



Kehl PM 2 – Large new production line ordered for special graphical grades



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Eleven months after the successful commissioning of their new PM 6 for decor papers, August Koehler AG, Oberkirch again placed a large order for expanding their Kehl mill: a new production line for thermo-papers.

Installation work on this new line has already begun. Production is to start in only sixteen months' time, and commissioning is scheduled for December 2001. That will mark the start-up of Europe's most modern and powerful production line for non-impact printing papers.

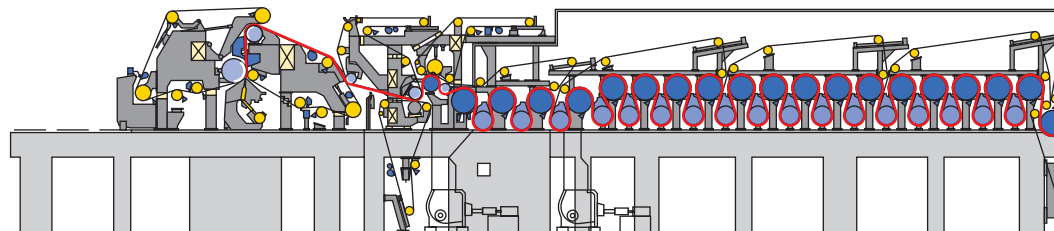
Non-impact or thermo-papers comprise special wood-free grades which can be printed thermally, and without contact as for example in inkjet printing. The printer is heated electrically up to about 160° C, at which temperature the inks combine with developers to generate a printed im-

age on the thermoreactive paper surface. Since thermal printers and copying machines save considerable time and costs in office communications compared with conventional printing methods, there is a growing demand for thermopapers. This growth is likely to continue for some time, since the processing possibilities, rapidity and flexibility of thermoprinting have not yet been fully exploited by any means.

It was only logical, therefore, for August Koehler AG as a leading producer of special graphical grades to expand their thermopaper production according to market demand. Decisive for their choice of Voith Paper as supplier of this new production line was our outstanding partnership recently in the planning, installation and commissioning of PM 6 for decor papers.

Main data of Kehl PM 2:

Product thermal basis papers, 40-80 g/m²
Web width on roller 4,200 mm
Design speed 1,500 m/min
Operating speed 1,400 m/min
Gross output up to 390 t/24 h
Production capacity about 120,000 t.p.a.



Apart from design planning and engineering, this large new order also covers substantial parts of the stock preparation line such as the charging, pulping and refining aggregates, rejects handling and the approach flow section. Main focus is on the new PM 2 and on the offline coating machine for thermal printing paper. The scope of supply also includes the reeler, paper roll transport system and packaging machine.

The Kehl mill's new PM 2 will set new milestones in thermo basis paper production.

To meet the high quality demands, the latest components of the Voith Paper "One Platform Concept" will be integrated in PM 2:

- **MasterJet G** headbox and **DuoFormer TQv** (vertical gapformer) in the forming section to ensure optimal uniformity in the macro range (cross-profile and machine-profile) and micro range (formation).
- **DuoCentri-NipcoFlex press** for outstanding runability with high dry content and high pre-coating smoothness on the reverse side for thermo printing.
- Single row **TopDuoRun** dryer section for rapid drying and optimal availability.
- **EcoSoft** softcalender after the predrying section for efficient precalendering and a uniform thickness cross-profile.
- **SpeedCoater** for good contour or insulation coverage as basis coating for thermo-printing on the reverse side.

In the offline coating machine, the sheet is covered with a thermosensitive surface-

Fig. 1: The August Köhler AG Kehl mill.

Fig. 2: Coating machine layout.

Fig. 3: Layout of the new PM 2.

ing. Particularly important here is a uniform, high quality coating, which is ensured by a special coating aggregate developed for this purpose by Voith Paper in teamwork with the customer. The joint venture signed between Voith Paper and IHI, Japan, also enables in Kehl the first application of a **curtain coater** working on the uniform 1:1 coverage principle. August Koehler is the first paper manufacturer to use a curtain coater at operating speeds above 1,000 m/min for this special product – a pioneering milestone!

After commissioning, this new production line will be described in detail in one of the next editions of "together". It will certainly expand the position of August Koehler AG in the high grade thermopaper sector and consolidate the company's market leadership in Europe.

