

**Medical Device Outsource Partner Delivers Added Value,
Flexibility with On-Demand Color Label Printing from Epson**

There are many reasons a medical device manufacturer may elect to engage a contract packager, including a lack of specialized equipment and expertise of staff, the desire to test market a new product and the need to expand manufacturing capacity to meet growing demand. These strategic partnerships often yield significant results in terms of reduced costs, enhanced efficiencies and increased speed to market.

All of these scenarios are familiar to [Millstone Medical Outsourcing](#), a Massachusetts-based provider of medical packaging outsourcing solutions specializing in the orthopedic sector. From its state-of-the-art facilities in Fall River, Mass. and Olive Branch, Miss., Millstone Medical Outsourcing offers a full suite of services to customers, ranging from advanced inspection and validation of medical device packaging, to clean room and non-sterile medical device packaging and re-packaging, to warehousing and distribution.

Offering such a varied service portfolio requires careful management and a highly flexible production environment. Adding further complexity is the fact that the company's 50+ customers in the orthopedic sector alone have different preferences when it comes to label production. For example, some customers rely on a two-step label production process. These customers will send Millstone Medical Outsourcing pre-printed color labels and the variable data gets added during the packaging process with the help of thermal transfer printers. Other customers invest in having a dedicated printer on-site at Millstone Medical Outsourcing.

While in the latter scenario, the printer brand, model and style (e.g. black and white or color) is ultimately chosen by the customer, it is not uncommon for Millstone Medical Outsourcing to provide counsel during the selection process to ensure the technology will deliver against the company's high quality standards. One recent example can be seen with a customer seeking an on-demand color label printer that would allow it to carry its distinctive branding and package design through to its labels. The printer would ultimately be deployed at Millstone Medical Outsourcing's Fall River facility.

“This was not the first time a customer had come to us with this type of request,” said Michael Morrissette, Program Manager at Millstone Medical Outsourcing. “After gaining a full understanding of this particular customer’s objectives and what they deemed to be the most critical features, we evaluated the various label printers we had deployed on behalf of other customers to identify viable options. We began exploring laser as a potential solution, but the image resolution required by this customer could not be met by any laser printer on the market.”

Options, Options, Options

To provide the most thorough set of recommendations to its customer, Millstone Medical Outsourcing enlisted the help of [Peak-Ryzex](#), its partner for enterprise printing and labeling and supply chain services, for additional insight. Based on the project brief, Peak-Ryzex recommended that Millstone Medical Outsourcing and its customer consider Epson’s ColorWorks® C3500 and the recently launched ColorWorks C7500G.

“We recommended the Epson printers for a few reasons,” explained Barry Alves, Label Systems Consultant for Peak-Ryzex. “First, both printers can produce labels that are strong enough to endure the harsh atmosphere that orthopedic products may encounter during the sterilization process, including radiation, ethylene oxide and gamma rays. In addition, while color is not a mandatory characteristic for medical device labels, we have customers that want to leverage color coding or color images to help users easily distinguish products. The Epson printers are capable of printing very high resolution images that were required by Millstone’s customer.”

After Millstone Medical Outsourcing vetted these recommendations, Peak-Ryzex worked with Epson to obtain label design files from the end customer and printed samples on both ColorWorks models to aid the decision-making process.

“While the ColorWorks C3500 and the ColorWorks C7500G are known for their color capabilities, it is the flexibility delivered by the on-demand format and the high resolution printing that is most appealing to medical device companies working with a high number of SKUs,” commented Jerry Tarrant, Manager Business Development – Healthcare for Epson America, Inc. “The very nature of on-demand labeling puts control in the hands of the

manufacturer, as they only produce as many full-color labels as they need, precisely when they need them. That enables them to switch between projects efficiently and easily, significantly reducing downtime. That's a huge benefit in a complex manufacturing environment like Millstone Medical Outsourcing's."

Picking a Winner

Thanks to the printer's ability to produce bright, vibrant colors that are almost photo-like in quality on a wide range of label media, including glossy stock, Millstone Medical Outsourcing's customer ultimately chose to move ahead with the purchase of the ColorWorks C7500G. Once the system had been purchased, Millstone Medical Outsourcing worked with [enLabel Global Services](#), a technology firm that develops software for highly regulated industries, including medical device, to make sure the printer passed FDA validation tests. As part of this process, the printer must be qualified in three areas (installation, operational and performance) to ensure it complies with pre-determined standards and specifications. The Epson ColorWorks C7500G was validated in less than four weeks.

An additional benefit of the ColorWorks C7500G is that it is fully supported by enLabel's Integrated Packaging Management (IPM) Software Platform. This unique cloud solution gives Millstone Medical Outsourcing and its customers complete control over label production by allowing them to design, electronically review and approve and print labels remotely.

Since its deployment in late 2015, Millstone Medical Outsourcing and its customers have found the ColorWorks C7500G printer highly effective and easy to use. The glossy label media has a luxurious look and feel that complements the packaging and helps Millstone Medical Outsourcing's customer convey the high quality of its products, a key goal at the outset of the project. The customer recently invested in a second ColorWorks C7500G for use by in its European facility to amplify the overall results and ensure brand consistency, no matter where its products are distributed.

About Epson America, Inc.

Epson is a global technology leader dedicated to connecting people, things and information with its original efficient, compact and precision technologies. With a lineup that ranges from inkjet printers and digital printing systems to 3LCD projectors, smart glasses, sensing systems and industrial robots, the company is focused on driving innovations and exceeding customer expectations in inkjet, visual communications, wearables and robotics.

Led by the Japan-based Seiko Epson Corporation, the Epson Group comprises more than 67,000 employees in 90 companies around the world, and is proud of its contributions to the communities in which it operates and its ongoing efforts to reduce environmental impacts.

Epson America, Inc., based in Long Beach, Calif., is Epson's regional headquarters for the U.S., Canada, and Latin America. To learn more about Epson, please visit: epson.com. You may also connect with Epson America on Facebook (facebook.com/Epson), Twitter (twitter.com/EpsonAmerica), YouTube (youtube.com/EpsonAmerica), and Instagram (instagram.com/EpsonAmerica).

About Millstone Medical Outsourcing

With 15 years of experience in organizing the chaos of outsourced supply chains, Millstone Medical (www.millstonemedical.com) is the leading provider of customized solutions to the medical device industry. Millstone operates three environmentally controlled facilities offering advanced inspection, clean room packaging, medical device specific warehousing, distribution, loaner kit management and aftermarket services. With an unparalleled focus on quality, Millstone Medical is the partner you can entrust with your post manufacturing needs. Please visit www.millstonemedical.com.

About Peak-Ryzex

Peak-Ryzex provides end-to-end enterprise mobility, retail, managed services, printing and mobile data capture solutions for performance-driven organizations focused on the optimization of supply chain and field-based business processes. Peak-Ryzex's in-depth industry-specific experience, state-of-the-art solutions and managed services, and exemplary customer support provide transformational business solutions and results that deliver greater ROI and outstanding value. Peak-Ryzex serves as a trusted business partner for some of the

world's largest companies, while also supporting local and regional customers with an extensive coverage footprint throughout North America and Europe.

About enLabel Global Services

Founded in 2005, enLabel Global Services has completely changed the pace of the global enterprise packaging industry, by providing the World's only end-to-end Integrated Packaging Management (IPM) Software Platform. Headquartered in the historic North End of Boston, MA, enLabel Global Services is a Technology and Consulting Services Company that works diligently with manufacturers and distributors in the Medical Device, Biotech, Pharmaceutical, Aerospace and Petro/Chemical industries. With a state-of-the-art streamlined approach to the global packaging process, enLabel is an industry leader in achieving zero-defect packaging, worldwide. For more information on the enLabel IPM Software Platform, as well as global compliance and additional services, please visit www.enLabel.com.

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Smark received consideration from Epson for providing this testimonial.

¹<http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/UniqueDeviceIdentification/ComplianceDatesforUDIRrequirements/default.htm>

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