, we use environmentally friendly forms of shipping and packaging.



#### Research and development

Our strategic aim is technology leadership. In order to safeguard the position we occupy today for tomorrow, we must remain competitive and fit for the future. In the process, our focus is on interconnection, efficiency and noise reduction. We have maintained our investment in research & development. In the fiscal year 2016/17, the € 106 million we spent was another record sum.

Our two outstanding fields of research are aerodynamics and aeroacoustics, in which simulation tools and laboratories are essential. This is why we continuously invest in new measurement and testing facilities where we can measure and optimize components and entire customer devices based on their aerodynamic, aeroacoustic and electromagnetic properties. This is how we keep our innovation rate high.



## Fresh ideas

Despite all the growth we have experienced, it is tremendously important for us to keep proving ourselves as guarantors of innovation. For this reason, the spirit of inventiveness is an essential component of our corporate structure. Our establishment of a "digital think tank" in Osnabrück is an expression of this spirit. There, a small, innovative team works under start-up conditions to put together new solutions for electronic combustion controls. A second creative nucleus is based in Dortmund, where new approaches for cooling, air conditioning and ventilation technology are developed.



#### Leader in technology

We are technology leader. There are good reasons why astronaut Alexander Gerst takes our equipment along on his journeys into outer space, and customers use our fans to cool both particle accelerators and Formula One racing cars. All types of companies appreciate our system solutions.

Even before the hype surrounding the Internet of Things, we were aware of the importance of digital interconnection. This is why all of our EC products are capable of interconnection. A fan or drive motor is provided with decentralized intelligence, is network capable and can be controlled by an app at all times. The foundation for the future has long since been laid in our own production facilities as well. We are, for instance, considered a showcase for SAP ME, a software module which controls the productivity of machinery and systems and helps to shorten processing times.



## Healthy growth

We invest in healthy growth around the world. With acquisitions such as that of electronics specialist IKOR or grill guard manufacturer Lae, we are expanding our position as a system supplier.

At the same time, our German sites are growing organically. In recent years we have added new facilities at our Landshut and St. Georgen sites. And the new distribution center in Hollenbach features state-of-the-art technology on 38,000 square meters, ensuring that customers everywhere receive their goods on time.



#### Energy efficiency and sustainability

At ebm-papst, we think and act sustainably. Our GreenTech philosophy stands for sustainability in products, production and processes. Whether we are talking about energy-saving EC fans, efficiency enhancement in energy management, building systems and logistics or the "Energy Scouts" trainee project – our aim is always to achieve maximum energy and resource efficiency and to keep our  $CO_2$  footprint as small as possible throughout the entire value chain.

Our motors and fans are extremely efficient. And we optimise our materials and processes right from the design phase to attain the best possible environmental compatibility, a positive energy balance, a significantly longer service life and recyclability.

Our products are tangibly more eco-friendly and fulfil even the most stringent standards. In many cases they now already more than satisfy the limit values set down for the future – to the benefit of both the environment and users.



## People matter

Without our responsible attitude towards people and society, we would not be the company we are. We depend on the united efforts of our employees and are fully aware of how important it is to arouse their enthusiasm for their work. Based on this realization, ebm-papst takes on social responsibility at all its plants throughout the world and supports sports, cultural and community projects. At the same time we are in the process of adapting to changes in the population structure – with the introduction of flexible working time models, schemes for older employees and steps to help balance work and family life, for example. Other examples include:

- Professorships and scholarships at universities
- Partnerships in projects such as "Young Researchers"
- Sponsorship of sports and cultural events
- Organization of the ebm-papst marathon and indoor football tournament
- Support for international aid projects and charitable organizations
- www.ebmpapst.com/csr



## Training activities

Whether they are involved in sales, production, development, service or administration, our employees with their high qualifications, creativity and outstanding commitment are the key to our success – and we intend to keep it that way: A wide range of training programs gives our employees the chance to extend their knowledge throughout their working lives. In this way, we can be sure of always being one step ahead of the global competition with our expertise. But we are particularly keen to promote the next generation. These are just some of the ways in which we encourage young people to take an interest in technology:

- Partnerships with universities and cooperative state universities
- Work experience, practical placements and dissertation tutoring
- Above-average number of trainees
- Extra-occupational Master courses
- Work placements around the world
- www.ebmpapst.com/career
- training@de.ebmpapst.com







## Award-winning

Our company's distinctions speak for themselves: The outstanding energy efficiency and innovative design of our products, our dedication to climate and environmental protection and our GreenTech philosophy have won over many experts worldwide. The AxiBlade axial fan from ebm-papst received the 2017 iF Design Award in the "Product" category. The accompanying marketing campaign took gold at the 2017 German Stevie Awards.







#### ebm-papst worldwide

Sales offices

Production sites

70-

www.ebmpapst.com/worldwide

#### Facts and figures at a glance

	2015/2016	2016/2017	Change in %
Sales	€ 1,680 million	€ 1,901 million	+13.2
Proportion of foreign sales	75 %	77 %	
Investments	€ 137 million	€ 166 million	+21.2
R & D expenditure	€ 104 million	€ 106 million	+1.8
Employees (31 March)	12,545	14,398	+5
Production sites	25	26	
Sales offices	49	49	
of which subsidiaries	43	43	