

# Cleaning Up In-Line Printing

*A medical device firm wanted to switch its FFS line to flexographic printing, but only if it could contain cleanup and repair costs.*

by Daphne Allen  
Editor

Smiths Medical (Southington, CT) was expanding its line of IV catheters, and the firm needed its facility in Monterrey, Mexico, to handle several new product codes. Because there were nine new catheter gauges, John Wuschner, production system manager, R&D, for Smiths Medical, needed a flexible packaging line that could be changed over quickly. Printing systems needed to be equally as flexible.

Wuschner planned to employ a Mahaffay and Harder form-fill-seal machine that he had previously deployed to package just one product code. Preprinted rollstock was used for that single product. But purchasing, stocking, and using preprinted materials for the new lines would have cost too much, in both time and money.

Wuschner decided to consider in-line flexographic printing for the new lines. He had concerns about maintenance, though, given his experience with some already purchased systems for other lines at the facility. "It takes four hours just to remove the print drums when servicing our existing flexo printers," he says. And because he was managing this operation remotely from his U.S. office, repeated trips for printer maintenance and repairs that local staff cannot handle could be costly.

Phil Morin, who had worked for Smiths Medical when the firm was a division of Johnson & Johnson, offered a solution. "While working for J&J for



Morin Automation provided Smiths Medical with a quick-change, easy-to-clean system.

15 years, I saw how costly machine downtime can be," he says. He set out on his own to develop flexographic printing technology under his own firm, Morin Automation LLC (Forestville, CT).

One of the features of Morin's machine is a patent-pending doctoring system that uses much less ink than traditional systems and is virtually spillproof, Morin says. "Using less ink keeps ink pH and viscosity stable and prevents ink spills," he explains. "Spills can cause the costliest downtimes. The cost savings alone with this feature can pay for itself in no time." Also, an intelligent ink management system with a 10-minute self-cleaning mode enables the machine to clean itself after sitting idle for more than 30 minutes.

Wuschner finds that the system requires little maintenance. "When using water-based flexo ink, evaporation occurs over time, changing viscosity and pH. We've tried ink-modifier drip systems before, with some suc-

cess, but it is easier when you don't have to worry," he says. "The printer's anilox system and doctoring system are forgiving. For instance, the doctor blade is not subject to variations in ink. We can run the printer without adjustments."

He still has to maintain the system, such as replacing bearer strips when they wear out. "But they take two minutes to change, and our local staff can handle it. Plus, the printer drum can be removed in seconds." But there are no clutches, valves, springs, or cylinders that need regular replacing, he says. "Morin eliminated these concerns," Wuschner says.

Print quality is also "extremely forgiving," Wuschner says. "It has much higher clarity for smaller print than other systems. We have had to fine-tune printers in the past to make sure that Os and As aren't filled in, but not with this system."

In fact, says Morin, the system can print legible type as small as 2 points. "Though we feel our customers would not need to print that small, they surely could add smaller text to their existing labels without compromising label quality," Morin says. Wuschner says his firm is printing 6-point type.

A magnetic-backed print plate also eases changeover from one label format to another.

Since installing the system in 2001, Wuschner says that the Monterrey facility hasn't had to call him or Morin for a repair. "I still go down there, but it isn't for the Morin printer." ■

# FlexoOne™....

## The Most Intelligent Rotary Flexo System in the Marketplace Today!

The **FlexoOne™** system is an advanced rotary flexographic printer offering the highest quality printing in the industry. However, like the rest of the RapidPak product line, not only does the **FlexoOne™** system offer state of the art in production capabilities, particularly in terms of print quality, but it is also designed for reliability and easy maintenance. The printer also has an extremely small footprint yet it is capable of printing up to a 22-inch index. For two color applications, the footprint is small enough that it can be mounted in tandem with a second unit.

### Features and Benefits

#### Printing and Drive System

- ✓ Stepper/servo motor drive gives precision repeatability
- ✓ A true synchronous printer capable of printing two point font type even on 1059B and 1073B Tyvek
- ✓ Eliminates seal disruption due to stretching of top web.

#### Ink management system

- ✓ Auto fill at start-up
- ✓ Auto clean after 30 minutes of idleness
- ✓ Self Cleaning system maintains highest high print quality
- ✓ Auto shutdown mode purges system automatically

#### Solid Construction

- ✓ Hard Coated aluminum frame
- ✓ Solid frame members with dowelled components
- ✓ Sealed bearings on all rotating components
- ✓ Ceramic coated and laser engraved Analog roller

Ergonomically friendly design minimizes downtime and facilitates regular maintenance.

- ✓ Easy to remove print drum
- ✓ Plug and Play electronics