Röchling

SUSTAIN-ABILITY REPORT 2020

CONTENTS

Dear Sir or Madam:

Sustainability along with all of its many facets is the single most important issue of the future. We must adapt to changing conditions and requirements, forge new paths, and seek out even better solutions for our customers. And do so with the ultimate goal of ensuring the survival of our planet for the coming generations. We are confident that we have laid the groundwork to accomplish this goal in the area of engineering plastics, because we set ourselves ambitious sustainability targets aligned with the UN Sustainable Development Goals.

Röchling-BioBoom, our new polylactic acid (PLA)-based material is a biopolymer made from renewable raw materials launched last year by our Automotive division. But that was just the beginning: By 2035, we aim to offer a bioplastic or recycled alternative for each of the plastics we have sold to date. In addition, we intend to invest more in the circular economy. Our goal is to systematically integrate sustainability into our supply chain. To do so, we also need our customers to join us in taking this path toward sustainability.

We are ready to take on the challenges of the future. That is why we have incorporated the initial strategic considerations in our second Sustainability Report, which you now hold in your hands. We are aware that this is only the beginning. This year, we aim to roll out a comprehensive sustainability strategy – in full awareness of the fact that we are setting ambitious goals that are dependent not just on us, but on external circumstances such as public policy, the current state of research, and market accessibility.

We are currently operating in a challenging environment. The coronavirus pandemic has captured not just our attention for the past year and a half, but that of the entire world. The long-term macroeconomic effects of the pandemic are not yet really foreseeable, which means the data in this Sustainability Report are comparable to those of previous years only to a very limited degree. Short-term closures of our Automotive division plans due to a lack of orders from automobile manufacturers and operations delayed by hospitals, which affected our Medical division, had and are having a major impact on our business as well as specifically on our sustainability figures.

We expect the effects of the coronavirus to be felt even after the end of the pandemic. Although we anticipate a rapid economic recovery, we must work harder to protect our employees from infectious diseases at the same time. COVID-19 has showed us that we must take considerably more precautionary measures. Our mission is to review and implement these steps to guarantee the greatest possible degree of safety for our workforce. In doing so, we can draw on the extensive experience we amassed in the last 18 months.

Sustainability is multi-faceted. We focus primarily on people, locations, partnerships, and products in our second Sustainability Report. In addition, we have showcased the many and varied projects of the Röchling Stiftung, which has brought together all activities undertaken by the Röchling family toward meeting its responsibility to society for more than 30 years now.

Prof. Dr.
Hanns-Peter Knaebel
President & CEO

Franz Lübbers
Executive Board

Evelyn Thome
Executive Board

For reasons of legibility, the text may not distinguish between genders.
All genders are addressed equally in all formulations – unless the context clearly implies a different interpretation.

SUSTAIN-ABILITY

Overview

The Röchling Group has been shaping industry. Worldwide. For nearly 200 years. We transform the lives of people every day with our customized plastics: they reduce the weight of cars, make medication packaging more secure, and improve industrial applications.

Our workforce of around 11,094 people is located in the places where our customers are – in 90 locations in 25 countries. The Group's three divisions – Industrial, Automotive, and Medical – generated joint annual sales of 2.039 billion euro in 2020.

The underlying premise: Röchling intends to use resources as efficiently as possible in manufacturing. This is why we analyze our material and energy flows and develop measures to curb energy consumption, emissions, waste materials, and waste water.

Röchling Industrial

The Industrial division is the expert for optimal materials for every use. We develop and supply individual products made of plastic for all industrial areas. This is why we have the broadest product range of thermoplastics and composite materials. We supply our customers with semi-finished products or machined components.

Röchling Automotive

The Automotive division advances mobility. Our product solutions in the areas of aerodynamics, propulsion and structural lightweight help solve major challenges. We protect the environment while also improving the driving experience.

Röchling Medical

The Medical division is the reliable partner to leading global companies when it comes to the components, services and smart plastic products that are needed in the healthcare industry. We develop solutions in the fields of diagnostics, fluid management, pharma as well as surgery and interventional.

11,094
employees*

2,039
billion euros
in sales

25
countries

90
locations

* including temporary employees

Guiding Principles

Our principles for responsible conduct and sustainable business planning are embedded in our Vision and Mission.

Guidelines applicable throughout the Group require all employees to conduct themselves with integrity and in line with rules and sustainability standards. All employees are encouraged to contribute to our Company's collective effort to meet our sustainability targets.

Our management systems put in place the necessary global structures in all business processes to guarantee that we conduct our business responsibly. We certify our locations to internationally accepted standards: ISO 14001 (environmental management), ISO 45001 (occupational safety), ISO 50001 (energy management) and to sector-specific quality standards such as ISO 9001 (quality management), IATF 16949 (automotive industry quality management), and ISO 13485 (medical device quality management).

At the operational and local levels, we further specify more detailed requirements for our work in work instructions and process specifications. The applicable guidelines, instructions, and specifications are available to all employees at our certified locations. They are also regularly informed about new or updated rules.

We expect our suppliers to share our fundamental values – including sustainability requirements. Only together can we ensure that our supply chain complies with the law and sustainable, responsible conduct.

International Standards and Frameworks

In its 2030 Agenda for Sustainable Development (2030 Agenda), the United Nations laid down the path for achieving worldwide economic progress in conjunction with social justice. The targets of this Agenda are described in the Sustainable Development Goals (SDGs).

The UN Global Compact is the world's largest and most important responsible corporate governance initiative. Based on ten universal principles, the UN Global Compact pursues the vision of an inclusive and sustainable global economy for the benefit of all people, communities, and markets. As a signatory to the UN Global Compact, Röchling acknowledges these principles as binding for the Group as a whole.

UN Sustainable Development Goals

The UN's 2030 Agenda featuring 17 Sustainable Development Goals (SDGs) is a global plan to promote sustainable peace and prosperity as well as protecting our planet.

THE GLOBAL COMPACT
WE SUPPORT

UN Global Compact

The UN Global Compact is the world's largest and most important responsible corporate governance initiative.

Vision

At Röchling, we are always thinking of future generations. This is why we plan beyond today for a sustainable future for us all. Our forward-looking products, services, and commitment combine the advantages of high-performance plastic solutions with environmental protection and social advances for a healthy future for our planet.

Mission

As a family-owned company, Röchling is aware of its responsibility to operate our company sustainably. For us, that means contributing to social and economic progress and protecting our environment. We are continually shrinking our technological and environmental footprint to develop excellent, pioneering solutions for our Industrial, Automotive, and Medical partners worldwide while at the same time assuming responsibility for our employees, our surroundings, our shareholders, our customers, and the environment. Our management has promised reliable support to all interested parties in their efforts to fulfill the requirements of sustainability.

Sustainability Guidelines

Safeguarding the future of coming generations is our priority. As a family-owned company with a history reaching back nearly 200 years, we do not focus on short-term success, but instead follow a long-term perspective. It is also an incentive to us to deal responsibly with resources for the sake of our descendants. Sustainable growth is a fundamental principle underlying our business activities. And it is a way to measure our business success.

As a processor of engineering plastics, our expertise lies in a material that makes an important contribution to environmental protection and the conservation of resources thanks to its low weight, long service life, and its many possible applications. Of course, we are aware that plastic waste causes ecological problems. As company that is aware of its social and ecological responsibility, we want to make our contribution to preserving the natural foundations of life. The Röchling Group therefore also feels responsible for minimizing the packaging waste in our environment.

With resource-efficient production processes, we strive to sustainably minimize our environmental footprint. We also expect this of others in our supply chain. This is why we analyze our material and energy flows and develop measures to curb energy consumption, emissions, waste materials, and waste water. In doing so, we strive to maintain our technological advantage obtained from decades of experience. Our forward-looking products and services enable holistic, sustainable solutions that boost the success of our customers in all industries across the globe.

We feel equally responsible for our employees: we support each other and are a reliable partner to our staff. Their safety and their health are guiding priorities for us. We are committed to the ideals of diversity and equality, to achieving a work-life balance and to the training and further qualification of our employees. We are confident that our company can only continue to exist and serve future generations if we achieve our business goals and at the same time take responsibility for our actions. That is why our company is a dependable partner to communities, government, and the environment at all of our locations.


Vision & Mission
Röchling's sustainable principles to safeguard the company's future
Sustainability Strategy
Long-term, Group-wide guidance for sustainability efforts
Guidelines & Management Systems
Group-wide guidelines and certified management systems
Process Descriptions, Work Instructions, Specification Documents
Focused plans for action at the operational level

Sustainability Strategy

Sustainability is the principle that guides us in doing business. We provided an initial glimpse into our many and varied activities in this area in our 2018 Sustainability Report. Thanks to our new Sustainability Guidelines and our Vision and Mission, we have expanded the umbrella of our sustainable business activities. These will be supplemented with a long-term Sustainability Strategy that we are currently formulating in detail and will publish soon.

The undercurrent here is the Röchling Group's international orientation. The Sustainability Guidelines provide a standard for our conduct in all divisions. We are developing specific, measurable targets that we want to achieve by 2025. Our managerial staff is committed to actively supporting our sustainability efforts. In order to even more strongly highlight the relevance of sustainability in our business, we set up an office for a sustainability officer in early 2021.

The Röchling Group's Sustainability Strategy calls for four areas of action:

People – Employer of Choice

Our employees are the foundation of our success. That is why we concentrate on their health, safety, well-being, and their families. We encourage and motivate our workforce by providing a safe workplace, fresh leadership concepts, and respectful personal interactions. As part of this focus, we always keep in mind the needs of society. Key issues for us are promoting talent, diversity, inclusion, tolerance, and security for the future.

Locations – Places to Live and Work

We plan uniform standards for developing, realizing and operating sustainable sites. To this end, we consistently invest in technologies with promise for the future to create an up-to-date environment for living and working. We use raw materials and energy as efficiently as possible and keep waste quantities to a minimum. In all of our activities, we also monitor the impact on our adjacent neighbors and communities.

Partnerships – Trusting Relationships

As a company we benefit from satisfied customers, well-educated employees, collaborative supplier relationships, legal and political stability, and a smoothly functioning infrastructure. For this reason, we are a reliable partner to all stakeholders. Our sustainability efforts cascade down through our supply chain through our regular review of the use of environmentally friendly raw materials.

Products – Sustainable Solutions

Sustainable products and their development are integral to our corporate strategy. We already aim to reduce our consumption of resources and structure our entire production process in line with sustainability. That is already a core element in our research and development approach. We expand our range of bioplastics on an ongoing basis and continually review the possible use of recycled materials in our production process.


PEOPLE
Employer of Choice
Talent & Diversity
Health, Safety & Well-being
Corporate Culture
LOCATIONS
Places to Live and Work
Environmental Protection
Technologies of the Future
Digital Transformation
PRODUCTS
Sustainable Solutions
Sustainable Products
Innovation & Research
Recycling & Biopolymers
PARTNERSHIPS
Trusting Relationships
Organizations & Government Agencies
Supply Chain
Stakeholder Groups & Customers
Röchling
Sustainability Strategy 2025
At Röchling, this means social and economic progress while at the same time protecting and improving our environment. The goal is to be the employer of choice for our employees and the supplier of solutions for a networked, sustainable world.

PLAS-
TICS

Overview

The Röchling Group processes engineering and high-performance plastics in its Industrial, Automotive, and Medical divisions. These are plastics used in sophisticated technical applications and not plastic products such as packaging that land in the world's oceans in an uncontrolled flood of garbage. Our expertise lies in a material that makes an important contribution to environmental protection and the conservation of resources thanks to its low weight, special combination of properties, long service life, and many recycling possibilities.

Around 55,000 companies in the plastics processing industry provide some 1.56 million jobs in Europe alone. In 2019, they generated sales of over 350 billion euros and reported a positive trade balance of 13.1 billion euros. The plastics processing industry is therefore a key driver of Europe's economic strength.

Jobs

1.56 million jobs

The plastics industry provides more than 1.56 million jobs in Europe.

Companies

55,000 companies

More than 55,000 mostly small- and medium-sized companies in Europe specialize in plastics.

Sales

Over 350 billion euros

In total, the plastics industry generates sales of over 350 billion euros in Europe.

Balance of trade

13.1 billion euros

European plastics producers have a positive trade balance of 13.1 billion euros.

Engineering and High-Performance Plastics

The Röchling Group produces engineering and high-performance plastics. Our expertise lies in a material that makes an important contribution to environmental protection and the conservation of resources thanks to its low weight, long service life, and many recycling possibilities. Our plastic products stand out due to a number of characteristics such as quality, efficiency, durability, performance, and resistance to external effects.

Plastics at Röchling Industrial

Röchling Industrial is one of the world's leading processors of standard, engineering and high-performance thermoplastics and fiber-reinforced plastics manufactured using various processes for applications in nearly every segment of the capital goods industry: from chemicals, electrical and electronics, and rail vehicle construction to the leisure industry, semiconductor manufacturing, and healthcare. Röchling Industrial's materials feature exactly the combination of qualities required for each specific use. For instance, they possess excellent lubrication properties, withstand strong chemicals, feature high mechanical durability while at the same time offering thermal resistance and electrical insulation – and are suitable for lightweight construction.

Our main focus in all of our activities is to add value for customers to make them more competitive and sustainable. The superior properties of Röchling Industrial's products replace the traditional materials used to date. For instance, they provide greater energy efficiency in conveyor technology, enable the manufacture of larger wind turbine rotor blades by providing reinforcement due to their extreme tensile strength, and make it possible for the food industry to safely and hygienically produce food products.

Plastics at Röchling Automotive

We focus not only on highly complex and customer-specific manufacturing processes, but have also set the goal of becoming the top supplier of bioplastics and recycled plastics for the automotive industry. Our biopolymers are just as suitable for vehicle manufacturing as the usual plastics used. Regarding stability and durability, the new materials are even significant improvement over the standard PLA (polylactide). This is due to its better aesthetic properties, greater resistance to scratching, and dimensional stability.

The mere use of conventional engineering and high-performance plastics has a major influence on the energy efficiency of processes. Reducing the weight of vehicles has a direct impact on cutting

carbon emissions, while speeding up production processes through their use. At the end of their useful life, they reduce waste quantities, because after their long life cycle, they can again be recycled, allowing their reuse as a raw material.

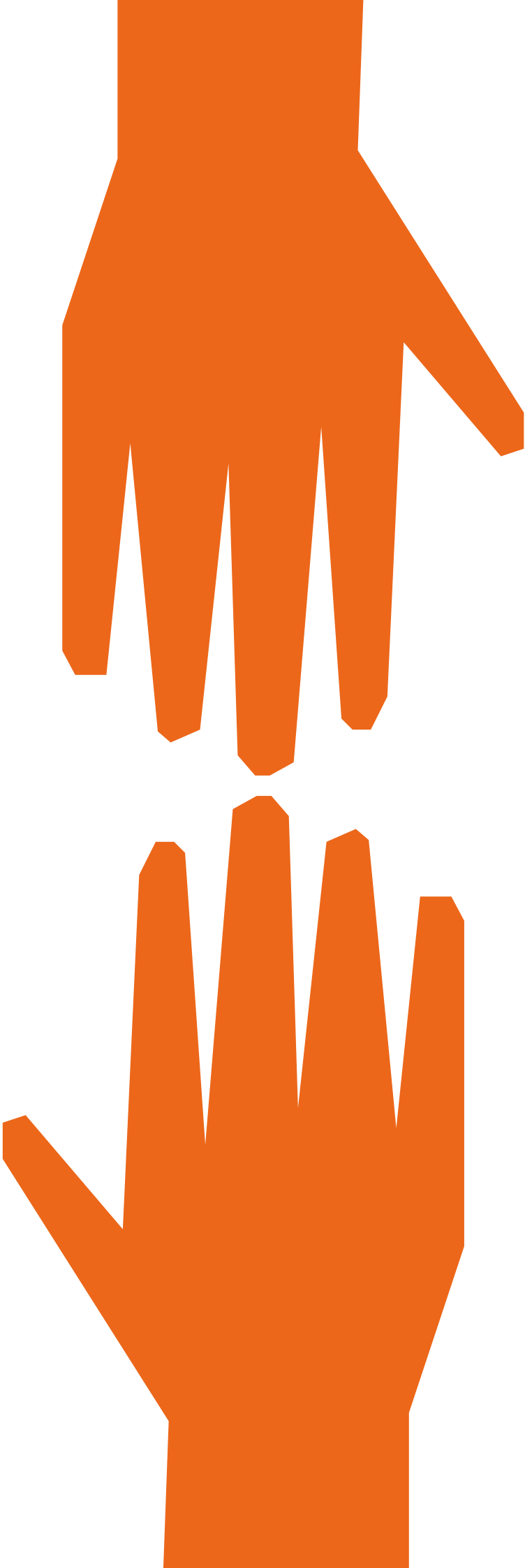
Plastics at Röchling Medical

In the medical field, our plastic products are all designed for specific uses. Thermoplastics are often used thanks to their versatility and good options for processing. They have isolating properties and do not bend. Therefore, they enable the manufacture of infusion bags that can be reclosed, breathing tubes that do not kink, and syringes that enable very exact dosing. Orthotics, prosthetics, and inlays, such as for hearing aids, are produced using thermoplastics.

The advantages of plastics in the medical field are many and varied. Plastics do not absorb odors and are resistant to water and other fluids. They are therefore used in nearly all aspects of medicine. For decades, syringes, cannulas, and infusion sets had to put through tedious sterilization procedures before they could be reused. Today, plastic-based medical products arrive at the location they will be used in sterile packaging and are generally discarded after a single use. This does not simply make the work of medical personnel easier but also improves safety for patients. In other areas, such as diagnostics, plastics are part of highly sensitive measuring instruments that are particularly durable and long lasting.

For me, ensuring a sustainable future means constantly evaluating the materials and resources we consume and designing and developing new methods of production and recycling to bring our carbon footprint to zero.

Jordan Kopping,
Sales Manager,
Röchling Direct Manufacturing Center



PEOPLE

Health, Safety, and Well-Being

The preservation and promotion of the health and well-being of our employees is our top priority. Working together responsibly includes strengthening the health of our employees, preventing health risks at work, and improving their general well-being. Safe and healthy working conditions positively impact the satisfaction and motivation of our employees.

Objective

By 2025, we will reduce the number of workplace accidents per thousand employees by more than 15 percent compared with 2020.

Our Approach and Our Goals

In addition to the focus on customers, the Röchling Group's main priority is its approximately 11,094 employees at 90 locations across the globe. Ultimately, it is they who contribute their knowledge and passion to ensure the success of our business partners as well as that of the Group. As a family-owned company, we greatly value guaranteeing a calm and safe working environment for our colleagues. For this reason, our executives commit to treat their employees collegially, provide them regular feedback on their work, and motivate staff to forge new paths and develop their potential. In order to make this effort transparent, we introduced our new leadership principles in 2019 and launched our WeLead management program in 2020. This forms the foundation for contemporary, up-to-date leadership in our group of companies.

Increasing employee satisfaction and their well-being is of great concern to us. We therefore strive to improve our employees' work-life balance and offer our workforce suitable working time models to do so. Remote working is a core component of our working world – and not just because of the effects of the current coronavirus pandemic. These measures enable us to promote the work-life balance of our employees and ensure that we can minimize their physical and psychological stress. We see modern, clean, safe workplaces as a symbol of a positive working environment in which employees can feel comfortable and productive. Our aim is to reduce workplace accidents to the absolute minimum.

It goes without saying that we protect our colleagues as much as we possibly can from negative environmental impacts.

Occupational safety and health are subject to mandatory reporting and are therefore something our management focuses on. As early as the planning stage of production lines and ergonomically designed workstations, the Röchling Group takes steps to avoid creating waste. Workflows are constantly monitored for possible hazards. Our occupational safety professionals in our three divisions work with executives and employees to develop strategies for preventing workplace accidents. This enables potential hazards to be identified, assessed and remedied at an early stage. Röchling Automotive has therefore been certified to ISO 45001 (occupational safety) to underscore that occupational health and safety are integrated into our processes.

Our Performance

Occupational Safety

The safety of our employees remains the top goal of our business activities. We therefore take care to use safe machinery and provide suitable personal protective gear. Regular safety discussions, walk-throughs, training, and information campaigns are among the steps we take to guarantee that our employees have a safe place to work.

The Automotive division holds an annual "Global Safety Week." These safety days serve primarily to include our employees in the analysis of safety issues. During this event, they can use a preprinted form to identify possible hazards and stressors at the workplace. The feedback is evaluated by safety professionals and therefore points out potential hazards. At the same time, with this approach we motivate our employees to grapple with the issue of occupational safety.

In 2019, Röchling Automotive was awarded the "Sicher mit System" ("Systematic Safety") quality seal for the second time. This involved an independent expert reviewing the effectiveness of Röchling's occupational safety management with a special focus on the conduct of employees and executives in line with occupational safety standards.

Employer of Choice

Our declared goal is to be an "employer of choice" where employees feel comfortable and secure from their very first day at work and choose to continue their professional careers at the company as long as possible. The Group People Management department at the holding company in Mannheim worked for the past two years to develop a comprehensive plan integrating the HR departments of the three divisions worldwide. This plan enables the Röchling Group to lay the foundation for a modern HR community extending beyond division boundaries, standardizes processes, and ensures greater reliability for employees and job candidates.

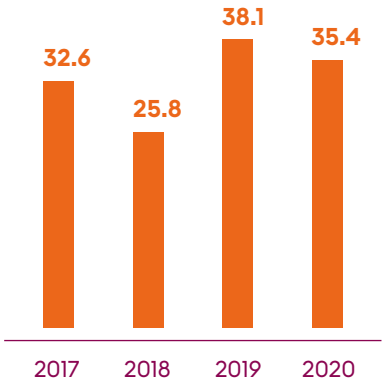
COVID-19 Measures

When the coronavirus pandemic broke out, the Röchling Group set up task forces at the holding company and divisions early on which regularly analyzed current developments and took appropriate steps to guide employees through this challenging time at work as safely as possible. The option to switch to remote working was established at an early stage to reduce the number of employees on-site and therefore minimize the risk of infection at the workplace. Where this is not possible, Röchling provides the employees in question with disinfectants and masks. Floor markings ensure compliance with physical distancing rules at the reception desk and in hallways. The protective measures taken by the Röchling Group also include taking employee temperatures and requiring masks to be worn if the necessary spacing between individuals cannot be maintained. Members of the task force at the holding company, which include two medical doctors, regularly use the information channels available to them to inform all employees about the current situation at the company and the steps being taken. This strict approach has contributed to very minimal community spread at our locations up through the beginning of 2021. In the course of fighting the pandemic, Röchling Automotive Italia was recognized as a "Welfare Champion" for its comprehensive prevention and safety plan in September 2020. Moreover, the measures taken by the Röchling Group in reaction to the pandemic were also designated as "Best Practice" by the trade association for the raw materials and chemical industry (BG RCI).

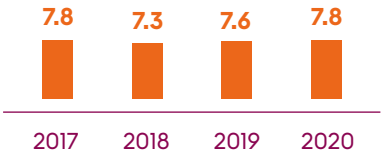
The 1,000-Man Rate of Reportable, Work-Related Accidents

converted to the number of 1,000 fulltime employees

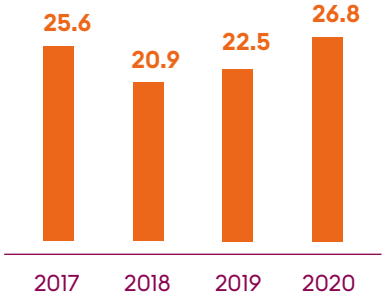
Industrial



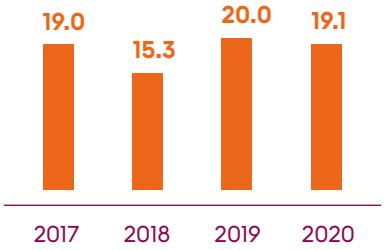
Automotive



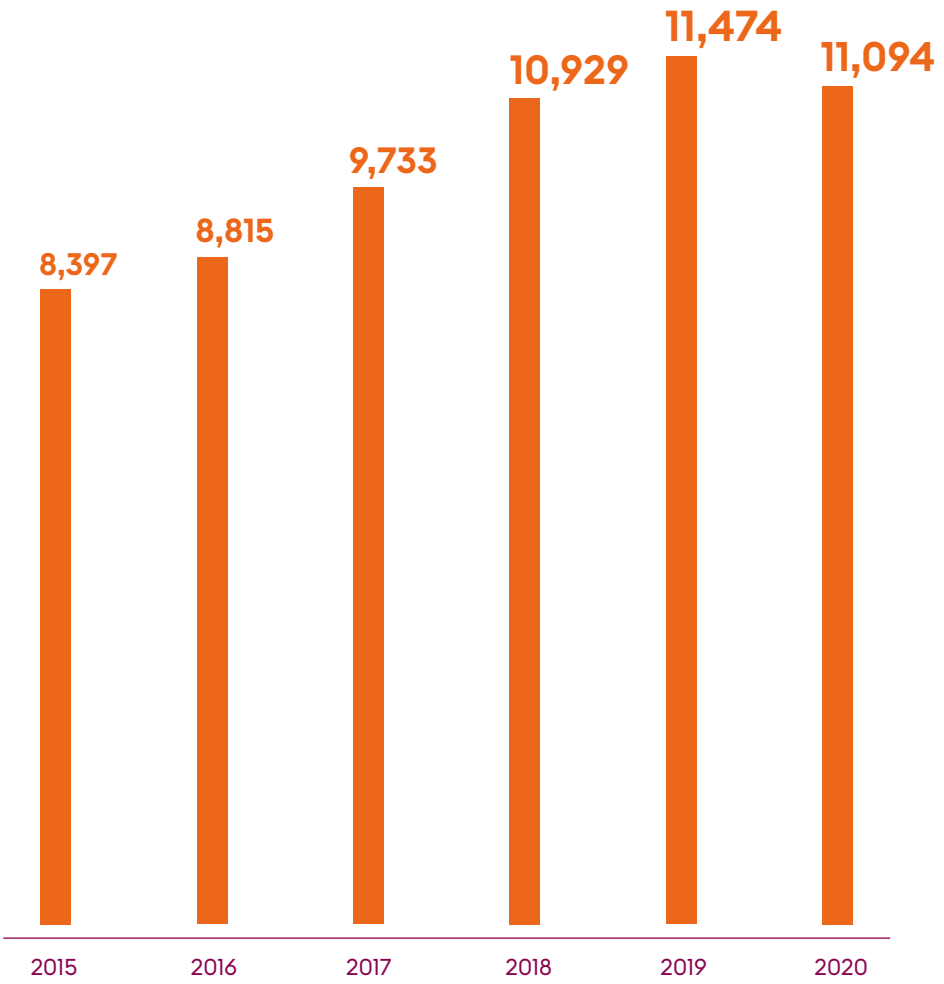
Medical



Röchling Group



Number of Employees in the Röchling Group



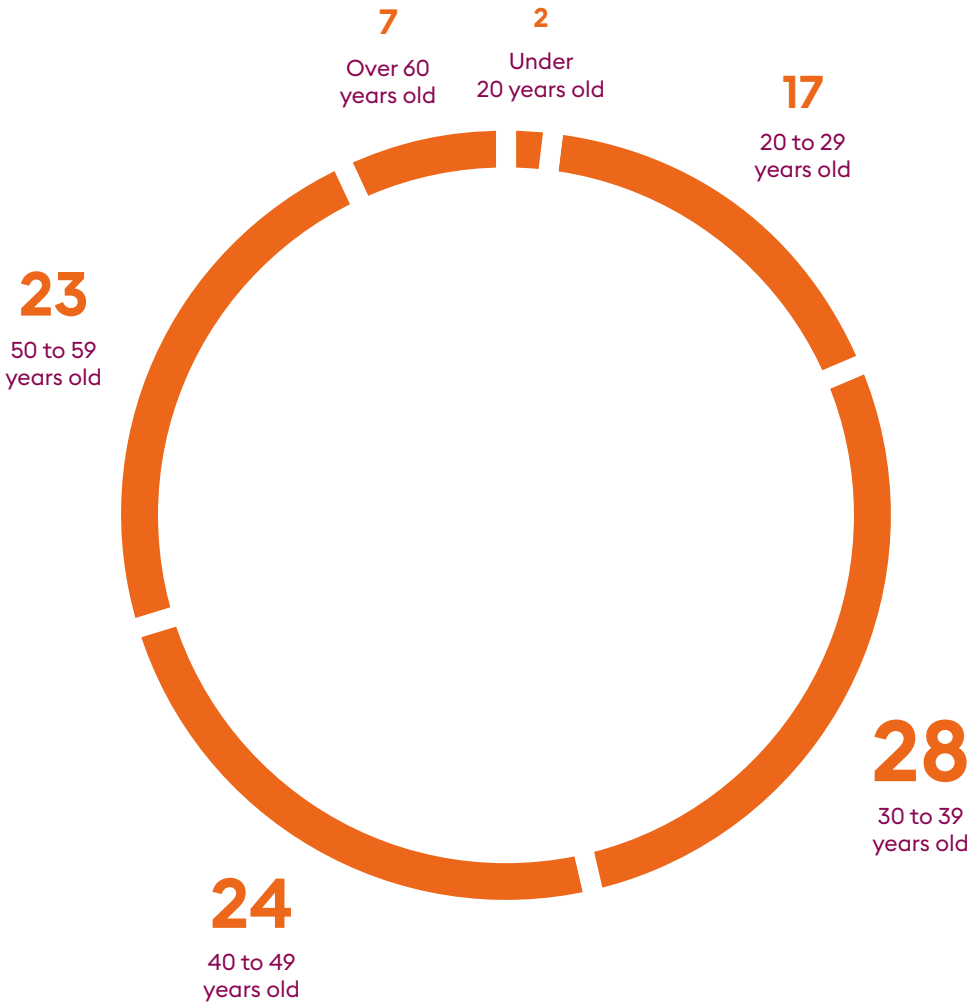
Outlook

Safety at work is paramount for us. Any accident is one too many for us and provides an opportunity to carefully reexamine our workflows. We want to continually improve occupational safety and therefore further decrease the number of accidents at our locations in the coming years. By 2025, we strive to reduce the number of workplace accidents per thousand employees by more than 15 percent compared with 2020.

The coronavirus pandemic has fundamentally changed our personal and professional lives over the last year and a half. At our company, we will continue to institute various occupational safety measures as protection against pandemics. For us, occupational health and safety will therefore explicitly include also shielding our employees from infectious disease. This is why we are specifically reviewing which of the safety measures we have taken will remain in place at our sites after the end of the coronavirus pandemic.

Age Breakdown of Röchling Group Employees

in percent



The pandemic has also showed us that we can successfully implement remote work to further improve our employees' work-life balance. We intend to continue to think about alternative working time models so that we can meet our staff's needs with even more customized arrangements. Our executives are therefore called on to systematically think through and continue to develop the plans put in place as a result of the coronavirus pandemic and adapted to each individual location.

We aim to make additional improvements as part of our "employer of choice" approach and to implement a structured onboarding process for new employees. We want our colleagues to feel welcomed and comfortable at the company even before their employment contract begins. Another area of improvement is our exit management process so that we can safeguard the knowledge of employees who are leaving the company and make it usable for their colleagues. In this way, we wish to maintain a relationship with particularly long-term employees even beyond their period of employment.

Talent and Diversity

In an international company like Röchling, diversity is highly prioritized. We are confident that an environment featuring mutual tolerance and respect is essential if we intend to reach our corporate goals. Promoting talent and providing education and further training are part of our HR strategy.

Objective

By 2030, we will increase the share of women in leadership positions to at least 25 percent.

Our Approach and Our Goals

Motivated, qualified, and curious employees are of fundamental importance in securing the Röchling Group's future. For this reason, we offer a new career and long-term prospects to employees coming from other fields. Continual professional development and promotion of our employees' strengths are a core element of our company's policies. We are increasingly digitizing our training processes and offerings to provide our employees with sustainable opportunities for development. Going forward, our development of a digital learning strategy will enable employees to access training online and learn collaboratively and at their own pace.

We train young people and therefore provide them with prospects for the future. Talent at Röchling is promoted with comprehensive training options and opportunities to rise up the ranks in the company. We also offer these employees an international perspective at various locations throughout the Röchling Group. And that pays off: Numerous employees in recent years have worked their way up to leadership positions.

For us, diversity is the expression of working together in a professional, multi-faceted, focused, and tolerant manner. We are confident that this is the only way our employees can fully develop their potential for the benefit of our company. This is why the Röchling Group signed on to the "Made in Germany – Made by Diversity" initiative in 2019, in which 50 major German corporations speak out in favor of greater openness to the world and tolerance. For our company, a person's background is not the relevant issue: it is open-minded and peaceful interactions among people.

Thinking and acting sustainably is a responsibility each and every one of us should take on.

Iris Willrich,
Head of Human Resources,
Röchling Industrial Lahnstein

We are committed to guaranteeing equal opportunity in employment and have a zero-tolerance policy for discrimination. Röchling does not treat people differently on the basis of gender, race, skin color, disability, place of origin, religion, age, or sexual orientation. We actively promote the integration of people with disabilities into the labor market and offer them opportunities for work at a safe and attractive workplace.

Our Performance

Woman in Traditional Male Occupations

Around 70 percent of the employees in a production plant work in an industrial setting. The dominant occupations are therefore those classically considered professions for men. Currently, 23 percent of the Röchling Group's employees are women.

We aim to increase the percentage of women in our workforce and therefore give young women a look into what our workday is like early on – with the awareness that intercultural and mixed gender teams with younger and older coworkers increase the quality of decision-making. We are aware that women are still underrepresented in leadership positions.

Education and Further Training

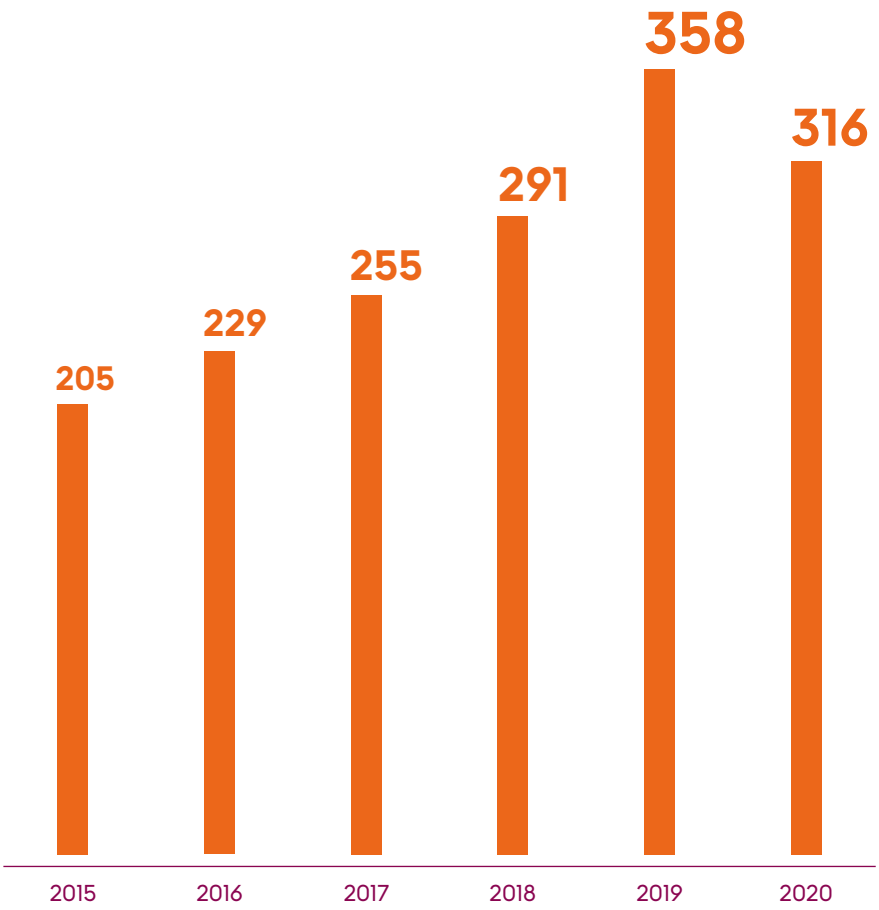
Röchling is stepping up its efforts to train young people, offering apprenticeships in 15 different occupations along with four cooperative courses of study at 20 locations in Germany. In 2020, a total of 316 of our colleagues completed their apprenticeships or cooperative courses of study at the Röchling Group. Röchling Automotive set up a training program in China as early as 2007. Currently, partnerships with the universities in Kunshan and Jiangsu provide college students with the opportunity to complete practical training at Röchling. This initiative was recognized with the Röchling Group's "Enkel Award" in 2019. Our site in Haren, Germany, sends training ambassadors to trade fairs and exchanges to give young people a personal introduction to various occupations by presenting information about their professions and familiarizing interested visitors to the booth with the company.

The further training of our employees is an important investment in the future of our company. This is why the Röchling Group devotes considerable funds to training the workforce, investing nearly 3.2 million euros for this purpose in 2019.

Executive Development

In 2019, the Röchling Group successfully launched the new International Leadership Series. This executive development program accepted 47 employees from the United States, China, Italy, and Spain in its first round. The company plans to continue this program, and a second round has already been launched. In addition, the Röchling Group has offered colleagues in Germany a leadership series for quite some time now that trains executives in topics relevant to them. The International Leadership Series was designed as an equivalent to this program.

Number of Apprentices in the Röchling Group



Seminar Program

Our extensive seminar program will be relaunched in 2021 and will incorporate what we have learned from the coronavirus pandemic and the development of digital training content. In the future, many of our education and further training courses previously offered in-person as part of our centralized seminar program in recent years will be held at the local level or made available digitally. Moreover, the HR departments in the divisions and HR employees on site can independently decide which training courses they wish to offer to their employees. This creates a more focused and tailored way to train our workforce.

Diversity in the Röchling Group

Diversity is integral to the Röchling Group. Various nationalities and cultures define collaboration within our company. We value diversity in our workforce, because it is a major contributor to our international competitiveness, our focus on customers, and therefore our success.

Outlook

We meet the requirements of the market and the desire of our employees for state-of-the-art training. This is why we will establish a Digital Learning Strategy and Global Learning Management System in the coming years. In early 2021, we launched a pilot project to this end in Germany and throughout Europe. The next step will be to roll out the strategy and management system to the other locations operated by the Röchling Group.

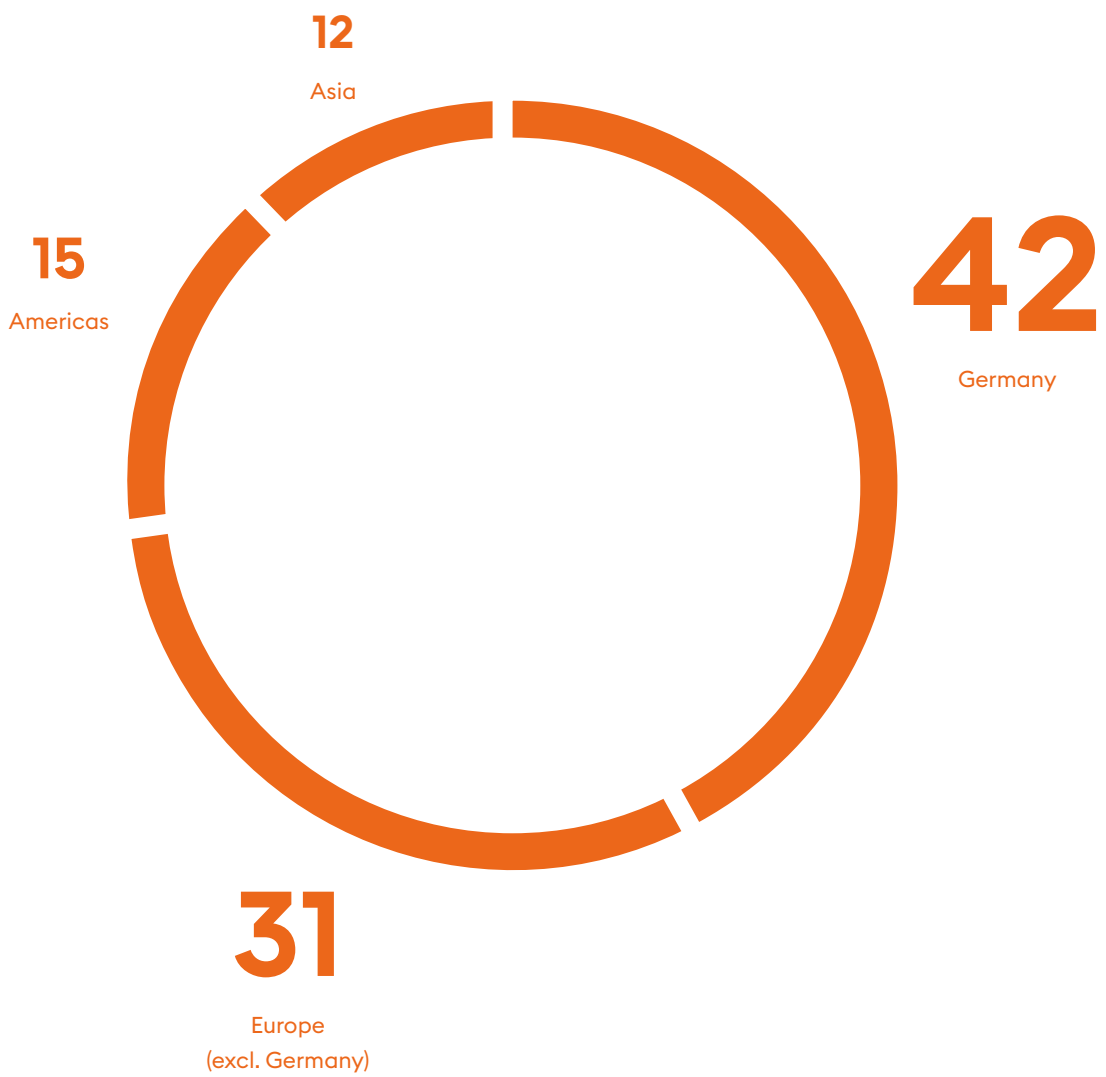
Our doors continue to be open to talent. Promoting the skills and abilities of our employees remains a key part of how we do business. This is the only way our company can stay fit for the future. We strive to continually adapt our further training program to the needs of our company and the locations as well as of individual employees. Participants are selected according to objective and transparent criteria.

By 2030, the Röchling Group will increase the percentage of women in our workforce and the share of women in leadership positions. Our goal is for women to make up at least 25 percent of managers. This is our company's contribution to gender equality and a more equitable distribution of responsibilities and leadership among our employees.

Diversity plays a major role at Röchling and will continue to do so in the future. By 2025 we plan to introduce diversity as a mandatory criterion as part of our holistic objective. Until then we will undertake a number of activities to promote diversity in our group of companies. Our target vision is "Diversity in Everything We Do." In the course of accomplishing this goal, we will sign the Diversity Charter for German companies and therefore commit to embracing and valuing diversity every day.

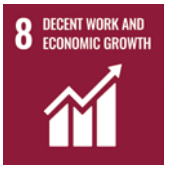
Employees by Major Geographical Region

in percent



Corporate Culture

We promote a corporate culture in which responsible and morally unobjectionable conduct and striving for the best possible performance are not in conflict – they are complementary. These values are applicable at all times and everywhere, for all employees.



Objective

By 2023, we will conduct a Group-wide employee survey focused on sustainability.

Our Approach and Our Goals

The Röchling Group requires that all employees follow a Code of Conduct and actively ensures compliance. This guideline represents a binding statement of our convictions relating to compliance with rules and regulations, voluntary commitments, internal guidelines, and ethical standards.

We advocate strongly for humane working conditions and worker rights and take a clear position against forced labor, child labor, and any other form of exploitation. It goes without saying that our working conditions align with human rights standards. We also expect our customers and suppliers to observe these fundamental values for human interaction. Of central importance for us are the UN Guiding Principles on Business and Human Rights and the associated National Action Plan on Business and Human Rights in Germany, the UN Human Rights Charter, and the International Labour Organisation (ILO) Core Labor Standards.

A rock-solid principle we follow is that we wish to prevail over the competition solely based on our brands and the quality of our products. This is in alignment with our company's values: pioneering, excellent, and reliable. In this way, we can generate optimum customer benefits and long-term business success. We simultaneously ensure than our employees are protected from unlawful and unethical action to achieve corporate goals.

We are aware not only of our environmental responsibility but also of our responsibility to society, which stems from our decisions. This corporate social responsibility is exercised primarily locally. Our locations initiate and independently take responsibility for charity projects, donations, and charitable activities worldwide, which are carefully matched to the specific needs of the respective regions.

Our Performance

Interacting in the Digital World

We are aware that communication can result in misunderstandings and a lack of clarity, especially considering the various cultures of our employees from more than 25 completely different countries. In order to guarantee fair and peaceful exchange among employees, the Röchling Group therefore approved a Code of Conduct for online interaction among staff in 2020. These basic rules ensure that our company remains a positive place for communication and that employees collaborate with one another and support each other.

Donations

In 2019, the Röchling Group donated a total of 149,000 euros, while in 2020 this figure was 155,000 euros, not to mention the wide variety of independent initiatives launched by employees, such as donation drives to combat poverty. For instance, employees at our Industrial division location in High Peaks, UK, began a donation drive in spring 2020. The proceeds of this initiative were donated to the Macmillan Cancer Support. The focus here is on supporting non-profit foundations as well as events and the activities of associations. Employees at Röchling Medical in Brensbach, Germany, organized a donation campaign for Sternenkinderzentrum Odenwald, a children's center. In addition to an annual call for donations for charitable institutions in the region, apprentices at our Industrial division site in Haren, Germany, financially supported a project by the Imme Bourtanger Moor e.V. beekeepers' organization. Röchling Medical Waldachtal, Germany, donated the proceeds from a customer survey to the NGO One Earth – One Ocean e.V. at the end of 2020. This organization aims to clear the world's waterways of plastic waste, oil, and other pollutants.

Engagement in Communities

At our Automotive division's site in Changchun, China, employees participated in a campaign to collect donations for disadvantaged children and village residents in the Shuangyang district in September 2020. The objective of the campaign is to combat poverty in the region. In summer 2020, Röchling Automotive in Laives, Italy, began supporting the town of Laives with a four-year sponsorship of a vehicle to help older people, people with disabilities, or underprivileged people without access to transportation to get around.

Commitment to Employees and Their Families

We create a family environment at our locations. At family days, we invite employees to show their workplace to their families and other relatives. This creates a sense of belonging beyond just the employment relationship. The community feeling is further reinforced by other activities such as summer festivals and Christmas parties as well as the participation of our employees in cycling events in Germany. In 2020, our Industrial division site in Xanten, Germany, held a virtual summer festival in compliance with the physical distancing rules implemented due to the coronavirus pandemic. A total of 90 employees received a party package for "Sommerfest@Home," which featured 300 attendees. The festival was streamed online.

Outlook

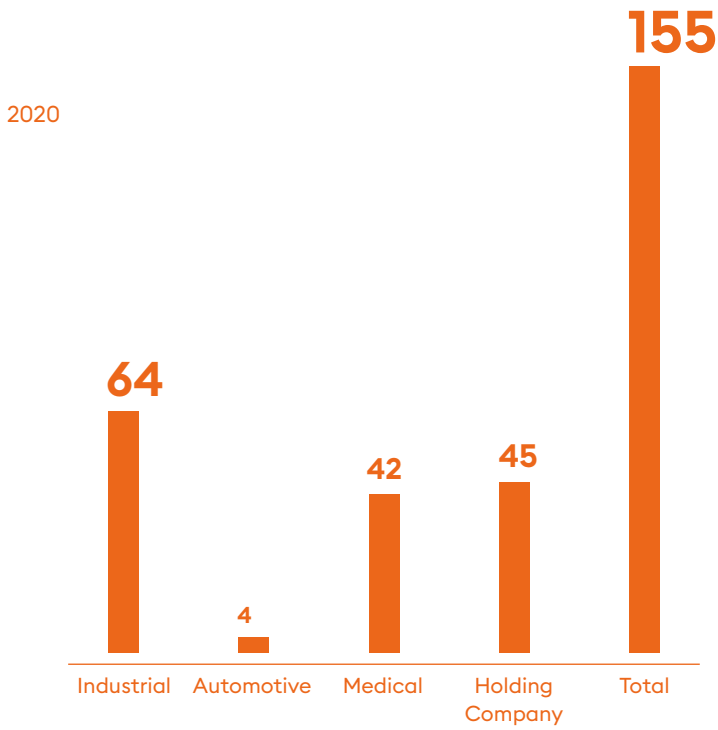
We take compliance with human rights standards and current labor and social standards seriously in our company. This is why Röchling is becoming a signatory to the UN Global Compact in 2021 to clearly announce our position. We therefore support an inclusive and sustainable global economy based on the Ten Principles of the UN Global Compact and the UN Sustainable Development Goals.

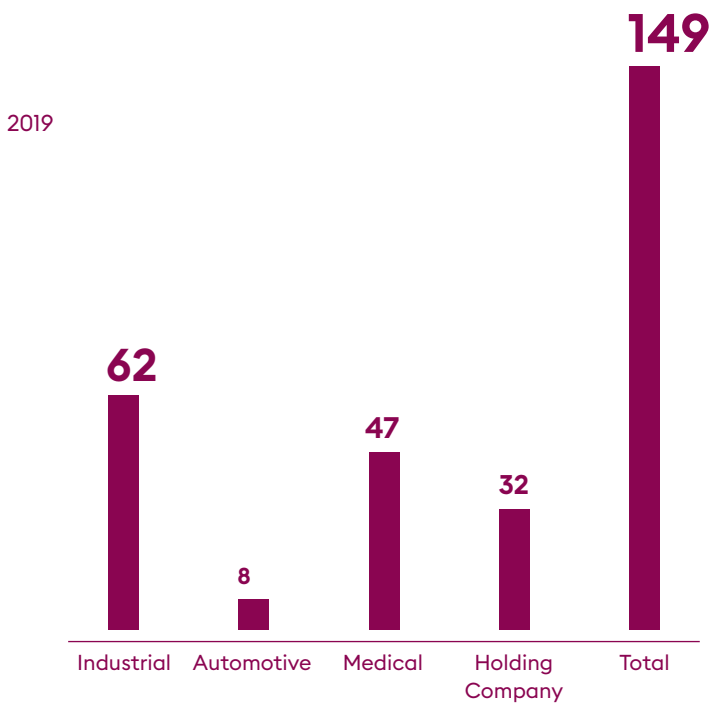
We will also step up our requirements for suppliers and develop a supplier code of conduct by 2022. In this way, we aim to ensure that we take into account not only business considerations in our relationships with suppliers but also environmental factors, compliance with human rights regulations, humane working conditions, and anti-discrimination and corruption prevention considerations.

Sports are an important way for people to integrate into society. Sports bring people together, create connections, and provide inspiration, whether those participating are community members or high-performance athletes. This is why the Röchling Group began supporting initiatives in 2021 as a member of the "Sportregion Rhein-Neckar" association to promote competitive sports and talented athletes in the Rhine-Neckar metropolitan area. We actively help bring together athletes, clubs, associations, municipalities, and businesses to make top-level sports possible.

Donations by the Divisions and Holding Company

in thousands of euro





LOCA-TIONS

Environmental Protection

Environmental protection and the efficient stewardship of resources are fundamental goals we pursue in operating our business. That means using all natural resources as efficiently as possible and keeping emissions to a minimum in all of our business activities.

Objective

By 2030, we plan for all of our locations to be carbon neutral (Scope 1 and 2 according to the Greenhouse Gas Protocol).

Our Approach and Our Goals

In order to protect and meet our responsibility to the environment, we measure, evaluate, and reduce our consumption of natural resources as much as possible. Our goal is to safeguard the quality of our product deliveries and of our services and developments on a permanent basis, thereby ensuring that we deliver only the best quality on schedule. This is done while taking the relevant environmental, occupational, and data protection regulations into account as well as applicable legislation and other binding regulations.

During production of medical and pharmaceutical products, the focus is firmly on patient safety as a quality criterion. We guarantee verifiable and total care and traceability of our activities all the way down to the raw materials used. With our certified management system, we are strengthening our customers' trust in our products and services. The compliance of our efforts with rules and standards is confirmed by independent authorities and results in certification of our management systems.

We avoid generating waste and the associated disposal by taking various approaches. For instance, we develop customized solutions for customers to guarantee long-lasting products and simplify the separation of components in the recycling process. We aim to avoid hazardous materials and waste in our production processes as much as possible or replace these with more environmentally friendly, safer alternatives.

We train our employees on sustainability issues, conduct information sessions, and encourage them to exchange information. In our Automotive division, we introduced an in-house reporting system in 2020 that enables all employees to directly report incidents to an employee authorized to handle such reports.

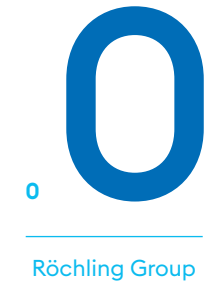
As a manufacturing company, we produce carbon emissions. We measure and analyze these to minimize the impact of this greenhouse gas on the environment to the greatest degree possible. We strive to continually lower our relative energy consumption and to use energy efficiently and cost effectively. In doing so, we take into account the energy we produce as well as the energy we purchase.

Our Performance

We analyze our material and energy flows on an ongoing basis, monitor our diversified waste management, use this information to develop ideas for improvement, and reduce the environmental impacts. Many of the Röchling Group's locations are already certified to the ISO 14001 and ISO 50001 environmental and energy management systems. These globally recognized standards confirm that we operate effective environmental and energy management systems and deal with natural resources such as air, water, raw materials, and energy in an environmentally conscious manner.

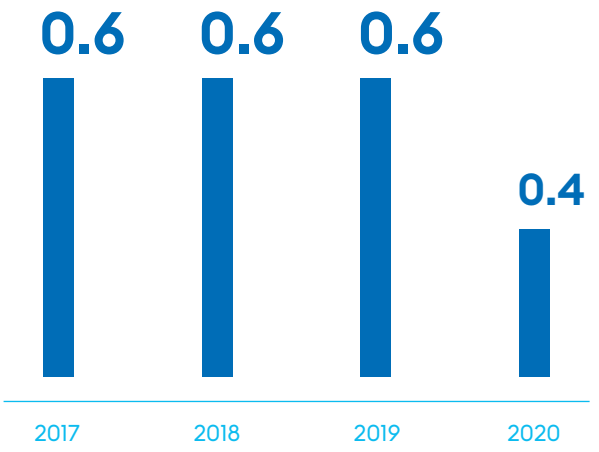
Notifiable Environmental Incidents Within the Röchling Group

2017
to
2020



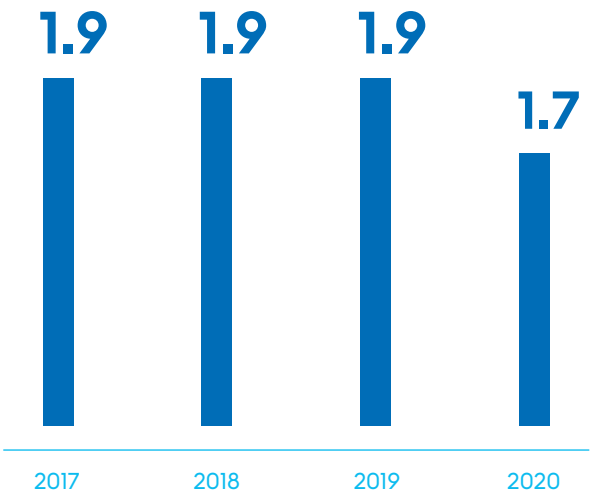
Röchling Group's Hazardous Waste

relative to the raw materials used (each in kg) in percent



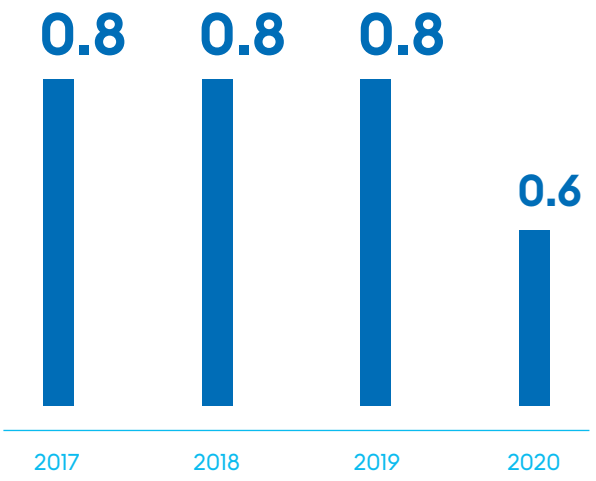
Röchling Group's Energy Consumption

relative to the raw materials used
(each in kg)



Röchling Group's Carbon Emissions

relative to the raw materials used
(each in kg)



Röchling Group Certifications

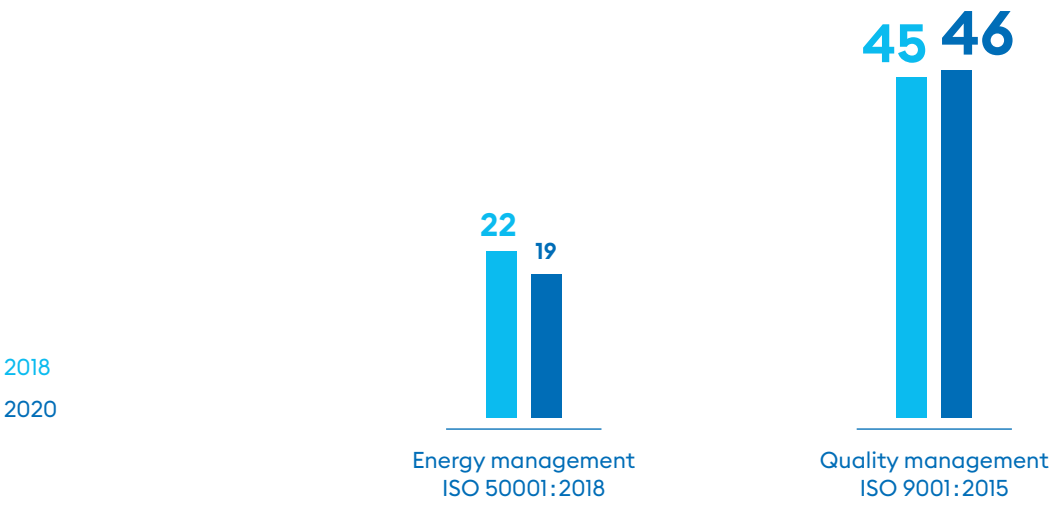
Clearly defined processes, responsibilities, and goals are fundamental to our success. We aim to confirm these by certifying the management systems in the Röchling Group. Our focus is on energy management (ISO 50001), occupational safety (ISO 45001 and ISO 18001), environmental management (ISO 14001), and quality management (ISO 9001, ISO 13485, and IATF 16949).

Solar Energy at Röchling Industrial Oepping

The Röchling Group has many locations where using solar panels to produce energy makes sense. Our first step in this direction was taken when our Industrial location in Oepping, Austria, made available the roofs of its production facilities to an energy supplier for generating solar energy in August 2019. The output so far amounts to 514 MWh, enough to

Röchling Group Certifications

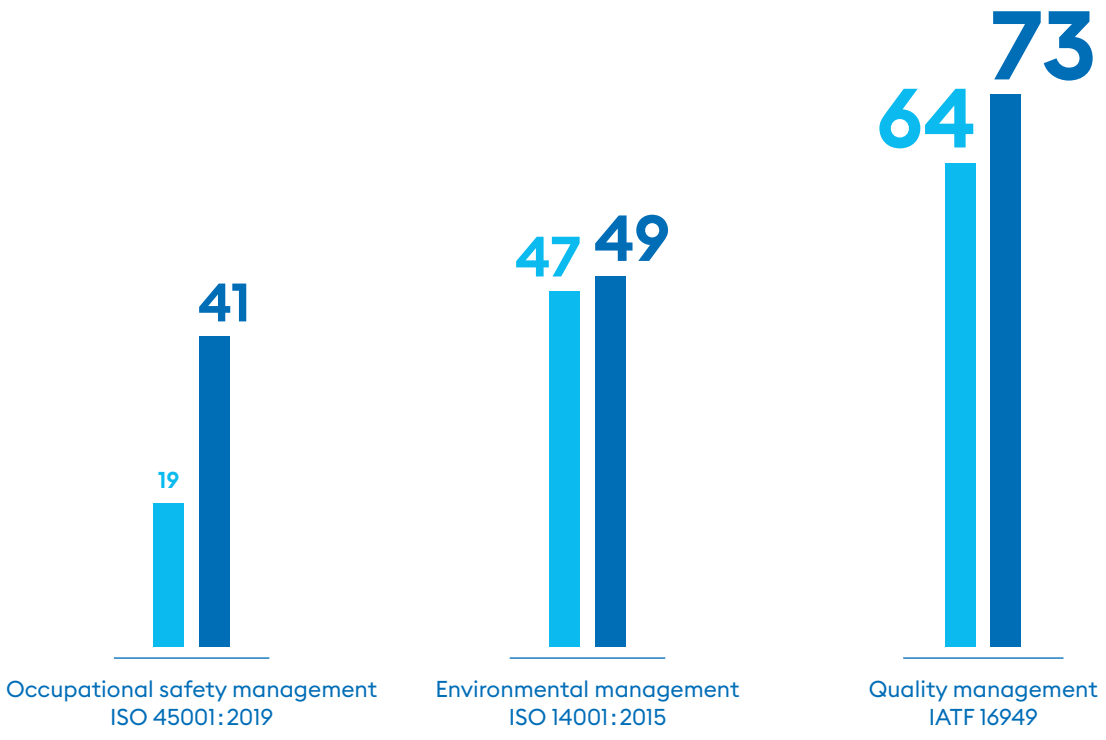
in percent



power 114 single-family homes for one year. This prevented emissions totaling 290 metric tons of carbon dioxide (as of 2020). In Vadodara, India, electricity is also generated from sunlight, and a review is being conducted of the suitability of roofs at the German locations in Haren and Geeste-Dalum for the installation of solar energy systems. It is the Röchling Group's aim to transfer these positive examples to other locations, thereby substantially contributing to the generation of clean energy.

New Spaces for Native Flora and Fauna

In spring 2020, bees began to collect pollen and nectar on the premises of our Industrial division's site in Haren, Germany. The bees were given a home in a wildflower field measuring some 25,000 square meters. Certified regional seeds were used to plant the flowers. The wildflowers and bees are part of a project carried out at Röchling by apprentices.



Emsland district is subsidizing the project in an effort to preserve native flora and fauna. A similar project was carried out by the apprentices at our Medical division's site in Waldachtal, Germany.

Product Responsibility

We continually work on making sure our products pose no risk to people or the environment when used properly and responsibly. By making a commitment to product responsibility, we agree to steadily minimize the negative impact of our products on safety, health, and the environment along the entire supply chain – from development to disposal.

The chemicals regulation of the EU known as REACH (Registration, Evaluation and Authorisation of Chemicals) aims to ensure improved protection of human health and the environment by ensuring better and earlier identification of the intrinsic characteristics of chemical substances. The regulation entered into force in 2007 and is applicable directly to all players in the plastics value chain. In the event of changes to the directive, primarily changes to the SVHC (Substances of Very High Concern) list, we check whether listed substances are contained in the articles to be delivered. If so, we inform the customers and initiate all necessary steps in each case. Likewise, we are committed to adhering to Directive 2011/65/EU (Restriction of Hazardous Substances/RoHS 2) and consequently contribute to customer satisfaction.

Outlook

Carbon Emissions

We intend for our Group's business to be climate neutral by 2030 (Scope 1 and 2 in accordance with the Greenhouse Gas Protocol, GHG). At the same time, we are preparing for the next step by more closely scrutinizing the carbon footprint of our products, suppliers, and logistics processes (Scope 3).

Waste

At our locations, we adhere to country-specific requirements regarding waste. We have already established a transparent process for tracing our waste paths and streams from the generation and to the disposal of waste. We will further decrease the amount of waste and hazardous waste we produce, and process and recycle materials.

Management Systems

Our Group-wide certification strategy defined in 2021 stipulates the goal of certification of all locations to the ISO 14001, ISO 45001, ISO 50001, and industry-relevant quality standards by 2025.

Röchling Medical Is Investing 50 Million Euros at the Neuhaus Site.

Röchling's Medical division is growing, so a new production facility with a total area of 1,850 square meters and four levels will be constructed at the location in Neuhaus am Rennweg, Germany, by the start of 2023. At the heart of the upper floor will be a clean room for production measuring around 1,700 square meters. Ground was broken on the 50-million-euro project in early October 2020. By the second quarter of 2022, we will have begun constructing the building and clean room and installing sustainable technical systems in the building.
The facility is designed with a focus on automation, Industry 4.0, and sustainability.

Sustainability is the most important element of responsibility; we are called to preserve our planet. With our innovative materials and pioneering technologies we have to support our customers in their sustainable transformation.

Mirco Brusco,
Vice President R&D Global,
Röchling Automotive Laives

Technologies of the Future

We invest in technologies of the future, including new manufacturing processes, new machinery, and the digital transformation of our locations. We are active in various organizations that aim to identify technology trends at an early stage.

Objective

By 2025, we will develop a portfolio of sustainable additive manufacturing products.

Our Approach and Our Goals

Change is in our DNA. That is the reason Röchling has transformed from a coal trading company into a global market leader in plastics. Without forward-looking technologies, this change would never have been possible. In its nearly 200-year history, the Röchling Group has always been open to change, especially when it comes to technology, and will remain so.

In the past this meant innovation primarily in steel and iron production, which made our company world-famous. Now it is fields such as additive manufacturing, clean room technologies, automation, and robotics that are most important to the Röchling Group. A public example of the latest developments is the founding of the Röchling Direct Manufacturing Center (RDMC), our new center of excellence for additive manufacturing at our location in Waldachtal, Germany. In order to account for the importance of this forward-looking technology, the RDMC was not assigned to a division but instead directly to the holding company.

For the Röchling Group, additive manufacturing processes are a key technology that complements a broad range of processes and technologies along the plastics value chain. Their many different possible materials and combinations of materials and almost unlimited design options are perfectly suited to enhance Röchling's strategic positioning as a technologically advanced solution provider in all three divisions.

We use robots in production to guarantee a reliable and reproducible production process on the one hand and to reduce the hazards to which our employees are exposed on the other hand. In clean rooms operated by our Medical division, robots decrease particle and germ contamination to protect patient safety.

In addition, validated robotics programs help us save time and reduce scrap. The software is fully networked and provides real time data analysis, i.e., processes and results can be accessed and analyzed during manufacturing from any workstation.

Our Performance

Röchling Direct Manufacturing Center – Our New Center for Additive Manufacturing

In our RDMC, we can further research additive manufacturing, develop optimal applications, and plan the most efficient material placement using tools such as computer simulations. This enables us to make strides such as structural topology optimization for lightweight components and saving up to 20 percent compared with conventional production methods thanks to intelligent product design. When the overall design of complex manufacturing equipment and recycling systems is explicitly tailored to additive manufacturing, waste plastics can immediately be reconverted into granulate, which further improves the cost effectiveness of

the already efficient use of materials. We use a broad selection of environmentally friendly materials such as a natural-fiber-reinforced TPU, PET from recycled plastic bottles, PLA made from sugar cane or corn starch, and materials containing mussel shells or wheat chaff.

Automation and Robots

In the case of the newest generation of robots at Röchling, minor improvements within specified parameters are performed by the robots themselves. This enables us to avoid downtimes, prevent collisions with the molding tools, and improve employee safety. We also use servo drives to promote energy efficiency.

At Röchling Medical, robots have been used for quite some time to operate single- and two-component injection molding machines or for assembly. Recently, additional robots were added to automate various processes and increase their efficiency.

A review is being conducted of the gripper component that removes an injection molded component from the mold through a vacuum to determine potential energy savings. For instance, the vacuum generators are controlled digitally and optimized using process parameters and a boundary value analysis, which keeps the removal process reproducible and also conserves energy.

Lightweight construction solutions are increasingly being used in gripper engineering thanks to the design of smaller robots in the Röchling Group. This allows us to produce significantly lighter grippers with a high degree of stability and process accuracy at our RDMC while at the same time cutting costs and using resources effectively.

Outlook

Manufacturing Equipment

Converting our machines and equipment to energy-efficient electric motors is something we are continually reviewing and pursuing. Ultimately, they are at the heart of an environmentally friendly manufacturing process, since motors are used in all areas of production at Röchling. In terms of climate neutrality, today's industrial landscape is unimaginable without electric motors. But even electric motors provide potential for optimization, because they already consume more than 25 percent of the worldwide electricity requirement of motors. We therefore reduce their energy consumption by electronically controlling their speed. This allows us to adjust the motor's power precisely to the need and process at hand.

If it makes sense to save energy and money, older machines are upgraded with energy-conserving technology, enabling us to save energy by optimizing their control, programs, and operating time.

RDMC as a Place for Innovation

We are confident that in the future, additive manufacturing will become increasingly important in the production of our high-performance products and in securing our market leadership position. In conjunction with our Technology & Innovation Board, the RDMC will be the driver for technological developments within the Group. Among other things, we focus on defining applications for additive manufacturing along with our customers and expanding this to make the technology available for the Röchling Group.

We also promote collaboration with machine manufacturers, service providers, and scientific partners, all with the goal of developing technologies and materials for the customer-specific products of the future. This creates the basis for the most important aspect of the RDMC: supporting the exchange of information and everyday use of this new technology in the production processes of our three divisions.

As a tradition-rich family-owned company, Röchling is a symbol of commitment to values and sustainability. Customer centricity in combination with our acceptance of our corporate environmental and social responsibility drive our policies and business activities – especially now during the pandemic.

Monir Beji,
Head of Human Resources,
Röchling Medical Neuhaus

Digital Transformation

Digitalization is the main driver of innovation in the 21st century. Digital transformation encompasses all social and economic aspects of life.

Objective

Production will be paperless at all production sites by 2030.

Our Approach and Our Goals

Digitalization is changing our work and especially the way we communicate. It defines how we handle data and massively increases the speed of innovation.

We want to make our company's digital transformation as sustainable as possible, so our entire company is discussing ideas for leveraging its potential to achieve stable, healthy, and sustainable growth. At the same time, we are adding value for our employees in ways such as increasing the opportunities for remote working, establishing new training methods, and simplifying activities in the production process.

Digitalization is increasingly raising the profile of data protection and data security. It is our top priority to protect our data from third-party access. The standards we apply to our efforts to protect our data exceed what the law requires.

We believe that digital transformation is a significant factor in remaining competitive, and are confident that it is no longer enough merely to be technologically competent and deliver good quality.

We have the responsibility to grow Sustainability as an integral part of any business and innovation. Bringing People, Planet, and Profit in harmony will enable future long-term success.

Eugen Schmidt,
Managing Director
Asian Operations,
Röchling Industrial

Our Performance

Smart Products – Connect E-Cap

Röchling Medical has developed the smart, interactive Connect E-Cap primary packaging for medications. This enables recording medications in real time, collecting the data, and helping patients with correct dosing. During the development process, the requirements of digitalization were significant factors considered along with sustainability. Connect E-Cap therefore contains a battery that can be charged via a USB interface. The electronic components can be easily removed from the rest of the packaging for disposal.

A Smart Wear Sensor Reduces Offshore Maintenance Costs

A smart wear sensor developed by Röchling Industrial in Oepping, Austria, controls wear on hydraulic hammers. These tools, which weigh several hundred metric tons, are used to prepare the sea floor for purposes such as offshore platforms, wind turbines, or bridges. Repairing a hydraulic hammer is labor intensive and expensive and takes several days. The smart wear sensor makes this process considerably more efficient and cost effective. It is part of the smart guiding system (intelligent building technology) in which several components made of Röchling plastics are used.

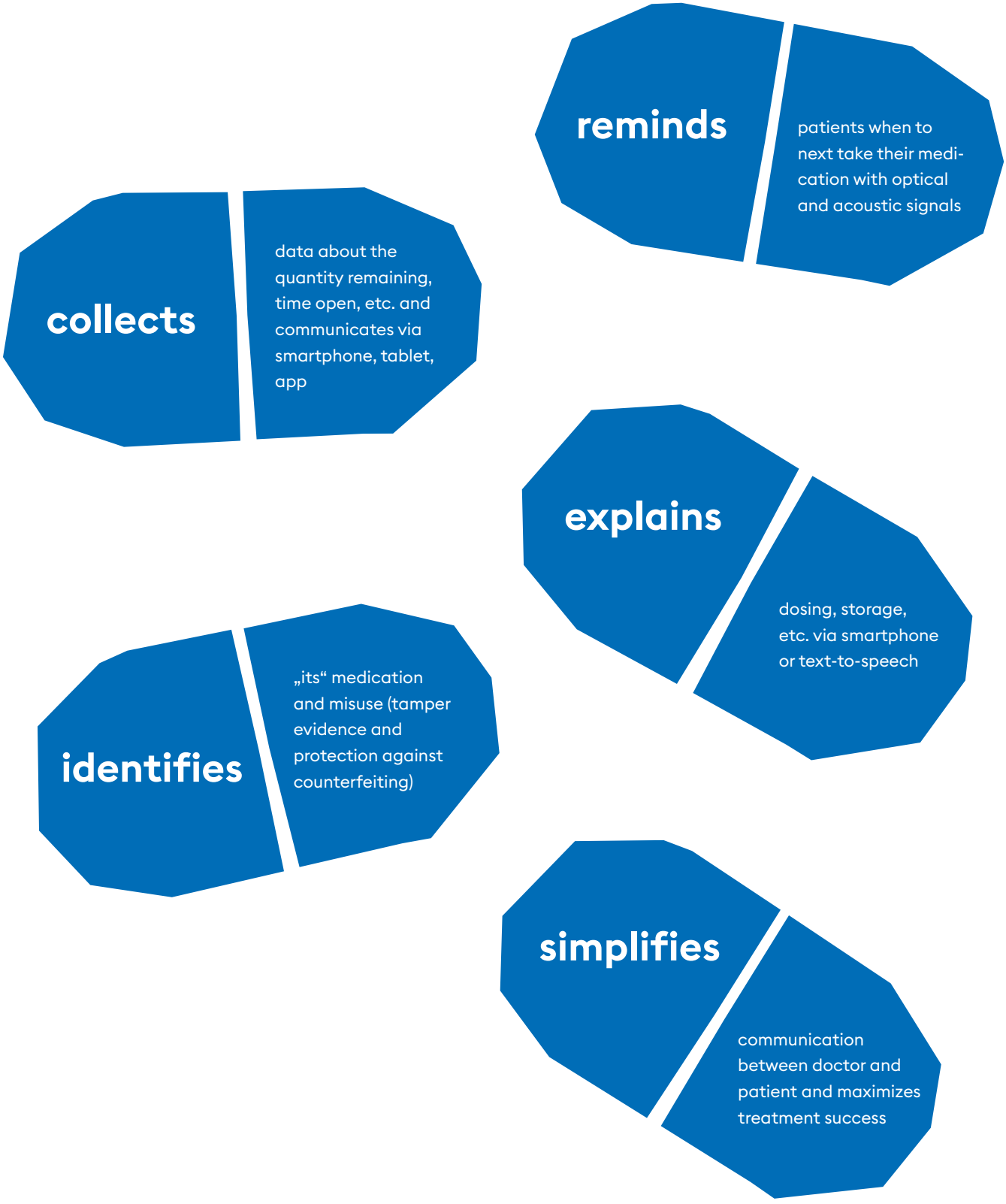
First Fully Virtual Röchling Conference

In view of the coronavirus pandemic, numerous already planned company events had to be reorganized in the past 18 months. We increasingly used digital approaches to do so. The Röchling Conference, the Röchling Group's annual management meeting, was quickly switched to take place completely online. Around 130 executives from 16 countries participated from their workplaces or home offices. The first fully virtual Röchling Conference also had to account for the fact that our participating colleagues were all in very different time zones. The switch to a virtual conference eliminated a number of business trips and therefore reduced our carbon emissions.

"One" Employee App

In November 2019, we launched the "One" employee app for internal communication at Röchling. In addition to providing a significantly more current way of obtaining information, providing news digitally also cuts paper consumption. The app was first launched in German and English, with five other languages added since then. Employees can access the content on this app designed in-house from any mobile end user device or desktop computer.

A Pillbox That Pays Attention



Outlook

For Röchling, Industry 4.0, digital transformation, and smart factories along with Big Data, artificial intelligence, and smart products are the issues of greatest concern in the future. We believe that we can only remain competitive if we face the challenges of today – and tomorrow.

Big Data

Our process mapping experience gives us access to large amounts of data, which relates to our own manufacture of products, conventional process parameters, data on in-process controls, as well as to logistics and statistical data. Analyzing massive quantities of data is what actually generates added value from data collection. This provides us with information that enables us to use computer systems to predict occurrences in production and therefore to make long-term improvements to processes and to reliably make decisions.

In terms of sustainability, Big Data offers us the opportunity to receive solid information on energy consumption, material usage, and reject rates. We use these to set reachable, sustainable targets, optimize the energy efficiency of our operating facilities, improve the quality of our products, and simplify disposal.

Artificial Intelligence

An artificial intelligence, or AI, system analyzes data with aim of identifying patterns so that occurences can be predicted and then, depending on the latitude available, either suggests improvements or makes them independently. AI increasingly puts machines and equipment in the position of being able tocollect experiential data and generate knowledge up to the point of the systems more or less being able to independently solve problems.

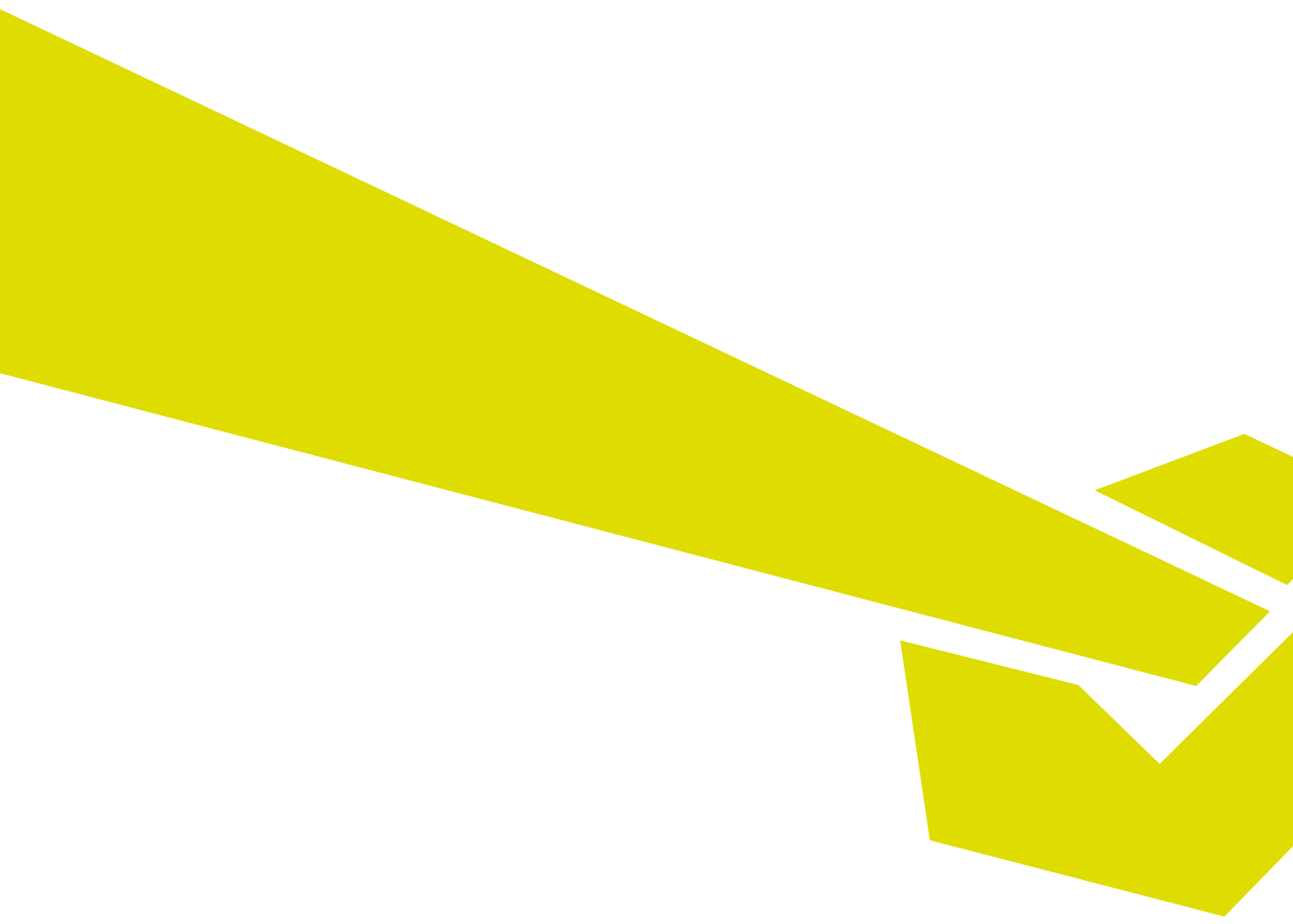
Our first step in this direction at Röchling is to tackle machine learning. AI and associated challenges, such as computing power and access to large quantities of data, are being analyzed in initial pilot projects, and the applicability of AI in the

Group is being reviewed. Our focus is on predictive maintenance and predictive quality. Predictive maintenance decreases machine downtimes and significantly increases energy efficiency as a result. Predictive quality reduces scrap, ensures product quality, and supports our recycling efforts.

Smart Factory

A smart factory for Röchling is the future vision of production that minimizes sources of human error through support systems. Accordingly, it controls the manufacturing equipment, logistics processes, raw materials, and energy to produce the desired products. Smart factories are inextricably linked with other intelligent infrastructure such as smart machines, smart mobility, smart logistics, and smart buildings.

There are many technologies and concepts that could be relevant for us that we need to review. This is why we are conducting various pilot projects in our RDMC and analyzing their influence, benefits, and risks.



PARTNER-SHIPS

Stakeholder Groups and Customers

Relevant stakeholders for Röchling are groups, institutions, or individuals with whom we have a direct or indirect bilateral relationship through our business activities.

Objective

We will train all employees on the Röchling Sustainability Guidelines by 2025.

Our Approach and Our Goals

As part of our relationships with customers, suppliers, and the environment, we integrate all units of the company and upstream and downstream parts of the value chain into our activities. We consider the entire path of the product from the supplier of the raw materials through production and all the way to the end customer.

Our stakeholders and long-term strategic partners include our shareholders, our employees and their representatives, our customers and suppliers, our neighbors, the political sphere, associations, and NGOs. We are concerned with defining collective sustainability targets along with these stakeholder groups and achieving these as well. Only in dialog will we be able to master global challenges such as climate change, environmental pollution, water shortages, and poverty.

Setting common sustainability goals creates trust and understanding for our manufacturing processes. These include the development, project management, procurement, production, order management, quality, and logistics sub-processes. We benefit from the exchange of experiences and perspectives as well as insights and ideas with stakeholders that we channel into our corporate decision-making process. Their feedback helps us to develop sustainable solutions and implement these successfully for the long term.

Our customers are pioneers like we are – continually pushing the limits of what is possible in an industrial setting. We are a reliable partner to them in this endeavor who supports them with products and solutions. For this reason, we continually improve our technological capabilities so that we can help our customers achieve their sustainability goals.

Our Performance

Customers

We seek dialog with our customers in the form of personal meetings and discussions, customer visits, or satisfaction surveys. Moreover, we build on partnerships with selected key customers to jointly develop new products and solutions that make positive contributions to sustainability.

Shareholders

Since our company was founded, Röchling and the family who owns the company have contributed to social, cultural, and sustainable development throughout the generations. Following in the footsteps of our founders, Theodor, Ernst, Carl, and Fritz Röchling, we see it as our mission to also engage in issues of concern to society. The shareholders are in regular contact with the Supervisory Board and Executive Board and conduct many one-on-one discussions at the Executive Board, project, or expert level.

Employees

In line with our corporate values, we survey employees, conduct regular employee meetings, and host visits by the Executive Board to our operating facilities. Through these and many other channels, we obtain ongoing feedback that provides for optimal engagement and well-being.

Public

We interact with our neighbors and the broader public through events such as an Open House Day, regional sporting events, and dialog with representatives from local associations.

Media

We regularly communicate with representatives of various media through established channels, such as interviews and media events, press releases, and the news section of the Röchling website.

Suppliers and Subcontractors

We work closely with suppliers and subcontractors at all levels. These partnerships are steadily improved through a regular exchange of information, audits, personal meetings, and annual conferences serving to encourage sharing experiencing and managing relationships. An annual supplier assessment helps to identify and classify potential for improvement.

Supply Chain Partners

In addition to contact with companies from along the entire plastics value chain, including the waste management and plastics recycling sectors, we actively participate in conferences, working groups, and events.

Works Councils

We support the activities of local works councils and the Group works council. We are interested in a dialog among partners.

Non-Governmental Organizations (NGOs)

As necessary, we participate in events, conferences, trade fairs, and workshops focused on plastics, are a member of alliances and federations, and work with NGOs on specific projects.

Outlook

By 2035, we aim to be the leading supplier of bioplastics and recycled materials. To this end, we build long-term partnerships with our customers to develop sustainable solutions. In the coming years, we will step up our dialog with them so that we can address customer and market requirements relating to sustainability at an early stage. Close, trust-based, and successful business relationships with customers are an important criterion for us to be able to continue to develop products and processes.

We are revising the materiality analysis for Röchling due to ongoing developments in the company and the Sustainability Strategy. We will conduct surveys within and outside of the company and collect data to evaluate the effectiveness of the steps we have taken.

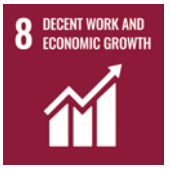
Suppliers are now and will continue to be selected based on quality, performance, suitability, and price. Compliance with ambitious requirements and standards is ensured through international purchasing activities, annual supplier assessments, quality and reliability checks at vendors, and identification of alternative suppliers.

We all know – danger is imminent. That is why we fight for change in the plastics industry and aim to become the top processor of bioplastics and recycled materials.

Dominic Garrecht,
Senior Specialist
Corporate Sustainability,
Röchling Group

Supply Chain

Röchling's supply chain is subject to constant change and is complex due to the numerous processing steps and wide variety of materials. This means great responsibility but also offers substantial sustainability potential.



Objective

By 2025, we will have confirmation from 100 percent of our strategic suppliers that they will adhere to Röchling's sustainability principles.

Our Approach and Our Goals

Our corporate responsibility extends along the entire value chain. Environmental and social criteria are of the utmost importance for us in selecting external suppliers and service providers. Purchasing and supplier selection processes are audited internally and externally as part of a certified environmental management system. In addition, our strategic suppliers agree to maintain a quality management system according to ISO 19001 or a comparable standard. Certification audits are conducted for the environmental, quality, and energy management systems annually. In the course of these audits, we aim for every process to be reviewed based on the relevant standard in the three-year certification period.

We ensure basic standards at suppliers and service providers with various rules and processes based fundamentally on the sustainability content in each supplier agreement.

Our Performance

The basic foundation for all supplier agreements is quality assurance agreements and our Code of Conduct. We stipulate certain mandatory standards, such as those concerning human rights and the rights of individuals, compliance with environmental standards, and ethical business conduct. Violations can result in consequences including termination of the business relationship.

Our suppliers' adherence to social criteria is an integral part of our standards for sustainable procurement. Audits on-site help us review whether our suppliers are complying with our social and environmental criteria. Audits are triggered by factors including supplier selection processes, product and process qualification, and specific customer requirements. The systematic monitoring of the risks of our suppliers is also an important tool that serves to accurately assess our supplier relationships and align our procurement strategies accordingly. In doing so, we are in continual direct contact with our partners. Key criteria that we apply, depending on the procurement segment, include quality, risk of missed deliveries, availability and dependence, protection of knowledge, and the supplier's financial stability.

Benchmark Platforms

In cooperation with our customers and suppliers, we use various benchmark platforms, including EcoVadis and NQC. A joint platform offers a universal scorecard, benchmarks, and instruments for improving sustainability performance, and can be established throughout the entire value chain. That helps us to manage our network, both upstream and downstream: on the one hand, because the common platform shares performance with stakeholders, and on the other hand, because it monitors the performance of our own upstream value chain.

Outlook

We expect our suppliers to share our principles for responsible and fair conduct with regard to employees, customers, suppliers, and the public and to be aware of their responsibility in this respect. We want to step up our support for our business partners in adhering to the principles laid down in our Code of Conduct in their own corporate policy.

Going forward, buyers and project managers will be given special sustainability training so they can identify and implement our requirements throughout the supply chain. Information is provided and advising offered to new suppliers undergoing the qualification or onboarding process. This can be expanded to include the collection, analysis, and provision of data.

The topic of sustainability in purchasing will be coordinated Group-wide in the future. We are already taking this approach with electricity purchasing.

Organizations and Government Agencies

Sustainability is not a trend; it is a process that will be with us for a very long time. This is why we work closely with organizations, companies, government agencies, associations, and medical and cultural institutions and collectively contribute to sustainable development.

Objective

We will introduce a Group-wide international reporting system for sustainability by 2022.

Our Approach and Our Goals

Cooperation with governments and regulatory bodies is conducted at the European, country, and regional levels using various channels. We regularly participate in and contribute our expertise to economic dialogs.

Röchling is an active member in industrial and trade groups as well as numerous domestic and international associations such as InnoNet, VDWF, Plastics Europe, Plastics Recyclers Europe, and in industrial, trade, and networking organizations and working groups.

We continually exchange information with our neighbors in municipalities and regions. Going forward, we wish to work more closely than in the past on issues such as environmental protection, education, and funding.

In terms of science and education, we collaborate on our development activities with leading universities and regularly participate in symposia, work groups, and advisory panels, and support research studies. We are currently working with 80 different partners worldwide and aim to concentrate on ten key partners regarding sustainability. In the future, these will include to a greater extent the Institut für Kunststofftechnik (Institute for Plastics Engineering) at the University of Stuttgart with a high level of expertise in bioplastics, and the Institut für Kunststoff- und Kreislauftechnik (Institute of Plastics and Circular Economy) at Leibniz University in Hanover on the circular economy.

Our Performance

Sustainability Confirmed

In 2019, Röchling Medical Neuhaus received a certificate from the Thuringia Sustainability Agreement in the German state of Thuringia (NAT) for the third time. The site has supported NAT since 2014, which is a voluntary agreement between the state government of Thuringia and businesses in the state. The NAT brings together policymakers, administration, and business particularly regarding the topics of protecting the climate and environment, energy efficiency, and social sustainability.

Röchling Medical Neuhaus is certified according to the DIN EN ISO 14001 environmental management system and DIN EN ISO 50001 energy management system. In addition, the company participates in the Zero Pellet Loss initiative of the industry association for plastic packaging. This initiative makes clear that losing plastic granulate in the environment should not be accepted as unavoidable. Minimal losses, such as when silos are refilled, can enter natural waterways through rainfall and sewer systems.

Certified Sustainable by NGO Bonsucro

Despite their numerous positive qualities, bioplastics are often viewed with skepticism. The question is regularly asked about the origin of the raw materials, the amount of energy used in their manufacture, and what will happen to the materials at the end of their life cycle. We espouse the view that bioplastics can be a true alternative only when their positive effect on the environment can be measured and proven.

A separate supply chain was established for BioBoom at Röchling Automotive, so that the components are subject to constant quality controls from raw material production to the finished product. The material was certified sustainable by the NGO Bonsucro. In addition, tests will continue to be conducted by several independent organizations.

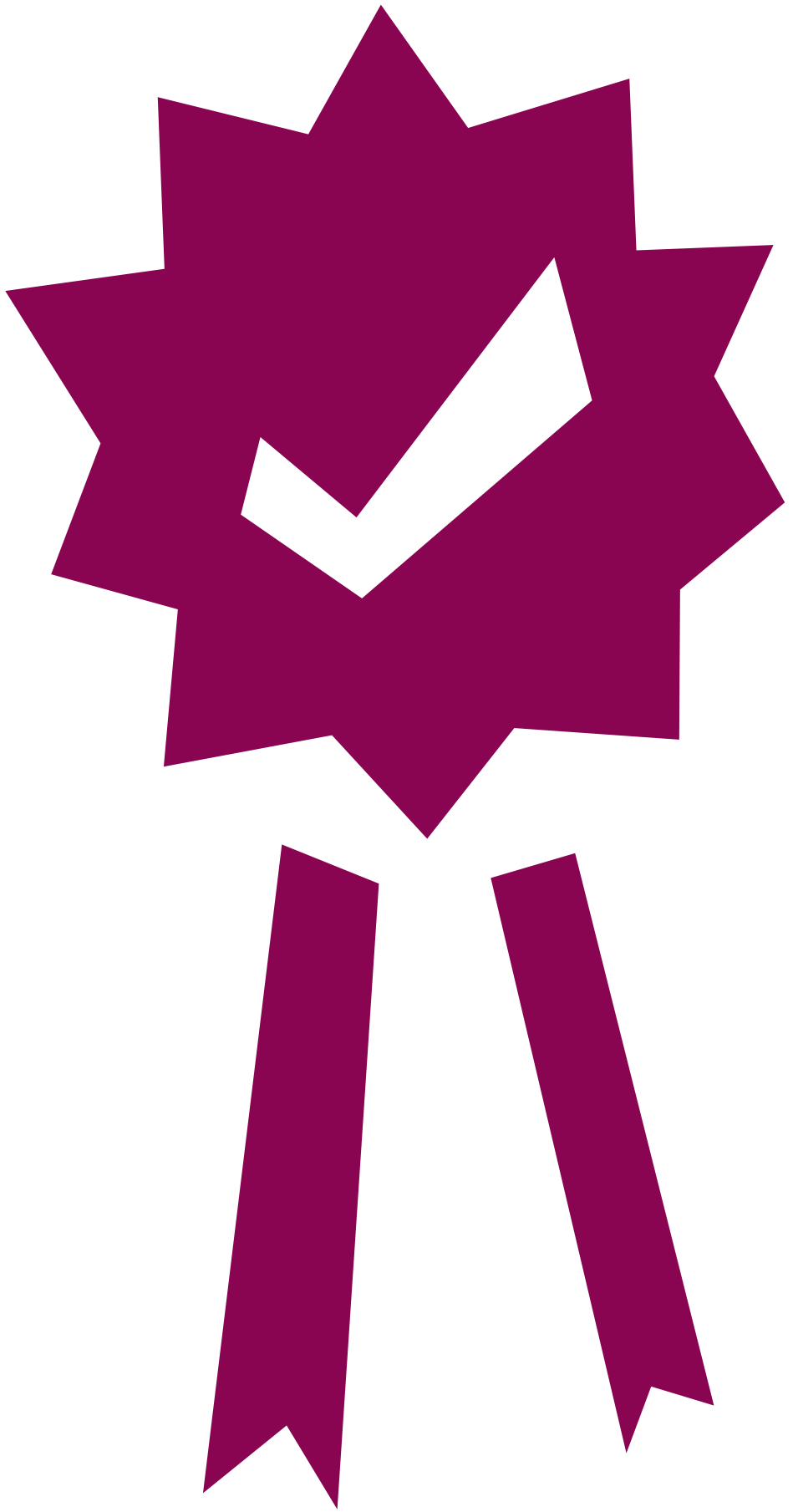
Outlook

In the future, we will increasingly grow into our role as a corporate citizen. For us, corporate citizenship begins with a good relationship with our neighbors and municipalities. This entails increasingly assessing investment decisions ahead of time to determine how our business activities will affect the environment. To this end, we are already analyzing expected emissions, regional infrastructure, and our influence on the local labor market. We plan to step up our efforts to answer the public's questions with regard to pending projects at our locations worldwide. Neighbors who bring their concerns to us already receive a quick, understandable answer.

We want to participate in other organizations focused on sustainability, so we are joining CSR Europe, a leading European company network, The organization's objective is to anchor responsibility for society in companies. The network represents around 10,000 companies. We aim to increase our activities at econsense, Forum Nachhaltige Entwicklung der Deutschen Wirtschaft e.V., to participate actively in the transition to a more sustainable economy and society.

Working at a family-owned company means taking responsibility for future generations. From my perspective, sustainability therefore represents a very fundamental and central part of Röchling.

Dr. Peter Walsh,
Director Real Estate Management,
Röchling Group



PRO-DUCTS

Sustainable Products

We have made it our goal to become the leading supplier of bioplastics and recycled materials in the plastics industry. For this reason, we are noticeably stepping up our development activities and increasing capital expenditure in this area.

Objective

By 2025, we will increase the share of sales accounted for by products that contribute to sustainability by 50 percent.

Our Approach and Our Goals

In line with market requirements, we are currently making a significant effort as a Group to build a comprehensive product portfolio of sustainable plastics and services. In accordance with our definition of "sustainable plastics," the division of materials into circular economy products and bioplastics has proven correct. Materials that explicitly aim to reduce our environmental footprint play a special role.

Our future product portfolio of sustainable plastics will simply be divided into two categories: Bio and Recycling. Currently, we are building a balanced product family from selected bioplastics. In addition to bio-based drop-in solutions available commercially today, the Bio family will be supplemented with materials that are currently in our portfolio, including PLA. Röchling's first bioplastics were designed for our mass markets for engineering plastics and polyolefins, such as PA, POM, PET, PP, and PE. Their share of the portfolio will be expanded further going forward.

We define circular economy materials as raw materials made of ground material, regranulate, reclaimed materials, or chemically recycled materials. The Recycling family comprises prospectively materials from large petrochemical companies (chemical recycling), from the waste industry, and from recycling in-house.

The development of a comprehensive portfolio of sustainable plastics combines our voluntary commitment to use sustainable raw materials or raw material mixes with the high expectations for performance and quality of our customers.

Our Performance

Active Air Dam

Two factors materially influence the energy required and therefore the sustainability of transportation: weight and drag. For Röchling Automotive, lightweight construction is a core competency that weaves its way through the design of all our products. Röchling Automotive is also a leader in airflow and the associated options for reducing air resistance. Smart, actively controllable air flaps (e.g., Active Grill Shutter or Active Speed Lip) provide the opportunity to reduce drag and still guarantee the necessary functions (e.g., air cooling).

A limitation for actively regulating charge air is often the installation space available in a vehicle. Röchling has developed a system for minimal installation space and maximum effect, the Active Air Dam. Its use in a conventional combustion vehicle can reduce drag by up to 25 counts, which results in a carbon reduction of up to three grams per kilometer driven. Due to the small installation space, the Active Air Dam is also perfectly suited for

use in electric vehicles and can improve their reach considerably. This results in greater acceptance of this new technology and therefore does twice the work in supporting more sustainable mobility.

Water Treatment With Polystone® P CubX®

Water management is enormously important today for the sustainable use of the valuable resource that is water. Various treatment processes can be used to clean waste water of pollutants and prepare it for reuse. Röchling Industrial supplies the raw material for the housing of a membrane filter system for process water treatment: Polystone® P CubX®.

Sustainability, cost effectiveness, and statutory regulations result in process water being returned to natural or company-specific water cycles. This requires a systematic technical water treatment process. In order to reuse process water, the pollutants introduced during the industrial production process must be removed.

Battery Solutions – Customized Core Components

Thermoplastic battery solutions by Röchling Automotive are lighter and more flexible than solutions made of metal. They therefore amplify the positive qualities of electric vehicles, both hybrid and fully electric cars.

Pultruded Profiles for Spar Caps

Together with the ribs, the two spar caps in the rotor blade shells are, you might say, the skeleton of each and every rotor blade of a wind turbine, and they must be able to withstand very high loads for the entire life of the turbine. That makes it essential to deliver high component quality and to ensure that the best possible properties of the mix of fibers and matrix are achieved. Röchling Industrial delivers pultruded profiles for spar caps with various types of fiber reinforcement, resin matrices, and cross-sections.

The continuous process enables us to manufacture almost endless profiles of a consistently high quality. The tensile forces prevailing during pultrusion make the reinforcing fibers very straight in orientation, thereby heavily reducing occurrence of the fiber undulations that occur frequently in other manufacturing processes.

Outlook

Fuel Cell Technology – Storing and Transporting Hydrogen

Storing and transporting hydrogen is a key condition for the future popularization of fuel cell technologies. This is mainly driven by the increasing pressure to avoid carbon emissions and the associated development of electric vehicles. Currently, articles can be found in almost all major media that forecast good future prospects for this technology. This is also reflected in broad-based domestic and international future-oriented programs, such as the European Green Deal or the German Hydrogen Policy.

The Industrial division has identified the market for high-pressure hydrogen tanks as a strategic future market and will quickly and sustainably capture market share. We can prospectively position Röchling as a manufacturer of high-pressure vessels for mobile transportation systems and special-purpose vehicles (e.g., buses, trains, mine and construction vehicles) or additionally – with partners – as a systems supplier for mobile transportation systems.

Regardless of the scope, the Industrial division will establish itself as a supplier for small-scale to medium-scale customer-specific solutions.

Our innovative plastics and technologies protect the environment and help our customers achieve groundbreaking successes in healthcare, diagnostics, and therapies. During the pandemic, this means being a reliable partner to our customers by systematically following infection-prevention protocols.

Dr. Boris Fröhlich,
President & CEO,
Röchling Medical

Innovation and Research

Our innovative spirit and interest in projects involving forward-looking technologies using bioplastics make us stand out from the field. Our processes for efficiently and sustainably using resources and energy are also part of our innovation management system.

Objective

By 2030, we will use 50 percent of our R&D budget in areas that directly or indirectly benefit sustainability.

Our Approach and Our Goals

R&D and the associated innovations play a key role at Röchling. For several years now, sustainability has becoming increasingly important, such as in the development of sustainable manufacturing technologies, the expansion of our product portfolio to include bio-based and recycled raw materials, and in unique applications for medical technologies.

Our efforts in process technology and company development allow us to optimize, simplify, and streamline business processes and develop new areas of business. In terms of technological developments, we are continually making progress – from developing new processing methods for injection molding and automated solutions in highly sensitive pharmaceutical environments to partnerships with machine manufacturers. We test technologies for energy efficiency, prefer the use of environmentally neutral materials and supplies, and extend the life of machines through long-term maintenance planning.

In addition to technological innovations, research and product development using bio-based raw materials also play a key role. We strive to use alternative, non-fossil-based raw materials and sustainable processes in production.

We also customize medical technology solutions for our customers. This also involves meeting the regulatory requirements of the European Union's new Medical Devices Regulation. We conduct risk management according to ISO 14971, conduct research on application feasibility, coordinate biocompatibility testing, and work together to develop outstanding combinations of bioplastics and medical devices. As a developer and manufacturer, we can optimally design our products to save energy during production as well as conserve raw materials.

Our Performance

Tape Technology

Lightweight design is one of the top issues in the automotive industry and a key technology for manufacturing highly efficient, low-emissions vehicles. In the past, Röchling Automotive already developed a number of weight-reducing components and applications. Using these lightweight parts in structural applications in the autobody means the plastic must be sufficiently strong and stiff. Röchling Automotive pursues this goal with tape technology.

Plastic parts are reinforced with tapes made of polypropylene or polyamide in combination with glass, carbon, or aramid continuous fibers. These tapes can be used precisely in line with the load path, reducing the amount of materials used. This not only cuts costs but also delivers a further contribution to sustainable transportation on account of the weight reduction and associated decrease in fuel and electricity usage.

Increasing Value Through Internal Collaboration

The cores for injection molding tools for the manufacture of trachea tubes at Röchling Medical in Waldachtal, Germany, are printed at our RDMC. For several years now, the location has produced individual parts for tracheal tubes that were man-

ually assembled into the finished product at the end. Tracheal tubes are medical aids that ensure respiration in situations such as operations, loss of consciousness, or acute breathing difficulty.

One of the components is the folding core which formerly had to be sourced from external suppliers in simplified form. Thanks to the RDMC, our colleagues in the Medical division became aware of the option of producing mold cores using additive manufacturing. The metal mold core is now printed by a 3D printer in a double-helix shape. The new in-house solution reduces the use of raw materials and contributes to shortening transportation routes.

Plastics Offer Many Advantages in Developing Biosensors

Experts at Röchling Medical are researching implantable biosensors and next generation plastic products that minimize rejection and immune reactions in the body. Plastic offers many options

Outlook

Industrial

Our Industrial division is increasingly concerned with the megatrends of urbanization, transportation, the neo-economy, and connectivity. We consider it important not only to develop and market solutions for existing challenges but also to turn our attention to coming challenges.

Where will our journey take us?

- → Smart plastics
- → Smart products
- → Lightweight construction (design optimization, thermal insulation, acoustics)
- → Bioplastics
- → Carbon-neutral products
- → Recycling after use
- → Circular economy
- → Flame retardancy

Automotive

In the Automotive division, we see digital transformation, sustainability, urbanization, and demographic change as future-oriented trends. As a supplier and development partner to the automotive industry, we know how important it is to always keep up with the times.

Where will our journey take us?

- → Sustainability
- → E-mobility
- → Driverless vehicles
- → Bioplastics
- → Circular economy

in this regard. A number of challenges must still be met before these products can be submitted for approval. A way must be found to protect patients from the electronic components, and to protect the electronic components from bodily fluids. However, work on this is already underway with distributors and universities. At the same time, the research results are being prepared in such a way that approval can later be obtained and market launch readied as quickly as possible.

The issues of sustainability and human resources management are very closely related. As sources of value creation, they shape the long-term development lines of the Röchling Group.

Dr. Johannes Möller,
Chief People Officer,
Röchling Group

Medical

The global priority issues from the point of view of our Medical division are healthcare, customized products, an aging society, connectivity, and the neo-economy. Medical technology is increasingly focused on the issue of safe, connected, and customized products. We set specific areas of focus to address these challenges.

Where will our journey take us?

→ Medical grade plastics and metal-like plastics

→ Miniaturization (design, manufacturing methods)

→ Individualization (adaptive design and UDI labeling)

→ Hybrids (plastic, metal, glass)

→ Smart products

→ Smart plastics

→ Bioplastics

→ Circular economy

Recycling and Biopolymers

At the end of their useful lives, we would like to prevent products from becoming waste. Instead, it is preferable to systematically and as effectively as possible recycle them. Another approach taken by the Röchling Group is to increasingly use plastics that are biodegradable and/or biocompatible.

Objective

By 2035, we aim to be the leading supplier of bioplastics and recycled materials.

Our Approach and Our Goals

We believe bioplastics are the next step toward ensuring that production uses minimal resources. For more than ten years now, we have worked on optimizing the bio-based plastic polyactide (PLA). We are convinced that in the automotive industry in particular, demand for biopolymers will increase sharply in the coming years. And we want to be prepared. Even today, our portfolio includes Röchling-BioBoom, a high-performance bio-based material made of PLA that is suitable even for sophisticated automotive applications. We believe that sustainability is one of the most important topics both today and in the future. The use of bio-based plastics reduces the carbon footprint during vehicle manufacture. Product quality and safe use by our customers continue to be the top priority for Röchling Automotive.

In terms of recycling, our goal is to achieve a closed material loop. Waste is reduced to a minimum, and the end product is designed to either be recyclable or compostable. Scraps are produced when manufacturing components out of plastic. This is generally a highly valuable material, however, that we return to the production process after processing into new feedstock. We have therefore been able to successfully set up a recycling loop with some of our customers.

The European Union aims to achieve a material recycling rate for plastic waste of 55 percent by 2030. This goal can be met only if the quality of waste collection and processing increases further: plastic components must be clean when collected and be easy to split into single-material plastic fractions. We want to do our part to meet this goal.

Our Performance

Our Röchling-BioBoom bioplastic makes us the first company on the market to patent a PLA-based biopolymer consisting of at least 90 percent renewable raw materials. We therefore offer an environmentally friendly and cost effective alternative to most conventional materials such as polyester (PC, PET, PBT), as well as polystyrene (ABS), polyolefins (like PP), and polyamide (PA6). Our bioplastics are a sustainable solution stemming from a completely self-controlled supply chain from the renewable raw materials to the automobile manufacturer. For many years, Röchling Automotive has worked with various partners, building in-house expertise in material development. Featuring significant improvements in thermal stability and chemical resistance compared with standard PLA, the new biopolymer family meets the strict technical requirements and specifications of our customers. Röchling-BioBoom enables reductions in greenhouse gas emissions exceeding those of PP by some 70 percent and those of PA6 by nearly 90 percent. This means that each vehicle produced saves 515 kg of carbon dioxide when the share of petrochemical plastics in a medium-sized car are replaced with bioplastics by Röchling Automotive.

We step up our recycling efforts year after year. This includes taking edge strips occurring during thermoforming that can be easily collected by type and processing them into new products using systematic return processes. Our facility in Bad Grönenbach, Germany, has been a partner to the thermoforming industry and for the development of recycling loops for many years. We have also successfully initiated material loops together with customers for the machining of components made of thermoplastic

materials. We will gradually expand our processes in order to deepen the integration of recycling loops in the various industries. We want to steer material streams viably and more efficiently towards a sustainable path together with our customers. This not only eliminates the time-consuming disposal of residual materials, but also makes an important contribution to resource conservation and environmental protection.

Outlook

Along with our customers we face the task of contributing to the definition of what exactly "green" means. Success in sustainability requires that we get a complete picture of all environmental impacts and consider the entire life cycle of products. We want to ensure through marketing, consulting, and sales that natural resources are used for the manufacture of our plastics and products. This improves the environmental footprint of our products. Currently, the high cost of bioplastics is still a hurdle to their broad marketing and acceptance. The fact that the environmental footprint of vehicles is increasingly taking center stage will increase acceptance of the price of bioplastics in the long run. The increasing industrialization of bioplastics will lead to competitive prices in the medium term. Crude oil, which is required to produce conventional plastics, is a finite raw material, which we believe will become more and more expensive – a key reason why we are betting on the use of bioplastics and recycled materials.

New Industrial Facility for Plastics Processing

We have been working for a long time now on the use of recycled raw materials made of residual plastics in sustainable products. To this end, we have built long-term partnerships with customers from which Röchling Industrial obtains unused plastic scraps separated by type, processes them, and then returns them to the process for producing engineering plastics. We want to step up these partnerships significantly to create a closed raw material loop, if possible. Currently, the use of recycled feedstock at Röchling Industrial accounts for some 25 percent of the total production volume.

In March 2021, we opened a facility in Geeste-Dalum, Germany, to close the material loop between Röchling and our customers. This gives customers the option to reduce their waste volume, give us their unused residual plastics from the production process, and obtain new semi-finished products made from these scraps. Production scraps from various Röchling plants are also processed there.

These are delivered separated by type and processed into high-quality raw materials in special granulating lines, subsequently filled in containers, and again made available to the production sites for the manufacture of semi-finished products. The new operating facility measures 6,300 square meters. Another 23,000 square meters are available for planned future growth.

In addition, Röchling Industrial has invested a considerable sum in capacities for compounding scrap from its own production processes. Compared with processing, the compounding process is a form of upcycling which produces new base plastics with specifically defined qualities. The technical properties of these materials can be tailored to the extrusion process and the desired profile of requirements for the semi-finished product.

We at Röchling Automotive Silao are excited and looking forward to pioneering the use of Röchling-BioBoom. This will be a stake in the ground to prove we are the ONE company that drives sustainability into mobility, setting a clear path to our 2035 vision.

Jorge Navarrete,
Plant Manager
Production &
Management Control,
Röchling Automotive Silao

FOUN-
DATION

RÖCHLING STIFTUNG

Non-Profit Platform for Sustainable Plastics Activities

Thirty years ago the Röchling family founded the non-profit foundation to bring their activities for the common good under one roof. Since 2018, the Röchling Stiftung has focused its activities solely on the issue of plastics and the environment. It supports the activities of civic organizations as well as scientific research projects that contribute to improving the circular economy for plastics.

However, the Röchling Stiftung does not see itself as purely a supporter of projects. More important than the financial contributions it makes is its role as a platform for information and dialog, and as a builder of bridges between the numerous and varied actors in the civic, business, scientific, and political realms. The Röchling Stiftung's primary aim is to promote collaboration among these various sectors.

Anyone who intensively works on the global challenge of the massive environmental degradation caused by plastic waste will determine that there is no lack of civic initiatives, projects launched by corporations, government programs, and scientific research. The lack of a systematic way to disseminate information about and synchronize these numerous solutions and approaches is equally drastic.

Under the POLYPROBLEM brand, the Röchling Stiftung has launched an initiative to encourage the relevant stakeholders to work together. Thematic reports are regularly issued to highlight various problems.

In spring 2020, the POLYPROBLEM thematic report on "The Waste of Others" was published in which international experts outlined from various perspectives the major problem of a lack of waste management systems in developing and emerging economies. A critical reckoning entitled "Treasure Hunt" was published in fall 2020 on the subject of the insufficiently functioning market for recycled plastics.

Each report is followed by a series of informative events and dialogs on each of the topics. The POLYPROBLEM initiative has brought numerous organizations together that had not previously known about each other's work so that they can join forces going forward.

When it subsidizes projects, the Röchling Stiftung also does not simply limit itself to acting as a donor, but instead tries to contribute its experience from other similar projects into the collaboration. Above all, the foundation uses its network to attract additional partners whose skills or donations are required to increase the effectiveness of the project.

Selected Joint Projects

Waste Management in India With soceo gGmbH

As in many developing and emerging economies, many places in India lack communally organized collection spots for packaging waste. Private waste collectors pick up vastly more waste than all of the public institutions combined – often under precarious conditions.

In the Sundarbans, a particularly environmentally sensitive region in Western Bengal, the non-profit organization soceo is establishing a robust waste management system with the help of the Röchling Stiftung. It set up communal collection sites for waste collectors where an organized effort is made to recycle the collected plastic waste. They are therefore offered a fixed place in the value chain, while at the same time the share of packaging recycled is increased.

In 2020, the Röchling Stiftung additionally provided emergency aid as a result of the coronavirus crisis. It provided funds so that waste collectors in the region could be equipped with protective gear, allowing them to continue their work safely during the pandemic.

Disposing of Maritime Waste With One Earth – One Ocean

The NGO One Earth – One Ocean e.V. and the Röchling Stiftung have a partnership going back many years. In 2020, the foundation supported the testing and improvement of a technology in Brazil the organization uses to clean up plastic waste from coastal waters. Local fishermen were involved as well. The "captured" waste will now be analyzed to obtain reliable information about the recyclability of ocean plastic for the first time.

Act on Plastic Incubation Platform With ProjectTogether

Many social businesses, initiatives, and civic organizations are developing promising solutions for improving the circular economy, reducing the use of single-use packaging, and developing new products and materials. However, many of them lack the opportunity to discuss their innovations with experts, test them, and further develop them in a focused way. The Berlin-based organization ProjectTogether and the company Soulbottles banded together with the Röchling Stiftung to build a platform for cooperation and award stipends to systematically support innovators.

Life Cycle Assessment of Industrial Components With TU Chemnitz

How does the use of recycled materials in industrial components affect their overall environmental and economic footprint? This is the question being investigated by a team from Technical University Chemnitz using plastic parts for sliding chains in conveyor systems. The Röchling Stiftung is supporting the research project from which a method can be derived to obtain a holistic view and plan for the use of circular economy-compatible materials in industrial applications.

Development of Social and Environmental Standards for Plastic Credits With Yunus Environment Hub

An increasing number of organizations offer what are known as plastic credits. This is a system comparable to trading in CO_2 certificates. Distributors of new plastic goods can commission these organizations to remove a certain quantity of plastic waste from the environment and recycle it. However, there are currently no reliable standards for these plastic credits. These are now being developed and tested by a consortium led by the non-profit Yunus Environment Hub in India and Vietnam. The Röchling Stiftung is involved as a sponsor along with the German Federal Ministry for Economic Cooperation and Development (BMZ).

These examples of partnerships clearly illustrate the promotion strategy pursued by the Röchling Stiftung. In all cases, the point is not to subsidize individual activities for a specific time. Instead, these projects aim to develop processes and systems that can be used by various players in business, the sciences, or civil society to come closer to closing the material loop for plastics and creating a circular society.

In short, the Röchling Stiftung invests in infrastructure, not projects.

Outlook

It is becoming increasingly clear that the Röchling Stiftung can have the greatest effect when it uses its resources to enable collaborations for doing business sustainably with plastic. As a purely charitable organization without its own economic interest, it is perfectly suitable to function as a hub of information and interface for stepped up collective activities along the entire plastics value chain. This role will be further developed operationally and promoted.

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