KOENIG & BAUER

Rapida 76



we're on it.



The B2 format benchmark

The Rapida 76 is the latest high-efficiency press designed by Koenig & Bauer to be suitable for a wide variety of applications. Proven technologies and new automation features have been combined to produce one of the most state-of-the-art half-format presses on the market. Extensive preset capabilities reduce job changeover times to an absolute minimum, while production speeds of up to 18,000 sheets/hour raise profitability to new levels. But that's not all – the Rapida 76 can be configured exactly the way you need for the respective job.

Highlights



Packaging printers benefit from **application-oriented configurations** with up to eleven printing and finishing units. Equipment packages extend the already wide range of substrates to include heavier boards or plastic films.

Commercial printers, on the other hand, can choose a press with up to ten printing units and an additional coating tower. This allows products to be printed and finished on a single pass. If you are one of those printers who is inspired by the flexibility of the B2 format but is unwilling to forego **automation convenience**, then you will find that the Rapida 76 is an ideal means of production. It pairs aesthetic design with the exceptional Koenig & Bauer DriveTronic dedicated drive technology. These are the new benchmarks in the B2 format. Experience its impressive superiority.

Any number of strong points for a better performance

The Rapida 76 is more than just another sheetfed offset press in B2 format. It is a high-end means of production that can cater to a range of applications that is unique in its format class. These range from typical commercial applications, including film and security printing, and extend though to demanding packaging jobs for sectors such as pharmaceuticals.

One of the Rapida 76's strong points is its format. As an option, it is able to handle sheets up to 605 × 750 mm. When printing in the US letter format or in typical magazine and catalogue formats, this adds room for up to two extra copies on each sheet. Even so, the Rapida 76 is a real space-saving wonder: it boasts a significantly **smaller footprint** compared to other sheetfed offset presses in this format. The low energy consumption is another positive factor in cost calculations.

Double-size impression cylinders and transfer systems, in combination with an ingenious air-cushioned sheet guiding system, carry lightweight papers, heavier board and plastic films from one printing unit to the next with absolutely no potential for scratching. When it comes to **inline finishing**, the Rapida 76 can cater to just about any requirement. Single and multiple coatings, gloss and matt effects, all-over and spot finishes – the choice is yours. Presses with two coaters and intermediate dryer towers are the icing on the cake when it comes to quality and gloss levels. Automated coating forme changes (SAPC) simplify and accelerate the makeready process – and sophisticated finishing becomes a viable proposition even for short runs.

The range of dryer systems for the Rapida 76 is as broad as the range of finishing options. Alongside classic IR/hot-air dryers, various UV, HR-UV and LED-UV systems are available. What all variants have in common is their modular system design, and the fact they have all been developed for perfect sheet travel on the press. VariDry^{Blue} combines infrared, hot-air and UV drying in a three-section extended delivery for flexible, energy-saving production using both conventional and UV systems.



Fully automated

The Rapida 76 is distinguished by a level of automation that defies expectations in this format class, and which makes it especially efficient. The DriveTronic dedicated drive technology, parallel washing processes and a whole host of unique technical features ensure straightforward operation, the shortest possible makeready times and high-performance print production.

DriveTronic dedicated drives optimise processes in every component of the Rapida 76. This begins at the feeder, where servo motors control the individual feeder motions. Complicated gear systems have long since become a thing of the past on the **DriveTronic feeder**. Format and air settings are entered and saved at the ErgoTronic console, and can be recalled later for repeat jobs.

DriveTronic SIS provides for automatic, contact-free lateral alignment of the sheet, without the need for intervention by the operator. This function has been integrated into the automatic format setting. The sidelay-free infeed positions the sheets with care, thereby ensuring the highest possible accuracy – even at maximum production speed.

The **simultaneous plate changing** system SPC reduces the change time for all plates on the press to 45 seconds. In combination with CleanTronic washing systems (CleanTronic Synchro), the blankets and impression cylinders – and, optionally, the ink rollers as well – can be washed parallel to plate changing. This results in another drastic reduction in non-productive makeready times. There are also other options for highly automated, makeready-saving washing processes that allow for mixed and UV production.

And there's one more thing that makes the Rapida 76 so unmistakeable: the automatic **disengaging of unused inking units** prevents roller wear and reduces the work involved in a production job requiring fewer individual inking units. This is because it is no longer necessary



to apply and later wash down roller oil. As a further benefit, an inking unit currently not in use can also be prepared for the next job while the current production continues.

The **AirTronic delivery** of the Rapida 76, too, offers full preset capabilities. With a dynamic sheet brake, motorised positioning of the suction modules and Venturi sheet guide plates, it incorporates everything you need for sheet transport free from markings.





Console and measuring systems State-of-the-art operating concepts

- 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)
- Wall screen for visualisation of all press settings
- Job profiles can be saved for repeat jobs
- Integration into the LogoTronic Professional production data management system
- ErgoTronic ACR (Automatic Camera Register) – option: ErgoTronic ImageZoom (video magnifier)

- ErgoTronic ColorDrive (online density measurement) – options: ErgoTronic Lab, ErgoTronic QualityPass, ErgoTronic Instrument Flight, ErgoTronic PSO Match
- ErgoTronic ColorControl (online density measurement) – options: ErgoTronic Lab, ErgoTronic QualityPass, ErgoTronic Instrument Flight, ErgoTronic PSO Match
- QualiTronic ColorControl (inline density measurement) – options: QualiTronic QualityPass, QualiTronic DotView, QualiTronic ColorView, QualiTronic Instrument Flight, QualiTronic PSO Match

Delivery Perfect piles

• High-level delivery for smooth sheet transport

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- Operation using a modern touchscreen display
- Reliable and marking-free sheet transport on an air cushion (AirTronic)
- Automatic adaptation of the air volume at the Venturi nozzles to the printing speed and substrate properties
- Dynamic sheet brake comprising three suction modules with a pre-suction wheel
- Automatic non-stop roller rack for uninterrupted production (in board package, otherwise optional)
- Delivery extension by 712 mm (ALV2) or 1,423 mm (ALV3)
- EES (Emission Extraction System)



Dryers For every conceivable application

- VariDry^{Blue} IR/hot air
- VariDry UV
- VariDry HR-UV
- VariDry LED-UV
- VariDry^{Blue} IR/hot air/UV

Coating unit Perfect refinements

- State-of-the-art chamber blade system with hydropneumatic chamber control
- Lightweight anilox roller
- Coating forme cylinder with quickaction clamps and register pin system for exact positioning of the coating forme
- Automated coating forme change (SAFC)
- Different coating supply systems, controlled using the ErgoTronic console
- Register setting from the ErgoTronic console

Plate changing Highly automated

- Fully automatic plate change FAPC
- Use of unbent printing plates
- Change time less than 50 seconds per printing unit
- Simultaneous plate change SPC: change time approx. 45 seconds (whole press)



Printing unit Uncompromising precision

- Double-size impression cylinders and transfer systems for reliable sheet travel with all sorts of different substrates
- Gentle, air-cushioned sheet travel with blower systems and Venturi sheet guide plates
- Universal gripper systems: no settings required when switching to a different substrate thickness
- Automatic setting of the substrate thickness
- Pneumatic impression on/off switching
- Mechatronic adjustment of the lateral, circumferential and diagonal register from the ErgoTronic console
- Board-handling package for substrates up to 0.8 mm thick

• Sheet travel sensors

Dampening unit Ideally equipped

- Speed-compensated film-type dampening unit for a stable ink-water balance
- Roller coatings for low-alcohol printing
- Differential drive controlled from the ErgoTronic console to eliminate hickeys (option)
- Additional chrome rider roller (fixed or oscillating)

Inking unit Highly responsive and convenient

- High repeat accuracy due to bleed-free metering in the ColorTronic ink ducts
- Highly responsive single-train inking unit
- Automatic disengagement of unused inking units to reduce roller wear and makeready times
- Inking unit temperature control
- Rainbow printing accessories
- Ink supply systems

DriveTronic SIS Simply ingenious

- Electronically controlled lateral sheet alignment without the need for a side lay
- Integration into automatic format setting eliminates any need for operator intervention
- Gentle sheet positioning with the highest possible accuracy
- Venturi system before the feed line for smooth sheet infeed
- Pneumatic drive elements for precise positioning of the sheet, even at maximum output

DriveTronic feeder Servo-controlled

Rapida 76

- Feeder motions controlled by means of servo motors
- Automatic pile side edge control and automatic pile lift adaptation
- Speed-dependent format and air settings, saved at the ErgoTronic console for subsequent access
- Non-stop pile changing based on individual rods (option)

General Configuration variants

- High speed accessory package (up to 18,000 sheets/hour)
- Board-handling package (CX)
- Accessory package for lightweight substrates
- Accessory package for films and plastics
- Antistatic equipment package
- Mixed UV/conventional production
- Coating unit with anilox roller
- Delivery extensions
- Raised press foundations
- Double coating
- Dryer towers

Technology at a glance

High quality – sheet after sheet

In order to meet increasing demands for higher quality, the Rapida 76 can be equipped with a wide variety of quality measurement and control systems. They help to reduce makeready times and paper waste, and guarantee a consistently high quality of printing production.

> Most systems use a shared camera which reduces maintenance work while simplifying handling and ensuring unhindered accessibility.

Two different systems are available for **reg**ister measurement and control. The simplest solution is automatic measurement and control of an individual sheet with the separate ErgoTronic ACR video magnifier. ErgoTronic ICR controls the register of an individual sheet on the control console.

Three further systems measure and control the ink. ErgoTronic ColorDrive is the most straightforward and compact solution for this. ErgoTronic ColorControl can be used to control ink densities and, optionally, the spectral values – both in colour bars and in the image – online at the press console. QualiTronic ColorControl makes **colour control** especially convenient. The camera system installed after the last printing or coating unit automatically determines the optical densities and controls the ink keys without further intervention.

ErgoTronic and QualiTronic form an unbeatable combination: from a simple online system through to high-quality inline colour control according to grey balance, there is a range of upgrade options to choose from. Whatever the printing standard is that you require, Koenig & Bauer has the right solution for you.

QualiTronic PrintCheck and QualiTronic PDF-Check are, moreover, the two different variants of **sheet inspection** that are available. Print-Check links the colour measurement to a fully automated comparison of the printed sheet against the reference. PDFCheck also upgrades this functionality with a comparison of the sheet against the customer PDF. This all makes the Rapida 76 ideally suited for high-end production for which consistent and uncompromising print quality is paramount.



Digital services at the press of a button A new application experience

The Customer Community forms the central interface between Rapida users and customer service representatives. This portal unites all digital services in one place. Users and the manufacturer can access an identical information database, meaning that they are all on the same page when working together.



PressCall improves communication during remote maintenance. The hotline technicians are able to view all the information they require at the push of a button on the control console. Communication is optimised while language barriers are removed. A customer ticket is created automatically in the CRM (Customer Relationship Management) system. This enables solutions to be found more quickly and efficiently, which in turn reduces downtime and increases availability.

Visual ServiceSupport further optimises communication during remote maintenance. By using the functions of current mobile devices, remote maintenance issues can be communicated easily and directly using photos and videos, audio transmission and comment functions. This has allowed Visual ServiceSupport to extend the functionality of remote maintenance to include process technology and mechanical support.

Users with a remote maintenance contract receive a regular **Performance Report**. Performance data and key performance indicators of presses are shown in easy-to-understand graphs. This allows performance data to be compared and maintenance work to be planned in advance, as well as revealing optimisation potential and reducing unscheduled downtime. Performance and availability will increase.

The **Press Inspection Report** provides a summary of the results of press inspections in an equally easy-to-understand format. You will be able to instantly identify potential technical improvements and the reasons for maintenance work, as well as its duration. It also lists the required interventions in order of priority according to impact on the productivity of the press as well as the urgency for individual parts to be replaced.



Rapida 76 Technical data

| Sheet format | | |
|--|-----------------------|----------|
| Maximum (standard/option) | 530 × 750 / 605 × 750 | mm |
| Minimum | 210 × 297 | mm |
| Print format | | |
| Standard/option (straight printing) | 520 × 740 / 585 × 740 | mm |
| Substrates ¹ | | |
| Standard | 0.04 - 0.6 | mm |
| With board-handling package | 0.8 | mm |
| Production speed ² | | |
| Up to 8 printing units + coater | 16,000 | sheets/h |
| Up to 10 printing units + coater | 13,000 | sheets/h |
| Press with High Speed package (optional) | 18,000 | sheets/h |
| Pile height | | |
| Feeder | 1,200 | mm |
| Delivery | 1,360 | mm |
| Plate and blanket dimensions | | |
| Plate size (standard/option) | 605 × 750 / 660 × 750 | mm |
| Standard copy line | 37.5 | |
| Blanket size | 700 × 748 | mm |
| Configurations for up to 10 printing units and additional coater | | |

¹The flexural rigidity of the substrate is a decisive factor in suitability for printing.

²Depends on individual operating conditions, and the inks and substrates used.

The illustrations and descriptions may depict or refer in part to special versions and options. Subject to technical and design modifications. Country-specific variants may apply. More detailed information can be obtained from your local representative.

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06/2022-EN Printed in Germany