Prepress automation – „no rules“ is the exception
Rules-Based Automation Software as key for efficiency and quality
Bosch-Druck, Ergolding, Germany
A print service and media provider that offers its customers made-to-measure solutions from web to print to warehousing and fulfillment – Bosch-Druck of Ergolding renews its commitment to this claim daily.

Under the leadership of Dr. Rüdiger Schmidt, the firm’s Managing Director, Bosch-Druck has been transformed into a supplier of forward-looking concepts and services that are held in great esteem by publishers, advertising agencies and top enterprises in key industries.

Digital printing, meanwhile concentrated in a separate production center, was first introduced in 2001 alongside classic medium-to-long runs in sheetfed offset. Customized products, either fully digitized or the outcome of a hybrid offset / digital printing process, play an important role. Customized user manuals and sales literature – for instance, for premium brands in the automotive and other major industries – as well as books with or without personalization components and photo books or calendars that are individually designed by the customer are printed continuously on demand.

Bosch-Druck’s objective is efficient processes and maximum automation in all areas – from the acceptance of customer jobs through several storefronts and web-to-print portals to prepress. A Kodak Prinergy Connect Workflow System forms one of the cornerstones of the company’s integrated, networked production philosophy. In the old days before the Kodak PDF workflow was implemented simultaneously with the Kodak InSite Prepress Portal System in the fall of 2009, a whole series of production islands such as an imposition station, imposition proofer, RIP and platesetter coexisted in the Prepress department. The files required for the various processing steps were manually transferred back and forth between these stations via the network.

Clearly defined prepress workflow

“Our way of working has undergone a fundamental change since we switched to the Prinergy Connect Workflow System. Until then, we’d never had an end-to-end solution for the complete prepress. From that point on, each prepress operator was in a position to process their respective jobs right through from start to finish,” explained Roger Diekmann, Technical Director and a member of the Management Board. “The Prinergy Workflow has enabled us to achieve a high level of automation and speed up our processes enormously – and that’s an immense advantage in today’s market. What’s more, Prinergy’s interaction with the InSite Prepress Portal results in considerable transparency for both our staff and our customers.”

The operators in the Prepress and Digital departments have access to the Prinergy Connect Workflow via fifteen workshop clients. The Workflow System communicates with various upstream and downstream systems using JDF. The data interchange with the company’s Hiflex MIS (Management Information System), for example, is controlled by Kodak Link Software. The Prinergy Connect prepress workflow additionally supplies automated ink-key setting information to the sheetfed offset presses with the help of the Printlink Software module, thus shortening the makeready and rollup times.

The plates are imaged on the Z speed version of a fully automatic Kodak Magnus 800 Quantum Platesetter. The multi-cassette unit (MCL) has five trays for a total of 500...
plates, which it feeds to the thermal CTP system. The imaged plates are transferred direct to a processing line, where they are processed, punched, and finally stacked. The already high capacity of the Magnus 800 Quantum, which is designed for a maximum throughput of sixty full-sized plates an hour, is augmented by a second thermal platesetter from another manufacturer with around half of this productivity. Bosch-Druck makes exclusive use of Kodak Electra XD Plates, a non-preheat type with a positive imaging characteristic and very high resolution.

The automation book of rules
The initial decision to automate prepress processes with Kodak Prinergy Rules-Based Automation Software (RBA) was taken early in 2010. RBA is an innovative solution that automates processes by performing defined actions in response to defined events. As soon as one of these events is detected in a particular process, the corresponding action is triggered and automatically executed by the Workflow System, taking account of if-when conditions. From simple sequences to complex process chains, RBA instructions allow a large number of workflows that would otherwise require repeated manual intervention to be automated throughout. Accelerated processes, fewer human errors, less time spent waiting for operator actions, and improved efficiency are just a few of the numerous benefits of Rules Based Automation.

Kodak ships the RBA Software with an extensive collection of standard rule sets that can be subsequently customized. The software’s Rule Builder is an editor that represents rule models graphically, allowing users to create their own sets of rules for the Prinergy Workflow from scratch. Rule creation is also offered by Kodak as a service.

„Databases and workflows that regularly recur in identical form and jobs where the customer or agency supplies files of a consistently high quality are essential in order to get the most out of RBA," said Diekmann. „This is the case with many of our customers because, among other things, our partnerships are long-term. Rules Based Automation helps us slim down our prepress processes dramatically and therefore speed them up both internally prior to production and externally in a way that is visible to the customer." Bosch-Druck currently uses about forty different RBA rules in the Prinergy Workflow.

In the meantime, Bosch-Druck’s prepress processes have been automated close on 100% for certain job categories. Prepress Manager Christoph Siebeneich, who joined the company in December 2007 and oversaw the introduction of the Prinergy Connect Workflow, chose the example of a standardized job category to illustrate what has changed: „Before we installed the Prinergy Connect Workflow, one of us was obliged to check the data after it arrived from the customer and define the geometry correctly. It was then sent to the imposition
main advantages of this system lie in the first-class service that can be offered to customers, namely the ability to send files to Bosch-Druck’s Production department at any time, view pages in progress, and control approval processes. “The whole thing is much faster as a result, and that’s very important for digital printing. The increased transparency is equally valued by customers, who like to keep track of what’s going on,” Diekmann continued.

Christoph Siebeneich cites an example from the publishing sector, where one of the publisher’s staff orders a certain quantity of a product through the Bosch-Druck storefront: “The external user receives an upload link for the InSite Prepress Portal from the storefront by e-mail. The job was created in Prinergy as soon as the input was submitted by the MIS. After a preflight in real time, the RBA Software launches various processing steps like refining, cover and content assembly, or approval in Prinergy. Provided the publisher’s personnel approve the job without any corrections, it can immediately trigger plate imaging. All of these processes are executed fully automatically.”

All in all, Bosch-Druck has succeeded in leveraging enormous streamlining potential and enhanced its productivity significantly since implementing the Prinergy Workflow and RBA in its prepress line. “We save a lot of time, which helps us cope with the higher order volume – particularly in the digital segment. Another aspect is that my team can now devote more time to supporting customers to the extent needed,” explained Siebeneich, who incidentally is in no doubt that both RBA and the InSite Prepress Portal still hold multiple opportunities for further automation and efficiency improvements. He hopes to realize these step by step in the next few years – but that’s another story.