More flexible than ever before

The Rapida 105 has for years stood as a synonym for reliability and an attractive price-performance ratio in medium-format sheetfed offset printing. The lasting market success has been founded above all on its superior substrate flexibility, outstanding ease of operation, a robust construction, diverse possibilities for inline finishing and, last but not least, the excellent print quality.
But competition is becoming ever fiercer, turnaround times ever shorter and the demands of the market ever more complex. The pressures placed on operators and presses continue to grow relentlessly. It is not least for this reason that the Rapida 105 shares the technology platform of the makeready world champion Rapida 106 / Rapida 106 X and is packed with design solutions which were previously unique to its two sister presses. These include:

- Preset capabilities
- Gripper systems
- Optimised inking units
- Improved sheet guiding
- CleanTronic washing systems
- VariDry dryer systems
- More extensive automation
- Delivery
- Measuring and control systems

Furthermore, an endless diversity of configuration variants permits individual tailoring to a broad spectrum of applications – from commercial printing to labels and premium packaging. Inline finishing? No problem: conventional and UV processes can be used to produce all-over, protective and spot coatings, as well as exciting visual and haptic effects, with ease.

The leap forward in technology on the Rapida 105 will set your heart alight.
Inline printing and finishing

The Rapida 105 is a genuine all-rounder. It handles an especially wide range of materials, from lightweight paper to board and microflute corrugated substrates up to a thickness of 1.2 mm. Plastic films can also be printed.
The same extensive flexibility applies with regard to the potential fields of application for the Rapida 105: for **commercial printing**, the press can be supplied in configurations with up to eight inking units and facilities for 4-over-4 perfecting in an inline process.

**Packaging and label printers** benefit from a diversity of inline finishing possibilities. Whether for conventional or UV production, customer-tailored VariDry dryer installations promise an optimal drying result for practically any ink or coating system you may choose.

On top of this, the Rapida 105 can be equipped with a cold foil system. Various modules are available to optimise foil use and to implement different levels of automation.

Configuration with the RS 105 reel-to-sheet feeder is another interesting possibility for **commercial and label printers**. Reel stocks – whether paper or plastic film – are cut into sheets immediately before printing, further expanding the range of process options.
The Rapida 105
Rapida 105

Modern console technology: Made by Koenig & Bauer

- Customer Community – central interface to all digital services and to Koenig & Bauer
- State-of-the-art operating concept on the ErgoTronic control console (including touchscreen for intelligent, straightforward handling)
- Job changeover program for fully automatic and coordinated makeready processes at the press of a button

AirTronic delivery: Rapida 106 inside

- Sophisticated Venturi system ensures a stable air cushion to support sheet guiding
- Speed-compensated and format-dependent powder metering
- Sheet brake with pre-suction elements and variable speed for optimal sheet deceleration
- Extended delivery to increase productivity when coating
- Specific non-stop solutions for uninterrupted production and smooth pile changes

- Job profiles can be saved for repeat jobs
- Integrated, Internet-capable remote maintenance module Press-Support 24 Sheetfed for remote maintenance and software updates
- Integration into the LogoTronic management system
- Optional wallscreen for visualisation of all press settings
**VariDry dryer systems: Ecological and efficient**

- High-performance VariDry IR/hot air, VariDry UV, VariDry HR-UV and VariDry LED-UV dryers
- Flexible use of the UV dryers for interdeck and final drying
- Dryer control in accordance with pile temperature
- Lamp replacement without tools
- VariDryBlue technology for enhanced energy efficiency

**Coater: Shining finishes**

- State-of-the-art chamber blade technology with lightweight anilox rollers
- Chamber blade system in wedge design for first-class quality inline finishing with coatings
- Coating supply system for dispersion and UV coatings in separate circuits
- Choice of application-orientated clamping systems
- Register setting from the press console

**CleanTronic: Washing systems with class**

- Parallel washing processes and job-specific, pre-selectable washing programs
- CleanTronic roller washing system
- CleanTronic blanket and impression cylinder washing system with single swing-action washing beam for both blanket and impression cylinder washing
- CleanTronic Synchro with separate washing beams for blanket and impression cylinder washing (only available for perfector presses)
**Plate change: Solutions to suit all preferences**

- Solutions matched to individual job structures and press manning practices
- Semi automatic plate change (SAPC) for automatic press rotation to the change positions
- Faster, optimised changeover process for fully automatic plate change (FAPC), including register zeroing
- Use of unbent printing plates with FAPC

**Inking unit: Performance in colour**

- High repeat accuracy thanks to bleed-free metering in the Color-Tronic ink duct
- Inking unit optimised according to the latest rheology know-how for improved ink flow and distribution
- EasyClean ink-repellent ink duct coating for fast ink changes
- Individual disengaging of inking units when not needed to reduce roller wear and makeready times
- Temperature control for duct roller and distributor cylinders, especially advantageous for waterless printing
- Speed-compensated VariDamp film dampening unit for a stable ink/water balance
- Differential drive to eliminate hiccups

- CleanTronic Multi multiple-media washing system permits the use of different ink systems
- CleanTronic UV to eliminate waiting times before and after cylinder washing in UV production
- CleanTronic SRW: Roller washing also during UV production
Printing unit: Register-true and perfect precision

- Substructure cast in a single piece for high torsional rigidity and stability
- Smooth running and excellent precision thanks to continuous gear train
- Double-size impression cylinders and transfer drums for low-profile sheet travel – even heavy substrates are subject to only minimal bending
- Venturi air-cushioned sheet travel for contact-free sheet transfer

- Universal gripper system adapts seamlessly to changes in substrate thickness
- Remote adjustment of lateral, circumferential and diagonal register
- Automatic register checking and correction with ErgoTronic ACR

DriveTronic feeder: dedicated drive technology

- DriveTronic feeder for continuous, stepless pile transport with automatic speed adjustment for paper and cardboard
- Automatic non-stop system with pile logistics
- Feed board with a central suction belt and electronically controlled sheet deceleration to ensure optimum sheet arrival speed at the front lays
- Pneumatic side lay for marking-free lateral alignment
- Quick-start function
- Ultrasonic double-sheet detector, also for inhomogeneous substrates
- Non-stop system with individual rods
- User-orientated automation
Rapida 106 inside
Your customers rightly expect perfect print quality and absolute consistency over the entire length of a run. To achieve this with a high degree of automation, and if necessary to document the quality attained, the Rapida 105 can be configured with various measuring and control systems.
For **register measurement and control**, you can choose between the especially compact solution ErgoTronic ACR and the automatic system ErgoTronic ICR. In both cases, necessary corrections are calculated for the lateral, circumferential and diagonal register settings.

The Rapida 105 can also be equipped with either online or inline **colour control systems**. ErgoTronic ColorDrive and ErgoTronic ColorControl both scan the colour bars of a sheet placed on the ErgoTronic console. Measurement is possible at any point over the whole sheet. After confirmation of the proposed corrections, the Rapida 105 adjusts the ink key settings automatically. QualiTronic ColorControl, on the other hand, measures the colour on every single sheet by way of a camera system installed directly on the press. The control system then implements the necessary corrections after every ten sheets.

QualiTronic PrintCheck expands the colour control functionality by also enabling **sheet inspection**. Here, the system performs a fully automatic comparison between the printed sheets and a reference determined from a series of good sheets at the start of production. QualiTronic PrintCheck functions without any operator intervention. Automatic sheet inspection commences as soon as production monitoring is activated.
The Rapida 105 at a glance – Rapida 106 inside

Sheet format

<table>
<thead>
<tr>
<th>Max (standard/special version)</th>
<th>mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum (standard/special version)</td>
<td>mm</td>
</tr>
</tbody>
</table>

Print format

| Standard/special version       | mm |
| Perfection                      | mm |

Substrates¹

| Standard                  | mm |
| With board-handling package | mm |
| With corrugated package    | mm |
| With film and plastics package | mm |

Production speed²

| Max, dependent on configuration | sheets/h |
| Max in perfecting              | sheets/h |

Pile height from floor / without non-stop operation

| Feeder                      | mm |
| Delivery                    | mm |

Plate and blanket dimensions

| Plate size                     | mm |
| Copy line (standard/special version) | mm |
| Blanket size                   | mm |

The illustrations and descriptions may depict or refer in part to special versions and options. For further information, please contact your local Koenig & Bauer representative.

¹ The flexural rigidity of the substrate is a decisive factor in suitability for printing.
² Depends on individual operating conditions, and the inks and substrates used.
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