

Versatility is the highest form of specialization.

The ROLAND 500.

The logo for manroland, featuring the word "manroland" in a lowercase, sans-serif font. The letter "o" is stylized with a blue circle around it. To the right of the text is a decorative graphic consisting of four colored squares arranged in a 2x2 grid: top-left is light blue, top-right is medium blue, bottom-left is dark purple, and bottom-right is light purple.

Some of the functions described above are options (identified by *Option) and not standard equipment for the ROLAND 500. They can be combined to provide customer-specific configurations in accordance with the valid options price list. The ROLAND 500 is subject to continuing development. Experience gained in practice and the results of research flow into product design. It is therefore in your interest that we reserve the right to make design and specification changes. Only the written Confirmation of Order is binding. The contents of this document, in particular brand names, logos, texts, illustrations and diagrams, are the property of manroland, unless otherwise identified, and are protected by law. Reproduction or utilization of this document as well as the communication of its content to others without explicit written authorization by manroland is prohibited. A civil action will be brought against offenders. All rights are reserved in the event of the granting of patents, utility models or designs.

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ROLAND 500



manroland



The ROLAND 500 impresses with high speed and outstanding printing quality.



With the double-diameter ROLAND InlinePerfector* ¹¹ sheet turning system and OptiPrint-Jackets ¹², printing quality is identical on both sides of the sheet.

Who wants to be fast needs a good running style.

ROLAND 500 Quality Features

Winners don't make any unnecessary movements. The ROLAND 500 has the world's flattest sheet travel and even with substrates up to 1 millimeter* thick and speeds up to 18,000 sheets per hour* it delivers outstanding printing quality. An exceptional performance that is almost the rule for our "Value Added Printing" strategy.

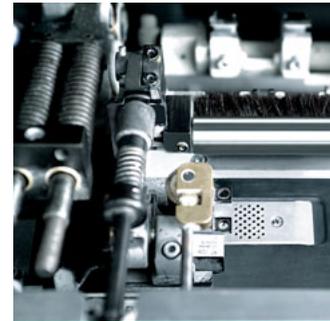
Flat and gentle sheet travel. Flat because the center points of the double-diameter impression cylinders and transferers are arranged virtually in a line **1** to provide the world's flattest sheet travel from the feedboard **2** right through to the delivery pile **3**. Gentle because, in addition to automatic substrate thickness adjustment, there are three* different height settings for the transferer gripper **4** bars. As a result, sheets from 0.04 to 1 millimeter* are always transported through the press gently and contact-free over the air tracks **5**.

Highly stable register. The massive integrally-cast base frame guarantees precise register. This combined with the stable mountings ensures smooth running for the lifetime of the press, and the double-diameter impression cylinders **6** and transferers **7** reduce the number of sheet transfers and thus the risk of register problems.

Highly stable inking. The fast-reacting 16-roller inking unit* **8** with large storage capacity provides an outstanding printing quality – with consistent inking over the entire run. And the Deltamatic damping unit **9** eliminates the need for mechanical hickey pickers which avoids any loss of quality and reduces the number of waste sheets.

Best coating results*: The unique positioning of the chambered doctor blade system at the delivery side of the coating module prevents splashes and foaming **10** from impairing printing quality. The long distance between where the coating is applied to the coating form and where it is applied to the substrate means there is sufficient time for it to spread and form an even, uniform and high-quality surface.

*Option



Safe sheet transport
through the combination
of a suction feedboard
and pneumatic sidelays.



Chambered doctor blade
technology: precise coating
dosage even with difficult
subjects and, as opposed
to a two-roller system, it
provides the highest level
of reproducibility.





AirGlide delivery for reliable and gentle stacking.

The automatic plate changing system (PPL™) speeds up the makeready process.



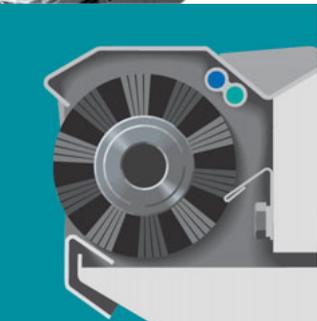
The fully-automated brush-type washing system provides outstanding results and reduces the workload.



The ROLAND InlineFoiler Prindor opens up new dimensions in bronze, silver, gold and metallic effects.

The only thing the ROLAND 500 can't do by itself is press the start button.

ROLAND 500 Efficiency Features



You can concentrate on life's pleasant aspects – the ROLAND 500 does the work. An almost unlimited degree of automation drastically shortens makeready times with a minimum of operating personnel. This gives the printer a lot of time to attend to other tasks such as preparing for the next job.

Highly automated. The most important automation features include format settings*, washing systems* **1**, air settings, PPL™ (Power Plate Loading)* **2** and ColorPilot* – the fastest color control system on the market. Besides these automation features, the QuickChange modules reduce makeready time even further. QuickChange Coating* simplifies coating changeover and QuickChange Surface **3** makes ink fountain cleaning fast and easy.

High speed with no quality compromises. The high printing speed of the ROLAND 500 creates additional capacity for more jobs. It prints paper and cardboard up to 1 millimeter* thick at a maximum speed of 18,000 sheets per hour*. Equipped with the ROLAND InlinePerfector* **4**, it can run at 15,000 sheets per hour in perfecting mode.

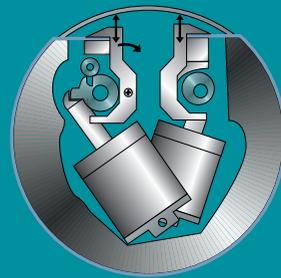
Inline coating*: Inline coating with dispersion or UV coatings provides two significant savings. One, there is no separate coating process, and two, rapid drying **5** enables the print products to move to the finishing operations sooner which facilitates just-in-time production.

Inline cold foil transfer*: Compared with the hot foil stamping process, cold foil transfer on the ROLAND 500 with ROLAND InlineFoiler Prindor **6** is less expensive and register is extremely precise. The possibility of multicolor inline overprinting of the foil provides a wide range of new and exciting design ideas that can help innovative printing companies to position themselves at the top end of the market.

A high-performance network. With printnet®* the performance potential of the ROLAND 500 can be fully utilized and integrated within a printing company's workflow. Modularly designed, it can be configured to meet specific requirements. The benefits are three-fold: 1. operator-friendly networking, 2. further reduction in makeready times through presetting when changing jobs, and 3. error-free transmission of all relevant job data.

*Option

With Coating PPL™ for fast coating form changeover, the ROLAND 500 has the most highly-automated coating module on the market – in all format classes.





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The ROLAND 500 control consoles for comfortable and efficient working at all units of the press.

Between 0.04 and 1 millimeter there is 0.96 millimeter. In words: worlds apart!

ROLAND 500 Flexibility Features

Flexibility is a matter of possibilities. The ROLAND 500 enables printing companies to process a greater variety of substrate thicknesses – from 0.04 to 1 millimeter*. A decisive factor for getting well ahead of the competition and staying there.

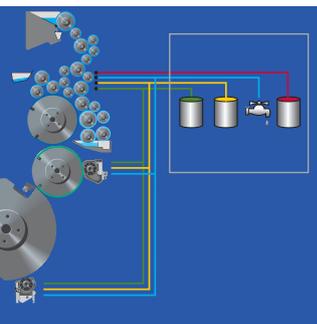
Enormous substrate versatility*. Lightweight papers from 0.04 millimeter are guided through the press just as reliably as rigid cardboard up to 1 millimeter thick. This means one ROLAND 500 can handle the work of two special presses for paper and cardboard respectively.

Additional multiple-up images. The 0B plus format* for the ROLAND 500 has a much larger image area (580 x 740 millimeters) than the standard version. This extra area permits more multiple-up images to be printed on a sheet when producing labels or postcards for example.

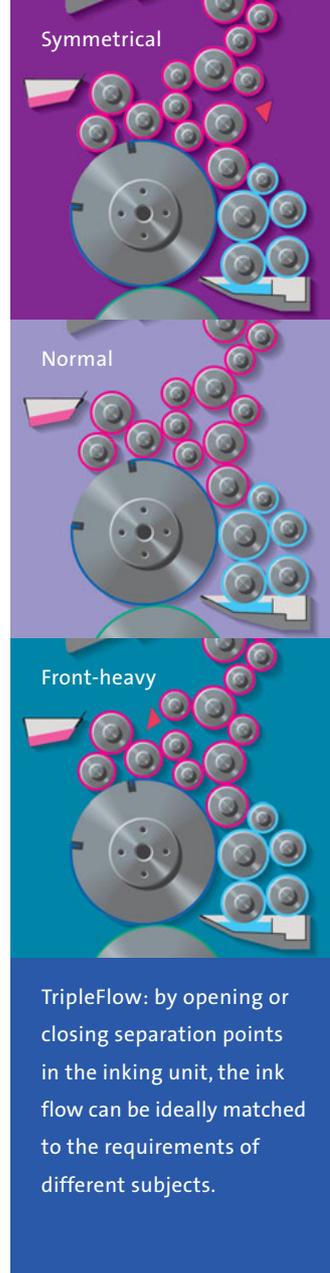
Flexible use of IPA*. To reduce or totally avoid the use of isopropyl alcohol (IPA), the ROLAND 500 can be equipped with a precise measurement and regulation system for the damping solution circuit, plus individual unit temperature control*. This permits stable production conditions even without any alcohol at all.

Optimal ink distribution. The TripleFlow inking unit* of the ROLAND 500 enables the ink flow to be changed for flexible reaction to the requirements of the print form and materials. Even with difficult inks and subjects, ink distribution is always ideal.

Fast washing agent changeover. Hybrid washing agent operation* simplifies switching from UV to conventional printing, and thus speeds up the makeready process extremely.



Hybrid washing agent
operation for fast washing
agent changeover.



TripleFlow: by opening or
closing separation points
in the inking unit, the ink
flow can be ideally matched
to the requirements of
different subjects.

*Option

