



Annual Report 2020

## The Aebi Schmidt Group at a Glance

EUR '000		2020		2019
SALES BY SEGMENTS				
Aebi products	59 529	12.8%	60 263	11.7%
Schmidt products	214 154	46.1%	243 246	47.1%
Meyer/Swenson products	28 602	6.1%	40 111	7.8%
MB products	66 333	14.2%	74 023	14.3%
ELP/Arctic Machine products	8 979	1.9%	0	0.0%
Service and spare parts business	88 279	18.9%	98 530	19.1%
Total net sales	465 876	100.0%	516 173	100.0%
BALANCE SHEET TOTAL				
Current assets	257 895	80.7%	264 985	82.8%
Fixed assets	61 496	19.3%	55 028	17.2%
Total assets	319 391	100.0%	320 013	100.0%
Loan capital	237 221	74.3%	242 279	75.7%
Equity capital (incl. shareholders' loans)	82 170	25.7%	77 734	24.3%
Total liabilities	319 391	100.0%	320 013	100.0%
NUMBER OF EMPLOYEES (FTE)				
Germany	442	23.9%	466	24.9%
Switzerland	283	15.3%	280	14.9%
Poland	289	15.7%	305	16.3%
Netherlands	212	11.5%	214	11.4%
USA	384	20.8%	424	22.6%
Other	236	12.8%	186	9.9%
Total employees	1 846	100.0%	1 875	100.0%

Whether runways and taxiways at airports, pedestrian walkways, freeways or green spaces in challenging terrain - the areas of application of the Aebi Schmidt Group's products are as diverse as our portfolio: it comprises our own vehicles, attachable and demountable devices for individual vehicle equipment as well as intelligent product systems and customized services. Decades of broad experience make the Aebi Schmidt Group unique – and a reliable and competent partner for our customers from all over the world. A support and service program perfectly tailored to customers' needs offers the appropriate solution to nearly any challenge.

## **Our Vision**

In 2025, the Aebi Schmidt Group is the global leader of smart solutions for the treatment of missioncritical infrastructural and agricultural areas.

## Our **Mission**

Based on our competitive product range, we strive for total solutions, enabling an economic, safe and traceable clearing. Our ultimate mission is to improve the performance of our customers.

# **Annual Report** 2020

Facts and Figures	2
Preface by the CEO – The Financial Year 2020	4
Milestones in 2020	6
The Aebi Schmidt Group Values	8
Product and solution portfolio	9
Product Range	10
Reporting on Aebi Schmidt Group	12
Sustainability	12
Our Locations	14
Customers, Sales Organisation, Markets	16
Products and Services	17
Airport	18
Summer	20
Winter	22
Agriculture	24
Services and Solutions	26
100 years Schmidt: Interview with Alfred Schmidt Junior	28
Corporate Governance	32
Board of Directors	32
Executive Board	34
Group Structure	36
Corporate Governance Report	37
Sustainability	40
Employees	40
Community	43
Environment	45
Information on the Sustainability Report	48
GRI Content Index	49
Addresses	53

# **Facts & Figures**

800000



PRODUCTION HOURS WORLDWIDE



IN 16 COUNTRIES ...

we are present with our own sales and service organisations.

#### IN FURTHER 90 COUNTRIES ...

we are represented through established partners who in turn serve other countries.



# **POSITIONS**

Attractive traineeship positions and opportunities for a career start at various locations.



# **TRAINEESHIP**

**PLANTS** with a total production area of over 90 000 m<sup>2</sup>.



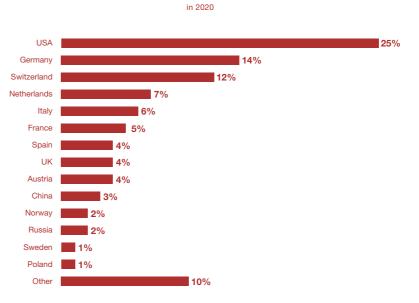


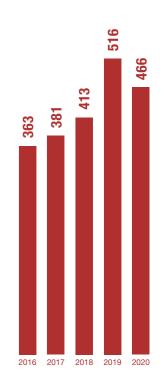
1846

## **EMPLOYEES IN FULLTIME EQUIVALENTS**

We benefit from the comprehensive expertise and the passionate commitment of our employees.

#### **SALES BY COUNTRIES**



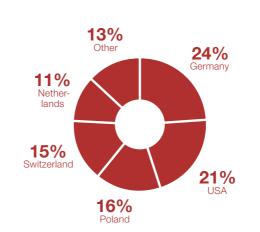


#### **MILLION**

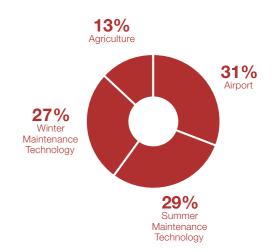
In 2020, the **Aebi Schmidt Group** generated net sales of EUR 466 Million.

## **EMPLOYEES BY COUNTRIES**

in full-time equivalents



### SALES BY AREAS OF APPLICATION





# **Financial Year** 2020

In view of the difficult conditions, the 2020 annual result is good to very good. Globally, we maintained our market shares and in some countries. we even expanded.

We will always remember 2020. The pandemic had a strong impact on our society, our economy and the financial markets. And on Aebi Schmidt Group as well. The halt to business travel had a negative impact on our airport business and due to delayed or cancelled public tenders during the lockdown, sales were also below the previous year in the municipal sector and the service and spare parts business. In addition to the pandemic, the low snowfall in winter 2019/2020 induced concern in all relevant markets. All in all the finan-

#### The past year has shown that we are capable of weathering a storm, and it has brought us closer together as a Group.

cial year 2020 demanded a lot from us: energy, patience, perseverance and, time and again, flexibility.

And yet thanks to the flexibility, solidarity and commitment of our employees, we coped well with 2020 despite everything. Our COVID-19 team initiated protective measures very early on, often before the officially decreed measures. In particular, employees at our plants had to work under difficult conditions. We managed to avoid the closing of any of our plants due to illnesses simply because employees acted with care and wore masks consistently.

#### Investment in new markets

The acquisition of Finnish company Arctic Machine has made us the market leader in Finland and we have expanded

our position throughout all Scandinavia. We have also moved closer to our Baltic and Russian customers. Arctic Machine is a leading manufacturer of vehicles and equipment for the year-round maintenance of streets and airports, with a clear focus on intelligent mobility and digital transport solutions - an ideal addition to our product portfolio

With the takeover of Canadian company Équipements Lourds Papineau Inc. (ELP), we have strengthened our presence in Canada, particularly in the municipal sector. ELP will also serve as the hub for the Canadian market and will enable us to provide better after-sales service in addition to expanding the product portfolio. This will bring us one step closer to our strategic goal of technology leadership in North America.

We literally laid the foundation for our growth in the US in Chilton WI in August by investing in expansion of the plant there. Construction will be completed by mid-2021 and represents the largest individual investment in a plant for many years.

#### Crisis-resistant supply chain

Another positive note is our robust supply chain, which enabled us to avoid production stoppages during the lockdown. This was due to close supplier management and an increase in safety stocks of critical components on our part, as well as the enormous dedication and unceasing commitment of our suppliers. A huge thank you goes to them.

#### Autonomous operations at airports

We achieved a major milestone in autonomous driving concepts for airports. The first of a total of three steps in our solution, the driver assistance system, successfully completed the acceptance process. Due to the pandemic, we developed a flexible solution for interested airport customers: rather than presenting the new driver assistance programme live on the airfield, a team made up of Product Management, Sales and Marketing prepared a live online demonstration, at which selected customers were able to attend. The first event offered in this way received very positive feedback.

# Sustainability - an integral part of our

Sustainability continues to be an essential part of our business activities because our customers expect it from us and because we are convinced that sustainable companies are more successful it as our responsibility to invest in progress and in the future.

Our economic, social and environmenentire value chain. We care about protecting the environment and use resources economically; we are a fair employer and invest in sustainable technologies. As the following pages show, this has resulted in valuable progress in recent years in terms of environmental awareness at our plants, in our processes and in our products. And the Aebi Schmidt Group also contributes every day towards implementation of the individual sustainability goals set by the UN\* - and it does so out of conviction.

## sweepers

A year and a half after the launch of the first fully electric sweeper, eSwingo, not only do our engineers have more experience, but suppliers have also improved their designs and technology; what was until recently impossible is now ready for series production. Therefore, over the coming year we plan to update the first-generation machines in line with the latest technological developments, and thus ensure that all customers share in the progress. The advantages of the eSwingo remain unchanged: it is quiet and emission-free - and saves up to 158 kg CO<sub>2</sub> per day compared with diesel-operated models.

Proximity to customers is part of the DNA of the Aebi Schmidt Group and many our IT infrastructure and IT security during of our products and innovations have emerged and been successful only because we have always maintained a close dialogue with customers. For example, our customers' experiences with the highvoltage battery in daily use revealed the potential for improvements in order to discipline and a clear focus. A decline in achieve the best possible operation times.

#### Priorities in the area of sustainability

The top priority with respect to sustainability is the gradual development of non-fossil sustainable drives, in particular the electrification of additional vehicles. A special focus also lies on the digitalisation of our products in the municipal sector, such as online reporting for machines. This meets customer demand for greater efficiency and lower costs. Our IntelliOPS telematics platform provides comprehensive functions for route monitoring and selection, as well as reporting and analysis. The platform displays a machine's activity data on a map in real time. As a result,

in the long term. As a company, we regard work processes and routes can be optimised, with a reduction in driving time, fuel and resources.

The increasing pace of digitalisation tal targets are being implemented along the is affecting internal processes as well; for example, our goal is to use 30% less paper and to forgo traditional print product brochures. We have invested in a multilanguage digital platform with search and filter functions that allow customers to download current product information. We are also committed to conducting business in a sustainable manner.

Aside from sustainability and digitalisation, two other trends shape our industry: market consolidation and the shift from purchase to rental or leasing. We take account of the latter trend by working Upgrade of the first generation of electric with partners in the financial sector to develop tailored solutions for our customers.

> Last but not least, the coronavirus has shown that some meetings can be conducted virtually without any problems. With this in mind, we will limit our travel

We reached a milestone in autonomous driving at airports: the first step in our solution, the driver assistance system, completed the acceptance process.

activity in future to a minimum, in particular flights. It is in large part for this reason that we made significant investments in the reporting year.

Due to COVID-19 and the current economic situation, 2021 is also set to be a challenging year and will again call for investment is likely, particularly in the airport sector in Europe. This market will recover from the pandemic only slowly. Nevertheless, we are working hard on the next step towards autonomous driving at airports, as we believe there will be unmet needs and increasing demand in this area.

Finally, we are in a strong position. The Aebi Schmidt Group has solid financial and organisational foundations and is pursuing a functional, crisis-resistant strategy. The past year has shown that we are capable of weathering a storm, and it has brought us closer as a Group - we are today a strong team. And it takes a strong, loyal team to withstand such a crisis as well as we did.

I would therefore like to thank all our employees around the world for their unceasing commitment and the great job they did on behalf of our customers and for the Aebi Schmidt Group - and our customers for their loyalty and trust.

> Barend Fruithof Group CEO

<sup>\*</sup> For example, the following Sustainable Development

## **Milestones in 2020**



#### January: Successful expansion of business in Canada

The sales organisation in Canada, established only a few months before, quickly finalises its fourth major order. Edmonton airport has already relied on the strong performance and the reliability of snow removal machines from MB and orders an additional four machines.

20



#### March: IntelliOPS platform goes live

With the launch of the IntelliOPS platform, the Aebi Schmidt Group has completed the consolidation of its offerings in the area of digital data support. With a modern licensing model, all applications and functions are accessible via the same platform. The scope of functions can be modified flexibly in line with the customer's specific needs and processes.



#### June: Good is now ever

Aebi launches the overhauled Terratrac model series and identifies it with a "+" in the type designation. The new air conditioning system ensures more pleasant working conditions in the cab, as do reduced noise levels. As part of the overhaul, the maintenance and service intervals are optimised and driving made more resource and environmentally friendly, thanks to a reduction in required oil changes.



#### August: Major order for the Spanish city of Murcia

The service company responsible for cleaning the city of Murcia places a large order for about 40 machines. The company previously used sweepers produced by various companies, but it now relies almost completely on our vehicles due to its good experience with them and our service expertise.



#### 8 September: The Aebi Schmidt Group takes over **Équipements Lourds Papineau** Inc. (ELP), the leading Canadian manufacturer of winter service equipment

The company, based in Saint-André-Avellin, Quebec. Canada, has been established for some 20 years and has made a name for itself as a provider of sophisticated, high quality technical solutions. The equipment and vehicles produced by ELP are an ideal addition to the product portfolio in North America. ELP's strong market presence gives the planned expansion of the business in North America an additional boost.



#### 3 November: New driver assistance system - Aebi Schmidt presents the first step towards autonomous operations at airports

Aebi Schmidt takes a three-step approach develop a pioneering technology for autonomous operations at airports. This allows clearing concepts to be tailored to specific situations. We present the first step, the driver assistance system, to interested customers around the world via live stream: seven cameras transmit the live demonstration from the Mercedes-Benz Test and Technology Center in Immendingen (Germany).

**FEBRUARY** ΔPRII JULY AUGUST **SEPTEMBER** OCTOBER NOVEMBER DECEMBER **JANUARY** MARCH MAY JUNE





#### 18 February: The Aebi Schmidt Group acquires Arctic Machine Oy

Arctic Machine Oy, based in Finland, is a leading manufacturer of vehicles and equipment for the year-round maintenance of streets and airports. The company looks back on 80 years of history and has transformed itself over the past decade from an equipment manufacturer to a provider of intelligent and comprehensive solutions for traffic and road maintenance. Arctic Machine Oy has a strong market presence in Scandinavia, the Baltics and Russia. The acquisition is an ideal addition to our product portfolio and supports our growth targets in the north and east European



#### **April: The world continues** to spin, even during the lockdown

Large parts of the world are in lockdown, trade fairs have been cancelled and vet vehicles must be delivered. users trained and products manufactured. Our organisation shows clearly that we are capable of responding to the new challenges easily and pragmatically, and that product demonstrations are possible despite the pandemic.



#### June: New Stratos 3 Mid-Range to close gap in product line-up

The Holten plant is preparing its production lines in order to be able deliver the new Stratos 3 Mid-Range with a larger tank and modular design in time for the winter season. During its development, special emphasis was placed on use of existing components and the special features of the production line.



#### 21 August: Groundbreaking for historic expansion

With a subdued celebration because of the pandemic, Aebi Schmidt North America officially lays the foundation for expansion of its production capacity at the Chilton location. The expansion by 6500 m2 will increase capacity and create space for the manufacture of new products and for offices. The expansion is the largest investment our Group has made in recent years.



#### 15 September: Licensed production by Meyer for

Jeep and Ram Effective immediately, Jeep and Ram owners can equip their vehicles with a licensed Jeep or Ram snowplough and spreader. Meyer was awarded the contract to produce the equipment, since the equipment will be developed and manufactured in the US - a key criteria for the two major US brands when assigning licences.



21

#### 17 December: Electrically powered Aebi transporter enters the second test phase

After testing the prototype of the first electrically powered Aebi transporter in real conditions in Stoos, a popular Swiss tourist destination, the overhauled vehicle now enters the second test phase. It will be put through rigorous testing in the municipal sector over the coming months.

## The Aebi Schmidt Group Values

Our values form the basis for all our actions and they guide our behaviour - both within the company and in dealing with customers and partners.



#### **RESULT ORIENTED**

We contribute and add value to **Aebi Schmidt Group performance** 

- ... recognize and realize business opportunities
- ... aim for the best result
- ... focus on the outcome of our actions
- ... maximize profitability



#### **COLLABORATION**

We strive together for one common goal

- ... work in a global network
- ... utilize each other's skills
- ... take risks, learn from mistakes
- ... benefit from other cultures



#### **CUSTOMER FOCUSED**

We improve the performance of our customer

- ... think in solutions
- ... achieve excellent results
- ... build strong partnerships
- ... focus on customer needs



#### INTEGRITY

#### We strive for long-term relationships

- ... are trustworthy and keep promises
- ... are open and honest
- ... are reliable and take responsibility
- ... act ethical and tolerant, we respect others' opinion



#### **PASSION**

#### We are part of a winning team

- ... inspire others
- ... are proud of what we do
- ... choose a positive attitude ... challenge the limits



#### INNOVATION

#### We break new grounds

- ... think out of the box
- ...try the untried
- ... strive for sustainable solutions
- ... encourage continuous
- improvement

## **Product and solution portfolio**

The Aebi Schmidt Group's range of products includes intelligent product systems and services for the management, cleaning and clearing of operational traffic areas and demanding terrain. These include its own vehicles and innovative attachments and mountable equipment for individual customisation of vehicles. Our range of support and service offerings, tailored to customer demand and needs, offer the right solution for virtually any challenge.



For airports, we offer the products required for snow clearing and cleaning, as well as corresponding concepts and tools based on many years of experience.



#### WINTER

From snowploughs to snowblowers and -cutters to spreaders and sprayers, we offer a full range of products for snow clearance and de-icing.



#### **SUMMER**

Our mounted, attachable and compact sweepers, street washers, transporters and numerous attachments and mountable devices are suitable for nearly all maintenance work.



#### **AGRICULTURE**

Our single-axle machines, implement carriers and transporters can be used flexibly and are powerful and safe - the ideal products for management of challenging terrain.



#### **SERVICE & SPARE PARTS**

Thanks to our efficient spare parts warehouse and its optimal transport connections, and a service organisation tailored to geographical characteristics, our customers remain operationally ready at all times.



## DIGITAL **SOLUTIONS**

From supervision to active influence of activities to documentation and reports: our digital tools help to work more efficient, more sustainable and more cost-effective



### INTEGRATED **SOLUTIONS**

Our range of products is unique. It makes us the ideal partner when you need fully equipped winter service vehicles or equipment for an entire fleet.

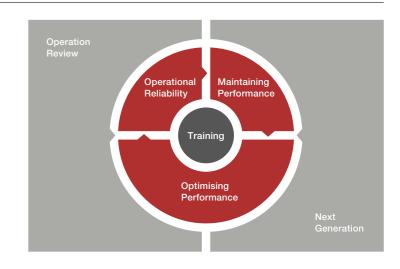


### **SPECIAL SOLUTIONS**

Whether it's rail technology or road marking, sand clearing or salt dissolving technology - we love challenges and offer our customers in-depth experience and expertise in these areas.

#### **OUR UNDERSTANDING OF SOLUTIONS**

Our aspiration is to offer customers tailored solutions. Customers determine where the process starts. We provide them with advice and support – from procurement to operational safety, service maintenance, service optimisation and training, to future designs. We want our customers to be able to use their equipment more effectively, more efficiently and more economically. We take a long-term view and ensure that customer fleets can be used flexible at all times and for their entire lifecycle. Customers get what they need from the Aebi Schmidt Group, not a standard product from a catalogue. We take an consultative approach to sales and maintain a dialogue to get the best out of the machines for the customer. Whatever we do, we do to protect our customers' investments.



10 Aebi Schmidt Holding AG / Annual Report 2020 — Product Range

# **Product Range**



Sustainability — Annual Report 2020 / Aebi Schmidt Holding AG 13 Aebi Schmidt Holding AG / Annual Report 2020 — Sustainability

## **Circular economy in practice**

Sustainability is a Group-wide responsibility. That's why we launched the Generation E programme platform. After all, the development and application of new technology requires us all to think in a completely new way. The fact that this involves much more than electric drives can be seen in the following example from the Netherlands.

In Overijssel, a province in the Netherlands, they use an older spreader that emits about 80% less CO2 than a new spreader. Yet it is a conventional diesel model. How is this possible? Aebi Schmidt completely overhauled the customer's vehicle in its plant and updated it in line with the latest technology.

Arjan Ester, CEO of Aebi Schmidt Netherlands, is used to his colleagues thinking he is crazy when he makes such offers instead of selling the customer a new vehicle. However, when one considers that the Dutch government wants its

entire procurement system to be regulated in accordance with the principle of the circular economy by the year 2050, then the offer makes complete sense. And in particular as the number of years until 2050 encompasses only two average life cycles of a spreader

Looking at it a little more closely, the facts speak for themselves: an overhauled and updated machine will save the significant amount of steel and plastic that is needed to manufacture a new vehicle. and no CO2 will be emitted during the manufacturing process. Although Arjan

use of resources, he is a businessman who works for a global group of companies. He admits that even in the Netherlands it is a challenge to convince employees and customers of the opportunities presented by the circular economy. This recycling have negative associations for many stakeholders. But the circular economy has nothing to do with scrap or recycling. Instead, it's about new thinking and entrepreneurial review of current practice from both sides of a partnership. On the

Ester is concerned with the sustainable may be because terms such as scrap or

**CIRCULAR ECONOMY EFFICIENCY OF EXECUTION** // aebi schmidt Parts manufacture Software developer Equipment manufacture Service provider 0010 customer side, for example, there is little desire to own one or more machines. They simply need to provide a service. If we, as a business partner, want to provide this service instead of simply selling the product, we must answer questions such as: will the machine be used efficiently? Can we reduce usage and get the same results, thus reducing costs and conserving resources? When is the right time to use the machine or overhaul it? What data will help with the optimisation of process-

with the customer will also help with cus-

Of course, we can promise to take back a vehicle after no more than 10 years and then ensure that it continues to be used somewhere else. Until then, however, we ensure that the vehicle is used optimally - a win for both parties. Different scenarios are possible: we have to dispose the vehicle after 10 years, we give it a second life, we equip it with the latest technology after five years, or we take it back es? Answering these questions together and replace it with two smaller vehicles

because the road network, the climate or mobility have changed.

Ultimately, it's about using resources efficiently and not wasting anything unnecessarily - and not about scrap or recycling. On the contrary, the circular economy enables exciting new business models. Arjan Ester is not getting tired of advocating such models. He says: "Ten years ago, we had one trainer who helped customers to use their machines more efficiently. Today, we have a department with nine specialists."

#### TEN EXAMPLES OF HOW WE CONTRIBUTE TO THE SUSTAINABLE USE OF RESOURCES

A fully electrically operated eSwingo used for 1500 hours a year reduces CO<sub>2</sub> emissions by 23.7 t.

at the new plant in Chilton are designed to maximise energy efficiency and minimise waste.

Our goal is to reduce paper consumption by a total of 30%. We only offer product brochures in digital form.

All Aebi Schmidt locations in Germany, Austria, Sweden and Norway are powered by up to 100% sustainably produced electricity. In the Netherlands, we produce more than 54% of our electricity requirements using our own solar installation. We are committed to provide all units with sustainably produced electricity gradually over the next few years.

Number of current development projects for e-vehicles, devices and modules

The intelligent use of data helps us to structure processes more efficiently and thus more environmentally friendly.

Technologically sophisticated systems allow us to ensure that salt is not wasted during winter service.

We contribute to the more efficient use of resources with every vehicle that is retrofitted or converted in a few steps for use in other activities that previously required a second vehicle.

# **Efficiency**

We ensure that conventional drives work as efficiently as possible and that they meet future standards now.

We reduce drive energy directly by manufacturing lightweight ploughs and other components with modern materials

14 Aebi Schmidt Holding AG / Annual Report 2020 — Our Locations

# Our Locations

We have a global sales and service organisation that we expand on a continuous basis. We serve our customers operationally via our own local sales and service organisations and sales and service partners. Our plants form the backbone of our organisation.



## **Customers**, **Sales** Organisation, **Markets**

At the Aebi Schmidt Group, we focus on our customers' needs and wishes – not only during the development of machines, but also when it comes to product safety and service.

Whether it's fully electric street sweepers, software solutions for the efficient use of vehicles, better coordination of field service technicians or the optimisation of existing machines, the development of new products and services takes into account the various needs of our customers. Our ambition: we want to be a full-service provider for our customers and adapt and optimise our product range accordingly.

## Customers can rely on safe products

The safety of our products and our customers is our top priority. That's why quality assurance is extremely important to us. In Europe, the Aebi Schmidt Group follows the EU's General Product Safety Directive and the respective national legal implementations that define the fundamental requirements for safe operation. Compliance with applicable laws and standards concerning product safety is documented by CE markings and GS certificates (Tested Safety). The GS certificates in accordance with German law are recognised in many countries. For products sold outside Europe, we comply with the specific local laws. The Aebi Schmidt Group examines the lifecycle of all products regularly to check their impact on the health and safety of users. The locations in the US perform a technical risk and hazard assessment as part of product development, spanning the entire lifecycle of

To ensure safety and health when operating the machines, specific training of the users is required. In addition to the training, we support the safe use of our products through the distribution of detailed information material. All products feature various protection systems, such as warning lights and warning signs - for example, all vehicles with lithium-ion batteries are marked accordingly. Customers confirm compliance with a set handover protocol by providing their signature. The operating manuals, safety manuals and safety datasheets provide information on

#### The Aebi Schmidt Group requires its suppliers to provide a certificate of origin for all essential materials.

all relevant safety instructions. For example, rescue cards can be found in every eSwingo electric sweeper to provide the emergency services with information about the risks and instructions for the safe handling of high-voltage technology. Operating manuals include information about the disposal and recycling of individual vehicle components. A number of countries additionally require certificates that prove the EU origin of individual product components. That is why the Aebi Schmidt Group requires its suppliers to provide a certificate of origin for all essential materials

In spring 2020, we were the first provider to receive the AGR certificate from the independent Healthy Back Campaign for our entire fleet of compact sweepers (Cleango, Swingo and Multigo). The certificate attests that the machine ergonomics have a positive impact on the health and performance of the operators.

## Focusing on the customer's needs

Our customers' needs and requirements are as different as our customers themselves. We supply municipalities, public administrations, airports, service enterprises, the military, agricultural businesses and industrial companies. As different needs also involve a variety of product requirements, the Aebi Schmidt Group maintains a close relationship with all stakeholders via various channels. An ongoing dialogue with customers, users and interested parties allows us to improve products and services continuously. All interaction with customers - from the initial telephone contact through to the supply of spare parts or maintenance services - are recorded by Quality Management. This ensures that feedback from customers is evaluated and translated into appropriate measures. The Aebi Schmidt Group also engages in regular dialogue with its dealer network and discusses specific improvement measures and ideas for enhancements.

A planning tool for service technicians was introduced with the goal of continuously improving customer satisfaction. It contains geographic and task-specific information that can be used to better coordinate deployments. As a result, customers receive reliable information about appointments while trips are optimised and CO<sub>2</sub> emissions are reduced. A similar winwin situation arises if customer machines are equipped with a modem in future: with the use of telematics systems the customer can access important performance and

The installation of modems results in a win-win situation: customers will be able to access performance and consumption data more easily, and our employees will be able to offer support more efficiently.

consumption data, and our employees can provide more targeted support. Customers are, of course, entirely free to use the system or not. An app for final product acceptance was tested during the reporting year. The goal of the app is to simplify the final acceptance process and exclude manual process errors as much as possible. The satisfaction of individual customer groups or regions is also reviewed at regular intervals. The next survey is planned for 2021 and focuses on users of the spare parts webshop.

In the development process, prototypes are tested by customers and then enhanced on the basis of their feedback. Electromobility was a focus last year, particularly for public administrations for sustainability reasons and since electrically driven machines are quieter and therefore

more pleasant for residents. Despite the difficult circumstances caused by the coronavirus pandemic, the Aebi Schmidt Group successfully carried out the market launch of the eSwingo and positioned the machine in a number of European coun-

Another important customer request is the optimisation of machine capacity in general and the optimisation of machines already in operation. The "Solution Selling" area is dedicated to these issues and was further expanded during the reporting year. This includes subjecting existing products to a refurbishment process; this makes the equipment as good as new and updates the technology in line with the latest standards. There is also strong demand for multi-function machines: a carrier vehicle with attachments that can be used year-round instead of separate machines for winter and summer service. (GRI 102-43, GRI 102-44)

# Products and **Services**

The Aebi Schmidt Group offers innovative technology that conserves not only energy, but general resources as well. This benefits our customers and the environment alike.

The major tasks and challenges of the future will involve protection of the environment and conservation of resources the Aebi Schmidt Group is preparing itself for this now more than ever. We promote innovative technology in order to offer our customers products that are not only high quality, but environmentally friendly as well. In addition, international and national laws and regulations increasingly stipulate the use of low-emission engines and control of the spreading agent dosage. All

The Aebi Schmidt Group continuously expands its portfolio of electric vehicles and equipment and in doing so contributes to the sustainable use of the environment and resources.

Aebi Schmidt Group's products comply with the limits of the EUROMOT 5 emissions standard. Furthermore, in 2020 the Aebi Schmidt Group proactively included the tighter standards and is now working to implement the EURO 6e standard in the

In addition to electric drives, the Aebi Schmidt Group focuses on the durability of its products and machines, and the development and implementation of components and devices with modern, lighter materials. It does so to reduce consumption and to use resources more effectively. In the area of e-mobility, the first year of series production of the fully electric eSwingo 200+ sweeper was a significant milestone for the company. The Aebi Schmidt Group has consistently devel-

oped and expanded its portfolio of e-vehicles and equipment. For example, we continued to electrify the product portfolio at our plants in Switzerland, Germany and the Netherlands in 2020. Swenson in Lindenwood and Meyer in Cleveland (USA) also offer their customers purely electric products as part of their wide range of spreaders, such as the VBEL, Electric PV Select, Electric LPV Select, Electric MDV and Electric PV Standard. Multi-function machines from the Aebi Schmidt Group also help to save valuable resources. In the Netherlands, the Combi Solig Flex, which enables customers to work with one machine instead of two, has seen an increase in sales. Our plant in the Polish city of Kielce launched a new highway snowplough on the market as a prototype at the end of 2020 that combines the front and side ploughs into a single piece of equipment. Thanks to the lightweight construction, the Polish plant was also able to reduce the weight of airport and highway ploughs significantly.

Energy and resource consumption were also reduced sustainably through the use of other solutions. Full-service concepts, telematics and route planning help to extend the vehicle and product lifecycle and reduce storage and transport routes. With the new IntelliOPS platform, processes can be continuously optimised with the help of vehicle and machine consumption and usage parameters - a service that benefits both the environment and customers. The same applies to the Swiss production centre: thanks to optimised maintenance intervals for the Terratrac and Transporter series, the amount of maintenance work required has been cut nearly in half, and consumables, fuel and wear parts have been reduced sub18 Aebi Schmidt Holding AG / Annual Report 2020 — Airport Airport — Annual Report 2020 / Aebi Schmidt Holding AG 19

# **Airport**

## At Aebi Schmidt, we are driven to develop pioneering future technology.

#### Aebi Schmidt is taking the first step towards autonomous operations at airports

It takes a three-step approach to development of technology for autonomous operations at airports. This approach is not based on a standard system, but instead enables clearing concepts tailored to specific situations. Aebi Schmidt presented the new driver assistance system to interested customers around the world via a live stream with a total of seven cameras at the Mercedes-Benz Test and Technoloav Center in Immendingen (Germany). A traditional demonstration was not possible due to the pandemic. At the beginning of the event, Rudi Rosenrope & Rest of the World and a member of the Aebi Schmidt Group's Executive Board, noted the importance of collaboration with truck manufacturers: 'Close cooperation with truck partners is crucial. The systems need to be fully integrated in order to work correctly and meet safety requirements.' The focus here is not on a single partner. One sive approach to test the new driver asof the most important features of the sistance system over the course of two driver assistance systems is that it can years. Although some of the functions be used on trucks and jet sweepers worked during actual use immediately,



kamp, Head of Sales for Northern Eu- View from the passenger seat on the display of the new driver assistance system.

from different manufacturers, thus re- we improved several others and used ducing the investment risk for airports

#### Tested in real conditions

Aebi Schmidt used a comprehen-

the experience to learn. The test phase also showed that with the help of the system, safety could be improved much more substantially than we had originally anticipated. A survey of airports that took part in the online demonstration revealed differing opinions and expectations when it comes to safety. However, the participants agreed on one point: a driver assistance system leads directly to an improvement in performance and thus to cost savings.

#### The key advantages of the driver assistance system from Aebi Schmidt

- assistance system, clearing jobs are completed correctly the first time, making time-consuming follow-up work unnecessary.
- can be mounted on all trucks and jet sweepers, irrespective of the
- Driver assistance means less training and therefore less organisational

#### Best practices panel

Aebi Schmidt has established an Expert Partner Review Panel. The goal of this panel is to establish an exchange of experience among experts in the area of autonomous jet sweepers. The exclusive panel comprises industry experts, including vehicle drivers and senior airport managers who evaluate and test the individual topics and technology together. The transformation of valuable experience gained from about a dozen leading airports into functioning and profitable systems is what we understand by a development partnership. The technology is new terrain for everyone involved, but thanks to the panel's combined efforts



Experts from different specialist areas evaluate solutions

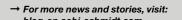
and experience the risk of costly adventures can be minimised substantially.

#### Collaboration with industry pioneers

Our understanding of the processes and conditions in the airport industry are also based on the experience we have gained from various projects with industry leaders over the course of decades. The close collaboration with part-

ners is particularly beneficial when it comes to complex processes, which are common at airports. For example, in the area of autonomous operations at airports we work with CPAC Systems which is a part of the Volvo Group. CPAC is a passionate partner when it comes to technology-driven innovation. Its success story began in 2003, when the company brought the first base platform for autonomous driving to market. We have also maintained close partnerships for many years with Lab1886, the innovation incubator of Mercedes-Benz AG, and Daimler Truck AG in the area of automated snow clearing. We are also a partner on the 'Smart Fleet' project, a joint project with Stuttgart airport, the Aebi Schmidt Group and Volk Fahrzeugbau. The aim of the project is to develop fully automated vehicle prototypes by 2022, and

test them in real-time conditions on runways, aprons and taxiways. In short, anyone who chooses the future technology of Aebi Schmidt will benefit from the collective transport expertise of wellknown pioneers.





At the interface between the present and the future: with the new driver assistance system from the Aebi Schmidt Group, customers can take the first step towards autonomous operations at airports.

# Summer

## Sustainability is much more than an electric drive.







Multigo 150: One machine, numerous possibilities - for versatile and efficient utilisation

#### Multigo 150: an all-rounder with almost unlimited options

FAM Hausmeisterdienste, a large and leading regional service provider with 600 employees and 250 vehicles, tional machines. And it had good reason for doing so, as Fabian Alexander tells the leading German trade publicawhat others are doing. Instead, we accalls for. That's why working efficiently with the best partners is very important to us. And we can do this only with the latest technology.' For some, the Multigo 150 is a machine, for others it is an implement carrier. While the low overall height or low tare weight are important to some customers, others appreciate the nearly unlimited attachment and mounting options. There is no arguing on the fact that the low overall height is a benefit in underground car parks and underpasses. The low tare weight, in turn, makes it possible to manage pavements and green spaces. With a maximum weight of 3.5t, the Multigo 150 can be driven with a class B driving li-

cence, which offers municipalities and cycle despite the higher acquisition service providers much greater flexibility in terms of staff planning.

The Multigo is powered by a diesel engine, yet it still contributes to sustaindecided to purchase eight multifunc- able and safe working. The energy-efficient all-wheel drive with high efficiency of customers. traction control results in low fuel con-May, owner and managing director, sumption, even during maximum performance. And with respect to the contion Bauhof Online: 'We don't look at sumption of resources and fuel costs, year-round use is more economical quire the technology that the market than the purchase of multiple vehicles. In addition to the all-wheel drive, the spacious cab with optimal visibility, ergonomic controls, adjustable steering column and spring-loaded driver's seat contribute to a healthier and safer workplace and driver. With the AGR seal of approval, the Multigo 150 offers tested and certified ergonomics.

#### The eSwingo conquers city after city

The eSwingo has impressed many municipalities and service providers because it is emission-free and quiet, reduces CO<sub>2</sub> by up to 158 kg per day, can be operated for up to 10 hours with just four hours of charging and results in significantly lower costs over its entire life-

cost. But its biggest advantage is that the fully electric model provides the same performance as the diesel model. This value proposition, which continues to be unique, has impressed a number



The eSwingo 200+ in use in Moscow.

#### Disinfect or clean?

In the fight against COVID-19, some cities have decided to disinfect hotspots such as bus stops. At the beginning of the pandemic, our colleagues had to answer a lot of questions on the compatibility of the materials with a wide range of disinfectants. With no official recommendations, each government authority decides itself if it wants to disinfect large areas and with which disinfectants. Irrespective of the concentration, many common disinfectants can be applied with our equipment. The important thing is to check the compatibility of the material in advance and to clean the tanks completely after each use or no later than after each shift.



Straliq City Jet: although it normally uses water, it has also been used with special substances in



The Aebi eVT450 prototype will now have to prove itself in real and everday operations

#### Aebi eVT 450: the first electric transporter is entering the second test phase

The first prototype was tested at a popular Swiss tourism destination for nearly a year. The municipality's experiences were entirely positive and guests appreciated being able to enjoy their coffee on the terrace or go for a walk without being disturbed by loud engine noise. Much of the experience gained from the testing has now been incorporated in the second, overhauled prototype, which is subject to a second round of testing in daily operations, this time by a Swiss city administration. The vehicle still has a Vario transmission, so it continues to have a high level of traction and drive. The experience from the second test phase will be incorporated directly into product development before the transporter is offered in series production.

→ For more news and reports, visit: blog-en.aebi-schmidt.com

22 Aebi Schmidt Holding AG / Annual Report 2020 — Winter Winter — Annual Report 2020 / Aebi Schmidt Holding AG 23

# Winter

## The Aebi Schmidt Group has strengthened its market position in Scandinavia, Russia, the Baltic region and Canada.

#### The latest generation of Stratos technology is now included in the mid-range series as well

During the development of the Stratos 3 Mid-Range spreaders, special emphasis was placed on the use of existing components and the special features of the production line in the plant. This results in both economic and environmental benefits. The economic benefits stem from the fact that we are able to produce existing components more efficiently and economically. The environmental benefits are achieved because it is not necessary during production or operation to replace or dispose existing components. The mid-range series now has a larger tank and can be modified modularly in line with the customer's needs. It fits a number of multiticularly suitable for challenging spreading duties in difficult, narrow or steep terrain. The compact design, which of the vehicle easier.



Stratos 3 Mid-Range: top technology is now available in the mid-range segment as well.

functional carrier vehicles and is par- does not extend beyond the width of the vehicle, provides the driver with a better view to the rear and makes manoeuvre

### With its acquisitions of Arctic Machine and ELP, the Aebi Schmidt Group has strengthened its market position and underlines its growth

The brands of the two companies will continue under the umbrella of the Group and they will continue to be led by the current management team. Arctic Machine Oy has made a name for itself in Scandinavia, Russia and the Baltics mainly as a provider of sophisticated and high quality technical solutions. ELP (Équipements Lourds Papineau Inc.) is known in Canada as a leading manufacturer of heavy-duty vehicle equipment and attachments for snow clearance and road maintenance. Both acquisitions represent an ideal addition to our current product portfolio. We also want to market directly to markets and customers that we were able to reach only indirectly before. The expansion of the portfolio and the exploitation of new markets are of key importance to the implementation of our growth strategy.





Best-of-class equipment from Arctic Machine (above) and ELP (below).

#### Licensed production by Meyer for Jeep and Ram

Since fall 2020, North American owners of Jeep and Ram are able to equip their vehicles with a licensed Ram or Jeep snowplow and spreader at participating Ram and Jeep dealers. The award for production of the equipment is a success for Meyer, not least because the equipment is developed and manufactured in the US, a key con-

sideration for the two major US brands when assigning licences. Speaking of the award, Marcus Scherer, CEO of Meyer, says: 'We are proud that Meyer is the first company in the industry to receive a licence from two of the world's leading vehicle manufacturers.' In addition to the partnership with Jeep and Ram, Aebi Schmidt North America further expanded its OEM business during the reporting year.

→ For more news and reports, visit: blog-en.aebi-schmidt.com



Jeep with a licensed Jeep plow, manufactured by Meyer

24 Aebi Schmidt Holding AG / Annual Report 2020 — Agriculture Agriculture — Annual Report 2020 / Aebi Schmidt Holding AG 25

# Agriculture

Better driving characteristics, greater operating comfort and more equipment features.



The clearest workspace in its class now offers an even better and more comfortable driving experience

#### Aebi TT 241+ and 281+: Good is now even better

A + has been added to the names of the two "large" TT models from Aebi. The plus stands for an even better and more comfortable driving experience and vastly improved equipment features compared with previous models.

Aebi has overhauled and improved not only the large Terratrac models, but the entire range. In the small TT 206 and TT211 models, the air conditioning, handbrake lever, power take-off clutch and steering have been optimised.

It is often the little things that make daily life easier for users and this is true for the CC models, which are often used as motor mowers. In addition to the engine and the range, the switches and handles have been optimised, making the machine even more comfortable to

#### A plus for the working environment

easily and therefore improve the driving comfort. The completely new air-conditioning system allows the driver's cab to be cooled down to the desired temperature even more quickly. Innovative insulation mats ensure less heat during high temperatures and thus enable long and focused work.

#### A plus for quietness in the cab

Better materials on the side panels reduce noise levels in the driver's cab. Less background noise means less distraction and ensures safer driving and higher

#### A plus for precision

quickly and safely. The optimised control of the power take-off clutch enables

#### A plus for productivity

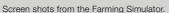
#### A plus for cost efficiency

With the TT281<sup>+</sup> and TT241<sup>+</sup>, maintenance and service intervals are extended significantly. With normal use, a service is now required only every 500 hours. The reduced downtime saves time and money.

#### A plus for environmental performance

The TT  $281^{\circ}$  and TT  $241^{\circ}$  need fewer oil changes, which improves the carbon footprint – for resource-efficient and environmentally friendly driving.





#### Aebi products are now also available in successful online game

The 'Farming Simulator' is the most successful Swiss computer game. The current version was downloaded more than a million times in one week. And now an Aebi TT 281+ and CC 66 are also available in the game. The game is popular not only in Switzerland, but also in Germany, France and the UK. In addition, an eSports league with 13 teams from eight countries and two continents

honour, Aebi Schmidt sent its own team

#### New generation of loading wagons

The new Aebi Schmidt loading wagons, which we offer in cooperation well. The volume and knives are not the with Agrar Landtechnik AG, make harvesting feed easier, safer and more performance, ground clearance, rotors efficient. With an increased loading volume of up to 11% and an expanded hauled. working width, the machine can collect

was recently set up - and as a point of a wider swathe of feed and load more than before. The knives can be locked with a single handle, which makes for faster and safer installation and removal. The chargers are available in two sizes and fit older carrier vehicles as only new features; the drive, pick-up and feeder flaps have all been over-



→ For more news and reports visit: blog-en.aebi-schmidt.com

Simpler, safer and more efficient: the new loading wagons from Aebi.

# Services and Solutions

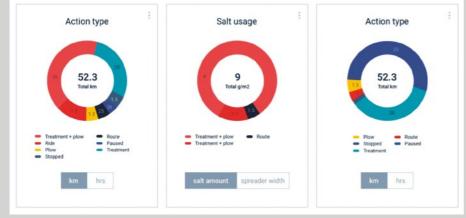
## Digital solutions are the key to efficient, sustainable and economical operations.

#### IntelliOPS: the platform for digital business operation support

In spring 2020, Aebi Schmidt launched a platform to provide access to data and applications tailored to the needs of users. The days where one had to opt for different applications and products depending on the requirements are gone; now all data and features are accessible via one single platform. The license determines the data a customer can see and which applications they can use. If needs change, no time-consuming updates or training are required: a simple adjustment of the license agreement will provide access to the data or features on the same platform. IntelliOPS is Cloud-based, so does not require any local installation and can be used on any workstation ing and consumption data by the on- on the Cloud is a prerequisite too. Digiand, of course, on mobile devices.

#### Efficient, sustainable and economical digital solutions optimise processes

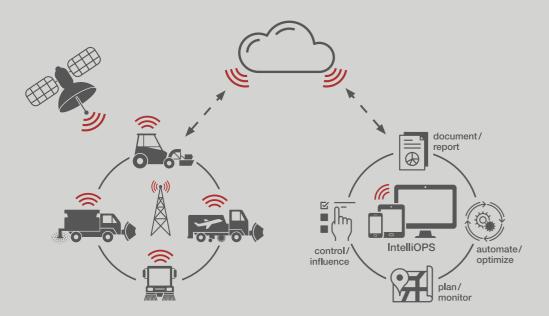
As well as boosting performance, the intelligent use of data and digital tools saves fuel, materials and time. only work with the company's own Position and activity data, such as machinery operating mode and driving from a customer's fleet. The secure speed, are recorded along with operat- transmission and storage of the data



The IntelliOPS platform offers a 24/7 overview of machinery and equipment.

IntelliOPS platform allow users to ac- tential. cess data either directly or indirectly. Aebi Schmidt's digital solutions do not brand equipment but with any brand

board data controller with GPS sup- tal and networked data make it possiport, and transferred to a secure Cloud ble to optimise central workflows on an environment. Various features on the ongoing basis and tap into savings po-



#### Where there's a will, there's a way: vehicle demos and training in times of coronavirus

Giving customers the opportunity to experience and trial machinery and equipment through live demos has been part and parcel of our day-to-day work for decades. But what happens now, given that distancing and hygiene rules have made regular demonstrations impossible? Our colleagues in the Netherlands and the UK found a creative solution to this problem without any immediate major digital upgrades: Aebi Schmidt Netherlands has been running demonstrations using regular video conferencing that involve an employee driving the vehicle while a colleague provides live commentary using a second camera. Other specialists tune into the live demonstration from home and are thus on hand to answer any customer questions. The sales team in the UK uses a hands-free two-way radio system for vehicle demonstrations. The driver and the product expert are equipped with a hands-free system actively operate the device and the demonstrations and training to continue in line with protective restrictions.



Training and demonstration: essential work remained possible in line with pandemic-related restrictions

## Modems come as standard in our

In future all airport equipment as well as sweepers in selected markets with headset, so they do not have to be delivered ex works with a modem as standard. Even before the customer channel stays open, enabling discussion starts to benefit from the process-orithroughout. This has allowed machine ented advantages of digital solutions, operating and activity data can help them to maintain their machinery, equipment or entire fleet more efficiently. Here customers can decide which data

they want to use and with whom they want to share this data. And owners of machines equipped with a modem can access the basic features of the Intelli-OPS platform for a year.

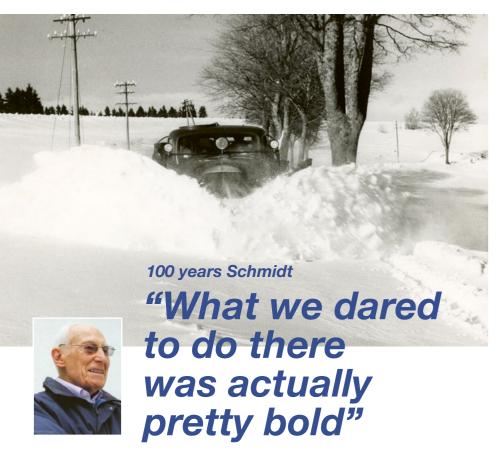
#### **Expansion of service offerings**

Although 2020 saw public life heavily restricted in many countries and the population sent into lockdown, our service teams remained busy. After all, when public life came to a standstill, so did a vast proportion of machinery otherwise in daily use. Many customers saw this as an opportunity to complete maintenance work that otherwise would have proven difficult to fit into the working schedule. So our specialists extended their range of services to include specific service packages designed for vehicles or entire fleets. Much of this maintenance work was completed during lockdown, with our delivery terms adapted to comply with the restrictions.





→ For more news and stories, visit: blog-en.aebi-schmidt.com



It is 100 years since Alfred Schmidt Senior opened a bicycle shop in the German town of St. Blasien back in 1920. This little workshop was the birthplace of a global company: shaped by the ingenuity of Alfred Schmidt Junior, the business has not only remained a pioneer in the fields of snow clearing and de-icing, it has grown into a global leader of smart product systems and services for the treatment of mission-critical infrastructural and agricultural areas. Alfred Schmidt Junior sadly left us in April 2020, not long after his 97th birthday. Shortly before that, Thomas Berger, Head Plant Germany and CEO Germany, and Thomas Schiess, Head Group Marketing, were able to sit down for an in-depth chat with Alfred Schmidt, accompanied by his children Uschi and Wolfgang Schmidt.

> Mr Schmidt, we are delighted to be ioining you here in your home, which is just a few kilometres north-west of what is still the Aebi Schmidt Group's biggest production facility, in St. Blasien. When you celebrated your 95th birthday, the "Badische Zeitung" newspaper wrote that you used to spend every winter travelling through the highest regions of Europe, presenting and selling snow clearing machines. Do any of these trips stick out in your memory?

It's hard to say, there were dozens of trips. But probably the Himalayas. It was on one of my trips to Japan in the early 1970s. We took a detour to a Himalayan pass, the Zoji La, which runs at an elevation of over 3500 metres and connects

Ladakh to Srinagar. It was in response to a call for tenders from the Indian Army. We actually scored really well, but we had no chance of winning it. The competition had representatives who got there faster than we did. Of course, it was tough to realise that the die had already been cast before we even joined the game. But a couple of years later, that's when we got to make our move after all. The competitor had provided machines which were not tried and tested, and they apparently performed really badly, so our representatives had no trouble in winning the order the next time the tender went out. We are talking about 22 or 24 machines. It was a huge order.

#### Is the condition of the snow in the Himalayas comparable to that in the Black Forest?

It's the same as that in the Alps. But the safety measures in the Himalayas were absolutely terrible. Every evening we were just happy to get home in one piece. They had some pretty strange ideas about safety - or none at all.

#### People say that you know a lot more about snow than any polar explorer.

[Laughing] Oh, that's overstating it, of course. But the different types of snow do reveal themselves to you when you're clearing it. Because it's often the case that snow is not pure. Layers containing sand or dust tell you a lot about the snow's oriain or condition.

#### You are a German and European senior long jump champion, the proud owner of numerous gold German Sports Badges, used to shoot pistols, were a cyclist, took part in ski marathons ... the list goes on. How did this passion for sport come

It started with the German Sports Badge, I scored well the first time, and that prompted me to take part in the contest every year: 25 times in all. You can imagine that in the summer you need to do something other than snow clearing. I was surprised that I was still able to perform well, despite my advancing years.

#### Let's turn the clock back 100 years. How did your father start the business?

It was after the First Word War. At 18 years old, he was a driver in Crimea. After he returned, he set up a little bicycle shop together with my grandfather, who was the foreman at the spinning mill in St. Blasien. That's where I got my love of bicycles from too.

#### Lots of the company's inventions and patents can be traced back to your time at the helm. Which ones are you especially proud of?

An example of a smaller invention that I was also proud of was when we developed the ability to control the ejection chute on the snow blower. Looking back, our invention of layer-cutting technology that enabled snow to be cut at heights more than twice the diameter of the cutter head was one of our greatest achievements. But unfortunately we could not patent it. We often found ourselves cutting snow layers on passes which had never been cleared before. I drove all the machines myself - for me, that too was a kind form of joint exhibitions at trade fairs, of sport.

#### The first volume of the book "Geschichten rund um den Unimog" ["Unimog Stories"] contains a wonderful line: "Layer cutting meant that, for the first time. I could cut snow that was even higher than the snow clearing head. The onlookers gasped: we had made the impossible possible once again." People thought it simply couldn't be done, and you did it anyway?

Yes. That was in 1963, I believe. Clearing the Great St Bernard Pass. We turned up at the uncleared pass, on purpose with our small machines - the Unimog with 30 horsepower, but with creeper gear and four-wheel drive – and offered to clear it. Hardly anyone believed we could manage it, but just a few days later the job was done.

#### For a long time, Schmidt and Unimog were closely linked in terms of how their technologies developed. How did this collaboration come about?

A businessman in the St. Blasien area had bought a Unimog. He approached me about attaching a snow plough to it, because his district had awarded him the contract to clear its snow. So we developed an attachment system for it, which later became the industry standard. But even before that, the people at Mercedes-Benz had been aware of our project at the Great St Bernard Pass and had been there for that clearance. After that, there was a little competition between us. The developers at Mercedes-Benz had attached one of our snow ploughs and used compressed air to operate it, but they could not raise the plough very smoothly, nor could they hold it down at the bottom well enough. Snow doesn't yield just like that, and you have to be able to keep the

plough in the position where you need it. However, our mechanical lifting and lowering system was more successful - even though it was actually much more primitive than the compressed air system used by Mercedes-Benz. Their Unimog dug itself in, the wheels started to spin and after a few metres it was game over. Our plough, on the other hand, was kept stable by the mechanical lifting and lowering system, and cleared the slope with no problem at all.

#### And that's how the collaboration with Mercedes-Benz began?

Yes, to start with it mostly took the which we and Mercedes-Benz staffed together. This meant that we came into contact with their customers too. Another rather important collaboration were the demonstrations that we would organise every couple of years at different high-altitude passes, before we settled on the Timmelsioch Pass as the venue for our major events. We spent three weeks clearing the pass there, taking the opportunity to showcase our latest snow clearing machines up on the pass itself, along with the rest of our product range, including our summer machines and especially our sweepers, down in the valley. We often welcomed over 2000 visitors from a good three dozen countries. It was our industry's most international event. Not only were we able to show our latest machines, we were also able to build relationships





Schmidt snow blowers, as they were also used in the

with our customers: advertising alone will never give you that edge. We felt at home on the Alpine passes. When it came to clearing snow, nothing could phase us. For instance, take a look at this photo here in this book [he points to a photograph]: a slope with a 30° incline. You couldn't clear snow like that with a machine. On the Grossglockner mountain they had six to eight workers whose job was to shovel a ledge into the slope. And I thought there just had to be a way of doing it mechani-



Group photograph in front of the local workshop, which was later to become a globally active company.

One of the first Schmidt sweepers on the airfield.

cally instead. So I developed the "cutting auger", which you could rotate in both directions, depending on the terrain. It enabled you to pierce directly to a depth of 1.80 metres.

#### You studied mechanical engineering. What would be your advice to apprentices starting their mechanical engineering training at the company today?

[Laughing] Well, you've always been able to go far with mechanical engineering and that's still, actually it's especially true today. I know from my peers and colleagues that no one ever had a problem finding a job. So they don't need any particular advice from me.

I would like to stay on the topic of trainees and apprentices a minute. When we were preparing for this talk, we asked our apprentices what they would ask you. One of the trainees from our factory in the Netherlands had this to ask: "How did Schmidt stand out from the competition back then?" You have already mentioned about keeping the plough held down and surpassing the cutting height. What else did people say back then? Schmidt is different because ...?

We were different because we tackled things head on without preconceptions and we were open to everything. That really was our method. Just like that time I mentioned on the Great St Bernard Pass. When we arrived there with two small Unimogs, everybody just shook their heads and said: "With all due respect, come back in four weeks, half the snow will have thawed and gone by then." And we replied: "No, we think we can do it." It was a proper adventure. The Great St Bernhard Pass isn't the highest pass, but it has lots of turns and back then there were huge snow drifts. What we dared to do there was actually pretty bold.

There was another question in the same vein. This one comes from three apprentices at the St. Blasien factory: "In your opinion, what was the crucial factor behind a 'small' snow plough manufacturer like Schmidt breaking through to become a global brand?"

It was our collaboration with the Unimog, which was initially only intended for agricultural use. We opened the door to local government contracts for them, and suddenly we had access to the Mercedes-Benz sales organisation, which had over 30 general agencies in Germany alone. Just like that, we had 30 retail outlets and Unimog was happy to have a new, attractive sales market to develop in the shape of municipal authorities. We established ourselves on foreign markets very early, often working there closely with Mercedes-

#### Today, the Aebi Schmidt Group has grown into the market leader, especially when it comes to the airport business. Can you remember the first time you approached an airport?

I don't know now when it was exactly. But Frankfurt Airport was definitely one of our first major customers. There were lots of other airports, not all of them in Germany, that were interested in clearing their snow too - not only using ploughs, but also with rotating machines. Back then, we had proper snow! Airports were constantly battling against the walls of snow left at the sides of the runway after clearing. They already had ploughs, but they also needed to get rid of those walls of snow, otherwise their runways would become too narrow. We chose a high-performance Kaelble machine as our base

vehicle. Before then, no one had thought to use these powerful machines for this purpose. But I was ambitious and able to persuade Stuttgart Airport to try it out. It's a great feeling to invent such a beast of a machine, which has an 800-horsepower drive unit for the cutter and around 300 horsepower for the vehicle

Thomas Berger adds: The Kaelble is still operational at Stuttgart Airport to this day. It has been overhauled twice in the intervening years, the last time almost a decade ago at our factory in St. Blasien. The VF7 cutter on the base vehicle is still running and is treated like a treasured possession. It is no longer used every year, but it is always ready to go as a reserve, and may only be driven by the workshop supervisor. Thanks to its latest overhaul, it looks spick and span.

Stuttgart is still an important partner to Aebi Schmidt today. We are working together with another industrial company to develop autonomous operations for the airfield at Stuttgart. Back when you were in the thick of things, did you ever think that these vehicles might one day drive themselves?

Oh no, not at all.

#### Let's leave snow behind for a second: how did the company first get involved in the sweeper business?

It was the idea that there had to be summer equipment too. We needed something that was in demand the whole year round. In business, you can't put all your eggs in one basket. Plus the winters were not very reliable; in fact, some were disappointing.





Schmidt snow blower VF3 mounted on an Unimog U406 at work on Timmelsjoch including breathtaking view

#### Although 1978/79 was a "once in a century" winter, with the whole of Germany under snow.

Yes, we sent two snow cutters to the north of Germany to help clear the roads there. We didn't abandon our customers and we even managed to sell a couple of machines that way too. It was a good advert for us. We were on hand when the situation got serious. Some villages and towns were completely cut off to traffic. The impact it had was quite incredible. Even trains were stranded. Some of the snow clearing done at low altitudes wasn't very professional - or it just wasn't done at all. We even sold a snow cutter to the city of Lübeck. [Laughing] Not long later, they sold it back to us.

Do you believe a fully electric Supra or one powered by fuel cells will soon make its way up as far as the Krunkelbachhütte one of the highest-altitude mountain restaurants in the region?

Yes. I do believe that.

### To what extent has the Black Forest influenced how Schmidt has developed over the last 100 years? Would the company have grown in the same way had it been located in the north of

I doubt that it would. The snow here was clearly the decisive factor. After all, the first snow ploughs that my father built were absolutely vital. Before that, people only had ploughs that were pulled over the snow by oxen. The first snow plough mounted on the front of a truck was a sen- supplied six or seven machines with sation.

#### Production was always in the centre of town, in various buildings and at different levels. What motivated you to keep the business in St. Blasien?

To be honest. I never thought of moving it anywhere else. The area was very important to us in terms of our employees. We always had really good, reliable people from the surrounding villages. That was a crucial point.

#### How did one of your machines find its way to Antarctica?

In South Africa, there was a call for tenders for snow clearing machines that would be used in Antarctica. They were primarily interested in machines with a crawler drive. But in the end it fizzled out. After that, I was on a trip to South Africa with a trade association, so I took the opportunity to go to the Ministry of Transport



Schmidt slush scrapers on a truck

in Pretoria and enquired whether they were no longer interested in our offer. The response came that they were indeed very interested, but when planning their budget, they had forgotten to include transport costs. And that's not an inconsiderable sum all the way from Germany to South Africa. So I suggested moving the transport costs to next year and the next budget. I called our workshop manager from Pretoria and asked whether we could still do it in time. He said that, with overtime and Saturday shifts, we could manage it, so we submitted our offer. They ordered the machine there and then. I think we crawler drives to the Antarctic, which were then used by the German, Australian and other research stations. I was invited to travel to the Antarctic on board the "S. A. Agulhas" research vessel as a thank you. That was a truly unique experience. As was the terrible storm with force 10 winds and a 45-degree list on the return journey!

#### Training has always been important to you as a way of attracting people to work for the company. We now have some employees who are the third generation of their family to have also done their training with us. Why was training so important to you?

It was just so obvious to me. There were lots of families where the father already worked for us and the children were interested too. I think that was what drove us to set up a department for trainees, which was separate from Production.

Let's end our conversation with a question posed by one of our apprentices from the Burgdorf factory in Switzerland. Feel free to close your eyes, as her question is this: "When you hear the name Schmidt, what do you see?"

Well, first of all I see snow clearing, of course, because that's the activity that has given us so much adventure. I see us in India, for example, on the Zoji La Pass, and in dozens of other countries on all five continents. How else would I have managed to get to all those places in my life? And when you're being financially successful and getting recognition for your technical achievements as well, it really is

## **Board of Directors**



**Peter Spuhler** Chairman of the **Board of Directors** Swiss citizen 1959

#### Major in Business Administration (BWL) - University of St. Gallen Executive Chair of the Board of Directors and interim CEO of Stadler Rail AG

Other roles and vested interests: Chair of the Boardof Directors of various companies of the Stadler Group, Estonia Train Finance AG, Nordic Train Finance AG and PCS Holding AG; Member of the Board of Directors of several other companies, including European Loc Pool AG, Allreal Holding AG, Autoneum Holding AG, Rieter Holding AG and Evonik Industries AG; Member of the Advisory Board of Robert Bosch GmbH; 1999-2012: member of the Swiss Parliament



Dr. Gero Büttiker Vice President of the Board of Directors Swiss citizen 1946

Dipl. Bau-Ing. ETH Zurich,

of the Board of Directors

Since 1993: Self-employed entre-

preneur, 1985-1993: NUEVA Hold-

ing AG (formerly Schweizerische

ETERNIT Holding AG), Delegate

Dr. oec. publ.



Hansruedi Geel Member of the **Board of Directors** Swiss citizen 1956



Peter Muri Member of the **Board of Directors** Swiss citizen 1958

#### lic. oec. HSG, Qualified Public Accountant

2017-2019: PCS Holding AG, Finance and Investment Management, 2001-2017: CFO Stadler Rail Group, 1994-1997: CFO Lüchinger + Schmid Group, 1990-1994: CFO Elektronikgruppe FELA, 1981-1990: PwC, Public Accountant

#### lic. iur. Solicitor

Since 1994: Owner of a lawyer's office in Weinfelden specialized in economic and revenue law, Member of the Board of Directors in various SMEs for example Gerlinger Industries AG, Kissling Swiss Switches AG, KMU Personal AG, Polygal AG, Rausch AG Kreuzlingen (SSI AG), TLA Transport Logistik Swiss AG, SwissChem AG, Kifa AG, SUN Bürglen AG, Arbenz + Partner AG Risk Service as well as Board member of chamber of Industry and Commerce Thurhau



Dr. Peter Ramsauer Member of the **Board of Directors** German citizen 1954

#### Dipl. Kaufmann, doctorate in political science

Since 1990: Member of the German Bundestag, since 2018: Chairman of the Committee on Economic Cooperation and Development in the German Bundestag, 2009-2013: Federal Minister of Transport, Building and Urban Development, 2005-2009: Chairman of the CSU parliamentary group in the German Bundestag, general partner of the company Ramsauer Talmühle KG in Traunwalchen, Bavaria, Chairman of the Supervisory Board of Streicher GmbH & Co. KGaA, Deggendorf, Germany, member of the Supervisory Board of Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Bonn, Germany



Andreas Rickenbacher Member of the **Board of Directors** Swiss citizen 1968

#### Master of Science (MSc) Business economist

Since 2016: Owner of Andreas Rickenbacher Management AG, Bern, 2006-2016: member of the Bern cantonal government, Member of the Board of Directors of Bernexpo AG, BKW AG, HRS Real Estate AG, Vice President of the Switzerland Innovation foundation and the Internationale Lauberhornrennen Wengen association



Markus Bernsteiner Member of the **Board of Directors** Swiss citizen 1966

#### Executive MBA - University of St. Gallen

Since 1999: Stadler Rail AG, Executive Vice President, 1995-1999: Operations Manager and Member of the Board of Directors of Elektrolux-Compactus AG, 1993-1995: Divisional Management and Member of the Executive Board of Aluwag AG, Member of the Board of Directors of LRS Engineering AG and Trunz AG, Member of the Board of Trustees of the ALLVISA pension fund

## **Executive Board**



**Barend Fruithof** Group CEO Swiss citizen 1967



Thomas Schenkirsch Group CFO and Deputy Group CEO Swiss and German citizen 1975



Rudi Rosenkamp Head Sales Northern Europe & Rest of World Dutch citizen 1963



**Gerhard Neudorfer** Head Sales Western & Central Europe Austrian citizen 1966

#### Executive MBA, University St. Gallen

Since 2017: Group CEO, Aebi Schmidt Group, 2015–2016: Bank Julius Baer & Co. AG, Head of Switzerland & Global Custody, Member of the Executive Board, 2008-2015: Credit Suisse Group. Zurich, Head of Corporate & Institutional Clients, Member of the Executive Board of Credit Suisse Switzerland, Member of Private Banking Divisional Management, 2004-2007: Raiffeisen Group Switzerland, St. Gallen, Chief Financial Officer and Head of the Finance & Corporate Center Department. Member of the Executive Board, 2001-2003: CEO of Viseca Card Services SA, Glattbrugg, 1997-2000: ZKB, 1997: EUROPAY (Switzerland) SA, 1992-1996: ZKB

#### Dipl. Betriebswirt

Since June 2016: Group CFO, Aebi Schmidt Group, 2008-2016: Director of Group Controlling at the ASH Group, 2003-2008: Corporate Controller and Head of Corporate Controlling Von Roll Management AG, Switzerland, until 2003: Financial Analyst at PerkinElmer Switzerland and Senior Treasury Analyst Perkin-Elmer, Boston, USA

#### Dipl. Ingenieur

Since 2021: Head of Sales for Northern Europe & Rest of World, Aebi Schmidt Group, 2017–2020: CCO Global Sales Dealer/Airport, Aebi Schmidt Group, 2013–2017: Head of Sales & Service Division, ASH Group, 2010-2012; Head of Direct Sales Division, 2008-2010: Head of the Service Division, 2004-2008: Head of Sales Holland

#### Mag. rer. soc. oec.

Since 2021: Head of Sales Western & Central Europe, Aebi Schmidt Group, 2018-2020: CCO Sales Europe, Aebi Schmidt Group, 2014-2018: Managing Partner, Optimus Consulting GmbH, 2011-2014: CEO, Linde Fördertechnik GmbH, 1987-2011: various managerial roles at Wacker Neuson Baumaschinen GmbH



Steffen Schewerda **CEO North America** German citizen 1971

#### Dipl. Ingenieur, University of Aachen, MBA - Universities of Augsburg/Pittsburgh

Since 2021: CEO North America, Aebi Schmidt Group, 2020: Designated CEO North America, Aebi Schmidt Group, 2016-2019: President for the Americas, SAF-HOLLAND, 2011-2016: President Trailer Business Unit, SAF-HOL-LAND, 2007-2010, President Global Operations SAF-HOL-LAND. 1996-2006: SAF GmbH



**Burkhard Ditsche** Head Group After Sales & Services German citizen 1967

#### Dipl. Kaufmann

Since 2021: Head of Group Aftersales & Services, Aebi Schmidt Group, 2018-2020: Chief Aftersales Officer, Aebi Schmidt Group, 2016-2018: EU Aftermarket Development Manager, KUBOTA GmbH (D), 2004-2015; Aftermarket Sales Manager, John Deere, within Sales Germany until 2011 and John Deere International (CH) for EU28 2011-2015, CIS and EAME, 1996-2004: Marketing & Media Services Manager, Kramp Groep B.V. (NL)



Henning Schröder Head Group Technology German citizen 1977



Jochen Schneider Head Plants Europe German citizen

#### Dipl.-Wirtsch.-Ing.

Since 2021: Head of Group Technology, Aebi Schmidt Group, 2019-2020: Chief Product Officer, Aebi Schmidt Group, 2017–2019: Executive Board & Regional Responsibility for Aftermarket Americas at Hella Automotive Sales, Inc. (USA), 2013-2017: Executive Board, Hella Pagid GmbH, 2010-2013: Head of Global Sales Special OE, Hella KGaA Hueck & Co., 2008-2010: Head of Product Management Asia Pacific, Hella Asia Singapore Pte. Ltd., 2001-2008: various roles and management functions, Hella KGaA Hueck & Co

#### Dipl.-Wirtsch.-Ing. Darmstadt University

Since 2021: Head of Plants Europe, Aebi Schmidt Group, 2018-2020: CEO North America, Aebi Schmidt Group, 2016-2018: COO Operations Global, ASH Group, 2012-2016: Head of Division Schmidt, 2004-2012: CEO FAUN Umwelttechnik GmbH & Co. KG, 2000-2004: CEO Dätwyler Inc. Rubber + Plastics Automotive, 1996-2000: Vice President & Partner ABB Business Services Ltd, 1991-1996: Colgate Palmolive

1962

# **Group Structure**

#### **BOARD OF DIRECTORS**

Peter Spuhler

Dr. Gero Büttiker

Chairman of the Board of Directors Vice President of the Board of Directors

Dr. Peter Ramsauer

Member of the Board of Directors Hansruedi Geel

Board of Directors

Member of the

Member of the Board of Directors

Peter Muri

Andreas Rickenbache

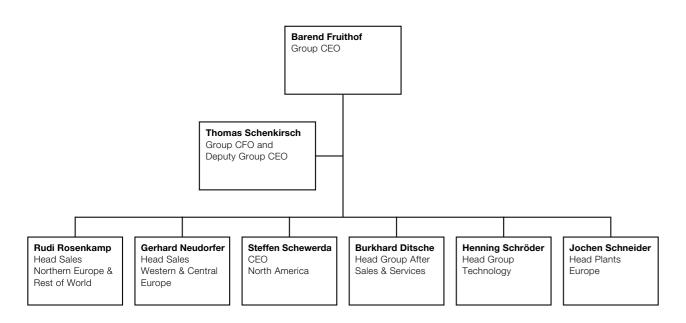
Member of the Board of Directors

Markus Bernsteiner

Member of the

Board of Directors

#### **EXECUTIVE BOARD**



# Sustainable **Value Creation** through clear **Management** and Control **Principles**

Aebi Schmidt Holding AG, with registered office in 8500 Frauenfeld, Schulstrasse 4, and another business address in 8050 Zurich, Leutschenbachstrasse 52, is a public limited company under Swiss law.

The Board of Directors and the Executive Board attach great importance to proper business management in the interest of customers, business partners, employees and shareholders. The basis for this is provided by the company's statutes and organisational regulations. Their implementation and consistent application ensure the required transparency for stakeholders to assess the company's quality.

## Group structure

The organisational structure was adapted on 1 June 2017 and is shown on the left side. The managerial responsibility for the Aebi Schmidt Group lies with the CEO, unless it is delegated to the Division Managers. The managerial responsibility for the divisions is incumbent upon the Division Managers. The parent company of all group companies is Aebi Schmidt Holding AG. For an overview of all group companies that belong to the consolidated entity, please see pages 53 of this report.

#### Shareholders

Aebi Schmidt Holding AG is owned by the following shareholders:

SHAREHOLDERS	
PCS Holding AG, Switzerland (owner: Peter Spuhler)	54%
Gebuka AG, Switzerland (owner: Dr Gero Büttiker)	35%
Group CEO, Aebi Schmidt Group, Barend Fruithof	8%
Other members of the Board of Directors and Executive Board	3%

## Capital

The fully paid-up equity capital of Aebi Schmidt Holding AG amounts to CHF 27 932 000 and is subdivided into 2 793 200 registered shares, each with a nominal amount of CHF 10. Each registered share constitutes one vote at the general meeting. All shares entitle to share in profits. There is neither approved nor conditional capital. The transfer of shares, whether for ownership or usufruct, is subject to the approval of the Board of Directors. The approval can be withheld for a good cause. The equity capital has remained unchanged since 4 July 2007.

#### **Board of Directors**

The Board of Directors is usually elected within the scope of the annual general meeting for the period of one year: the term of office ends on the date of the next annual general meeting. Members newly appointed during a term of office complete the term of office of their predecessors. Re-election is permissible. The Chairman of the Board of Directors is elected in the general meeting. Apart from this, the Board of Directors constitutes it-

The Board of Directors is in charge of the executive management, supervision and control of the Executive Board of the Aebi Schmidt Group. The Board of Directors is responsible for all matters delegated to its members under statutory law and the statutes, unless the Board of Directors delegates them to third parties. Except as

otherwise provided in statutory law or in the statutes, the Board of Directors fully delegates the operational management to the Group CEO, Aebi Schmidt Group, who is supported in this task by the remaining members of the Executive Board according to the authorities assigned to them. The CEO is accountable to the Board of Directors. All members of the Board of Directors are non-executive.

The board meeting is convened upon invitation by the Chairman as often as business matters require and as soon as requested by a member, although usually four times a year. A meeting usually takes half a day to one day. The notice of invitation contains all items that are dealt with. The attendants to the meeting receive an extensive written documentation of the proposals in advance. Besides the Board of Directors, these meetings are attended by the Executive Board, which has no voting rights. The resolutions are passed by all members of the Board of Directors. The Board of Directors constitutes a quorum if the majority of its members are present. The resolutions are passed by a majority of the votes cast. In the event of a tie, the Chairman has the deciding vote.

The Board of Directors appoints an Audit Committee consisting of three members, currently comprising Hansruedi Geel, Dr. Gero Büttiker and Peter Muri. The Audit Committee is the point of contact for the external auditors, holds a meeting at least once a year and is entitled to prepare the company's annual financial statement for inspection by the external auditors as well as to discuss the results of the audit with the external auditors at the end of the audit. The meetings are usually attended by the CEO and the CFO and, if necessary, a representative of the external auditors. The Audit Committee makes no final decisions. It prepares the business transactions assigned to them and files proposals to the full Board of

In 2019 the Board of Directors has additional a Nomination and Compensation Committee initiated. This is currently comprising by Andreas Rickenbacher, Peter Muri and Markus Bernsteiner. The meetings are usually attended by the CEO. The Nomination and Compensation Committee supports the Board of Directors by subjects governed by law or bylaws articles in the area of compensation and human resources policies.

## Information and control instruments

The Board of Directors is in charge of supervising the Aebi Schmidt Group's internal control systems, which limit, but cannot rule out, the risk of inadequate business performance. These systems provide adequate, although not absolute, protection against substantial misstatements and pecuniary loss.

The Board of Directors is extensively informed of the business development on a monthly basis. The members of the Board of Directors are provided with a monthly report containing up-to-date information on the business development and the transactions of the Aebi Schmidt Group. At the board meetings, the Executive Board presents and comments on the business development and tables important issues.

Additionally, the Board of Directors adopts the budget for the following year. Once a year, it receives the results of the medium-term plan for the next four years and discusses and resolves adaptations to the corporate strategy. The Board of Directors and the Audit Committee additionally determine factual issues that are taken up within the scope of the internal controlling processes and elaborated by analyses and assessments. The Audit Committee also determines major issues by a member or if a meeting is necessary, concerning the definition of the scope and the contents of the external audits. Once a year, the Board of Directors deals with the strategic issues of the Aebi Schmidt Group within the scope of a strategy meeting. The Chairman of the Board of Directors and the CEO regularly inform each other of and discuss all business transactions that are of fundamental significance or might have far-reaching consequences.

The Board of Directors subjects the internal information and control systems to a periodic inspection regarding their effectiveness to identify, assess and cope with risks associated with the business activities.

## Risk management

The Board of Directors and the Executive Board attach great importance to the careful handling of strategic, financial and operational risks. The risk assessment

is determined by the Risk Controlling Manual, which was approved and introduced by the Board of Directors within the scope of its meeting of 9 September 2008. Based on periodic and systematic risk identification, the relevant risks for the Aebi Schmidt Group are assessed regarding their probability of occurrence and their effects. These risks are avoided, limited or passed on by taking corresponding measures. The last risk assessment was conducted by the Board of Directors in October 2020. It is incumbent upon the Executive Board to identify and communicate the substantial risks to the Board of Directors.

## Executive **Board Member**

The CEO is in charge of the management of the Aebi Schmidt Group, Under his direction, the Executive Board deals with all relevant issues, makes decisions within the limits of its authority and files proposals to the Board of Directors. The Division Managers are responsible for the development and achievement of their entrepreneurial goals and the independent management of their divisions. The Board of Directors appoints the Executive Board; the CEO is entitled to file proposals. The board meeting is convened if requested usually once a month.

## Shareholders' participation rights

The general meeting is convened by the Board of Directors, if necessary, by the Audit Committee. The annual general meeting takes place once a year within 6 months after closing the business year. The Annual Report and the Audit Report are sent to the company's registered office no later than twenty days prior to the annual general meeting. Extraordinary general meetings are convened as necessary. The Board of Directors shall convene an extraordinary general meeting if requested in writing by shareholders representing at least 10% of the share capital, indicating the purpose and the proposals. The general meeting is convened by letter to the shareholders no later than twenty days prior to the date of the meeting. Be-

sides the date, time and place of the meeting, the items listed on the agenda as well as the proposals of the Board of Directors and the shareholders shall be indicated in the notice of convocation. No resolutions can be passed on items that are not announced in this manner with a proviso to the regulations regarding general meetings attended by all shareholders (universal meetings)

Provided that no objection is raised, the representatives of all shares can hold a general meeting without having to comply with the formal requirements of convocation (universal meeting). As long as the owners or representatives of all shares are present, this meeting is entitled to discuss and pass valid resolutions on all items within the limits of the general meeting's authority.

There is no statutory limitation of voting rights. Registered shareholders whose names are entered in the company's share register are eligible to vote. Each shareholder can have himself represented by another shareholder provided with a written power of attorney

Pursuant to Art. 703 OR [Swiss Law of Obligations], resolutions of the general meeting shall be passed by absolute majority of the represented voting shares. Resolutions listed in Art. 704 OR as well as resolutions regarding the conversion of registered shares into unregistered shares, which requires at least two-thirds of the votes represented and absolute majority of the nominal share value represented, shall be exempted from this regulation.

## External auditors

In 2014. PricewaterhouseCoopers AG. Zurich, assumed the mandate as the external auditor of Aebi Schmidt Holding AG. Successor of the auditor is Philipp Gnä-

The inspection and supervision of the audit is incumbent upon the Audit Committee. The external auditors draw up an extensive report on the results of their audit on an annual basis. The Audit Report is accompanied by a management letter and a comprehensive report to the Board of

### Compliance

The Aebi Schmidt Group distributes a large portion of its products in the environment of public institutions (federal states, cities, municipalities, motorway and airport operators) and therefore pays special attention to always complying with all applicable national and international regula-

The term compliance stands for compliance with standards, laws and industrial standards as well as any requirements within the scope of self-regulatory measures or in-house directions. In the past business year, the Aebi Schmidt Group examined the existing compliance regulations and processes and adapted them to amended and new statutory requirements, where necessary. Today, the Aebi Schmidt Group exhibits a well-balanced overall system to fulfil the ever more complex issue of compliance.

The major elements of compliance are as follows:

- Code of Conduct Defines the fundamental values of our employees' activi-
- Competence regulations Defines the competencies within the company.
- Risk management The Executive Board examines the risks of the Aebi Schmidt Group on behalf of the Board of Directors and defines measures to avoid, limit or pass on the risks.
- ICS (Internal Control Systems) The risks identified by the persons in charge of the processes are examined within the scope of appropriate inspections. The inspections are reviewed by the Executive Board on an annual basis and, where necessary, adaptations are requested from the Board of Directors.
- Dealers and agents must undergo regular compliance audits, which are monitored by the Compliance Board.
- There is also a regular customer review and dual-use inspection in the spare parts business. The export regulations demand compliance and verification that no goods or services are provided to a person or institution prohibited by an official authority from being supplied

and whether or not the regulations for goods that can also be used for military purposes are complied with. Last year, the list of affected persons and institutions was constantly extended due to political upheavals. Using the newly introduced processes and IT-based check programmes, the inquiries can be carried out efficiently and promptly.

 Suppliers are subject to a compliance check and sign a code of conduct for suppliers.

The Aebi Schmidt Group is convinced that the principle of conducting business transactions in a responsible manner and in compliance with the statutory and official regulations of the countries in which we are operating is feasible. The Aebi Schmidt Group is making every effort to constantly improve its compliance system in order to be able to respond to the changing requirements in our global busi40 Aebi Schmidt Holding AG / Annual Report 2020 — Sustainability / Employees

# **Employees**

## Competent and satisfied employees are key to the company's long-term success.

The Aebi Schmidt Group offers an attractive working environment and country-specific benefits and attaches great importance to equal treatment. As a global corporate organisation with production sites in a number of different countries, it is important that norms and standards are defined and implemented to create a consistent framework for all employees. Our key corporate values include flexibility and openness towards the different cultural and job-specific backgrounds of our employees.

### Attractive working environment

Open and honest interaction encourages all employees to become actively involved in the company. That is why we adopt a transparent approach to communication with our employees, and keep them informed on a regular basis via newsletters, the intranet, CEO messages, roadshows and management calls. The start of the pandemic in spring 2020 made it a priority to establish preventive measures and guarantee communication in terms of suspected cases and infected individuals. Despite the pandemic-related absence of our regular survey on employee satisfaction in Europe in 2020, feedback was requested from employees. The Aebi Schmidt Group is dedicated to ensuring a high level of staff satisfaction, which helps to keep good employees in the company. The various benefits offered to employees in different countries contribute to achievement of this goal. In Switzerland, the Aebi Schmidt Group offers attractive pension plans to ensure a secure future for its employees. In the US, the benefit programmes of the various companies were consolidated in 2020 and improved in some areas, in particular health and life insurance.

These favourable framework conditions enable the Aebi Schmidt Group to position itself as an attractive employer on the employment market. The good employment situation in many countries means that the cost and effort required for recruitment of skilled workers is still high. Strong seasonal variations in incoming orders and the ongoing lack of specialist workers in specific areas are some of the main issues faced by Human Resources. In 2020, recruitment was dominated by the circumstances of the pandemic: last year very few employees were prepared to take the risk of a change in job. Vacant positions were filled using video interviews, and sometimes employees were willing to switch locations within the company. We set up a new website with a job portal to support recruitment and to help candidates familiarise themselves with the Aebi Schmidt Group. We also implemented a simplified application process for production employees and replaced written applications with tours and trial days.

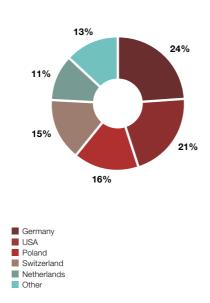
## Equal opportunities for all employees

At the Aebi Schmidt Group, diversity is a value in itself. A diverse workforce boosts the company's understanding of global markets and customers, helps it to access skilled staff and to stand out from the competition, and last but not least enhances its reputation. We are dedicated to ensure that all employees are given equal opportunities. In Switzerland, the Swissmem collective bargaining agreement formalises the requirement for equal treatment. Equal opportunities and remuneration are monitored in Switzerland each year using the Loqib self-assessment tool and compliance with the minimum wage is reviewed by an external auditor. In 2020, the factory in Burgdorf took part in the Landolt & Mächler salary survey for a second time, another measure of equal pay. In the Netherlands, a salary survey was carried out for the entire production division. In Germany, the Transparency of Pay Act is applied consistently. In fact, employees at several locations are covered by collective agreements, for instance in Germany, the Netherlands, Norway, Spain, Italy, Sweden, Austria and Finland. In the US, roughly half of the

#### **FLUCTUATION BY GENDER AND AGE GROUP**

90% 70% 30% 10% Departures

## **EMPLOYEES BY COUNTRY**



Numbers equal persons, permanent staff only

employees at Meyer Products and about 60% of employees at M-B Companies are covered by collective agreements. In Switzerland, three guarters of all employees are subject to the Swissmem collective bargaining agreement. In Poland, staff have signed an agreement with an employee representative body to extend accounting periods for up to 12 months. (GRI 102-41).

Fair and non-discriminatory interaction within the company and with business partners constitutes a basic prerequisite for long-term partnerships and is firmly R&D anchored in our corporate culture. The binding Code of Conduct defines core values and standards that all employees undertake to observe in writing. Managers also have a key responsibility to lead by example, promoting and monitoring compliance with these standards in daily business routine. In the event of any questions or complaints, the employees can contact the Compliance Officer. Last year we ran an anti-harassment and discrimination course at our sites in the USA. In 2020, there was one registered case of discrimination within the Aebi Schmidt Group; proceedings are currently underway.

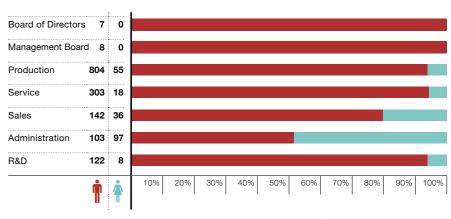
## Health and safety

The health and safety of employees has the highest priority within the Group a fact made abundantly clear by our handling of the pandemic. The greatest challenge faced in 2020 was the pandemic: it was important to protect the health of employees while maintaining business operations. The Aebi Schmidt Group set up a COVID-19 task force and took a proactive approach to overcoming the challenges. For instance, employees were given the option of working from home, protection plans were drawn up for production sites and special precautions put in place for employee interaction with customers, in most cases before this was prescribed by

Not only does the Aebi Schmidt Group comply with all statutory regulations, it also implements further preventive healthcare measures within the scope of occupational safety management. As well as internal regulations and the Code of Conduct, this includes safety initiatives and regular information events. Employees also receive training on how to deal with risks and hazards in their day-to-day

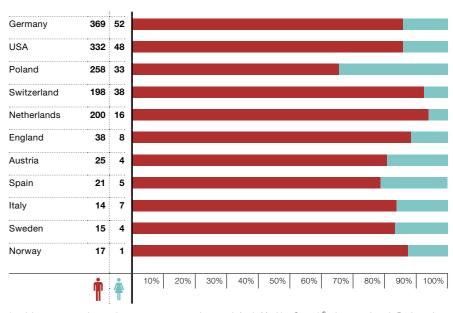
#### **WORKFORCE BY CATEGORY\***

in full-time equivalents / 2020



\* excl. interns, apprentices and temporary agency workers; excl. Arctic Machine Oy and Équipements Lourds Papineau Inc

#### **WORKFORCE BY COUNTRY AND GENDER\***



\*excl. interns, apprentices and temporary agency workers; excl. Arctic Machine Oy and Équipements Lourds Papineau Inc.; allocated to countries of employment

#### **COMPOSITION OF THE WORKFORCE\***

	Male	Female	Total
Workforce by employment contract	1 488	215	1 703
Permanent	1 407	208	1 615
Temporary	81	7	88
Workforce by employment type	1 488	215	1 703
Full-time	1 433	171	1 604
Part-time	55	44	99

\*excl. interns, apprentices and temporary agency workers; excl. Arctic Machine Oy and Équipements Lourds Papineau Inc

42 Aebi Schmidt Holding AG / Annual Report 2020 — Sustainability / Employees

#### OCCUPATIONAL HEALTH AND SAFETY

Numbers per 100 full-time equivalents / 2020

	Male	Female	Switzerland	Other Locations	All
Injuries	3,3	3,0	1,8	3,5	3,3
Days lost as a result of injury	65,6	14,2	41,5	62,1	59,2
Days lost as a result of injury and illness	1 054	765	777	1 058	1 018

Rates were calculated for 200 000 working hours (≈ 100 full-time positions). There were no fatalities. The data represents a weighted average of all incidents (actual number of incidents weighted by the number of target hours).

work. At the locations with production facilities, it is the occupational safety department that assumes responsibility for occupational safety management. In Germany, health and safety at work is subject to inspection by the trade inspectorate and the relevant professional association on a recurring and event-driven basis. Furthermore, all workplaces are assessed professionally in terms of their potential hazards with the support of an external safety specialist. We then implement measures on the basis of this analysis to minimise risk/exposure. In Germany, inhouse doctors are on hand to provide examinations. In Switzerland we evaluate audits by Suva, the Swiss national accident insurance fund, and implement measures accordingly. In the Netherlands, external audits are carried out annually

#### A proactive approach during the pandemic has helped to protect the health of employees while maintaining business operations.

and internal audits monthly with a view to quaranteeing occupational safety; external specialists are consulted for occupational health services. Voluntary programmes are aimed at promoting health; for instance, in Poland regular medical checkups are offered and workshops held on the subject of 'Back health at work', and the current desks are gradually being replaced with ergonomic height-adjustable desks. Other sites offer vaccinations and bike discounts schemes.

## The importance of training and further education

The Aebi Schmidt Group relies on well-trained and skilled staff to ensure long-term business success. In light of the ongoing shortage of skilled workers, training and further education for our existing workforce is particularly important. As was the case in previous years, electricians and painters were thin on the ground, as were mobile service technicians. The management at each location is responsible for ensuring that training and further education targets the best interests of the company and the employees. The Aebi Schmidt Group carries out regular employee appraisals with around 80% of the workforce in total. These are also used to plan specialist training reauirements.

The aim is to fill two thirds of vacancies with internal candidates by 2023. The Aebi Schmidt Group is working on a systematic succession plan for the top three hierarchy levels to promote talent, to increase opportunities for advancement and to secure upand-coming management talent in the company. We also plan to continue with our existing advancement programme for internal talent and our individual employee development plans. The advancement programme, which runs for 18 months, gives internal talent the opportunity to work on projects, take part in training and present in front of the Group Executive Board. Some employees from the first advancement programme have already now been promoted to new roles. In addition, a survey was conducted on the first programme, which concluded in mid-2020, and the results were taken into account in the design of the new promotion programme.

The Aebi Schmidt Group offers Group-wide product training and runs courses on specific technical expertise for individual groups. The company supports continuing education via internal and external courses as required, either by making a financial contribution or offering the option of taking out an interest-free loan

Regular employee appraisals also serve as a basis for planning professional advancement. Internal talent is fostered and the chances of advancement within the company increased.

for training. For instance, in 2020 refresher courses were held for high-voltage work for employees of the Aebi Schmidt Group. In 2020, all sales staff received training in sales methodology and key account management as part of the Sales Academy programme. In Poland, the company extended its range of courses to include forklift truck and crane training for production employees and individuals from relevant departments. Painters were trained in the new painting system.

## **Community**

The Aebi Schmidt Group's commitment to and presence in underdeveloped regions enables it to create jobs and to contribute to the economic development of the areas around its business locations.

Commitment, integrity, a love of innovation and cooperation are our most important corporate values. These are everpresent in our partnerships with suppliers and our approach to other stakeholders.

## Setting high standards for our supply chain

In 2020, the Aebi Schmidt Group purchased products and services from about 3300 suppliers, almost 200 fewer than the year before. Thus, the pool of suppliers was downsized and the complexity of the supply chain reduced. The Aebi Schmidt Group employs a Group-wide supply chain management system. This approach means that increasingly locally based initiatives are replaced and standardised within the Group. Another focus area of supply chain management is the improvement of transport channels, shipping and packaging with a view to reducing CO<sub>2</sub> emissions and cutting costs. In one case, for instance, a supplier of special technical products was changed in order to cut down on the transport distance involved

Our supplier pool features companies of varying sizes from a wide range of industry sectors. The most important product categories include steel, stainless steel, welded assemblies, engines and hydraulic and electronic components. The Aebi Schmidt Group also has a network of local specialist suppliers to handle specific finishing work. For the products of the Aebi brand manufactured in Switzerland and the vehicles of the Schmidt brand manufactured in various European coun-

tries, the suppliers come predominantly from Europe. Inbound freight products are received, consolidated and shipped to the production facilities by two logistics partners. For key suppliers, the Aebi Schmidt Group uses centralised procurement, which is supplemented by decentralised, logistically optimised procurement from the respective business locations' local areas. In 2020, the purchasing volume for products and services for European factories amounted to EUR 163 million. In Asia, the Aebi Schmidt Group procures smaller volumes directly from specialist suppliers. The Group works with 1864 suppliers to cover the North America region, the majority of which are based in the US and Canada.

The Aebi Schmidt Group analyses its suppliers based on the ABC principle. This structured supplier management makes it possible to evaluate and classify all suppliers with regard to processes, quality, energy consumption, environmental policies as well as ISO 9001 and 14001 certifications. Global quality management plays a key role in the evaluation of suppliers. Quality assurance agreements are an important contractual component for all major suppliers, as they include fines or free replacement of sub-

Compliance with sustainability standards on the part of suppliers is also subject to regular review. If the supplier does not meet the required criteria, the Aebi Schmidt Group ends the collaboration. The qualification process for new suppliers includes the evaluation of environmental criteria, such as the recycling of raw materials or the reduction of CO2 emissions; they must also comply with a Code of Conduct. Anchoring sustainability in the onboarding and management process for suppliers helps to future-proof production. The Aebi Schmidt Group subjects all suppliers to a compliance check in order to ensure that they have not gained an economic advantage through either corruption or illegal practices.

In a market where customers are placing increasing value on sustainability, the Aebi Schmidt Group can make itself stand out from the competition by implementing environmental guidelines and having corresponding certifications. This increases the value of incoming and outgoing goods and also streamlines the supply chain. In order to offset the high acquisition prices for these sustainable products, we increasingly offer our customers full-service leasing agreements

## A strong stakeholder focus

The Aebi Schmidt Group informs its stakeholders about its activities, objectives and progress in the Annual Report. The company communicates regularly with its most important stakeholders; i.e. those that influence or are influenced by our business activities, including customers, suppliers, business partners, trade associations, municipalities, regional authorities and research institutions (GRI 102-40 GRI 102-42). We take on board customer requirements and implement these in our vehicle equipment as part of our standard process. With the new IntelliOPS platform, this approach is now being transferred to digital tools: the platform enables customers, based on their license, to select and use individual modules and services as needed without use of each application as a stand-alone.

Autonomous driving and electric drives, two of our biggest focuses in 2020, have shown how important ongoing dialogue with customers and other stakeholders is for the company. Customer feedback has proven indispensable for the new electric drive technology; it provides the sole means of optimisation, not least given the many operational concepts. Similarly, the trialling of prototypes has proven crucial to success in the field of autonomous driving. Products can be

Autonomous driving and electric drives, two of our biggest focuses in 2020, have shown how important ongoing dialogue with customers and other stakeholders is for the company.

checked in good time to ensure that they meet market requirements and offer the intended customer benefits. An example of this is the cooperative partnership with Stuttgart airport and other industry participants in the Smart Fleet research project: in 2020, the project continued to explore the framework conditions required for automated and autonomous driving in the airport environment. In another example, Kempten University of Applied Sciences and the City of Füssen have launched a joint research project into autonomous sweepers: the Aebi Schmidt Group is providing a nationwide unique prototype for

44 Aebi Schmidt Holding AG / Annual Report 2020 — Sustainability / Community

this research project and hopes in return to receive important information that could secure it a competitive advantage in future.

Contact and dialogue with our dealers is key to our success too. For instance, the model update campaign was planned and implemented in close cooperation with Aebi dealers in Switzerland, Aebi Schmidt meets its dealers regularly to discuss outstanding issues, new occurrences, etc. Wherever possible, we decide together how to address various issues from technology to marketing.

The Aebi Schmidt Group is committed to its employees. In 2020, we started work on the expansion of the Chilton factory at M-B Companies in the US. This is a strategic project intended to ensure we can continue to supply our airport clients with industry-leading equipment in future. In addition to the expansion of the manufacturing division, sanitary facilities, breakrooms and offices for employees will also undergo modernisation, (GRI 102-43, GRI 102-44)

### Active in committees and associations

The Aebi Schmidt Group is actively involved in various regional and international committees and associations. These include the European Engineering Industries Association (EUnited), the DIN

Standards Committee on Municipal Technology (NKT), the Municipal Vehicles and Equipment Industry Association (VAK) and the Mechanical Engineering Industry Association (VDMA). In addition, the Aebi Schmidt Group is a member of the SWISS-RAIL Industry Association, which unites more than 100 companies from the Swiss automotive and transport industry. the European International Contractors federation, which advocates the interests of the construction industry on an international scale, and Swissmem, the Swiss association of mechanical and electrical engineering industries. In the Netherlands, Aebi Schmidt is involved in the Smart Welding Factory organisation, which aims to bring together companies and non-profit organisations. Aebi Schmidt Poland is a member of the Polish-Swiss Chamber of Commerce. And M-B Companies in the USA is involved in the local Chamber of Commerce. Aebi Schmidt North America is a member of the National Truck Equipment Association (NTEA). which supports the sustainability efforts of companies from the truck industry and represents their interests. Moreover, the factories in Cleveland and Lindenwood are members of the Member Verification Program (MVP), which honours companies for excellent business practices and the implementation of quality standards. In 2020, the Aebi Schmidt Group stepped up its collaboration with industry associations to address the sector-wide problem of cancellation of trade fair events at short

## Socially engaged

The Aebi Schmidt Group's social commitment includes predominantly sponsorship of local sporting and social projects and partnerships with students at various stages of education for research and term projects. There was very little opportunity to engage in new commitments in 2020, since few events could take place as a result of the coronavirus pandemic. At Holten in the Netherlands, various local social projects are supported. Numerous employees in St. Blasien also help schoolchildren in the Hochrhein-Bodensee economic region to prepare for job interviews. In Germany, Aebi Schmidt is involved in career orientation evenings for pupils from regional schools. M-B Companies supports the Salvation Army and families in need via donation boxes from the New Hope Center in Chilton. Mever supports the annual initiatives of the local scouts. The employees at Meyer also donate to the Ronald McDonald House and a local refuge for mothers at risk in Cleveland. Swenson arranges food donation campaigns at Christmas. Aebi Schmidt Poland is one of the sponsors of KS Vive Kielce (handball) and sponsors the local fire service in its fire prevention

## Compliance with legal regulations

By having a clear definition of responsibilities, risk management and efficient control systems, the Aebi Schmidt Group makes sure that all statutory provisions and industry standards in a complex requlatory environment are observed. Thanks to functioning compliance control mechanisms, the Aebi Schmidt Group became aware of an instance where a regulation relating to engine approval was not being met. We reported this to the authorities voluntarily and are now handling the case with the relevant bodies.

A Group-wide Code of Conduct, which is specified in in-house directives, defines our corporate values and code of ethics. Among other things, it addresses IT security and privacy, environmental protection, fair competition and the prevention of corruption. These days protection against cyber attacks has become a subject of great importance. As such, in 2020 there was an obligatory online course on IT security for all employees working with computers. The IT course comprises several modules and is set to continue in 2021 with new content.

A focus on results, collaboration, customer focus, integrity, commitment and innovation - our employees apply these values in all aspects of their work both within the company and in dealing with customers and partners. These values are used as criteria for the annual employee reviews. If all employees consistently adhere to these values in their activities, this will make collaboration easier and ensure the long-term success of the company.

The Aebi Schmidt Group also understands integrity to mean that the operations are in line with the applicable antitrust and competition laws and that all employees refrain from any actions that

In order to minimise corruption risks on an ongoing basis, a procurement handbook has been launched with a clear definition of responsibility for specific purchases.

would inhibit trade or restrict competition or could make such an impression. The Code of Conduct stipulates the rules for handling gifts and other benefits and prohibits any form of bribery. Any trace of anti-competitive behaviour poses the risk that the Aebi Schmidt Group might be excluded from public tenders. All major bids are reviewed by the CEO and the CFO of the Group in terms of prices, terms and trading partners. So far, this has worked well for the company. No anti-competitive behaviour or corruption cases were registered in the year under review.

To minimise risks of corruption, in 2020 the Aebi Schmidt Group introduced a procurement handbook setting out rules for dealing with suppliers with a clear definition of responsibility for specific purchases. This process standardisation helps to save costs in purchasing and has led to the implementation of a dual control principle for all externally procured services. As the Aebi Schmidt Group also supplies customers in the public sector, corruption risks in particular need to be minimised in the supply chain. These risks are reduced via a systematic review as part of strategic supplier development, strict se-

lection and evaluation procedures and improved supplier management. In 2020 a binding code of conduct for suppliers was launched, covering corporate responsibility, transparent business relationships, fair market conduct and the protection of data and trade secrets. Monitoring compliance with these standards is necessary, but it leads to increasing administrative work and additional cost.

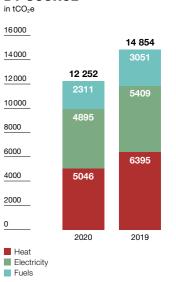
The Aebi Schmidt Group applies export controls to ensure that civil goods and spare parts in particular are not used for military purposes. A software solution compares every new contracting partner - whether a supplier, customer or dealer - with public sanctions lists to prevent supply to any person or institution that is banned from receiving supplies by a public authority

## **Environment**

Developing environmentally friendly machinery and making production processes more eco-friendly: the Aebi Schmidt Group goes above and beyond what is required of it by law in its efforts and goals. Cost considerations and customer expectations play a role here too.

Climate change is a global challenge that has to be addressed by our industry. The Aebi Schmidt Group is rising to the challenge. After all, the development of high quality and environmentally friendly products can become a unique selling point in a highly competitive international market. Our company has a variety of public sector customers that are more committed than ever to the protection of the environment and CO2 neutrality. With this in mind, we strive to design our products in such a way that even with conventional drives they meet the latest emissions standards, operate with maximum efficiency and cost little to maintain. In fu-

#### **GREENHOUSE GAS EMISSIONS BY SOURCE**





Expansion of the Chilton plant: creating jobs in the region with high standards for employees.

chines with electric drives. The fully electric eSwingo sweeper impresses customers with its endurance and performance. Several tests with competitor machines have confirmed that it is currently the most powerful machine on the market. But electric drives need to be continuously adapted to new standards and corresponding development work undertaken.

## An innovative and committed approach to protecting the environment

Developing environmentally friendly machinery is just one aspect of what we do. Creating ecological production processes is equally important. For example, production facilities must comply with increasingly stringent limits for energy consumption and emission levels. To encourage an ongoing reduction in the consumption of resources, the company measures its progress regularly by recording environmental performance figures, and implements operational measures and trains its employees in the responsible handling of resources. The Aebi Schmidt Group constantly monitors the relevant national and international developments and prepares

ture, we plan to offer more municipal ma- for any changes in the regulatory framework in good time. The need to keep up with an ever-faster pace of technological and societal change, and also develop our range of products and boost productivity, requires an innovative and committed approach.

> Our goals for environmental protection go far beyond the minimum legal requirements. These are supported by certifications, among other things, and all locations have been ISO 9001-certified since 2009. The production facilities and the local sales and service organisations in Peterborough (UK), Fiume Veneto (Italy), Burgdorf (Switzerland), Skänninge (Sweden), Holten (the Netherlands), St. Blasien (Germany) and the plant in Poland are also certified under ISO 14001. Furthermore, the Group observes the guidelines for social responsibility under ISO 26000.

> To further reduce the consumption of resources, the company is implementing operational measures and training its employees in the responsible handling of resources.

## Saving energy and reducing waste

The Aebi Schmidt Group is planning to gradually increase the supply of sustainably generated electricity at its European plants in 2021. This will help the company to reach its sustainability goals and to reduce its CO<sub>2</sub> footprint. In the year under review, the Aebi Schmidt Group implemented optimisation measures across a number of its locations. For instance, the two German sites St. Blasien (production) and Laatzen (warehouse and offices) underwent an energy audit in line with the requirements of the German law on energy services and other energy efficiency measures (EDL-G). The aim of the audit was to identify and determine new opportunities for energy saving. The proposed measures will allow the annual energy consumption at the two sites to be reduced by 63 000 kWh. This corresponds to a CO<sub>2</sub> reduction of 23.53 t a year. A considerable amount of savings have already been achieved by replacing standard lighting with efficient LED lighting.

As well as implementing optimisation measures and projects, all business locations of the Aebi Schmidt Group consistently opt for energy-efficient machines when replacing old ones and, wherever possible, reduce the amount of technical equipment to further lower the use of resources, energy consumption and CO2 emissions. At the plant in Kielce, Poland, all old forklifts are gradually being replaced by new highly efficient electric transportation equipment, as is also happening at the Dutch plant in Holten, where efficient new air compressors have been installed. Construction has been underway on a modern layout for the extended production facility at the plant in Chilton, US, since August 2020. This will optimise energy efficiency and waste management in accordance with the latest standards.

Various types of waste are produced in the Aebi Schmidt Group production plants: general waste and special waste. Where waste cannot be prevented, it is sorted according to the waste code applicable in the country in question or reintroduced to the production process as part of the 'circular economy'. All recyclable waste is sent to specialist disposal companies and the remaining waste is sent for thermal use. For instance, checks are carried out on a case-by-case basis to see whether

has been installed to cut down on the use handling production waste.

goods for production can be delivered on of coating materials and is expected to rereusable pallets. A waste management duce the amount of paint used in future. In system was introduced at the plant in the Dutch plant, the Aebi Schmidt Group Poland in 2020 and a new VOC reduction has also invested in a new push-pull syssystem was also put into service at the end tem in the welding shop that has led to an of the year. Emissions from the paint-spray improvement in working conditions and a cabin and the paint room are now routed reduced environmental footprint. In North via a catalytic bed, reducing the percent- America, the Fit 4 Tomorrow project has age of volatile organic compounds by more seen the introduction and partial implethan 90%. In the Netherlands, a powder mentation of efficient production layouts to robot with adjustable coating thickness reduce the manual work required when

### **ENVIRONMENTAL PERFORMANCE INDICATORS**

	2020	2019 1)	Delta
Energy consumption in MWh	42 894	53 243	-19%
Electricity	10 841	12 020	-10%
Of which from renewable sources	26%	24%	2%
Heat	23 352	29 734	-21%
Fuel oil	4 044	4 625	-13%
Natural gas	18 941	24 464	-23%
LPG/propane	90	72	25%
District heating	276	573	-52%
Fuels	8 702	11 490	-24%
Diesel	8 086	10 592	-24%
Petrol	320	517	-38%
LPG	296	381	-22%
Energy consumption in kWh per FTE	24 235	28 408	-15%
Total GHG Emissions in tCO₂e ²	12 252	14 854	-18%
Scope 1	7 296	9 318	-22%
Combustibles	4 984	6 267	-20%
Fuels	2 311	3 051	-24%
Scope 2	4 956	5 536	-10%
Electricity 3)	4 895	5 409	-10%
District heating	61	127	-52%
Total GHG emissions in kg CO₂e per FTE	6 922	7 925	-13%
Waste in metric tons	1 552	1 772	-12%
General waste	1 118	1 245	-10%
Incineration	120	118	1%
Residue landfill	116	226	-48%
Recycling	881	900	-2%
Special waste	434	527	-18%
Incineration	86	79	8%
Recycling	30	76	-61%
Other <sup>4)</sup>	319	372	-14%
Total waste in kg per FTE	877	946	-7%

Due to an improved data basis, some figures for 2019 slightly differ from the report published last year

## **ENERGY CONSUMPTION BY COUNTRY**

26000 24000 22000 20000 18000 16000 14000 12000 10000 8000 (64 Contant October Metalian, Challenge Matte Montant Median, Challenge Matter Montant Median, Challenge Matter Montant Median, Challenge Matter Matter Montant Median, Challenge Matter Montant Median, Challenge Matter Montant Median, Challenge Matter Matter Montant Median, Challenge Matter Montant Median, Challenge Matter Montant Matter Montant Median, Challenge Matter Montant M

<sup>2</sup> Calculations in accordance with the WRI/WBCSD Greenhouse Gas Protocol guidelines. Scope 1: GHG emissions from own sources, e.g. boilers and fuels Scope 2: GHG emissions stemming from the production of electricity and district heating. Sources for emission factors: Defra & IEA

Greenhouse gas emissions associated with the production of electricity were accounted for in accordance with the 'location-based approach' according to the Greenhouse Gas Protocol Scope 2 standard.

<sup>4</sup> Absorption and filter material, cleaning cloths, protective wear, scrap from ironworks, laser scrap

# **Information** on the **Sustainability** Report

Sustainability at the Aebi Schmidt Group is a Group-wide responsibility and is therefore not allocated to an independent department.

as part of the Annual Report.

been prepared in accordance with the GRI Standards: core option. The contents were

not subject to an external review. The report was subject to and successfully passed the GRI Materiality Disclosures Service (see GRI logo on page 49). The Annual Report includes all divisions and business locations of Aebi Schmidt Holding AG listed in the consolidated entities on pages 14-15 (GRI 102-45). The contact for any questions on the Annual Report 2020 is Thomas Schiess, Head Group Marketing, thomas.schiess@aebi-schmidt.com.

Two acquisitions were made in the financial year 2020: Arctic Machine Oy in Finland and Equipments Lourds Papineau in Canada. These two acquisitions have not yet been taken into account in the environmental and HR data for the reporting year 2020. Restatements of information given in the previous reports were not made (GRI 102-48).

The essential sustainability topics After publication of separate sustain- were determined in 2015 as part of an inability reports in 2015 and 2016, the Aebi ternal workshop which took various func-Schmidt Group has reported on its sustions of the Aebi Schmidt Group as well as tainability efforts since business year 2017 the points of view of the Group and the individual divisions into account. No ex-The last Sustainability Report was ternal stakeholders were directly involved published in April 2020. This report has in this process. The Executive Board reviewed the result (GRI 102-46).

#### Essential sustainability topics (GRI 102-47)

ECONOMIC	Economic performance
	Indirect economic impacts
	Anti-corruption
	Anti-competitive behaviour
ENVIRONMENTAL	Energy
	Emissions
	Effluents and waste
	Supplier environmental assessment
	Environmental compliance
	Energy-efficient products and services
SOCIAL	Employment
	Occupational health and safety
	Training and further education
	Diversity and equal opportunity
	Non-discrimination
	Customer health and safety
	Marketing and labelling
	Socioeconomic compliance

## **GRI Content Index**



#### **Universal Standards**

Reference	Title	Page number/information
GRI 101: 2016	FOUNDATION	
GRI 102: 2016	GENERAL DISCLOSURES	
Organisational	profile	
GRI 102-1	Name of the organisation	37
GRI 102-2	Activities, brands, products and services	9-11
GRI 102-3	Location of headquarters	37
GRI 102-4	Location of operations	53
GRI 102-5	Ownership and legal form	37
GRI 102-6	Markets served	2-3
GRI 102-7	Scale of the organisation	2-3
GRI 102-8	Information on employees and other workers	42
GRI 102-9	Supply chain	43
GRI 102-10	Significant changes to the organisation and its supply chain	48
GRI 102-11	Precautionary principle or approach	5
GRI 102-12	External initiatives	none
GRI 102-13	Membership of associations	44
Strategy		
GRI 102-14	Statement from senior decision maker	4-5
Ethics and inte	egrity	
GRI 102-16	Values, principles, standards, and norms of behavior	8, 45
Governance		
GRI 102-18	Governance structure	36
Stakeholder er	ngagement	
GRI 102-40	List of stakeholder groups	43
GRI 102-41	Collective bargaining agreements	41
GRI 102-42	Identifying and selecting stakeholders	43
GRI 102-43	Approach to stakeholder engagement	17, 44
GRI 102-44	Key topics and concerns raised	17, 44
Reporting prac	etice	
GRI 102-45	Entities included in the consolidated financial statements	48
GRI 102-46	Defining report content and topic boundaries	48
GRI 102-47	List of material topics	48
GRI 102-48	Restatements of information	48
GRI 102-49	Changes in reporting	none
GRI 102-50	Reporting period	01.0131.12.2020
GRI 102-51	Date of most recent report	48

For the Materiality Disclosures Service, the GRI Services team checked that the GRI content index is clearly presented and that the references for Disclosures 102-40 to 102-49 align with the appropriate sections of the report. The Materiality Disclosures Service used the German version of the report.

Reference	Title	Page number/information
GRI 102-52	Reporting cycle	48
GRI 102-53	Contact point for questions regarding the report	48
GRI 102-54	Claims of reporting in accordance with the GRI Standards	48
GRI 102-55	GRI content index	49

48

#### Topic-specific Standards

External assurance

GRI 102-56

Reference	Title	Omission	Page number/information
GRI 200: ECONOM	IC STANDARDS		
GRI 200: ECONOM	IC STANDARDS		
GRI 201: 2016 ECC	NOMIC PERFORMANCE		
GRI 103: 2016 103-1/103-2/103-3	Management approach		4-5
GRI 201-1	Direct economic value generated and distributed		Umschlag
GRI 203: 2016 IND	RECT ECONOMIC IMPACTS		
GRI 103: 2016 103-1/103-2/103-3	Management approach		44
GRI 203-1	Infrastructure investments and services supported		44
GRI 203-2	Significant indirect economic impacts		43
GRI 205: 2016 ANT	I-CORRUPTION		
GRI 103: 2016 103-1/103-2/103-3	Management approach		45
GRI 205-1	Operations assessed for risks related to corruption		45
GRI 205-2	Communication and training about anti-corruption policies and procedures		45
GRI 205-3	Confirmed incidents of corruption and actions taken		45
GRI 206: 2016 ANT	I-COMPETITIVE BEHAVIOUR		
GRI 103: 2016 103-1/103-2/103-3	Management approach		45
GRI 206-1	Legal actions for anti-competitive behaviour, anti-trust and monopoly practices		45
GRI 300: ENVIRON	MENTAL STANDARDS		
GRI 302: 2016 ENE	RGY		
GRI 103: 2016 103-1/103-2/103-3	Management approach		46
GRI 302-1	Energy consumption within the organization		47
GRI 302-4	Reduction of energy consumption		46-47

Reference	Title	Omission	Page number/information
ENERGY-EFFICIEN	T PRODUCTS AND SERVICES		
GRI 103: 2016 103-1/103-2/103-3	Management approach		17
GRI 302-5	Reductions in energy requirements of products and services		17
GRI 305: 2016 EMIS	SIONS		
GRI 103: 2016 103-1/103-2/103-3	Management approach		45-46
GRI 305-1	Direct (Scope 1) GHG emissions		47
GRI 305-2	Energy indirect (Scope 2) GHG emissions		47
GRI 305-5	Reduction of GHG emissions		47
GRI 306: 2016 EFFL	UENTS AND WASTE		
GRI 103: 2016 103-1/103-2/103-3	Management approach		46-47
GRI 306-2	Waste by type and disposal method		46-47
GRI 307: 2016 ENVI	RONMENTAL COMPLIANCE		
GRI 103: 2016 103-1/103-2/103-3	Management approach		46
GRI 307-1	Non-compliance with environmental laws and regulations		45
GRI 308: 2016 SUPI	PLIER ENVIRONMENTAL ASSESSMENT		
GRI 103: 2016 103-1/103-2/103-3	Management approach		43
GRI 308-1	New suppliers that were screened using environmental criteria		43
GRI 400: SOCIAL S	TANDARDS		
GRI 401: 2016 EMP	LOYMENT		
GRI 103: 2016 103-1/103-2/103-3	Management approach		40
GRI 401-1	New employee hires and employee turnover		40
GRI 403: 2016 OCC	UPATIONAL HEALTH AND SAFETY		
GRI 103: 2016 103-1/103-2/103-3	Management approach		41-42
GRI 403-1	Management system for occupational health and safety		41-42
GRI 403-2	Hazard identification, risk assessment and incident investigation		42
GRI 403-3	Occupational health services		42
GRI 403-4	Worker participation, consultation and communication on occupational health and safety		42
GRI 403-5	Worker training on occupational health and safety		42
GRI 403-6	Promotion of worker health		42
GRI 403-7	Prevention and mitigation of occupational health and safety effects directly linked by business relationships		42

 $52~{\rm Aebi~Schmidt~Holding~AG~/~Annual~Report~2020}$  — Sustainability / GRI Content Index

Reference	Title	Omission	Page number/information
GRI 403-9	Work-related injuries		42
GRI 403-10	Work-related ill health		42
GRI 404: 2016 TRAI	NING AND EDUCATION		
GRI 103: 2016 103-1/103-2/103-3	Management approach		42
GRI 404-2	Programmes for upgrading employee skills and transition assistance programmes		42
GRI 404-3	Percentage of employees receiving regular performance and career development reviews		42
GRI 405: 2016 DIVE	RSITY AND EQUAL OPPORTUNITY		
GRI 103: 2016 103-1/103-2/103-3	Management approach		40-41
GRI 405-1	Diversity of governance bodies and employees		41
GRI 406: 2016 NON	-DISCRIMINATION		
GRI 103: 2016 103-1/103-2/103-3	Management approach		40-41
GRI 406-1	Incidents of discrimination and corrective actions taken		41
GRI 416: 2016 CUS	TOMER HEALTH AND SAFETY		
GRI 103: 2016 103-1/103-2/103-3	Management approach		16
GRI 416-1	Assessment of the health and safety impacts of product and service categories		16
GRI 416-2	Incidents of non-compliance concerning the health and safety impacts of products and services		16
GRI 417: 2016 MAR	KETING AND LABELLING		
GRI 103: 2016 103-1/103-2/103-3	Management approach		16
GRI 417-1	Requirements for product and service information and labelling		16
GRI 419: 2016 SOC	IOECONOMIC COMPLIANCE		
GRI 103: 2016 103-1/103-2/103-3	Management approach		45
GRI 419-1	Non-compliance with laws and regulations in the social and economic area		45

### **Holding**

#### Switzerland

Aebi Schmidt Holding AG Schulstrasse 4 CH-8500 Frauenfeld

Tel +41 71 626 91 10

#### Business address:

Aebi Schmidt Holding AG Leutschenbachstrasse 52 CH-8050 Zürich Tel +41 44 308 58 00

#### www.aebi-schmidt.com

Our local subsidiaries are all accessible via the Group website.

#### **Plants**

#### Germany

#### Aebi Schmidt Deutschland GmbH Albtalstrasse 36

DF-79837 St. Blasien Tel +49 76 72 412 - 0 Fax +49 76 72 412 - 230

#### Netherlands

#### Aebi Schmidt Nederland by

Handelsweg 6-8 NL-7451 PJ Holten Tel +31 548 370 000

#### Poland

#### Aebi Schmidt Polska Sp. z o. o.

ul. Skrajna 80A PL-25-650 Kielce Tel +48 41 36 52 100 Fax +48 41 36 52 222

#### Switzerland

#### Aebi & Co. AG Maschinenfabrik

Buchmattstrasse 56 CH-3401 Burgdorf Tel +41 34 421 61 21 Fax +41 34 421 61 51

#### Finland

#### **Arctic Machine Oy**

Valmetintie 11 FI-40420 Jyväskylä Tel +358 20 7791 500 Fax +358 20 7791 501

#### USA

#### Meyer Products LLC

18513 Euclid Avenue Cleveland, OH 44112-1084 Tel +1 216 486-1313 Fax +1 216 486-1321 www.meyerproducts.com

#### Swenson Spreader LLC

127 Walnut Street Lindenwood, IL 61049 Tel +1 888 825 73 23 Fax +1 866 310 03 00 www.swensonproducts.com

#### M-B Companies, Inc.

P.O. Box 200 1615 Wisconsin Avenue New Holstein, WI 53061 Tel +1 800 558 5800 www.m-bco.com

#### Équipements Lourds Papineau Inc.

1186 route 321 Nord (C.P. 5040) St-André-Avellin (QC), J0V 1W0 Canada Tel +1 819 983-5000

Fax +1 819 983-5555 www.elp.ca

### **Logistics Centre** (spare parts)

#### Aebi Schmidt Deutschland GmbH

Karlsruher Strasse 14 DF-30880 Laatzen Tel +49 511 353 48 571 Fax +49 511 353 48 381

#### Sales & Service

#### Germany

#### Aebi Schmidt Deutschland GmbH

Albtalstrasse 36 DE-79837 St. Blasien Tel +49 76 72 412 - 0 Fax +49 76 72 412 - 230

#### Aebi Schmidt Italia s.r.l.

Via dei Pinali 11

Frazione Cimpello

IT-33080 Fiume Veneto (Pordenone) Tel +39 0434 951 711

Fax +39 0434 959 066

#### Netherlands

#### Aebi Schmidt Nederland by Handelsweg 8

NL-7451 PJ Holten Tel +31 548 370 000

#### Relaium

#### Aebi Schmidt Belgium

Middelmolenlaan 175 2100 Antwerpen Tel +32 345 091 40

#### Norway

#### Aebi Schmidt Norge AS

Paradisvegen 2 NO-2836 Biri Tel +47 61 10 84 40 Fax +47 61 10 84 41

#### Austria

#### Aebi Schmidt Austria GmbH

Schiessstand 4 AT-6401 Inzing/Tirol Tel +43 5238 53 590 20 Fax +43 5238 53 590 50

#### Poland

#### Aebi Schmidt Polska Sp. z o. o.

ul. Skrajna 80A PL-25-650 Kielce Tel +48 41 36 52 149 Fax +48 41 36 52 121

#### Switzerland Aebi & Co. AG Maschinenfabrik

Buchmattstrasse 56 CH-3401 Burgdorf Tel +41 34 421 61 21 Fax +41 34 421 61 51

#### Aebi Schmidt Sweden AB Borgmästergatan 24

SE-596 34 Skänninge Tel +46 142 29 90 00

#### **Arctic Machine Oy**

Valmetintie 11 FI-40420 Jyväskylä Tel +358 20 7791 500 Fax +358 20 7791 501

#### **Arctic Machine Oy**

Karsikonmäentie 1 FI-77800 lisvesi Tel +358 20 7791 500 Fax +358 20 7791 501

#### Infotripla Oy

Aleksis Kiven katu 10 E FI-33210 Tampere Tel +358 3 223 8311 www.infotripla.fi

#### Spain

#### Aebi Schmidt Iberica S.A.

C/ de la Perdiz, Parcelas 18 y 19 ES-45950 Casarrubios del Monte Tel +34 9 02 02 02 42

#### **United Kingdom**

#### Aebi Schmidt UK Limited

Southgate Way, Orton Southgate Peterborough, PE2 6GP Tel +44 1733 363 300

#### Russia

#### 000 ASH Rus

125362 Moscow Vishnevaya str. Building 9/1 Tel +7 495 648 7354

#### Arctic Machines - R Ltd.

107061 Moscow 16 9th Rota St., bldg, 3 Tel +7 495 414 12 13

#### Arctic Machines - R Ltd.

196158 St. Petersburg Moskovskoe shosse 23, bldg. 2 Tel +7 812 640 90 29

#### ASH Trading & Services Co., Ltd.

Chaowai Soho, Building A, Room 5007 6 Chaowai Dajie, Chaoyang District, Beijing 100020 P. R. of China Tel +86 10 5869 6449 www.aebi-schmidt-cn.com

#### Meyer Products LLC

18513 Euclid Avenue Cleveland, OH 44112-1084 Tel +1 216 486 1313 Fax +1 216 486-1321 www.meyerproducts.com

#### **Swenson Spreader LLC**

127 Walnut Street Lindenwood, IL 61049 Tel +1 888 825 73 23 Fax +1 866 310 03 00 www.swensonproducts.com

#### M-B Companies, Inc.

P.O. Box 200 1615 Wisconsin Avenue New Holstein, WI 53061 Tel +1 800 558 5800 www.m-bco.com

#### Aebi Schmidt Canada Inc. 2800-630 boul. René-Lévesque O

Montréal (Québec) H3B1S6 Canada Tel +1 581 988 2779

#### Équipements Lourds Papineau Inc. 1186 route 321 Nord (C.P. 5040)

St-André-Avellin (QC), J0V 1W0 Canada Tel +1 819 983-5000 Fax +1 819 983-5555 www.elp.ca

#### International

#### **Aebi Schmidt International AG**

Leutschenbachstrasse 52 CH-8050 Zürich Tel +41 44 308 58 00 Fax +41 44 308 58 99

The original German version of this Annual Report shall be legally binding.

#### Imprint

Publisher: Aebi Schmidt Holding AG, Schulstrasse 4, CH-8500 Frauenfeld, www.aebi-schmidt.com Consulting Sustainability Report: Sustainserv GmbH, Zurich (CH), Munich (DE), Boston and Nashville (USA)

Concept and design: Evelyn Bernhard, graphic design + communication, Zurich (CH)
Photographer of the Board Members: Jos Schmid, Zurich (CH)
Print: siggset print & media AG, Albbruck (D)

This Annual Report was printed in a climate-neutral process.

#### Copyright © Aebi Schmidt Holding AG, 2021

All rights reserved. All texts, pictures, graphic design, including arrangements thereof are subject to the laws of copyright and other laws concerning the protection of intellectual property rights. The contents may not be copied, distributed, altered or made available to third parties for commercial purposes. Some pages of the Aebi Schmidt Holding AG Annual Report 2020 contain pictures which are subject to the copyright of those people who provided them.

Status 04/2021

