







Who we are. How we think. How we act. 2020/2021

# ebmpapst



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#### **Foreword** by the Managing Directors.

The performance of our employees, the partnership with our customers, the input of our suppliers and the cooperation with experts and scientists are the basis of our technological leadership. Together, we create added value and set international market standards with our core competencies of motor technology, electronics and aerodynamics. Innovation, progress and sustainability are the quiding principles of our activities - and so our 900 engineers are constantly at work developing new, intelligent, and energy-efficient solutions for our customers precisely tailored to their applications. In our production, too, we have our eyes on the future and boost the digital networking of processes. This way, we can inspire markets and customers even more efficiently and quickly. The way we act is always governed by the values and principles of the ebm-papst Code of Conduct.

Stefan Brand

Thomas Wagner

Dr. Stephan Arnold

Hans Peter Fuchs

Johannes Pfeffer

#### Meilensteine von ebm-papst.



1963
Gerhard Sturm and
Heinz Ziehl found
Elektrobau Mulfingen
GmbH & Co. KG.

#### 1965

Development of first compact fan in DC technology.



Acquisition of PAPST Motoren GmbH in St. Georgen.



**1997**Takeover of Landshut plant from ALCATEL.



# 1998 Development of

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



ebm-papst passes the one billion euros sales mark. Gerhard Sturm retires from operative business.



2010
With GreenTech,
ebm-papst focuses on
resource efficiency and
sustainability.



2013
50 years of ebm-papst
and winning the
German Sustainability
Award.



2017
New dispatch centre opens in Hollenbach and two digital think tanks are set up in Osnabrück and Dortmund.

#### 2018

ebm-papst exceeds two billion euros in turnover and starts its fifth location in China.

#### 2019

ebm-papst strengthens its business activities with new production site in Tennessee.



2020
New location in Xi'an,
China, opens and
start-up ebm-papst neo
boosts digitalization
strategy.



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#### The ebm-papst DNA.

As a family-owned company, ebm-papst is economically independent and thus ensures its sustainability. Indeed, we are fully focused on the future. With our product portfolio of innovative and intelligent software and hardware solutions, we are the technological leader in the field of ventilation and drive engineering.

As global market leader, we are present in all relevant regions with our own subsidiaries and sales offices, application development and production sites. We rely on the partnership and inspiring cooperation with qualified suppliers, employees and customers. Diversification is always aimed at our core competencies of motor technology, electronics and ventilation and can be implemented quickly and synergetically within the existing sales network.

We are committed to optimizing the use of resources and to minimizing their amount. We are aware of our social responsibility towards our employees and the region and actively contribute to it.



#### Passion for ventilation and drive engineering.

We move air intelligently and quietly and are constantly at work setting new standards in drive technology. Every new solution we develop must exceed its predecessor in terms of intelligence and sustainability. We strive to create tailor-made application solutions for a wide range of industries and manufacture products not only as large series, but also to individual customer specifications. As ventilation experts, our core competencies are motor engineering, aerodynamics and electronics and their optimal interaction.

We take a holistic view of the entire application and include all relevant requirements in our developments. In line with Industry 4.0 and the Internet of Things, our activities are strongly focused on networking and digital processes.



#### **Expertise** for many sectors.

As the worldwide innovation leader for ventilation and drive technology with more than 20,000 products, ebm-papst always has the right solution for the most diverse requirements.

With intelligent networking always as an option, we create added value beyond the physical product. Knowing exactly what our customers and their industries need allows us to develop highly specialized solutions that are ahead of the competition. The spectrum of our applications ranges from household appliances and automotive to industrial drive engineering and ventilation technology.

In the field of medical engineering, ebm-papst is an important partner. Particularly during the Covid 19 crisis, the fan and drive specialist made sure widely different demands could be satisfied, including components for ventilators.







# **ebmpapst**

the engineer's choice

### Where to find us.

The company headquarters is in Mulfingen, Germany. Together with the two affiliated plants in Niederstetten and Hollenbach, this is the Group's largest location. In the Baden-Wurttemberg region of Hohenlohe, we focus on ventilation, air conditioning and refrigeration with our competence center "Air". The product portfolio consists of axial, centrifugal and diagonal fans.

In the global world of drives and compact fans, St. Georgen in the Black Forest (together with 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.

With strategic acquisitions and a start-up in Osnabrück, ebm-papst Landshut is specialist and market leader in the development and manufacture of fans, small motors and pumps for energy-efficient heating and household appliance technology. Blowers for condensing boilers or intelligently networked combustion controllers are just as much a part of the portfolio as hot air fans for stoves and condensate pumps for tumble or wash dryers.





#### **At home** *throughout the world.*

As an internationally operating company, we have quickly adapted to the local requirements of the various regional markets. This is why we go beyond just a global sales network by operating production sites and even setting up R&D facilities and in core regions such as China and the US.

This way, our local customers find a development partner right on their doorstep who is well-positioned to optimally satisfy their individual needs. We have around 8,000 employees working in our development and production facilities outside Germany.



#### Closeness creates markets.

With more than 75 per cent of our sales generated outside Germany and subsidiaries in almost 50 countries, we are actively doing business around the world.

At all our sites in the respective countries, our customers are supported by local talent and competent specialists. Our international sales organization supports the efforts of our customers to sustainably work towards and meet 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 engage in an active transfer of knowledge with our partners and invest in comprehensive training measures and courses.



#### Sustainable value chain.

At 29 production sites in Germany, Europe, Asia and North America, we are committed to the efficient use of resources and the reduction of emissions. In order to live up to this commitment, we continuously scrutinize and improve our manufacturing processes. We not only meet the globally binding quality and environmental standards, we actually exceed them in every respect.

And we also expect this from our suppliers. After all, our products follow one principle: We only build motors and fans that fully comply with regulations, have low emission, are energy-saving and durable. Naturally, we also ship and package them in the most eco-friendly way.



#### **Research** *and development*.

Our strategic aim is technology leadership. In order to make sure we maintain our present top position in the years to come, we need to remain competitive and fit for the future. Therefore, our focus is on solutions based on connectivity, efficiency and noise reduction. To this end, our expenditure in research & development has always been quite substantial. In fiscal year 2019/20, we a spent a record sum of more than € 100 million on R&D.

Outstanding fields of research are aerodynamics and aeroacoustics, to name just two. Here, simulation tools and laboratories are essential. This is why we continuously invest in new measuring and testing facilities which allow us to measure and optimize components and entire customer devices in aerodynamic, aero-acoustic and electromagnetic respect. This is how we maintain and boost our high innovation rate.



#### Fresh ideas.

No matter where we grow, it is of key importance for us to prove ourselves time and again as guarantor of innnovation. This is why inventiveness is firmly anchored in our corporate structure. This spirit is expressed, for example, in the founding of our "digital think tank" in Osnabrück. Here, a small, powerful team is given free reign and start-up conditions to come up with new, creative solutions for electronic combustion control systems.

A second creative nucleus is located in Dortmund. There, another team is working on new business models and IOT strategies for the ebm-papst group. Incorporating digitization, we want to make the company more efficient - for example, complex effort being reduced or smart functions being added. At ebm-papst neo, new approaches are being developed for refrigeration, air-conditioning and ventilation.



#### **Leader** in technology.

We are leader in technology. That is why one of our centrifugal blowers supports astronauts before takeoff. Particle accelerators are also cooled with our fans. Companies of all kinds value us as a provider of system solutions from a single source.

Even before the hype surrounding Industry 4.0 and the Internet of Things, we were aware of the importance of digital connectivity. This is why all our EC products are Industry 4.0-compatible. Almost every fan and drive system has decentralized intelligence, can be networked and can therefore be controlled at any time via app. Moreover, we have long since set the course for the future in our own production. We are, for instance, considered a model company for SAP ME, a software module that controls machine and plant productivity and helps to reduce throughput times.



#### Healthy growth.

We invest in healthy growth throughout the world. With each strategic acquisitions we are strengthening and boosting our position as a system supplier.

At the same time, our national and international sites are growing organically. In recent years, we have added the distribution center in Hollenbach which features state-of-the-art technology on 38,000 square meters, ensuring that customers everywhere receive their goods on time.

Furthermore, applying the "local for local" principle, we are consistently expanding the regions of Asia and America , thus strengthening local independence in the areas of development, sales and production.

In fiscal year 2020/21, we also opened our second US production site in Tennessee and expanded our activities in the Asian market by building a new plant in Xi'an (China).



#### **Energy efficiency** and sustainability.

At ebm-papst, we think and act sustainably, with an open and tolerant mind and always aware of our responsibility. Be it energy-saving EC fans, efficiency enhancement in energy management, building systems and logistics or the internationally successful "Sustainability Scouts" trainee project – we always aim at achieving maximum energy and resource efficiency and keeping our CO2 footprint as small as possible across the entire value chain.

Our motors and fans are highly efficient. And we optimize our materials and processes right from the design phase to attain the best possible environmental impact, a positive energy balance, a significantly longer service life and, of course, better recyclability.

The environmental edge and benefit of our products is measurable and meets the toughest standards. It is not uncommon for them to already undercut future limit values many times over today. This way, we create values that pay off not only for the environment but also for the user.



#### **People** *matter.*

We treat people and society responsibly. We live from the collective commitment of our staff and know just how important it is to inspire people for a cause. Based on this conception, our identity, ebm-papst accepts social responsibility at all locations worldwide and supports sporting, cultural and social projects and events. At the same time, we are facing up to demographic change by taking a wide variety of actions - through flexible working time models, schemes for older employees and ways to help reconcile family and career.

Here are just a few examples:

- Endowed professorships and scholarships at universities
- Education partnerships, e.g. for "Jugend forscht" (Young explorers and inventors scheme)
- Sports and cultural sponsoring
- Main sponsor of the ebm-papst Marathon
- Support of international aid projects and non-profit organizations



#### **Education** and Training.

Whether working in sales, production, development, service or administration, our staff 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 staff the chance to broaden and deepen their knowledge throughout their working lives.

This way, we can be sure that our collective expertise allows us to always be one step ahead of our global competition. And the next generation is particularly close to our heart. So here 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, internships and dissertation tutoring
- Above-average number of trainees
- Extra-occupational Master courses
- -Work placements around the world







#### GreenIntelligence.

As logical development of GreenTech, ebm-papst GreenIntelligence stands for sustainability combined with digital networking.

With GreenIntelligence, we offer our customers intelligently networkable solutions that give our partners a decisive competitive edge. We have recognized the opportunities of digitization and are thus in a position to offer solutions that combine highest energy efficiency with the advantages of digital networking. This way, applications become more powerful, processes more efficient, our customers more successful, their business more profitable and their customers more satisfied. In a nutshell, this is what we GreenIntelligence is all about.

With Greenintelligence, we enable our customers to enjoy competitive advantages in the context of IoT and digital transformation. Our intelligent technologies and services increase the revenue potential of customer applications, improve planning and operational reliability and ensure high cost and resource savings. This benefits both our customers and their customers – and, of course, the environment.

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## ebm-papst worldwide.

## Facts and figures at a glance.



	2018/2019	2019/2020	Change in %
Sales	€ 2,185 million	€ 2,188 million	+0,2
Proportion of foreign sales	78 %	79 %	+1
Investments	€ 131.8 million	€ 134.3 million	+1.9
R & D expenditure	€107.9 million	€114.3 million	+5.9
Employees (31 March)	15,058	14,638	-2.8
Production sites	28	29	
Sales offices	48	48	
of which subsidiaries	55	55	