



Trelleborg Helps Japanese Printer Eliminate Paper Picking and Increase Efficiency

Konron Printing Corporation

Printers are expanding their use of UV offset printing technology because of its advantages in terms of quick drying and short delivery times. At the same time many major needed changes have not happened, such as in equipment and materials.

When Konron Printing began operating a new LED-UV printing press, it faced the issue of paper picking. This was resolved with the introduction of Trelleborg's Vulcan Pack UV printing blankets provided by Gadelius.

On a visit to the company's Toke plant in the Chiba Prefecture in Japan, *Printing Experts* spoke with Mr. Yoshihisa Ohno, Chief of the Printing Division, and Mr. Mitsuyoshi Yokota, Chief of Staff.

Building strong trust as a pioneer in UV printing

Founded in Chiba Prefecture in 1976, Konron Printing first applied the leading-edge technology of UV printing in 2007. Most of the company's customers are other printing firms as the company acts as contractor for printing on large Japanese paper sizes such as Kikuban and A1 size.

Commitment to quality is a defining feature for Konron, which has not only received Japan Color's standard printing certification, but also certification in 2015 for the use of Toyo Ink's Kaleido® wide-gamut color process ink. Many of the company's professional press operators are also certified printing proficiency experts.

Konron's main machine today is a Mitsubishi 8-color Tandem Perfector. The high speed workflow and high quality provided by this equipment has given its clients trust in them. In 2017, a Ryobi RMGT 920PF 4+LED-UV one-side/two-side four-color printer was introduced to respond to recent needs for 1/1 and 2/2 printing.

Paper picking: the one big issue

"In the past, even if printing was just 1/1 or 2/2, we had to move to a Tandem Perfector, which was very wasteful," Mr. Ohno says about the introduction of LED-UV printing equipment. The



RGMT 930PF 4 dramatically improved efficiency of work at the printer, “The only challenge was paper picking, which happened pretty regularly,” he says.

White gaps could be seen in text and other areas, so careful checks were required during printing. Picking depends greatly on the surface strength of the paper being used—and it often occurs with the now popular recycled, high-quality and matte papers.

Mr. Yokota, who is in charge of the RMT 920PF-4, adds, “Basically it’s a matter of ink hardness, and, although we address this by adding a viscosity-adjusting agent, it is difficult to accurately control this. If the ink becomes too soft and flows more than necessary, then this will lead to other disadvantages such as scumming, so I was looking for methods other than modifying with the ink.”

Testing reveals the advantages of Vulcan Pack UV

Because of these issues, a sales representative from Gadelius suggested Konron try Trelleborg’s Vulcan Pack UV printing blankets. The company already had confidence in Vulcan blankets, as they had been using the Trelleborg’s Vulcan Folio UV blanket for 12 years in their main press,. Mr. Yokota said about the Vulcan Pack UV, “Obviously, the finish has changed, and paper picking has been dramatically reduced.” Due to the superior inking properties, the resulting quality of solid printing and high reproduction of halftone dots was immediately seen on printed materials.

To find a solution for paper picking, the company tried printing blankets from several other companies before settling on Vulcan Pack UV as the other blankets did not eliminate the paper picking.

“The ink issues involve a variety of factors that influence each other, such as compatibility with other materials, and the temperature and humidity within the plant, so that even with the same printing press and ink, this isn’t a simple affair that can be solved with a specific blanket,” Mr. Ohno says. “For that reason, we needed to test them one by one, and, in our case, Vulcan Pack UV gave us the answer.”

Reducing labor needed for inspection and cleaning, and cutting paper waste costs

Reducing the incidents of paper picking is not only a matter of ensuring print quality, but also has a major impact on reducing the work load for operators and increasing production efficiency factory-wide. To ensure that there were no defects, operators in the past had to stay close to the press and check the finish.



“I was usually very nervous,” Mr. Yokota says. The amount of time required for adjustment of the ink tack value and for inspection was considerable. Also, since any paper that was picked would turn into dust and remain on the printing press, frequent cleaning work was also required.

“The number of times we have to clean has been cut down hugely, and people can now leave one area to do some other work in a different area while the UV press is operating,” Mr. Yokota says.

“By using Vulcan Pack UV, labor has dramatically decreased.” Mr. Ohno agreed: “With a planned print job being completed on time and without trouble, the operator has more time to work on other projects, so overall efficiency has improved.” In addition, the amount of paper waste caused by paper picking has decreased, so the company is also seeing an improvement of productivity.

A plant that benefits both customers and employees

“The major reason for the introduction of the RMGT 920 PF-4 was to reduce employee overtime,” Mr. Ohno reveals. “Because presses other than the Tandem Perfector were oil-based presses, and because we didn’t have efficient turnaround of projects because of a lack of facilities in the plant, we needed to have operators working overtime to cover for this.”

With two 4-color/8-color UV printing presses, it became possible for the company to provide efficient turnaround for every printing request, as not only the paper picking issue was resolved, but Konron Printing found itself at almost optimum production. By reducing overtime to almost zero and the workload on the staff, the company greatly enhanced its ability to provide quick delivery, and to gain its clients’ trust even further.

End

Konron Printing Corporation

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