

# MILLSTONE – ON-DEMAND COLOR LABEL PRINTING

## CASE STUDY

### ABOUT THE COMPANY

With 15 years of experience in organizing the chaos of outsourced supply chains, Millstone Medical 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.

### BUSINESS CHALLENGE

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, MA and Olive Branch, MS, 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.



#### INDUSTRY:

Manufacturing/Medical Products

#### BUSINESS CHALLENGE:

- State-of-the-art label printing software system and high quality printer

#### FEATURED SERVICES:

- Enterprise Printing

#### FEATURED PRODUCTS:

- Epson ColorWorks printing
- enLabel's Integrated Packaging Management (IPM) Software

#### KEY BENEFITS:

- New UDI labeling system
- Significantly reduced printing costs

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."

## THE SOLUTION

To provide the most thorough set of recommendations to its customer, Millstone Medical Outsourcing enlisted the help of Peak Technologies, its partner for enterprise printing and labeling and supply chain services, for additional insight. Based on the project brief, Peak 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. "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 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.

## BENEFITS AND RESULTS

Thanks to its 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 customer's 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 customer 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.



*The fact that the user has to present a badge to obtain the documents provides a very high level of security that meets HIPAA regulations. In addition, the cost per printed page is only about one-half of what the customer incurred in the past.*

*- Thomas Heitmant,  
Manager of  
Solutions Consulting*

