



KBA COMPACTA 408/418/618/818

Powerful Double-Circumference Presses
for High-Volume Commercials

Competitive Advantage

Market Opportunities



The KBA Compacta 408, 418, 618 and 818 double-circumference commercial presses are specifically engineered to print high-volume runs and high-pagination products. Low production costs per thousand copies give you that vital edge in a fiercely competitive market.

With the continuing boom in promotional literature and new magazine titles, commercial web offset will remain one of the dominant production processes within the graphic arts industry. However, the quality, productivity, flexibility and economic efficiency of commercial presses must keep pace with increasingly sophisticated customer expectations.

KBA's double-circumference presses – long-grain and short-grain presses for products from 32 to 80 pages – help you



expand your position in the commercial arena by offering a logical, effective choice of automation and optional modules to enhance net output, handling and production flexibility.

They let you configure your press to suit your market, whether you are looking for specialised equipment for printing books, or the flexibility to handle a variety of magazine formats and page counts.

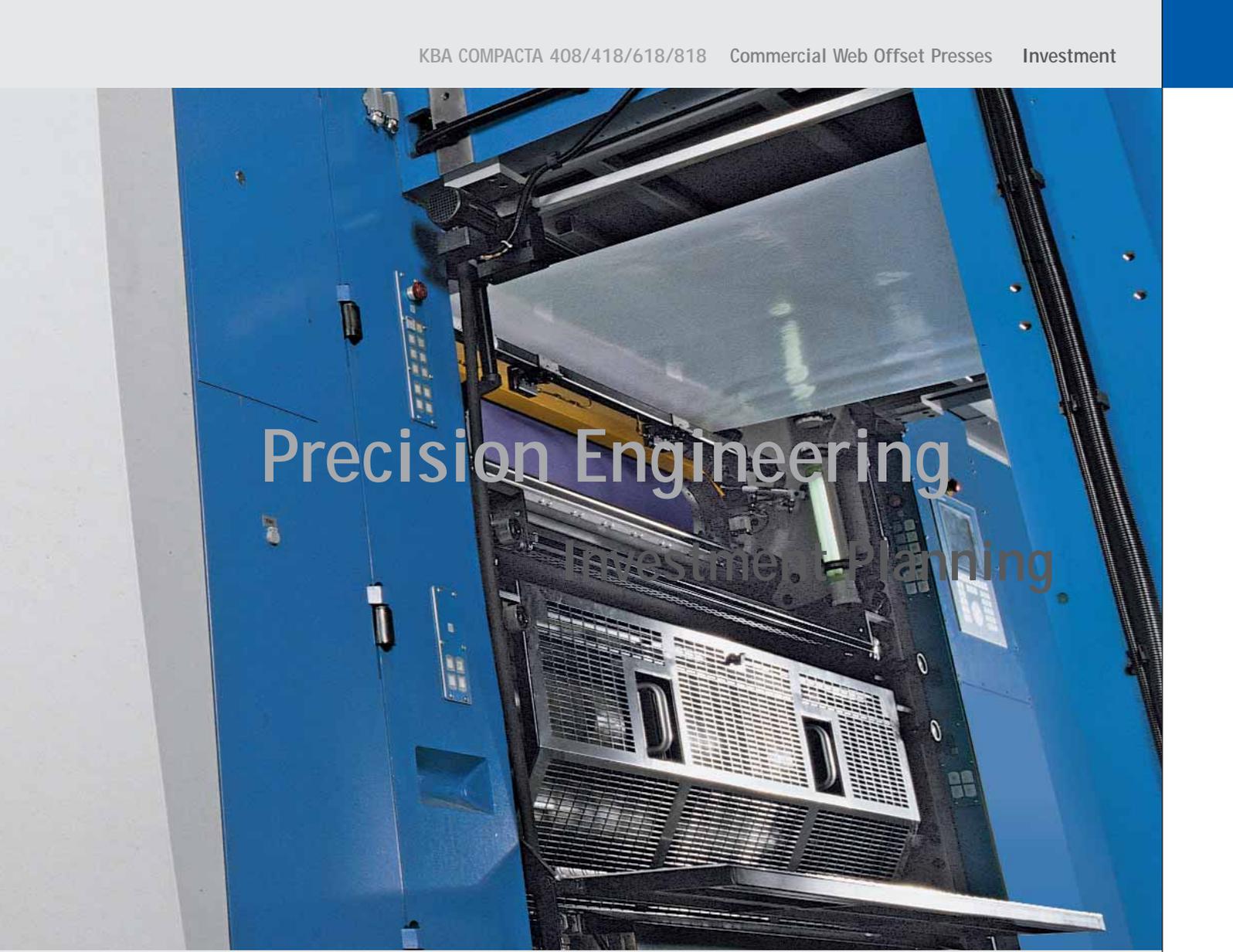
Highlights at a glance

- KBA DriveTronic shaftless drives throughout
- Minimised lock-up slots to cut paper consumption and enhance format flexibility
- Automated plate changing
- Optimised film inking units for precise, uniform inking
- Multi-ring bearings for a superb print quality
- High-performance KBA Pastomat RC beltless reelstand with integrated KBA Patras M (manual) or KBA Patras A (automated) paper-logistics system
- antilevered turner bars and formers for easy access
- Automatically convertible P5 folder for all the most widespread types of product
- Variable-format V5 gripper folder for short- and long-grain products
- Cutters for maximum productivity
- Distributed, intelligent controls at subassembly level
- Console for convenient operation
- JDF-based process integration via KBA LogoTronic



For commercial printing, whatever the application, a KBA Compacta is sure to be the right choice. Because our presses are purpose-designed in close collaboration with you, our customers, and benefit from the most extensive pool of experience in press manufacturing combined with the most advanced engineering and production processes currently available.

As with any investment, careful planning is the key to success. Here at KBA exhaustive feasibility studies are followed by detailed project planning and scheduling. Our universally acknowledged high-precision engineering, supported by cutting-edge CNC processing stations, guarantees a superlative manufacturing quality and a long service life.



Precision Engineering

Investment Planning

Aggregates are pre-installed to cut assembly and commissioning times. A low level of maintenance, minimum down times – even in triple-shift operation – and a global service network of qualified staff ensure a high, calculable level of press utilisation.

Intensive research and development activities, with special emphasis on automation and control, reduce your manning costs and improve your production performance.

Just-in-Time

Paper Logistics



KBA's integrated paper-logistics system embraces total automation of the paper flow, from reel reception and storage to on-demand supply of the prepared reels to the reelstand, loading onto the reelstand arms, and removal and disposal of the empty cores. Remote control and monitoring of the individual sequences from cutting-edge consoles is a key feature.

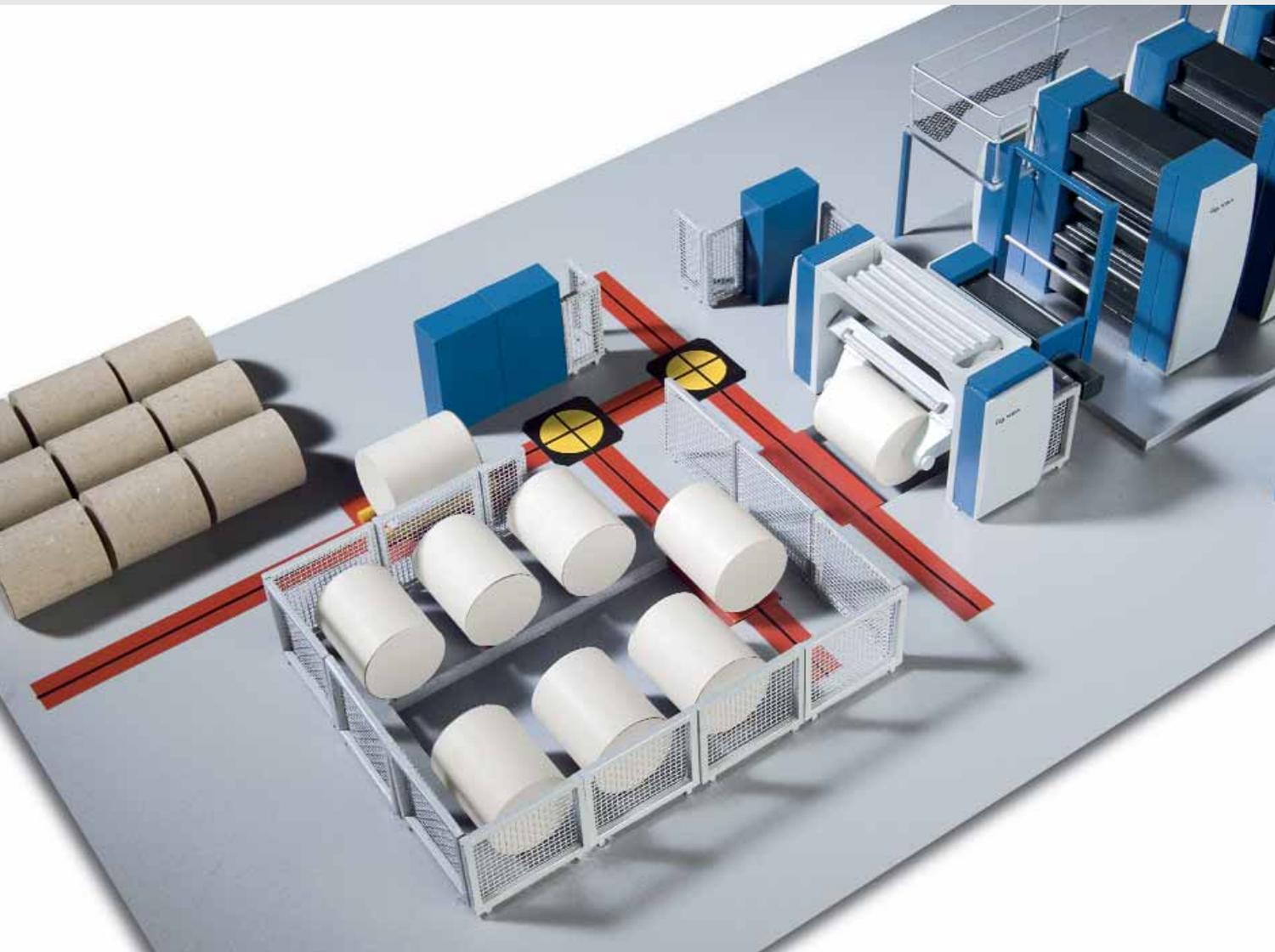
The KBA PATRAS paper transport system is module-based to offer a wide range of versions, from manual to fully automatic, so that it can be custom-configured to suit individual production specifications and the space available.

The modular design of the reel logistics system, which is available in a choice of automation levels from manual to all automatic, supports customisation to suit specific production parameters and architecture.

KBA Patras is engineered for a long service life and low maintenance, and is a real value-for-money investment. Optimising paper logistics with Patras brings substantial savings in costs and paper waste.

The KBA Pastomat RC high-performance reelstand with central drive and divided arms can be integrated easily into an

High-performance KBA Pastomat RC reelstand
for web speeds of up to 15.2mps (2,992fpm)



Automated paper-logistics system.
A new web is automatically spliced onto
the expiring web at full production
speed. The absence of a belt drive on
the Pastomat RC makes splice pre-
paration much easier.

The divided arms on the Pastomat RC
are infinitely adjustable by push-
button. The ability to handle reels of
different widths affords a high level of
flexibility in processing a variety of pro-
ducts.

Separate brochures are available on
streamlining paper logistics with KBA
Pastas and on the new-generation KBA
Pastomat RC reelstand.

The reels are driven via the core by robust AC motors





The printing couples in Compacta double-circumference presses are the product of traditional, quality-focused engineering skills combined with breakthrough technology. They are designed for high-volume print runs in triple-shift operation. The cylinders for the printing plate and blanket promote a smooth machine run and superb commercial print quality even at the maximum web speed of 15 m/s (2,953 f/m).

Rigid side-frames made of solid cast iron, and the box-type design of the printing units, prevent vibration even at maximum speeds – an absolute essential for a high-grade print quality and the basis for many years of low-maintenance, error-free operation in the harsh routine of multi-shift production.

Whether you are aiming to print high-volume runs or short runs of high-pagination copies, KBA double-circumference presses will bring you big bottom-line benefits.

The printing units in Compacta double-circumference presses combine innovative technology with proven features

High-Quality Prints

Focus on Printing Couples



High-quality production and smooth running even at maximum speed



Film inking unit for a superb print quality

The film inking units on KBA double-circumference presses raise the bar in precision inking. Specially designed rollers put ink to plate with absolute precision and uniformity. The ink is split repeatedly to create a fine ink film which transfers delicate lines and problematical images onto the paper with equal clarity.

The oscillation of the four specially coated ink drums provides for an exact distribution of ink. The ink drums and duct rollers are connected to an ink-temperature control system and guarantee a uniform ink temperature for an optimum print quality. The circulation systems for the cooling water are controlled separately.

Three form rollers, one of them reciprocating, transfer the ink uniformly to the plate and reliably prevent ghosting. The speed of the motor-driven duct roller can be regulated from the console and from the ColorTronic desk. The inking and dampening duct rollers have freely storable acceleration curves so that they run up to colour faster.

The high-capacity ink ducts have cross-heads for torsional rigidity, a precisely defined throw-on position and can be connected to a central ink supply. The ink knives are segmented into zones and can be preset and remotely adjusted from the ColorTronic desk. A digital link to obtain presetting values from pre-press is possible, in order to minimise make-ready times and wastage.

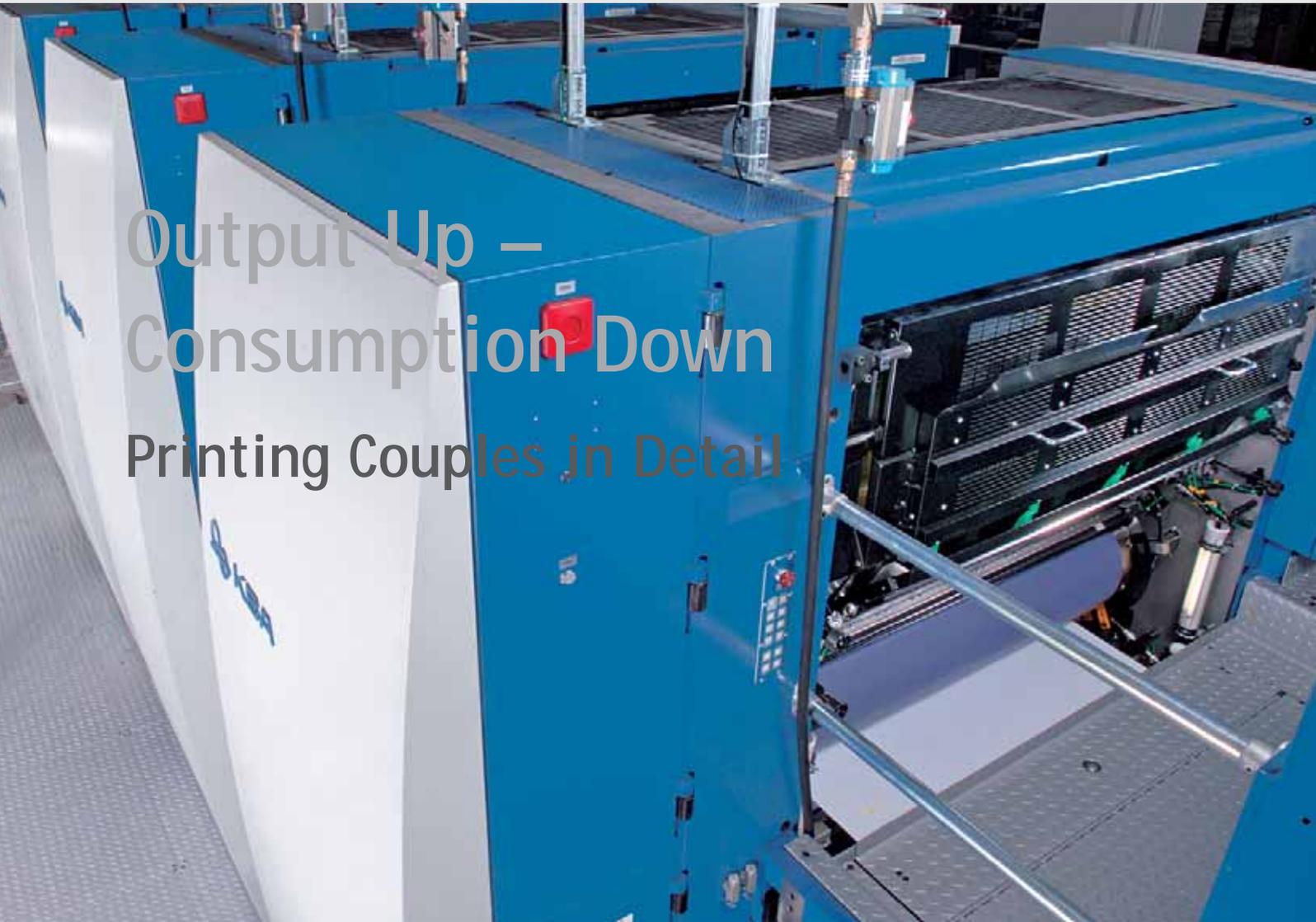
Ink on the Dot

Inking and Dampening Units



Dampening unit for alcohol-free printing

Low-alcohol dampening units enhance press ecology and economy. The electrically driven rubber-coated duct roller, the chrome roller for dampening transfer and the large-diameter reciprocating plate dampener create a rapid ink/water balance during press start-up. The plate dampener, like the ink forme rollers, follows the plate cylinder during cocking and is thrown on and off pneumatically during job changes. The dampening trough is insulated, the level of the fount solution is monitored electronically.



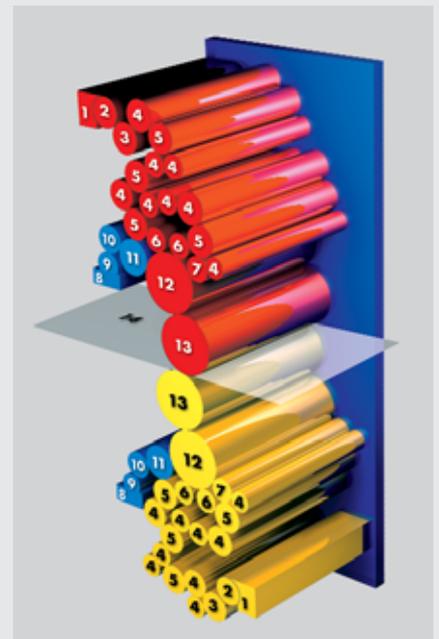
Output Up – Consumption Down Printing Couples in Detail

The KBA double-circumference presses are designed for maximum productivity. Plate-changing has been automated to cut makeready and down times. The circumference of the plate and blanket cylinders – and thus paper consumption – has been reduced by minimising the lock-up slot, which brings the added benefit of enhancing print quality by eliminating vibration at high press speeds.

The plate cylinder and solid steel blanket cylinder are both nickel-plated, dynamically balanced and run in maintenance-free triple-ring bearings with zero play. Broad bearer rings made of special steel ensure a smooth machine run and increase the service life of the press. The blanket is tensioned evenly via two

spindles. Motorised adjustment of the sidelay, circumferential and diagonal register from the console cuts set-up times and waste. The individual drives assume the function of the unit-to-unit register.

- 1 Ink duct
- 2 Duct roller
- 3 Film roller
- 4 Ink distributor roller
- 5 Ink drum
- 6 Forme roller
- 7 Reciprocating forme roller
- 8 Dampening duct
- 9 Dampening duct roller
- 10 Dampening transfer roller
- 11 Plate dampener
- 12 Plate cylinder
- 13 Blanket cylinder
- 14 Web





Automated Plate Change
The leading edge of the plate is



The design of the turner-bar superstructure influences the versatility and economic efficiency of the entire press line. This is why KBA installs rapid turner-bar superstructures whose high performance has already been proven in gravure printing. The turner bars are cantilevered to allow free access to the superstructure and rapid webbing-up.

Once in the superstructure, the web can be slit into ribbons of different widths. Parallel turner bars position the ribbons one above the other and guide them to the former for the first length fold. Web infeed has been optimised, the register assembly and easy-access former can be shifted sideways or in the direction of web run.

The latest further developments serve to reduce air consumption and thus save valuable energy. At the same time, the turner bars are contamination-free and promote smoother ribbon travel. Linear-register rollers permit optimum adjustment of the cut-off register.



Slitters guarantee a precise scissor cut



New turner bar materials for a stable web run

High-Speed Versatility

Flexibility in the Superstructure

Each of the slitters has an adapter for a dust extractor and can be adjusted remotely from the console. The cutting pressure between the upper and lower knife is precisely defined to produce a clean scissor-cut with minimal abrasion.

The electrically controlled dedicated drives for the draw rollers maintain a uniform web tension. They can be preset and adjusted by remote control from the console, which dramatically shortens setting and makeready times.

Cooling rollers cool the web to ambient temperature prior to infeed into the superstructure. The first cooling roller doubles as a measuring roller for web tension. The principle applied in KBA's chill roll stand, with its extreme angle of wrap, requires just a small volume of water to cool the web, which also cuts energy consumption.



Optimum efficiency at the chill roller stand



Colour measurement and control for perfect print results

More Productive Time

Fast Pin Folder

The output level and versatility of a web offset press are determined by the folder. KBA double-circumference presses incorporate a KBA P5 folder



An intelligent superstructure design supports folder versatility

with five-part cylinders to accommodate high web speeds.

The heavy-duty folder has a modular design to allow you, the user, to specify the configuration best suited to your operations and your market.

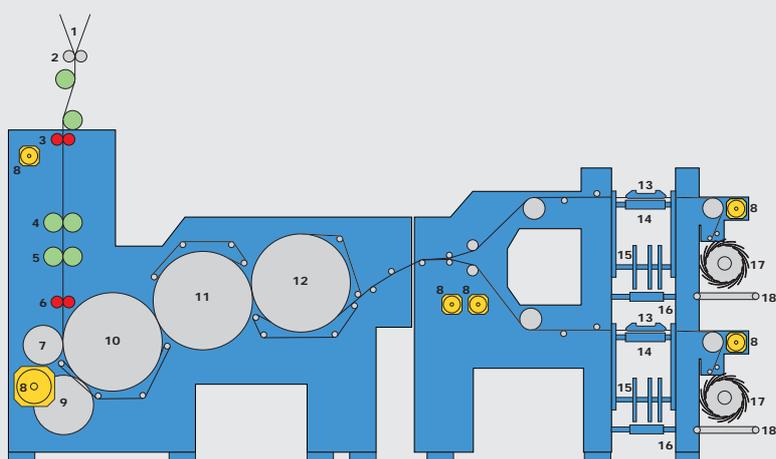
The standard version offers a choice of first cross fold and quarterfold in collect and non-collect mode. A double quarterfold and overhead copy guidance into the delivery of the lower quarterfold are also standard features, as are length and cross perforation. Options include a separate delivery for crossfold production, a second parallel cross fold and a section stitcher.

Whatever the level of sophistication you choose, you will find that the convenience and speed of automated press presetting and conversion from the console will

support a wide variety of products by helping to minimise makereadies and changeovers. With the P5 you can keep abreast of market trends by offering your clients new, attractive products.

The folder is also fully integrated into the innovative shaftless drive system. There are no gears or clutches, and press parts not scheduled for the next job can be automatically disengaged during changeover. This reduces wear, tear and maintenance while boosting press productivity. The circumferential setting of the spider wheel can be adjusted on the run to accommodate different copy thicknesses and so ensure a problem-free delivery. The position of the spider wheel can be preset automatically during production changeovers.

A host of other features, such as a cross perforator with on-the-fly depth adjust-



- 1 Former
- 2 Forming rollers
- 3 Driven draw roller
- 4 Length perforation
- 5 Cross perforation
- 6 Driven draw roller
- 7 Cutting cylinder
- 8 Distributed drive
- 9 Sticher

- 10 Collecting cylinder
- 11 Folding-jaw/folding-blade cylinder
- 12 Folding-jaw cylinder
- 13 Quarterfold blade
- 14 Folding rollers
- 15 Spider wheel
- 16 Sheet delivery
- 17 Cross-fold spider wheel
- 18 Cross-fold delivery

ment or three-stage product deceleration in the delivery, ease the press crew's workload and enhance folder productivity and reliability.

A severer prevents damage to folder parts in the event of a paper jam. The stop in the quarterfold can be cleaned of paper trimmings during the production run.

The P5 folder combines production flexibility, rapid conversion, accurate folding and low maintenance with extreme reliability and easy handling.

Upping Your Options

Format-Variable Gripper Folder



Web offset printers, whose flexibility is often limited by the fixed format of their presses, will welcome our V5 gripper folder's ability to process both short- and long-grain products.

Our expertise in gravure technology, especially in folder engineering, has enabled us to create a folder for commercial presses as well. A folder which, for the first time, makes it possible to switch a KBA Compacta 618, for example, from 48 A4 pages long-grain to 60 (slightly reduced) A4 pages short-grain. This furnishes much greater production flexibility. The V5 is the ideal solution to increasingly fierce competition in the 32- to 80-page market.

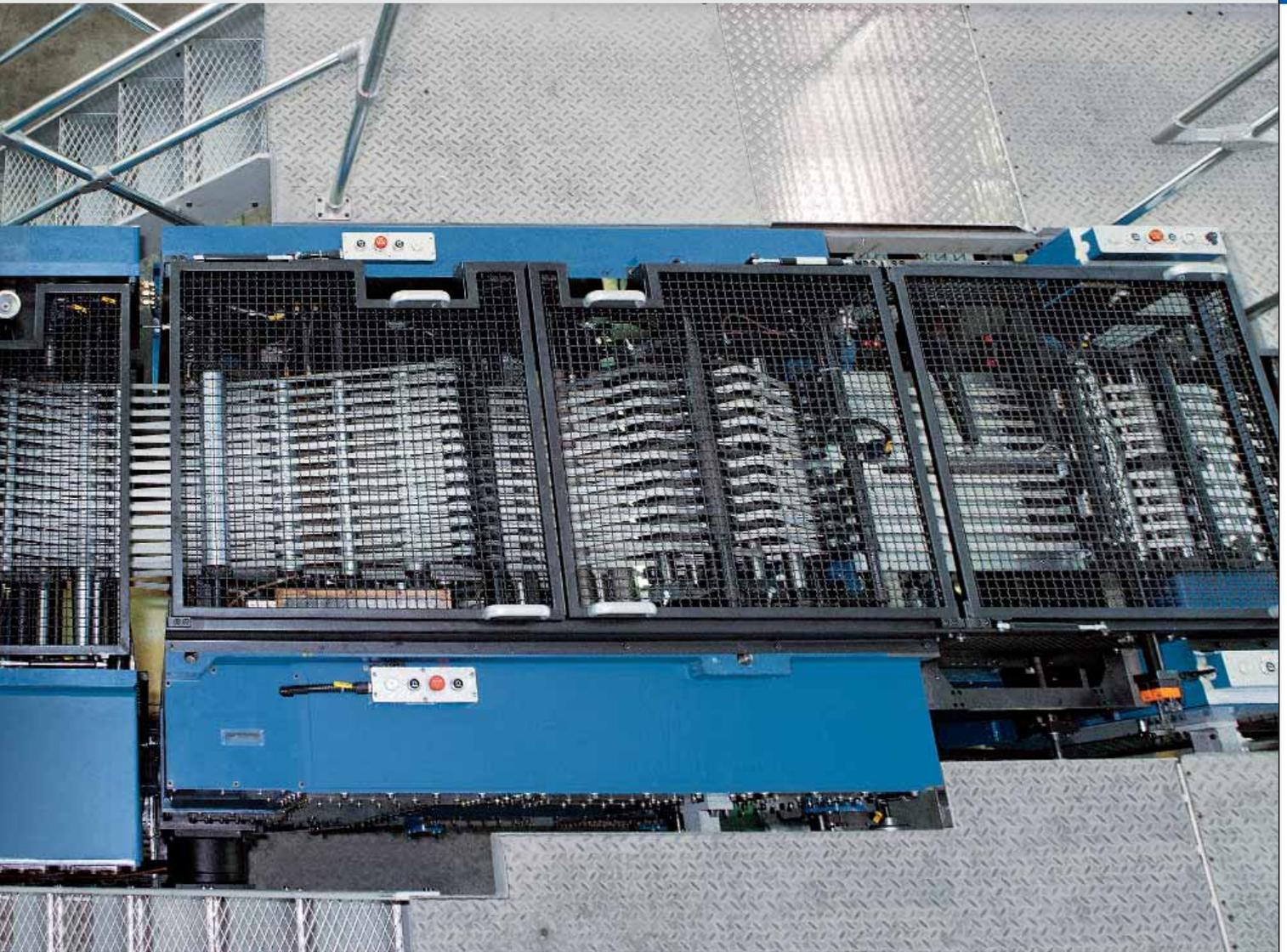
In order to make the most of this versatility you need a superstructure capable

of handling a large number of ribbons. Cut-off cylinders at the infeed to the V5 folder allow the cut-off length to be varied, just as in gravure, eg to 620 or 413.3mm. It goes without saying that the V5 incorporates all the familiar technical features of the P5 folder and, of course, individual drives.

The V5 broadens your options for maximising plant utilisation and therefore enhances press economy. It enables you to raise your competitive profile by offering an extensive range of products and react more flexibly to changes in market and customer demands.

And the V5 gives you a lot of other benefits including more room for manoeuvre in a fiercely competitive marketplace. In some cases it can even

cut-off cylinders at folder infeed support a wide choice of cut-off lengths



save you the expense of investing in a second press for short-grain products. If your job structure exploits the V5 folder's full potential, this can bring additional, substantial, bottom-line benefits.



A tailored superstructure concept is prerequisite to utilise the full variability of the V5



The KBA cutter dramatically lowers investment and production costs.

The moving parts in the KBA cutter all rotate, so there is no braking effect caused by deflection, and the press can run at the optimum speed for the job. This is a big advantage – particularly when printing low-pagination copies – and substantially reduces costs while enhancing output.

The cutter is the ideal complement to KBA's range of commercial folders. Its advanced technology and engineering optimise the production of 4, 8, 12 and 16 pages.

Dieses Konstruktionsprinzip senkt einerseits Investitions- und Produktionskosten drastisch, bringt andererseits eine enorme Produktionsleistung. Der Abschnittapparat stellt die ideale Ergänzung zum KBA-Akzidenz-Falzapparate-Programm dar. Er optimiert die Produktion von 4, 8, 12 und 16 Seiten durch den Einsatz modernster Technologie und Fertigungsverfahren.

Cutter technology trims also investment and production costs...

also as a complement to a standard folder

Trimming Production Costs

Simple Cutter Handling



The essential details:

- Variable infeed width
- Variable length trimming opposite the



The cutter permits optimised handling of low-pagination products



KBA OPERA

Dialogue between man and machine

On the high-performance Compacta 215, the user-oriented control console KBA ErgoTronic, the automatic press-presetting system KBA EasyTronic, the automatic web tension control system KBA WebTronic and the production management system KBA LogoTronic are important elements of an integrated automation concept. Through the networking of intelligent control technologies at unit level, the operating crew maintains full control over the whole press throughout all phases of production. With KBA OPERA (Open Ergonomic Automation System), KBA furnishes the modules which are indispensable to master today's increasingly complex press installations and the instant dialogue between man and machine which these demand.

All important commands are initiated from the user-oriented control console

KBA ERGOTRONIC

The new control console of the Compacta 215 is a perfect symbiosis of functionality and aesthetic design. All important production commands, including those for automatic conversion of the folder, are initiated from the console. Clearly arranged data screens with plain-text displays promote accurate and rapid handling via touchscreen controls.

Remote diagnostics and maintenance

KBA service staff can be contacted at any time via a 24-hour hotline for prompt and effective assistance. Modern facilities also enable the KBA customer service department to communicate directly with the computer systems of the Compacta 215, ensuring that any malfunctions can be located and rectified with an absolute minimum of delay.



KBA COLORTRONIC

The ColorTronic desk is the press operator's central workplace and permits optimum handling of the ink settings for the upper and lower printing couples. A presetting system for the ink keys is part of the standard package. Broad LED strips provide an immediate indication of the

ink profiles set and facilitate fast corrections when necessary.

KBA CIPLink

The CIP3 converter CIPLink is an optional component of the KBA LogoTronic system for calculation of the area coverage, and thus of the ink key openings, on the basis of pre-press data. The CIP3 files can be imported from floppy disk, from CD-ROM or online via a local network. In this way, the relevant data from pre-press can be transferred directly into the press in digital form.

KBA EASYTRONIC

The automatic press presetting system KBA EasyTronic raises the availability of the press and contributes to considerable savings in wastage. It features, for example, automated web-threading, automatic web width conversion when

setting up a new job, run-out washing in accordance with production demands, and defined pre-inking. All superstructure and folder components are preset on the basis of the pre-press data. A single press of a button provides for optimised starting, setting-up and stopping of the press, ensuring the shortest possible production times and an absolute minimum of wastage.

KBA WEBTRONIC

The self-regulating web tension control system KBA WebTronic assists the operator when starting up the press, takes care of web tension regulation during production, and thus contributes essentially to greater stability at all phases of the print run. This not only reduces the risk of web breaks at start-up, but also boosts net production output and promotes uniformly high print quality.

Intelligent automation concepts relieve the press crew

The goal for practically every print enterprise is to possess an unbroken workflow from order receipt to product dispatch. Since so many different machines and programs are involved to cater for different product ranges, such workflows are scarcely available "off-the-shelf". Individual configurations must be tailor-made. This is also generally not a domain for "one-stop suppliers". KBA makes a dedicated contribution to networking and workflow with its management systems Logotronic professional and Logotronic basic, but at the same time works together closely with recognised suppliers of branch management software. The universal JDF format (Job Definition Format) developed by the CIP4 consortium, of which KBA is a member, permits data exchange with both

management information and prepress systems. The JDF specification takes into account all process-relevant modules. Data transfer, however, can nevertheless use the previously installed interfaces.

Logotronic basic

All KBA Compacta presses are equipped as standard with the Logotronic basic version of the system. This version serves to transfer essential preset data to the press. Logotronic basic embraces the optional modules CIPLink (CIP3/CIP4 data transfer for press presetting) and logging for paper and ink data. The existing company hardware (server) is used to implement the networking system. Presetting data for the ink keys and for the duct roller settings are transferred.

Logotronic professional

To support a digital exchange of job and presetting data for the press, to permit immediate monitoring and systematic evaluation of production data, and to establish links to upstream PPS systems or company EDP networks, the console can be further expanded by adding the open production management system Logotronic professional. The logging of press and production data facilitates operations management, with KBA Logotronic as a source of truly meaningful statistics. Logotronic professional is the central element of communication between KBA presses and the corresponding print company MIS, whether via direct database access or via JDF. The communication module JDFLink implements JDF data exchange.

KBA LOGOTRONIC

Digital workflow



PressWatch

The Logotronic component PressWatch provides management with an overview of all the jobs currently being run. Counter states, printing speeds, job data and progress, press status messages and a whole array of other relevant information can be displayed in real time.

SpeedWatch

SpeedWatch creates a time/speed diagram, similarly in real time, with which all events and messages for a selected press can be depicted. Correspondingly authorised persons are able to access this information via the Internet or the company Intranet.

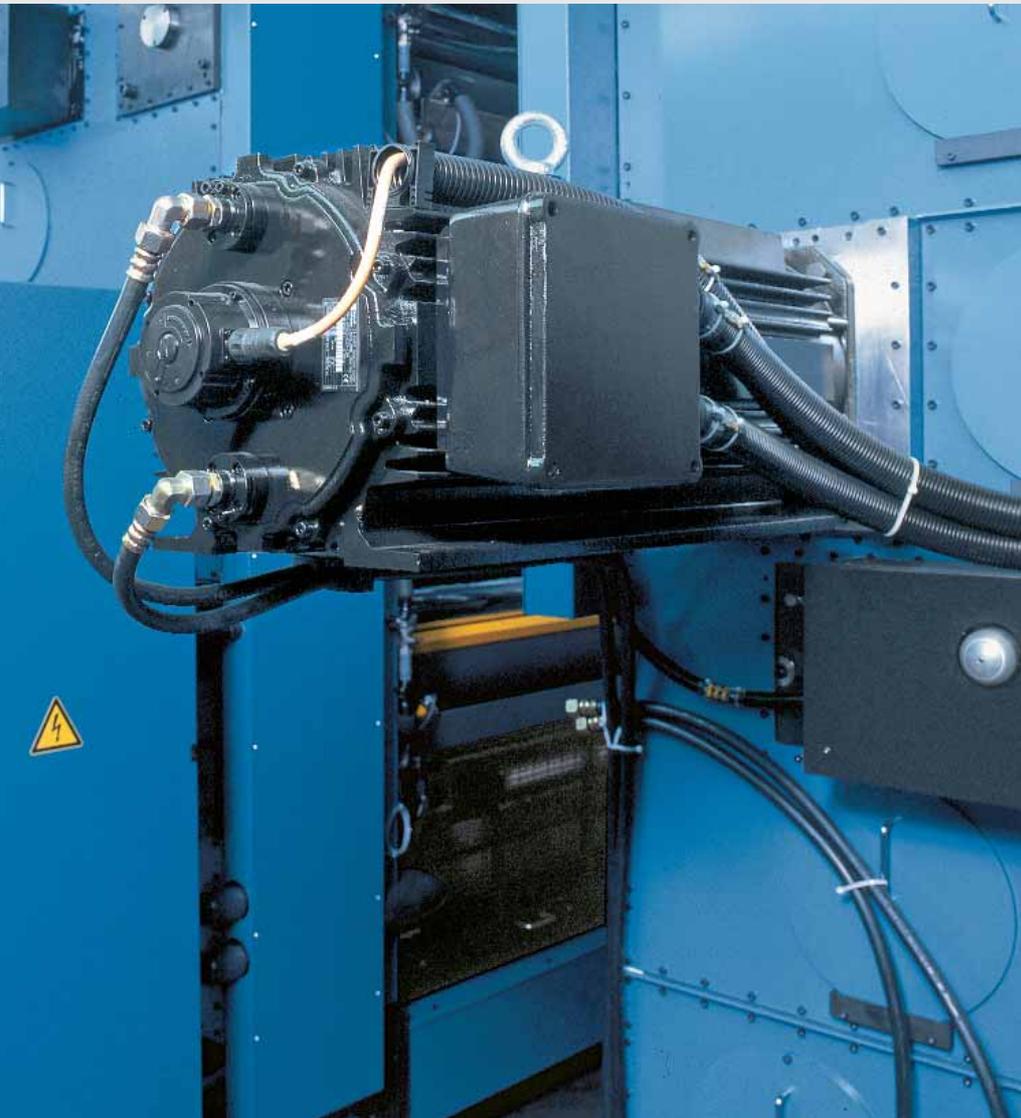
JDFLink with Logotronic professional

Interconnection of Logotronic professional via the universal interface JDFLink offers the following advantages:

- Unbroken automated workflow (job data can be passed directly from the branch)
- Access to Logotronic professional from all connected workstations
- Presetting and repeat data provide for shorter makeready times
- More effective production per shift
- Less waste
- Single data input brings greater efficiency and reduces the risk of errors

- Improved cost accounting on the basis of exact press and production data (no daily worksheets to be completed by hand)
- Clearer overview through facility to retrieve all job, presetting and press data
- Comprehensive and transparent information for management

Important information on current print production can be called up from any location



Einzelantriebstechnik auch im Überbau

Koenig & Bauer's new-generation double-circumference presses feature KBA DriveTronic dedicated shaftless drives instead of a mechanical main shaft. The position-controlled and in part water-cooled AC servo motors are synchronised via a 'virtual shaft'.

Individual drives for all subassemblies, from the infeed unit and printing couples through to the chill roll stand, the draw elements in the superstructure and the various folder modules, cut wear and tear and provide for less maintenance, fast makeready, high register precision and vibration-free running. The result is a dramatic improvement in print quality.

Mechanical unit-to-unit registration is no longer necessary, as this function is assumed by the individual drives. Extra modules, eg an additional printing couple, can be added and the superstructure or folder can be extended even years after the press originally came on stream. In fact, the shaftless drive technology permits practically unrestricted retrofitting of expansions to an existing press configuration.

Another advantage is the significantly reduced on-site installation time, because all subassemblies can be pre-installed and tested prior to shipment.

The drives are synchronised via an electronic shaft

Dedicated drives also in the substructure

COMPACTA 408/418/618/818

At A Glance

	C 408	C 418	C 618	C 818
Circumference mm	890-900*	1,156-1,240*	1,156-1,240*	1,156-1,240*
Max. web width mm	1,260	1,000/1,075	1,450	1,905/1,980/2,060
Max. no. of pages A4 (standard)	32 short-grain	32/40 long-grain	48 long-grain	64/72/80 long-grain
Max. speed rph	60,000	45,000	45,000	45,000
Max. web speed m/sec	15	15	15	15

*additional circumferences upon request

Standard features

- KBA reelstand
- KBA infeed unit
- Stretching roller
- Printing units
- Blanket washing unit
- Water preparation unit
- Web catcher
- Dryer without after-burner
- KBA chill roll stand
- Superstructure with/without insertion deck
- Silicone unit
- Web guidance
- Ink-register control
- Cut-off register control
- Automatically convertible P5 folder
- Plate-punching machine
- Plate-bending machine

Opera (standard)

- Console (KBA ErgoTronic)
- Remote adjustment of inking unit, dampening unit and register (KBA ColorTronic)
- Shaftless drives (KBA DriveTronic)
- Production management system (KBA LogoTronic): basic
- CIP3 integration possible

Optional extras

- KBA Patras reel-logistics system (manual or automated)
- Web-threading device
- Ink-supply system
- Dryer with integrated after-burner
- Desk lighting
- Height adjustment for desk
- Web-remoistening unit
- Cross lead for duplex presses
- Steel substructure for stacked version
- Insertion decks
- Auxiliary former
- Length gluing unit
- Format-variable V5 folder
- Cutter
- Die-cutter perforator
- Coater and remoist gluer
- Plough fold
- Compressed-air unit
- Cooling station

Opera (optional extras)

- Film and plate scanner (KBA ScanTronic)
- Production management system (KBA LogoTronic): professional
- On-line data transfer (KBA CIPLink)



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03/2006-e. Printed in Germany

Our agency: