Print Quest invests in two additional Shine LED Lamp Kits, innovated by Miraclon, at drupa 2024

A tradition of innovation

Print Quest Graphics Ltd, based in Skegness, UK, made its second investment in Shine LED Lamp Kits, innovated by Miraclon, at drupa 2024 after reporting significant efficiency and quality gains from their initial investment earlier this year.

“The benefits were so significant,” said David Jarvis, managing director and founder of Print Quest, “that I knew within 24 hours after installation that I would be upgrading my other two exposure units with Shine LED Lamp Kits too.”

Dave explains: “On average we’ve reduced exposure times by 33%, which is remarkable. Because the LED lamps don’t degrade, exposures are consistent across the entire bed, eliminating plate remakes, and our plate specialists aren’t spending time monitoring and recalibrating lamps. In addition, because the Shine LED lamps operate at room temperature, we don’t have to wait for the lamps to warm up and cool down. This can take up to 30 minutes, so the productivity benefits are considerable as well. We also anticipate significant savings on our energy bills, so it enhances our sustainability proposition.”

The Shine LED Lamp Kit is Miraclon’s innovative solution to providing fluorescent users with a simple, low-cost route from inconsistent fluorescent exposure to the multiple advantages of LED technology. By utilizing customers’ existing fluorescent exposure frames, for a fraction of the cost of a new LED exposure unit, users benefit from consistent, predictable intensity over a much longer operating life (up to 5,000 hours compared to 800 hours for fluorescent tubes), faster exposures, and enhanced sustainability performance. These features won the Shine LED Lamp Kit a unique double at this year’s FTA Excellence in Flexography Awards, winning top awards for both Sustainability and Technical Innovation.

The Shine LED Lamp Kit is designed to be retrofitted on-site in a few hours by a qualified electrician. “In our case, the installation took around five hours and went very smoothly,” says David Jarvis. “There was minimal disruption to production.”

Print Quest is always on the lookout for innovative technology that delivers efficiency and quality benefits. In 2008 the company was the first commercial installation of the Flexcel NX System, and later became one of the first European tradeshops to...
complete the Miraclon Certification Program for Flexcel NX Plates. The company has also developed its own patented plate screening technology – Utopia – which relies on the exceptional reproduction and ink transfer capabilities of Flexcel NX Technology to allow printers to match any color standard while dramatically improving on-press efficiency by reducing waste and set-up time.

David Jarvis says that in evaluating new technology “it’s important that it should benefit both Print Quest and our customers, improving workflow, efficiency and quality for both parties. The Shine LED Lamp Kit meets all these criteria and is proving an excellent addition to our production.”

Highcon announces CEO Transition following Successful drupa

Highcon has announced that Yair Alcobi will succeed Shlomo Nimrodi as Company CEO on 1 August. On that date Nimrodi will succeed Alon Bar Shany as Active Chairman of the Board of Directors. Bar Shany will remain on the Board. Shlomo Nimrodi to be succeed by Yair Alcobi on 1 August and to assume Active Chairman role.

Alcobi has over 25 years of experience in technology and advanced manufacturing, supported by a BSc in Mechanical Engineering from the Technion, an Executive MBA from Haifa University, and executive programs at Stanford GSB and the Technion Institute of Management. He has held leadership positions at XJET Ltd., KLA Corporation (formerly Orbotech), Kulicke & Soffa (K&S) and other companies where he focused on and consistently delivered growth.

“Prior to committing to Highcon, I visited drupa 2024. Highcon’s presence there was vibrant and impactful, and the opportunity to get an overview of the industry was invaluable.” said Yair Alcobi, incoming CEO. “I look forward to coming on board, meeting customers, employees, partners and customers, and to leading Highcon to ever-greater success.”

“After 5 exhilarating but challenging years and following the success of drupa 2024 as a culmination of the repositioning of Highcon and its portfolio, the time is right for me step down as CEO” said Shlomo Nimrodi, outgoing CEO. “I’m immensely proud of what we’ve achieved at Highcon. I have complete confidence in the team I’ve built and in Yair’s ability to lead Highcon into the high-growth chapter of the coming years. My association with Highcon continues with my new role of Chairman of the Board; I’d like to thank Alon who has filled this role so effectively over the last 3.5 years.”

Plasma treatment for improved print quality in coding and marking printing

In many areas of industrial printing, cold atmospheric pressure plasma is used to print on plastics that are difficult to print on due to their surface properties. Plasma treatment greatly improves the adhesion of the printing inks to the surface and thus increases the print quality. The reliable and abrasion-resistant printing of high-performance plastics poses a challenge for all areas of industry. A typical example of this is the printing of PTFE (polytetrafluoroethylene) in inkjet printing. Prior surface treatment with cold atmospheric pressure plasma enables high-quality and reliable marking with as little effort as possible. The compact PiezoBrush PZ3-i plasma unit or the PiezoBrush PZ3 hand-held plasma unit for manual pre-treatment of small batches makes integration into existing production lines particularly easy.

Marking PTFE with data matrix codes

While data matrix codes were previously used for permanent direct marking by laser or embossing, they are now increasingly being used as printed code images. The code must be both easy to read and abrasion-resistant. A leading company in the development, production and sale of tool solutions for surface processing uses the PiezoBrush PZ3-i in conjunction with the Keyence MK-G1000SA continuous inkjet printer to mark PTFE fabrics reliably and effectively.

PTFE is one of the most important fluoroplastics due to its good non-stick properties and extreme resistance to heat and chemicals. However, PTFE has a surface energy of less than 30 mN/m without prior plasma treatment. Plasma treatment with the PiezoBrush PZ3-i can increase the surface energy to at least 38 mN/m, which makes all the difference. Without this increase in surface energy, it is not possible to bond the printer ink. The printed image appears faded, is not abrasion-resistant and the data matrix codes used cannot be read.

Comparison of print image without plasma pre-treatment (top) and after plasma treatment (bottom)

Comparison of print image without plasma pre-treatment (top) and after plasma treatment (bottom)

By integrating the cold plasma treatment into the process sequence, good legibility of the printed data matrix code and its fatigue strength can be guaranteed even under difficult conditions such as friction and temperature. Traceability and reliable sequences in the subsequent process steps are thus ensured by pre-treating with the PiezoBrush PZ3-i in the marking print.

The plasma treatment of the surface cleans the surfaces to be printed of the smallest organic impurities and leads to an additional molecular modification of the surface topography. As a result, plasma functionalization at atmospheric pressure makes it possible to avoid expensive vacuum systems or toxic wet chemistry, which has a positive effect on costs, safety and the environment.

Platinum Packaging reinvents its production floor with Bobst oneECG disruptive technology

In a change to its operational methodology, Platinum Packaging has
implemented two automated Bobst Master M6 inline flexo presses with oneECG technology. The Kenyan flexible packaging specialist made this strategic investment to optimize its production floor and operations.

Nairobi-based Platinum Packaging Ltd specializes in providing customers with tailor-made solutions to all their flexible packaging and labeling requirements. As one of the leading packaging manufacturers in the Eastern and Central African region, the company supplies brand owners in the fast-moving consumer goods (FMCG) sector, agrochemical, pharmaceutical, automotive and construction industries. With a total annual production of 580 tons, it continuously adapts to meet evolving packaging demands.

Established in 2019, Platinum Packaging initially concentrated solely on gravure printing relying on machinery including a state-of-the-art Bobst Nova RS 5003 press complemented by a Novalam S 550 solventless laminator. However, a fire in 2022, which damaged the facility, caused a severe setback.

As CEO Hasit Patel and his team began the reconstruction, they identified an opportunity to reassess their operation and pursue innovative new strategies. This included extending its partnership with Bobst to include two new Master M6 inline flexo presses equipped with oneECG and DigiFlexo automation. “The fire gave us an opportunity to rethink our approach and introduce more Bobst technology to address some of our major pain points, mainly long setup times due to color matching, high levels of setup waste, and slow speed to market,” stated Mr Patel.

“The introduction of the Master M6 presses has been instrumental in improving our efficiency for short runs, thus optimizing our wide web and gravure presses for more extensive runs as well as ensuring uniformity across all our output,” he explained. “This last piece of the puzzle has truly augmented the capacity of the other presses.”

Elevating production with oneECG, the integration of the Master M6 presses with the existing machinery has significantly enhanced the production capabilities for Platinum Packaging. In particular, the introduction of Bobst oneECG (Extended Color Gamut) technology has been critical, leading to notable increases in efficiency and flexibility, along with high-quality print results, faster job transitions, and enhanced press efficiency.

oneECG technology, which digitalizes color matching with an extended color gamut, reduces the need for costly and often wasteful spot inks, making color reproduction consistent and repeatable. “Thanks to oneECG, we’ve achieved great improvements in productivity, reductions in downtime, and significant savings on waste of materials and time,” Mr Patel explained. “oneECG has disrupted our operations as it is compatible and consistent across different applications and technologies, enabling more efficient setups and faster job completion. Digital color matching has significantly expedited our processes, enhancing business continuity and consistency. The automated setup procedure has also reduced substrate waste to less than 30 meters, and we can execute on-the-fly job changes in a couple of minutes. This makes the M6 powered by oneECG one of the most disruptive technologies I’ve seen in recent years.”

The support from Bobst during this significant undertaking has been instrumental in maximizing the capabilities of oneECG. Thanks to Daragh Whelan, Bobst’s Application Technical Director, the transition has been smooth and successful.

A flexo printing expert specialized in using oneECG for labels and packaging, Mr Whelan works closely with customers to drive efficiencies and help operators get to grips with the intricacies of an extended color gamut workflow. At Platinum Packaging, he also assisted in establishing a new prepress department, as the company scaled up and fully digitized the color matching process with oneECG.

Mr Patel praised the technical support provided by Bobst and Mr Whelan’s involvement. “Throughout this endeavor, Daragh has given us invaluable support allowing us to achieve the best possible outcomes from oneECG, supporting us in a management change shift and optimizing the usage of the Master M6 presses together with the rest of our technologies.”

Establishing a milestone in the history of Platinum Packaging, Bobst’s Master M6 technology, with DigiFlexo automation and oneECG printing, has enabled the Kenyan company to reposition itself in the market with an enhanced value proposition. Now its brand owner customers can enjoy improved order flexibility with reduced lead times and lower MOQs (minimum order quantities) and still expect exceptional color quality and consistency.

Looking back, Mr Patel proudly declared, “This strategic partnership with Bobst was not just a choice but a necessity and it has been truly transformative. With the advanced Master M6 flexo press, we have been able to expand our product range, particularly in the food industry, by providing printing and converting services with inline capabilities, among others for shrink sleeves.”

He concluded, “But more than that, this evolution represents a paradigm shift in our approach. By adopting Bobst oneECG process, we have embarked on a path of continuous improvement. It has allowed us to serve our customers with greater agility and respond promptly to unexpected demands, thereby strengthening their confidence in Platinum Packaging.”