



Schmalz ecoSYSTEM

Sustainability Report 2019

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The managing directors of J. Schmalz GmbH (from left): Dr. Kurt Schmalz, Andreas Beutel

Sustainability – Our Tradition Is Our Future

Here in the Black Forest, we've embodied sustainability long before the term was in fashion. Efficient and sustainable management has been one of our company's guiding principles ever since our founding in 1910 in Glatten, Germany. Sustainability has a long tradition at Schmalz – a tradition that, in the face of global changes, has developed into a major factor to our success.

The issues we are dealing with today are different from the issues from 100 years ago. Our principles for sustainable action must therefore be continually adapted and redefined in the face of current questions and challenges: How can we utilize the opportunities provided by digitalisation? How do we counteract the shortage of skilled workers? How do we meet the growing demands of the international markets?

Our challenge is to find answers to these questions, as well as to increasing customer requirements and intensifying global competition. Our company's long-term strategic

orientation is critical to meeting this challenge. When it comes to resource efficiency, for example, it is not just a question of making our production as environmentally friendly as possible. Rather, it is a matter of designing efficient material strategies so that we can offer high-quality products that produce real benefits at fair prices. It is a matter of defining strategies that are consistent with the latest production methods, such as 3D printing.

For more than 100 years, sustainability has been the compass by which we have navigated economic, ecological and social issues. And we will continue to chart this course into the future.

As you will see on the following pages, sustainability is not an end in itself: Sustainable business creates added value for our customers and partners, for our employees, for society and for the environment. It's a goal that we are proud to live up to.

Dr. Kurt Schmalz

Andreas Beutel

Sustainability in All Areas

A Portrait of Responsibility

Sustainability is a dynamic topic that is influenced by many factors: Schmalz's actions are as much determined by national and international climate protection targets as they are by the United Nation's Sustainable Development Goals or the cooperation with other companies. Schmalz's sustainability activities are therefore constantly influenced by a range of different factors. A few examples:

Global Reporting Initiative

Schmalz's sustainability reporting is based on the requirements of the Global Reporting Initiative. The key figures presented in this report refer to J. Schmalz GmbH in Glatten.

Membership in Key Networks

Schmalz is a member of the "Companies for Climate Protection," a group initiated by the Federal Environment Ministry, the Federal Ministry of Economics and the German Chambers of Industry and Commerce.

Schmalz is a member of the **Business Initiative for Sustainability (WIN)** of the state of Baden-Württemberg. Schmalz was one of the first companies to sign the **WIN Charter**, a voluntary commitment to adhere to twelve guiding principles for sustainable management.

Standards and Specifications

With certified standards, Schmalz guarantees its partners work processes that are sustainable in terms of both quality and the environment.

- **Quality management** according to DIN ISO 9001, certified since 1994
- **Environmental management** according to DIN ISO 14001, certified since 1997
- **Energy management** according to DIN ISO 50001, certified since 2012
- Schmalz India: **quality management** according to ISO 9001, certified since 2018
- Schmalz USA: **quality management** according to ISO 9001, certified since 2018

Goals for Climate Protection and Sustainability

Schmalz acts in accordance with national and international climate protection goals and the Sustainable Development Goals of the United Nations. For example, Schmalz sees the Paris Agreement (to limit global warming to less than two degrees) as both an incentive and an obligation to make a difference – by using materials and energy in a way that conserves resources as well as through targeted campaigns that raise awareness of sustainable action among employees and the public.



Coordinated and Effective Action

The Schmalz ecoSYSTEM

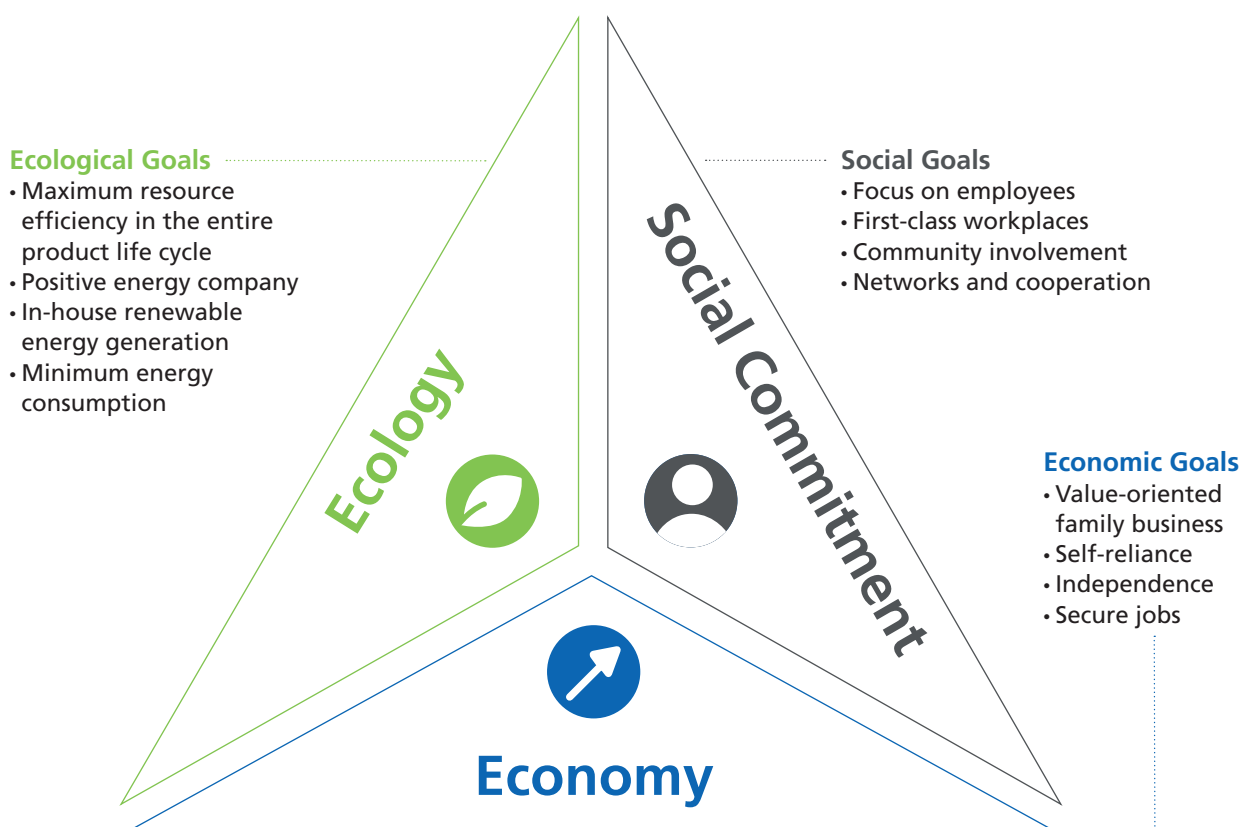
Sustainability has many dimensions. Long-term stability can only be achieved if economic success, ecological responsibility and social commitment function as a whole. The various aspects of this ecosystem are interdependent and require a sensitive touch to keep them in balance.

That's why Schmalz bundles all sustainability activities into the Schmalz ecoSYSTEM, an interface that ensures efficient solutions, responsibility to future generations, and fair play toward customers, employees, suppliers and society.

Sustainability Goals from the Schmalz ecoSYSTEM

To avoid getting lost in arbitrary and ineffective sustainability measures, you need clear goals. Schmalz has therefore formulated goals for its three cornerstones of sustainability: economy, ecology and social commitment.

A wide variety of measures are implemented to achieve these goals. Because sustainability doesn't mean doing everything under the sun; it means doing what is feasible and doing it with conviction – like Schmalz.





Efficient management, even with its own strengths: Schmalz utilizes innovations that make working life easier and more efficient.

Economy

The word is derived from the ancient Greek terms for *“household”* and *“manage”* and describes the activities of the *“oikonomos,”* a *“good housekeeper”*.

To be commercially successful in the long term, one needs strong economic skills. At Schmalz, our success depends on having a solid financial basis and the courage to consistently focus on innovation.

Vacuum Offers Limitless Possibilities

Whether vacuum suction cups, tube lifters or crane systems, our family-owned company is the market leader in vacuum automation and ergonomic handling systems, with around 1,500 employees worldwide.

Schmalz products are used wherever individual parts need to be held or moved within a production process. The possible applications for vacuum technology are as diverse as the production landscape itself. They range from medium-sized sawmills to large automotive corporations to international smartphone manufacturers.

With vacuum technology, large goods such as heavy wooden boards, car body parts, cardboard boxes or even wind turbine rotor blades can be moved from A to B just as easily as small goods like cookies or chocolates.

On the Move in Dynamic Markets – With Innovative Products

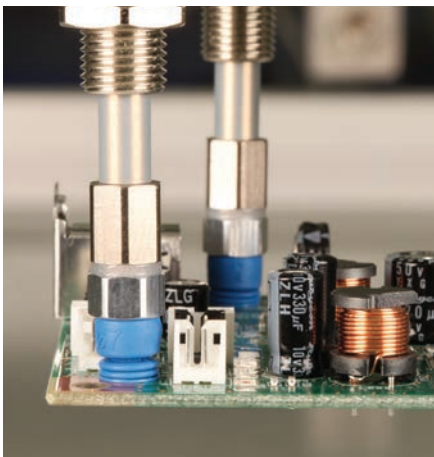
Schmalz's portfolio is correspondingly diversified, containing both vacuum automation products and lifting devices. By providing highly specialized solutions for various industries, including sectors with high growth potential, Schmalz manages to operate independently of economic fluctuations. The company is also taking advantage of the high growth in individual segments to expand its position with innovative products and new business units.



Vacuum suction cup for chocolates



Vacuum tube lifter for heavy wooden boards



Handling of tiny printed-circuit boards



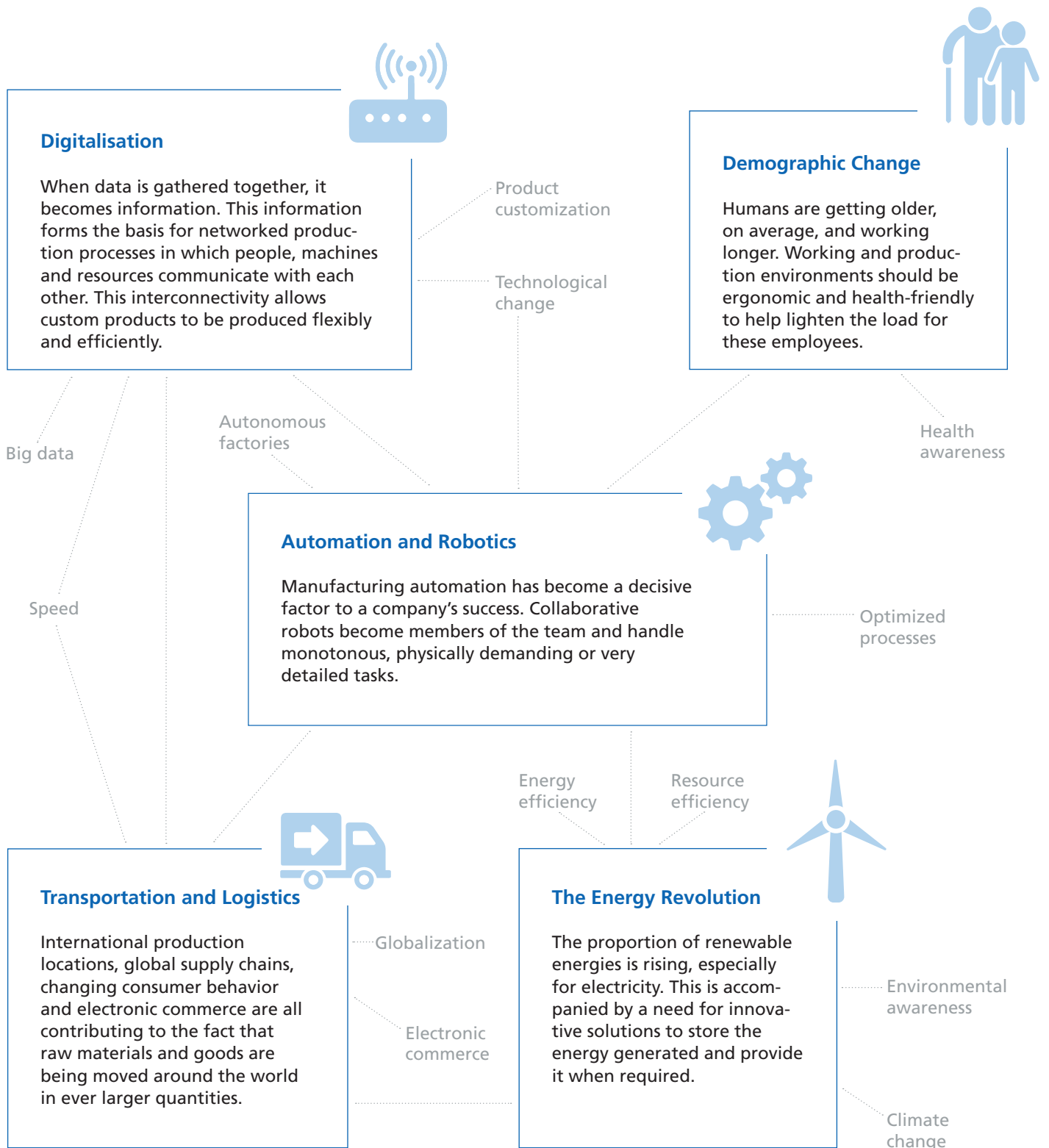
Manual handling of cardboard boxes



Vacuum layer gripper for jars

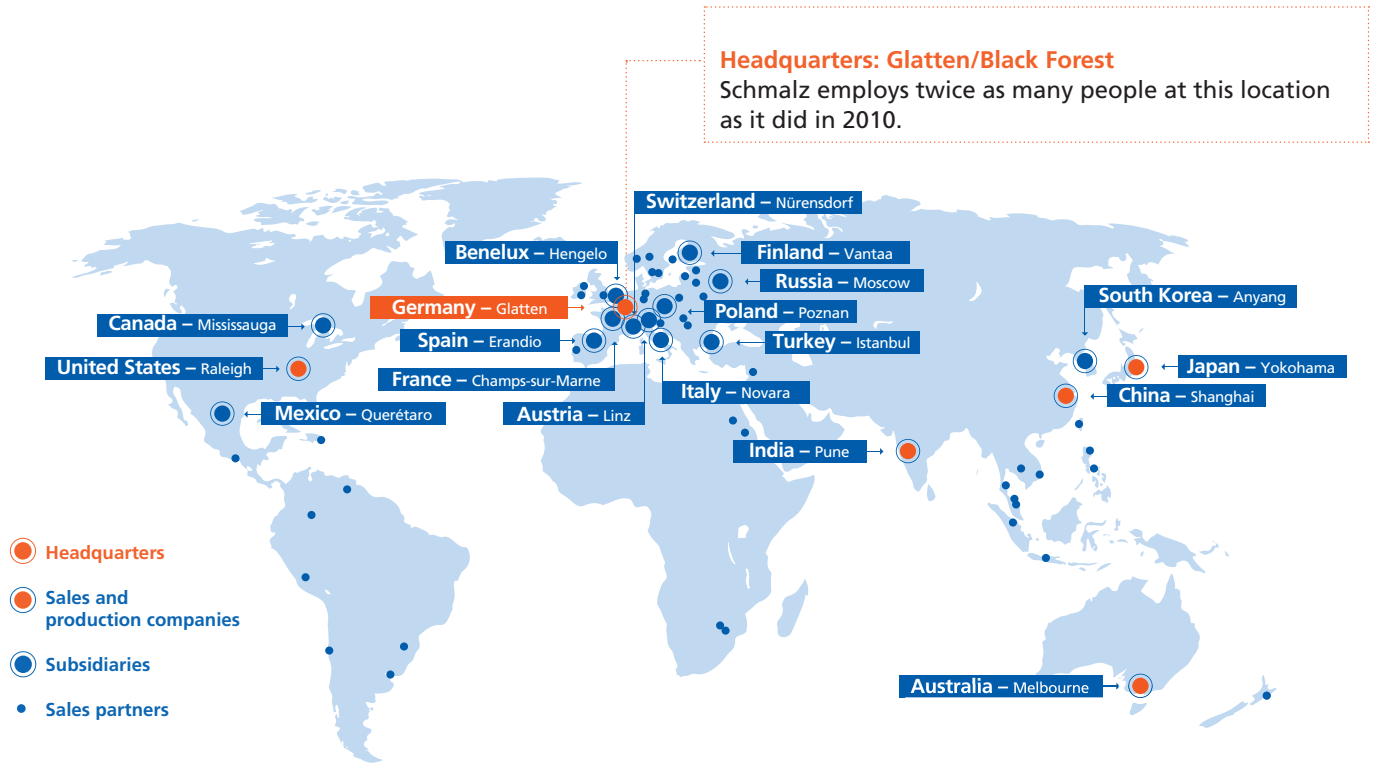
The Future Is Within Reach

The world is changing. Megatrends such as digitalisation and the energy revolution are causing major changes in our professional and private lives. At Schmalz, we've long been at the forefront of these trends with our innovative solutions.



A Growing Family Business

Schmalz employs around 1,500 people worldwide, with an increasing tendency.



Since entering the vacuum technology market in 1984, our family company has known only one direction: up. **The youngest member of the international Schmalz Group is Schmalz Austria with headquarters in Linz.** Our rate of trainees is 13 percent in Germany – significantly higher than in comparable companies in Germany.



A Seventh Sense for New Products

If you want to be innovative, you have to be open to new ideas.

From razor blades to transport devices to vacuum technology, Schmalz has repeatedly succeeded in recognizing new trends, identifying relevant requirements and continuously expanding its product range.

It's no wonder, then, that Schmalz is also playing a leading role in Industry 4.0, automation and robotics – with products such as the lightweight gripping system SLG or the vision & handling sets 3D-R for collaborative robotics.

9 % of sales flow into new ideas and products.

More than 100 employees work in research and development.

580 industrial property rights demonstrate Schmalz's talent for innovation.

Stacks for Energy Storage Devices

Schmalz transforms trends into innovations.

A successful switch to renewable energies will crucially depend on solutions that can store electricity and heat. Schmalz is taking advantage of this demand to establish a new business unit.

At its headquarters in Glatten, our company is developing and producing **redox-flow stacks** for storing energy in stationary large battery systems. These converter units allow electrical energy, for example from wind turbines, to be stored in special tanks in scalable amounts and released as required. The number and size of the stacks and tanks determine the performance of the system. Because of their modular design, different

sizes can be combined to produce storage capacities according to demand.

The stacks also form the heart of a demo system in Glatten: Schmalz uses this system to test the scalable energy storage of redox-flow battery systems and to demonstrate the benefits of such systems to interested customers – giving them a glimpse into the future of “Made in Germany.”

Schmalz has all the knowledge and skills necessary to succeed, with its expertise in modern manufacturing methods, plastics and process engineering as well as the handling of sensitive components. What’s more,

the vacuum technology experts even produce their own energy from renewable sources.



The redox-flow large-battery storage facility at the Fraunhofer ICT in Pfinztal: the pilot system is equipped with Schmalz stacks.

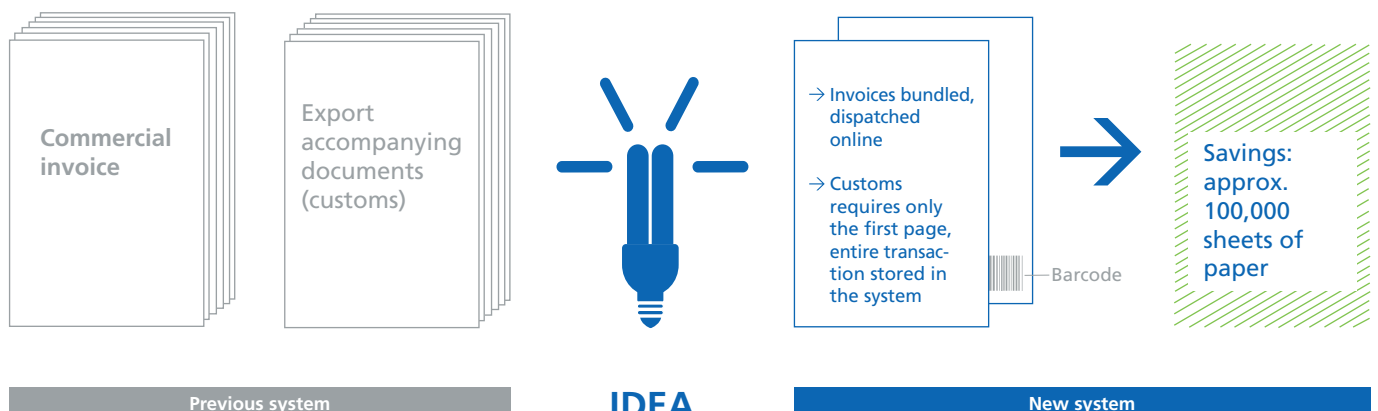
Making Good Even Better

Efficient processes increase value creation.

The more global a company is, the more complex its processes become. To make operational processes as efficient as possible in all areas of value creation, employees can submit suggestions for improvement, both for the company as a whole and within their own team.

Approximately
7,000 *suggestions*
 were submitted by employees in 2019.

Example: how an employee’s idea significantly reduced paper consumption for customs documents.





Digitalisation in Vacuum Automation

Schmalz gets its customers ready for networked production, helping them to control their devices and systems and retrieve relevant data on a mobile device.

Schmalz 4.0

Schmalz develops and manufactures efficient and intelligent automation solutions for the digitally networked factory.

Smart glasses, smart watches, smart homes – the digital transformation is already underway in our everyday lives. While at home an app might control both your coffee machine and your lights, manufacturing companies are transforming themselves into smart factories. Automation, robotics and artificial intelligence are the buzzwords of this trend, which no company can ignore. At the same time, many forget that there is more behind the term digitalisation than the development and use of smart objects. Digital transformation is changing the way we work and communicate, how we think and learn, how we produce, cooperate, consume and transport.

A company like Schmalz, which is active in the field of vacuum automation and whose customers include manufacturers of automobiles, smartphones and wind turbines, must adapt to the high dynamics of these markets. But it's even better to be one step ahead. That means no more long development phases, but rather extremely short innovation cycles. Not standard products off the rack, but rather custom solutions tailored to customer requirements. It is not enough to make small adjustments in our operational processes. With a transformation of this magnitude, all processes must be rethought from a digital perspective – from brainstorming to production and sales.

New Products and Business Models

Schmalz has already taken several key steps in this regard: Agile project teams work on customer-specific solutions across disciplines and countries. We use digital tools and learning platforms and modern creativity techniques to support our design and development processes.

“We use only the materials that the customer actually ordered.”

Andreas Beutel, Managing Director

In addition, Schmalz has acquired the startup company GPS Gesellschaft für Produktionssysteme and has joined the Siemens MindSphere – an association of users that work together on cloud-based services and IoT.

Such measures drive the digitalization process within the company further, creating innovative solutions for customers. Not only are products becoming smarter and smarter, Schmalz is also offering more and more digitally networked functions

for research and ordering. For example, customers can individually configure the Schmalz lightweight gripper SLG via the website. Using the online configurator, they can create their gripper with just a few clicks – flexibly adapted to the workpiece. Selection and changes of the components are immediately displayed in a 3D preview. Thanks to additive manufacturing, the grippers are particularly light, robust, printed quickly and delivered even faster.

Short Data Paths – From Configuration Directly to Production

Schmalz also relies on digitalization in the production of large-area grippers: Each vacuum gripper ordered by our customer receives a digital code. This product code contains all information relevant for production. It is carried out in a one-piece flow process. Only the material that has been ordered is used. For example, one machine cuts the right foam mat for each gripper. The aluminum profiles are also milled individually. The resource-saving process in figures: 2,600 kilograms less foam and 200 kilograms less aluminum profiles per year – that saves more than 17,000 kg of CO₂. Production and delivery times are also shortened.



The new walkway with photovoltaic collectors connects the production and office buildings to the communications center, reduces travel times, and even produces energy.

Ecology

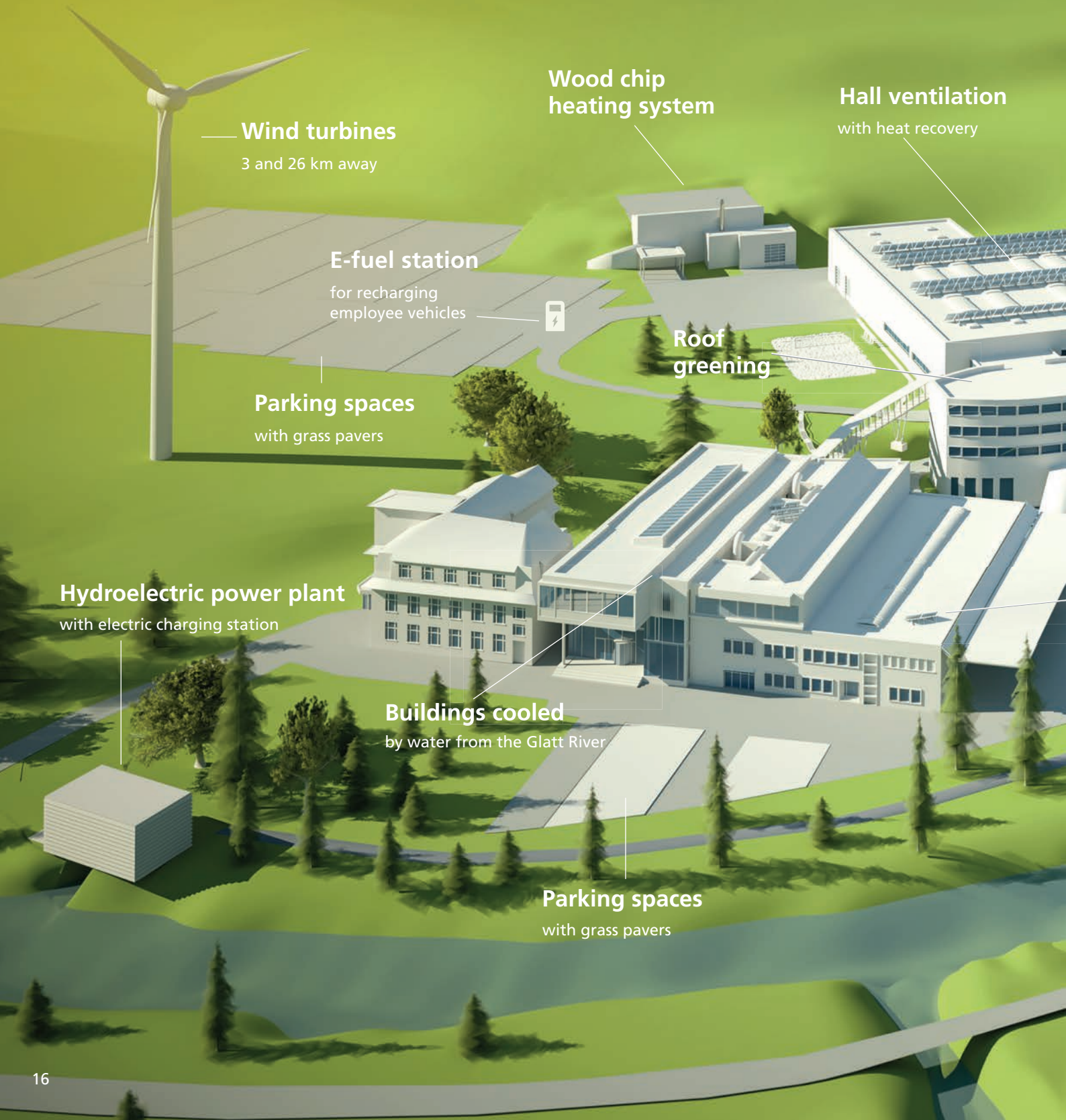
The term ecology describes the science of *“interactions between living beings and their environment.”* It posits an ideal of peaceful coexistence in our *“shared natural economy.”*

Schmalz works toward this goal with consistency and conviction.

That means: Generating more electricity and heat than we consume ourselves. Being efficient with materials and other valuable resources. Reducing CO₂ emissions. Being respectful in the broadest sense of the word.

We Are Our Own Power Plant

At its headquarters in Glatten, Schmalz is carrying out its own energy revolution. The goal: to consume no more electricity and heat than the company produces from renewable sources.



Wind turbines

3 and 26 km away

Wood chip heating system

Hall ventilation

with heat recovery

E-fuel station

for recharging employee vehicles



Roof greening

Parking spaces

with grass pavers

Hydroelectric power plant

with electric charging station

Buildings cooled

by water from the Glatt River

Parking spaces

with grass pavers



Cisterns

Photovoltaic systems
on numerous roofs

North-facing shed roofs
to reduce thermal load

Automatic small parts warehouse
with recovery of braking energy

Geothermal system
for heating of Schmalz buildings

Rainwater retention basin

Geothermal cooling

IT server room
with sprinkler cooling

Solar plant

Battery demonstrator

Ecological trail loop

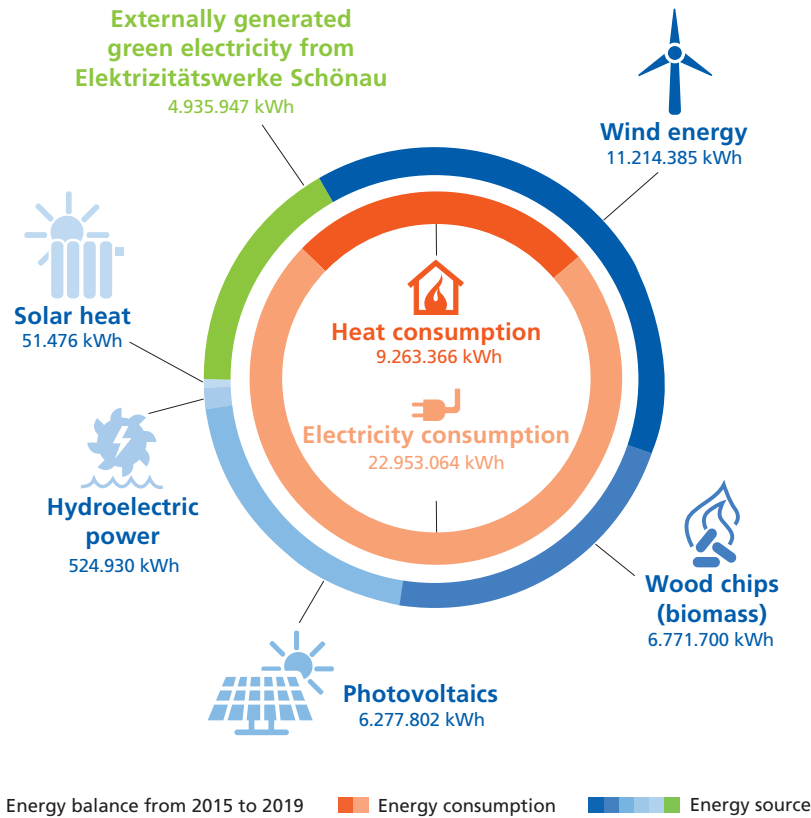
Biotope facility

5,542,784 kWh

were generated by Schmalz in 2019 from renewable sources.

Full Steam Ahead for a Positive Energy Balance

Schmalz covers a large portion of its energy requirements from its own renewable sources.

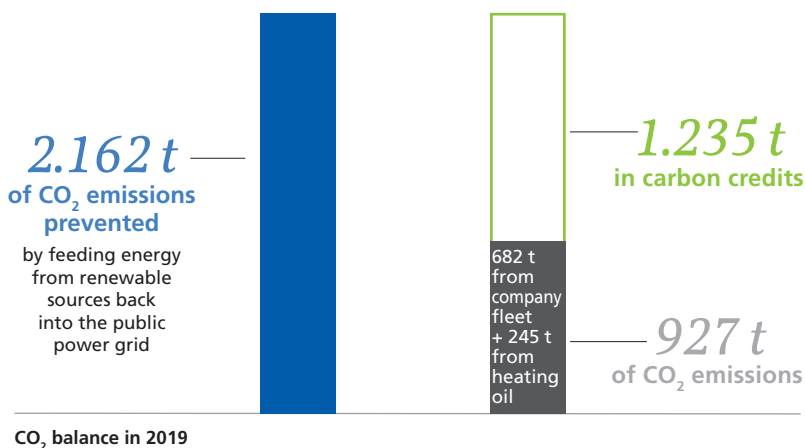


Schmalz's goal is to be a positive energy company. In the period from 2015 to 2019, the company produced 77 percent of the energy it consumed from its own sources. It did so with power plants such as wind turbines and photovoltaic collectors, which are expanded permanently.

Renewable energy production is one way to balance our energy budget. Another is to reduce our energy consumption over the long term. A third is choosing the right energy providers, because as long as storage technologies are still developing, external energy sources will always be needed to cover spikes in demand. That's why Schmalz works with the Elektrizitätswerke Schönau utility company, which has received many awards as a provider of green energy.

Schmalz is in the Green

In 2019, the company earned 1,235 tons in carbon credits.

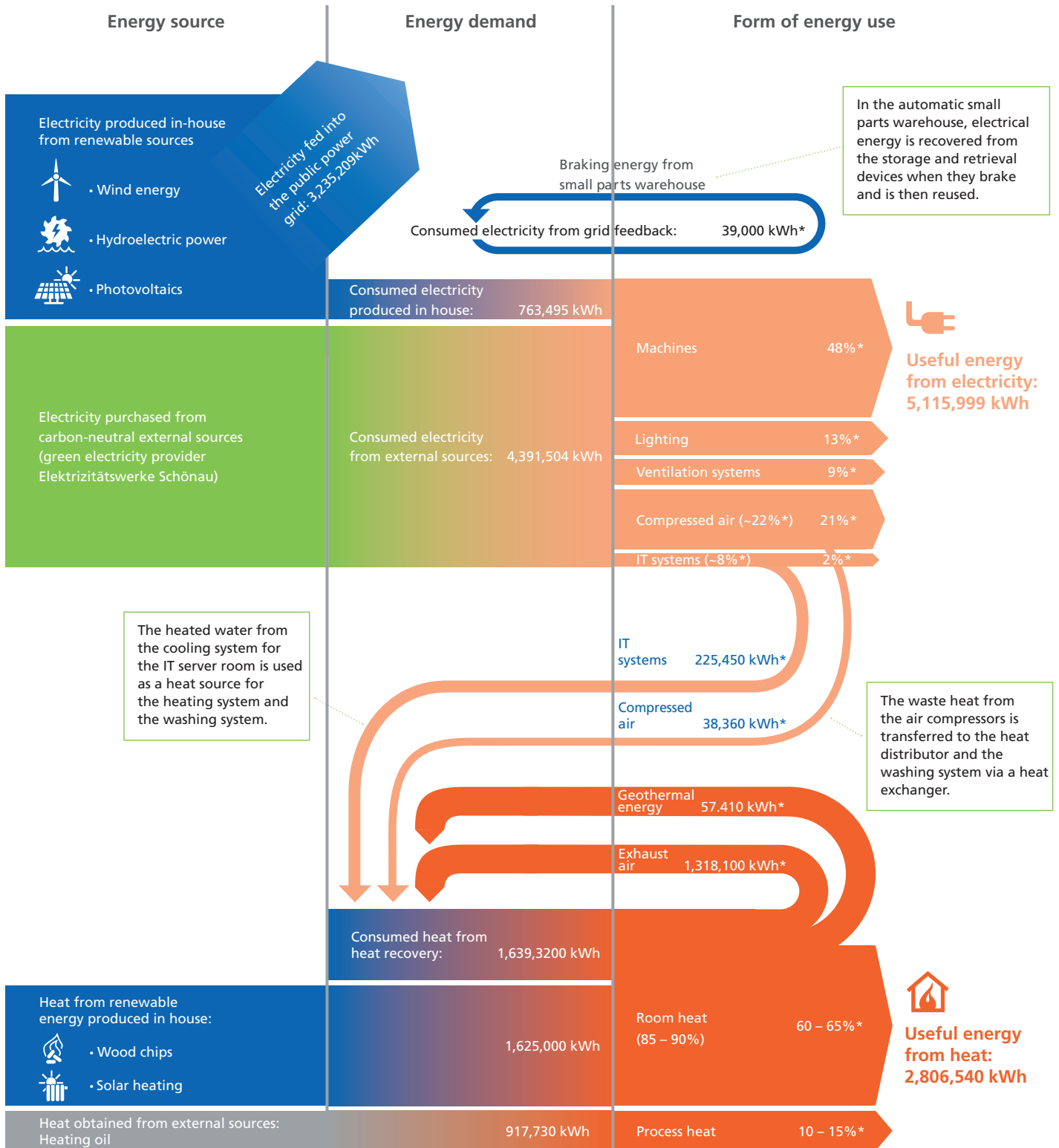


The energy that the company does not use itself is fed back into the public power grid. This allows Schmalz to avoid CO₂ emissions that would otherwise result from conventional power generation.

The result: a big plus for the environment and a perfect example for the manufacturing industry.

Everything in Flow

The three components of a flexible energy system: in-house energy sources, carbon-neutral electricity providers and a range of energy recovery measures.



Less CO₂ Baggage

Schmalz products have a significantly lower product carbon footprint than comparable products on the market.

The “CO₂ baggage” of a Schmalz product is significantly less than that of comparable products on the market. Schmalz achieves carbon-neutral production by using its own renewable energy sources and through numerous

energy-saving measures. The company also designs its upstream and downstream processes to be as resource-efficient as possible – from development all the way to recycling.

A Resource-Efficient Product Life Cycle



Design-related factors have the largest impact on a product’s carbon footprint. Schmalz reduces energy-intensive materials and manufacturing processes as early as the development phase.

Example:

The new area gripper FXCB is now **30 percent lighter** – which saves both material and energy.



Area gripper FXCB for cobots

According to the German Environment Agency, absolute carbon dioxide emissions from land transport are now 20 percent higher than in 1995. Schmalz seeks out short transport distances to keep CO₂ emissions as low as possible.

Example:

Nearly 80 percent of its suppliers come from Germany, of which **50 percent come from Schmalz’s federal state.**

Around
50
percent
of our German suppliers come from Baden-Württemberg.

The product carbon footprint captures all greenhouse gas emissions that occur in the life cycle of a product. Because Schmalz’s production processes are carbon neutral, our ecological footprint does not increase during the manufacturing process.

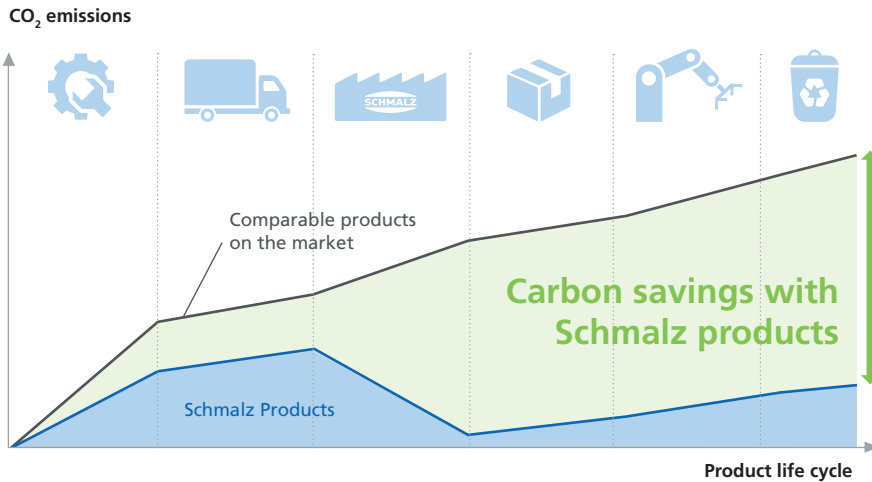
Example:

The **CO₂ balance** of all goods produced by Schmalz is significantly reduced in the manufacturing process.



A view into the production hall

Development of CO₂ Emissions during the Product Life Cycle



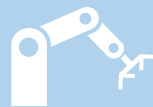
Principles for carbon accounting

Schmalz's carbon accounting is based on the greenhouse gas (GHG) protocol of the World Resource Institute and the standards of the World Economic Council for Sustainable Development.

- The following influencing factors are currently taken into account:
- Scope 1: All direct GHG emissions
 - Scope 2: Indirect GHG emissions from consumption of purchased electricity, heat or steam



Sales



Use



Recycling

Global production chains and flows of goods pose major ecological challenges. Because Schmalz is represented in 20 locations worldwide, it depends on a sustainable distribution system.

Example:

Schmalz bundles deliveries to its subsidiaries abroad and uses **carbon-optimized shipping methods**.

A large portion of greenhouse gas emissions result from the customer's use of the product. That's why Schmalz develops products that reduce energy consumption on the customer's end as well.

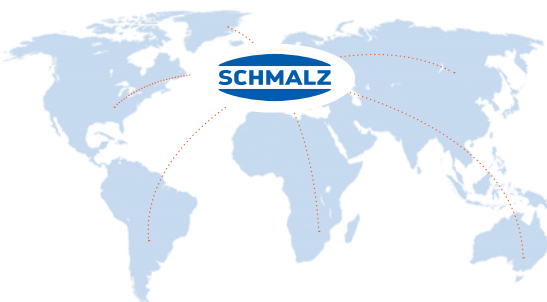
Example:

Despite its higher suction rate, the basic ejector SBPL requires **eleven percent less compressed air** than its predecessor.

The best waste is waste that is never produced in the first place. Starting in the development stage, Schmalz makes sure that wearing parts can be replaced and that different materials can be easily separated and recycled.

Example:

Wearing parts **can be replaced** without having to replace the entire suction cup.



Basic ejector SBPL



Suction cup consisting of four single components



11,500 ^{m²}
of new floor space

The state-of-the-art Value Stream Factory arranges production, technology and logistics processes such that the throughput time from order receipt to customer delivery is reduced to an absolute minimum.

Construction managers Daniel Rapp (right) and Thilo Baur in the shell of the new Value Stream Factory.

The Factory of the Future

Efficient production processes based on value streams, ergonomic workstations and networked machines and systems – all combined in a sustainable building infrastructure. Schmalz is building a prototype for a state-of-the-art factory at its headquarters in Glatten.

It is one of the largest construction projects in the history of Schmalz: With the new Value Stream Factory, the vacuum specialist will double its production and logistics space and create 200 additional jobs. The new factory will feature ultra-modern machine technology and sophisticated architecture. But if you think it's just a prestige property, think again. Because the industries in which Schmalz does business are growing rapidly, the company is laying the foundation to be able to produce faster, more flexibly and on a make-to-order basis in the future.

Aligning Production toward Value Streams

Aside from the additional space and the energy-saving measures, the focus of the new factory is on production processes. Schmalz is completely reorganizing production, assembly and logistics so that they are no longer aligned by business units but rather according to functional added-value processes. Products with similar or even identical production steps are manufactured on the same line. For example: The Value Stream Factory has only a single station for metalworking. All metal parts that have to be turned or milled pass through this station, whether they are components for lifting devices or vacuum grippers.

The part travels from production directly and without delay into assembly and shipping. And there is an express lane for rush orders and small

batch series, like in a supermarket. The result of this marvel of organization and design? Significantly shorter lead times from order to delivery.

There is yet another benefit of combining identical work steps: Expertise is not distributed across different business units but rather concentrated in a single place, allowing knowledge to accumulate where it is needed.

Showing Off

The new Schmalz Value Stream

Factory focuses on innovative industry 4.0 measures, for example networked value creation from the supplier through production to the customer, even with its own crane systems and vacuum lifters. It is our main production site and a show room in one. With three floors and a glass façade that shows the factory's inner workings, Schmalz is demonstrating in impressive fashion how growth will look in the future.



MODERN AND ENERGY-EFFICIENT BUILDING TECHNOLOGY:

- Efficient primary energy standard – 50% better than EnEV
- Air-conditioned work areas
- Production processes and server rooms cooled with evaporative cooling in ventilation systems and a resource-saving geothermal system with downhole heat exchangers
- Underfloor heating with heat from the downhole heat exchangers and the central wood chip heating system
- LED technology with daylight sensors
- North-facing shed roofs for natural light
- Photovoltaic systems on the entire hall roof to generate renewable energy



The Schmalz Kinderwelt daycare center helps employees balance family and career.

Social Commitment

The word “*social*” refers to how people work together and coexist in a society. Social harmony requires individuals, organizations and companies to actively contribute to and invest in their community.

Specifically, that means: Giving our employees the freedom and support they need in all areas of their life. Supporting opportunities and education for young people. And looking out for those less fortunate than ourselves.

That’s Schmalz’s view, and it’s the foundation of our social commitment.

A Motivated Team Can Do Anything

The equation is simple: The more satisfied your employees, the better and more productive they are. The company and the employees benefit in equal measure. This explains why Schmalz does so much for the wellbeing of its employees, both during and outside of work.



Schmalz supports its employees in all areas of their professional and private lives. A wide range of employer benefits are offered as part of the "LIFE+" program. Profit sharing, a gym, an extensive range of hobbies and leisure activities, local recreation on the company premises and good career opportunities are just a few of the benefits that Schmalz offers in the following five areas of life. And the company further expanded its range of benefits in 2019.



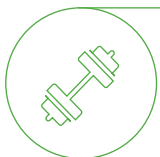
Finances & Security

As a family business, Schmalz offers long-term secure jobs, fair wages and attractive additional benefits.



Future Prospects & Education

As a future-oriented company, we want our employees to be able to move forward. We offer optimal perspectives – in return we expect motivation and willingness to perform.



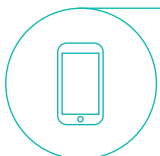
Health & Well-being

The well-being of the employees is important to Schmalz. That is why we offer state-of-the-art workplaces and free offers for healthy nutrition, exercise and relaxation.



Family & Leisure Time

We offer models for the individual design of working hours and location, an own infant care and for example an annual children's holiday program.



Mobility & Digital Life

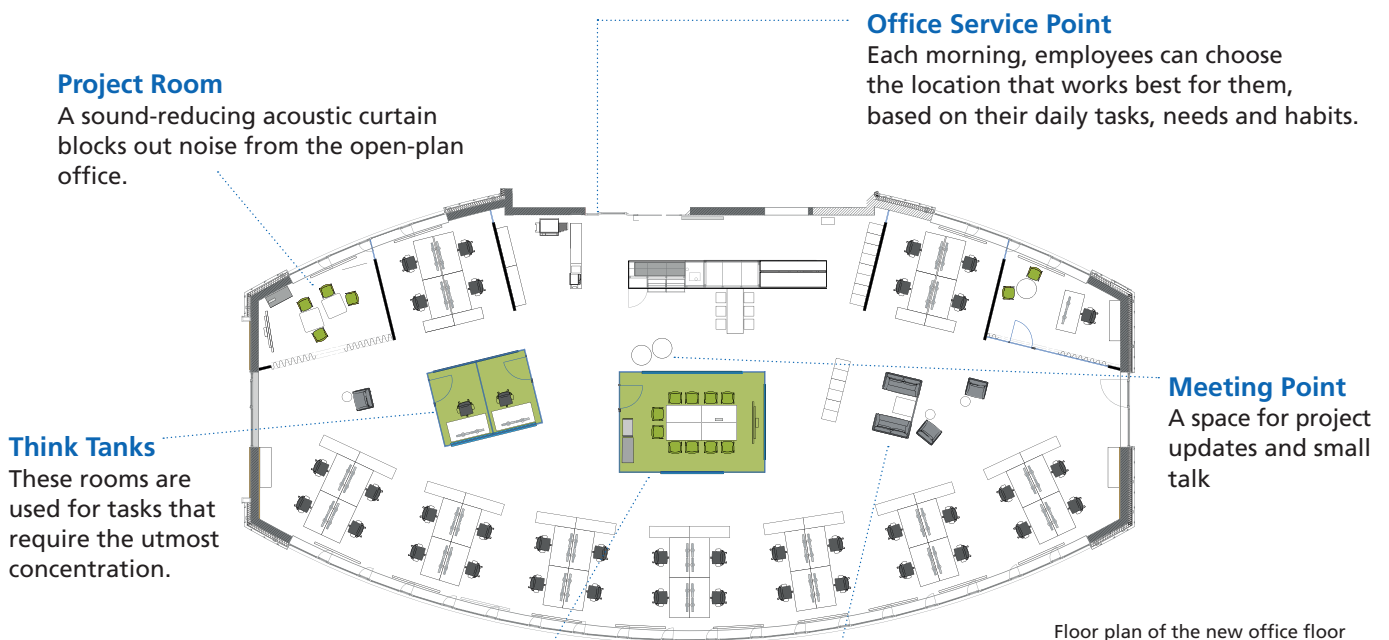
We create the conditions for employees to work as flexible as possible – whether they are in the office, at home or work mobile from elsewhere.

> You can find more details and an informational video at www.schmalz.com/lifeplus



Flexible Work in New Office Environments

Imagine a working environment that provides the right conditions for every task and every stage in the project, from secluded areas for complex tasks requiring concentration to multifunctional spaces where you can be creative and bounce ideas off of colleagues. At Schmalz, it's not just wishful thinking, the dream has been a reality.



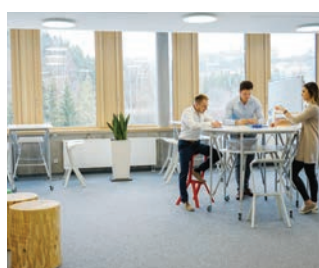
Meeting Rooms
The rooms are equipped with the optimal technology for presentations, meetings and video conferences to facilitate any kind of communication.



Sofa Corners
The ideal retreat for spontaneous meetings and short conversations. The high backs of the sofas keep employees visually and acoustically secluded without having to leave the open-plan office.



Office Floor
Whether in the open-plan office, a project room or a think tank, the flexible room layout at Schmalz allows employees to quickly set up and change their working environment.



Creative Room
The large creative room measures just under 100 square meters. The equipment supports all techniques for activating creativity, whether a meeting requires classical brainstorming or modern design thinking.

Laying the Foundations for the Employees of the Future

Schmalz has always placed great value on youth education. This is demonstrated by its above-average trainee rate, which stands at 14 percent of all employees. At the end of 2019, nearly 130 trainees and cooperative education students were employed in Glatten. The company aims to attract additional skilled workers with measures like the Freudenstadt Training Initiative and the Black Forest Campus. Schmalz has been very actively involved in both initiatives right from the start.

Career Opportunities for Special Needs Students

For graduates of special education schools looking for a training program the situation is tough. Openings are rare, and professional opportunities are anything but rosy. The Freudenstadt Training Initiative was founded in 2007 for precisely this reason. As one of the co-founders, Schmalz was involved from the very beginning.



The education program for precision metal workers takes three years.

The training initiative for special needs students was launched by a number of companies from the region, in cooperation with special education schools, vocational schools, the German Federal Employment Agency, the district of Freudenstadt and the Chamber of Industry and Commerce of the Northern Black Forest. The goal of the initiative is to integrate young people into society and the professional world, to impart social skills and to actively support them in their personal development, for example in the field of metalworking. Their training is accompanied by special education and remedial classes that are specially tailored to the needs of the target group.

Successes of the Initiative

- In 2011, the initiative won the **“Selected Landmark 2011”** award as part of the national competition **“365 Landmarks in the Land of Ideas.”**
- In 2018, the program graduated its **100th precision metal worker.**
- **90 percent** of the precision metalworkers still have permanent employment.

Master's Programs Deep in the Country

Ground was broken for the Black Forest Campus in July 2018. According to the Mayor of Freudenstadt, Julian Osswald, the campus offers a unique combination of research and industry that he "would not have thought possible."



The project represents a clear commitment to the Freudenstadt region.

Distributed across two buildings and 3,000 square meters of floor space, the facility will include seminar rooms, laboratory halls, co-working areas, a cafeteria, a workshop, a kaizen room and a faculty floor with offices and administrative areas – a real campus, in other words. But so far from a major city? The Black Forest region around Glatten is a technological hub that is home to many innovative

companies and medium-sized firms that are leaders on the world market. Schmalz recognized an opportunity here and, together with other companies from the region, established the Black Forest Campus in 2016.

The companies worked with the University of Stuttgart to develop a range of master's degree programs, in addition to a teaching and

development lab for digitalisation and energy efficiency in production. Aided by state-of-the-art equipment and tools, young recruits will receive excellent training in all aspects of leadership, digitalisation and sustainability. The close integration with regional firms helps to attract top talent to small and medium-sized enterprises in the Black Forest and encourages the founding of new startups.

Schmalz's International Commitment

Schmalz's subsidiaries abroad also support important activities and institutions:

Schmalz India

Around 25 girls and boys from the ninth and tenth grades learn the basics of pneumatics in a weekly course. Schmalz India provides educational materials and products for them to use.

Schmalz India

Schmalz India promotes weekly German lessons for around 130 children from kindergarten age to sixth grade.



Schmalz USA

Schmalz USA regularly supports various local institutions with donations in cash and in kind, including the Food Bank of Central & Eastern North Carolina, which provides support for food-insecure children and adults.

Schmalz Italy

In December 2018, Schmalz Italy provided new jerseys for the Scuola Basket Ticino youth basketball team.

The Right Mentality at Work and on the Field

These are the values that define the partnership between Schmalz and the SGM Stadt Dornstetten-Glatten sports club:

- **Courage:** acting with confidence
- **Determination:** pursuing goals
- **Willingness:** showing responsibility and a will to achieve
- **Resilience:** never giving up
- **Teamwork:** putting our individual talents toward common goals
- **Respect:** staying modest, appreciative and down to earth
- **Optimism:** measuring ourselves against the best



Sharpshooters: a professional sports photographer took new team photos for the youth sports teams.

Achieving More Together

Daniel Wennagel looks back on a successful 2018/2019 season. The head of the SGM Stadt Dornstetten-Glatten club is very pleased with the achievements of his soccer players. Especially considering that the team, consisting of young people from Glatten, Dornstetten and the surrounding region, was almost knocked out of the tournament.

Until recently, the SGM Stadt Dornstetten-Glatten team did not even exist; instead there were only four local clubs, all facing the same challenge: there was a lack of young talent for the youth teams. The four youth management boards therefore decided to combine their A to D teams into the SGM Stadt Dornstetten-Glatten. Schmalz, too, was inspired by the teams' values-oriented approach to developing young soccer talent. Intensive discussions paved the way for cooperation that now extends far beyond the field.

The partnership first became visible on the field with the new jerseys. Once former rivals, the players now proudly wear a patchwork emblem consisting of the logos of the four clubs. Right above the Schmalz logo.

A Strategy for Excellent Opportunities

"The players' community is pursuing an innovative model of conveying values such as team spirit and respect via the sport. We can identify with that very well," says Dr. Kurt Schmalz, in explaining his view of the partnership. However, Schmalz wants to go beyond classical sponsoring and make an active contribution to developing young people into top-performing and valuable members of society. Whether it's an internship, a summer job or an introductory interview, Schmalz has plenty of ways for interested young people to "take their shot" at a technical apprenticeship with a global company. Daniel Just, Head of Human Resources at Schmalz, has a clear goal

"A strong partner opens up entirely new possibilities."

Daniel Just, Head of Human Resources at Schmalz

in mind: "The goal of our social involvement is to attract young people to an apprenticeship or a cooperative education program at Schmalz." Daniel Wennagel agrees: "Particularly for young people who will soon be beginning their working lives, the partnership represents far more than just an emblem on their chest."

Since the beginning of the partnership, Schmalz has been active and visible in the club with a range of activities. One such example is the "Schmalz Award" for the team of the year. Another is the printed yearbook with team photos – so that the young players can look back proudly on their achievements. And last but not least: a presentation at the Academy by triathlete and "Ironman Hawaii" Wolfgang Epting, exclusively for members and associates of SGM.

Football and vocational training have a lot in common: Individual skills and self-confidence are developed within a team. And young talent needs to be supported and fostered. With Schmalz, the players have a strong partner at their side, in both their athletic and professional lives. Will we be able to turn these young people into high achievers? As German soccer coach legend Otto Rehhagel once said, "Die Wahrheit liegt auf dem Platz," meaning that the only way to know the outcome is to play the game. A statement that's as true in the sporting world as it is in the professional one.



Group picture of the A, B, C and D youth teams, along with coaches and representatives from the clubs and from J. Schmalz GmbH.

Milestones from 2019

Diving Deep

An ideal solution for picking up workpieces from low positions: the new Jumbo Low-Stack.



February



Gentle Grip

Schmalz offers new suction cups for the electronics industry. They grip even sensitive printed circuit boards.



April



Starker Speicher

On the company premises in Glatten the Business Unit Energy Storage presents a redox flow battery system.



June



Kicking off Their Careers

Around 130 young people do their apprenticeship at Schmalz. At the annual career information day they inspire other young talents for the



August



An All-Rounder

The vacuum suction cup SUF is our new solution for handling flat workpieces: a real all-rounder.



October



All's Well That Ends Well

The annual celebration is the festive end of the business year. Traditionally, the employees with long periods of employments are honored.



December





January



New Building in China
The contract for the new building is signed. Taicang, northeast of Shanghai, will be the new headquarters of Schmalz China.



March



Hip Hip Hooray!
Our subsidiary in India celebrates its 20th birthday.



May



Customer Express
In the new Value Steam Factory, all production processes are geared towards value creation and customer requirements: fast, efficiently and cost-effectively.



July



We are Family
More than 1,500 employees and their families get together to celebrate a very special family event in Glatten.



September



Awarded
We were a finalist for the "Großer Preis des Mittelstandes" award for our commitment to sustainability.



November



Top Three
Great honor at the German Sustainability Award: Standing on the winner's podium and proudly accepting the TOP 3 award as one of the best medium-sized companies.

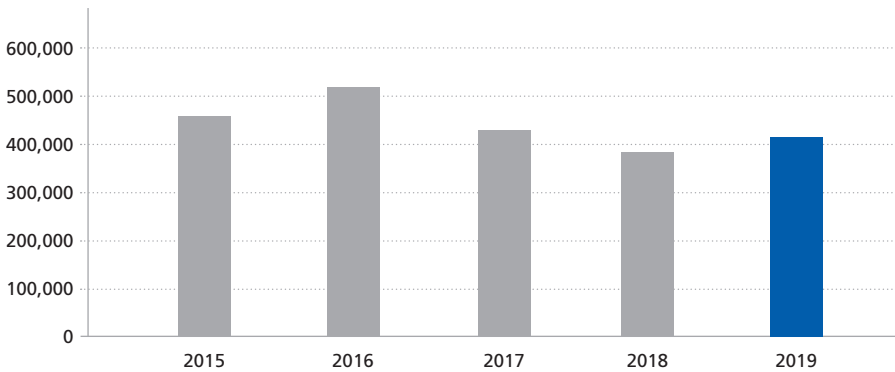
Economy Ecology Social Commitment

Sustainable throughout the year: Various activities and measures contribute to achieving our sustainability goals.

ecoSYSTEM Balance

🔗 Saving Money with Good Ideas

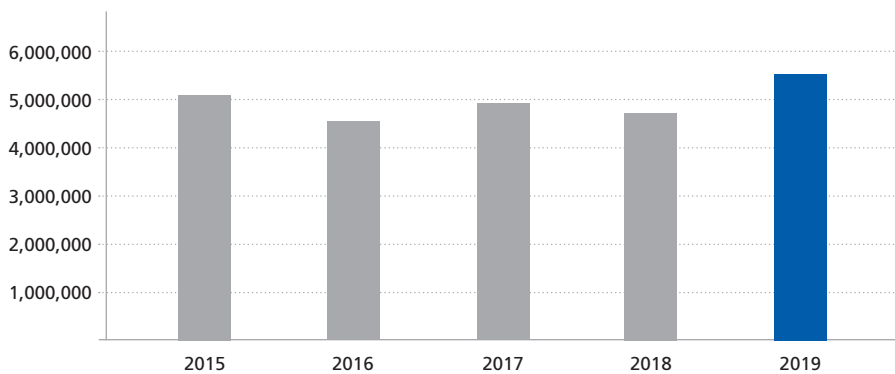
Savings in €



Employees can submit ideas for potential savings in the company, with the chance to win a bonus (see also p. 11). The suggestions are evaluated by the Lean and Idea Management department. Schmalz saves thousands of euros annually thanks to the improvements implemented.

🌿 We Love April Weather

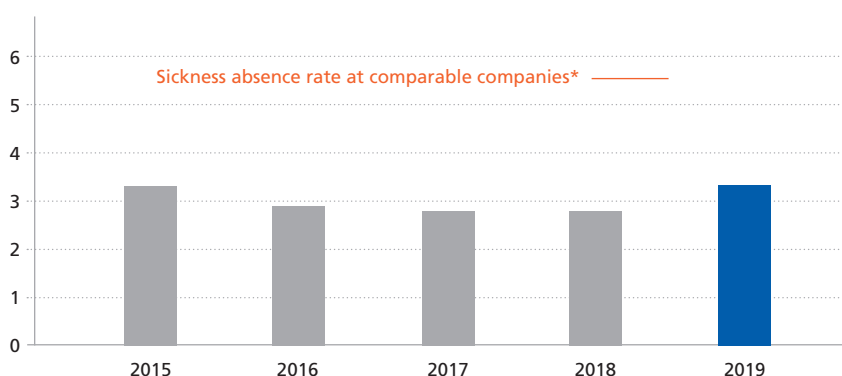
Renewable energy produced annually from our own plants in kWh



Wind, sun or rain: Schmalz is at home in any weather. Wind is good for the wind turbines, and sun is a boon for the photovoltaic and solar heat modules. When it's raining, our hydroelectric plant kicks into high gear. That's in addition to our efficient wood chip heating system.

👤 Health Comes First

Sickness absence rate in %



The sickness absence rate at Schmalz has been consistently low for years and is well below the industry average. Schmalz promotes the health of its employees with a range of measures: For example, during the winter months the company distributes about six tons of healthy apples, delivered free of charge to the employees.

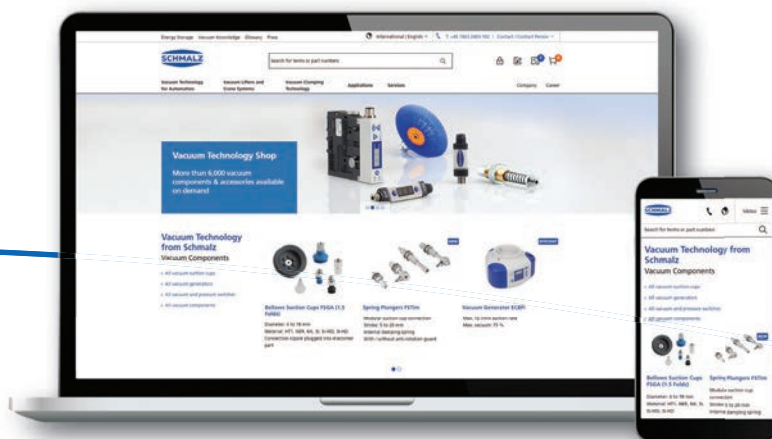
*Federal Association of Company Health Insurance Funds for the Metal and Electrical Industries in Germany 2017

**Want to know more
about sustainability?**

You can find the latest key figures and information at:

WWW.SCHMALZ.COM/SUSTAINABILITY





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