

Finishing 4.0

Part 4

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Part 4: Touchless workflow – and it runs like clockwork

To conclude our small series on Finishing 4.0, we'd like to say a few words about touchless workflow. Imagine the following: You press a button and the next jobs are simply perfect-bound, thread-stitched or saddle-stitched. You might now say to yourself: He talks about „touchless“ and then in the following sentence he says you have to press a button! Of course you're right, it does sound a bit strange. But when you compare the new workflow possibilities with conventional production, the new variant is truly touchless.

All you need to do is monitor the production process and possibly add signatures and covers. Finally, you collect the finished products from the assembly line. Too good to be true? I can answer that with full conviction: No! Touchless workflow is already working in the printing industry now and is being used by customers all over the world. It saves each and every one of them time and money every day!

For everything to work like clockwork, the highly automated machines must be fully networked. The smooth interaction of machines and the Connex workflow system reduces or even eliminates manual interventions in production. Incidentally, our workflows, which we presented at the [Hunkeler Innovationdays](https://www.hunkeler.ch/innovationdays) in Lucerne in February, also gave a highly impressive demonstration of how this works.



With uninterrupted production, especially of digitally printed products, product parameters can be changed within a job without the operator having to intervene or interrupt production. Job changes can be performed without manual interventions (using the dynamic job change function on the perfect binder) or require only minimal operator input (pre-adjustment via Connex LineControl).

How is touchless workflow controlled?

- ▶ Either by integrating all processes into the Connex workflow system.
- ▶ Or at machine level via barcodes applied to the product.
- ▶ Added to this are the popular setup and optimization assistant and simple diagnosis tools, which also facilitate day-to-day work.

Three examples of how touchless workflow works

1) Connex Workflow System: On-The-Fly Format Change

This new function ensures that format changes are performed at the SigmaLine in a seamless, touchless job change, without the printing press being halted or the machine operator having to intervene. Once job A has been completed, the Connex workflow system triggers the digital printing press, which briefly suspends printing at full speed. Coordinated by Connex LineControl Pro, the new job B is sent to the machines. During this time, all size changes on the SigmaFolder (cycle speed of the cross cutter, perforation, cross/length folding, web division, former fold positioning, reference positions of the cameras) are carried out fully automatically. The size adjustments in the SigmaCollator are also included. Job B is then produced seamlessly. The machine therefore ensures the fully automated changeover of the entire in-line system in perfect interaction with Connex.

2) Barcode: Variable Data Production (VDP) at the Saddle Stitcher

Thanks to VDP, fully variable products, such as customized and personalized magazines, can be produced using the Presto II Digital saddle stitcher. All parameters required for production are controlled in a touchless manner via a barcode. This ensures that each product is complete and correctly assembled. The sequence of the individual products can also be controlled in order to form individual bundles that are optimized by mailing route. The barcode likewise triggers the selective feeding of signatures and covers via the feeders and thereby checks the matching of content and cover. The thickness can vary from product to product, so the stitching machine and three-knife trimmer are set fully variably.

3) Segmented Book-of-One Changeover

We have realized another possibility on the Diamant MC Digital Bookline. After the books have passed through the first part of the bookline, it automatically adjusts to the next order on the basis of barcodes. This allows the operator to operate the machine without stopping production despite the many changeovers. This type of changeover is also called „segmented changeover“. It can be implemented with or without external data connection.

Important to know!

In order for touchless workflow to work, each system is configured individually. The reason is that a smooth process depends on the order situation and the end products of each individual print shop or bookbindery. We will therefore provide you with expert advice on implementing a touchless workflow at your company. Simply contact us.



This information brings us to the end of our Finishing 4.0 series. Would you like to read up on the other topics again?

[Part 1 Finishing 4.0 – or: How can you get the most out of your print finishing?](#)

[Part 2 What role do automation and networking play in Finishing 4.0?](#)

[Part 3 Every product is different - with Finishing 4.0 you still make money!](#)

And if you have any questions about these fascinating topics relating to Finishing 4.0, we at Muller Martini will be happy to help.

Until then!

Kind regards,
Pascal Keller
Product Manager Digital Solutions
Muller Martini AG

