

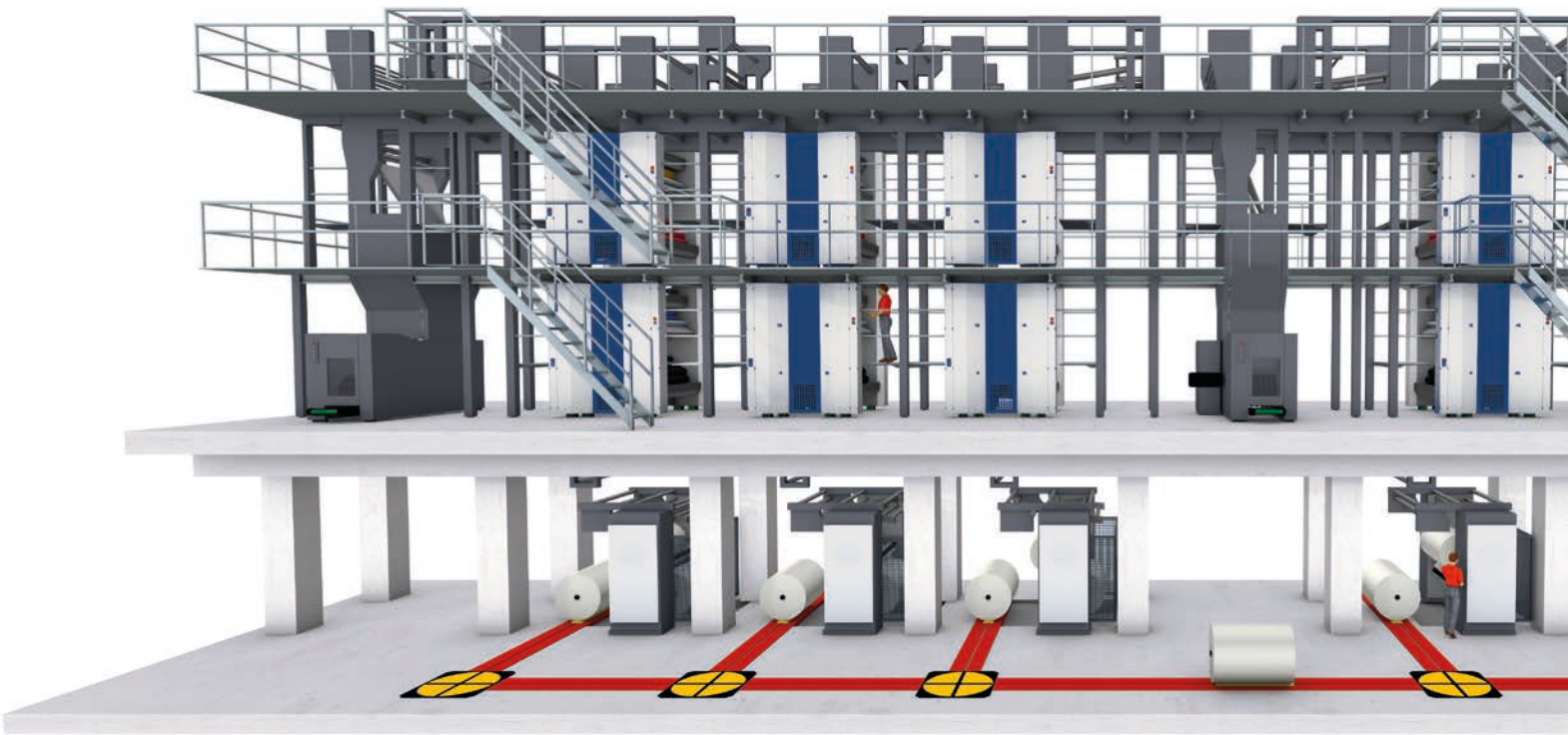
KOENIG & BAUER

# Commander CL



we're on it.

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## Intelligent modular design Outstanding value for money

With the Commander CL, Koenig & Bauer offers a compact four-high tower press whose H-type units are barely 2.75 metres (9 ft) high. The modular concept provides for simple adaptation to individual needs, and the press is correspondingly popular with newspaper and semi-commercial printers alike. The Commander CL is available in 4/2, 4/1 and 6/2 configurations.



**The flexibly automated Commander CL is the most successful press on the market in its class**

#### Highlights of the Commander CL

- Tailored scope of automation
- Compact design, fast makeready, minimised production costs
- Four-high tower with optimum accessibility, only 6 metres (19 ft 8 in) high
- Option to retrofit automated plate changing
- Automatic plate change in less than 3 minutes
- Superior inking unit with three forme rollers
- RollerTronic automatic roller locks
- Dedicated drives for absolute precision
- CleanTronic automatic blanket washing system (option)
- Ink roller washing system (option)
- Heatset package for semi-commercial production (option)
- Modern ErgoTronic console
- Fast presetting with PressNet (option)

#### Individual features and extensive retrofit options

To reduce the idle time for job changes, the Commander CL can be equipped with optional semi- or fully automatic plate changers and with a plate lift. These features can also be retrofitted at a later date. The intelligent modular design guarantees a high degree of flexibility and outstanding value for the money spent on an investment. Fast makeready and washing, a chain system for effortless web infeed, simple maintenance, an optimised operating concept with clearly arranged display screens, and minimised production costs are further benefits.

Depending on the chosen format, the maximum production speed is 55,000 cylinder revolutions per hour (4/1: 84,000 cyl.rph). The press is engineered for cut-off lengths from 450 to 630 mm (17.7 to 24.8 in) and a maximum web width of 1,730 mm (68.1 in).

The Commander CL is built around DriveTronic dedicated drives, ErgoTronic consoles and MLC control technology, and supports flexible newspaper and semi-commercial production with market-oriented capabilities such as variable

web widths and hot-air dryers. RollerTronic automatic roller locks are a standard feature and significantly reduce the scope of time-consuming maintenance work at the printing units.

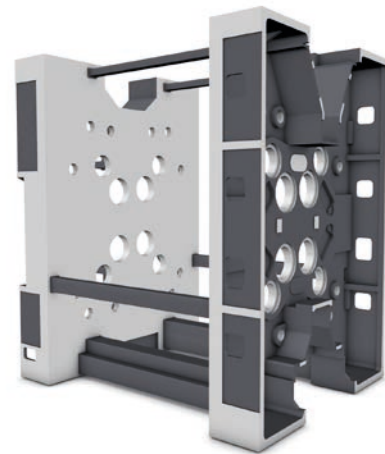
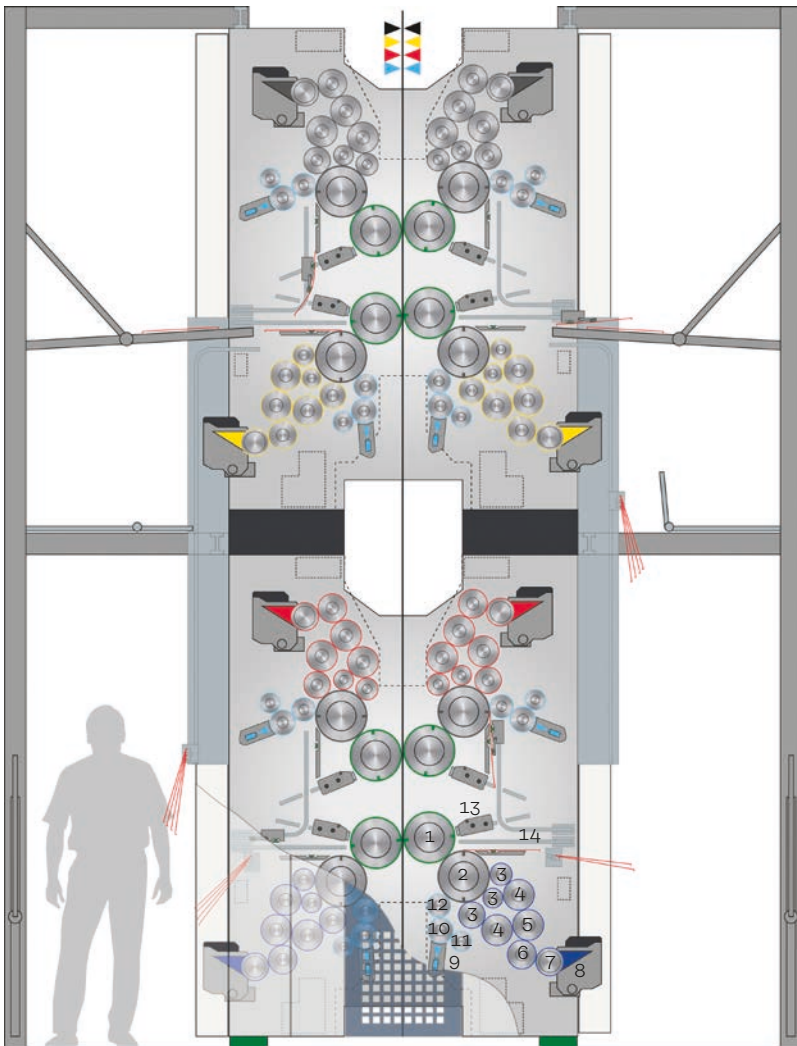
Like the compact Commander CT, the Commander CL incorporates modern inking units with three forme rollers for high-quality print and less start-up waste, which in turn means lower paper consumption and carbon emissions. The more than 50 per cent reduction in the amount of oil in the printing units further enhances this positive ecobalance. The Commander CL can be supplied with an array of optional features derived from the successful compact press series Commander CT and Cortina, for example fast presetting via PressNet and one-button start-up and run-down with EasyStart and EasyClean-up.

Proven superstructure concepts, robust KF 3 and KF 5 jaw folders, Pastomat reelstand series, clean-cutting scissor-style slitters and many other useful modules are similarly available for the Commander CL. The Patras reel-handling system, furthermore, provides a modular solution for integrated paper logistics.

# Commander CT inking unit technology

## No compromising on print quality

Characteristic for the bearer-free printing units of the Commander CL are their compact design, ready accessibility and precision engineering. The box construction of the side frames and new cylinder bearings ensure quiet running and excellent print quality.



Robust side frames and new cylinder bearings ensure quiet press running

Cross-section of a six-metre four-high tower with H-type printing units (4/2 or 6/2)

- 1 Blanket cylinder
- 2 Plate cylinder
- 3 Plate cylinder
- 4 Ink distributor roller
- 5 Ink transfer roller
- 6 Film roller
- 7 Ink duct roller
- 8 Ink duct
- 9 Spray bar
- 10 Dampening distributor roller
- 11 Dampening roller
- 12 Dampening forme roller
- 13 Blanket washing system
- 14 Semi-automatic plate changer

The exceptionally low height of just 6 metres (19 ft 8 in) for a four-high tower shortens the distances between the individual printing couples, minimises fan-out and, in conjunction with web aligners, supports high register accuracy. The web aligners can be integrated in an automatic fan-out control system as an option.

### Intelligent solutions on the plate and blanket cylinders

The standard slot clamps which are used for manual plate changing allow fast, register-true plate mounting without the need for tools, and can also be preconfigured for a later upgrade to semi- or even fully automatic plate changing. Continuous slots support the mounting of double-spread plates. Two-bar clamps for the blankets ensure a perfect fit around the cylinder (tensioning spindles are optional). The printing units are furthermore prepared for the optional installation of blanket washing systems.

### Fast into colour

The undershot film inking unit with full-width ink ducts and three forme rollers (two rollers on 4/1 presses) has been taken over from the Commander CT and stands out with reduced dot gain, high process stability in case of low ink take up, excellent reproduction of solids, contrast-rich images and only minimal ghosting. The colour space and ink densities achieved by the inking unit exceed the general standard for coldset printing. The roller arrangement with two direct ink trains provides for very fast reactions and a reduced tendency to ink mist. This saves waste and reduces the amount of cleaning to be done by press crews. Options include an automated inking unit washing system and facilities for inking unit cooling, which Koenig & Bauer always recommends where long production runs are to be expected.

### Optimised spray dampening units

The new-generation three-roller spray dampening units are always installed in the pre-dampening position. The dampening solution is transferred to the distributor roller via an optimised, cylinder-wide spray bar with two nozzles per page and separate pulsed control for each individual nozzle. A new nozzle-cleaning function prevents blockages and reduces maintenance. For production with

variable web widths, the spray dampening units can be fitted with optional shutters, which are then adjusted from the console.

### Dedicated drives for each printing couple

The shaftless drive concept of the Commander CL assigns a dedicated AC motor to each printing couple. Play-free settings with zero backlash between the gears of the plate and blanket cylinders also contribute to the ultimate running precision. The use of dedicated drives permits time-saving independent makeready. Further enormous benefits relate to ease of operation, flexibility, constant web tension, print quality and waste.

**Contrary to other presses, each printing couple of the Commander CL is driven separately, delivering significant benefits in terms of handling and makeready**



# Practice-oriented automation

## Cutting makeready and costs

Practice-oriented automation features, such as fully or semi-automatic plate changing, plate lifts, automatically adjustable RollerTronic roller locks, the integrated CleanTronic blanket washing system and the reel-handling system Patras, serve to shorten makeready, downtime and washing times, reduce production waste and lower the costs of labour and maintenance.

### Fully or semi-automatic plate changing

Optional automatic plate changers shorten makeready times and free up additional production capacity where product structures demand frequent job changes.

After the plates have been sorted into the register-accurate loading systems at the main operating level of the relevant printing couples, the plates for the upper printing unit are automatically raised when equipped with the plate lift. The automatic system completes a full plate change in less than three minutes. Accessibility to all plate cylinders remains

unhindered at all times. Used plates from the upper units are automatically returned to the operating level. When upgrading from semi-automatic to fully automatic plate changing, all equipment modules can continue to be used to 100 percent. Maintenance is also only half that of comparable solutions on the market.

### Unique RollerTronic system

RollerTronic automatic roller locks are far superior to other systems and have already been installed in their thousands. Automatic setting and adjustment of the ink and dampening rollers is accomplished either for a single roller or for an entire section. The process is started by pushbutton from the console and takes just two minutes. Time-consuming and costly manual roller adjustments become a thing of the past and there is significantly less maintenance required at the printing units.

### Patras reel-handling system

With the Patras reel-handling system, the Commander CL can be integrated with a customised paper logistics solution. The modular system with options ranging from manually assisted reel loading to full-scale automated logistics solutions allows for optimum adaptation to local circumstances and production requirements.

**Right: Automatic plate changes in less than 3 minutes**

**The Patras reel-handling system forms a basis for highly flexible logistics solutions**





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# Variability made to order

## Customised superstructures

Fast webbing-up and a correct web tension through all production phases are prerequisites for minimised waste, high print quality and an efficient overall process. The superstructure of the Commander CL impresses with its compact and robust design.

Numerous configuration possibilities offer a high level of flexibility with regard to product structure. At the same time, Koenig & Bauer has developed various concepts for the processing of different web widths.

### **Automatic webbing-up system**

A chain pulls the web over a rail system from the reelstand to immediately ahead of the turner bars or above the former. This Koenig & Bauer solution offers a wide range of web guidance options, from simultaneous infeed of individual or all webs, fast job changes to automatic circumferential changes (in conjunction with Patras A).

### **Web tension under control**

The motorised infeed unit after the reelstand of the Commander CL is driven by an AC motor and can be adjusted remotely from the console. Low-mass idling rollers promote smooth running of the web and minimise any deviations

in cut-off register during acceleration and braking. Photocells monitor the web at several points along its path through the press. In addition, a web tension control system (Basko) assists the press operator by maintaining an optimum web tension over the entire production process.

### **Maximum console integration**

The ability to turn and shift individual ribbons guarantees high production flexibility. The slitters ahead of the draw rollers are readily accessible and possess high-quality cutting heads with automatic depth adjustment – a feature currently unique in newspaper printing. The scissor-style cut produces so little dust that there is no need for dust extraction prior to turning. The individual ribbons are guided to the former infeed over air-flushed turner bars. The draw rollers, the ribbon-gathering rollers and the RTF can all be adjusted remotely, and the turner bars are set from the press console. Colour and/or cut-out register controls can be incorporated upon request.

### **Diverse options for the folder superstructure**

The standard configuration is to install two formers side by side on 4/2 and 4/1 presses, or similarly three formers on a 6/2 line, though balloon formers and further variants can be realised upon request. Alongside skip slitters and ribbon stitchers, the list of optional extras includes length gluing, length and/or cross perforation (“Zip’n’Buy”) and four-page centre spread capabilities. (see also Services and Solutions for your press)

**An automatic chain web-up system on the drive side of the press accelerates production preparation**

# Designed by pros for pros

## High-performance folders and reelstands

Koenig & Bauer is well known across the market for its high-quality folders and reelstands. Convenient operation and simple maintenance are paired with high availability, a long service life and exemplary safety standards.

### Precise folding and exact delivery

The Commander CL can be configured with either of two state-of-the-art folders, depending on output and page count requirements. The KF 3 jaw folder is engineered for production with up to 80 broadsheet pages at a maximum speed of 45,000 rph, while the high-performance KF 5 folder handles copies with four to 120 pages at speeds up to 55,000 rph. Both folders stand out with a high level of automation and are fully embedded into the

shaftless DriveTronic drive concept. If necessary, they can be supplied with additional quarterfold capabilities or a section stitcher for the production of stitched magazines in either straight or collect mode.

### New-generation reelstands

There are similarly two variants of the extremely reliable Pastomat beltless reelstand for the Commander CL. A Pastomat version accommodates reel weights up to 2.2 tonnes. For heavier reels, a heavy-duty Pastomat is available as an option for weights up to 3.3 tonnes.

Both reelstands are driven and braked via the reel core with robust AC servo motors and possess steplessly adjustable divided arms to support the simultaneous use of different reel widths for on-the-fly pagination changes. The reelstands are provided with decentralised operating displays and are fully integrated into the overall console concept of the press. Even at high web speeds, they guarantee reliable functioning and low maintenance requirements.



The Commander CL is supplied with reliable Pastomat reelstands

Right: Folders from Koenig & Bauer are characterised by their high folding precision and exact delivery



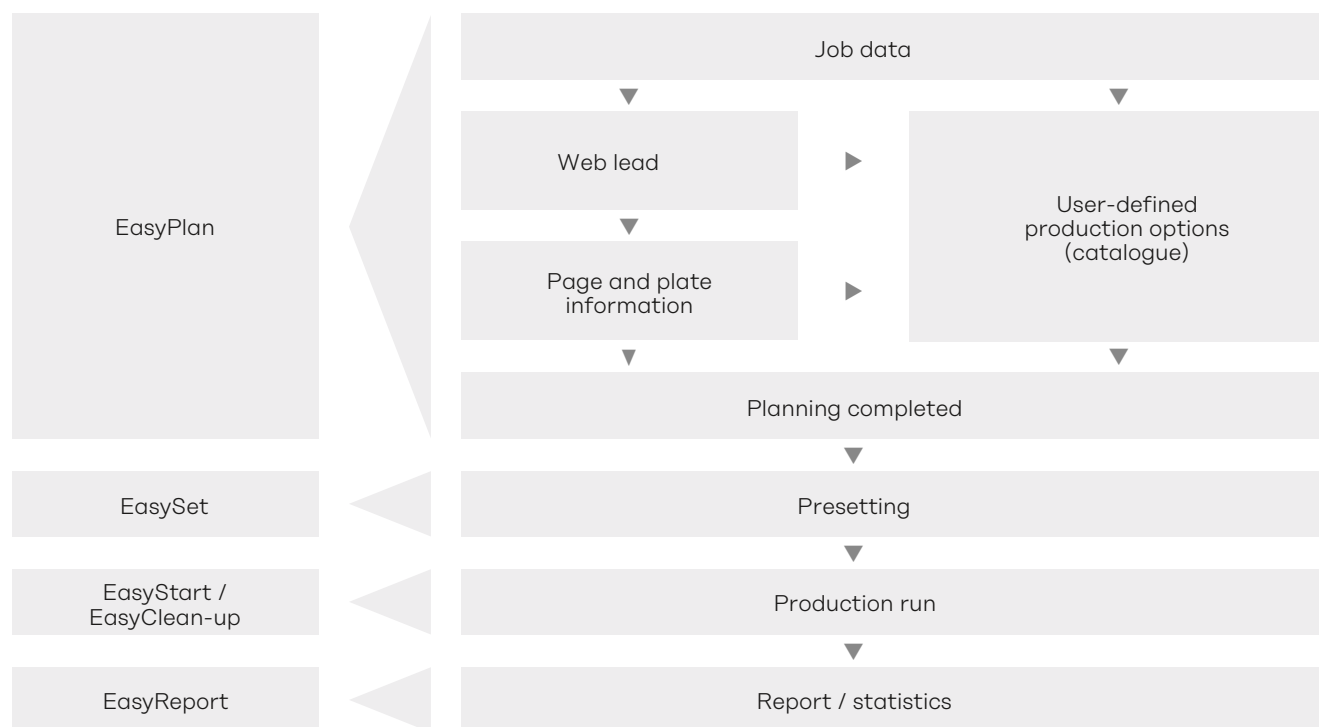


## PressNet – Efficiency through digital networking

Digital networking and the integration of individual process steps are today more important for efficient newspaper production than ever before. There is considerable savings potential in automated production planning, in press presetting for coming jobs and in automated start-up and run-down of the press line.

With PressNet, Koenig & Bauer offers tailored workflow solutions for the Commander CL. Through the optimisation of production sequences, the press is in a position to deliver maximum performance at all times.

Process monitoring and control is intuitive and uncomplicated with the optional automation tools.



The modules of the PressNet suite cover the entire workflow chain from production planning (EasyPlan) and presetting of the press (EasySet), via automatic start-up (EasyStart) and run-down (EasyClean-up), through to automatic reporting and documentation (EasyReport).

### EasyPlan

Careful planning is a decisive factor in sustainable success. That also stands true for newspaper production with EasyPlan. The operator can choose the desired option from a catalogue of defined production variants, though individual inputs are also possible.

### EasySet

Various press parameters need to be preset exactly to enable the fast completion of makeready, to minimise waste and to guarantee a high level of stability and quality in subsequent production. EasySet was developed to permit fast and simple presetting of the whole press line. The multi-stage presetting system stores preset data for register, web tension, ink profiles and the process-specific acceleration curves. These values can be recalled for all similar production jobs, as an immediate contribution to enhanced production efficiency.

### EasyStart

“One-button” press start-up and automatic acceleration to production speed is child’s play with EasyStart. Acceleration curves with specific dwell times at certain speeds can be defined by the operator in accordance with production requirements.

### EasyClean-up

Automatic, pushbutton run-down is similarly no longer a distant vision on presses from Koenig & Bauer. The function EasyClean-up triggers predefined sequences to run the web free, to wash the inking units and blankets and to remove the plates at the end of production. This not only simplifies the operator’s work, but also leaves more time to attend to other tasks.

### EasyReport

Another important factor for enhanced productivity and cost reductions is the timely detection and pertinent analysis of occurring errors. This is the domain of EasyReport. A long-term log of all relevant messages can be exported and filtered to support error analysis and minimisation. An additional feature is the integrated reporting function, which enables the comprehensive documentation of all jobs printed, together with detailed production reports.



The Commander CL  
incorporates the latest  
console and  
control technology

# ErgoTronic

## Efficient and ergonomic

The modern ErgoTronic console is a standard feature and provides a clear user interface with intuitive data screens. Together with the intelligent production management system PressNet, it enables enormous productivity gains.

The console technology is based on the advanced Ethernet standard and the real-time automation bus Sercos III. The press console itself, with its 19-inch touchscreen monitor, can be raised or lowered electrically to match the height of different operators. Press commands are entered via intuitive key panels.

### **Press Control**

Processor modules for press and drive control are to be found in the reelstands, the printing units, the folder and other subassemblies. They are connected to each other and to the central console by way of high-performance data bus systems and implement the latest MLC (motion logic controller) technology.

The current operating status of the press is displayed at the console alongside any error messages which may arise, and corresponding safety devices are activated in response, where appropriate. The clear, logical concept simplifies press operation and monitoring, and ensures maximum flexibility for later expansion or modernisation.

### **Copy- and press-oriented operation**

The visualisation software supports both copy and press-oriented operation on the basis of clearly arranged, function- and subassembly-specific data screens.

# Commander CL

## At a glance

### Technical Data

- Max. production speed:\* 55,000 Cyl.rph  
(4/1: 84,000 Cyl.rph)
- Cut-off lengths: 450 - 630 mm  
(17.7 to 24.8 in)
- Max. web width 1,730 mm (68.1 in)

### Printing units:

#### Standard:

- RollerTronic automatic roller locks
- Inking unit with three forme rollers (two rollers for 4/1)
- New-generation three-roller spray dampening unit with nozzle-cleaning function
- DriveTronic dedicated drive technology
- Water-cooled main motors
- Two-bar blanket clamps
- Slot clamps on plate cylinder
- Optimised cylinder bearings
- Mechanical web aligner in the printing tower

### Options:

- Plate cylinder prepared for later retrofitting with fully or semi-automatic plate changing systems
- Fully or semi-automatic plate changing
- Plate lift
- Spindle blanket tensioning
- CleanTronic blanket washing system
- Shutter in spray dampening unit to accommodate variable web width
- InkWasher automatic washing system
- Oil cooling
- Inking unit temperature control (2 distributor rollers)
- Automatic colour and dampening unit clutches

### Folders:

- KF 3 jaw folder (2:3:3)
- KF 5 jaw folder (2:5:5)

### Reelstands:

- Pastomat C
- Pastomat CL

### Papier logistics (optional):

- Patras M
- Patras A

### Automation:

- Ergotronic control console
- PressNet (optional)

### Further equipment options:

- Semi-commercial package with hot-air dryer

\* depending on format and folder  
Other formats upon request



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