

Industry Information

Adhesive solutions for the graphics industry

Your partner in bonding

Jowat
Klebstoffe



Faster, versatile, better

A sector in transition.

The graphics industry is defined by dynamic, individuality and performance. Innovation partners support these challenges with experience, advisory competence and future-proof product solutions.

The graphics industry

Structural change is the key term in the graphics industry. Increasingly automated and digitalised manufacturing processes, the internet replacing print media, growing pressure from competition due to declining order volumes – rarely has an industry undergone so many changes in such a short period. New business models arise from this scenario: specialised online printers are powerful and large players acting as an interface between classic printing and digital media.

Due to these changes, all performance parameters in the manufacturing chain are exploited at their maximum potential to increase efficiency. Enterprises have to make their production processes more profitable, more

versatile and faster, because lot sizes are becoming smaller, projects change more often and products become more diversified. The key to success is an attractive design. The demand for superior finished print products, which emphasise the value of a brand, is growing. Print businesses become media service providers. Special configurations, customisations and print-on-demand are reshaping the market. To safeguard success, enterprises have to be versatile.

Under these circumstances, leading companies in the graphics industry have relied on innovation partnerships in their competence network, which provide products and services that support efficiency, versatility and high



performance. Manufacturers of industrial adhesives have to supply the graphics industry with suitable products for a growing number of different applications and increasing speeds. With an extensive expertise in all processes from paper manufacturing to the highly finished surface, Jowat successfully supports clients with innovative solutions for all adhesive applications. Customers rely on competent advisory and modern, powerful adhesives.

Print finishing



Top performance in all disciplines

For more attractive products at the point of sale.

High line speeds, highest demands on quality and appearance. Finishing steps become more and more diversified and the degree of finishing increases continuously. In the manufacture of superior surfaces, all parameters are used at their fullest potential to provide the best results.

Film lamination of print sheets

High-quality print finishing creates outstanding effects and makes products more attractive for buyers at the point of sale. The superior appearance is supported and protected by laminating the surface with diverse finishing foil. Adhesives for this application have to provide excellent adhesion to foils as well as to the printed substrates. Over the past years, Jowat has developed a wide range of dispersion adhesives. These modern laminating adhesives are characterised by minimal foaming and application amounts, and excellent flow properties. High compound strength and cut resistance, as well as high durability ensure optimum downline processes, like grooving, notching or embossing.

Sheet lamination

Sheet lamination of printed paper material is a widely used finishing method for many different products, for instance folders, book covers, board games, jigsaw puzzles or display packaging. Jowat has many years of ex-

perience in bonding all types of papers and cardboards – whether on highly absorbent greyboard, in the overlapping area, paper with plastic content or printed with digital printing inks. The dispersion adhesives, crosslinking agents and cleaners by Jowat are perfectly adapted to each other and meet all individual requirements: excellent adhesion, no wave structures, and optimum LayFlat properties.

Rotary fold bonding

Rotary fold bonding is characterised by very high speeds, different paper qualities and newly printed inks. Adhesives for this application have to fulfil highest quality demands. Jowat dispersions have been used successfully in fold bonding for many years and are perfectly optimised for the challenges of this application. They are continuously improved in close cooperation with processors and are suitable for all standard application systems and diverse paper types. The adhesives are characterised by fast drying and optimum cut-off at the nozzle, even at high line speeds.

Top-quality from the first to the last page

The best adhesive for each material.

Choosing the suitable adhesive for bookbinding depends on many different parameters. For instance on the manufacturing requirements and methods, but also on the purpose of the printed product. With a wide range of hot melt and dispersion adhesives, Jowat is the perfect partner for the manufacture of books, magazines and catalogues.

Softcover manufacturing

Jowat provides different adhesive solutions for the spine and side bonding of softcover books and catalogues and for all standard paper qualities. The spine glue for softcovers is adapted to the special requirements in manufacturing. Numerous factors have to be taken into account to ensure an ideal performance of the adhesive. For instance, the temperature of the adhesive, the dwell-time in the processing unit, the application amount and the feed speed. Side glues are used to bond the end sheets of a book or a magazine to the cover and the demands on these products are high as well. High flexibility, perfect adhesion on different surfaces, no bleed through, and maximum initial strength are essential for this application.

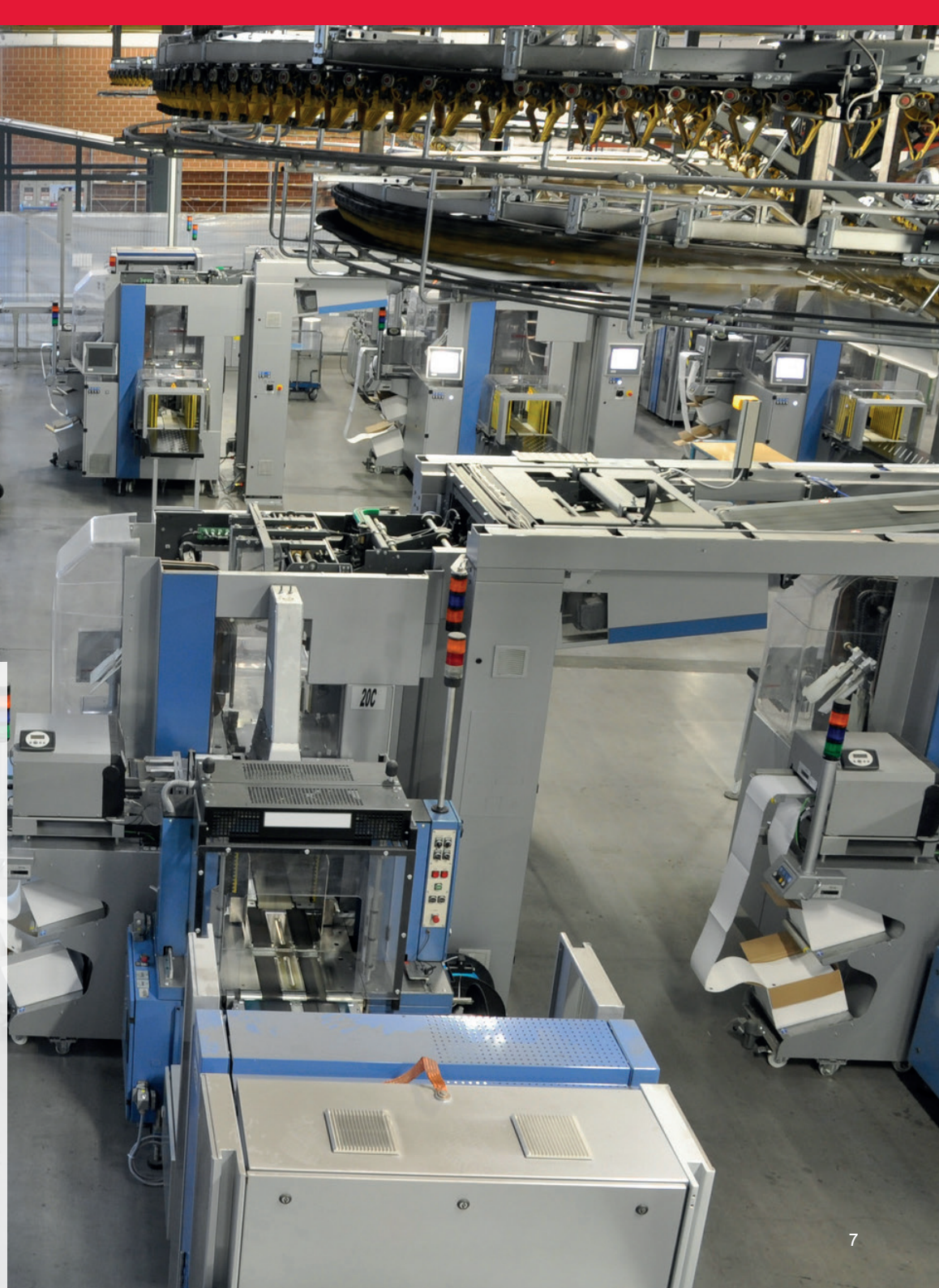
Hardcover manufacturing

In hardcover manufacturing, Jowat adhesives are the perfect solution for all applications – starting with the assembly of the book block and end-sheet bonding, to attaching ribbons for bookmarks and manufacturing the cover. Just like in the production of softcovers, the properties of the adhesive play a key role. However, another essential aspect is the purpose of the product. The Application Technology Department at Jowat has many years of experience in the field and knows which questions have to be clarified when choosing the suitable adhesive: Is it a children's book? Does it come into contact with food? Will the product be exposed to high temperatures (e.g. car manuals)? What is the minimum lifetime of the book?



LayFlat

Jowat supplies hot melt and dispersion adhesive systems for the manufacture of LayFlat books, which are adapted specifically to this application. Dispersion adhesives, for instance, facilitate reliable processes and are suitable for diverse papers due to minimal cleaning, high compatibility of machines, fast drying and downline processing. Frequent adhesive changes become obsolete and optimum adhesion to different surfaces is ensured. Therefore, bookbinders have maximum creative freedom in using the LayFlat technology to manufacture visually appealing print products which fold open perfectly flat. No contour trapping, no misaligned printing registrations, no colour differences. For superior product quality.



Print varnishes



Brilliant performance

Creating highlights with Jowat varnishes.

In addition to modern adhesives for print finishing and bookbinding, Jowat also supplies UV varnishes for superior print finishing or for special structural effects. Synergies between the products during development and application are exploited for best results.

UV-curing varnishes

UV varnishes provide outstanding optical highlights in print finishing, like high-gloss or matt effects. UV-curing coatings by Jowat provide excellent adhesion on all standard print inks and foils and are characterised by high scratch resistance, homogeneous application pattern, good processing properties and minimal odour. Jowat® UV varnishes and adhesives are complementary products which provide an optimal interaction. For instance, print sheets can be coated completely during finishing without recessed areas for the subsequent application of adhesive (e.g. for carton closing). The Jowat PermaCoat® product range facilitates superior product quality and very efficient processes – for screen printing, as well as for offset printing or flexo printing.



Structural varnishes

Jowat structural varnishes are the results of an on-going development of UV-curing varnishes and are used for special optical finishing effects, like lenticular printing, 3D simulation effect, diffusion printing or lens effects in screen printing.

In addition to purely optical effects, structural UV varnishes from the Jowat portfolio are also suitable for special functional applications. Jowat has developed an innovative structural varnish system for the application of braille dots. This technology allows applying the Braille letters as coating dots using a special nozzle applicator – with excellent flow properties, optimum drying and constant quality, even at higher line speeds. The structural Braille varnish meets the highest requirements and complies with the “Marburg Medium” standard: meeting the minimum dot diameter and height, maximum adhesion even on plastics, clearly defined dots, a formulation optimised for the pharmaceutical industry, good readability of text below the dots.

Lower emissions, better health

Monomer-reduced hot melt adhesives considerably reduce the risk potential for employees and significantly increase the occupational safety - while the quality remains as high as usual.

Monomer-reduced adhesives

Increased health protection due to minimal emissions is nothing new for Jowat. A few years ago, the adhesive specialist has developed a product group of monomer-reduced polyurethane hot melt adhesives, which have been optimised constantly ever since. These systems do not have to be labelled as hazardous substances and they are not classified as harmful. Unlike classic PUR hot melt adhesives, they can be processed in non-hazardous production areas. Monomer-reduced hot melts provide the same performance known from conventional PUR products and as required in many applications, for instance high heat resistance, water resistance and joint quality.

Further information on monomer-reduced adhesives and the current legal requirements are available on the Jowat website.



Have we sparked your interest?

As an innovation partner for the graphics industry, Jowat supports processors in optimising manufacturing processes and in meeting customer requirements worldwide. We understand the challenges in the graphics industry – whether it is about complex, plastic-based papers with high-density surfaces, how to increase the degree of finishing or how to shorten the lead time between the placement of an order and the shipment of the product.



We are part of the entire manufacturing chain and provide extensive advisory services: from the continuous search and testing of new, sustainable raw materials, to the development of innovative adhesives in close cooperation with processors and engineering companies, and to conducting individual failure analysis in case of rejects. For years, Jowat has safeguarded the success of enterprises and protected investments by playing a key role in providing innovative adhesive solutions for existing and new engineering technologies, and facilitating the optimisation of products and processes.

Have we sparked your interest? Feel free to contact us. We look forward to working together.



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