



**NRW.GLOBAL
BUSINESS**
Trade & Investment Agency

Plastics industry in North Rhine-Westphalia

Spotlight

GERMANY
AT ITS
BEST



NORDRHEIN-WESTFALEN

Facts & Figures

Number of companies*	1,057
NRW's share of German companies	22.8%
Employees*	137,074
NRW's share of German employees	18.1%
Sales*	30.7 bn. EUR
of which, foreign sales	50.2%
NRW's share of German sales	18.0%
Average monthly earnings	3,995 EUR
Exports**	23.3 bn. EUR
NRW's share of German exports	18.6%
Imports**	14.0 bn. EUR
NRW's share of German imports	17.7%

Source: IT.NRW; data: as at 2020

* the figures refer to the production and processing of plastics by companies with 20 and more employees; they are based on the "Classification of Economic Activities (WZ 2008)"

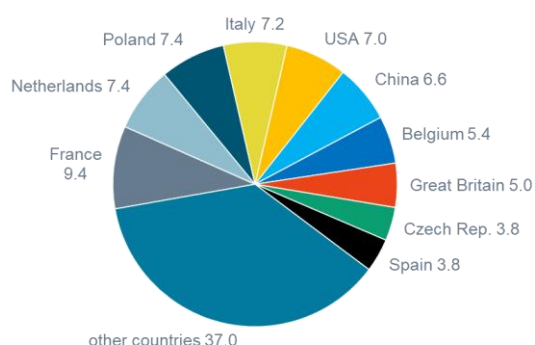
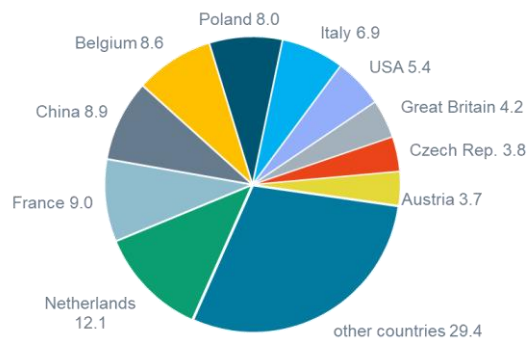
** the figures refer to foreign trade statistics North Rhine-Westphalia

With its distinctive cross-sectional character, the plastics industry is the carrier and driver of innovations in the fields of materials, production processes and products for practically all areas of life in North Rhine-Westphalia (NRW). A continuous value added chain of plastic manufacturers, plastic processors and manufacturers of plastic-processing machinery and an extensive scientific, research and service landscape are all proof of the industry's excellence, which in this concentration and composition is unique throughout Europe.

Approx. 1,100 companies with 137,000 employees from the plastics industry, plus 70 universities, renowned institutes and company-owned research institutions form the plastics industry and ensure innovation.

Foreign trade

Of the total export volume of 23.3 billion euros – which is only slightly lower than in 2019 – just under 60 percent went to countries in the European Union, from which 65 percent of the imports of 14.0 billion euros came (2020). Overall, France and the Netherlands, alternating with Poland and Italy, have been the top trio of customer countries for years. As supplier countries, the Netherlands, China and France have been the top trio for many years, albeit in alternating order. Due to the pandemic, imports from China fell particularly sharply in 2020, by over 35 percent.

Customer countries (in %)**Supplier countries (in %)**

Source: IT.NRW, Foreign trade statistics for North Rhine-Westphalia; special evaluation; data: as of 2020

Companies (examples)

The entire plastics value chain is represented in NRW. The spectrum ranges from the predominantly small and medium-sized businesses in plastics processing, plastics mechanical engineering, plastics recycling and B2B service providers to internationally positioned joint stock companies in plastics production.

Plastics manufacturers (selection)

- **Covestro Deutschland AG, Leverkusen**

Established: 2015; sales: €4.9 billion; employees: 6,776 in NRW (16,500 worldwide)

Covestro (formerly Bayer MaterialScience) is one of the world's largest polymer companies and has 33 production sites. The focus is on the manufacture of high-tech polymer materials and the development of innovative solutions for everyday products such as paints or adhesives.



- **Evonik Industries AG, Essen**

Established: 2007; sales: €12.5 billion; employees: 2,700 in NRW (33,000 worldwide)

Evonik is one of the world's leading specialty chemicals companies. With a budget of €433 million in research and development alone, it employs approx. 2,700 people at 37 locations. It researches, develops and produces rubber silanes for the tire industry or industrial carbon black as a filler for the rubber industry, for paints and inks as well as flexible plastic materials for additive manufacturing.



- **LANXESS AG, Cologne**

Established: 1863; sales: €6.4 billion; employees: 6,700 (14,300 worldwide)

The core business of LANXESS is the development, production and sale of plastics, rubber, intermediates and specialty chemicals. The company is currently present at 74 production sites in 25 countries worldwide. Among other things, it produces organic colorants for plastics and high-performance plastics for lightweight vehicle construction.

Processors (selection)



- **Josef Mawick Kunststoff-Spritzgusswerk GmbH & Co. KG, Werl**

Established: 1958; sales: €26 million; employees: 261

Mawick offers its customers full service in plastic injection molding and blow molding technology. The company produces a wide range of articles for the automotive, electrical, household goods and children's vehicle industries as well as products for the garden and agricultural sectors.



- **GERHARDI Kunststofftechnik GmbH, Lüdenscheid**

Established: 1796; sales: €162 million; employees: 1,356

At its four locations in Lüdenscheid, Werdohl, Ibbenbüren and Montgomery/USA, the company manufactures plastic articles for the interior and exterior areas of the automotive industry. The company has established itself as a competent supplier for the automotive industry through state-of-the-art injection molding technology, painting technology and galvanic surface finishing.



- **Murtfeldt Kunststoffe GmbH & Co. KG, Dortmund**

Established: 1990; sales: €40 million; employees: 350

The Dortmund-based company is one of the world's leading manufacturers of sliding profiles, chain and belt guides, chain tensioners and individual machine parts made of abrasion-resistant sliding plastics. The products are mainly used in machine and plant construction as well as in drive and conveyor technology, but also in other areas such as medical technology.

Recycler (Auswahl)



- **Der Grüne Punkt – Duales System Deutschland GmbH (DSD), Cologne**

Established: 1990; sales: €490 million (group sales); employees: 210

Der Grüne Punkt – Duales System Deutschland GmbH (DSD) is one of the largest dual systems in Germany and a provider of other intelligent take-back systems. It markets raw materials of all kinds, some of which come from the dual system's collections, and its competence center offers optimized disposal concepts. The brand name "Der Grüne Punkt" is protected worldwide and is one of the internationally best-known trademarks. It is used in many countries as a financing symbol for packaging recycling.



- **Hoffmann & Voss Technische Kunststoffe GmbH, Viersen**

Established: 1962; sales: €17 million; employees: 64

In its third generation of entrepreneurs, Hoffmann + Voss produces engineering plastics for customer-specific requirements, primarily for the automotive, electrical and electronics industries, as well as the household appliance industry. In addition to application-specific compounds based on raw polymers, the recycling of plastics to high-quality recyclates certified by the automotive industry has become more important for the company in recent years.

Mechanical engineering (selection)



- **ENGEL Automatisierungstechnik Deutschland GmbH, Hagen**

Established: 1945; sales: €1.3 billion; employees: 6,500

Almost every second automated production cell sold by a European injection molding machine manufacturer is supplied by ENGEL. This makes the family-owned company a leading supplier

in injection molding machine automation. The export ratio is 95 percent, with production taking place at nine locations in Europe, North America and Asia.



- **Reifenhäuser GmbH & Co. KG Maschinenfabrik, Troisdorf**

Established: 1911; sales: €450 million; employees: 900

The Reifenhäuser Group with the largest competence network worldwide is a leading supplier of innovative technologies for plastics extrusion. Reifenhäuser technology enables the production of blown films, cast films, polished sheets and nonwovens.



- **Kautex Maschinenbau GmbH, Bonn**

Established: 1935; sales: €74 million; employees: 470

Whether automotive, technical parts or industrial and consumer packaging – Kautex Maschinenbau is at home in all relevant application segments of blow molding technology. The world market leader generates about 80 percent of its sales abroad and serves its international customers through sales and service organizations in all major industrial regions and its own subsidiaries in the USA and China.

University & research landscape

North Rhine-Westphalia is distinguished by its comprehensive plastics expertise in the corporate landscape as well as in the R&D sector. From production through processing to mechanical engineering – its technology leadership in the field of plastics technology is undisputed.

University institutes and study programs (selection)



- **IKV Institute for Plastics Processing at RWTH Aachen University**

Established: 1950; employees: 300

The strength of the IKV as part of the Faculty of Mechanical Engineering at RWTH lies in the integrative consideration of component design, material and processing of plastics and rubber in product development. More than 80 scientists at the IKV work continuously on application-related, technological and materials science issues in ten research areas and with sub-projects in the "Internet of Production" cluster of excellence.



- **Kunststofftechnik Paderborn, Affiliated Institute to the University of Paderborn**

Established: 1980; employees: 50

Kunststofftechnik Paderborn (KTP) stands for the successful research and development of processing technologies in the field of plastics and rubbers. In their practical and theoretical work, the employees deal, for example, with the extrusion, injection molding and welding or bonding of plastics. In addition to their extensive teaching activities at the University of Paderborn, they support industry with a variety of services.

- Institute of Product Engineering at the University of Duisburg-Essen**
Established: 1977 (establishment of the Chair for Engineering Design and Plastics Machinery); employees: 64
 The Institute for Product Engineering IPE teaches the basics of design theory and specialized knowledge of plastics processing and plastics mechanical engineering in particular through its Chair of Engineering Design and Plastics Machinery KKM. The scientists work on research projects such as injection molding technology, extrusion technology and component testing. The integration of student employees in research is an important part of the institute's philosophy.
- Study program in Polymer Chemistry at the Gelsenkirchen University of Applied Sciences**
 The importance of chemistry as an innovation driver in materials research is steadily increasing. The Polymer Chemistry master's program at the Recklinghausen site provides a broad and well-founded scientific education. The teaching is application-oriented, including current topics taken from practice and often in close cooperation with companies in the region. The spectrum ranges from polymer analysis and polymer synthesis to the development of adhesives and the research of new polymerization catalysts.
- Study program in Plastics Engineering at the South Westphalia University of Applied Sciences, Iserlohn**
Established: 2002; students: approx. 100
 The key elements of the Plastics Engineering study program are manufacturing processes, product design, simulation (CAE), production management, business aspects and quality assurance. For the practical training, the study program cooperates with the Plastics Institute for SMEs NRW (KIMW), an affiliated institute of the South Westphalia University of Applied Sciences, which means, among other things, the use of the excellent equipment of the KIMW (e.g. machines, testing laboratory / measuring and testing equipment, CAE/CAD software and hardware, surface application center) for the students on this course.

Courses of study related to plastics (selection)

University	Courses
RWTH Aachen University	<ul style="list-style-type: none"> Mechanical Engineering, B.Sc., M.Sc. Industrial Engineering, B.Sc., M.Sc. Plastics and Textile Technology, B.Sc., M.Sc.
University of Duisburg-Essen	<ul style="list-style-type: none"> Mechanical Engineering, B.Sc., M.Sc. Chemistry, B.Sc., M.Sc.
Westphalian University of Applied Sciences Gelsenkirchen	<ul style="list-style-type: none"> Chemistry, B.Sc. Industrial Engineering, B.Sc. Polymer Chemistry, M.Sc.
South Westphalia University of Applied Sciences	<ul style="list-style-type: none"> Plastics Engineering, B.Eng.
University of Paderborn	<ul style="list-style-type: none"> Mechanical Engineering, B.Sc., M.Sc. Chemical Engineering, B.Sc., M.Sc. Chemistry, B.Sc., M.Sc.

Non-university institutions and service providers (selection)



- **Fraunhofer Institute for Environmental, Safety, and Energy Technology UMSICHT, Oberhausen**

Established: 1990; employees: 577; www.umsicht.fraunhofer.de

Fraunhofer UMSICHT actively shapes the energy and raw materials industry. As a pioneer for technical innovations in the areas of energy, processes and products, it advances sustainable management, environmentally friendly technologies and innovative behavior. One of the focal points is customized biobased plastics for a variety of applications from films, fibers, injection molded parts and others. These compounds and composites offer a specific, often novel property profile that matches or even exceeds that of fossil-based polymer materials. Fraunhofer UMSICHT is a founding member of the Circular Plastics Economy Cluster of Excellence, in which six Fraunhofer institutes conduct research into solutions for a circular plastics economy.



- **Plastics Institute for SMEs NRW (K.I.M.W.), Lüdenschied**

Established: 1988; employees: 100; www.kunststoff-institut-luedenscheid.de

As an affiliated institute of the South Westphalia University of Applied Sciences, the Plastics Institute is a private-sector service company for the entire field of plastics technology. It supports its clients in the selection, development, optimization and implementation of products, tools and processes in the entire field of plastics technology, especially for injection molded parts made of thermoplastics and duoplastics.

A comprehensive overview of the university and research landscape can be found on the research map at www.kunststoffland-nrw.de.

Networks (selection)



- **Verein kunststoffland NRW and State Competence Network, Düsseldorf**

www.kunststoffland-nrw.de

The association kunststoffland NRW operates the state competence network, supported by the state of North Rhine-Westphalia and the European Union, for all actors along the entire plastics value chain, from medium-sized plastics processors, plastics machinery manufacturers and recycling companies to internationally positioned corporations, universities and research institutes. Kunststoffland NRW functions as a platform for information and communication, networking and cooperation. The central goal of kunststoffland NRW is to strengthen the performance and competitiveness of the plastics industry in NRW. kunststoffland NRW offers above all SMEs practical mediation and consulting services as well as tailor-made events. The network supports framework conditions that promote successful business, education and research in NRW, especially in the future fields of lightweight construction, resources and energy efficiency. kunststoffland NRW consciously takes on a pioneering role in central future topics, such as the EU plastics strategy and the implementation of a genuine recycling economy, and constructively involves all relevant players far beyond the industry.

Trade fairs & events (selection)



- **K – International Trade Fair for Plastics and Rubber, Düsseldorf;**

www.k-online.de; next dates: October 19-26, 2022

For more than 50 years, K in Düsseldorf has been the industry's leading trade fair for the sector. It is the world's most important information and order platform for the rubber and plastics industry. In 2019, nearly 3,333 exhibitors from all over the world came to Düsseldorf to present their products and services to 225,000 trade visitors. The fair is held every three years.



INSTITUT FÜR
KUNSTSTOFFVERARBEITUNG
IN INDUSTRIE UND HANDWERK AN DER RWTH AACHEN

- **31st International Colloquium Plastics Technology, Aachen;**

www.ikv-kolloquium.de; next dates: March 16-17, 2022

The International Colloquium on Plastics Technology has been presenting the research results of the Institute of Plastics Processing IKV to a broad public from science and industry since 1960. Many technical presentations by IKV scientists, combined with keynote lectures by experts from industry, provide an overview of current innovations, new production processes, product development methods and corporate strategies in plastics technology. And around 50 companies from the plastics industry will be presenting their products and services. The colloquium takes place every two years.

Imprint



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