



RÖCHLING

2015

Competence
in Plastics



Profile of the Röchling Group

The Röchling Group has operations around the globe and represents competency in plastics.

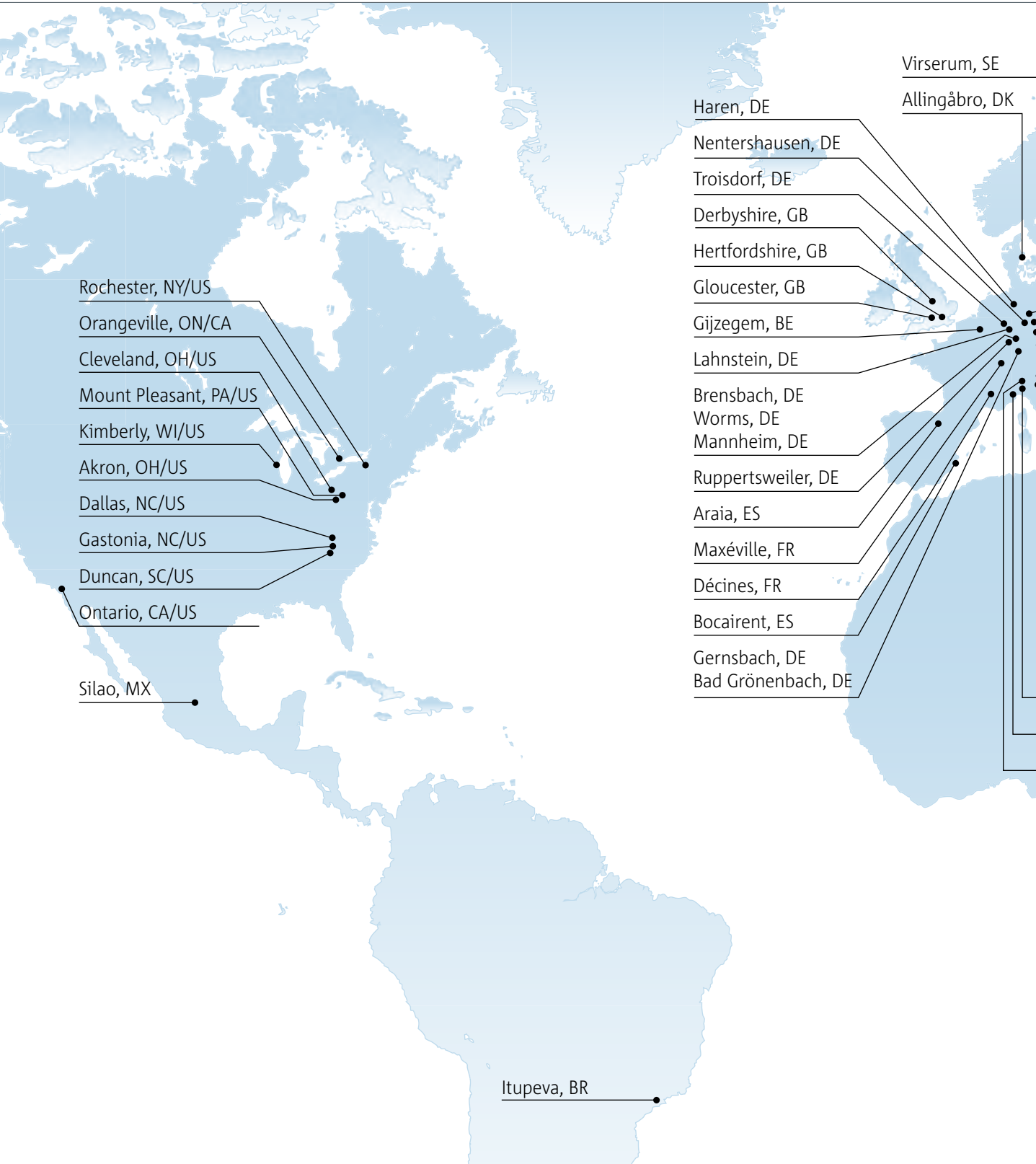
Röchling's fundamental values are:

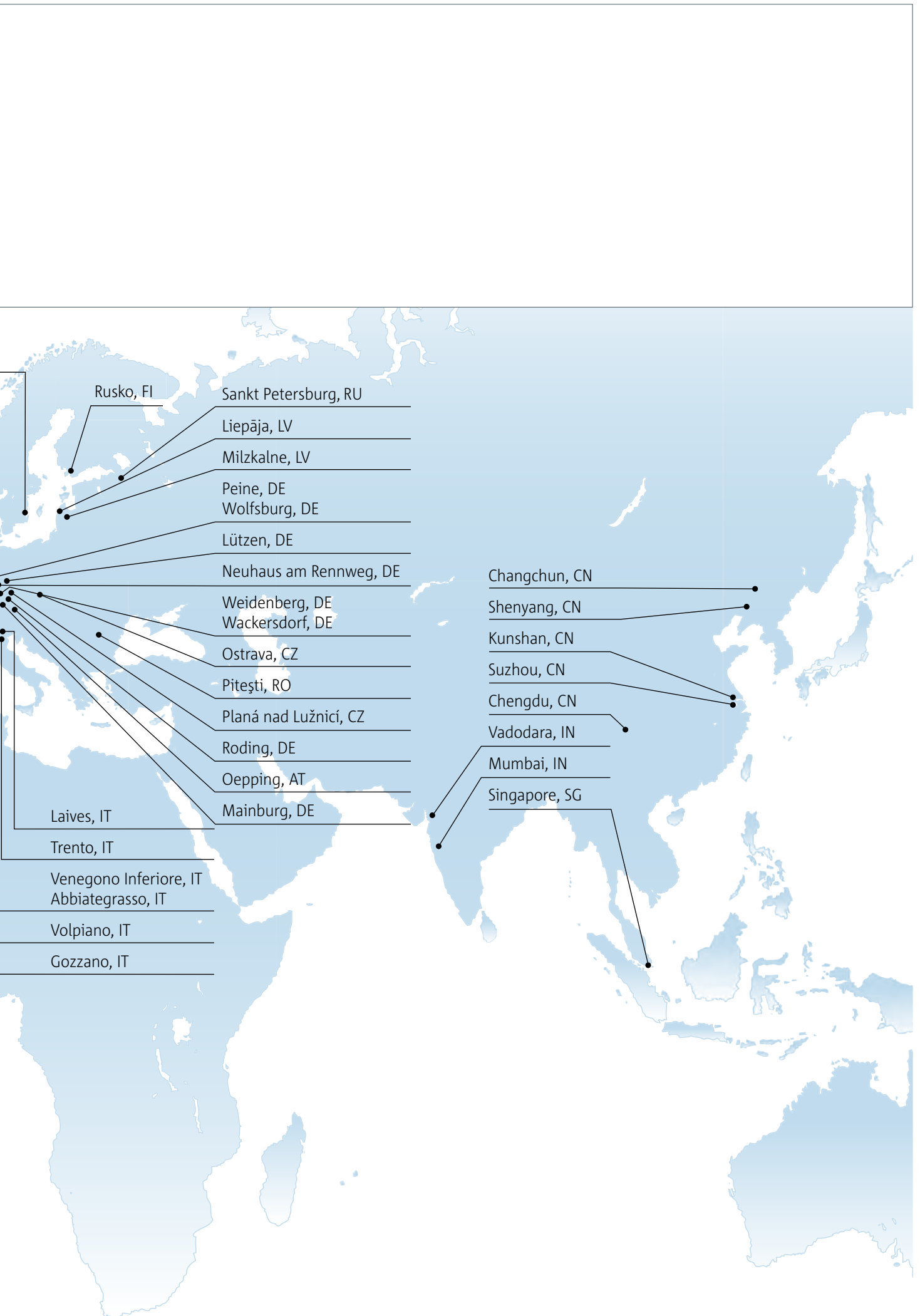
- competence
- quality
- innovation

in the processing of engineering plastics.

Key Figures	2014	2013	2012	2011	2010
Sales (in EUR m)	1,364	1,283	1,193	1,134	1,003
EBIT (in EUR m)	102.9	90.1	85.1	79.6	72.2
EBIT (in percent)	7.5	7.0	7.1	7.0	7.2
Shareholders' equity (in percent)	41.9	40.0	42.1	41.3	39.4
Employees (as of December 31)	7,880	7,463	7,165	6,559	5,931

A Global Presence: 65 Companies in 21 Countries





Rusko, FI

Sankt Petersburg, RU

Liepāja, LV

Milzkalne, LV

Peine, DE

Wolfsburg, DE

Lützen, DE

Neuhaus am Rennweg, DE

Weidenberg, DE

Wackersdorf, DE

Ostrava, CZ

Pitești, RO

Planá nad Lužnicí, CZ

Roding, DE

Oepping, AT

Mainburg, DE

Laives, IT

Trento, IT

Venegono Inferiore, IT

Abbiategrosso, IT

Volpiano, IT

Gozzano, IT

Changchun, CN

Shenyang, CN

Kunshan, CN

Suzhou, CN

Chengdu, CN

Vadodara, IN

Mumbai, IN

Singapore, SG

Competence, Quality, Innovation



Our Claim

The Röchling Group, founded in 1822, has been active in plastics processing for over 90 years. Step by step, our Company has extended its activities with high-quality materials and state-of-the-art technologies. This, combined with our employees' expertise, is what makes Röchling a reliable partner of customers around the world today – competence in plastics.

Competence, Quality, Innovation

Today, many internationally active enterprises require their suppliers to be present around the world. They should quickly respond to the wishes of local customers while simultaneously adhering to uniform standards worldwide. For the most part, neither large enterprises nor small companies fulfill both requirements. However, Röchling accomplishes this with ease.

Our customers reap the benefits of speedy implementation and flexibility in order processing guaranteed by our small and medium-sized companies, as well as the mutual support and clout of a powerful group.

With decades of expertise, high and uniform quality standards, and recognized innovation oriented toward customer needs, the Röchling Group is impressive on all fronts.

We have at our disposal a palette of innovative products and state-of-the-art plastics processing technologies that is unique worldwide. Our high quality standards equip us for any task, now and in the future. This is what the Röchling name and the Röchling logo represent.

Röchling Group

Headquartered in Mannheim, Germany, our global plastics group encompasses 65 companies. Together, they employ 8,000 people in 21 countries around the world.



Our globally positioned Group of small and medium-sized companies is a world leader with a wide-ranging technology base in all areas of plastics processing. With our High-Performance Plastics and Automotive Plastics divisions, annual sales revenue from business in Europe, the Americas, and Asia amounts to EUR 1.4 billion.

Strong growth and the swift pace of innovation characterize the market environment in which the Röchling Group does business. Few industries can compare with the plastics industry's current potential. In recent decades, plastics have spread at an unparalleled rate. Plastic has made its mark on the lives of people from Greenland to South Africa and from Colombia to Australia. In the twenty-first century, no other material will rival plastic in significance.

Material of the Future

These factors form the basis of the Röchling Group's long-term entrepreneurial growth strategy. In focusing on plastics processing, we are concentrating on a material with outstanding future prospects. We have substantially promoted the development of plastics in recent decades and now benefit from the experience and specialized knowledge that our employees have amassed over the years.

Three corporate principles have been the foundation of the Röchling Group's rise to the leading international ranks among plastics companies – **Competence, Quality, and Innovation.**

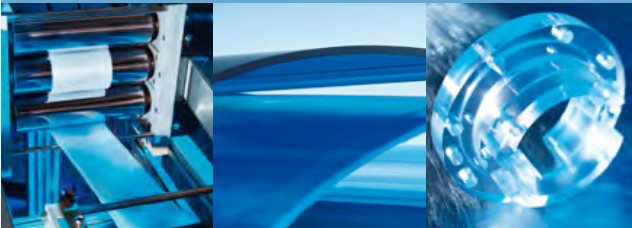
Röchling Group

Sales: EUR 1.4 billion

Employees: 8,000

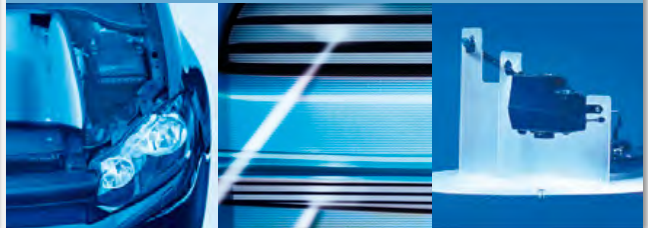
Division

High-Performance Plastics



Division

Automotive Plastics



Competence means that Röchling companies are leaders in their business. The Group covers the full range of quality plastics and all major plastics processing techniques.

We at Röchling believe **Quality** means that our products and our service meet our customers' exact requirements. We keep our promises.

A spirit of **Innovation** is required in order to competently advise our business partners. That is why Röchling leads the field in the technological development of products, applications, and processes.

For example, the innovative product range of the **High-Performance Plastics division** encompasses a wide range of semi-finished products, profiles, cast and injection-molded parts, as well as finished parts made from standard plastics and technical high-performance plastics that are machined, coated, and ready to use, also in cleanroom production for pharmacy and diagnostics.

The **Automotive Plastics division** provides automobile manufacturers and system suppliers all over the world with technologically superior plastics applications that are being implemented to solve the current challenges of the automobile industry – reduction of weight, fuel consumption, emissions, and costs.

High-Performance Plastics

The High-Performance Plastics division delivers customized solutions to the capital goods industry and the medical technology sector worldwide.

Röchling entered its plastics age over 90 years ago, and plastics have shaped the Company's history ever since. With our thermoplastic and composite materials, we offer a customized solution for nearly all areas of the capital goods industry. The foundation of this approach is our competent consulting, marketability and the true commitment to technological progress. Röchling's High-Performance Plastics division and its workforce of 3,430 employees at 39 production locations around the world are active in various business units and achieve sales of EUR 678 million.

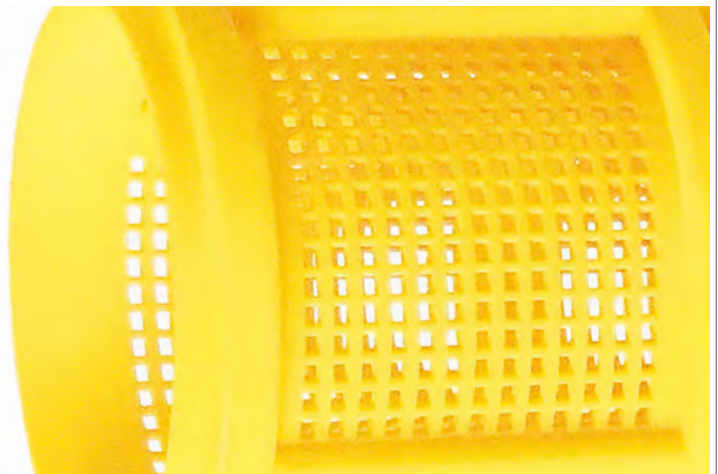
Customized Solutions for All Industries

The High-Performance Plastics division's products are used in a wide range of industries – in the food industry, for example, as cutting boards, or as storage tanks for chemical substances and process containers in chemical tank and apparatus building. For pharmacy and diagnostics, there is a wide range of low-germ-functional containers and packaging containers available. They are employed in the anti-static ventilation systems and manufacturing equipment used for semiconductor and clean-room technology as well as for manufacturing the photovoltaic modules for solar panels. In the packaging and beverage industries, they are used in sliding and conveyor components to enable frictionless transport from one spot to another. In medical technology, MRI examination tables,

sterilization trays, test implants, and orthotic braces could scarcely be imagined without high-performance plastics. They are indispensable as large-volume insulation components in transformer and generator manufacturing or as interior and exterior cladding for commuter trains and buses. Be it mechanically solid or flexible, easily machined, light, resistant to chemicals, extreme temperatures or UV light, antimicrobial, low-friction, low-abrasion, electrically conductive or insulating – our plastic products have the exact properties our customers need.

Broad Range of Processes

Plastics are a dynamic market environment with a secure future. Fast-paced innovation cycles and increasingly sophisticated customer requirements regarding specific product attributes as well as manufacturing precision and dimensions have a major influence on business in the High-Performance Plastics division. We cover the entire range of products and production processes by dynamically transferring expertise between companies within our Group as needed. As a group of specialized companies, Röchling possesses materials, process, and industry expertise that allows it to offer its industrial customers and distributors tailored specialist advice. The Röchling Group thereby profits from the positive trend in the plastics industry and is preparing for the future in order to maintain its position as a technology leader in thermoplastics and composite materials.



Automotive Plastics

The Automotive Plastics division is one of the leading manufacturers of systems and modules made of polymer materials for air flow and fluid management, acoustics, and thermal management.

The partnership between Röchling and the automobile industry began in the 1950s. The processes and products used have changed over the course of time. The high standards expected of quality and customer service have remained. Röchling's Automotive Plastics division and its workforce of 4,395 employees at 25 production locations are active around the world and achieve sales of EUR 686 million.

Helping Achieve Greater Efficiency

In an age when sustainability is being promoted vigorously, the automobile industry is facing the primary task of making its vehicles more efficient. The use of plastics represents an important contribution to this. Röchling develops technologies and solutions which make a key contribution to reducing weight, consumption, cost, as well as CO₂ and noise emissions. The solutions that the automobile industry is looking for are being found by Röchling's developers, particularly in the fields of air flow and fluid management, acoustics, and thermal management. Our specialists ensure that fuel consumption is reduced by optimizing air currents and improving a vehicle's comfort without increasing its weight. Röchling manufactures many air flow management modules and components: ducts, air filters, intake manifolds, and complete air induction systems. Windshield cowls and air ducts take care of the interior, while air flap systems, underbody panels, and wheel arch liners ensure outstanding aerodynamics and acoustics. Degas bottles and cooling-water pipes are important elements

of thermal management. We support the vehicles' structures with trays and pans, and we help to improve the aesthetics with door panels and car body coverings. With technologically advanced applications made from thermoplastics and composite materials, as well as fiber mat specialties, Röchling is one of the leading suppliers in the engine compartment, undercarriage, and structural component areas.

A Reliable Partner for Automobile Manufacturers

The range of functions we cover is broad. Whether its high-quality trim, protection of power trains, or optimization of acoustics, aerodynamics, and cooling areas, we provide our customers with individually tailored solutions. All the components, modules, and systems from the Automotive Plastics division are characterized by their low weight and satisfy customers' individual standards thanks to specific attributes, such as multifunctionality or special design features. That is why the Röchling Group is the development and production partner of choice for almost all the renowned automobile groups in the world in a market shaped by rapid innovation cycles for products and processes. What customers most appreciate about Röchling Automotive is its high level of innovativeness in the product and process solutions field, as well as the increasing globalization of its activities on the intensely competitive, fast-growing market.



The Customers

Our very close relationship with customers is a crucial component of our Company's success. Cultivating and enhancing this relationship is Röchling's foremost priority.

The central theme of customer relations, both today and in the future, is providing competent advice. Regardless of the customer's industry, the materials involved, or the manufacturing processes used, Röchling unites all plastics processes, technologies, and competencies under one roof and offers its customers individual solutions. To find the optimum solution for our customers' requirements, we develop a close cooperation with our business partners so as to find the perfect concept to suit each requirement.

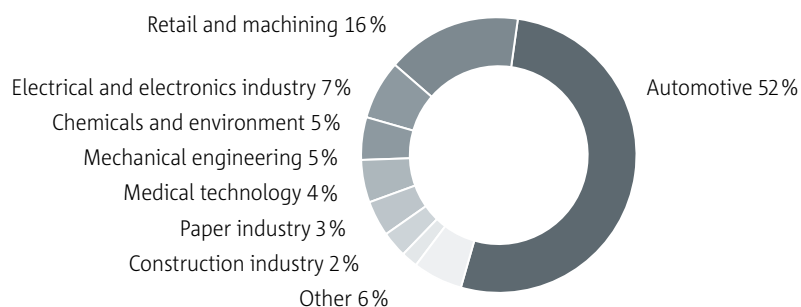
Our Customers' Solution Partner

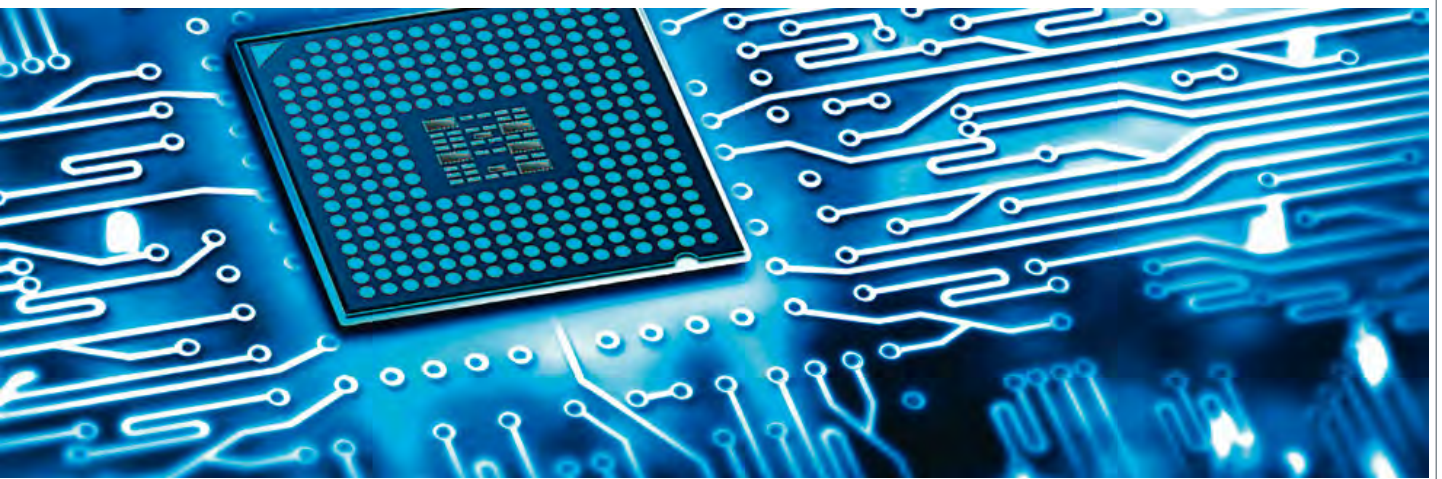
At Röchling, keeping close to the customer also means being represented by subsidiaries wherever business partners are likely to need assistance at existing or new industrial locations. Customer training courses and events at the Röchling Training Centers as well as on site all around the world are further ways in which we offer our customers added value. These events also give us the opportunity to discuss our customers' needs with them face to face.

Röchling's customers are not only found all over the world – they also come from nearly every sector of the capital goods industry. The High-Performance Plastics division supplies both manufacturers and distributors in chemical tank and apparatus building, the food and beverage industry, and conveyor technology, transportation technology and vehicle manufacturing, medical technology, electrical engineering, electronics, and the renewable energy industry along with customers from mechanical engineering and plant construction as well as manufacturers of micro-electronic components.

Customers of the Automotive Plastics division include nearly every leading automotive manufacturer and key systems supplier around the world. We ensure that our customers are provided with optimum support by maintaining facilities in close proximity to the manufacturers and development centers in Europe, the Americas, and Asia.

Sales by sector





The Markets

The Röchling Group's markets are as diverse as its plastics. As a group of small and medium-sized companies, Röchling is at home where its customers are: all over the world.

In past decades, Röchling has gained a leading position with its High-Performance Plastics and Automotive Plastics divisions in Europe, the Americas, and Asia. The Group has always kept pace with the times and, today, as part of our flexible corporate structure, operates 65 production locations in Germany, France, Spain, Italy, Austria, Denmark, Finland, Sweden, the United Kingdom, Belgium, Latvia, the Czech Republic, Romania, Russia, the USA, Canada, China, India, Singapore, Brazil, and Mexico.

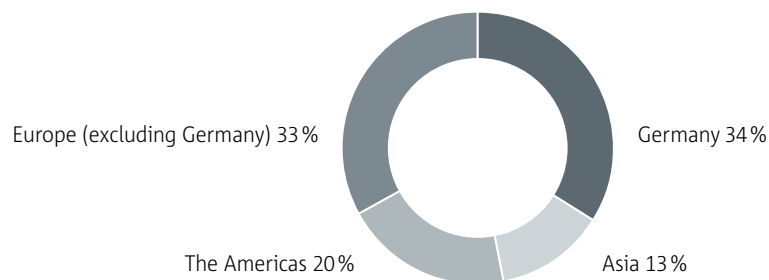
To expand our strong position, we invest strategically in new locations. From an international perspective, we are unequaled in the industrial plastics market. Our raw materials and manufacturing processes are absolutely identical, no matter if in China, India, Europe, or the Americas. With our financial power and vigorous internationalization, we are able to unfold our strengths to the fullest in this environment. In a continuous process of expansion, we have set up production facilities, sales offices, and development centers wherever we have customers. In recent years,

the Röchling Group has followed the major car-makers as they expanded into the Americas, China, Eastern Europe, Brazil, and Mexico, for example. The Röchling Group has strengthened its position in the European and American markets by means of acquisitions and has established new production facilities in Asia, Europe, and the Americas.

Always Close to Our Customers

The Röchling Group's expansion strategy is being shaped in particular by the growing development of the emerging markets in Eastern Europe, Asia, and South America. It has led to an increase in demand for capital goods and, therefore, for engineering plastics. We are already strongly committed in these emerging markets and will continue to pursue this strategic objective in the future. Our major advantage is that we are on safe ground from South America to China with the same products based on identical raw materials and processes, advanced machining technology, and the process expertise that goes along with it all.

Sales by Region





The Employees

Röchling – the Company is comprised of 8,000 employees who work worldwide in 65 companies and in 21 countries. Their expertise and experience, their commitment every day, and their eagerness to achieve define our corporate group.

The individual development of our employees is highly valued in our corporate group. We discuss potential development with our employees in annual interviews and define specific continuing education measures. More than 1,200 employees, primarily from Europe, take advantage of our range of approximately 100 local Röchling seminars and workshops on general, specific technical, and personal development topics. For our companies in North and South America, we design specific workshops and continuing education programs that serve the needs of the local employees together with our international trainers.

Our internationally operating executives have been using “Röchling Management Training,” a platform for learning, routine training, and exchanging ideas, since 2010. This helps to continuously optimize our managerial performance and strengthen networking within the Group.

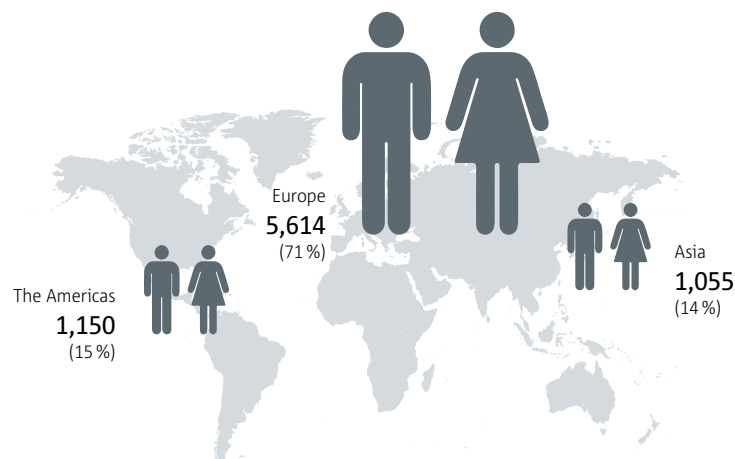
We employ more than 200 apprentices in 13 vocational training fields in several Röchling plants in Germany. We offer them the opportunity to participate in specific training across locations on various topics. Here our up-and-coming talent can look beyond their own training site and obtain a broader view of other companies of the Röchling Group. With this program, we are preparing them to work outside their own apprenticeship area and promoting filling positions from within the Company.

Internationality and multicultural management characterize Röchling and its employees. Worldwide employment opportunities on various projects are an incentive for our flexible and mobile employees as well as for future top performers.

Depending on their own interests and the complexity of tasks or projects, employees may be able to work in foreign countries either on a short-term or long-term basis.

Employees worldwide

(As of: 31.12.2014)





The Materials

The invention of celluloid 140 Years Ago ushered in the “plastics age.”
Plastics have since made unprecedentedly triumphant progress,
changing the world in the process.

For thousands of years, man has mastered materials and made objects out of them. It is for this reason that the main periods in human development have been named after materials used by man since the Stone Age. Today, plastic objects are predominant in workshops, laboratories, offices, homes, and our daily lives. This versatile material has enabled us to realize an enormous number of desired product properties and has advanced technological development like no other material.

First Choice – Economically and Ecologically

Plastics pave the way for economic, ecological, and social progress. They conserve resources, facilitate by means of their excellent working properties the economic manufacturing of all types of goods, and are, in many areas, the best material available in terms of functionality and design. Röchling has

a strong influence on the field of plastics processing. Today, we are able to provide a solution for almost every application using these high-tech materials. We adapt to growing demands with regard to mechanical and temperature stability, workability, resistance to abrasion and wear and tear, weight, sliding ability, electrical and thermal insulation properties, and acoustics.

And the material’s potential is by no means exhausted. In the future, we will continue to support technological developments required by the aerospace, automotive, medical, electrical, or communications sectors, for example, via the targeted implementation of new plastics. This also applies to the development and use of environmentally sustainable biopolymers. In short, the plastics age has only just begun.

Materials

- ♦ Commodities
(PE, PP, ABS, PVC, PMMA, PS)
- ♦ Engineering plastics
(COP, PA, POM, PET, PBT, PC, PVDF, PE-UHMW)
- ♦ High-temperature plastics
(PSU, PES, PPS, PEI, PAI, LCP, PEEK)
- ♦ Glass fiber reinforced thermoplastics
(PA 6-GF, PA 66-GF, POM-GF, PC-GF, PPS-GF, PP-GF)
- ♦ Composite plastics
(UP, EP, VE resins, glass and carbon fiber reinforced, SMC)
- ♦ Low weight reinforced thermoplastics
(LWRT)
- ♦ Laminated compressed wood
- ♦ Laminated pressboard
- ♦ Biopolymers (PLA)



Thermoplastic material

Laminated compressed wood

Engineering plastics

Composites

Glass fiber reinforced plastics

High-temperature plastics

The Processes

The mastery of highly varied manufacturing processes plays a key role in plastics processing. Röchling covers a unique range of processes used to form, shape, and mold these materials.

Given the versatility of modern plastics, the various manufacturing and processing procedures are important criteria for product quality and process efficiency. The palette of processes we use for production, processing, surface finishing, plant and mold construction, calculation, simulation, and prototyping is just as diverse as our product range.

Processing with Expertise

The High-Performance Plastics division uses a large number of production processes for its extensive product range of thermoplastics and composite materials. These include extrusion, polymerization, compression molding, winding, pultrusion, and processing semi-finished products on state-of-the-art CNC milling machines as well as the supply of standardized, ready-to-install components. We provide the growing market for technical injection-molded parts with

high-precision plastic components. During their production, all types of engineering plastics are processed by injection molding machines with a clamping force of up to 5,000 KN. The automotive segment is an important submarket of the plastics industry. On the basis of the Röchling Group companies' expert know-how and state-of-the-art equipment, the components, modules, and systems that the Automotive Plastics division manufactures meet the customers' individual requirements. Our extensive materials expertise in the ever more important field of direct compounding also plays a part in ensuring this.

Another Röchling specialty is the manufacturing of semi-finished products for innovative, acoustically effective, lightweight components and modules such as underbody panels or air ducts.

Production Processes

- Injection molding (multi-component injection molding, hybrid technology, GID, PIT, overmolding) up to 32 KN
- Extrusion Blow Molding (2D, 3D, suction, sequential)
- Injection Blow Molding
- Injection Stretch Blow Molding
- Jectbonding
- Compression molding (DLFT, GMT, sheets, compression molded parts, LWRT, SMC)
- Extrusion (profile, rod, and sheet extrusion)
- Multi-Layer
- Polymerization (vertical casting, shaped part molding, spin casting)
- Winding
- Pultrusion

- Polyurethane foaming (PUR)

- Selective laser sintering

Machining Procedures

- Mechanical machining procedures (lathing, milling, drilling, cutting, punching)
- Cutting (laser, water jet)
- Joining techniques (welding, gluing, screwing, attaching inserts, insert molding)

Finishing Procedures

- Film cladding
- In-mold decoration
- Printing
- Coating
- In-mold graining
- Sterilisation

Equipment and Mold Construction

- Equipment design and construction
- Plant development/construction
- Mold construction

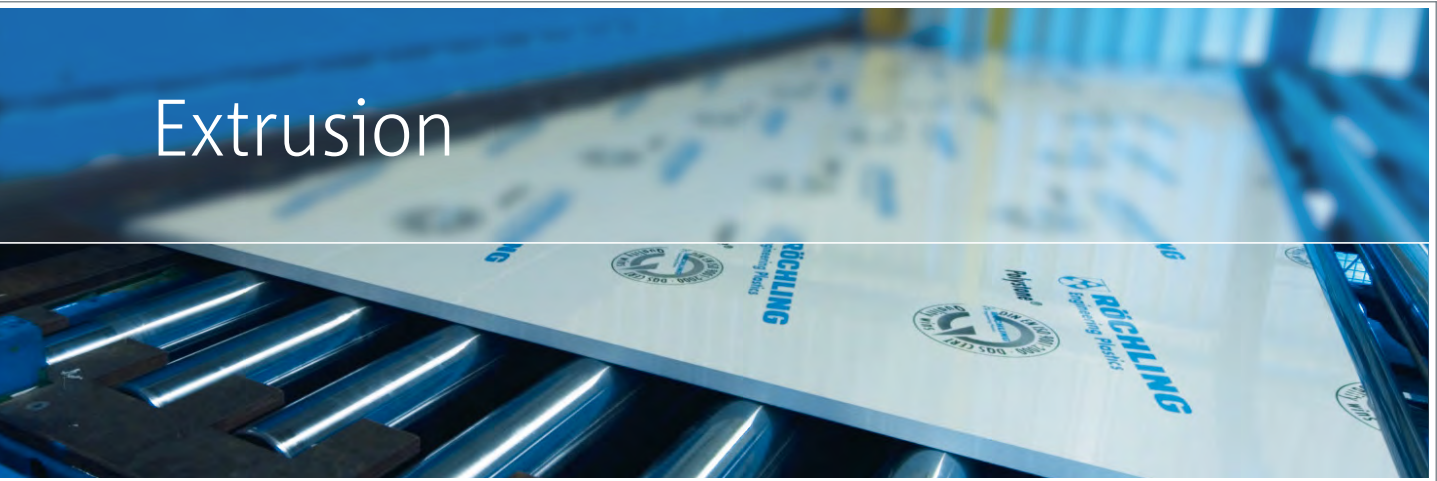
Simulation and Analysis

- CAD/CAE/CAM
- CFD (flow analysis)
- FEM (structural analysis)
- Moldflow (injection molding simulation)
- Software development
- GT-Power (acoustic analysis)

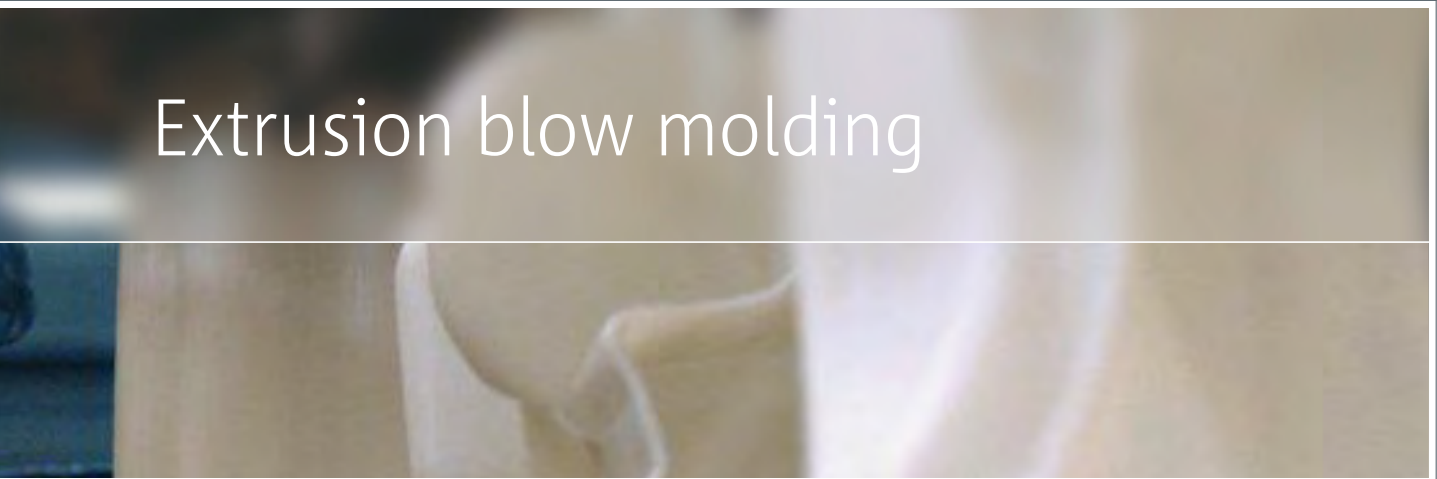
Prototyping

- 3D rapid prototyping
- Vacuum forming
- Machine finishing (turning, milling)

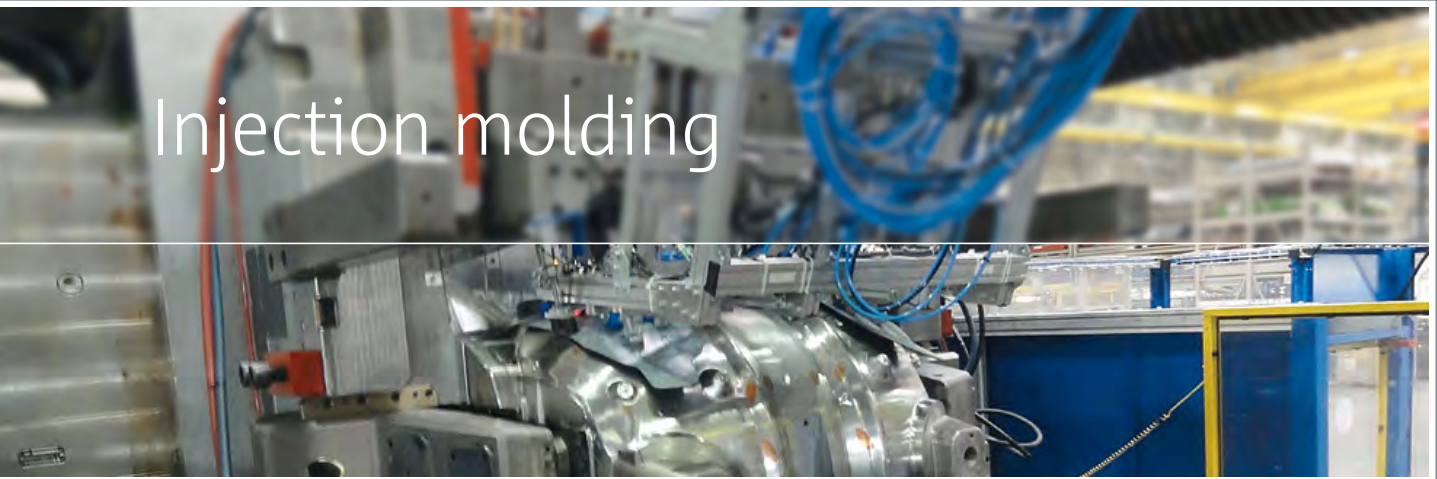
Extrusion



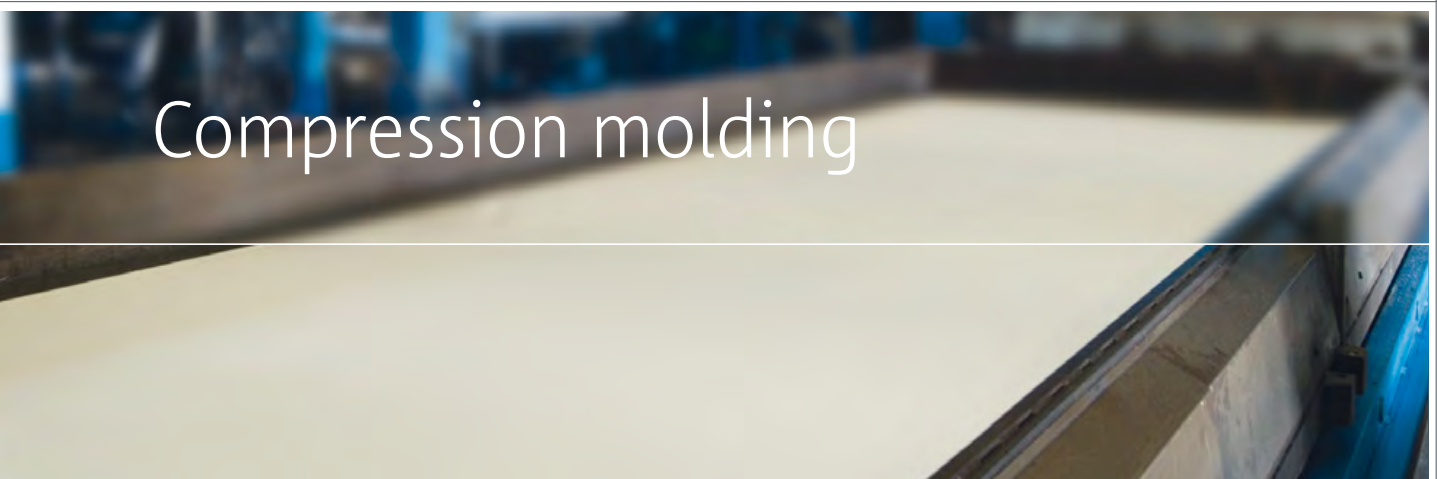
Extrusion blow molding



Injection molding



Compression molding



Environmental and Occupational Safety

For the Röchling Group is the safety of our employees in the workplace and the prevention and reduction of environmental impairment highest priority and imperative for our business success.

In our business activities, we aim to design our work environment in such a way that our employees can work safely and without accidents, in addition to preventing or minimizing environmental degradation. Röchling is highly committed to both areas through a formalized process of continuous improvement in the companies. Both areas of activity are subject to reporting requirements and are the focus of the management's attention. The companies of the Röchling Group conduct qualitative, environmental, and occupational safety management in accordance with internationally recognized standards.

Preventing Accidents in the Workplace

As early as during the planning of production lines and ergonomically designed workplaces, we take steps to prevent accidents. We monitor our work procedures continuously for possible hazards to employees. Together with executives and employees, our safety officers develop strategies to prevent potential accidents in the workplace. As a result of this active analysis, safety hazards can be identified early on, evaluated, and alleviated. In addition, the topic of accident prevention is part of the employee suggestion system.

In connection with workplace safety, small measures often have a big impact. At Röchling, prevention is a prime focus. We review how we can succeed in

reducing the number of accidents by making changes to machinery and equipment continually, revising transport routes, optimizing lighting, improving signage, and providing appropriate training for employees. Also in the future, we will continue to maximize the potential of comprehensive prevention in order to minimize risks and prevent accidents.

Committed to the Environment

Already in the planning stage of new products and manufacturing processes, we minimize any possible harm to the environment. Sustainability is a major concern for us and using resources effectively is a key concern. In order to identify potential improvements, we analyze our material and energy flows and develop measures to reduce energy consumption and emissions. These measures are incorporated into the planning process when designing plants and new production machinery. In principle the Röchling Group adopts ideas to prevent waste and to increase the recycling rate. These ideas include using state-of-the-art technologies, treating recycling wastewater, taking advantage of internal recycling potential, preventing waste, and sophisticated waste management. We raise the environmental awareness of our employees by providing information and training.

DIN EN ISO 14001

Röchling Group: Two Centuries of



From Coal to Plastics

The history of the Röchling Company begins in 1822. During that year, Friedrich Ludwig Röchling founded a coal trading business in Völklingen. His four nephews – the “Röchling brothers” – began with the production of hard coal coke and processing industrial iron in 1849, the year of revolutions. The acquisition of Völklinger Iron Works in 1881, now a UNESCO World Heritage site, marked the beginning of the steel era. But that was not the only material Röchling bet on – in 1922, it acquired its first plastics company, thus becoming a trail-blazer in plastics processing.

The acquisition of Rheinmetall Berlin AG, supplier of the newly constituted German Army, in 1955 was another step toward diversification and away from dependence on steel. In 1978, Röchling finally left the mining industry entirely and instead aggressively pursued diversification into various business areas outside of materials trading during the 1980s and 1990s.

The Company did not lose sight of plastics, though, but rather expanded its product range to add it through acquisitions, in automotive plastics for example. At the end of the millenium, it adopted a fundamental change in strategy: Röchling focused on its core expertise in plastics and sold all other holdings. Along with the restructuring, the Company intensified the globalization of the plastics group in Eastern Europe, America, and Asia and tapped into new markets, particularly in medical engineering.

The Röchling Entrepreneurial Family

The roots of the Röchling family go back all the way to the 17th century. For almost two centuries, the entrepreneurial family has been supporting the Röchling Group through its various stages – from a steel company to the globally operating plastics group it is today – and ensuring continuity during change.

The shareholders of the Röchling Group have always thought of themselves as active owners, regardless of whether they managed the Company operationally or – as today in the sixth generation – strategically as part of the Advisory Board, which includes family members and external experts.

Innovative Materials



A Century of Competence in Plastics

- 1922** Acquisition of Holzveredelung GmbH in Berlin with the patent for the densified wood laminate Lignostone
- 1935** The Company relocates to its current site in Haren, Germany
- 1964** Development of the thermoplastic Polystone
- 1975** Development of the glass fiber reinforced plastic Durostone
- 1980** Takeover of the Sustaplast Group
- 1981** First subsidiary in the US founded
- 1986** Entry into automotive plastics through acquisition of the Seeber Group in South Tyrol, Italy
- 1987** First production site in the US established
- 1991** First Asian subsidiary founded in Singapore
- 2002** First production site in China established
- 2007** Production in India begins
- 2008** First medical engineering company acquired
- 2012** Production site in Brazil established

Advisory Board

Johannes Freiherr von Salmuth, Chairman
Dr. Carl Peter Thürmel, Vice Chairman
Dr. Günter von Au
Gregor Greinert
Dr. Bernd Michael Hönle
Dr. Gerd Kleinert
Prof. Klaus Nehring, Ph.D.
Prof. Dr. Frank Richter

Executive Board

Georg Duffner, CEO
Ludger Bartels, COO
Marc Trube, CFO

Röchling Management Board



Georg Duffner

CEO Röchling Group
Automotive Plastics
Division



Ludger Bartels

COO Röchling Group
CEO High-Performance
Plastics Division



Marc Trube

CFO Röchling Group
Röchling Real Estate



Dr. Joachim Brunswicker

CFO
Röchling Engineering
Plastics Group



Lewis H. Carter

President
Röchling Engineering
Plastics North America



Erwin Doll

CEO
Röchling Automotive
Sales, R&D



Dr. Stephan Glander

COO
Röchling Engineering
Plastics Group



Uwe Kassens

Director of the
Composites
Business Unit
High-Performance
Plastics Division



Rüdiger Keinberger

Director of the
Machined Components
Business Unit
High-Performance
Plastics Division



Franz Lübbers

Director of the Thermo-
plastic Semi-Finished
Products Business Unit
High-Performance
Plastics Division



Gerhard Neidinger

Executive Vice President
Röchling Automotive
Asia



Dr. Andrea Rocca

Executive Vice President
Röchling Automotive
COO



Steffen Rowold

Executive Vice President
Röchling Automotive
CFO

Röchling Group

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