

Looking for adhesives? This is where you`ll find it!

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The future belongs to modern, mediumsized enterprises that live values, like the courage to innovate, sustainability, constancy, and reliability.



Welcome to the World of Bonding

Bonding is the most efficient assembly method and therefore a global growth market. The Jowat Group as medium-sized, family-owned enterprise is one of the top adhesive manufacturers around the world. Tradition and experience from almost 100 years of corporate development allow us to act as leading company in technologies and innovations, in numerous markets and application areas. This ranking as innovative leader is made possible by the commitment and competence of our employees, the adhesive experts who always find the perfect solution for our customers.

More than 500 different Jowat adhesives, matched by the respective comprehensive service, provide optimised manufacturing processes for many products. They also allow the customer to profit from all advantages offered by the modern and highly diverse adhesive technologies for his specific needs.

Jowat SE operates on clearly defined markets, with a global sales structure of 20 Jowat affiliates and six production sites on four continents.

Among the major sectors are the woodworking industry and furniture manufacture, the paper and packaging industry, the graphic arts, the textile, automotive, and electrical industries. The main objective of our daily work is to meet the expectations of our customers all over the world by providing them with adhesives, chemical products and tailored service, and to satisfy our company owners with qualified corporate growth.

The success story of bonding is developing rapidly. Jowat is ready to write new chapters of this success story together with you. Come and join us.

2 Ville

Klaus Kullmann

Dr. Christian Terfloth

Ralf Nitschke



The Wood, Furniture and Construction sector is a globally growing market and a strategic target of Jowat SE.

Jowat is a comprehensive supplier of these markets, including many special applications, providing a wide range of adhesives combined with extensive technological expertise.

Adhesive manufacturers and processors have to respond to constantly renewed challenges based on the increasing demands of the wood and furniture industry concerning product reliability, process and occupational safety. The pressure for innovation throughout the entire value chain is increased by current trends, like new living environments with overlapping room utilisation concepts, furniture that is more and more individualised, and by a demand for items produced observing health and sustainability aspects.

Manufacturing processes in the woodworking industry are increasingly automated and interlinked. This calls for adhesive technologies that are efficient, process reliable, flexible and durable. Additionally, workplaces as well as the end product are expected to meet stringent ecological standards.

Equal in versatility and matching these high standards are the adhesive systems from Jowat. Their reliability for these applications has been proven for many decades.

Furniture, doors, floors

Jowat adhesives with the most diverse product characteristics are used successfully for the standard applications of the wood and furniture industry: edgebanding, profile wrapping, flat lamination and coating, assembly of sandwich elements, manufacture of 3D furniture fronts by membrane pressing technology, postforming and worktop sealing, flooring (parquet and laminate), dowelling, frames and carcase bonding, and in the manufacture of doors.



Wood processing industry and glulam

Only certified adhesives, another key product group in the Jowat portfolio, are used for the manufacture of solid wood for construction, glued laminated timber and cross-laminated timber. Solid wood bonding, manufacture of window frame scantlings and window frames, fingerjointing, edge bonded and multilayer panels, and assembly bonding, are further applications in the wood processing sector.

Upholstered furniture, mattresses

Manufacturers of upholstered furniture – requiring adhesives suitable for a high level of manual assembly and a wide variety of different materials – have been using Jowat adhesives for many years now, just like the mattress and foam converting industry. Growing demands in the mattress industry on efficiency, health, comfort, and safety, have launched innovative developments of our adhesives.



Building industry, construction, assembly

The adhesives used for window profile wrapping are faced by substantial challenges: durability of the end products, the growing variety of substrates and decor materials, plus faster downline processing. The manufacture of insulating compounds, stoneware compacting, installing roof insulation materials, cladding elements, preassembled housing manufacture, and assembly bonding, are further applications in the building and construction industry.







Packaging industry and manufacture of packaging materials

The variety in packaging products is constantly expanding. New product and market segments have emerged that are clearly defined with regard to specific applications and requirements. Examples are all types of solid and corrugated cardboard boxes, for instance trays and wraparounds, but also folding boxes with multiple varieties of finishing designs. Modern packaging processes require adhesives for carton closing that can be applied with the highest precision.

Beverage industry (Liquid Food)

One major application of the beverage industry is the bonding of caps and straws to beverage cartons, and of paper and plastic labels to metal, PE, PP and PET packaging units. Another standard sector is the manufacture of secondary packaging. High speeds and the growing diversity of packaging designs and materials require adhesives that are perfectly tailored for the processes.



Manufacture of sacks, bags and compound films

The applications for adhesives in flexible packaging units are very diverse and characterised by specific requirements. Main applications are e.g. paper and plastic sacks, bags and pouches, compound film manufacture and aseptic packaging, which has to comply with food regulations. The bonding of woven materials to manufacture carrier bags and heavy duty sacks is a futureoriented development for this market.



Graphics industry

Foil lamination, which has been a focus of Jowat in print processing for many years, is a finishing step used especially for folding boxes, book covers and other high-end print products. The range of applications extends from special additives for the paper manufacture to bookbinding, including books bonded with the LayFlat technology, to structural Braille varnishes, UV coatings, the manufacture of envelopes, window patching and other print jobs.

Paper | Packaging



The paper and packaging industry is the largest consumer of adhesives worldwide and a market with numerous applications for the most diverse adhesive technologies.

In the paper and packaging sector, Jowat SE is focusing on innovative applications and niches where the expertise as market leader can be successfully utilised, and pursues a continued expansion in these areas.

The challenges for innovative adhesives are raised due to the general trend, where the packaging is increasingly a means to promote branding of the end product. Sustainable packaging units made of renewable resources also create new opportunities to distinguish Jowat from the competition.

In the graphics industry, as well as in the entire paper and packaging industry, competent technical consulting is crucial to make the decision for the right adhesives a success. Jowat sets standards e.g. for bonding all standard foil substrates, handling highly transparent surfaces or the processing of print stock made of recycled materials.

Automotive | Textile | Electrical VE | EXTILE Electrical



The technology of bonding is a well-established integral operation in the manufacturing processes of the automotive, textile and electrical industries.

Jowat SE as leading company in technology and innovations is constantly pursuing numerous ideas and projects in the technology of bonding to increase the benefit for the customer and the potential for economisation due to the specific adhesives. Because adhesives make innovations possible.

On average, approx. 15 kg of different adhesives are used in a car. Well-known automotive companies and subsuppliers from all around the world rely on the innovative bonding solutions made by Jowat, which are used mainly in the interior of the vehicle.

The growing demand for adhesives in the automotive industry is supported by two trends: Interiors are designed and equipped to reach constantly raised high-end standards and this is accompanied by the respectively expanded material mix. Adhesives for new model series are developed in close co-operation with the automotive industry, parts manufacturers and engineering companies, which covers all steps up to serial production.

The textile industry expects adhesives with properties to meet the high requirements of each individual application: washing stability, breathability, flame retardancy, sterilisation stability and a wide spectrum of adhesion.

For many adhesive applications in textile manufacturing, processors and end customers consider the environmental compatibility to be of major importance. Many Jowat product solutions are therefore certified according to ECO-Passport, which facilitates the manufacturer's procedure to obtain the seal OEKO-Tex Standard 100 for the final product.

Automotive industry and sub-suppliers

All adhesive technologies used in the automotive industry are supplied by Jowat with products that are tried and proven for many years. The main areas of application include interior lamination, the panelling of doors, instrument panels and columns, seat manufacture and seat covers, trunk cover and lining, coating of insulation and sound-absorbing materials, as well as assemblies e.g. for convertible roofs and headlights.

Filter industry

The manufacture of air, oil and cabin filters is another application of Jowat adhesives. Since the filter materials and also the manufacturing methods differ widely, the adhesives utilised for the pleating process and frame bonding demand adhesives with special properties.



Textile industry

Jowat provides an extensive portfolio of adhesives for clothing textiles (functional textiles, sports, outdoor or protective clothing, lingerie), membrane lamination, cover materials for furniture and mattresses, technical textiles for industrial applications, for instance emery paper or multilayer filter materials and cleaning textiles (scrub pads, cleaning rags).



Electrical industry

The requirements on adhesives used in the electrical industry are also very special: protection against moisture, resistance against a number of different technical fluids and high temperatures. Jowat delivers tailored adhesives e.g. for car batteries, casting electronic parts by low-pressure injection moulding, coating shrink tubes and assembly of parts and components of electronic devices.





ProdUC Products

osslinkino esives O emperature er σ ce tensi epolvmer **Π Dens** OWS issio spectrum Compound elements hermal stability S ova adhesives UV resistance Open time reacti Sute n e efficient . Reaction time Super app zed σ Feed speed

The World of Bonding – apart from being dynamic and innovative – is above all a highly demanding technology with a huge range of different products.

Modern adhesives do not just bond. They provide various additional functional properties to increase the benefit for the respective application.

Our chemists pay great attention to detail when developing the right adhesive formulation for every individual application. Anyone who has dealt with industrial adhesives before is already familiar with the major parameters for rating and classifying adhesive properties: Adhesion spectrum, viscosity, initial strength, open time and processing temperature are only a few of the characteristics that are crucial factors for an ideal adhesive, suitable for each application. Our customers can count on our comprehensive advisory service and support for their specific application, when choosing the right adhesive as well as during the first trial run. Jowat SE covers the entire range of modern adhesives with a portfolio of products representing the leading edge of technology. Standard bonding technologies differ from each other mainly by their physical and chemical reactions that occur during and after adhesive application.

Many dispersions, thermoplastic hot melts, and solvent-based adhesives are physically curing. Dispersions, commonly known as glues, are available in different versions and processed directly. Supply forms of hot melt adhesives may be granulate, pastilles, pillows or blocks, which before must be molten prior to application with the respective suitable processing system.

Reactive, moisture-curing hot melt adhesives based on polyurethane or polyolefin and other 1- or 2-component reactive adhesives represent the largest group among the chemically curing adhesives. The product portfolio is completed by pressure-sensitive adhesives, primers and special products, for instance release agents or cleaners.

Everything vou always wanted to know about bonding*

* But were afraid to ask.

People People



The success of Jowat as entrepreneur is mainly based on the people who contribute their competence and experience in our daily work. Our employees are therefore our largest capital.

Over almost 100 years of corporate history, our highly dedicated employees have always provided their enthusiastic commitment to develop, manufacture and market innovative adhesives. This alone made Jowat one of the leading global adhesive manufacturers with dynamic growth perspectives. We want to keep and follow this tradition in the future. Achieving this will only be possible with the best team from the entire industry at all times.

Qualified, motivated and contented employees use their knowhow in every workplace and in every corporate function to the benefit of our customers. All staff members are expected to live up to the high standards of Jowat SE, and to represent us externally as an innovative, reliable and successful brand supplier. Bonding connects. As a family enterprise, we are emphasizing a corporate philosophy based on partnership and openness, while at the same time promoting performance and providing scope for individual creativity. We intend to motivate by transferring responsibility, recognizing achievement, and also by a high level of information concerning operational contexts. Our Management supports especially any commitment and contribution of skills by the employees to further international cooperation.

The individual support and professional improvement of employees, ensuring advanced competence and skills, is provided by special training and educational courses. This means that the continuous qualification of our staff is a major target. Other measures complementing this are raising the level of occupational health and improving the balance of career and family.

Principles ICIDES

If we succeed in thinking differently together with our customers and partners, this will improve our adhesives in the end.

Our corporate principles and guidelines were worked out, formulated and communicated together. However, the most important part is to live up to them in every day's interactions with colleagues and customers. Some of these values were already presented as part of this brochure. The following paragraphs summarise the information that can not be found on other pages.

Research and development: Our potential for innovation allows us to be the spearhead in R&D and adhesive application technologies for all product segments and industrial areas in which we operate. More than 33 % of our Top-20 products have been newly developed over the last four years.

Quality management is not a legal matter to us but a company principle. All departments show an exceptional level of quality awareness, a decisive factor for the success of Jowat. Total Quality Management means optimisation of internal processes, error prevention, superior product quality and supplies on time. **Solution partners** are manufacturers of machinery, materials, substrates or application equipment, serving the same industry we supply. The exchange of ideas and experience in regard to research and development activities, product application, as well as co-operative efforts between us, will lead to improved and new practical assembly methods. All customers will benefit from these efforts.

As a globally active enterprise with local roots, we are constantly aware of our **economic**, **ecologic and social responsibilities**. This involves saving natural resources, using renewable raw materials and safe manufacturing processes, reducing emissions as much as possible and providing comprehensive environmental information and support to our customers.

Adhesive Research Award: Jowat products win prizes and awards. For us this is reason enough to support and reward innovative and creative work. Since 1995, Jowat has been honouring outstanding solutions and innovative ideas in the adhesive sector with the Adhesive Research Award.





Worldwide competence is more than a slogan to us. There is no journey we would not undertake to be close to our customer.

Around the world, we provide local support for any application problems. Our products are used successfully in over 80 countries, on all continents. As a globally active enterprise we are constantly pursuing the triad strategy, which is underlined by six production sites on four continents.

Our 20 Jowat affiliates and a worldwide, tightly connected network of distributors ensure that we can provide our customers reliable assistance in every step they take towards internationalisation and global networking.



Our affiliates:

Australia Brazil Chile China Germany France Great Britain India Italy Canada Colombia Malaysia	Jowat Universal Adhesives Pty. Ltd., Ingleburn Jowat do Brasil Ltda., Novo Hamburgo Jowat Chile SPA, Santiago Jowat (Beijing) Adhesives Co. Ltd., Beijing Jowat SE, Detmold Jowat Klebstoffe GmbH, Elsteraue Jowat France sarl, Mâcon Jowat UK Ltd., Stafford Jowat Adhesives India Pvt. Ltd., Navi Mumbai Jowat Italia s.r.l., Osio Sotto (BG) Jowat Canada Ltd., Mississauga Jowat Andina S.A.S., Itagui Jowat (Malaysia) Sdn. Bhd., Balakong Jowat Manufacturing (SEA) Sdn. Bhd., Bandar Enstek
Mexico Netherlands Poland Russia Sweden Switzerland Turkey USA UAE	Jowat de Mexico S. de R.L. de C.V., Cuauhtémoc Jowat Nederland B.V., Fleringen Jowat Polska sp. z o.o. sp. k., Poznan Jowat OOO, Moscow Jowat Scandinavia AB, Malmö Jowat Swiss AG, Buchrain (LU) Jowat Atasoy Yapıştırıcı Ürünler Ticaret A.Ş., Istanbul Jowat Corporation, High Point (NC) Jowat Middle East FZE, Sharjah







Tradition

JOWAT·LEIME

JOWAT KG

The first car for Jowat representatives, a Lloyd 250 Saloon.



Two numbers can say a lot. In our case, these numbers are 100 and 1,000. We keep both firmly in view.

Jowat will soon celebrate the 100th birthday since the foundation of the company. In 2015, our number of employees passed the 1,000 mark, a challenge for medium-sized companies. We are particularly proud of these two numbers.

In 1919, Johannes Watzlawczik laid the foundation for the family-owned enterprise in Breslau, setting up a wholesale business. In the first years, the product portfolio consisted mainly of glue made of casein, animal hide and bones, of wood stains and other chemical products for the wood-working industry.



The courage to pursue new ideas, continuous technological improvement and highly committed Jowat employees were already the key elements for the company's success from the very beginning.

After the startup of "Jowat Lobers und Frank KG, Chemische und Leimfabrik" 1945 in Detmold, the product portfolio expanded at a steady pace, at first with focus on the woodworking industry.

The transformation from a glue factory to a modern industrial adhesive plant was initiated by ground-breaking developments in polymer chemistry and the availability of synthetically produced polymer resin dispersions in the 1950s and 1960s. The first patent application for a hot melt adhesive on a reel (Jowatherm[®]-Band) in 1968 established Jowat as one of the top suppliers of high-performance hot melt adhesives.

The high level of innovation created entries into new customer sectors early on, particularly in the 1970s. Not only the automotive and textile industries, but above all numerous applications of the paper and packaging industry are since that time bonding successfully with Jowat products.

In the 1990s and after 2000, Jowat focused on a successive globalisation of its business activities. Jowat affiliates and manufacturing sites were established during this period, among others in the Netherlands, Italy, Poland, Malaysia, Mexico, Brazil, Russia, Turkey and China.

Founded as a small trading company, Jowat is up to this day committed to the values of a modern family enterprise. In spite of today's market dynamics, a sustainable entrepreneurship draws on consistency, reliability and trust.

Operating as a joint-stock company since 2002, Jowat AG converted to Jowat SE (European Stock Corporation) in 2015, emphasising the perception of Jowat as global player – where the customer always comes first.

Brand Cano



Brands have fascinated at all times. Brands are omnipresent in our daily life. They have the power to make us believe in the product's outstanding quality and performance, in the focus of the brand-owner on us as customer, and are highly efficient in bringing a message across.

How strong B2B brands become embedded in the customer mind is often quite complex and based on a history of many individual, satisfactory customer relations. Just like these, the brand is usually in a continuous development during the history of a company, constantly adapted to fit the "Zeitgeist", target group requirements and technical possibilities.

Brands are reliable suppliers, partners we trust, and the visionaries of their industries. This was their role at all times, and it will not change.

"We stick to our promises" – For us at Jowat, our target is set higher than being recognized worldwide as a brand – we aim to keep the promise of the performance tied to the brand Jowat, at all times in our relations with each and every customer.

Jowat Jowat Jow





Numbers



Innovations must create added value and meet future customer requirements, not only in bonding. This is our philosophy and motivation. Number of trade shows worldwide where Jowat kept in touch with its customers in 2015

million euros annual turnover





260



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Jowat steht für Zukunft.

Im Technologie-Netzwerk: Intelligente Technische Systeme OstWestfalenLippe:



Jowat SE

Ernst-Hilker-Straße 10-14 32758 Detmold • Germany Telefon +49 (0) 5231 749-0 Telefax +49 (0) 5231 749-105 www.jowat.de • info@jowat.de