

In the Smart Factory, we Realize Visions

Today marks the start of the Hunkeler Innovationdays in Lucerne. I am delighted that we will be able to present our latest digital solutions, including two world premieres, at this industry highlight. Did you know that we at Muller Martini have been pioneers in the development of groundbreaking systems for the finishing of digitally printed products for more than 20 years? This is where we see further opportunities for our industry and where we can now draw on a wealth of experience.

Smart factories are emerging in the printing industry in various forms and recently in significantly increasing numbers. Countless companies are already benefiting from the incredibly efficient processes realized with the new digital press and workflow solutions. In the meantime, even small jobs can be produced economically and in good quality. This progress confirms that we are continuing to drive forward our Finishing 4.0 development strategy, which we have been pursuing at Muller Martini since 2016 with a focus on automation, connectivity, variability and touchless workflow.

Implement visions

The vision behind Finishing 4.0 is a production system with which individualized print products can be manufactured economically and at an industrial level. By individualized, I'm referring to both the content and the physical equipment, i.e. different formats, volumes or materials. At the same time, everything must function fully automatically so that we can eliminate the influence of batch size on costs. If we standardize and simplify, we are more

efficient – but in the Smart Factory, it must also be possible to map the individuality of orders.

This is a very demanding undertaking. We have made great strides in recent years with new solutions and continue to work on the optimal implementation of this vision. Compared to traditional printing technologies, digital printing allows us to massively increase productivity in subsequent manufacturing processes. All the machines involved in these processes have improved significantly in terms of quality, cost and reliability. For me, therefore, they now represent a compelling opportunity for the successful future of our industry.

As few interventions as possible

At the moment, I still see a major challenge in the variability of the processes. Just think for a moment about how many different variations there are in postpress. For example, we no longer just produce softcover books on a perfect binder, but also hardcover book blocks with gauze. On our SigmaLine, we manufacture products that are finished on a hardcover line, on a perfect binder or on a saddle stitcher. Covers can be designed quite differently – with or without a flap – and finally have to be matched with the right content. All these and many other possibilities need to be covered.

In addition, it is unfortunately the case that we still have to intervene too often in the manufacturing process. Here, too, we are constantly improving our systems. And I can give you a very good example where we have already consistently implemented the principles of the Smart Factory: the InfiniTrim. On this cutting robot, all grippers and knives are equipped with individual drives, which enables full format and thickness variability from book to book. The machine automatically receives all the necessary information on each individual product, ensures correct positioning, ideal pressing and cuts it to the correct dimension, regardless of format and thickness. And it does this without manual intervention, while maintaining consistent performance and impressive quality. Ideally, this is how all systems involved in the process should work.

Digital connectivity

This, of course, is where our Connex workflow system comes into play, a decisive building block for the successful use of the machine solutions described. In the Smart Factory, it links the individual process steps in terms of data technology and must support the countless postpress options. This diversity of applications must be taken into account as early as the prepress stage. Our Connex LineControl reliably plans and controls production, and with Connex Info Cloud the production data is visualized clearly and independent of location. With Connex, we have developed a very powerful workflow system. Of course, the close and trusting cooperation with the relevant digital printing press manufacturers also plays a major role here. This is the only way we can realize the many successful projects.

People as a success factor

What I would like to emphasize at this point is that the digital transformation in graphic operations is not just about technical solutions, but also and above all about processes and personnel. Always remember that people remain the decisive factor for success in the smart factory. In recent years, many of our customers have worked with us to gain extensive experience with digitization and the associated organizational projects. With this know-how, we can now support our customers with holistic consulting in early project phases. Customer-specific training, support for projects in the start-up phase or our MMServices portfolio also make a significant contribution to the success of projects.

Ensure high availability

And speaking of service. We are also taking advantage of the opportunities presented by di-

gitization for our service business. Last year, we officially launched our <u>Smart Services</u>, which enable us to avoid unplanned service calls as far as possible and provide our customers with advice and assistance quickly and regardless of location.

One example is the MPOWER customer portal, which gives customers access to digital functions such as the eShop for ordering spare parts, the production data of the systems or the digital system documentation. With its online connection, the Remote Service Portal provides an ideal starting point for communication between the machine, the operator and our specialists, which is possible at any time. In the Smart Factory, where high availability is a decisive factor for success, this aspect must not be underestimated either.

I am convinced that digital production will continue to develop gradually and hand in hand with technological innovations in the coming years. Trends such as <u>Machine Vision</u> or <u>Artifical Intelligence</u> are something we are watching very actively and are constantly reviewing how they could be usefully applied in our machines. I think we have already come very far, but of course there is always potential for improvement – also due to technological advancements. And we are continuing to work on this with focus and at full speed.

But for now, I'm looking forward to your feedback on the new systems we'll be showing in Lucerne. Are you curious about the innovative solutions we are launching? You can either read about it <u>here</u> or simply visit us in Lucerne. Maybe see you soon at our booth!

Your Bruno Müller CEO Muller Martini