Sustainability Report 2019

Follmann Chemie

‘ We define sustainability as combining our business activities with our sense of economic, environmental and social responsibility. For us, sustainability is an obligation towards the generations of today and tomorrow. ’

Dr Henrik Follmann
Managing Director

Sustainability Report 2019

Dr Henrik Follmann (right)
Dr Thomas Damerau (left)

Foreword by the management

Dear Readers,
You are holding in your hands the 2019 Sustainability Report of the Follmann Chemie Group. We'd like to thank you for your interest in our company.

We produce this report annually because sustainability is a high priority in our group of companies. We follow the guidelines of the Chemie³ initiative, a joint sustainability initiative of the German chemical industry association VCI, the Mining, Chemical and Energy Industrial Union (IG BCE) and the German Federation of Chemical Employers' Associations (BAVC). These guidelines were also taken into account in the revision of our Code of Conduct in 2019. This Code of Conduct is binding for all of our employees.

At the beginning of 2020, the quality of our sustainability commitment was recognised with the EcoVadis gold award. EcoVadis is a provider of a globally recognised, cloud-based platform for holistic ratings in the area of corporate responsibility and assesses companies in the areas of environmental protection, occupational safety, ethics, human rights in their global supply and value chain, and sustainable procurement.

Our new construction chemical production, which represents the largest investment in the history of the Follmann Chemie Group, was fully commissioned in 2019. All new production and filling systems are today operating as intended. The high degree of digitisation and automation has already led to significant improvements in quality consistency and mastery of our broad product range compared to the previous production now shut down. This investment, which for us as a medium-sized company represents a clear commitment to the Minden location and the region, has of course also seen the implementation of ecological optimisation potential. The new production halls are heated exclusively by using waste heat from our combined heat and power plants. By installing silos for powdered raw materials, such as quartz sand, we were able to save almost 100 t of waste by eliminating the packaging materials.

After the Follmann Chemie Group expanded for the first time in the recent past by taking over the Sealock Group based in Great Britain in 2018, we further added to our product portfolio by purchasing an adhesive manufacturer in Russia. The Russian market offers a lot of development potential for the Follmann Chemie Group. We see this expansion with regard to Eastern European markets as another economic pillar of sustainability in our company.

As part of our sustainability activities, the 'New Work' sub-project has been continued in its now third year. In the past year, for example, we implemented things like new uniforms and improving the infrastructure on the company premises. To better reconcile work and family, we joined forces with other companies from the region and the child protection association Kinderschutzbund e.V. Minden-Bad Oeynhausen as part of the 'Happy Family' project in order to create the appropriate capacities and build a contingent of childcare places for our employees by building a new day-care centre.

Socially, we continue to engage in a variety of ways outside our core business, by supporting various social and educational institutions in the region. Last year we expanded our health management for our employees with Sportnavi.de. This corporate fitness provider in the Ostwestfalen-Lippe region includes a network of different service providers from the areas of sports, fitness and well-being. This gives employees the opportunity to customise their health programme. We support every membership with a financial contribution and a monthly cancellation option. We also conduct blood donation campaigns together with the German Red Cross.

In order to better support employees who return to work after a long illness, we have optimised and reorganised the company's integration management in our group of companies. Our integration team provides employees with additional individual help after long-term illnesses and preventive support to prevent them from becoming unable to work again.

We are aware that we can only achieve our goals by working closely with our customers, suppliers, employees and the authorities, and through our willingness to engage in dialogue, in particular with our neighbours. Therefore, we present to you this sustainability report to give you an insight into our activities in 2019.

We look forward to continuing our dialogue with you.

Dr Henrik Follmann
Managing Director

Dr Thomas Damerau
Managing Director

Follmann Chemie Group

The Follmann Chemie Group is an owner-managed, internationally operating and successful group of companies headquartered in Minden. It comprises the Follmann and Triflex business units.
Founded in 1977 by Heinrich Follmann and his son, Dr Rainer Follmann, the family-owned company initially focused on the manufacture of construction chemical products. A few years later, the portfolio was expanded to include printing and coating materials for different types of end products. By founding the two business units Triflex and Follmann, expertise was bundled and successfully advanced. The many international subsidiaries and sales offices are an impressive reflection of this dynamic. Today, the family business is led in the third generation by Dr Henrik Follmann, alongside Dr Thomas Damerau.

Until 2018, Minden was the only production location for all products. The acquisition of the Sealock Group has added three new, smaller adhesives manufacturing locations to the portfolio, namely Andover (UK), St Petersburg (Russia) and Warsaw (Poland). In 2019, the Follmann Chemie Group took over the Moscow-based Russian adhesive manufacturer Chemical Alliance with around 20 employees. The acquisition of Chemical Alliance is a further logical step in the growth strategy in the adhesives business, which will strengthen our position in the market and our international presence. Follmann and Triflex are represented worldwide with numerous foreign companies. Besides Minden, Follmann has its own sites in Russia and China, and Triflex has seven European affiliates and numerous sales offices worldwide. Follmann Chemie is also represented in Poland in addition to the Minden headquarters.

The key competences of the Group are the development, manufacture and sales of speciality chemicals for the processing industry (printing inks, adhesives and coatings) as well as the construction chemistry industry (waterproofing systems, marking materials and infrastructure). High innovative strength, excellent product quality as well as customised solutions and services are essential to the company's success. Thanks to a modern organisational structure and efficient processes, it is possible to react quickly and flexibly to customer requirements, and to sense trends and implement them systematically. Today, the company is an important player in the speciality chemicals sector in Europe.

Innovation, appreciation and sustainability: these three pillars form the basis for the business goals achieved so far and are at the same time important guard rails and signposts for a successful future.

Innovation

In our group of companies, innovation is an important part of the corporate philosophy. Together with our customers, we develop individual, high-quality solutions for the construction and craft industries as well as the processing industry. To achieve this, we invest large sums in the development of new products

Follmann Chemie
Minden, Germany

Triflex

DE | Triflex Germany
NL | Triflex Netherlands
UK | Triflex UK
CH | Triflex Switzerland
AT | Triflex Austria
BE | Triflex Belgium
FR | Triflex France
IT | Triflex Italy
SG | Triflex Singapore
PL | Triflex Poland
RU | Triflex Russia
CN | Triflex China

FOLLMANN

DE | Follmann Germany
RU | Follmann Russia
CN | Follmann China
PL | Follmann Poland
RU | Chemical Alliance
UK | Sealock UK
RU | AO Intermelt

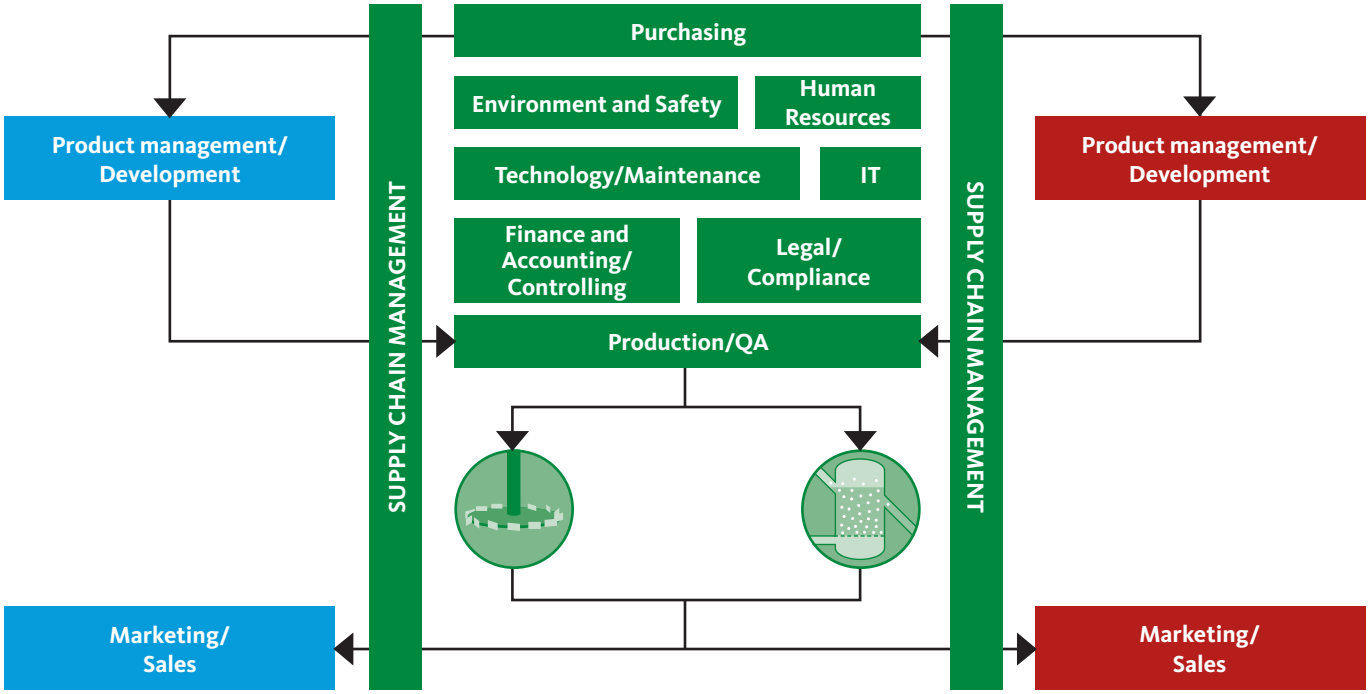
and technologies every year. Comprising more than 10% of all employees, the R & D and New Business Development departments form a significant group within the company. Sophisticated testing facilities and state-of-the-art laboratories underline the importance and value of these departments, in which the company will continue to invest going forward.

Appreciation

Appreciation and respect for our employees are essential components of our corporate culture. We value diversity, promote equal treatment of all employees and equal opportunities in employment. We have laid down these issues in our Code of Conduct, which we updated in 2019.
The group of companies' great importance for the region is reflected not only in its support of public and social institutions, but above all in its high number of investments: in the past ten years alone, almost 100 million euros have been spent at the Minden site.

Sustainability

Sustainability has always shaped our corporate philosophy, on which corporate decisions and actions are based. Our principle of sustainability is founded on the three pillars of ecology, economy and social issues. In all three areas, we are aware of the responsibility as a company in the chemical industry and act in accordance with our sustainability policy.



Our corporate organisation

An important visible indication of our clearly defined processes is the Follmann Chemie Group's organisational structure at the Minden location with the sales and development companies Triflex and Follmann. Our main focus is to provide customised, high-quality solutions to our customers with real added value for users. Due to the extensive activities of the Follmann Chemie Group, the subsidiaries Follmann and Triflex can concentrate fully on developing and selling the respective products.
A key player at Follmann Chemie is the Supply Chain Management department, which coordinates all goods movements from the ordering of raw materials and intralogistics to the delivery of the products.
In addition, Follmann Chemie is responsible for raw material and technical purchasing and manufactures the products developed by the subsidiaries in six production departments.

The quality – along the whole cycle from the raw materials to the finished products – is ensured by the quality assurance department. In addition to quality assurance and control, this department also trains chemical laboratory technicians. The service departments support all processes pertaining to Information Technology (IT), Human Resources, Legal and Compliance, Technology, and Environment and Safety. Finance and Accounting as well as Controlling are also centrally overseen by Follmann Chemie.

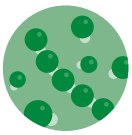
The newly added companies of the Sealock Group and Chemical Alliance are not organised in this framework. The four locations in England, Poland and Russia each combine all the functions necessary for the development, manufacture and sale of adhesives.

Production methods

Follmann Chemie operates six different production areas at its Minden site. The production processes can be divided into mixing (homogenising and dispersing) and polymerising. The procedure deployed is batch production.

Mixing

The physical processes used in our production are mixing processes. Our mixing processes can be distinguished between homogenising and dispersing.
Both are performed with different stirrers and with different machines. Owing to low shear forces, homogenisation leads to a uniform distribution of the different components in a mixture. Dispersing is the mixing of substances which do not form a chemical bond and dissolve into each other only slightly or not at all. Here, a substance (disperse phase, e.g. pigments) in another substance (dispersion medium, e.g. printing ink resin) is distributed as finely as possible under high shear. The aim is that as many particles of the disperse phase as possible are completely wetted with the dispersant.
Products: printing inks, liquid plastics, wallpaper coatings, functional coatings, hot-melt adhesives.



Polymerisation

Polymerisation is characterised by chemical transformation generated by the transformation of small molecules (monomers) into macromolecules (polymers). The manufacturing process takes place in closed systems (heatable and coolable) with continuous dosing of the various reaction partners. The chemical reaction is triggered by the supply of heat (via steam) and the addition of catalysts. The reaction heat (exothermic reaction) produced by the triggered reaction is dissipated via the cooling of the reaction vessels. Agitators ensure the necessary distribution and homogenisation.
Products: dispersion adhesives, binders as preliminary products for our printing ink and coating production areas, microencapsulations

Our sustainability policy

We see sustainability as our duty to the generations of today and tomorrow and have made the idea of sustainability an integral part of our corporate strategy. We associate financial success with an awareness of economic, environmental and social responsibility. We also adhere to the sustainability guidelines of the chemical industry in Germany and follow the Responsible Care guidelines of the German Chemical Industry Association (VCI).

Within our company, we employ an integrated management system according to the applicable ISO standards to ensure we comply with the laws, official regulations and requirements for plant and product safety.
We set ourselves binding targets as part of a continuous improvement process. We check on an annual basis whether we are on course to meet these targets and make adjustments where necessary. We supply the information and resources needed to achieve these targets. It is the duty of each and every member of staff to do his utmost in his area and role to help us implement our sustainability policy.

Economics
As a family-owned SME, the Group pursues a long-term corporate strategy on which all involved can rely. Two fundamental elements of our strategy are to maintain and improve competitiveness and to safeguard jobs. We are a reliable partner to our customers and suppliers.
We invest heavily in research and development, and this creates added value for the economy and society. We promote a long-term approach to success. We are not under any obligation to optimise returns in the short term.

Environment
Environmental protection is a high priority in our company. Our goal is to improve our in-house environmental protection activities constantly in the interests of achieving environmentally responsible corporate development. We operate a comprehensive in-house environmental management system, which is certified to ISO 14001.

Energy
We use energy responsibly and are increasing our energy efficiency through a process of continuous improvement, with the aid of an energy management system subject to the ISO standard 50001.
We invest in modern and energy-efficient technologies.

Products
With our products, we also support the sustainability goals of our customers and users. When developing products, we take into consideration aspects such as resource conservation, energy savings and the reduction of environmental pollution during manufacture and throughout the entire product life cycle.
We are as sparing as possible with raw materials, water and other resources.

Safety

The health and safety of our staff are very important to us. Thus occupational safety forms an integral part of our management system and we place emphasis on a high level of safety in the operation of our plants.

To avoid incidents with a detrimental effect on the environment, we have put in place preventive measures at organisational, personnel and technical levels as part of our internal alarm and hazard prevention plan. Their purpose is to reduce or prevent risks and, in the event of an incident, to effectively limit the impact on humans and the environment.

We set the highest standards for the safety of our products and support our customers and users in the safe and environmentally friendly use of our products. We also inform customers of the risks associated with their use.

Communication

We engender trust in our business activities by communicating openly and respectfully with our customers, staff, shareholders and suppliers as well as with the authorities, our neighbours and the wider public.

We inform all of our staff about sustainability measures and energy-related matters; we motivate them to be responsible at work and we nurture an awareness for the environment, energy and safety.

We publish a sustainability report each year, informing staff, customers, authorities and the general public on the various topics related to the matter.

Social

We value diversity within our staff, and our HR decisions are free from bias or prejudice regarding background, religion, gender, age or disability.

We offer young people a wide variety of training opportunities, with an appropriate scope, to help them take their first step on the career ladder.

We offer our employees development opportunities in the form of general and specific training courses.

We provide various models of working hours where possible in operational terms, and this supports the family commitments of our staff.

Our Code of Conduct is a comprehensive, binding rulebook governing the behaviour of our employees both inside and outside the company.

We see ourselves as part of society and assume the associated responsibilities and obligations. As a medium-sized family business, we focus our social commitment on education and sport in our region. We support kindergartens, schools, colleges and educational institutions through personal commitment, funding and other activities.

Our sustainability commitment

Ecology

Even back in Follmann's early days, ecological aspects were central to the corporate philosophy. For example, we have developed a number of solvent-free products and have twice received awards for environmental awareness in company management from the 'Arbeitsgemeinschaft Selbständiger Unternehmer' (working group of independent entrepreneurs). Furthermore, in 1986 the medium-sized business association 'future' was established with Dr Rainer Follmann as one of its co-founders, who went on to introduce environmental management systems in their respective companies long before these could even be certified. At the end of the 1990s, we decided to integrate environmental and health and safety issues in our existing quality management system. Since 2014, environmental issues have been augmented and complemented by the site-based energy management system.

As a member company of the German Chemical Industry Association, we support the initiative for responsible action for a secure future. We are committed to act in line with this global 'Responsible Care' initiative, which means taking responsibility for continually improving the protection of the environment and health as well as the safety of employees and the community. We also follow the guidelines of the Chemie³ sustainability initiative, a joint initiative of the German Chemical Industry Association VCI, the Mining, Chemical and Energy Industrial Union (IG BCE) and the German Federation of Chemical Employers' Associations (BAVC).

Economics

In terms of economics, Follmann has adhered to firm principles from the start, and is committed to combining financial success and environmental and social responsibility. Ever since it was founded in 1977, Follmann has been a family company and intends to remain so. We feel just as responsible for our customers' success as our own. We make long-term investments at our production site in Minden rather than focusing on maximising short-term profits. We adopted a Code of Conduct in the Follmann Chemie Group to which all employees are bound and which we updated in 2019.

Social responsibility

We have made a clear commitment to the Minden location and are involved in various ways in the region. Over the past years, occupational safety as well as training and development opportunities for all employees in the Group have been continuously systematised, professionally organised and enhanced. In addition to occupational safety, we have established a health management system as part of which we implement a wide range of health-related activities. We offer talks, workshops and courses with external involvement. The Follmann Chemie Group provides training opportunities for an exceptionally large number of young people.

Activities and memberships

Working with organisations: Our employees are involved in around 60 working groups, committees and associations in order to help shape the framework conditions in our industry as a medium-sized family business.

Responsible Care: an initiative of the chemical industry, which stands for constant improvement of health and environmental protection and corporate safety. We are committed to acting in the spirit of this global Responsible Care initiative.

Chemie³: a sustainability initiative organised by the German chemical industry. We play our part in this initiative and intend to get to grips with sustainability in all its facets on an ongoing basis.

DGNB e.V. – German Sustainable Building Council: we are a member of the DGNB and, with our systems and know-how, we support the council's goals of sustainable building and operation of the built environment.

future e.V. – responsible companies: Dr Rainer Follmann was a co-founder of this society of SMEs in 1986. The founders took the view that financial success and environmental awareness are not contradictory but are in fact closely linked.

Förderverein Mindener Innovations- und Technologieinitiative e. V.: we are a member of this funding association, which primarily supports entrepreneurs and start-ups and wants to give them access to research and science.

Our sustainability management

Internal sustainability working group

In order to control the sustainable development of the corporate group, we have formed an internal sustainability working group with representatives from the three companies Follmann Chemie, Follmann and Triflex: Management, Environment and Safety, Purchasing, Quality Management, Sales, Research and Development, Human Resources, Marketing and Works Council are represented in this body. This group meets twice a year to monitor current sustainability issues related to the group of companies.

Integrated management systems

We are convinced that the successful running of a company is only possible through well-organised processes and thus through well-functioning management systems, and it is a matter of course for us to continuously improve ourselves. Only through sustainable improvement processes can a company continuously ensure an excellent product, project and service quality while the framework conditions are constantly changing. Our quality management has been certified according to ISO 9001 since 1997. Our environmental management system has been certified according to EMAS since 1998, and according to ISO 14001 since 2001. In 2014, our energy management was for the first time certified according to ISO 50001.

EcoVadis sustainability rating

EcoVadis is the provider of the first collaborative platform for supplier evaluation in terms of sustainability aspects. The EcoVadis rating assesses the performance of suppliers with respect to corporate social responsibility (CSR) and sustainability criteria. Aspects analysed and evaluated using 21 different criteria were the environment, social affairs, ethics and sustainable procurement. In 2015 we joined EcoVadis and were awarded 'Gold' status in 2019. Despite this very good rating, we are committed to continuous improvement and constantly working on our sustainability performance.

Sustainable procurement

Our raw material portfolio is very extensive for a medium-sized company and can be divided into over 20 different raw material groups, such as monomers, binders, fillers, waxes, resins and pigments.

As an international company, we attach great importance to transparency and sustainability in the global supply chain. In 2017 and 2018, we participated in a pilot project called 'Sustainability in Supply Chains', which was initiated as part of the Chemie³ sustainability initiative of the chemical industry and dealt intensively with environmental protection, occupational safety and social and ethical standards at our suppliers.
In 2019, we subjected our top-selling suppliers to a supplier assessment, which for the first time also included sustainability. In addition to the information obtained through the supplier self-assessment and some on-site audits, the sustainability performance of selected suppliers, and in particular of new suppliers, are evaluated using the EcoVadis external platform solution. Affected suppliers with risk potential are notified of possible dangers and further developed jointly as part of supplier management.
In addition, the evaluated suppliers of raw materials are to confirm compliance with our minimum standards as laid out in our Code of Conduct.

The EcoVadis assessment methodology and the Code of Conduct help us to manage and review sustainability along the global supply chain.
We are fully committed to the observance of human and labour rights and seek to have a positive impact on their enforcement along the whole value chain. We expect our business partners to respect human and labour rights and to ensure occupational health and safety. Child labour and forced labour are not negotiable for us. The previous evaluation of the various assessments showed that neither compliance with human and labour rights (including prohibition of slavery and forced labour) nor other requirements of our Code of Conduct had been violated.

	2017	2018	2019
Suppliers evaluated based on environmental criteria and CSR issues	–	approx. 40	65

Fiscal year 2019

The 2019 fiscal year was successfully completed with a turnover of approximately 200 million euros and a production volume of around 60,000 tonnes.

A clear commitment to the location of Minden and to the region is the completion of the largest investment in the history of the Follmann Chemie Group: the new building for the manufacture of construction chemical products for our Triflex division.
After the buildings and system technology were completed in 2018, all new production and filling systems were fully commissioned in 2019. Thanks to the innovative technologies, optimised, digitised processes and the high degree of automation, a consistently high level of quality can be ensured. For example, all raw materials are precisely weighed. Until now, we have had to rely on the weight information provided on the supplier's packaging for some raw materials. A clear product structure has also helped to simplify processes and avoid mistakes.
The upcoming 2020 season will be the first in which all construction chemical products will be manufactured exclusively in the new production facility.

Extensive preparations were made last year for the next important investment project for the Minden location: the planning for the new construction of a technology centre has largely progressed and the old buildings at the future location have already been demolished.

The technology centre will be an extremely important link to our customers. We attach great importance to not only being able to offer our customers a product, but a solution to their specific problem. In the future, the technology centre will enable us to show customers these solutions in practice, which will also further strengthen the Minden location.

After the Follmann Chemie Group had expanded through a company takeover for the first time in the recent past in 2018, we further expanded our activities in the adhesives area in 2019 with another purchase: 'OOO Chemical Alliance' based in Moscow is a manufacturer of special adhesive systems that further strengthen our position in the Russian market. Together with the production at Intermelt in St Petersburg, we now have two locations for the production of hot melt adhesives in Russia.

In the future, we will thus be able to serve customers even faster and more flexibly in this important market. The acquisitions are part of the international growth strategy of the Follmann Chemie Group.

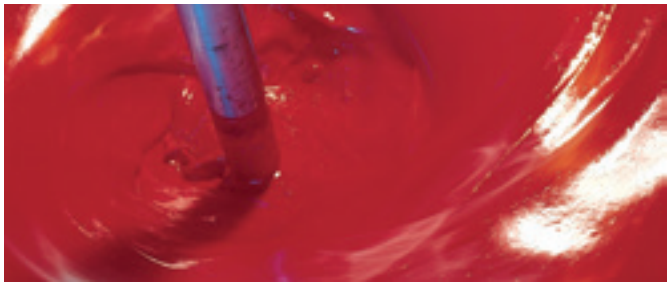
Another important element in this strategy was the establishment of Triflex South East Asia in 2019 in order to be present in Singapore with building chemical Triflex products in the currently developing market in this region.

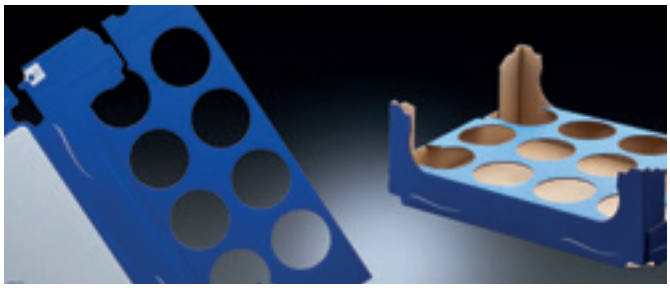
Internationalisation also includes ensuring a reliable, sustainable and competitive supply of raw materials, which is a major challenge for us as a medium-sized group of companies. Europe is increasingly developing as an import market for chemical raw materials, especially from Asia. This also requires the Follmann Chemie Group to engage in direct purchasing activities in countries such as China or India in order to be able to assess the security and sustainability of supply first-hand and not rely on intermediaries.

Other digitisation projects were also vigorously pursued in 2019. Examples include the introduction of pioneering software at the interface between Triflex KG and its customers, and the automation of order and delivery processing with selected suppliers.
The takeover of Chemical Alliance and further hiring at the Minden site increased the number of employees in the Group to more than 800.

With more than 500 employees, Minden remains the Group's main location. It is also home to the central research and development departments with more than 70 employees. The number of trainees and dual students has also remained high, consisting of 30 members of staff.

Group data for 2019, last updated: 31.12.2019	
Established	1977 Follmann 1984 Triflex
Group founded	2015
Production locations	Minden (D) Andover (UK) St Petersburg (RU) Moscow (RU) Warsaw (PL)
Turnover	> 200 m Euro
Employees in total	> 800
Employees at the Minden site	540
Employees in R & D	approx. 70
Trainees and dual students	approx. 30
Production volume	approx. 60,000 t





FOLLMANN

Our product solutions

The Follmann product range comprises printing inks, adhesives and microcapsules as well as coating systems for the decorative and functional design of surfaces in various applications. We support our customers from the initial product request to the finished end product. Individual solutions are our speciality!

Print and packaging

Printing inks and coatings for the printing and packaging industry

With our water-based printing inks for flexographic and gravure printing, we do not only offer brilliant colour shades, but also an environmentally friendly and low-consumption alternative to solvent-based inks. The water-based inks are used in flexible packaging made of plastic and aluminium, in packaging made of paper or cardboard, in napkins and table decoration products as well as hygiene products.

Scented coatings that can be printed on flyers, postcards, magazine pages or packaging round off our portfolio.

Design and function

Decorative and functional coatings for a variety of applications

The product range extends from printing inks and coatings for the wallpaper and woodworking industries, through plastisols and polymer dispersions for engineering textiles and pigment preparations for industrial coatings and the colouring of plastics to water-based coatings for digital printing media.

Industrial bonding

Powerful adhesives for a variety of adhesive applications

An adhesive bond should be reliable and last even in extreme conditions. Follmann has been developing and producing quality high-performance dispersion, hot-melt and pressure-sensitive adhesives for industrial use for many years.

Our adhesives are used in the food and non-food sectors in the packaging industry, in the cardboard and corrugated cardboard industry, in end-of-line packaging, in transport and shipping packaging, in bookbinding as well as in textile applications, labels and special segments such as the mattress industry.

Wood and furniture

High-performance adhesives for the wood and furniture industries

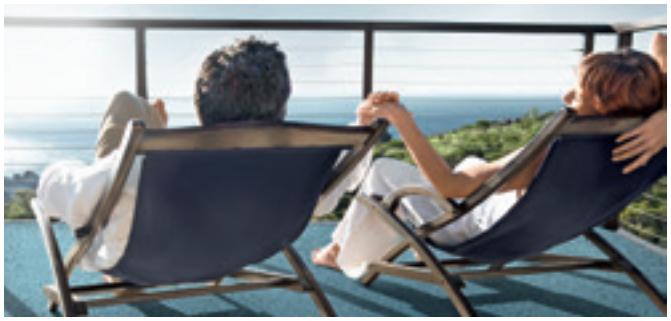
Whether for solid wood bonding, full-surface and assembly bonding, hot and cold laminating, veneering, edge gluing and pre-coating, panel and profile wrapping as well as a whole host of other wood bonding processes, in this Business Unit we sell high-performance hot-melt and dispersion adhesives for the wood and furniture industries.

Specialities

Microencapsulation for the most diverse applications

Innovation, precision and experience are the foundations of microencapsulation – our high-tech speciality. The packaging of liquid and solid substances in microcapsules is the perfect way to selectively release or sustainably protect content. Enjoy long-lasting freshness for clothing thanks to microencapsulated scents in detergents, or a more efficient use of pesticides through microencapsulation.

Follmann encloses a variety of ingredients in microscopic capsules that can be opened under exactly defined conditions. We not only refine detergents, care products and cosmetics in this way but also add functional value to a wide variety of speciality chemicals such as paints, lubricants and adhesives.



Triflex
Gemeinsam gelöst.

Our system solutions

As a leading European specialist in waterproofing and coatings, we have learned one thing in the last 40 years: having an excellent product is not enough to solve problems permanently. As a family business, we pursue a very different approach: we always solve problems together. From consultation and execution of the projects through qualified processing to excellent products and services, we work closely with our specialised craftsmen, planners, architects and the housing industry to devise a suitable solution for each task.

Flat roofs and flashings

Triflex supplies systems with long-lasting protection for simple, detailed and complex roof structures. Whether new constructions or renovations, green roofs or individual surfaces: Triflex offers you an optimal, individual and sustainable solution for every requirement. The fleece reinforcement, combined with the elastic material, ensures a seamless and jointless seal.

Balconies, terraces and walkways

Exposed areas, such as balconies, rooftop terraces, loggias and walkways, are continuously exposed to the elements and mechanical stress. Here, moisture penetration, concrete spalling and corrosion can damage the reinforcement and endanger the building fabric. Triflex systems permanently protect against moisture and dampness and offer durable solutions that allow for predictable planning and thus ensure a high level of reliability.

Multi-storey and underground car parks

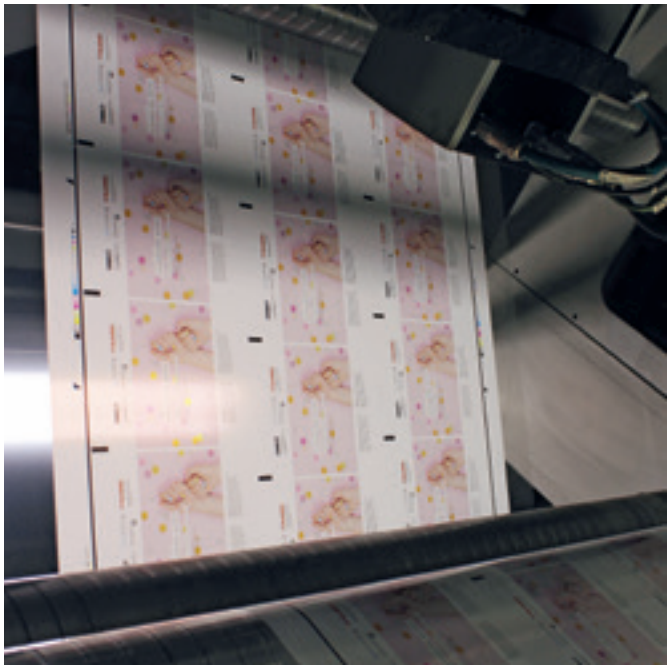
Multi-storey car parks are exposed to mechanical and chemical stresses throughout the year. Rain and condensation water, road salt and fuels additionally attack the already contaminated surfaces. Triflex systems permanently seal multi-storey and underground car parks and meet the highest standards of safety, cleanliness and cost-effectiveness. Thanks to the fast-curing liquid plastic, all surfaces, ramps and details can be driven on again very quickly.

Infrastructure

Triflex develops innovative system solutions for a variety of applications. These include maintaining and operating traffic areas as well as protecting joints, wind turbines and silo systems, and spaces for liquid manure, slurry and seeping juices. Thanks to the Triflex systems, these areas are permanently sealed and can be used and re-used after just a short time.

Road, cycle path, hall and car park marking

Increasing traffic, weather conditions and mechanical stress on motorways, roads and cycle paths also place high demands on the marking systems. Triflex systems are not only durable and quick to process, they also provide orientation at any time of day or night and in any weather, ensuring maximum safety.



Product responsibility

Focus on product safety

As a company in the chemical industry, we have a high level of responsibility for the safety of our customers and the users of our products. Product safety is therefore an extremely important issue for us. We are constantly working to improve our products and to minimise the use of hazardous substances. For example, we are committed to avoiding toxic and carcinogenic substances when developing new products. Owing to our raw material qualification process, we only use raw materials that meet our criteria for the respective application. As a general rule, we do not use any raw materials without testing and approval.

Water-based inks for sustainable and environmentally friendly printing

With the water-based Follmann printing ink systems, we offer high-quality products for flexible packaging made of plastic and aluminium, for packaging made of paper or cardboard, for napkins and table decoration products as well as for hygiene products. Because these inks contain water rather than organic solvents, they are significantly lower in emissions and more environmentally friendly than traditional, conventionally used solvent systems. Our water-based printing inks and coatings for wallpaper make a long-term contribution to the excellent quality of the indoor air, increasing your sense of well-being.

Low-emission adhesives

With our dispersion and hot-melt adhesives, we make an important contribution to natural living. Our adhesives are proven to be low in emissions and comply with the most stringent European standards.

Circular economy

We joined the CEFLEX initiative in order to contribute to the sustainable cycle of flexible packaging with our products. CEFLEX is a European consortium of companies that represents the entire value chain of flexible packaging and drives system solutions for the circular economy of packaging. We already have a solution for recycling glued paper packaging: all of our hot-melt adhesives can be separated from paper in the recycling process. Specially developed printing inks for products that are to be composted do not inhibit the composting process and thus also contribute to the circular economy.

Reducing the amount of active ingredients through microencapsulation

The encapsulation of active ingredients and fragrances offers the possibility of targeted release. Thanks to the patented Follmann technology, the use of active ingredients and fragrances can be reduced to a minimum.

Triflex – stable and durable

Triflex systems made of liquid plastic permanently protect the building fabric from dampness and moisture. The high-quality solutions significantly extend the renovation intervals and thus make a decisive contribution to preserving value.
Liquid plastics are single- or multi-component materials, which are applied on-site in a liquid and seamless manner and produced by a chemical crosslinking reaction or by physical drying. Safe surface and detail sealing is no problem with Triflex system solutions – regardless of whether for new buildings or refurbishments. Liquid plastics from Triflex can be processed well and ensure long-term protection from a single source.

Triflex **waterproofing solutions** are certified in the highest performance categories and have proven themselves in extensive tests and many years of practical use. According to ETAG 005, the expected duration of use for the seal is 25 years.
Constant internal and external quality controls as well as the further development and optimisation of the products are a matter of course for us.

Triflex **marking materials** are characterised by high mechanical strength, long service life and dirt resistance. Production according to the standards defined by DIN ISO 9001 guarantees a constant quality. More than 100 colours are available for designs in halls, multistorey car parks and areas where they ensure the best possible orientation and long-term safety. In addition, they clearly structure parking spaces, walking paths and driving routes.

Triflex
Gemeinsam gelöst.

Emissions

Our production operations produce emissions of dust, volatile organic compounds (VOCs) and CO_2 that are released into the air. Volatile organic compounds are created through the use of carbon-based raw materials in our production processes. To minimise VOC emissions and odours, the exhaust air from construction chemicals production, microencapsulation and as of last year also polymerisation is routed via a regenerative thermal oxidiser (RTO). By building the RTO more than ten years ago, we were able to reduce our VOC emissions by more than 80%. VOC emissions correlate on the one hand with the production volume (longer emission times) yet, on the other hand, also depend on the type of products produced. The emissions vary depending on the VOC content of the raw materials used. In 2019, we saw a further decline in VOC emissions owing to the fact that we connected the exhaust air from the polymerisation plants for the production of our dispersion adhesives to our existing RTO.

Dust emissions arise out of the use of powdered raw materials such as pigments and fillers in our production areas. In all production areas in which we use powdery raw materials, we have installed powerful dust filter systems. Therefore, our emitted dust levels are very small and amounted to around 80 kilograms in 2019. In our new construction chemical production we installed novel efficient dust filters for areas in which powdered raw materials are handled to allow us to further minimise dust emissions.

In our energy station and in the operation of our RTO, CO_2 emissions arise directly from the combustion of fossil fuels (natural gas) on-site. By purchasing electricity, the production of which also generated CO_2, our actions also produce indirect CO_2 emissions. Our energy station is a high-efficiency plant and consists of two combined heat and power plants for generating our own electricity, two steam generators and one refrigeration plant. The increase in CO_2 emissions in 2019 is due to the failure of one of our CHP plants and the resulting necessary purchase of higher amounts of electricity with a poorer CO_2 balance (as our own electricity).

Emissions [t]			
	2017	2018	2019
Volatile organic compounds	6.3	6.0	5.8
Dust emissions	0.100	0.096	0.081

CO_2 emissions			
From primary energy sources (scope 1) [t]			
Natural gas	4,318	4,454	4,323
Diesel/heating oil	64	63	57
LPG	155	146	128
From secondary energy sources (scope 2)[1] [t]			
Electricity	2,454	2,466	2,722
Total	**6,991**	**7,220**	**7,230**

1 *indirect greenhouse gas emissions from the purchase of electricity. Source of CO_2 factors: Federal Environmental Agency, electricity mix*

Water and waste water

Our water consumption is mainly met with drinking water from the Minden municipal water supply network. Water is used as a raw material in products, for cleaning purposes in the plant, as a coolant, as boiler feed water for steam generation and for sanitary facilities (toilets, showers, kitchens). We partially also use well water to operate the cooling system in our energy station.

Our fresh water demand fell again in 2019; compared to the previous year the reduction amounts to more than 10%. This is due in particular to optimisation measures in polymerisation production as well as the reduction in our use of fresh water for cooling and cleaning purposes.

We aim to minimise the use of fresh water for processes, including steam generation, cooling and cleaning operations, to as low an amount as possible. In 2019, the process water volume increased by 2% compared to the previous year. This is due to the complete commissioning of our new construction chemical production, which has a higher steam requirement and accordingly a higher level of water consumption in the steam boiler systems. In 2019, the continuous control measures on the steam systems ensured continuous, trouble-free operation and prevented increased water consumption (as in 2017).

Our volumes of waste water, which we introduce into the city sewer system, correlate with our use of water. The waste water is made up of operational waste water, which is mainly produced by cleaning processes in production and during treatment tank and container cleaning, sanitary sewage from toilets, showers and kitchens as well as waste water from the steam plant. The operational waste water passes through a separate sewer system to our in-house waste water treatment plant. There it is pre-cleaned by means of precipitation and flocculation, and we introduce it as an 'indirect discharge' into the municipal sewage system for onward transport to the Minden municipal waste water treatment plant.

Our indirect discharge approval specifies limit values for certain hazardous substances for the operational waste water introduced into the municipal sewage, which we monitor on a regular basis both internally and externally.

Water volumes [m³]

	2017	2018	2019
Fresh water purchasing	39,554	37,758	32,619
Process water	28,281	21,068	21,528
of which cooling water	4,995	2,821	1,446
Share of cooling water in fresh water	10.5%	1.5%	1.2%

Waste

Reflecting our product diversity, our company creates over 60 different types of waste, which are collected and disposed of separately. We regularly review the disposal options and give preference to recycling where economically feasible.

After our amount of waste remained almost unchanged in 2018 compared to the previous year, we were able to reduce the amount of waste by 9% (211 t) in the reporting year. On the one hand, this is due to the reduced quantities of packaging materials disposed of (paper bags, foils and cardboard) that are saved by the construction of the silo systems in the new construction chemical production. On the other hand, the amount of raw materials and products disposed of (e.g. due to the shelf life being exceeded) could be further minimised. We were also able to further reduce the amount of hot-melt adhesives that are not marketable for us and which arise when the plant is started up.
In accordance with European waste management regulations, waste is generally classified according to whether it contains a certain proportion of hazardous substances. But because we cannot avoid using hazardous substances in our production processes, the generation of waste classified as hazardous is unavoidable. Through our development processes, we ensure at an early stage that the use of hazardous substances in our production remains as low as possible, and we thus keep the proportion of hazardous waste at a low level. The proportion of hazardous waste rose slightly in 2019 (from 43% to 49%), which is mainly due to the reduction in our total amount of waste by avoiding non-hazardous waste.

In the 2019 reporting year, compared to the previous year, we were able to raise our recycling rate to 71%, the same high level as in 2017. This is partly due to the fact that we identified other usable fractions in our mixed commercial waste as part of the implementation of the Commercial Waste Ordinance.

Waste volumes [t]			
	2017	**2018**	**2019**
Total waste	2,290	2,270	2,059
Waste for recycling	1,603	1,560	1,472
Waste for disposal	687	710	587
Hazardous waste [%]			
	42	43	49
Recycling rate [%]			
Waste for recycling	70	69	71

Energy

The energies we use on-site are natural gas, electricity, diesel and LPG. Natural gas is used to operate our energy station, for heating and for auxiliary firing of the thermal exhaust air cleaning plant (RTO). The energy station, which went into operation five years ago, consists of two combined heat and power plants (CHP) with steam boiler systems and a refrigeration system. The goal of this system is to cover our basic steam, electricity, heat and refrigeration requirements at our site in the most resource-effective way possible. Diesel is needed for the emergency generators and for internal swap body transporters. Fuel oil is used for the operation of the high-pressure cleaning devices and liquid gas is used as fuel for the forklift trucks.
Of the amount of electricity used in 2019, 38% came from our own heat-regulated combined heat and power plants (2018: 48%). The significantly lower proportion of own power generation in 2019 is due to the decommissioning of one of our CHP plants, which was necessary due to a technical defect in the exhaust pipe. As a result, our natural gas requirements have decreased, but the amount of purchased electricity has increased. In contrast, we saved about 36 Mwh through various measures.

We have decided to evaluate our energy consumption based on the level of carbon dioxide emissions caused by the combustion of fossil fuels on-site and by the production of the electricity which we procure externally. In 2019, we made a major change by commissioning our new construction chemical production facility, which has fundamentally changed our energy requirements. That is why our performance indicator is no longer comparable to previous years. However, we are abiding by our key performance indicator and will be redefining the starting point after a full productive year of chemical construction (at the end of 2020).

Energy sources

	2017	2018	2019
Natural gas [GWh]	21.4	22.5	21.4
Diesel/heating oil [GWh]	0.2	0.2	0.2
LPG [GWh]	0.7	0.6	0.6
Electricity [GWh]	4.6	4.6	5.6
Total [GWh]	**26.9**	**27.9**	**27.8**

Tonne of CO_2 produced per tonne of product [t/t]

	2019
Quantity	0.130

Milestones

Ever since company was first established, ecological goals and innovations have been an integral part of the corporate philosophy. The following chronological presentation provides an overview of selected sustainability activities of the company.

1984
Development of solvent-free tissue printing inks

1985
Elimination of use of chlorinated hydrocarbons

1986
Founding member of the Förderkreis Umwelt future e.V. environmental association

1988
Establishment of the Environment and Safety department and appointment of the first Environmental Protection Officer

1990
Introduction of solvent-free printing inks in the European wallpaper industry

1991
Founding of the industry and commerce environmental initiative in the Minden-Lübbecke district

1992
Development of the world's first chlorine-free plastisol for wallpaper coating

1994
Implementation of a new concept to increase sales in reusable containers

1997
Set-up of an environmental management system pursuant to DIN EN ISO 14001 and integration into the existing quality management system

1998
Recycling instead of disposal of PVC waste paste and films

1998/99
Award for environmental awareness in company management from the Arbeitsgemeinschaft Selbständiger Unternehmer (working group of independent entrepreneurs)

2000
Development of VOC-free printing inks for tissue printing

2002
Recycling of more than 50% of all waste

2003
Development of a new reaction process for adhesives in order to minimise the residual monomer content

2004
Participation in a research project of the German Federal Environmental Foundation (DBU) for the development of VOC-free film printing inks for flexible packaging (2004–2006)

2006
Sound insulation: installation of a housing for an extraction fan and the corresponding dust extraction system as well as a sound insulation pipe

2007
Installation of a new dust extraction system to reduce dust emissions from construction chemicals production and WBC production (reduction of dust emissions from 4 tonnes to 150 kilograms per year)

2008
Installation of an exhaust air cleaning plant (RTO) to reduce emissions of volatile organic compounds (VOC) by 20 tonnes per year

2009
Installation of caustic treatment to eliminate the use of organic solvents for container cleaning and significantly reduce the emissions of volatile organic compounds (VOC)

2010
Minimisation of VOC emissions by more than 10 tonnes per year through decommissioning of solvent containers

2011
Development and market launch of water-based inks for flexible packaging (e.g. carrier bags and plastic films)

2013
Introduction of an energy management system according to ISO 50001

2014
Installation and commissioning of an energy station comprising a combined heat and power plant with a steam boiler and refrigerating plant

2016
Housing and sound insulation of our water chillers in the polymerisation system in order to minimise ambient noise emissions

2017
Implementation of various noise control measures in hot-melt adhesive production to reduce the noise level below that for noise zones

2018
Exclusive heating of the new construction chemical production facility by utilising the waste heat of our combined heat and power plants

2019
Awarded GOLD status by the sustainability platform ECOVADIS

Occupational safety

Occupational safety and the safe use of our products are top priorities for us. This is reflected in numerous measures and projects across the entire Group and the involvement of many employees.

Occupational safety has been integrated into our management system for more than 20 years. It is professionally organised and an integral part of our everyday activities. This was impressively confirmed by our employee survey in 2018. Based on the question of whether occupational health and safety is addressed sufficiently in the company, it was determined that these aspects of our corporate philosophy are rated very positively in all departments of the Group. The result ranks among the top five questions with the most positive results, with an approval rate of 87%.

We appointed three specialists for occupational safety from the fields of Technology, Production, and Environment and Safety. We had a fourth occupational safety specialist trained by the trade association as part of a future retirement-related succession plan. In addition to these specialists, we currently also have 19 safety officers and a large number of first-aiders and fire safety assistants. These officers undergo continuous further training after completion of their initial training.

The various aspects of occupational safety and hazard prevention are also taught and retaught in regular internal and external training courses; tailored to the requirements of the specific employee's job. Two years ago, we started to gradually switch our internal training courses to an electronic training system in order to be able to assign the numerous (legally required) instructions to individual workplaces and activities. In 2019, 3,667 training courses on safety-related topics such as operating instructions or personal protective equipment were completed by 348 employees in the production, logistics and technology departments. The employees can choose the time for their courses independently. Through clear training documents, regular comprehension checks and a feedback tool for the employees to training document authors, this system continuously improves the transfer of knowledge.

With regard to possible incidents, we have anchored preventive safety measures in our management system at the organisational, personnel and technical levels. If an incident occurs, these safety measures are effective in limiting the impact on people and the environment. These are laid down in our corporate alarm and security plan, annual training in which is compulsory for all employees.

Work accidents

We have been systematically recording work accidents for over 30 years, and now that occupational safety has been incorporated into our management system, a thorough analysis of each accident is conducted. We record both notifiable (to the German employer's liability insurance association) and non-notifiable accidents. For every accident, an accident report is generated on our intranet, which serves as the basis for accident analysis and processing. The results of the accident analysis and any necessary countermeasures taken are documented there.

The number of recorded work accidents increased by approximately 15% in 2019 for the second year in a row. The number of reportable accidents has increased by one case in each of the past two years. Due to our increased number of employees, our quota of reportable accidents per 1,000 employees is identical to the previous year. Despite the increased accident rates, the number of days lost has fallen by 7% compared to the previous year. Most work accidents (44%) fell under the category 'bruising, contusion, compression'. Five of these accidents were somewhat more severe and accounted for 60% of all days off. The majority of the remaining 'bruising, contusion, compression' accidents had only minor consequences and resulted in only minimal downtime.

After a serious chemical accident (despite the employee wearing full personal protective equipment) having occurred in production in the past (2017), we implemented additional extensive safety measures. As a result, in 2018 and 2019 we only had three minor accidents with chemicals that did not result in any consequential damage or treatment.

As a precaution against 'bruising, contusion, compression' accidents, we avoided points of impact through various conversions and installed different forms of edge protection. In addition, the entire staircase was replaced with a new one with lower steps on an agitator where a trip accident occurred. In order to avoid cutting injuries, which are the cause of more than a fifth of all days off, new types of knife with special safety devices are tested in various areas as an alternative to those previously used.

Work accidents

	2017	2018	2019
Recorded work accidents	**20**	**23**	**27**
Reportable work accidents	**12**	**13**	**14**
Quota of recorded accidents per 1,000 employees	40	46	50
Quota of reportable accidents per 1,000 employees	24	26	26

Employees

By the end of 2019, the number of employees of the Follmann Chemie Group had risen to more than 800, and of these more than 500 work at our site in Minden. This growth has led to changes concerning the location, the working environment and the way of collaborating. As a company, we want and must accompany these changes properly and implement and shape them together with our employees.

Employee survey

After the first employee survey in 2018, the start of 2019 was marked by team meetings and workshops that were actively supported by the Human Resources department. All employees were given an insight into the results of their own team and, together with the manager, defined up to three measures that were to be worked on together. Some issues could already be worked on at the end of the year, including changes related to the workplace and to the way we collaborate. However, since not all measures can be worked on at short notice, the implementation of individual measures from the employee survey will still be ongoing throughout 2020.

New Work

Building on the basic values of the Follmann Chemie Group – innovation, appreciation and sustainability – the activities of the New Work team were given ample room in 2019. Since the idea boxes were launched in 2017, they have already been emptied five times and around 300 ideas have been collected. Every idea shows that the employees are concerned about the company and want to help shape its further development. Various suggestions were not only taken into account, but also implemented, such as new uniforms and improvements to the infrastructure on the company premises.

Another good example is the desire of employees to combine family and work. Follmann Chemie Group employees benefit from flexible working hours and as of late also from a quota of dedicated childcare places.

'Happy Family' childcare

Families and companies alike face the challenge of offering children age-appropriate care in the region. As a family company, the Follmann Chemie Group is particularly keen to provide an attractive work–life balance, which is why the Follmann Chemie Group has partnered with other companies from the region and the child protection association Kinderschutzbund e.V. Minden-Bad Oeynhausen to help create appropriate capacities for the Marienkäfer day-care centre with the new building. The Follmann Chemie Group has ten childcare places available that have been extremely well received. The day-care centre will start operating in summer 2020, and in 2019 registrations were already accepted and quickly filled up and all available places were allocated.

In collaboration with the child protection association, we are also able to support the placement of qualified nannies and babysitters.

Education

In addition to the classic recognised trades such as industrial clerks, chemical laboratory technicians, chemists and warehouse logistics specialists, the Follmann Chemie Group has also successfully established a dual degree course in business administration, mechatronics, industrial engineering and business informatics. At present, 32 young people are completing their training or an integrated dual degree at our company. Here they benefit not only from our numerous departments that they get to work in, but also from various training courses such as in MS Office, presentation techniques and communication.

Trainee excursion

The 2019 team building excursion took our trainees to Bayer AG in Leverkusen. The 18 participants were taken on a guided tour with many stops before heading for the communications centre where they had the opportunity to learn, for example, about the development path for a drug or the nutrients in our food. This was followed by a very entertaining visit to the Escape Room, which was all about solving a riddle together in small groups to be able to leave the room.

Energiescouts OWL

In 2019, a total of 19 teams and individual candidates, accompanied by the IHK, participated in the Energiescouts OWL programme by considering energy saving options in their own company as part of a project. Three of our trainees had also agreed to participate in the project. After brainstorming, inspired by workshops at the Chamber of Industry and Commerce, the trainees worked on the topic of 'Optimising the forklift fleet'. They suggested to replace gas-powered forklifts with electric forklifts, which was tested on two models for about a month and compared to the conventional methods. In addition to reducing carbon dioxide emissions, enormous cost savings can be achieved and explosion-protected productions can be navigated. Although the implementation in all areas is only partially possible due to the three-shift operation and the battery charging time of five hours, the project idea is still being pursued.

Health management

Health management was fundamentally revised based on the results of the employee survey and the suggestions from the idea boxes. The term 'occupational health management' summarises permanent activities such as company cycle leasing, massages and cooking events. The annual Health Day was replaced by campaigns that changed during the year to meet the needs and wishes of the workforce.

Company cycle leasing

Company cycle leasing has been offered to our employees since 2018 and became well established in 2019. The option to do something for one's own health and improve fitness both on the way to work and in one's personal time has been very well received. At the end of 2019, a total of 70 employees had leased at least one company bicycle. The following measures also contributed to this:

- Expansion of bicycle parking spaces
- Simple processing through the digital company cycle tool
- Possibility of leasing a second company bicycle for family members
- Adjustment of the employer's subsidy to ten euros per employee

Company integration management

The company integration management was also improved in the Group in 2019. Our integration team provides employees with additional support after long-term illnesses. The company integration management aims to restore and promote employees' ability to work, to adapt working conditions to health conditions and to prevent employees from becoming unable to work again. Both employees and the employer benefit from this. Not only can absenteeism and production downtimes be prevented, it also counteracts demographic change and the associated shortage of skilled workers.

Sports navigation system – Sportnavi.de

Since February 2019, the Follmann Chemie Group has been cooperating with a provider of corporate fitness in the East Westphalia-Lippe region. Sportnavi.de is a network of different service providers from the areas of sports, fitness and well-being. The employees can design their own health programme individually and are independent of fixed times or sports facilities. Machine training, fitness classes, swimming, massages and dance classes are just a few of the offers included in the membership. We want to offer our employees the flexibility to reconcile health, leisure and everyday work, and we support each membership with a financial contribution and a monthly termination option. The Sportnavi offer is continually being supplemented and expanded, with employee suggestions also being taken into account. In December 2019, we already had 56 users.

Life in the region

'Social commitment has been a core component of our corporate culture for many years.'

(Dr Henrik Follmann)

In addition to the clear commitment to the Minden region and the expansion of the local site, we are involved in the Minden community in various ways. Amongst other things we assist local schools, the parent and child centre at the Johannes Wesling hospital and the child protection association in Minden-Bad Oeynhausen. Local sports clubs are also sponsored and the regional activities of our staff are actively encouraged and supported.
We give young people the opportunity to do internships, to write BA and MA theses and do vocational training whilst studying.
For years now, we have participated in the 'vocational exploration day' scheme to give children and teenagers a taster of career opportunities at the company.
We encourage communication with our neighbours, interested citizens and politicians by inviting them to various events held in our company.

Examples of our social commitment in the region

- Every year, we support the work of the **Rehburg-Loccum workshops for the blind** by purchasing large quantities of brooms and hand brushes for our product sets.
- Financial support of the **Minden Museum**
- Financial support of the **Weserlieder Kultur e.V.**

- **Sports club sponsorships:** e.g. JSG Landesbergen; JSG Meißen / Röcke
- Participation in a rowing cup and in various **company and charity runs**
- Sponsoring partner as league partner of the Bessel rowing club as part of organising the Rowing Bundesliga (07/2019)
- Promotion of **GWD Minden**

- Annual foundation of a prize to recognise students with an excellent performance at the **Minden Bessel Grammar School**
- Sponsor of the **OWL Study Fund**
- Support of the **parent and child ward of the Johannes Wesling Clinic Minden**
- Support of the **Weserhafen day-care centre**

Overarching sustainability goals

As part of our sustainability management, we set quantitative targets in the areas of safety, environmental and health protection by means of key figures and their target values.

Overall target	Indicator and target	2019 result
Raw materials		
We aim to avoid as far as possible the use of raw materials classified as toxic or CMR.	**Proportion of toxic substances purchased** [Volume of 'toxic/cmr' raw materials purchased] / [Total volume of raw materials purchased] **< 1%**	Comfortably achieved
Water consumption		
We aim to minimise the use of fresh water for production as far as possible.	**Water indicator** [Fresh water consumption for processes (m^3) / Production volume (t)] **≤ 0.39 m^3/t**	Achieved

Raw materials

The development departments of Follmann KG and Triflex KG ensure as part of our management system that particularly hazardous substances are only used in exceptional cases. We ensure that hazardous substances are handled safely and responsibly within our group of companies. We have set ourselves the goal of avoiding the use of acutely toxic substances and substances with CMR properties (i.e. carcinogenic, mutagenic or toxic for reproduction) as far as possible. In doing so, we wish to minimise handling of these substances by our employees and by our customers.

Water consumption

Our goal is to use as little fresh water as possible for process purposes (steam generation, cooling and cleaning). Last year, we adjusted the target value for our water index to the current situation, since the energy station with two steam boilers has more than twice the boiler output available up to that point and therefore has a higher water requirement. Based on our new target value, we achieved our goal in 2019.

Overall target	Indicator and target	2019 result
Amount of waste		
We aim to keep the volume of waste produced to a minimum on a permanent basis.	**Waste indicator** [Total waste (t) / Production volume (t)] **≤ 0.035**	Narrowly missed
Waste treatment		
We aim to keep the volume of waste produced to a minimum.	**Disposal ratio** [Waste disposal volume / Total waste volume] **< 40%**	Achieved

Amount of waste

After our amount of waste remained almost the same in previous years, we were able to reduce the amount of waste in 2019 by 9%. This is due, in particular, to the reduced quantities of packaging materials disposed of (paper bags, foils and cardboard) that are saved by the construction of the silo systems in the new construction chemical production. Minimised quantities of disposed, superimposed raw materials and products as well as further reduced quantities of hot-melt adhesive waste also contributed to this significant reduction, so that we missed our target value only narrowly.

Waste treatment

Over 60 different types of waste are produced by our company. We regularly review how they are disposed of and give priority to recycling. More than 70% of our waste was recycled or incinerated to produce energy in 2019. As in the previous year, the disposal ratio was thus well below our target, which means we have once again achieved our goal here.

Completed projects: Safety, Health, Environment and Energy Management 2019

In our programmes for safety measures, health and environmental protection and energy, projects are documented and tracked for greater optimisation potential. These are the results of some projects undertaken in 2019:

Initiated by	Department	Measure, goal and result
Occupational safety		
Inspection	Production of printing inks	Assembly of lifting aids for the addition of raw materials and for the ergonomic handling of containers.
Inspection	Quality control	Optimisation of the extraction during the production of test samples via hot-air oven to minimise warm vapours in the laboratory air.
Management team	Company-wide	Introduction of an electronic training system for assigning workplace-specific and job-specific (legally required) training courses with regular comprehension checks and a feedback tool.
Health and safety committee	Production and maintenance	Procurement of blower respirators as a convenient alternative to conventional respirators.
Accident analysis	Production	Replacement of a staircase to the stage on an agitator by an alternative with ergonomically better steps.
Risk analysis	Construction chemical production: Silo systems	Safety-related optimisation of the maintenance platform and installation of call buttons and additional lighting on the silo system.
Water conservation		
Technology	Company-wide	Partial renovation of the underground sewer system based on the digital inventory.

Initiated by	Department	Measure, goal and result
Waste		
Purchasing, environment and security	Production of hot-melt adhesives	Waste minimisation through the use of start-up blocks from hot-melt adhesive production as a substitute raw material and official approval as a 'by-product'.
Emission control		
Inspection	Company-wide	Creation of a noise forecast for the site based on new noise measurements.
Environment and Safety	Production polymerisation	Implementation of the connection of the exhaust air of the adhesive reactors in the polymerisation plant to our existing waste gas purification plant (RTO) in order to reduce VOC emissions.
Energy		
Technology	Company-wide	Procurement of a measuring device to check the functionality of the steam traps within the steam network and to detect leaks in the compressed air system.
Management	Administration	Partial changeover of the lighting in the administration building to LED technology.
Technology	Research and development	Energy savings by increasing the temperature of the air conditioning system by 3 K.
Operational safety		
Management	Plant safety	Creation of a turnstile to ensure access restriction for unauthorised persons on the premises.

Planned projects: Safety, Health, Environment and Energy Management 2020

Various health, safety, environmental and energy management measures and projects have also been included in our measure programmes for the current year 2020. Some of the projects from various areas of the firm which we aim to realise this year are listed below:

Initiated by	Department	Measure and goal
Occupational safety		
Technology	Construction chemical production	Installation of additional point extraction systems for individual areas in which additional cleaning work is carried out.
Health and safety committee	Company-wide	Expansion of the internal electronic instruction system to train external companies and service providers with regard to the (safety-relevant) rules of conduct on the factory premises.
Health and safety committee	Company-wide	Expansion of the internal electronic instruction system to train truck drivers in different languages regarding the rules of conduct on the company premises.
Production	Production of hot-melt adhesives	Commissioning of a silo system for the automatic dosing of a main raw material. This measure reduces the manually moved mass of raw materials by more than 25%.
Technology	Company-wide	Procurement of a sound level meter for control measurements and orienting measurements of the noise level in all operating areas.
Waste		
Production	Wastewater pre-treatment plant	Reduction of waste quantities through lower sewage sludge quantities by means of optimised precipitation.
Production	Production of hot-melt adhesives	Reduction of packaging waste from the hot-melt adhesives segment by 20% by commissioning the silo system.

Initiated by	Department	Measure and goal
Water conservation		
Production	Production polymerisation	Optimisation of the precipitation results and the amount of precipitant used by separating adhesive-containing rinse water.
Technology	Company-wide	Continuation of the renovation of the underground sewer system based on the digital inventory.
Environment and Safety	Company-wide	Establishment of five groundwater measuring points as part of the preparation of an initial status report to enable qualitative and quantitative monitoring of the properties of the groundwater at the company location.
Operational safety		
Management	Company-wide	Preparation of a cross-plant emergency power concept
Inspection	Warehouse areas	Introduction of temperature-monitoring data loggers to ensure the optimal storage temperature of temperature-sensitive products.
Production	Construction chemical production	Procurement of two temperature-controlled climatic chambers for optimal temperature control of raw materials to ensure simplified handling and processing.
Energy		
Technology	Production of plastisols	Renewal of cooling of raw materials for plastisol production.
Management	Company-wide	Commissioning of a photovoltaic system on the roof of the central office building to use solar energy to generate electricity.
Energy team	Company-wide	Installation of an automatic, higher-level regulation of the compressed air systems to reduce power consumption and maintenance intervals.

Glossary

CHP
A combined heat and power plant (CHP) is a modular system for generating electrical energy and heat. We use a gas-powered internal combustion engine as drive for the power generator.

BU
Business unit Follmann GmbH & Co. KG Vertrieb is divided into five strategic business units: Print and Packaging, Design and function, Industrial bonding, Wood and furniture and Specialties.

CEFLEX
CEFLEX is the joint initiative of a European consortium of companies that represent the entire value chain of flexible packaging and develop solutions for the recycling of flexible plastic packaging.

Chemie³
Chemie³ is an industry initiative of the German chemical industry association VCI, the Mining, Chemical and Energy Industrial Union (IG BCE) and the German Federation of Chemical Employers' Associations (BAVC) and is committed to sustainable development in the chemical industry.

Circular economy
In contrast to the linear economy, in the circular economy material cycles are closed through reuse and recycling, and waste is reduced.

DGNB e.V.
The German Sustainable Building Council (DGNB e.V.) is a non-profit and non-governmental organisation whose mission is to develop and promote ways and solutions for the sustainable planning, construction and use of structures.

EcoVadis
EcoVadis operates the first collaborative platform that enables companies to measure the sustainability performance of their suppliers. EcoVadis has set itself the goal of improving environmental and social practices through the consistent use of global supply chains.

EMAS
Eco Management Audit Scheme: general name for Regulation (EC) No. 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation of organisations in a community eco-management and audit scheme.

Emissions
Solid, liquid or gaseous substances as well as noise, heat and radiation released into the environment.

End-of-line packaging
Packaging process at the end of the production process.

ETAG 005
European Technical Approval Guidelines 005 Liquid-applied roof waterproofing.

Food applications
Applications in the food industry.

ISO
The International Organization for Standardization – ISO for short (from Greek: isos) – is the international association of standardisation organisations and develops international standards.

PE, PP, PET, PA, OPP, PVC
Materials for plastic films: polyethylene, polypropylene, polyethylene terephthalate, polyamide, oriented polypropylene, polyvinyl chloride

Sustainability
The idea originally came from forestry: in order to implement sustainable action, only so much should be cut down in a forest as can regrow in the foreseeable future. Today, it is considered a development that ensures that future generations will not be worse off than those currently living. At the centre of sustainability are ecological, economic and social aspects.

Non-food applications
Application in areas without contact with food.

RC – Responsible Care
Responsible Care is an initiative of the chemical industry with the objective to strive for a constant improvement of the companies in the areas of environment, health and safety irrespective of legal requirements and to make this progress public on a regular basis.

RTO
Regenerative thermal oxidation, an emission control process, is preferably used to reduce hydrocarbon emissions, whereby natural gas must be added to the exhaust gas. In regenerative afterburning, the treated exhaust gas transfers its heat to a regenerator, which in turn warms up the untreated exhaust gas, reducing the energy requirement for combustion.

Stakeholders
Groups or individuals who are significantly affected by the company's activities, products and/or services or who, in turn, can significantly influence the company's business.

Internal stakeholders:
- Employees
- Works council
- Management

Examples of external stakeholders:
- Customers
- Suppliers
- Neighbours/public
- Politicians/authorities
- Competitors

VOC
Volatile organic compound

WBC-PR
Water-based compounds production

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Communication and contact

Reports and publications notwithstanding, nothing beats a face-to-face conversation. We therefore welcome dialogue with staff, neighbours, authorities, professional and environmental associations, schools, journalists and politicians and other interest groups.

If you have any questions or would like to talk to us for any other reason, then we look forward to hearing from you!

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