

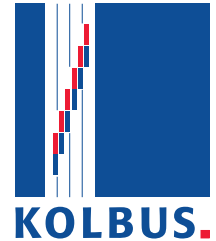
**Deutscher Drucker**

**Trade magazine for pre-press, cross media publishing,  
printing, print finishing**

Deutscher Drucker Verlagsgesellschaft mbH & Co. KG, Ostfildern  
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## High-performance KOLBUS perfect binders: one year down the line



▲ **Cooling tower of the perfect binder line installed with Weiss-Druck in Monschau.**

▼ **Lightweight paper and sensitive materials are no longer a problem for Schaffrath in Geldern.**



**OPERATIONAL EXPERIENCE. Just over a year ago, three of the biggest web offset/sheet offset printers in the German state of North Rhine-Westphalia invested in high-speed perfect binding lines. Their aim was to counter the growing pressure on prices and increasing competition in the marketplace by offering a better, faster, more flexible service. How do they assess the line's performance over the past year?**

**WEISS-DRUCK.** One of the most up-to-date and biggest offset printers with a publishing operation in Germany, Weiss-Druck, is located in Monschau. Here the company produces catalogues, magazines and telephone directories. Stefan Maaßen, manager of the binding department, and plant manager Heinz Carell decided to invest in a Kolbus perfect binding line (18,000 cycles/h). The new machine has enabled the company to cut make-ready times by 50% and to increase net productivity. The Kolbus line, which replaces an older system, consists of a ZU 841.E gathering machine with 18 bundle feeders, a KM 412.E perfect binder, a cooling tower, an HD 153.1P three-knife trimmer, a compensating stacker and PL 771 palletiser. The result: higher speeds, higher quality, more competitive pricing and shorter make-ready times have resulted in faster post-print processing of higher print volumes. »We really value the improved reliability of the whole line and the far better trimming quality,« says Stefan Maaßen. The line is used mainly for processing larger runs of between 20,000 and several million copies; it invariably delivers a high quality product. Even for smaller split runs, an increasing trend in catalogue production, the fact that make-ready takes half the time is a bonus. The speed and efficiency of the gathering operation is an excellent starting point for maximizing added value. Many products, especially magazines, not only have smooth UV-coated covers, but almost 30% also have inserts, which the new gathering machine handles far better than the previous system.«

**SCHAFFRATH.** The full-service printer based in Geldern carried out intensive testing prior to the purchase decision. The positive results led to the decision to strengthen the post-print side of the business with a Kolbus high-speed perfect binding line. One of the specific challenges that Schaffrath faces is processing lightweight newsprint (45 g/m<sup>2</sup>) in signatures from four to 48 pages. In the past year, the company has found that the ZU 841.E with its 18 gathering stations has solved the problem of sensitive lightweight paper causing a production bottleneck. On the line installed with Schaffrath, twelve of the feed stations are fitted with bundle feeders. The gathering machine is also equipped for electrostatic fixation, so that, for example, postcards or small extra inserts can be electrostatically fixed to the first page of a section and – in

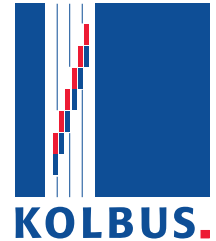
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Schaffrath's experience – will remain securely fixed through the remainder of the production process. This eliminates a separate process on an insert line. Another area where the new line scores is processing stability when processing covers made of lightweight paper (90 g/m<sup>2</sup>), for example, by feeding the covers automatically via the stream cover feeder of the perfect binder. At Schaffrath, onward processing within the existing Arvato production system is handled via a JDF/JMF link (basis: JDF specification 1.3). The ADM 701 control centre was integrated to ensure that the Kolbus line fits smoothly into the end-to-end workflow. The advantages include the fact that the Kolbus line is fully linked into the existing production system, where its performance has contributed to overall productivity as part of the established workflow. Integration has been very successful: »We've been able to increase net output by between 10 and 30%«, confirms Dirk Devers, Technical Director at Schaffrath. »We installed two PL 771 palletisers with [bundle stackers] in the dispatch area for postcode-optimised palletising of packs with different heights; this eliminates labour-intensive manual sorting and stacking.«

**PROBIND MOHN MEDIA.** The KM 412.E perfect binder with 40 transport clamps is definitely at the heart of all Kolbus high-speed systems. This is certainly true of the system installed with Probind Mohn Media Binding GmbH in Marienfeld. The 18,000 cycles/h perfect binding line enabled the specialist company to set up a performance record of 136,000 brochures net per shift. With catalogues increasingly sophisticated and printruns sometimes reaching several million copies, high quality production and an absolute reliably process are a decisive profitability factor. »The system takes everything, from parts catalogues with 24 sections and a 34-mm thick block to straightforward brochures, from stick-on cards to electrostatic nailing to inserting – it can do everything that our customers want,« says Probind Operations Manager Michael Blanke. Compared with the earlier drum system, which was often the weakest link in the perfect binding line because of the way it worked, Kolbus has succeeded in making the ZU 841 the strongest element in the perfect binding line. Regardless of the speed at which the line is operating and the material being used, the ZU 841 operates with just about zero stoppages. This contributes to the high net output per shift that Probind Mohn Media Binding achieves.



▲ **Andreas Hülsmann, Kolbus Sales, Germany (left), and Michael Blanke, Operations Manager at Probind, with the company's new HD 153.P and KM 412.E engineered as an inline system.**

All users also praised the rugged engineering of the KM 412.E, saying it results in smooth, quiet operation and a stable and reliable process (even at very high production speeds). The system is engineered to operate with both hotmelt and PUR glues. After PUR or hotmelt gluing, the products move through a special cooling tower – its space-saving, circular design amply accommodates the necessary drying distance. Products arrive at the HD 153.P three-knife trimmer either shingled or separately, they are collected in the hopper, trimmed and then fed to the compensative stacker as the start of the packaging and dispatch process. Alternatively, at Probind, products can be transferred, for example, to a Hugo Beck insert line, connected inline, for further inserts to be added. Transfer to the PL 771 palletiser often follows directly after compensative stacking. Products are palletised to customer specifications, for example, to match distribution patterns. If required, they can be wrapped and banded before palletising.