

## Lithrone G40 advance for Enhanced Efficiency and Quality in Package Printing: Double Delivery and Heavy Roller Cleaning Offer Major Benefits

Japan, Silver Printing Co., Ltd. | Lithrone G40 advance [GL-540A]



Founded in 1978, Silver Printing Co., Ltd. specializes in high-quality paper-based package production. The company has established an integrated system from planning and design to final products. In 2002, Silver Printing acquired ISO 9001 certification to reinforce its quality control system. Since January 2025, it has been operating the five-color Lithrone G40 advance equipped with features such as double delivery and a double-sided inspection system, further advancing efficiency and quality. We spoke with President and Representative Director Kimio Toita, Manufacturing Department Manager/Factory Manager Takeshi Matsui, Manufacturing Department Acting Factory Manager Tatsuya Yoshimura, Manufacturing Department Captain Keisuke Tsujikado, and Manufacturing Department Print Operator Yoshinori Nakamura about the background and effects of this introduction.

"Our product quality has received top marks from customers, and we expect the new press to further reinforce that strong reputation."

Kimio Toita, President and Representative Director

## Lithrone G40 advance: Optimal for Small Lots and Diverse Orders



Lithrone G40 advance with members of the Manufacturing Department

Silver Printing serves customers from a wide range of industries--including pharmaceuticals, health foods, cosmetics, industrial products, and sporting goods--allowing it to respond flexibly to the changing packaging market. This adaptability to diverse customer demands is a major strength, earning high praise and trust from clients. Regarding the company's equipment strategy, President Toita states, "We are steadily strengthening our production system to handle increasingly smaller lots, greater product variety, and shorter delivery times each year."

The new five-color Lithrone G40 advance is equipped with UV curing, double delivery, double-sided inspection, Full-APC (Fully Automatic Plate Changer), PDC-SX (Spectral Print Density Control), and special surfactant for ink rollers--features that enhance both quality and

productivity. "When we introduced our first Komori press in 2017--a five-color Lithrone G40 equipped with double delivery, a single-sided inspection system, and a coater compatible with both aqueous and UV varnishes--it brought about a complete transformation in our employees' awareness of quality. This time, we evaluated various aspects, including quality, product performance, and operating efficiency, and listened to various views from within the company before deciding on the Lithrone G40 advance," Toita explains.

The new press has been in full operation since January 2025 and the company now runs three sheetfed offset presses, including the Lithrone G40. "We downsized by replacing two conventional machines with one UV press, making both UV machines equipped with double delivery. The UV press's rapid drying and automatic sorting of OK and defective sheets through double delivery is ideal for enhancing quality control and responding to tight deadlines. We have now established a system that allows us to respond more broadly to the diverse needs of our customers."

### The appeal of double delivery: Streamlining the sorting process



Inline Double-sided Inspection System and Double Delivery

*"Labor-saving in removing defective products has been achieved, and human sorting errors have been eliminated."*--  
President Toita



#### Enhanced Feeder Section Pusher for Top and Bottom Alignment

*"In the feeder section, we used to experience issues like sheets becoming misaligned or shifting, which sometimes led to paper jams or stoppages. With the top/bottom pusher aligning the tail edge of the sheet, paper feeding has become much smoother. It has also reduced the need for manual sheet alignment."* --Factory Manager Matsui

Factory Manager Matsui emphasizes the synergy between UV and double delivery: "Previously, after oil-based printing, we had a process of drying sheets and then sorting OK and defective sheets using a large inspection machine. With the new UV-equipped press, quick drying and automatic sorting by double delivery allow us to move sheets directly to post-processing. This is a very attractive setup."

Manufacturing Department Acting Factory Manager Yoshimura also adds, "With a single delivery system, even with an inspection device in place, both OK and defective sheets are stacked together. This results in extra work to remove the defective sheets and restack the paper. Double delivery is essential for improving sorting efficiency and easing the workload on operators."

President Toita pointed out recent changes: "As specification sheets and instruction manuals become less common, more information is now being printed on the back side of packages. Because of this, installing a double-sided inspection system that can reliably detect issues such as ink splatter not only on the front side but also on the back side offers a significant advantage."



## Heavy Roller Cleaning Reduces Color Changing Time and Boosts Efficiency

The Lithrone G40 advance delivers two types of efficiency improvement. On color changing, Factory Manager Matsui says: "Color changes are frequent in package printing, and it used to take time, especially when switching to white. We had previously tried using roller additives and cleaning agents, but they didn't result in significant time savings. However, with the Heavy Roller Cleaning function, we were able to cut color changeover time in half."

Print Operator Nakamura adds appreciatively: "With fewer rollers, ink cleaning now finishes more quickly, and the final results are much cleaner. Ink roller cleaning also takes about half the time it used to, which is truly impressive." Regarding maintenance efficiency, he shared his impression of the improvements in the advance model, saying, "Thanks to enhancements in the assist functions, tasks like plate nip adjustment can now be completed simply by pressing a button once the initial nip is set. This has significantly improved overall work efficiency."

Factory Manager Matsui also highlighted the environmental benefits of the new system, citing reductions in paper waste and ink mist: "The automatic register adjustment function not only improves work efficiency but also helps reduce waste paper generated during color adjustment. Because it promotes easy operation, I believe this press is also well suited for securing personnel. Additionally, features such as the ink mist removing device help keep the machine clean--not only supporting consistent quality and efficient operation but also contributing to environmental performance," he explained.

## A Trusted Komori Press--Aiming for the Third and Fourth Presses

Looking ahead, President Toita says: "We're paying close attention to the impact of digital printing in the packaging sector. We're considering a shift to digital in the future and are particularly interested in Komori models like the Impremia NS40 and J-throne 29."

"This latest press was introduced using an energy-saving subsidy with Komori's support. We'll continue exploring new press introductions while working toward further growth. We also value our 'Customer First' corporate philosophy and plan to further strengthen our sales capabilities," he concludes.



From left: Takeshi Matsui, Manufacturing Department Manager/Factory Manager, Tatsuya Yoshimura, Manufacturing Department Acting Factory Manager

*"With this new press, we can achieve even higher quality and deliver confidence to our customers, which leads to greater trust."*

-- Takeshi Matsui, Manufacturing Department Manager/Factory Manager

*"At the open house, we were able to see the machine in action and incorporate our requirements into the final specifications. It was also valuable to see the latest technologies of the Smart Factory."*

-- Tatsuya Yoshimura, Manufacturing Department Acting Factory Manager



From left: Keisuke Tsujikado, Manufacturing Department Captain, Yoshinori Nakamura, Manufacturing Department Print Operator

*"I can feel the improvements every day, from increased printing speed and enhanced feeder mechanisms to powderless printing."*

--Keisuke Tsujikado, Manufacturing Department Captain

*"With PDC-SX, registration is almost spot-on in one go. It's really helpful."*

--Yoshinori Nakamura, Manufacturing Department Print Operator

