FUJIFILM

Pressroom solutions

CASE STUDY BOSCH DRUCK

BETTERBUSINESS

Helping printers all over the world build
a better business.

Pressroom solutions

Real printrooms, real results.

Fujifilm's intelligent and integrated pressroom solutions meet the challenges across every segment of the offset printing process. Our expertise and understanding of offset printing has allowed us to develop a complete range of pressroom chemicals that help you take control of the entire printing process from plate to page, delivering the following benefits:

A total solutions provider

Reduced production cost

Optimised productivity

Excellent print quality

Reduced environmental footprint

This case study highlights how our pressroom solutions are benefiting printers all over the world, helping them to build a better print business.

Powerful pressroom solutions

The complete range of founts, washes, coatings, spray powders, silicones, glues and auxiliaries designed to optimise the performance of your pressroom. Available for sheet-fed, heatset and coldset printing processes.

Founts

A wide range of sheet-fed and heatset founts for IPA-free and IPA-reduced printing. For coldset our formulations guarantee a stable printing process with low damp settings.

Fujifilm founts feature minimised blanket piling and ink-feedback for optimised print quality and reduced need for maintenance.

Our ECOdry technology increases the drying speed of the ink on non-absorbing substrates and for UV and metallic inks we offer optimised solutions.

Washes

An important factor for washes is a fast and effective cleaning of paper and ink build up on the blanket. With excellent water miscibility, our washes ensure low maintenance and minimised paper waste on restart. The best possible performance in combination with a high safety for the press is guaranteed thanks to OEM approved formulations.

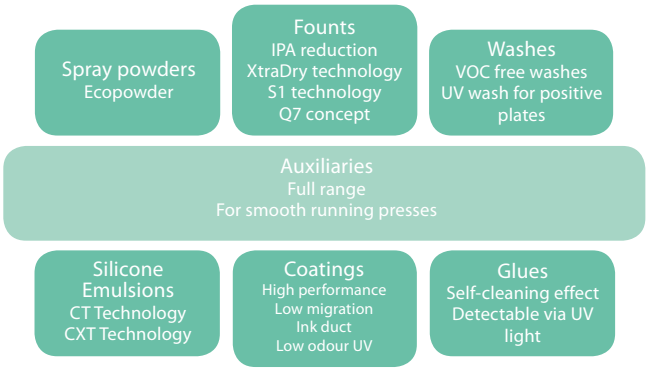
In our range of UV washes you will find the optimum product for each application, including EPDM washes, mixed (EPDM and NBR) washes and also products for unbaked and processless printing plates.

For heatset applications our washes offer the best possible performance in combination with high dryer safety.

Thanks to low-VOC and VOC-free washes, Fujifilm can help printers reduce their impact on the environment.

What's in our toolbox

For sheet-fed, heatset and coldset printing processes



Coatings

Fujifilm offers a wide range of coatings for the printing industry. From UV to water-based, from super gloss to extra matt, from high slip to low slip, from single sided to double sided. Tell us more about your application and we will support your daily demands with the optimum product.

This range also includes coatings (water-based or UV) for compliant food packaging. Our Low Migration series offers you the best performance for your food safe packaging.

Our primer coatings for inline coating units, for finishing with UV coating or foil lamination, offer optimum adhesion.

Ink duct coatings for finishing without a coating unit are available in two qualities: viscous or pasty.

Also, coating solutions for web applications with an inline coating unit are included in our product range.

Spray powders

Fujifilm only offers starch-based spray powders as these provide optimum performance when used in conjunction with coatings.

Silicones

Our silicones set a new standard in the printing industry: with improved silicone technology, penetration into the paper is drastically reduced while at the same time offering you the best possible wetting, levelling and protection in the folder.

Glues

Glue performance has an important influence on your final print product in the packaging industry and inline folding process. Correct viscosity, adjusted setting time and optimum adhesion are just a few important factors. As well as optimised packaging size, we offer easy traceability thanks to UV tracer and minimised maintenance.

Auxiliaries

Fujifilm offers a full range of auxiliaries which support each main pressroom product in its performance: from water treatment to heavy duty cleaners, from roller washes to fold aid. It's all part of our toolbox.

Using WashMax 60.65 MI could reduce our wash consumption by 50%. Moreover we are happy with the process improvement brought by it."

JURGEN UNFRIËD
HEAD OFFSET PRINTING

From left to right: Christian Lenz (Fujifilm), Roger Dickmann (member of Bosch-Druck), Jurgen Unfriëd (head of offset printing Bosch-Druck)

Bosch-Druck

How WashMax 60.65 MI improves the washing process at Bosch-Druck thanks to its special emulsification behaviour.

A drastically reduced wash consumption, better cleaning results and shorter production stops – with the switchover to WashMax 60.65 MI detergent from Fujifilm, Bosch-Druck in Ergolding (Germany) near Landshut has optimised another process step at its printing plant since the start of 2013.

When providers of printing services are involved in the Just-in-Sequence production of the automotive industry, they have no alternatives for industrial manufacture. ‘For us, as a supply company to the automotive industry, the margin has always been tight. In fact, the shorter the transit times, the better we have had to organise our operational processes’, explains Roger Diekmann. In particular, offset printing had to be stable, controllable and transparent. ‘All ‘stops and callbacks are counterproductive’, according to the member of the management of Bosch-Druck GmbH in charge of production and engineering.

Installation

Pressroom	WashMax 60.65 MI
Country	Ergolding - Germany

BETTERBUSINESS

- Wash consumption reduced by 50%
- Better cleaning results
- Shorter production stops

PRESSMAX

WASHMAX 60.65 MI

WashMax 60.65 MI stands out because of its special emulsion behaviour. When the wash is mixed with water, both spontaneously turn into a homogeneous mixture which guarantees optimal cleaning results using only minimal quantities."

In order to be prepared to meet the extremely high standards of the automotive manufacturers and other clients, and to constantly increase the stability and efficiency of the production workflow, the head of Offset Printing, Jürgen Unfried, has been fine-tuning every aspect that might further optimise operational processes for years. For instance, the pre-press and printing workflows at Bosch-Druck have been completely standardised. All unproductive moments, including preparation times, have been reduced to a minimum at the printing plant, with 4 shifts around the clock from Sunday 10 p.m. to Saturday 10 p.m. The same is the case for pre-press.

Do not hesitate to try this wash

Against this background, Fujifilm received only positive reactions when it asked Bosch-Druck to try the WashMax 60.65 MI wash. 'We had been promised a clearly more efficient cleaning process of our printing machinery with a significantly lower product consumption', Unfried recalls from the first conversations with Fujifilm about the high-performance wash from the company's PRESSMAX presroom chemicals programme. Obviously, this had aroused our curiosity.

Finally, at the end of January 2013, the wash was tested on the company's first brush washing unit. 'The experts from Fujifilm had recommended us to set the machine at the shortest washing programme. We followed their recommendation and we immediately got perfect washing results', the printing plant manager explains, when asked why Bosch-Druck afterwards also changed its other printing machinery to WashMax 60.65 MI once the remaining stock of the wash they had been using up to then had been used up. The difference between the new and the old product is huge. 'In the end, we are only using half of the amount of wash we used to use for our three printing machines with a brush washing function.' This way, the amount of waste from used wash Bosch-Druck needs to discard has also been drastically reduced.

In addition, the washing results have considerably improved. The ink and residues of the substrate – i.e. the particles that come off the paper – are reliably washed from the rubber blankets. This contributes to the stability of the printing. Moreover, with WashMax 60.65 MI there is no more initial smearing. Unfried: 'With difficult papers we used to have to wash the edges again and again. Those times are over.' And as if this were not enough: After washing, the rubber blankets dry in no time. The printing machines are operational again sooner after each washing. 'Thanks to the fast drying process, paper waste is considerably lower. Only ten sheets are lost. The next sheets

We followed Fujifilm's recommendation and we immediately got perfect washing results."

can already be sold', the printing plant manager says, summarising the financial advantage, while we are walking towards the print hall.

The emulsification behaviour makes the difference

Once there, Unfried pours a small amount of WashMax 60.65 MI into an empty PET bottle, adds a little water, screws the cap on and shakes the bottle for a few seconds. Already, both substances have blended into a homogeneous whitish liquid. 'In the end, this spontaneous emulsion behaviour is the secret to the efficiency and performance of the detergent', Unfried explains. The emulsifiers allow the water to be mixed with the wash in such a unique way. The special consistency of the emulsion, for its part, ensures that both the ink pigments and the fibres and dust of the substrate are eliminated equally well from the rubber blankets. At the same time, these – entirely independently from the quality of the substrate used – are perfectly dissolved into and eliminated by the emulsion. This explains, from a technical point of view, the high effectiveness of the high-end wash, which is based on a specific formula with carefully selected, high-quality raw materials.

'Let us see when the WashMax 60.65 MI and the water have separated again', Unfried says, as he sticks a label to the bottle and writes the date on it. He then places the bottle on his desk. It is to stay there until both liquids can be clearly distinguished again.

The availability of the printing machines increases

The fact that Bosch-Druck is now able to always run the shortest washing programme, regardless of the substrate, has its effect on the availability of the machines. Because whereas the shortest washing programme is already done cleaning the rubber blankets after about 30 seconds, the longest programme takes more than four times as long. According to Unfried, 'this makes an especially big difference when we need to wash in between'. The shorter the washing cycles, the higher the productivity of the printing machines. Here, it should be borne in mind that the quality of the paper used in offset printing deteriorates and that an increasing amount of filler is released from the paper. For this reason alone, washes during the printing process should be more frequent. The recommended frequency of washes also depends on the image being printed. 'In particular, sheets with colour shading and dark raster areas are especially sensitive to build-up and are therefore typical candidates for more frequent washes.

Otherwise, the washing programme is run with every job change. The less time this takes, the faster the machine operators can place the plates for the next job. Unfried: 'In the end, the wash supports my goal to further shorten preparation times, especially on days with a larger number of small jobs.' Overall, it enables Bosch-Druck to perform more jobs per shift, without 'our employees breaking too much of a sweat.'

Last but not least, in principle, there is a wash after each change of stack. As the washing programme is

finished long before the stack change has been completed, the machine can be started up again immediately. It does not need to wait while the washing is going on. On average, around 10-15 washes per shift take place at Bosch-Druck.

Another aspect: when the cartridges of the brush washing units have reached a certain degree of dirtiness, Bosch-Druck sends them to the manufacturer of the printing machines, where they are cleaned with ultrasound. Thanks to the considerably lower use of wash, the intervals between cleanings can be noticeably increased. Therefore, Bosch-Druck has to send in the cartridges less often. This is another way the costs of the company are reduced.

Smell nuisance has been eliminated

'In addition, the smell of this wash is considerably more neutral than that of other products, which is something our machine operators are very grateful for', Unfried points out as another positive aspect for the daily work at the offset printing plant. It is a matter of logic: the less product is used in the process, the less product can evaporate. Some other wash have a particularly strong smell. This is not the case with WashMax 60.65 MI. Although the new wash is also based on crude oil.

'A consistently optimised workplace is an important factor for motivation. By providing our employees with everything they need to perform the duties assigned to them as best as possible, we are laying the foundation for seamless operational processes. This is something one simply learns from experience. From this perspective as well, the new wash perfectly supports the company processes. The employees in the print hall were involved in the decision from the start. 'We are sticking with this wash was heard throughout the print hall when the amount that had been supplied to test it had almost been used up. Of course: in the end, the machine operators have every interest in a stable process.

In addition to the three printing machines with brush washing units, the company has two machines with cloth washing units. As with the brush washing units, Bosch-Druck also obtains better washing results using the new wash here, although these units only account for up to 10 % of the company's total wash consumption.

WashMax 60.65 MI complies with all requirements of Fogra and the printing machine manufacturers – no ifs, no buts. For instance, the wash, which is delivered to Bosch-Druck in 25-litre canisters, has been tested and certified against the strictest quality

In the end, the wash supports my goal to further shorten preparation times, especially on days with a larger number of small jobs."

"As the brush washing units at Bosch-Druck are now all running the shortest washing programme and using less than half of the formerly usual amount of wash, the cartridges of the brush washing units need cleaning less frequently which results in cost saving."

standards. The corresponding test certificates certify its compatibility with the rubber blanket units in question.

'In addition to the improvements to the process, with WashMax 60.65 MI we have clearly reduced the cost of cleaning our machines', Diekmann says, summarising the financial factors. It is true that, in comparison with the traditional products, the price of the high-quality wash is quite a bit higher. However, if one takes into account the drastically reduced quantities to be used and discarded, the time gain during the washing and the preparation process and the lower number of wasted sheets, the overall result of WashMax 60.65 MI for Bosch-Druck is also noticeably positive from a cost perspective. 'In addition, there is the side effect of reducing the amount of waste, which is positive from an environmental point of view.' Moreover, this can be used by Bosch-Druck in its marketing to customers.

Bosch-Druck

What would Josef Bosch say if he were alive and saw what has become of the book printing company he founded in 1914? The fact that, barely 100 years later, printed products, such as, for instance, user manuals, would be delivered straight to the vehicle assembly line at fixed times, was then surely beyond all expectations. Today, Bosch-Druck GmbH, based in Ergolding (Germany) and employing 170 people, supplies high-quality printwork mainly to car manufacturers, publishing houses and agencies in the entire German-speaking region. In addition, the company also offers printing services such as photo books and greeting cards to Web-to-Print suppliers. These are printed digitally and dispatched all over Europe.

www.bosch-druck.de

Please contact your local Fujifilm partner or mail to marketing_ffbe@fujifilm.eu

For further information:

Web	www.powertosucceed.eu
YouTube	www.youtube.com/FujifilmGSEurope
Twitter	@FujifilmPrintEU

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