

Komori GLX40RPDouble-Sided Press

Doug Schardt

Abstract

The Komori GLX RP is a “reverse printer” that prints the bottom and the top of a sheet respectively, in a single pass without turning the sheet over. This contrasts with the technology of a convertible perfecter. Komori created the unique RP press design in the 1980’s and was introduced on earlier platforms such as the Lithrone and Lithrone SX models. The GLX40RP represent a whole new redesign with more automation, a concentration of IoT, increased speed and greater overall efficiency. This new version was unveiled in 2016 but became commercially available in 2018.

The reverse printer option is available on the GLX platform which has a top speed of 18,000 sph and a maximum sheet size of 29 17/32” x 41 11/32”. When equipped with the reverse printer, the GLXRP is available in a variety of configurations such as 8 colors over 1 color, 5 colors over 5 colors with or without coaters and everything in between. The GLXRP can also be built to match the print size of existing Komori 40” presses and is available for thinner stocks up to 20 pt. or thicker stocks from 8 pt to 32 pt.

The GLXRP comes equipped with state-of-the-art automation and offers a rich choice of options:

- **Full press automation:** Fully automatic plate changers, fully automatic washup systems, automatic stock size adjustment, etc.
- **Optional Parallel Control:** Allows multiple makeready and washup functions to be done simultaneously to further compress makeready times
- **Smart Sequence:** Jobs put in a target run order with preselected makeready and wash steps. Press then goes into automatic job processing with no lost time between jobs

Komori America Corp; InterTech Award Recipient

- **Smart Feedback:** A unique Komori feature that utilizes several simultaneous techniques to quickly correct over or under inking, usually within 50 sheets even in dramatic cases.
- **Automatic Register Adjustment:** Register is automatically adjusted for lateral, circumferential, skewing, fanout and alignment between sheet sides.
- **Optional PDF Comparison:** Compares printed sheet to imposed digital file or preprinted sheet to confirm content is correct
- **Optional PQA-S:** Known as “Print Quality Assessment”, it is an on press electronic vision system to instantly detect any defects that may occur during production while simultaneously and continuously controlling ink keys to keep the job within quality standards
- **Optional Ink Jet Numbering:**
 - **Optional Logistics:** Feeder and delivery piles in board applications can be transported into and out of the press automatically without the need to stop production
 - **KHS-AI:** A comprehensive operating software that includes many valuable features such as air presets based on stock, coverage and speed conditions, ink presets conditioned for the stock/ink combinations that result in ink stability after just 20 sheets are run in a makeready
 - **Many others:** Embedded diagnostics, a variety of reporting formats, cloud-based connection to Komori, etc.

In operation, the GLXRP can makeready and produce a sellable sheet in just a few minutes with as little as 20 sheets of waste. Each sheet of the job can be individually inspected for any defects and have inks maintained continuously at 18,000 sph and the press can do it with a smaller stock footprint than a convertible perfecter.

Note: This manuscript was not received in time for publication in the *2021 TAGA Proceedings*.