

KOENIG & BAUER

# CutPRO X 106



we're on it.

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## Tailor-made die-cutting solutions for forward-looking in-house production

The CutPRO X 106 stands for ultimate performance in inline die-cutting. Individually tailored die-cutting solutions bring your printed sheets into shape and guarantee seamless downstream further processing of the final product. Rapida technology makes all this possible.

Developed on the basis of the established Rapida medium-format press series, the rotary die-cutter CutPRO X 106 offers you the very latest die-cutting technology and a sheer boundless scope of applications. Whether for folding cartons, elegant presentation folders or in-mould labels for paint buckets – with the CutPRO X 106, you can cut, emboss, crease, perforate and then separate the individual blanks to the highest quality standards in a single machine pass.

Proven technical features such as DriveTronic system components, Venturi sheet guiding, universal gripper systems and the AirTronic delivery ensure maximum substrate flexibility at die-cutting speeds up to 15,000 sheets per hour. And handling becomes intuitive thanks to the intelligent TouchTronic operating concept at the ErgoTronic console.

The CutPRO X 106 is tailored precisely to your future-oriented in-house production needs and will win you over with

- **Maximum performance** thanks to impressive die-cutting speeds up to 15,000 sheets/hr
- **Ultimate productivity** thanks to state-of-the-art features from the Rapida medium-format press series
- **Unrivalled flexibility** thanks to separate process units
- **Exceptional quality** thanks to register accuracy down to 15 µm and individual setting of the die-cutting pressure in 1 µm steps
- **Significant cost savings** thanks to minimal waste and quality costs



## Ready for the next step!

You can choose from a whole range of different configurations and equipment packages. Depending on your market segment, applications and individual requirements – for products of the highest quality, die-cut with absolute precision and care.

The CutPRO X 106 processes a broad spectrum of substrates from ultra-thin in mould films up to 0.6 mm board. This is made possible by the low-curvature sheet travel concept typical to Koenig & Bauer machines, with double-size back cylinders and transfer drums. Aerodynamically optimised sheet guide plates lend additional reliability to sheet transport. From the DriveTronic feeder through to the delivery pile.

Depending on your planned application, you can choose from a range of special performance

packages. They enable high-speed die-cutting production, even on sensitive substrates. Individually tailored, adapted to specific substrates and designed for outputs of up to 15,000 sheets per hour.

Up to four individual process units – in combination with the fully automatic blanking system AutoBlank, should you wish – are the key to maximum production flexibility, ultimate ease of operation and uncompromising quality.



Blanking



Stripping



Die-cutting



Creasing



Embossing



If you hope to hold your ground on the market, it is imperative to identify niches and to establish unique selling points. But what makes folding cartons unique? Exceptional printing and finishing quality, of course. And yet original forms and special haptic or visual impressions also catch the eye, arouse interest and stick in the mind. Where others may be satisfied to apply high-quality coatings, you can add that special something to your customer's products. Die-cutting, kiss-cutting, perforating, creasing, embossing – give free rein to your creativity.

With a multitude of different configuration variants and options available, the CutPRO X 106 offers a perfect answer to the challenges of your future-oriented folding carton production.

**Highlights of the CutPRO X 106**

- Die-cutting speeds up to 15,000 sheets/hr for a broad spectrum of substrates up to a thickness of 0.6 mm
- Full job changeovers in less than 20 minutes
- Saving of all job-specific setting values in the Koenig & Bauer LogoTronic management system to ensure the fastest possible make-ready for repeat jobs

- Embossing in ultimate quality at the maximum machine speed of 15,000 sheets/hr – separate process units also avoid any need for a second machine pass
- New possibilities in folding carton design thanks to separation of the process steps of die-cutting and creasing, e.g. tighter cutting line radii or intersecting creasing and cutting lines
- Inline blanking at production speeds up to 15,000 sheets per hour for a high net sheet output per shift
- "Click & Cut" register pin system for fast and exact forme positioning on the cylinder without further manual intervention
- Register accuracy down to 15 µm for maximum process quality
- LiveApp family to assist machine operation and inventory management
- Minimised space requirements for tool storage, e.g. die-cutting formes

## Tailor-made for the packaging market

Modern folding carton production embraces an enormous range of applications and forms. The growing trend towards just-in-time production calls for fast and cost-effective solutions that nonetheless deliver the highest quality. Impress your customers not only with first-class print, but also at all downstream finishing stages.

**Benefits**



Exceptional productivity thanks to die-cutting speeds up to 15,000 sheets/hr



Significant waste savings thanks to comprehensive preset functions and DriveTronic components



A wide range of automation modules and implementation of the "click & cut" principle provide for extremely fast makeready between jobs



Maximum flexibility in terms of configurations and equipment options, which can be perfectly tailored to your individual requirements



Outstanding register accuracy down to 15 µm guarantees excellent process quality



Modern operating concept and intuitive user interface for maximum ease of operation

# Something special for every need

Appealing and individual print products in the shortest possible time – this is the daily challenge in commercial printing.

From business stationery and forms to flyers, catalogues, brochures and calendars, the options are endless.

A broad diversity of materials must be processed, and run lengths are extremely variable. A real challenge for you as a provider, because the demands that customers place on your ideas and solutions have never been greater in terms of applications, performance and flexibility. This is not only true of printing itself, but also the subsequent finishing and post-press stages.

The rotary die-cutter CutPRO X 106 puts the ideal die-cutting technology at your fingertips, for successful post-press production that meets all the high demands of the print market and your customers.

The CutPRO X 106 stands out with the following highlights for commercial production:

- Die-cutting speeds up to 15,000 sheets/hr for a broad spectrum of substrates up to a thickness of 0.6 mm
- Full job changeovers in less than ten minutes for the fastest possible makeready with repeat jobs
- Saving of all job-specific setting values in the Koenig & Bauer LogoTronic management system
- High variability in terms of machine configurations and equipment options thanks to the typical unit-based design principle
- Separate process units remove all limitations on die-cutting and creasing rule lengths for greater efficiency and more blanks per sheet
- "Click & cut" register pin system for exact forme positioning on the cylinder without additional manual intervention
- Register accuracy down to 15 µm for maximum process quality
- LiveApp family to assist machine operation and inventory management
- Minimised space requirements for forme storage



## Benefits



Highest net sheet outputs per hour thanks to die-cutting speeds up to 15,000 sheets/hr



Significant waste savings thanks to comprehensive preset functions and DriveTronic components



A wide range of automation modules and implementation of the "click & cut" principle provide for extremely fast makeready between jobs



Separate process units for maximum flexibility and practically unlimited design freedom



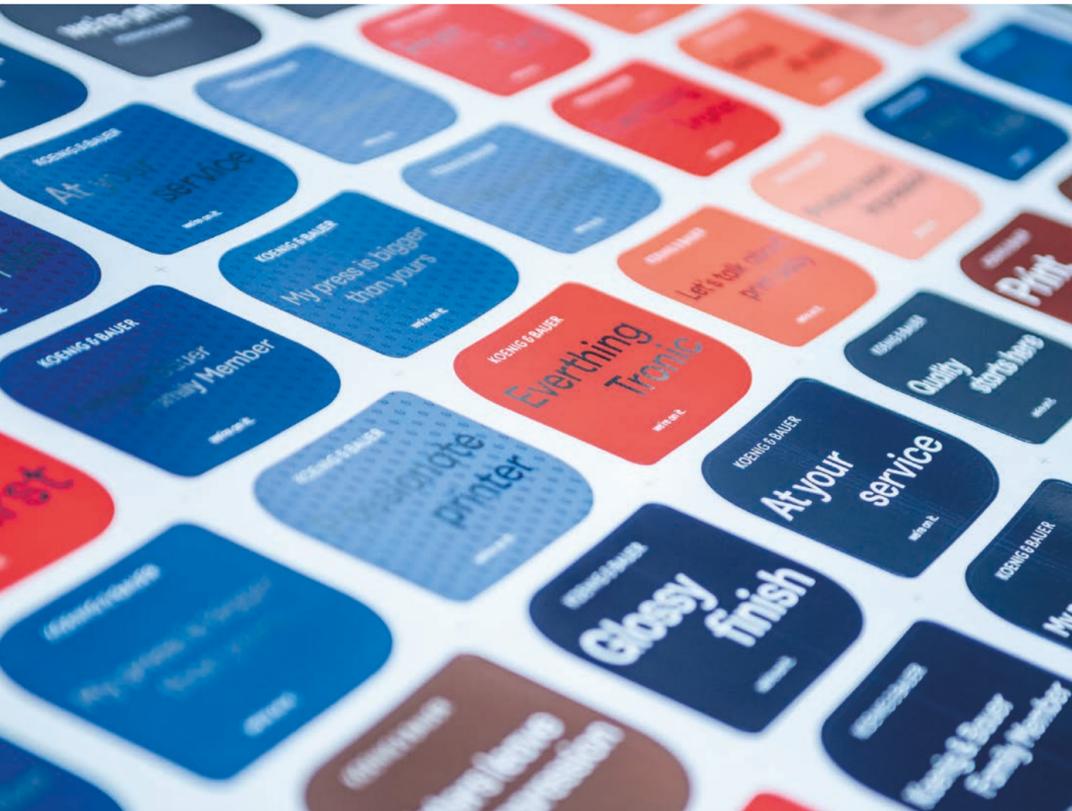
Outstanding register accuracy down to 15 µm guarantees excellent process quality



Modern operating concept and intuitive user interface for maximum ease of operation



Exceptional productivity also for short runs



## Superior with ultimate quality

Labels are something special. They lend products a truly unmistakable appearance.

Despite their usually relatively compact format, labels carry all sorts of key information on contents, product origin, price and sell-by date, as well as transport notes and hazard warnings. As advertising vehicles, they also contribute in no small way to purchase decisions at the point of sale. Maximum performance, high quality

and flexibility play a decisive role in label production.

Label printers, in particular, must face up to a seemingly endless variety of exacting customer demands. The high-performance rotary die-cutter CutPRO X 106 will allow you to master

all challenges that arise elegantly and to the highest quality standards.

The CutPRO X 106 is tailored precisely to your needs and puts you one step ahead with the following highlights for efficient label production:

- High performance with die-cutting speeds up to 15,000 sheets/hr for a broad spectrum of label substrates – from ultra-thin in mould films to standard wet-adhesive labels
- Reel sheeter RS 106 to enable the highly efficient die-cutting of labels printed in a web-fed flexo process
- Precise cutting of pre-printed reels to an exact format for full flexibility up to a sheet length of 780 mm
- Register-true sheet alignment and crease-free feeding of the sensitive substrates with DriveTronic SIS for fast makeready, minimal waste and fewer stoppages during production
- Film-handling package with high-performance antistatic systems as the basis for high production speeds, stable processes and precise pile formation when using particularly demanding materials
- Console-controlled Venturi air-cushion sheet guiding for gentle and reliable sheet transport through the machine
- Makeready times well below five minutes thanks to the “click & cut” register pin system for exact forme positioning on the cylinder without additional manual intervention
- Register accuracy down to 15 µm for maximum die-cutting quality
- Perfect pile quality and therefore “picture-perfect pallets” allow immediate further processing of the die-cut sheets without further manual intervention – a decisive benefit in the production of in mould labels
- High process efficiency – preparation of piles with up to 1,000 sheets permits seamless further processing at the blanker without additional handling
- Saving of all job-specific setting values in the Koenig & Bauer LogoTronic management system
- LiveApp family to assist machine operation and inventory management
- Minimised space requirements for forme storage

### Benefits



Exceptional productivity thanks to die-cutting speeds up to 15,000 sheets/hr



Extended service portfolio thanks to the option of highly efficient processing of labels printed in a web-fed flexo process



A wide range of automation modules and implementation of the “click & cut” principle provide for extremely fast makeready between jobs



High register accuracy down to 15 µm guarantees excellent process quality

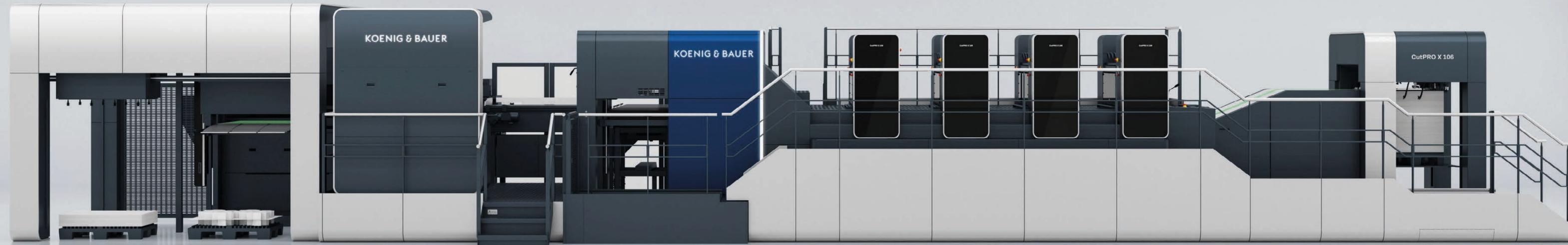


Film-handling package ensures maximum production speeds and reduced waste when processing particularly sensitive substrates, e.g. in mould films



Perfect pile quality – “picture-perfect pallets” – allows immediate further processing of the blank stacks

# CutPRO X 106



#### Control console – everything in focus

- Clearly structured and intuitive TouchTronic operating concept equivalent to the one used for Rapida sheetfed offset presses
- Touchscreen for ergonomic access to machine functions
- Screen keys for convenient and intuitive function selection
- USB port for fast communication of job data
- Job preparation facilitated by loading all CIP3 data via CIPLinkX or LogoTronic
- Job-specific saving of all relevant machine parameters for repeat jobs
- Integration into the Koenig & Bauer production data collection system

#### AutoBlank blanking system – Koenig & Bauer only

- Fully automatic system for inline blanking directly after the rotary die-cutting process
- Blanking is possible without additional tools
- Simple, convenient handling and high production speeds up to 15,000 sheets/hr
- Fastest possible makeready – a full job change is completed in less than ten minutes
- Precise blank stacks with inserted slip sheets enable direct further processing on the folder-gluer or shipping to the customer

#### AirTronic delivery – full preset capabilities

- Venturi sheet guiding system provides for innovative, air-cushioned and therefore contact-free sheet transport for the broadest range of substrates, including particularly sensitive materials
- Dynamic sheet brake of the CutPRO X 106 ensures "picture-perfect pallets" with absolutely straight pile edges for immediate further processing without manual intervention, even at die-cutting speeds up to 15,000 sheets/hr
- Fastest possible makeready thanks to full preset capabilities for all air and format settings

#### Stripping unit – fast and convenient

- For process optimisation of folding carton production within the rotary die-cutting process
- Shorter production times as die-cutting and stripping of the die-cutting waste can be completed in a single machine pass
- Double-size stripping cylinder for secure fixing of the die-cut blanks and reliable waste separation
- Convenient removal of the die-cutting waste

#### Die-cutting unit – absolute precision

- Fastest possible makeready and straightforward handling at job changeovers thanks to a "click & cut" register pin system for automated positioning of the process forme on the cylinder
- Maximum process quality with register accuracy down to 15 µm
- High-precision setting of the die-cutting pressure in 1 µm steps, separately for each side of the cylinder
- Perfect die-cutting quality from the very beginning of the shift – the "ZeroFlex" die-cutting unit provides for constant die-cutting pressure and stable quality at all times

#### Creasing unit – always perfectly in line

- Fastest possible makeready and straightforward handling at job changeovers thanks to a "click & cut" register pin system for automated positioning of the process forme on the cylinder
- Maximum process quality with register accuracy down to 15 µm
- Exceptional precision through exact setting of the die-cutting pressure in 1 µm steps, separately for each side of the cylinder
- Magnetic back cylinder for mounting creasing formes with register punching, making use of the Click & Cut" principle

#### Embossing unit – flexible and user-friendly

- Fastest possible makeready and straightforward handling at job changeovers thanks to a "click & cut" register pin system for automated positioning of the process forme on the cylinder
- Maximum process quality with register accuracy down to 15 µm
- Exceptional precision through exact setting of the die-cutting pressure in 1 µm steps, separately for each side of the cylinder
- Magnetic back cylinder for the mounting of
  - embossing formes with register punching, making use of the "Click & Cut" principle or
  - individual embossing tools or die segments, which can be positioned freely within the area of the sheet without any need for tools

#### Magnetic cylinder – the heart of the process unit

- Precision-ground magnetic cylinder with permanent magnets and register pin system for fast, exact and tool-free forme positioning
- Precise setting of the die-cutting pressure in 1 µm steps, separately for each side of the cylinder – guarantees ultimate accuracy and perfect die-cutting results
- Convenient, user-friendly mounting of
  - complete formes with register punching, making use of the "Click & Cut" principle
  - individual die segments (e.g. Braille texts), which can be positioned freely within the area of the sheet without any need for tools

#### Sheet travel – efficient and reliable

- Maximum performance in the production process thanks to gentle, air-cushioned sheet guiding with blower systems and Venturi guide plates
- All sheet travel functions can be controlled from the machine console, with full preset capabilities for repeat jobs and individual adjustment to suit every substrate
- Universal gripper systems for reliable sheet transfer and absolute register accuracy at all speeds – with no need for adjustments to accommodate substrate thickness changes

#### Die-cutting unit substructure – Rapida performance

- Unit-design principle with double-size back cylinders and heavy-duty bearings for ultimate quality and a long service life
- User-friendly clamping and tensioning mechanism permits fast and convenient replacement of the protector jackets on the back cylinder

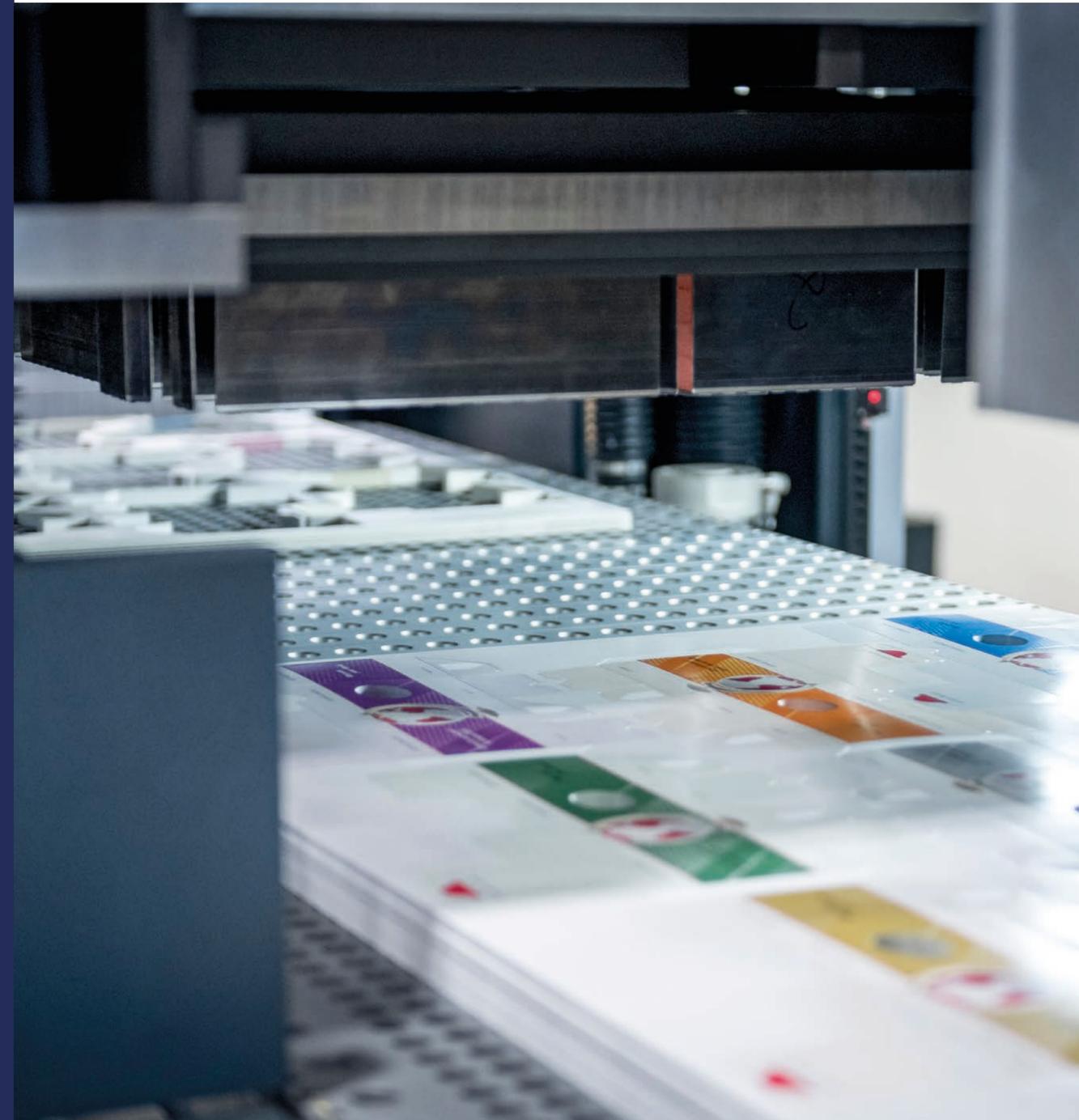
#### Sidelay-free infeed DriveTronic SIS (Sensoric Infeed System) – simply ingenious

- Koenig & Bauer only
- Significant waste savings thanks to reliable, marking-free sheet alignment, irrespective of substrate thickness
- Stable production processes and high availability thanks to fewer stoppages and exact infeed register

#### DriveTronic feeder – convenient and time-saving

- Absolute sheet feeding precision and production speeds up to 15,000 sheets/hr thanks to innovative, dedicated DriveTronic drive technologies from the makeready world champion Rapida 106 X
- Process reliability and maximum flexibility, even when working with demanding substrates
- Fastest possible makeready for repeat jobs thanks to full preset capabilities for all air and format settings

# Technology at a glance



## CutPRO X 106 blanking system AutoBlank

Ultimate efficiency in folding carton production  
with blanking at speeds up to 15,000 sheets per hour

Satisfied customers are the goal of your daily business. You cater to their specific needs and wishes, identify the best technology for their print products, optimise the production process, and thereby ensure the fastest possible processing from order receipt through to shipping of the final product. With the integrated blanking system AutoBlank, the CutPRO X 106 is precisely the machine you need when faced with challenges like this.

The fully automatic system separates the blanks directly after the rotary die-cutting process – inline and at production speeds up to 15,000 sheets/hr. You save additional work steps and gain valuable production time, because the result is a pallet of exact blank stacks with inserted slip sheets – ready to be passed on to the folder-gluer or sent directly to the customer.

Fast job changeovers and straightforward handling of the blanking system are the key to maximum performance. A wide range of folding carton substrates can be processed up to a thickness of 0.6 mm for layouts with separating or intermediate cuts – the system can be perfectly adapted to the blank size and guarantees the highest quality of each individual blank.

Are you using a flat-bed die-cutter without blanking facilities? Then the offline variant of the AutoBlank is ideal for you. With its exceptional production speed and full job changeovers in less than five minutes, the system is capable of handling the output of several flat-bed die-cutters.

# Logistics systems for increased productivity

When printing on heavier substrates, pile changes are especially frequent. That means stopping the machine, switching the full and empty pallets, restarting the machine – just think of how much valuable production time is lost. Non-stop pile changing facilities are the obvious solution.

Non-stop systems at the feeder and delivery allow for uninterrupted production and smooth pile changes. Naturally at full production speed. Still not enough? Logistics installations tailored to your individual production environment are child's play with PileTronic.

#### Non-stop operation at the feeder

- Non-stop system with individual rods for uninterrupted production during pile changes
- Fully automatic non-stop system with a sensor-monitored rake for pile transport and pile reunion
- Pile insertion and removal possible from all three sides

#### Non-stop operation at the delivery

- Non-stop pile changes possible at full production speed
- Lowerable non-stop roller rack automatically extends above the pile
- Sensor monitoring for lifting/lowering of the main and auxiliary piles

#### PileTronic

- Networking of machine control, non-stop pile changing systems and pallet supply for maximum efficiency in die-cutting
- Tried-and-tested logistics modules available
- Elaboration of customer-specific solutions
- Pallet-free paper supply possible





## Digital services at the touch of a button

### New application experience

The customer portal myKyana represents the central interface between users and customer service. All digital services are pooled 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 presented with all the information they require at the touch of a button on the control console. Communication is optimised while language barriers are removed. A customer ticket is automatically created in CRM. This enables solutions to be found more quickly and efficiently, which in turn reduces downtime and increases availability.

**Visual ServiceSupport** is an additional means of optimising communication during remote maintenance. By using the functions that today's mobile devices provide, 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 remote maintenance functionality to aid process technology and mechanical support.

Users with a remote maintenance contract receive a regular **Performance Report**. Performance data and key performance indicators for presses are shown in an easy-to-understand graphic form. 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 increase accordingly.

The **Press Inspection Report** provides a summary of the results of press inspections in an equally easy-to-understand format. You can 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 of replacing individual parts.



## Perfectly harmonised for maximum performance

The sheer diversity of potential applications places enormous demands on the die-cutting formes. To assist you in your search for the ideal forme, we have tested the products made by established manufacturers with regard to their quality and performance in production on the CutPRO X 106.

The ideal formes for a given application are not only prerequisites for perfect die-cutting results, but also help to shorten makeready and reduce waste. They are manufactured from high-quality materials on modern CNC machines and guarantee the trouble-free die-cutting, kiss-cutting, perforating, creasing, embossing or stripping of substrates from 0.03 to 0.6 mm. The heights and angles of the tools harmonise precisely with the substrates in use.

Whether die-cutting, creasing or embossing formes – our specialists have subjected all tools to comprehensive performance tests. On this basis, and working together with our

tooling partner, they have been optimised for use on our high-performance rotary die-cutter CutPRO X 106. This is always done with the objective of further perfection in terms of die-cutting quality and machine performance, so that your production runs stably and with maximum efficiency at all times.

If you are interested in more detailed information about die-cutting technologies and tools, please feel free to tap the comprehensive know-how of our experienced application engineers and specialists. We and our partners would be glad to offer you our support and advice.

# CutPRO X 106

## Technical data

### Sheet format

Maximum (standard)	740 × 1,060	mm
Maximum (option)	750 × 1,060 780 × 1,060	mm
Minimum cardboard	340 × 480	mm
Minimum IML	480 × 480	mm
Gripper margin	10 ± 1	mm

### Suitable substrates

Standard	0.03 – 0.6	mm
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### Pile heights

Feeder	1,300	mm
Delivery	1,200	mm

### Production speed

Maximum <sup>1</sup>	15,000	sheets/h
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### Dimensions and weights

Length <sup>2</sup>	7,250 to 8,250	mm
Width	4,020	mm
Height	2,000	mm
Net weight	approx. 12,000 to 18,000	kg

### Die-cutting margin

Die-cutting margin (standard)	17	mm
Die-cutting margin (optional)	13	mm

<sup>1</sup>Dependent on material properties and job layouts

<sup>2</sup>Dependent on number of die-cutting units

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