

**The Premius
by KBA-Metronic AG**

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Our representative:

PREMIUS

Brilliant print results and high gloss effects with waterless offset printing and UV technology. High-speed printing on a wide range of media including DVD, CD, MiniDisc, Optical Business Card and special formats



Perfection on a small footprint: fast, economical printing of photorealistic images and user-friendly technology

The Premius offers excellent flexibility for printing media that have different shapes and sizes.



Semi-automatic printing plate replacement ensures high registration accuracy and takes no more than 5 minutes. You can use analogue or digital waterless printing plates.

The Premius offset printing machine from KBA-Metronic AG helps your business thrive. You get brilliant print quality combined with excellent performance and perfect reproduction of photorealistic images on DVDs, CDs, MiniDiscs and Optical Business Cards from the first piece to the last even on large print runs.

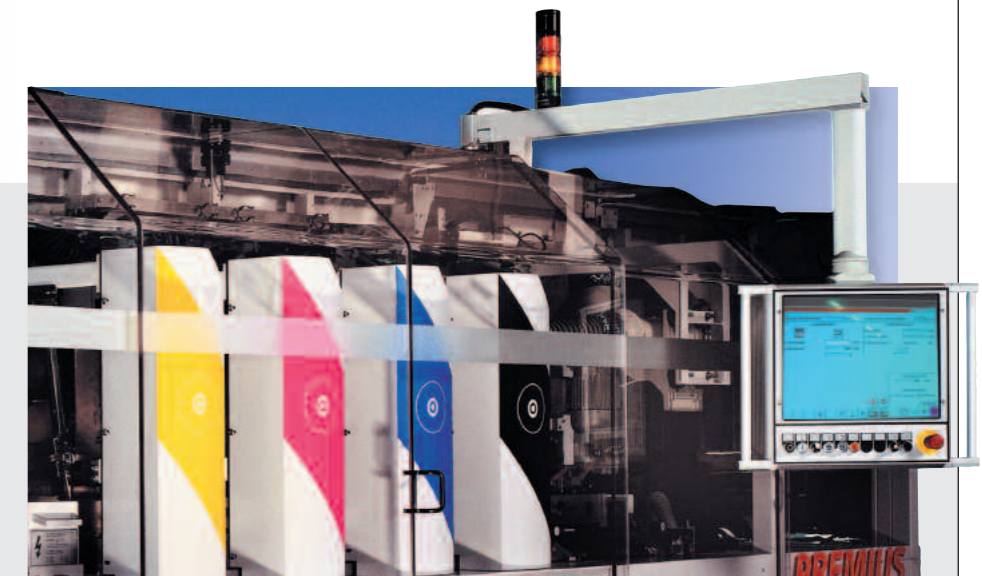
The consistency of print results on the Premius is simply outstanding. Mature, field-proven technology from KBA-Metronic is your guarantee of exceptional print quality. Waterless offset printing, short inking units without ink keys and an efficient four-cylinder print unit design all enhance ease of operation, reliability and availability. UV varnishes can be applied to some or all of the media surface to add a high gloss appearance.

The speeds are equally impressive. You can print up to 7,200 pieces an hour, change printing plates semi-automatically in less than 5 minutes, and there is no need to adjust registration. All of this adds up to short setup times and high machine utilization, even when you are running more than one shift.

KBA-Metronic AG has many years of experience with short inking units that work without ink keys. Temperature is used to control the color tones which remain constant across the entire width of the print surface. Many adjustments that are necessary with conventional offset printing such as setting ink keys are not needed on the Premius.

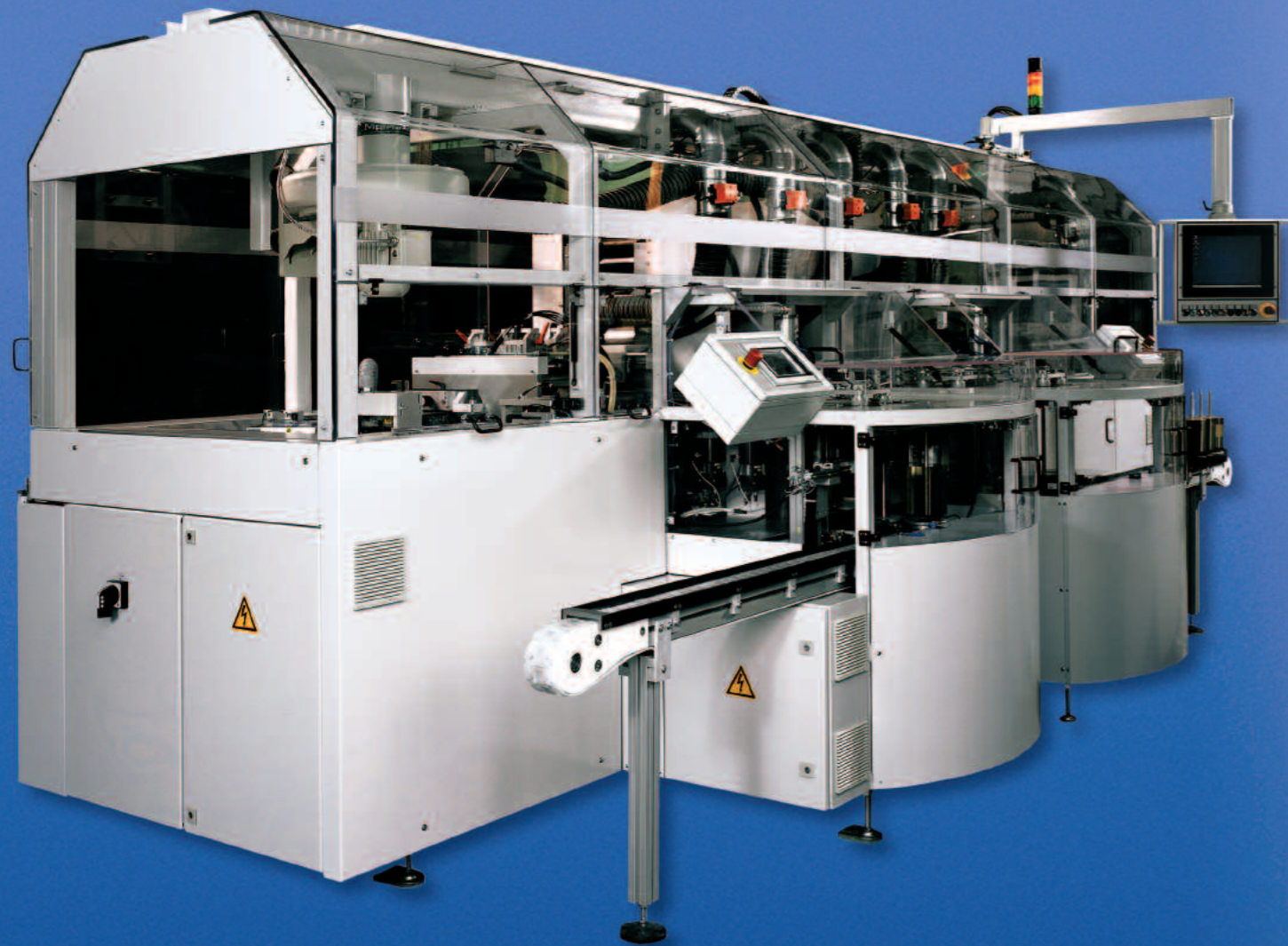
Unrivaled advantages of the Premius:

- compact print unit developed by the engineers at KBA-Metronic: four-cylinder design and UV drier for each print unit (wet on dry).
- very easy to operate, even by unskilled operators
- minimal setup times and low wastage
- changeover of all four printing units within five minutes - semi-automatic printing plate replacement with high registration accuracy
- throughput of 7,200 items per hour in four-color photorealistic quality
- 1:1 color transfer using identical cylinder diameters eliminates ghosting
- short inking unit with no ink keys guarantees high print quality right through the entire print run
- printing plates can be re-used on repeat orders
- media with varying contours can be printed



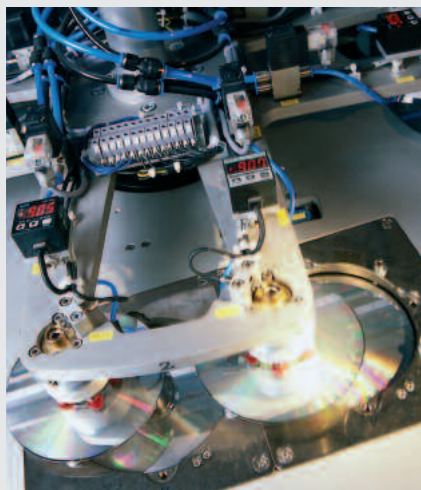
- varnish can be added to part or all of the disc surface to enhance the appearance
- parameters can be saved to ensure no fuss reproducibility on repeat orders
- dust particles are extracted inside the Premius to ensure consistent print quality
- economical and competitive solution no matter how large the print run is.

The control panel with a user-friendly touch screen can be pivoted around the whole machine to make things as easy as possible for the operator.



Ease of handling: Pragmatic design gives you the best possible results

The PremiUS is designed to allow maximum access to all screen and offset printing units to make work on the system easier and more ergonomic.



Flexible transport system, single or dual configuration.

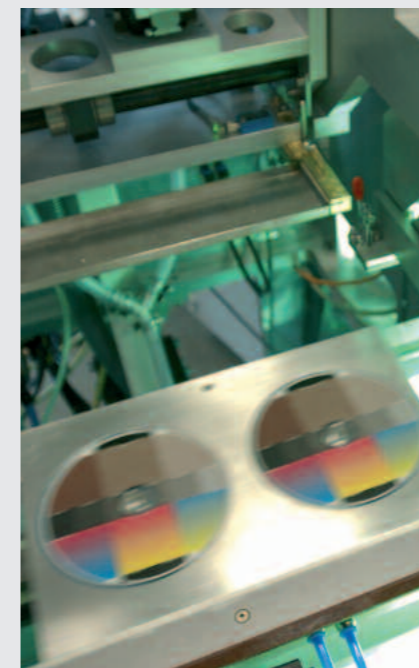
The PremiUS is built around a four-cylinder print unit, which contains the anilox roller, ink transfer roller, plate cylinder and impression cylinder. Temperature control is provided on the anilox roller and plate cylinder to guarantee constant color control throughout the entire print run. Because the anilox roller, ink transfer roller, plate cylinder and rubber cylinder all have identical diameters, there is no ghosting. Each printing unit has a semi-automatic plate replacement aid. The plates can be mounted in five minutes, and excellent registration accuracy is maintained. The operator simply presses a button to eject the plates from the compartment to remove them.

An intense coating of white primer can be applied to the discs in the screen printing unit prior to the CMYK printing process. There is a short inking unit with no ink keys for each printing unit,

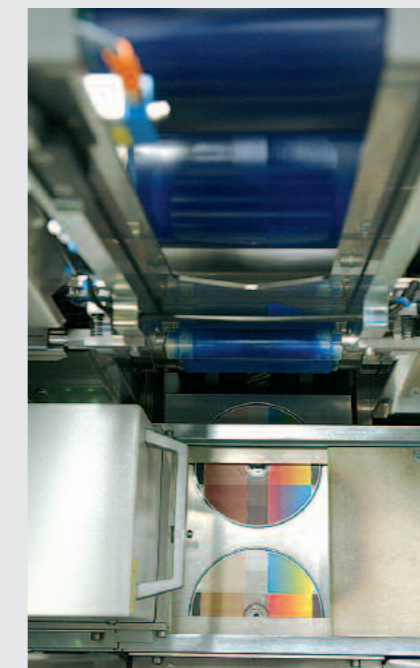
and each printing unit has a UV drier (wet on dry). Actuators adjust circumferential registration with micrometer accuracy under program control. Because of the mounting accuracy of the printing plates, there is normally no need to adjust lateral registration, but manual adjustment can be performed if necessary.

Disc buffers are provided at the feed and delivery units to maintain uninterrupted operation even when spindle are changed.

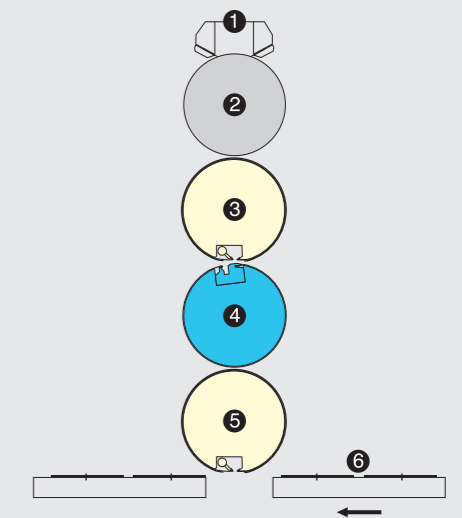
A high-resolution camera is used to check the print image, detect defective discs and route them to the reject spindle.



Transport shuttles with individual vacuum tray control.

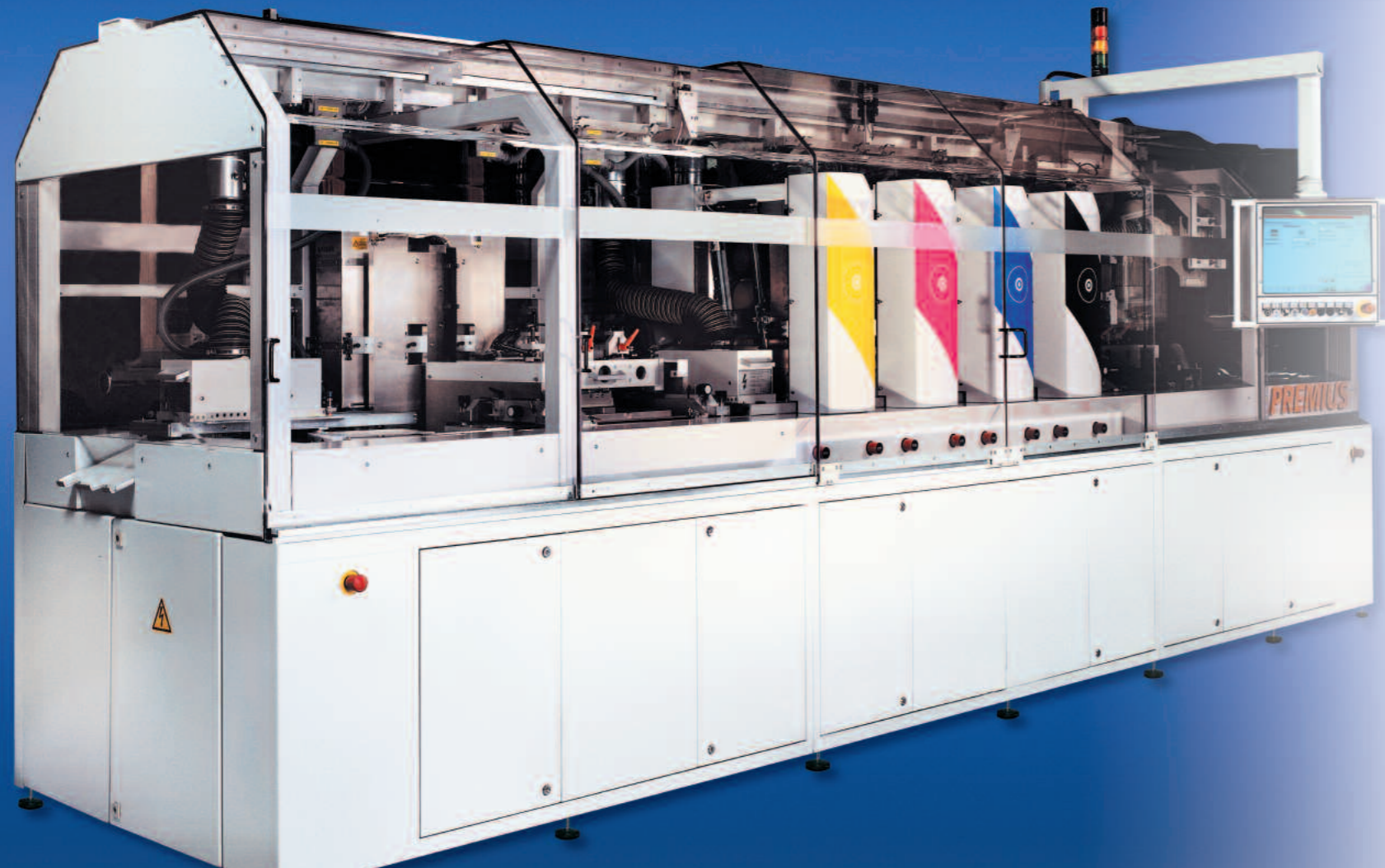


The innovative transport system enables the PremiUS to run at 7,200 discs per hour at a low mechanical cycle rate (low wear).



Schematic representation of a four-cylinder print unit:

- 1 collecting blade
- 2 anilox roller (with temperature control)
- 3 plate inker
- 4 plate cylinder (with temperature control)
- 5 blanket cylinder
- 6 shuttle



Performance = quality:
production reliability
keeps the order books full

Waterless offset printing combined with UV technology: the Premius from KBA-Metronic AG.



Short inking technology used on the Premius delivers photorealistic offset quality.

The efficiency of the Premius is based on high availability, application flexibility and excellent print quality. Exact reproducibility of images on repeat orders is important, and with the Premius you can be sure that this is what you will get.

When you look at the details, you discover other functions that enhance quality and cost-effectiveness. A double shuttle configuration doubles the throughput without increasing operating speed. The dual flat screen print units perform several functions: white primer, varnishing or decorative print. The varnishing unit can also be used for special colors. Analogue or digital printing plates can be used.

Depending on the order profile and volume, there are other aspects that can strengthen your competitive position.

The Premius from KBA-Metronic AG is built to meet tomorrow's challenges in a growing market.

Premius technical data

Print process

Printing system: waterless offset printing
Printing units: 4 offset printing units
2 flat screen printing units
Ink: UV-hardening ink

Printing materials / formats

Printing materials: conventional CDs, CD-RWs, DVDs, MiniDiscs, CD-Cards
Material dimensions: max. diameter 120 mm (4.7")
thickness 1.2 mm (0.047")

Printing plates

Printing plate format: (waterless, analogue or digital)
404 x 150 x 0.3 mm
(15.9 x 5.9 x 0.012")
Plate change: semi-automatic, precision registration, less than 5 minutes to change all plates
Capacity: max. 7,200 pieces/hr
120 pieces/min.

Length x width x height 5,520 x 2,240 x 2,324(2,645) mm
(217.3 x 88.2 x 91.5(104.1))
Total weight: approx. 6.5 tons (14.330 lbs)

Electrical supply

Supply voltage: 400 / 230 V
Network structure: TN-S (as defined in IEC 364-1-41/
VDE 100, Part 410)
Frequency: 50 / 60 Hz
Current strength: 85 A
Connection performance: 65,000 VA
Fusing: 100 A

UV drier

Quantity: 6
Power consumption: 2,250 watts / drier
Three-step power control

Pneumatic supply

Air connection: 6 bar (87.0 psi), 1"
Air consumption: max. 550 l/min

Emissions

Noise: max. 78 db(A)

Technical alterations reserved