

7 Through the global active relations network of Q.I. Press Controls, we can now place our solutions at the customers even faster, stronger and more innovative. 9

"We will be unveiling new products to the market"

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"We believe Q.I.
Press Controls
currently offers
the most advanced
system and the best
vision"

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Q.I. Press Controls continues developing

Innovation

For Q.I. Press Controls, 2015 will - first and foremost - be a year of collaboration, product development and discovery. The central theme is 'innovation'. In an interview with the management, registerFOCUS asks what 'innovation' actually means to the business that leads the field in highquality measurement and control systems for web offset printing presses. According to Menno Jansen, innovation - as far as Q.I Press Controls is concerned - is all about anticipating the needs of the market. "The printing industry has hit on hard times," Mr. Jansen explains. "In our view, our innovative products are helping support the production process so that it becomes more efficient. Not only does this mean we generate bigger profits for customers, we also maintain our number one position in the market."

explains Erik van Holten. "There are definitely new innovations in the pipeline. At Drupa 2016, we will be unveiling new products to the market." When we ask them for some sneak previews, registerFOCUS is met with tightlipped smiles from both executives. "Sorry, it's still under wraps!" explains Mr. Jansen.

Menno Jansen and Erik van Holten, Q.I. Press Controls' Board of Directors.

We will be unveiling new products to the market 9 9

Collaboration

Collaboration between Q.I. Press Controls and EAE is leading to ever greater synergy. "We are working together to develop new products and to integrate our products in EAE's control systems," says Mr. Jansen. "By increasing the efficiency of our products and service, we are also able to benefit the customer in terms of cost. One example is the service contract we offer, whereby a service technician from Q.I. Press Controls or EAE Service can provide backup for all products from both organisations."

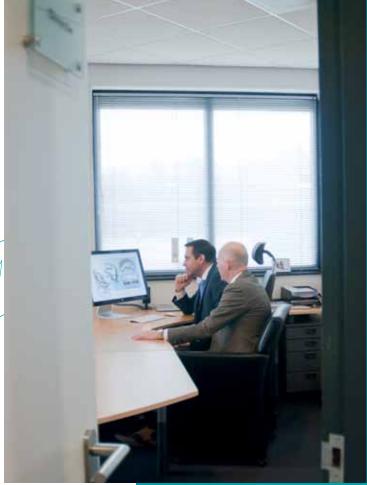
Product development

Over the last few years, Q.I. Press Controls has discovered that innovation helps give it a head-start on the competition. One of these innovations has been Q.I. Press Controls' IDS-3D, which the business launched in 2014 at the World Publishing Expo trade fair in Amsterdam, the Netherlands. Another has been use of the Q.I. Press Controls AIMS (Automatic Ink Mist Shield) system that ensures cameras are always kept clean. Mr. Jansen: "Innovation is aimed at bringing about efficiencies so that the client can produce to high standards in the shortest possible time and at the lowest possible cost."

Discovery

Eventually, Q.I. Press Controls aims to produce new products for the printing of packaging. "We are exploring new markets and continuing to develop our products."





Harmsworth Quays Printing Ltd. wants IDS-3D for quality and the environment

IDS-3D for flexo print

In 2015 Harmsworth Quays Printing Ltd. shifted its focus to improvements in print quality and the reduction of waste. In an interview with registerFOCUS, Group Technical Director Martin Hunt tells us how indispensible Q.I. Press Controls' IDS-3D is in meeting these targets.

Interview

Only a week has passed since the contract was signed on 2 February 2015 when registerFOCUS interviews Martin Hunt at Harmsworth Quays Printing Ltd. (HQP) in West Thurrock (UK). Mr. Hunt, who has been in the printing industry for nearly 40 years, is Group Technical Director at HQP. He started out in printing press manufacture with Goss in 1975 and over the years worked in the various departments of the organisation in a number of roles. In 2000, Mr. Hunt decided to make a clean break with Goss and set up in business managing press-related projects. After being involved on several major projects, including one for a leading UK newspaper, in 2002 Mr. Hunt was offered a full-time contract at HQP. Since then, he has never looked back. The Group Technical Director is passionate about bringing success. "I've been lucky enough to have helped work on projects right from the very start and make a success of them, for example HQP's new plant in West Thurrock. From the word go, the whole construction project took two years and we've since moved 4,000 tons of equipment from our old Docklands site to West Thurrock", he explains. He tells us about the collaboration between HQP and Q.I. Press Controls and the way in which both organisations can be of help to each other in developing yet more quality solutions for automating flexo print production.

Harmsworth Quays Printing Ltd. – the environment and quality

HQP is the printing division of one of the UK's leading multimedia concerns. DMG Media is responsible for publication of the Daily Mail, The Mail on Sunday and Metro, whilst HQP looks after the printing operations. The organisation has two printing plants, one in West Thurrock and the other in Didcot, both of which are flexo. HQP prints on its own presses but also makes use of web-offset contract printing across the UK, Ireland and the rest of Europe.

HQP's ambition is to deliver high-quality products as inexpensively as possible with the least possible impact on the environment. Mr. Hunt tells us that the West



Group Technical Director Martin Hunt

Thurrock plant is the greenest of its kind in the UK. "The aim was to create the greenest possible plant at no extra cost and we have succeeded in doing this because we

99It registers everything!99



were able to start from scratch. The only water we use in the production process is rainwater and the building is heated during the day by the heat given off by the presses at night. This means free heating in the building, without the need for gas."

Consolidation and cost-savings have been the priority in recent years, Mr. Hunt explains. This year however, the focus has shifted to the improvement of print quality and reduction in the use of raw materials. This is one of the reasons that HQP placed the order with Q.I. Press Controls for the IDS-3D.

IDS-3D for West Thurrock site

The possibility of an order was first mooted during a visit to the IFRA 2014 in Amsterdam, where Mr. Hunt met with Menno Jansen, managing director of Q.I. Press Controls, with whom he had been doing business for the last fifteen years. Mr. Jansen was able to demonstrate the new IDS-3D for colour register and colour control. "We got talking about the possibility of using the IDS-3D on a flexo press," Mr. Hunt explains. "This would help us reduce waste levels as well as improve the quality of the product using an advanced control system. Following detailed discussions, we got the green light from management in January to start the project."

Management at HQP agreed to the first order for the West Thurrock plant which accommodates what is believed to be the longest press line in the world. Four of the 36 full-colour towers and one of the six folders on the 165-metre long KBA Flexo Courier will be been fitted with IDS-3D cameras with colour control, colour register, AIMS, fault detection, waste gate control and plate change detection.

explains: "Ink levels can't be adjusted during printing, but the IDS-3D does allow us to check whether every flexo plate is fixed in the right position and help us react quickly if anything is amiss. Normally, an operator would only find out whether a plate had been incorrectly positioned after he picked a copy from the folder delivery belt and this might cost us as much as 50 production copies. In next

99 We aim to work on innovative solutions with Q.I. Press Controls 9

The Intelligent Quality Management (IQM) information system will also be installed. Ultimately, the goal is to install the system on all towers and folders.

IDS-3D used for flexo printing

The flexo printing process does not allow ink to be adjusted during production. Nevertheless, HQP has decided to invest in colour measurement. register FOCUS wondered what the organisation aimed to achieve by this. Mr. Hunt

to no time, the IDS-3D enables us to check at a glance whether the image is correct and respond accordingly. The density regulation helps us anticipate any link splashes low ink levels and ink loss. We don't have to wait for the operator to do the checks anymore."

Mr. Hunt believes IQM is indispensible for HQP: it reports any damaged plates that are detected, shows how many (accurately printed) copies have rolled off the press and picks out any density problems. "It registers everything," Mr. Hunt says. "The system will provide us with a detailed and accurate production quality."

Mr. Hunt explains in a nutshell what IDS-3D with IQM will mean for HQP's flexo production: "The system will not only save on usage, but on time too whilst improving both the quality of production and the quality of reporting."

Collaboration and development

It's not without reason that Mr. Hunt decided on Q.I. Press Controls. The Q.I. Press Controls' IRS system has been integrated on HQP's presses for years. Mr. Hunt adds that the system still operates to his complete satisfaction and, when required, the service is always efficient. He believes in the system, adding that there is a good rapport with the management team at Q.I. Press Controls. The organisation is on the same wavelength as Mr. Hunt: "We both want to continue developing and will do so until we are satisfied everything works perfectly." The good relationship HQP enjoys with David Waller, Q.I. Press Controls' UK agent, has also been instrumental in building up confidence in investing in a new system.



Bottom right: QIPC's Graphical Operator Station

It's striking that Q.I. Press Controls finds itself working with a flexo print partner, since the organisation has built up a name primarily in the web-offset market. However, this is because Q.I. Press Controls wishes to expand into other markets and sees in HQP a partner with which the product can undergo further development. The organisations have the joint goal of producing flawless fully automated print copies on flexo presses whilst minimising waste.

Positive about the future

Mr. Hunt explains the importance of the ongoing collaboration between HQP and Q.I. Press Controls: "We also have a desire to work on innovative solutions with Q.I. Press Controls. (...) We aim to bring about a situation in which we will have accurate copies automatically rolling off the presses. The only thing an operator needs to do will be to check the cut-off. The rest will be done by the control system: the cameras are the extra eyes that are able to constantly check quality. They are able to check whether the print is in register, that pages are in the right place and that the ink is in balance. It closes the waste gate automatically and is significantly quicker than an operator is assessing whether the best quality is being produced. When things should go wrong the control system will quickly notify the operator or even stop the press immediately thus keeping waste to a minimum."

When asked by registerFOCUS about his expectations for future collaboration between HQP and Q.I. Press Controls, Mr. Hunt is extremely positive. He concludes: "I believe the system we've acquired will meet our expectations. If so, it means we can make big savings and do the next investment that pays for itself in the shape of the installation of IDS-3D cameras on the remaining 48 towers in West Thurrock and Didcot!"



Part of the longest press line in the world

An investment in a fully automated product from Q.I. Press Controls provides quick returns.

So what about Sydostpressarna?

In January 2014, Karlskrona-based Sydostpressarna in Sweden opted to install a fully automated system from Q.I. Press Controls. One year later, registerFOCUS went back to find out what happened next. The organisation, it seems, is more than happy with the results.

Sydostpressarna forms part of Gota-Media AB, the owner of eleven national dailies and some weeklies with a strongly regional focus. In the first instance, the printing company was interested in a register system, but after a fact-finding visit to a satisfied client they soon became enthusiastic about a fully automated solution. In January 2014, Sydostpressarna became the first company in Sweden to invest in the <u>m</u>RC-3D for colour register, IDS for colour control (including dampening control) and the IQM reporting tool.

The system was installed on a manroland GEOMAN press and the company had two clear objectives in mind: cost savings and improved quality. Jan-Åke Lundgren, Sydostpressarna's Plant Manager explained why Q.I. Press Controls had been chosen: "We've known about Q.I. Press Controls for years. We were looking for a system whose primary objective would be to cut down on labour. After painstaking research, it became clear that Q.I Press Controls had the solution we were looking for and was really able to cut back on staffing costs. Because the image-based functionalities of the system match the very same tasks carried out by an operator, the system is able to repeat these operations in full."

In September 2014, Erwin van Rossem, Area Sales Manager at Q.I. Press Controls, visited the Karlskrona-based plant together with Jarl Söderqvist, agent for Q.I. Press Controls in Sweden. Like Mr. Lundgren, they too are avid sports cyclists. The deal was, that if the system

delivered on its promises, Mr. Lundgren would take them on a bike tour in the wonderful countryside around Växjö. The system had only been in place for a couple of months and "in this short space of time, the product had already proved its quality in this short space of time, in a way that the company had never experienced before," according to Van Rossem. Not only that, waste had been reduced by almost a 1/3 and it had already saved on one full-time job. According to Mr. Lundgren, one year on and it is expected the following economies will have been achieved: "We continue to make savings in terms of materials used. staffing levels have been curbed and quality has improved markedly." From the very outset, the mRC-3D performed in line with expectations and at the current moment, density control is operating according to plan. Although ink levels are now stable, savings have not yet been achieved. Mr.

One push of the button is all it takes!" The printers agree with this comment: They have mounted a 'golden' medal onto the reporting screens because to them, the system is the best printer we have ever seen!

Over time, the system is improving in line with expectations. The customer is extremely happy in having opted for the Q.I. Press Controls solution and that results are in keeping with those that were forecast. When this continues, the target will certainly be met and the investment will end up in extremely attractive payback times to say the least. "Q.I. Press Controls is now putting the finishing touches to the fine-tuning of the water control," explains Mr. Lundgren. "I therefore expect that we can achieve even greater savings in the future so that we can improve on quality even more."

99 One push of the button is all it takes!99

Lundgren believes that this can be put down to the much improved resolution of the images they are now working with and ink reductions will soon follow. System reliability is exceptional Mr. Lundgren explains: "So reliable in fact that the operator is standing around for much of the time.



I AM... Introducing

Who? Nielson Miranda Fernando, 37 years old, comes from São Paulo, Brazil.

What? New Managing Director for Q.I. Press Controls Latin America.

Nielson is a real family man. He loves to spend time with his wife and two kids, especially on grandfather's farm where he can teach them about rural life.

He started his career at a young age as Sales person for different markets. After finishing his education Mechatronic Engineering and receiving his Master in Industrial Processes, he fulfilled several functions for various international companies. The functions ranged from Project Manager to Head of Engineering. All this time he was working close to the customers and that is just the way he likes it. When you ask him what the World needs to know about him, he answers that he really likes to be in touch with people and wants to motivate and try to help everybody to achieve their goals.

Nielson started his position at Q.I. Press Controls in February 2015 and hereby replaced Júlio Coutinho who has worked over seven years for the company. He loves to celebrate success with his customers and Q.I. Press Controls. But, most of all: He is committed, eager to learn and is here to support all of customer needs.



I AM... Introducing

Who? Mathijs (Matt) Baron, 28 years old, comes from Oosterhout, the Netherlands.

What? New Sales Executive for the South of Europe, the U.K. and South Africa.

Mathijs has an aspiration for travelling. After he studied the last half year of his study on the Caribbean Island of Curacao, Mathijs received his Bachelor of Education in 2009 and left the Netherlands for Beijing, China. In Beijing he has launched English learning programs for Chinese primary school students, served as an agent to provide teachers for primary schools and created a program to promote English books in the Capital Library of Beijing.

Since October 2014, Mathijs is back in the Netherlands. If you ask him for hobbies besides traveling, he answers that he like motorcycles and cooking.

He started his position at Q.I. Press Controls in January 2015. Mathijs is convinced that listening to the customer is most important. When he knows the customers' problem, he will offer one of Q.I. Press Controls' reliable systems for a structural better result and thus creates positive word-to-mouth advertisement for the company.



Mediaprint chooses QI as partner in its pursuit of process automation

A perfect print production

Vienna-based Mediaprint is the first to place an order for Q.I. Press Controls systems in 2015. The order consists of IDS-3D, mRC-3D and IQM for its division in Vienna, Austria. The order is the first in a series of four. Ultimately, the intention is to install Q.I. Press Controls systems in each of Mediaprint's three divisions. In so doing, Mediaprint is not only investing in quality, but also in a product-development partnership with Q.I. Press Controls.

Mediaprint

Mediaprint is the largest coldset print company in Austria. With its three printing plants in Vienna, Salzburg and St Andrä, Mediaprint is responsible for 900 million individual copies per year. The company produces a vast array of titles for the Austrian market, including the newspapers Kronen Zeitung and Kurier. The organisation has an annual turnover of 500 million euros and, as such, is the second largest media concern in Austria.

The order, placed in January of this year, consists of the IDS-3D for the combined function of colour control and colour registration, the <u>m</u>RC-3D for cut-off and sidelay control, and the IQM quality management system. The

system will be installed on three KBA Commander full-colour towers in Vienna. The order represents the first phase of the project and ultimately all divisions of the company will be fitted with the system. As soon as the system is working satisfactorily, it will be installed on the remaining 21 full-colour towers in the Vienna plant. This will be followed by the nine towers in St Andra and the six in Salzburg, amounting to total order volume of 78 IDS-3D cameras and 117 $\underline{\text{mRC-3D}}$ cameras.

Environment and quality

Mediaprint takes the environment and quality seriously. In July 2014, the organisation was awarded the Austrian Ecolabel (Österreichische Umweltzeichen), which is a

guarantee that the organisation supplies environmentally friendly products and services. The company sets high standards when it comes to environmental protection, health and quality. In order to continue meeting the high standards of print quality in the future, after making detailed enquiries about providers of automated solutions, Mediaprint plumped for Q.I. Press Controls. Thomas Hofinger, Manager of Mediaprint's print centre, explains the choice: "If we look at technology and dampening control, we believe Q.I. Press Controls currently offers the most advanced system and the best vision when it comes to other requirements for printing plants, especially when we take future challenges into consideration."





Thomas Hofinger, Manager of Mediaprint's print centre

Partnership

This phased investment programme means that Mediaprint will be establishing a partnership with Q.I. Press Controls. Both parties are keen to automate the printing process as much as possible. Mr. Hofinger explains that it's important for Mediaprint's print production to have a high degree of automation in the future, adding: "Our goal is not only to reduce production costs, but to achieve greater flexibilities in handling the increasing number of smaller circulation jobs and to meet the high standards of quality and colour accuracy."

Mediaprint has disclosed that the two organisations will be working more closely towards ongoing development of current products in the coming period. The first stage in the pursuit of full automation will be to bring about effective colour register, colour control, dampening control and cut-off register, thus laying the basis for optimum production. The second stage is 'waste gate control', so that more proofs pass the quality test and that good copies no longer get thrown away because the 'waste gate' is reversed too late. By fine-tuning the 'waste gate control', Menno Jansen, managing director of Q.I. Press Controls, aims to demonstrate that greater production efficiencies and cost-savings are possible as a result of less waste.

Mr. Hofinger is convinced this will not be the final stage in its quest for perfect print production. The partnership will continue until these objectives have been reached. "As far as our presses are concerned, I want to achieve the same as Kodak did for cameras," Mr. Hofinger adds. "When

Kodak came up with the idea of a camera for universal use, they tried to make the system as simple as possible. The slogan they used for this new kind of photography was: 'You press the button, we do the rest.'"

Mutual understanding

So far, everyone is delighted with the collaboration. Both organisations are on the same wavelength and are working towards the same goals. "Business-wise, we speak the same language," Mr. Hofinger explains, "so that's

Neither has the cooperation between EAE and Q.I. Press gone unnoticed at Mediaprint and has been received enthusiastically. EAE is seen by Mr. Hofinger as a major player when it comes to press control software: "We view the partnership with EAE as a good sign. What we see is an interesting supplier of an operator desk and control systems with excellent R&D capabilities, which is certainly a challenge at a time when things are not easy for manufacturers of printing press applications."

99 We believe Q.I. Press Controls currently offers the most advanced system and the best vision 99

why we chose Q.I. Press Controls as a partner. When it comes to print innovation, our ideas overlap. We have a good understanding with each other and as a partner, they recognise our need to evolve." Arslan Miftachoglu, managing director of Q.I. Press Controls Germany, adds that the collaboration has a stimulating effect on the company: "This decision, taken by an organisation with such a global reputation as Mediaprint, demonstrates that the printing industry is showing confidence in our products, concepts and solutions. This spurs us on to further innovation so that we can market other new and exciting solutions in the future."

Q.I. Press Controls is delighted with the Mediaprint order. Mr. Jansen: "This order not only confirms that our systems are compatible with major printing plants worldwide. The partnership with Mediaprint also ensures that our products will continue to evolve so that we will be able to offer top quality-products in the future as well."



Orders and synergy

Joint development and knowledge-sharing

Q.I. Press Controls and EAE are currently enjoying the benefits of a joint development programme in which knowledge-sharing between them is helping optimise the products supplied to customers. This collaboration is perhaps most clearly visible in the field of Support, Research & Development and Sales. registerFOCUS asked respective managers at Q.I. Press Controls and EAE what this development entailed.

NewsPrinters Broxbourne Ltd, Broxbourne, United Kingdom

IDS-3D closed loop colour control incl. dampening control IQM quality management system

WIFAG Bern, Shreveport, USA:

Delivery of new handhelds for reel loading system



Werner Ringel - Managing director & Manager Sales

"We use the synergy of both organisations and combine our forces this way. Through the global active relations network of Q.I. Press Controls, we can now place our solutions at the customers even faster, stronger and more innovative. The customers need solutions: EAE and Q.I. Press Controls can provide them."



Coré Ertürk - Projects & Support Manager

"Our department has been optimising the collaboration between Q.I. Press Controls and EAE. Whereas previously, a technician would be employed by each one of the organisations, they now receive training in the technology of both. Without doubt, this offers our clients added value. For example, joint service contracts can be arranged at attractive prices, because only one technician now needs to be called out."



Andreas Dau – Research and Development & Business Development Manager

"The cooperation between the two R&D departments combines the innovative strengths of both organisations. It results in products that enable customers to produce more cheaply and effectively. One example of this is the integration of EAE Loop Technology in the IDS-3D which optimises water regulation. Another is the development of a new desk from which it is possible to control several printing presses automatically.

El Tiempo Casa Editorial SA, Bogota, Colombia

mRC-3D colour register control

S.I.A. / Goss International Europe BV, Alger, Algeria:

FAF PC Retrofit at the Goss Universal 45

Infoglobo Comunicacoes SA, Rio, Brazil:

MAN Unipaster retrofit of 2 additional reelstands

Fynskemedier A/S, Odense, Denmark:

 $\underline{m}RC\text{-}3D$ colour register, cut-off and side lay control and fan-out IDS-3D closed loop colour control incl. dampening control IQM quality management system

Grafischer Betrieb Henke GmbH, Brühl, Germany

 $\underline{m}\text{RC-3D}$ colour register, cut-off control IDS-3D closed loop colour control incl. fault detection

Trykkompagniet Hvidovre, Hvidore, Denmark:

Retrofit Axodyn drive control



Jaco Bleijenberg – Director of International Sales & Marketing

"EAE is now linked to the Q.I. Press Controls network. Our team of sales staff and agents are now being trained in the knowledge of EAE products. But the reverse is also true. This means we are able to focus our attention on local markets more effectively. Customers can also benefit financially because we are able to offer them joint contracts. This development demonstrates the level of synergy that exists between the two companies.





Christoph Wenk – Customer Support Manager

"The effect of the collaboration between organisations is that we can draw upon the benefits offered by the close network of Q.I. Press Controls' representatives and their excellent contacts. It means we can offer a fast and more effective service. We are also in a better position to meet the needs of the customer when it comes to spare parts."



Brian Gajadhar – Research and Development & IT Manager

"Another example of this cooperation is the development of the new EAE desk. Both companies are combining their efforts to develop solutions which enable the whole printing process, and with it output, to be controlled. The new desk symbolises the innovative capabilities unleashed by the collaboration. In the future, this partnership will result in new products, such as joint displays (GOS), thus bringing about a more efficient printing process.

DNN Company / Koenig & Bauer AG, Bangkok, Thailand:

Control retrofit SBC4 to EPC2020

Jagran Prakshan LTD, Gaya and Hisar, India:

mRC+ colour register control

Fairfax Group, North Richmond, Australia:

Service level agreement (SLA) on EAE and QIPC equipment for all sites of the Fairfax Group

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Innovation

Innovation is what inspires EAE. In a recent interview, Newsnology asked Werner Ringel, Managing Director of EAE, the leading supplier of control systems, automation solutions and software for newspaper print houses, how innovation manifests itself at EAE.

According to Mr. Ringel, EAE has and will always seek to continually improve its products so that they provide our customers with maximum benefit. Add to this our commitment to come up with creative ideas that lead to the development of new products and the optimization of customers' workflow processes – all with the goal of fully automating their printing process.

What's more, Mr. Ringel firmly believes that the newspaper industry is not going to disappear and still has a future. Without doubt, there are many newspaper printers out there who still need to reduce their costs even further if they are to continue to be successful. And we are certain that we are in a good position to make a valuable contribution to this industry through our innovative products. It's precisely these innovations, products and solutions our customers need if they are to survive and succeed. And together Q.I. Press Controls and EAE are the right partners with the right products.

Continual improvement

Mr. Ringel explains that one of the key criteria for what has been a highly successful relaunch for EAE was the fact that the market and our clients still place an incredible amount of trust in us. This is why it is crucial for us that we use our products and know-how to continually improve our customers' processes at the workflow level, at the presses and in the downstream (post-)production departments. This will result in affordable and profitable solutions for our customers.

Full Automation

Our goal is that one day, this process of continual improvement will lead to fully automated systems.

One of our main focuses will be to develop a completely new control console that leaves behind our previous philosophy to introduce a totally new one. To put it in simple terms: to depart from the printers'

"control desk" and move to a totally autonomous and automatic control console. All of the products required to achieve this goal, such as PRINT Image, PRINT, the colour and cut-off register system, and the IDS-3D colour control system, are already part of EAE's and Q.I.'s portfolio. The data and information stored in these products are adopted by the control console, processed and then used to control the press 100% automatically.

Future prospects

Not only will we maintain and continue to develop our EAE systems and products, but we will also do the same for newspaper presses that are not equipped with EAE components. We have developed precisely the technologies we require to be able to do this. For our retrofit business, this means that we will in future also upgrade any press, even if it isn't kitted out with an EAE control system, bringing it in line with the latest state of the art, cost-effectively and without interrupting production. The customers will decide for themselves whether they want to use EAE or off-the-shelf components. We have already successfully implemented a number of retrofit jobs in the gravure printing segment and further larger orders are also in the pipeline. We have also received our first orders from the packaging market, which we are currently in the process of fulfilling.

With regard to the logistics industry, we have already developed our first sorter controllers and workflow systems and installed them in customers' facilities.

Cooperation between Q.I. Press Controls and EAE

The collaboration between EAE and Q.I. Press Controls enhances the scope of possibilities conceivable. In this respect, Mr. Ringel explained, "We are utilizing the synergies from the collaboration between the two companies and have joined forces. To our amazement, despite the cultural differences, the two companies have come together and combined their strengths in an unbelievably short space of time. We

can say with confidence that the two companies are cultivating an open, collaborative relationship that is genuinely based on trust."

Werner Ringel



Werner Ringel, Managing Director

Newspaper printing under the direction of EAE

A few years back, Funke Mediengruppe caused quite a stir in the newspaper world: At a time when others were thinking about consolidating, closing down printshops or cutting production capacities, the group built a completely new printing center in Braunschweig, near Hanover (Germany). This investment, that cost a comparatively modest 31 million euros, is targeted at one key goal: Newspaper printing with maximum efficiency and the highest degree of automation possible. Highly integrated systems from EAE not only control the press but also network the entire printing workflow with upstream and downstream production areas and support cross-functional management processes.

At the heart of the production process are two highly automated COLORMAN XXL Autoprint presses from manroland web systems for 4/4-colour printing of 48 broadsheets in one pass. One special feature of this equipment is its ability to change size, because the plant produces dailies (see inset) in what's known as the "Braunschweig format" (340 x 470 mm), but freesheets and external contracts in the narrower "Berlin format" (315 x 470 mm). The web press comprises a total of four four-high towers with a 9-cylinder satellite design, four reelstands and two folders and is equipped with plate changing robots and automatic paper roll transport systems. For press control and management of the entire print workflow, the company decided in favour of systems from EAE.

EAE in use across all sites

Indeed, the press previously installed at the Braunschweig newspaper printing house, a COLORMAN from 1995, had also been equipped with control systems and consoles supplied by EAE, the automation experts from Ahrensburg, situated to the north of Hamburg. The fact that the press minders – who had many years of experience with EAE systems – would require less training in how to operate the new equipment was in no way the main reason for the decision in favour of EAE. The main reason was a strict principle followed by Funke Mediengruppe that dictates that all production sites must use the same operating and workflow concept. And because EAE systems control the web presses and cross-functional workflow processes at all other newspaper printshops belonging to the group, it was EAE that won the order for the Braunschweig printing center, too.

"All of our newspaper plants use EAE systems. This is in keeping with the strict principle of Funke Mediengruppe to maintain as high a degree of standardization and uniformity as possible with respect to the systems and processes deployed across all of our sites," says Elmar Edeler, Production Manager at Druckzentrum Braunschweig GmbH. "By sticking with EAE, we also ensured that our IT systems here in Braunschweig can be remote-controlled and supported from the group's headquarters in Essen."



For EAE, Braunschweig was a project that had already been running for several years, since it had basically first kicked off in 2008. Back then, they had started planning the retrofit of a press control system to the old COLORMAN. However, in 2009, when all the signs were pointing toward fresh investment in new machinery, the experts at EAE began to draw up control concepts for newspaper presses built by all major European press manufacturers and demonstrated them to Funke Mediengruppe. Once the customer had, in 2011, finally decided to go for the COLORMAN XXL Autoprint, EAE was able to win the day with its master plan.

Networked EAE systems in action

Of great importance to cross-system interaction of the web press



Elmar Edeler, Production Manager at Druckzentrum Braunschweig GmbH

with upstream, downstream and higher-level systems from other suppliers is the fact that EAE's systems conform to the PRIME NETWORK standard. This interface and data communications standard is supported by leading manufacturers of editorial and workflow systems, presses, mailroom technology, and other systems.

The installation at the printing center is an almost perfect image of the systems EAE offers the newspaper industry. Due to the scope of the installation and the importance of the EAE systems for the plant's ability to output product, the company has signed a 24/7 service agreement with EAE.

The most striking thing from EAE's point of view is the prominence of its systems right at the press, where the printers operate the entire web press by means of four EAE Baltic Star control consoles. Communication between the control level and the manroland press controllers takes place via an EAE gateway. Furthermore, EAE's INFO systems provide for automated, meticulous capture and logging of the press' production data. The EAE control level and PRINT, EAE's production planning and press control system, are also interfaced with the Aurosys automatic roll handling system.

EAE PRINT is crucial to ensuring 'to-the-minute' newspaper production within the narrow time frames so typical in this industry. The production planning system exchanges data with EAE's PRINTimage system that controls the input of digital pages from the publisher and automatic plate imaging on two newspaper CTP systems. In addition, EAE PRINTimage automatically supplies the ripped page

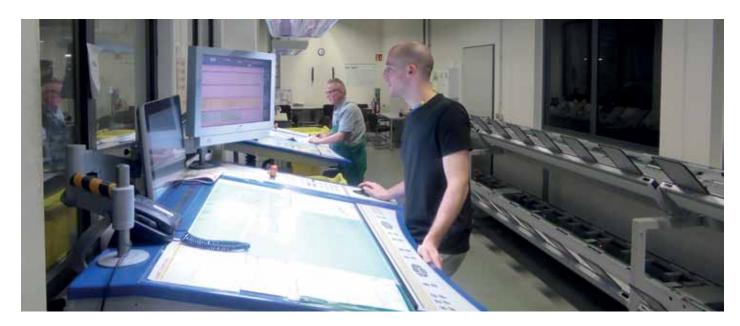
Druckzentrum Braunschweig GmbH in brief

The newspaper printing plant commissioned in November 2012 and officially inaugurated at the beginning of March 2013 is one of four printing centers operated by Funke Mediengruppe, the other three being located in Erfurt (eastern Germany), Hagen (central Germany) and Essen (at the heart of Germany's Ruhr region), which is also the group's headquarters. The print division of the media group comprises more than 30 dailies and weeklies, over 170 consumer magazines and trade journals, around 100 freesheets and approaching 400 customer magazines.

The Braunschweig plant, that boasts in excess of 7,500 m² of production floor space, is located on the northern side of the town, conveniently situated next to the A2 autobahn. The plant operates in three shifts, seven days a week. The plant employs 79 full-time workers and up to 120 marginal part-timers and temporary staff, depending on the time of year.

Daily newspapers and other publications of this Braunschweig newspaper publisher (BZV Medienhaus GmbH) account for around two-thirds of production. In the newspaper sector, the company prints the Braunschweiger Zeitung, with its various local editions – the Gifhorner Rundschau, Helmstedter Nachrichten, Peiner Nachrichten, Salzgitter-Zeitung, Wolfenbütteler Zeitung, Wolfsburger Nachrichten and the HarzKurier. Add to this five weekly freesheets distributed throughout the region, while the company's portfolio is rounded off by course booklets for adult education centers in the area as well as numerous promotional brochures, supplements and mail order catalogs.

Every year, 14,000 tons of newsprint are converted, 650,000 plates are made, 3.7 billion pages are printed and almost 400 million supplements and brochures are inserted into newspapers.



separation data for calculating the ink key settings for the printing units. Supplementing PRINTimage with the optional Emergency Tool module provides the system backup function. When faults arise in the automatic press workflows, Emergency Tool allows platemaking to be continued in manual mode, which, however, still receives instructions from the system.

"By 6 p.m. every day, we receive the page layout information from the publishing systems, at which point we then automatically have a complete picture of what we will be printing during the night. The production schedule is drawn up by the shift supervisors. Plate production is then conducted in accordance with the information that EAE PRINT generates," explains Elmar Edeler. "EAE PRINT uses the data supplied by the publishing house to calculate precisely which paper rolls have to be ready at the press at what time. This results in a work schedule. Afterwards, the rolls are prepared and temporarily stored before robotic vehicles transport them directly to the reelstands."

Cross-functional data collection and analysis for process optimization

EAE's V.I.P.statistic module acts as a higher-level management information entity for the company. V.I.P.statistic collects, fully automatically, the production data from the CTP and web press sections as well as from the mailroom, which is equipped with three Ferag dispatch lines. The system offers central visualisation of all phases of the production process and saves the data to a database for statistical and analytical purposes.

"Working hand in hand with our own IT department, EAE customized V.I.P.statistic precisely in line with our needs. It is an extremely valuable tool that helps us cut waste and errors. It helps us localize problems precisely and streamline our production both time-wise and in terms of cost effectiveness. For instance, when studying the data

collected over a specific period, we can see exactly when suppliers have delivered substandard materials," the Production Manager reports. He sums up his and the company's partnership with EAE as follows: "I've known EAE for a very long time. Working with this company is a joy and everyone at every level is extremely competent. EAE isn't the cheapest supplier in the market, but the service is excellent and we can always rely on EAE to get the job done."

"I've known EAE for a very long time. Working with this company is a joy and everyone at every level is extremely competent"



EAE RIGA2015: New, flexible system solution for press control

In one respect at least, web offset printing is no different from any other kind of industrial manufacturing process: the ability of the production equipment to operate efficiently, reliably and economically — which ultimately determines the quality of the end products — hinges very much on the capabilities of the control systems. Press control and automation technology is EAE's core competency. With more than 50 years of experience to build on, the company develops system solutions for the printing industry which represent the latest state of the art and meet the needs of today's market.

The EAE RIGA2015 system is a new control solution for printing presses that adapts flexibly to the requirements of different types of newspaper web offset presses. EAE RIGA2015 is made up of standardised modules. It succeeds the EAE RIGA system which first appeared on the scene about three years ago and shares the same basic concept, yet is also highly scalable. The consistent application of a centralised control concept – with one or more Microsoft Windows based control console PCs and a section computer to which various systems per printing tower or folder, each pared down to the essentials, are connected – is new along with the extensive use of affordable standard hardware. RIGA2015 was designed by EAE as an entry-level solution for fully automated web offset presses and is positioned in its product portfolio below the manufacturer's established control systems featuring Baltic Star control consoles.

Press control and more – as a standard feature

The RIGA2015 system covers the whole functionality required to control a web press line. In addition to machine-level equipment such as motors and actuators, it also includes quality-defining elements, for example ink and dampening units or sidelay and circumferential registers. Furthermore, the system inherently supports functions like colour and cut-off register control (ColourRegisterControl and CutOffControl modules) as well as remote adjustment systems for the ink zones (InkFountains module). Of course, to be able to take full advantage of these control processes, a press must be shipped – or retrofitted – with the necessary technical equipment.

Simple control from a single, central location

The RIGA2015 system unites all control elements in a single console with a touch screen. All settings and control inputs are made in intuitive screens which visualise all important information in graphics. The entire system intelligence is combined in a central cabinet in the base of the RIGA2015 control console. This cabinet also houses an uninterruptible power supply (UPS) that compensates any variations in the supply voltage and ensures the system can be shut down automatically in a controlled way in the event of a power failure. This concentration of key hardware components in one control console increases serviceability both directly in the field and for remote access from EAE's head office in Ahrensburg.

The fact that the software for the RIGA2015 system's control components was produced in conformity with IEC 61131-3 – the standard which defines programming languages for programmable controllers (PLCs) – has further advantages. Since a large number of PLC manufacturers support programming to the IEC standard, EAE can draw on an extensive array of standardised, non-proprietary hardware. Quite apart from that, the use of standard hardware makes it much easier to get hold of spare parts locally if required.

One system – several scenarios

"Thanks to its scalable architecture, we can configure the RIGA2015 system for completely different press types. They range from single-width 2/1 presses with a low level of automation of the kind that are very popular in markets like Africa, Asia, the Middle East and South America to large, highly automated web press lines with 4/2 or 6/2 printing units", explains Bernhard Schmiedeberg, Senior Sales / Key Account Manager at EAE. "RIGA2015 is just as good as original equipment for new web presses as it is as a retrofit solution for existing newspaper presses that have already done many years service."



Bernhard Schmiedeberg, Senior Sales / Key Account Manager at EAE.

As an OEM product, in other words as original equipment for brand new web presses, the RIGA2015 system makes a particularly attractive alternative for makers of comparatively basic models. There are a number of reasons for this: owing to its central, scalable system concept and the use of standardised modules, RIGA2015 can be offered by EAE at an altogether affordable price. And since it combines all control functions in one console, rather than forcing the OEM to distribute them across several consoles from different manufacturers as was often the case in the past, the new RIGA2015 provides several tangible benefits. The decision to concentrate everything in a single control console means lower costs and reduced complexity, and the press manufacturer now has just one supplier and one contact for support, updates, service engineer training, etc. What's more, EAE is also in a position to deliver single-source automation components which, as mentioned earlier, are controlled by the RIGA2015 system as standard, even if the press in question was originally only shipped with a low level of automation. The innovative register control systems from EAE's partner Q.I. Press Controls and ink rails for adjusting the ink zones remotely are two examples that immediately spring to mind here.

Retrofits are an important pillar of EAE's business and RIGA2015 puts the focus on web presses, which until now have been equipped with third-party control systems. Customers who opt to modernise their press controls with the latest generation of EAE technology are generally aiming to maintain or restore the reliability of their production processes. Yet aside from the desire to avoid production stoppages and the associated costs, retrofits with the new RIGA2015 system are also an opportunity to increase the level of automation. For example, EAE can simultaneously supply Q.I. Press Controls inline cameras for the register controls in order to equip the web press with cutting-edge colour and cut-off register controls in one and the same project. By investing in a full-scale retrofit in this way, printers can reduce their make-ready times and waste to a minimum while improving product quality. Substantial cost savings and a measurable return on investment are the outcome.

"Thanks to its scalable architecture, we can configure RIGA2015 for completely different press types"





Pressehaus Bintz-Verlag: Second phase of the EAE retrofit kicks off

Step-by-step modernization instead of totally new investment – By retrofitting new units and functionalities to their equipment, newspaper printers can upgrade their existing, ageing presses at an affordable price so that their plant can continue to operate reliably and they also minimize the risk of costly disruptions to production. Another advantage of a retrofit over the purchase of new equipment is the fact that the investments necessary can be spread over a longer period, making it easier to reconcile outlays with the budget available. Among the companies who have gone down this route is Pressehaus Bintz-Verlag GmbH & Co. KG of Offenbach am Main, Germany.

EAE was recently commissioned by this newspaper printhouse, that belongs to the Ippen media group, to instigate a further modernizing step for the control technology of its newspaper press. The press in question is a KBA Anilox-Colora system comprising two 32-page web presses with four blanket-to-blanket, four-high towers, six reelstands and two folders. This press, designed for a maximum web width of 1400 mm, is no stranger to EAE. Back in 1997, when the press was first installed in the newly built publishing center, it was the Ahrensburg-based press control and automation specialists who kitted out the facility with systems and control consoles. In addition, a colour register control system from Q.I. Press Controls has been performing reliably with this rotary press ever since that time.

24 of the 200+ employees at the publisher work in the newspaper printing plant, which operates seven days a week. Every year, 9000 tons of newsprint are converted and some 100 million products printed. The Offenbach-Post daily, with a total print run of 40,000 copies, is the company's mainstay product. The company also contract-prints

for the Hanauer Anzeiger daily and the twice-weekly Kicker-Sportmagazin, and produces part editions for the Neue Zürcher Zeitung (NZZ) on this press. 14 weekly freesheets, the Sunday ad journal Rhein-Main EXTRA TIPP, with a print run of 750,000 copies, various other publications and retail flyers round off the portfolio.

Anton Geier, a qualified printer, has worked for the Offenbach newspaper publisher since 1991 and been printshop manager and responsible for the newspaper press since 2005.



Reliable production for a further ten years targeted

Against this backdrop, it's clear how crucial it is to ensure the reliability of this press. "Through regular maintenance, preventive servicing and targeted retrofit measures, we want to keep our press in a condition that guarantees our production capability at all times," explains printshop manager Anton Geier. "We are determined to keep this machinery in full working order for another ten years." To this end, the printhouse has already carried out a number of modernisation measures on the KBA Anilox-Colora press. These include having both folders completely overhauled and last year having all of the motors and drive units of the press replaced with new, latest-generation components.

Furthermore, back in 2011, the publisher commissioned EAE with an initial retrofit that involved upgrading the control level systems – four EAE control consoles and two EAE INFO system units – to the state of the art. This was triggered by the discontinuation of



the OS/2 operating system, on which these systems were based. The switchover to Windows went hand in hand with replacement of the, by then, 'creaking' PC hardware of the control consoles, the EAE INFO system and the service computer required for remote access by EAE's Service department with new, more powerful computer technology.

Another phase of the technical rejuvenation therapy

In this latest step in the retrofit process, EAE will replace the PLC hardware at machine level, that is, all control units of the reelstands, towers, folders and folder superstructure. This step became necessary as a direct result of the ending of support services for the discontinued SBC4 controllers installed in the systems. These will be replaced with ultramodern, powerful EPC control hardware. In addition, EAE will supply new IEC 1131-compliant control software written in the CODESYS programming environment.

"This step is essential if we are to succeed in achieving the degree of production reliability we are striving for. We need to be sure that spare parts are readily available for our press and, if it comes to the crunch, we can carry out repairs fast," says the Offenbach printshop manager. "And it goes without saying that press reliability will improve simply as a result of the new controllers being installed – after all, the old ones they are replacing are 18 years old!"

EAE has planned this latest retrofit in close cooperation and down to the very last detail with the client. The modernisation work on site in Offenbach will be completed within three weeks, despite the fact that production on the newspaper press must in no way suffer as a result of the retrofit. For this reason, EAE's technicians will be installing the new controllers only during periods when the press is not in use or only on sections of the press that are not handling print jobs at given times.

Planned meticulously, implemented efficiently

Before any project, EAE engages in some thorough groundwork so that the retrofit itself runs smoothly and everything gets done to schedule. "We start by drawing up a project plan that we then coordinate down the finest detail with the customer. This is followed in-house at EAE by the hardware engineering work, with materials procurement running in parallel, followed in turn by writing of the customized control software for all systems," elucidates Rüdiger Hahn, project manager at EAE, with overall responsibility for the project. He goes on to explain how all system components are subjected to an integration test before they are shipped to the client. This involves testing, in Ahrensburg, the functionality of all hardware and software components and ensuring that they function perfectly together, so that only systems that operate perfectly leave the EAE plant.

Anton Geier is convinced that this retrofit project with EAE will also prove to be a big success: "Looking back at our long history of working with EAE, we can only say that it has been exceedingly positive. Thanks to the highly professional support we have received from EAE, we

have to date succeeded in solving every problem we have ever experienced with respect to control technology. The first retrofit job four years ago went exactly to plan. The second phase of the retrofit now about to begin will give us the level of production reliability we want and the assurance that the new hardware will guarantee the supply of spare parts for at least the next ten years."

"Looking back at our long history of working with EAE, we can only say that it has been exceedingly positive."

