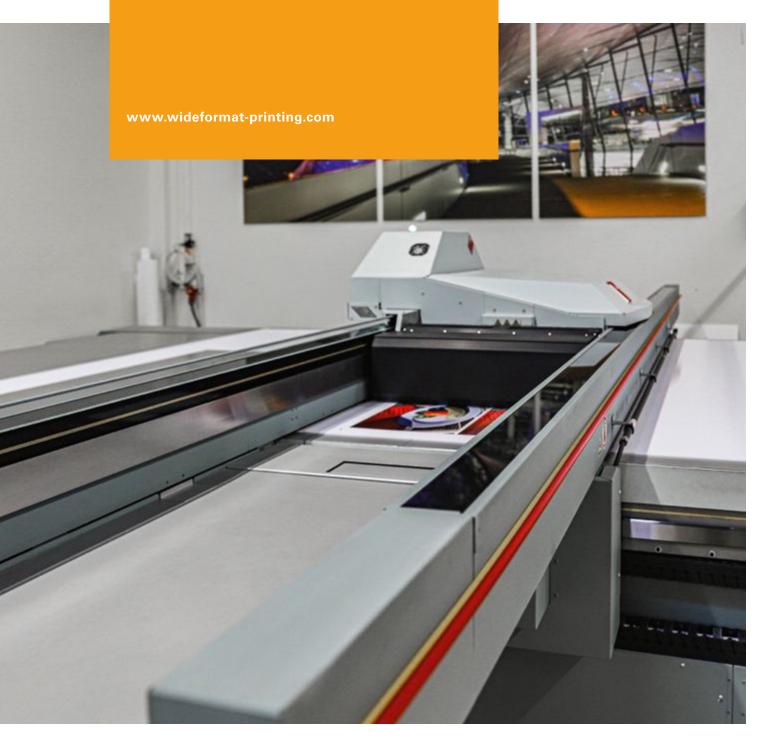


WIDE FORMAT AUTOMATION SUITE

For maximum press utilization and quick turnarounds





Being the middleware OneVision's Wide Format Automation Suite sits between your job input and DFE and automates the entire PDF prepress workflow and prepares files for printing, embellishment and finishing.



More automation

Higher productivity as well as error-free and fast RIP processes thanks to automation of time-consuming manual work (adjustment and correction) as well as simplified file structures



Lower costs

Automation in prepress for faster job preparation and solving of bottlenecks. This results in higher job throughput, improved press utilization and reduced material waste



Higher quality

Incoming files are analyzed using 130 different error criteria, errors are flagged and corrected automatically. For error-free, high-quality print files and a smooth production process



More flexibility

Adjust and automate your production processes at any time and adapt it flexibly to your production requirements thanks to modular set-up

AUTOMATION FOR WIDE FORMAT PRINTING

with the Wide Format Automation Suite



Integration and connectivity

The Wide Format Automation Suite can be flexibly integrated with your existing system landscape (software and hardware), beginning with your file input or file management system. The software not only supports systems that output structured (XML) files, such as Excel sheets, web shops, MIS or ERP solutions. Print files can also be transferred to the system via FTP, web upload, e-mail or USB stick. After file processing and preparation, the Wide Format Automation Suite transfers the production ready file directly to your DFE, RIP or finishing system.



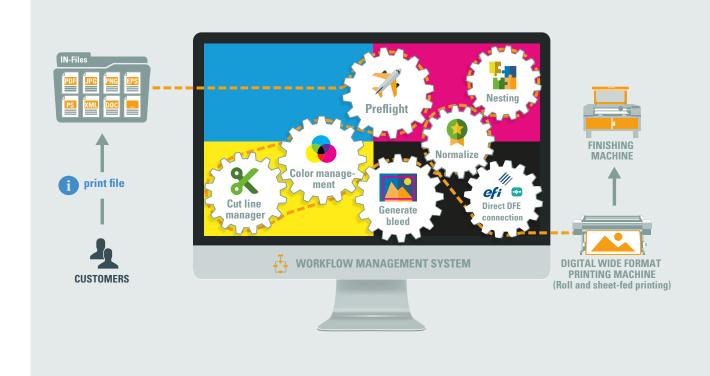
File diversity

Most print files are sent as a PDF document. However, the software solution can do much more: it can also process open graphic data from InDesign, Illustrator or Photoshop. The same applies to Word, Excel or PowerPoint files. Classic image or vector files such as EPS, JPEG, GIF, TIFF or PNG are also possible.



Reduction of file complexity

Print files usually consist of rich content which often results in big file sizes (which slow down the whole process). When preparing the print PDF files, Wide Format Automation Suite simplifies file complexity without sacrificing print quality. As a result the files can be processed faster by RIPs and subsequent devices.



Integration

Workflow Management System

Prepress: file optimization & normalization

The software suite can be connected with any system that outputs structured and consistent data like XML. This includes Excel sheets, MIS solutions, web shops or ERP solutions. Files can also be delivered and processed via FTP, web upload, email or flash drive.

Jobs are being transmitted directly from the file input system (e.g. MIS) to the Workflow Management System, where files get pushed through rule-based assembly lines.

The comprehensive prepress solution analyzes the files in the preflight for more than 130 criteria. Detected errors are corrected automatically; for example flattening transparencies, color management, file normalization, and much more.

AUTOMATION IN WIDE FORMAT PRINTING

The software suite combines an intelligent work-flow management system with a comprehensive prepress package and tools tailored to the needs of wide format printing. With Wide Format Automation Suite, digital printers can automate time-consuming manual tasks to significantly speed up their production processes. Complex incoming files are simplified to ensure an error-free and fast printing process. Throughput is significantly increased by cross-customer gang runs. Starting from job entry to printing, the software offers maximum automation and reliability for all production steps.

Production preparation

Finishing

Integration

Furthermore, the Wide Format Automation Suite comes with tools specifically tailored to the needs of wide format printers, which optimally and automatically prepare the print files for production; among others nesting/ganging, generating bleed, tiling/paneling or barcodes.

The software can create varnish/white masks for embellishment and cut lines for finishing. Both can be transferred as separate information to the production machines. The Wide Format Automation Suite can be directly integrated with your DFE/RIP and your cutters.



FEATURES & FUNCTIONS IN DETAIL

Fully automated quality check and correction of print files

Automated file check and correction

Preflighting, normalization, tiling/paneling, creating white masks and varnish masks, adding bleed – manual work can be completely automated with the Wide Format Automation Suite. Print files are transferred into the system directly or via an interface to third-party systems, checked for quality, and then optimized so that they can be produced without errors

Optimization steps include flattening transparencies or machineand substrate-specific color management. If a customer for example sends a huge file with complex graphics the "Rasterize Pages" function reduces the file size by converting vector graphics into images. Likewise, files can be split into several pages or their format can be adjusted.

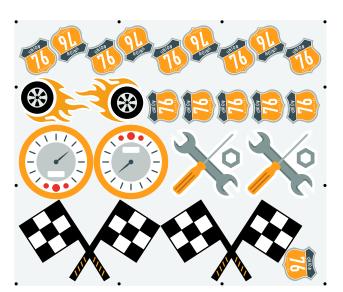
Generate Bleed

The "Generate bleed" function adds missing bleed to the print file on the basis of the PDF trim box or a free-form cutting die shape. Bleed is intelligently created by mirroring or pixel extension. This eliminates the need for manual corrections and saves 80 percent time.



Print file is supplied without bleed

Automatically added bleed

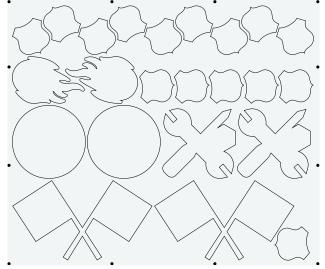


Ganging / Nesting

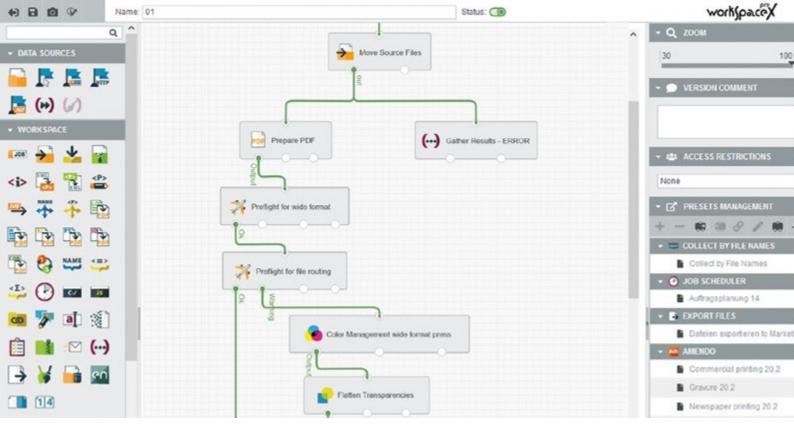
The automated ganging/nesting solution reduces waste to an absolute minimum. OneVision's technology will automatically position individual layouts to complex print forms for sheet or roll while maximizing material usage and creates a separate PDF with only the cut lines that can be used by the cutter. The function also allows to gang the layouts by type and it supports double sided nesting.

Cut Line Manager

Incoming files may have different names for cut lines or they could be damaged or incomplete. The Wide Format Automation Suite solves this problem fully automatically. Incorrect or damaged cut lines are corrected and adapted to your cutting machine. Whenever technically possible, cut lines can be merged intelligently thus saving cutting time. The function removes the cutting lines from the print file and creates a separate cutting line file. All cut line names are accepted.



Extracted cutting file for the cutter



Tiling & Paneling

"Tile Pages" can automatically tile or panel an oversize artwork into smaller pieces. This is especially useful for super wide format products like wall banners or billboards.



Add hemstich and eyelets

Eyelets or hemstitches are often necessary for banners, giant posters, flags or more. Wide Format Automation Suite adds hemstitches to the page side you need. To do this, either the print image is mirrored or white space is added. Individual marks can be placed on the page for adding eyelets.



Wide Format Automation Suite features overview

- Workflow Management System
 - Job tickets, metadata/property based workflows, dragand-drop workflow editor
- Comprehensive prepress package
 - Preflight, flattening transparencies, creation of printmarks and barcodes, color management, normalization, convert complex pages to images, format adjustments
- Nesting/ganging
- Cut line management
 - Accepts all cut line types and names, automatic merging of cut lines, auto-correction of broken or incomplete cut lines
- Trim to crop marks/cutting die
- Tiling/paneling
- Add hemstich
- Create varnish / white masks
- Generate bleed

Optional features

- Additional prepress features merge documents, watermarks, VDP
- Manual PDF editor
 Editing and last minute corrections at any time
- O Inksave
- Integrations to RIP, DFE or finishing systems among others: Onyx RIP, Caldera RIP, Efi Fiery, Zünd Cut Centre, Trotec, Summa



WORKFLOW AUTOMATION WORKSPACE

More automation, higher quality, more efficiency

The workflow management system Workspace is the backbone of the Wide Format Automation Suite. Workspace allows you to map all production workflows digitally, to process print files automatically and to adjust them flexibly. With the user-friendly drag & drop editor assembly lines can be set up according to the requirements of your print jobs. This ensures that both single work steps as well as the further processing of files are being automated.



Connectivity and integration

All production machines can be integrated into the Wide Format Automation Suite for printing, embellishment and finishing. This allows to send jobs to production. Each machine receives exactly the information it needs: Print PDF for the presses, varnish/embossing information for embellishment, and cut files for finishing. Time-consuming setup and adjustment work is significantly shortened.



Dashboard and production control

The dashboard allows monitoring of order status in real time. With its detailed evaluations, it helps to plan and control production processes optimally. The workload of the individual modules and the job status can be tracked and analyzed. Furthermore, it is possible to reprioritize, cancel or restart jobs. Possible production bottlenecks are detected at an early stage and can be avoided.



Job ticket

Workspace can be directly connected to external systems such as web shop, MIS or press/postpress systems via XML interface. Orders are controlled via job tickets.



Metadata and properties

Workspace can process and route files based on metadata, file and job properties. Metadata and properties are read from job tickets, barcodes, or directly from the production file itself. Based on the information, Workspace routes files to relevant assembly lines or process jobs according to the properties such as substrate, color, format or due date.



JavaScript

To make your workflow as individual as possible, you can create your own scripts with the JavaScript module. No external script files are needed any more. The respective scripts can directly access and process metadata, such as file and job properties. For frequently used JavaScript operations an easy to use user interface is available.

THE SOFTWARE IS THE KEY

Voice of customer posterXXL

Mastering the day-to-day fluctuating order patterns of its customers is one of the biggest day-to-day challenges of Munich-based specialist for photo services, posterXXL. How to best cope with order peaks and compensate lows ensuring customers receive their order on time? The perfect mix of automation and manual intervention has helped posterXXL to a production workflow on time, high flexibility and more profitability.

Bastian Götz, Susanne Feller and Max Baum describe the daily challenges of the production.

The digitalization in photography and new possibilities by the smartphone have opened up new markets for the printing industry. Only few customers still capture their most beautiful moments in photo albums. The vast majority uses photo books, decorate their smartphone cases with a picture of their family or put up printed canvas with holiday photos in their living rooms.

Since 2004 posterXXL, one of Germany's leading providers of photo services in digital printing, produces exactly such photo products. In order to further strengthen and expand its market position, it is particularly important for posterXXL "to deliver on the promise we make to the customer, usually within a few days," explains Bastian Götz, Department Manager Plates at posterXXL.

Product variety and high production costs

On a daily base the Bavarian printing company is confronted with a very variable order income. "We don't really know when the customers are ordering, how they are ordering, what marketing campaigns they are responding to or not", describes Susanne Feller, Head of Production at posterXXL, one of the daily challenges. In addition, there are "many different products, all of them requiring different production times, because for one product there are several different production steps involved whereas for another there might only be three, for example" adds Feller. "Managing the production flow that way that we can guarantee everything is on time, that is the challenge" says Max Baum, Vice President Engineering at posterXXL.

Moreover, for many big print service providers, running production sites in Germany is becoming increasingly unprofitable; high costs for staff, buildings and infrastructure. "Nobody can imagine that a print service provider with quite some manual work can actually work pretty economically in Munich" says Susanne Feller. So how



can these aspects – profitability, product diversity and fluctuating order income – be managed while meeting the delivery time?

posterXXL masters this balancing act with a perfectly matched mix of full automation of their production processes and manual intervention. "To save time, of course, we want to automate as much as possible" explains Max Baum. Nevertheless, it is necessary to react flexibly and quickly to changes in production, for example in the case of a machine failure. However, these manual interventions shouldn't have any effect on the production process, disrupt it or even lead to a loss of time.

Automation with manual intervention

Production at posterXXL starts off in a classic way: In the web shop, the customer selects the product ranging from posters and canvases, over photo books and direct prints to printed bags and individual puzzles, and checks out. The next steps are fully automated. The digital printer therefore uses the Wide Format Automation Suite from OneVision. The images of the customers are uploaded via an interface from the web shop to the

software suite, that processes the data according to fixed schedules. "An assembly line that processes the files automatically can consist of up to 28 steps in order to get a printable PDF for our machines" explains Bastian Götz. The choice of the production line depends on the substrate to be printed on. posterXXL prints on both, on plates and on rolls. Hence, in addition to rigid foam/PVC sheets or alu-dibond sheets, various foils or photo and picture printing papers are also used. The print service provider also produces various photo gifts using the sublimation printing process. The individual production lines prepare the images for printing and further processing, move

them to suitable folders, rename and sort the files, set them up and then create a normalized nesting. This can be set specifically and adjusted for an optimal material utilization: "When is the software allowed to write a nesting, when should it perhaps wait for other pictures, for other orders so that we have as little waste as possible" describes Bastian Götz the nesting with Wide Format Automation Suite.

Via a direct connection to the DFE, the Wide Format Automation Suite sends the nested print file to the printing presses, such as "large format roll-to-roll printers, classic DesignJets from HP and Arizona from Canon" names Susanne Feller only a part of the machinery. In addition, posterXXL uses printing machines from Mimaki (JV300) or HP (Latex). For post-press, the Wide Format Automation Suite "generates files explicitly suited for the post-press systems (for example Pro-Cut by Zünd/Océ)," says Bastian Götz. "This means that subsequent systems are prevented from queues or crashes caused by heavy print file volumes. Therefore we can guarantee a faster workflow.

In this final process step the images are cut, "the canvas is mounted, the book is bound and in the end the product is packed up and shipped to the customer as quickly as possible" Susanne Feller completes the process.

Flexible automation, profitable production

In addition to the better material utilization, posterXXL benefits from two major advantages due to the automation: Thanks to the flexibility of the Wide Format Automation Suite the level of automation can



The Wide Format Automation Suite also provides postpress systems with production data tailored to their needs.

CHALLENGES ARE TRANSFORMED INTO STRENGTHS



Different production times for different products

The Wide Format Automation Suite gets products with different production times in synch and enables joint shipment



Highly fluctuating incoming orders

Thanks to individual and intelligent assembly lines, strongly fluctuating numbers of incoming orders are no longer a challenge



Up to 15,000 orders per day

No matter how high the daily order volume is, by automating time-consuming tasks every order is shipped on time



Production on time

Automatic checking and correction of the print files ensures a faster production process



Production location

Cost savings allow for production in high-wage countries



Independence from IT resources

The modern, intuitive user interface allows a quick set-up and easy changes of assembly lines; completely independent of IT

be adjusted and changed at any time. Depending on the requirements, check points can be implemented in the workflow and enable manual intervention. This allows the photo printer to adapt its workflow to production conditions without disrupting production. Bastian Götz is sure that this flexibility comes from the user-friendly usability of the software: "You don't need an IT education, you don't need developer knowledge to operate the system. And if you really don't get anywhere, OneVision also has a super Helpdesk you can contact by phone or e-mail."

The independence from IT also counts as one of the big advantages to Susanne Feller. "What we appreciate the most is that we can work on the software ourselves." Changes to the products or the production can be implemented and modified quickly and flexibly, without the IT

department accessing it. Hence, posterXXL masters the delivery promise significantly better. The different products "all have different production times, thus, managing and timing the different production times and everything that way that it gets out the door at the same time and in time, that's the crux. And that's exactly what we're doing much better now with OneVision" the production manager sums up.



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