



KBA RAPIDA 106

Technical information

Feeder and infeed



■ DriveTronic feeder

- Feeder controlled via 4 servo motors, with continuous, stepless pile lifting and automatic lift compensation (paper / board)
- Antistatic rear-edge separating air
- Automatic format setting
- Automatic pile side edge alignment
- Front-edge pile height sensing with automatic compensation of the feeder head height
- Skew-sheet correction at the feeder head during production

■ Suction-belt feed table

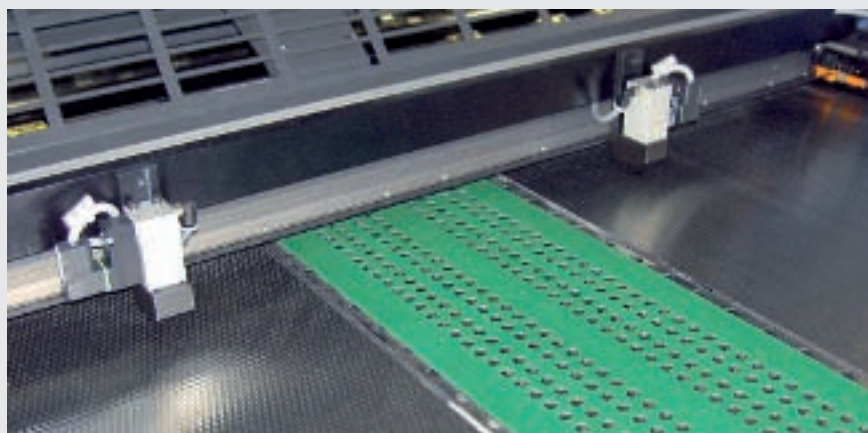
- Suction-belt feed table with stainless, antistatic structured surface, with a single suction belt and multi-chamber vacuum system
- Electronically controlled sheet deceleration to ensure optimum sheet arrival speed at the front lays

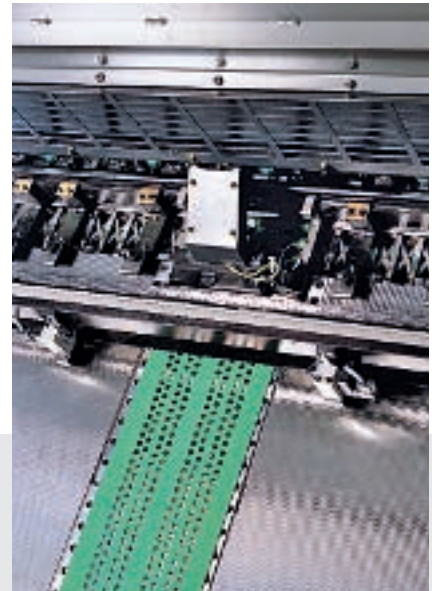
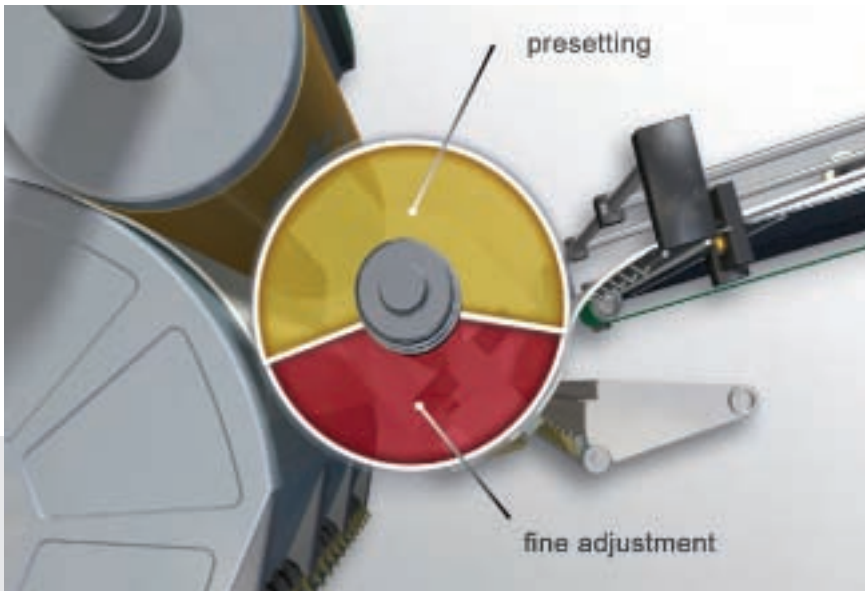
■ Infeed

- Swing infeed accelerates the sheet for transfer to a single-size feed drum
- Motorised remote adjustment of the feed line, individual front lays and the front lay cover height with DriveTronic Infeed

■ Touchscreen display

- Touchscreen display with direct function keys for reliable and intuitive press operation





■ Vacuum side lay

- Marking-free alignment of the sheet
- Multi-chamber vacuum system to permit matching of different suction requirements
- Automatic format setting

■ DriveTronic SideLay (SIS)

- Sidelay-free infeed eliminates all operator settings for lateral sheet alignment (makeready savings)
- Excellent alignment accuracy thanks to the very long period of rest for the sheet at the front lays

■ Sheet monitoring

- Ultrasonic double-sheet detector
- Capacitive double-sheet detector for inhomogeneous materials
- Electromechanical double-sheet detector
- Multiple sheet sensors
- Optical skew-sheet and side lay sensors
- Optical front lay sensors with electro-pneumatic overshoot blocking
- Magnetic crash bar



Printing unit



■ Design principles

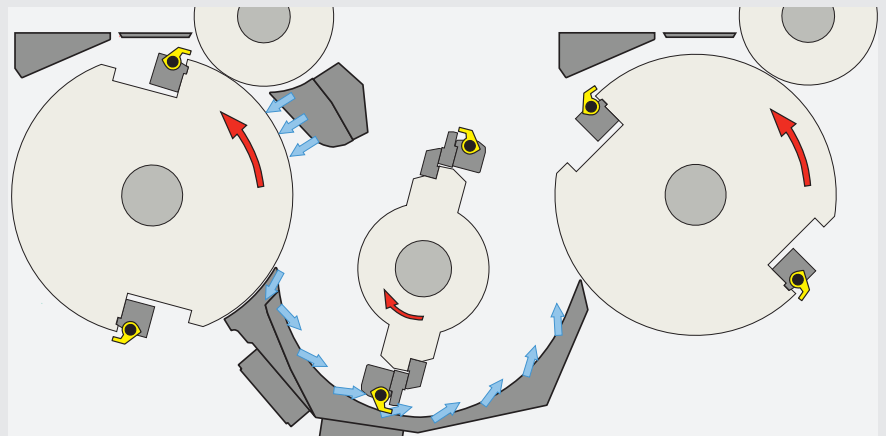
- Substructure cast in a single piece for high torsional rigidity, stability and reduced weight
- Continuous gear train for smooth running and precision
- Unit design; 7 o'clock cylinder arrangement
- Corrosion-free cylinder surface finish
- Bearer contact and play-free bearings for precise rolling between plate and blanket cylinders
- Automatic bearer cleaners
- Central lubrication for the most important lubrication points

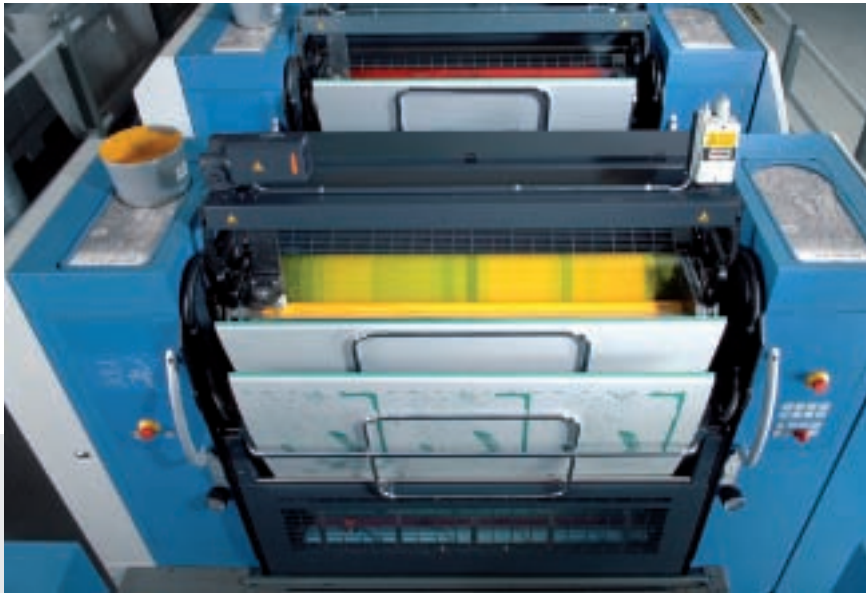
■ Universal gripper system

- No adjustments required to accommodate changes in substrate thickness
- Ceramic-coated gripper tips for maximum holding force
- Structured gripper pads with elastic inlays
- Gripper pads and tips can be replaced individually

■ Sheet travel

- Double-size impression cylinders and transfer drums for reliable sheet travel over the full substrate range
- Air-cushioned sheet travel with blower bars, Venturi guide plates and comb suckers
- Automatic setting of the substrate thickness
- Two-stage pneumatic impression on/off switching





■ **Semi-automatic plate change (SAPC)**

- Pneumatic opening and closing of the plate cylinder guard
- Automatic clamping and tensioning of the plate
- Divided rear plate clamps

■ **Fully automatic plate change (FAPC)**

- Change completed in 3 cycles
- Total change time in straight printing mode: 3 min
- Total change time in perfecting mode: 6 min

■ **Simultaneous plate change (DriveTronic SPC)**

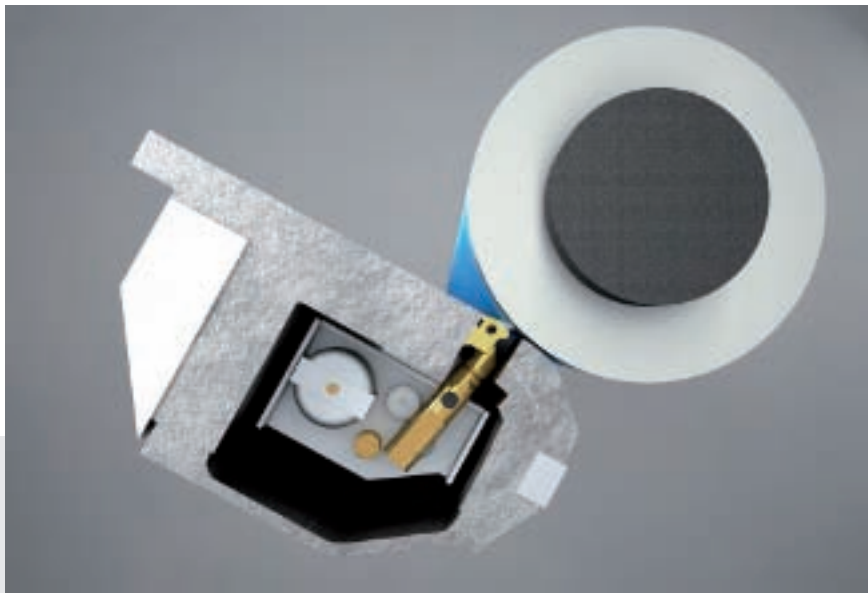
- Simultaneous in a single cycle
- Plate cylinders driven directly by dedicated motors
- Plate change parallel to other make-ready processes
- Total change time: 1 min

■ **Register setting**

- Remote setting of lateral, circumferential and diagonal register
- Diagonal register achieved by tilting the transfer drums
- ErgoTronic ACR for automatic and exact register checking and correction



Printing unit



■ ColorTronic ink duct

- Ink keys with carbide blades and ceramic-coated ink duct roller
- Remote control of the ink keys
- Wear-free ink metering ensures accurately reproducible settings
- Ink duct roller speed compensated to the press speed for constant ink transport

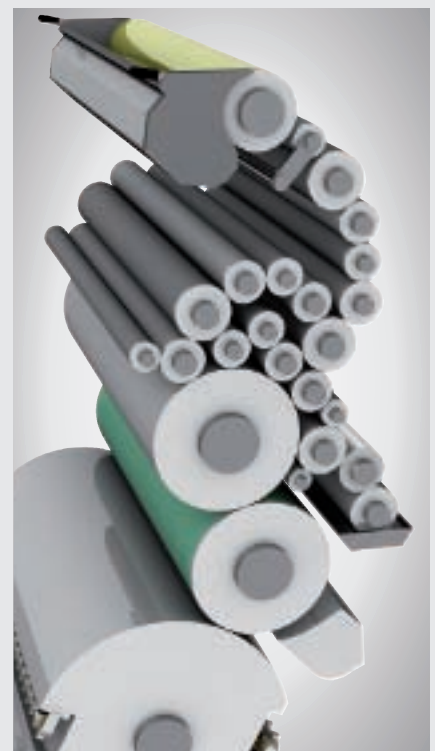
■ Inking unit

- Fast-reacting single-train inking unit
- Remote setting of vibrator frequency and blocking
- Ink train separation with impression-off to maintain the vertical ink distribution in the inking unit
- Stepless remote adjustment of the oscillation timing during production
- Remote switching of ink forme roller oscillation
- Oscillating distributors and ink duct rollers prepared for inking unit temperature control
- Individual engaging/disengaging of inking units for reduced roller wear and minimised makeready times



■ Dampening unit

- Speed-compensated Varidamp film-type dampening unit for a stable ink-water balance
- Differential drive to eliminate hickeys, activated/deactivated during production





■ Multi-purpose washing system for blankets and impression cylinders

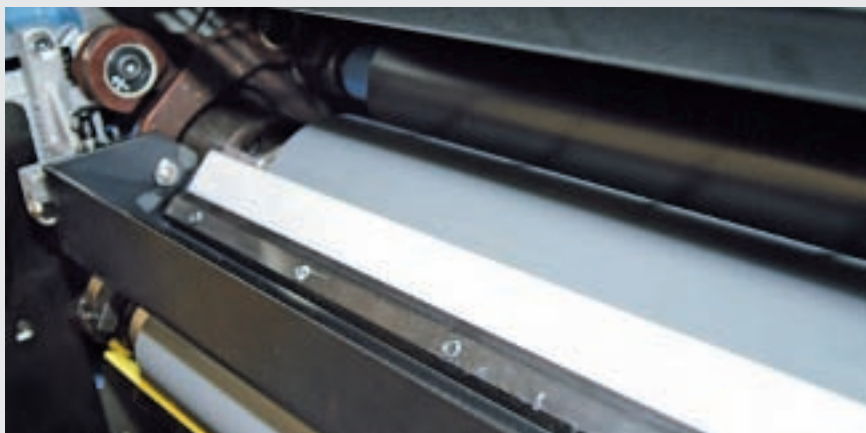
- Use of dry cloth or ready-impregnated Prepac® cloth rolls
- Indication of washing cloth consumption
- Individual programming and central control of washing programs
- Multiple-media washing circuits permitting the use of different ink systems

■ Roller washing

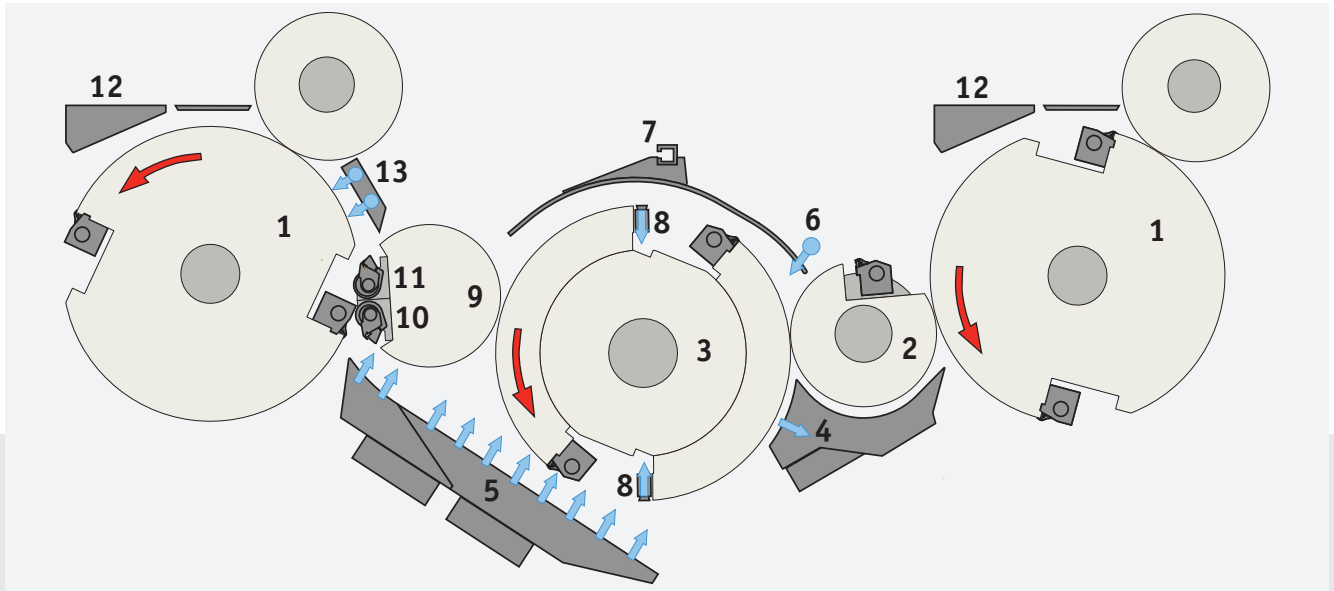
- Individual programming and central control of washing programs
- Multiple-media washing system permitting the use of different ink systems

■ "Print clean" function

- Specific stripping of the remaining ink from plate and blanket
- Reduced blanket washing times
- Enhanced production stability with thin materials



Perfecting



■ Three-drum sheet turning

- Proven 1-2-1 configuration for exact perfecting register
- Special perfecting drum gripper system handling a broad substrate range in both straight printing mode and perfecting
- Maximum production speed in both straight printing mode (18,000 sph) and perfecting (15,000 sph)
- Fully automatic mode conversion: 2 min

■ Sheet travel

- Air-cushioned sheet travel with blower bars and Venturi guide plates
- Twisting suckers spread the sheets tight to ensure precise transfer
- Long-lasting ink-repellent surface on impression cylinders after the perfecting unit
- Automatic suction ring positioning in the delivery for fast job changeovers in perfecting

■ Sheet monitoring

- Cameras under the perfecting unit and in the delivery for convenient monitoring and fine adjustment of the sheet travel
- Optical missing sheet sensor

- 1 Impression cylinder
- 2 Transfer drum
- 3 Storage drum
- 4 Guide plate with comb suckers
- 5 Air-cushion plate with plain nozzles
- 6 Blower bar
- 7 CX sheet guide
- 8 Stretching suckers
- 9 Turning drum
- 10 Straight printing gripper system
- 11 Perfecting gripper system
- 12 CX guide plate
- 13 Sheet smoothing blowers



Coating tower



■ Chamber blade system

- Chamber blade system for constant and even coating application
- HydroComp blade pressure control ensures maximum blade life
- Lightweight anilox rollers ensuring fast and user-friendly replacement

■ Coating supply system

- Coating supply system for dispersion and UV coatings in separate circuits
- Central control of automatic cleaning for dispersion and UV coatings
- Excellent cleaning result enabling immediate use of the coating system for the next job

■ Coating forme change

- Automated coating forme change
- Change time: 2 min
- Remote pressure setting
- Remote setting of lateral, circumferential and diagonal register

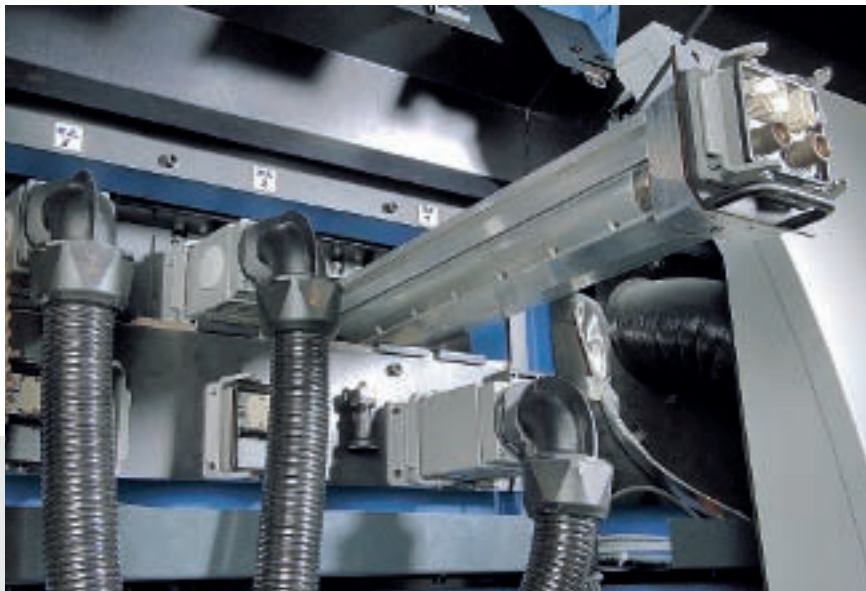


Dryer systems



■ VariDry IR/hot-air

- Carbon twin lamps with IR power rating of 60 W/cm
- Lamp replacement without tools
- Automatic pile temperature regulation and dryer control
- Can be installed as final dryers, as intermediate dryers or in a dryer tower



■ VariDry UV

- Compact dryer module with UV power rating of 160 W/cm (stepless control)
- Lamp replacement without tools
- Automatic pile temperature regulation and dryer control
- WashTronic for enhanced productivity and maximum service life of the UV lamps
- Multiple-media connector permits free positioning of modules as final or interdeck dryers



Delivery



■ Sheet travel

- Speed-compensated gripper opening cam for a broad range of substrates
- Fan modules and blower bars promote optimum pile formation
- Light barriers to guard the hazardous area

■ Touchscreen display

- Touchscreen display with direct function keys for reliable and intuitive press operation

■ Powder sprayer

- Speed-compensated and format-dependent powder metering

■ Sheet brake

- Sheet brake with pre-suction plate and variable speed to facilitate smooth sheet delivery
- Automatic format setting
- Individual air setting for suction rings

■ Extraction system

- Elimination of health hazards from ozone and VOC emissions

■ Extended delivery

- Enhanced productivity through fast drying times
- Optimised sheet travel for high printing speeds
- Available extension lengths: 1,400 mm, 2,400 mm, 3,800 mm



Non-stop systems



■ Feeder

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

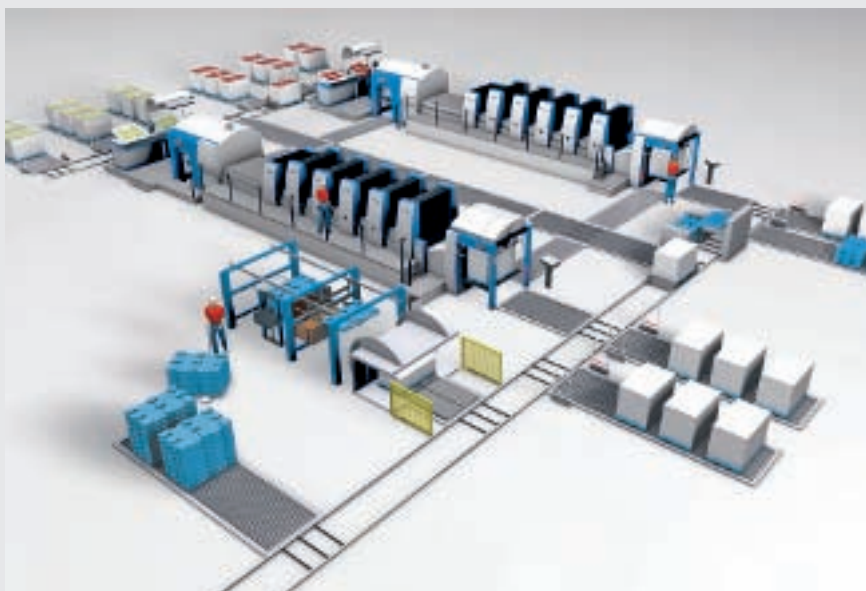


■ Delivery

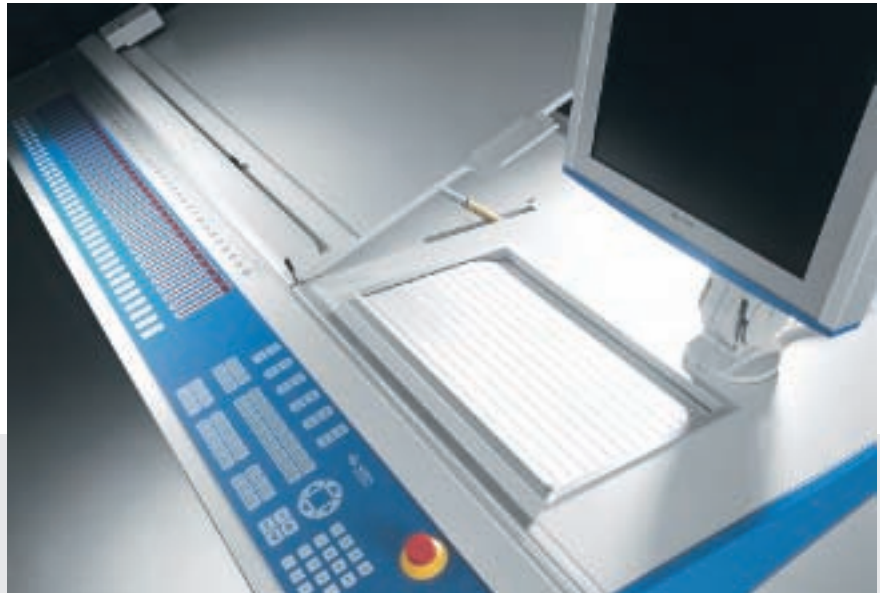
- Non-stop pile change possible at full production speed
- Lowerable non-stop roller rack extended automatically in the direction of sheet travel
- Sensor monitoring for lifting/lowering of main and auxiliary piles

■ PileTronic logistics

- Networking of press control, non-stop systems and pallet handling for maximum production efficiency
- Range of proven logistics modules available
- Elaboration of customer-specific solutions
- Paper supply without pallets possible



Console and workflow management



■ ErgoTronic Professional control console

- 19" TFT touchscreen for ergonomic access to all press functions
- USB port for fast communication of job data
- ColorTronic ink metering with ink profile displays on console
- Motorised console height adjustment and sheet inspection desk with adjustable desk angle
- Uninterruptible power supply to enable controlled press shutdown in case of power supply failure
- Integrated remote maintenance module

■ Control console functions

- Job changeover program for automatic job presetting
- Job-specific saving of all relevant press parameters for repeat jobs
- Presetting of format and substrate thickness
- Presetting of all substrate-specific air settings
- Job-specific presetting of ColorTronic ink metering
- Remote register setting
- Presetting and selection of washing functions
- Control for all peripheral equipment
- Maintenance indicator

■ LogoTronic

- Ink profile presetting via CIP3 data

■ LogoTronic Professional

Comprehensive management system for KBA presses:

- CIP4/JDF interface to an MIS
- Order management
- Press presetting
- Master data, including central ink database
- PressWatch for graphic representation of the overall production process
- SpeedWatch for graphic representation of job progress
- Report functions



Service



■ Remote maintenance

- Integrated remote maintenance module in every press (remote maintenance free of charge during the warranty period)
- Most comprehensive remote maintenance functionality and longest experience on the market
- Access to individual printing unit controllers possible
- Fast assistance and problem remedies in up to 80% of all cases – without need for service visit or spare parts
- Telephone hotline free of charge during the warranty period
- Immense time and cost savings
- Increased availability of the press

■ Spare parts service

- Comprehensive product and quality tests for original KBA parts
- Efficient advice from our service specialists and unambiguous identification of parts
- Guarantee of outstanding precision, high reliability and maximum service life
- Spare parts in line with the latest state of the art
- High availability of over 2.5 million parts
- Fastest possible delivery of spare and accessory parts

■ Retrofits

- Adaptation of already installed presses to changing market conditions
- Possibilities to shorten makeready times, reduce waste or further improve quality
- Considerable experience gained in the course of many successful modernisation projects
- Comprehensive measures to raise press productivity possible



Technical data



Sheet format:

| | | |
|--|-------------------------|----|
| Maximum (straight printing/perfecting) | 740 x 1060 / 740 x 1060 | mm |
| Minimum (straight printing/perfecting) | 340 x 480 / 400 x 480 | mm |

Print format:

| | | |
|---------------------------|------------|----|
| Maximum | 730 x 1050 | mm |
| Maximum before perfecting | 720 x 1050 | mm |

Substrates¹⁾:

| | | |
|-------------------------------|------------|----|
| Standard | 0.06 - 0.7 | mm |
| with lightweight equipment | 0.04 | mm |
| with board-handling equipment | 1.2 | mm |
| with corrugated equipment | 1.6 | mm |
| Press with perfecting | 0.8 | mm |

Production speed²⁾:

| | | |
|---|--------|-----------|
| Up to 8 printing units | 18,000 | sheets/hr |
| Press with perfecting in straight mode, up to 8 printing units | 18,000 | sheets/hr |
| Press with perfecting in perfecting mode, up to 8 printing units | 15,000 | sheets/hr |

Pile height³⁾:

| | | |
|----------|-------|----|
| Feeder | 1,300 | mm |
| Delivery | 1,200 | mm |

Plate and blanket dimensions:

| | | |
|--------------------|------------|----|
| Plate size | 795 x 1060 | mm |
| Standard copy line | 36 | mm |
| Blanket size | 860 x 1070 | mm |

- ¹⁾ Printability is also influenced decisively by the flexural rigidity of the substrate
²⁾ Dependent on individual processing parameters, e.g. the inks and substrates used
³⁾ From floor / without non-stop operation



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