



# RAISING THE BAR IN COLD FOIL TECHNOLOGY

Eagle Systems' cold foil units have been on the market for almost 10 years and have made a significant impression on folding carton converters.

By Jackie Schultz

**O**ftentimes, the products that grab a consumer's attention in grocery and retail stores have eye-popping graphics that incorporate hot or cold foil. The design requires highly specialized equipment that only a handful of suppliers offer. One such company is Eagle Systems. Mike King, who is known to many of his customers as "The Foil Expert," founded Eagle Systems 25 years ago. Initially, he engineered and designed hot foil stamping modules for retrofitting diecutters. There are more 400 systems installed around the world.

King became interested in the concept of cold foil about nine years ago when one of his customers, Multi Packaging Solutions (MPS), asked him for assistance. MPS is

considered a pioneer in cold foil applications for packaging. King remembers the phone call from John Cote, MPS Vice President of Innovation and Manufacturing Technology. "He had an older cold foil system and needed service on it because the company that built it had gone out of business. I said, 'John, I have no idea about cold foil,' but he said, 'Mike, you know foil. I need you to come here and fix this machine.'"



**John Cote, Multi Packaging Solutions**

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King agreed to look at the system, which was installed on a MPS press in Indiana. "I repaired it and got it to work, but then I

realized I could build my own better system," he says. Today, Eagle Systems has 28 cold foil units installed worldwide. MPS has two. One is installed on a KBA 10-color press in Indianapolis, Indiana, and the second is on a Komori eight-color in Dallas, Texas.

## Foolproof Process

Eco-Eagle cold foil systems are self-contained and fully automatic units that can be installed on virtually any sheetfed offset printing press, offering the inline application of foil. There are basically only two steps in the application process: 1. An adhesive is applied to the substrate, in register, using one of the printing units in the press. 2. The foil is released from the carrier onto the substrate wherever the adhesive was printed.

Two printing towers are used in the process. One is used to apply the adhesive, which is printed as a normal offset ink, and the second is used to press the substrate and the foil carrier together. The system is designed so that press operators can easily switch from foiling to normal printing. The process is continuous and runs at the same speed as the sheets through the press.

The system is easy to operate and virtually foolproof, King says. "It's like getting in a car and saying, 'Okay I'm at my office and I want to go home and all you have to do is sit there and the car drives itself. There's no steering wheel, there's nothing to program. The Eagle is self teaching and has extremely high-end software so the operators don't have to program it."

"It basically won't let you make a mistake," Cote says. "You just have to follow certain procedures. That saves you a lot of downtime."

### High Value Proposition

Ease of operation, high quality results, low cost (compared to other foil processes), technical support and expanded market opportunities are common reasons why folding carton converters choose to purchase a cold foil unit from Eagle Systems. It is a more efficient and less

wasteful process, according to Scott Marris, Vice President and General Manager of Marris Printing & Packaging, City of Industry, California. Prior to installing a unit on its manroland 700

six-color plus UV offset press, the company was printing on full sheets of silver foil and covering parts of the foil with an opaque white ink. "That's a terrible waste of board," Marris says. "SBS is less expensive than the foil board. Plus, inline foil gives us more flexibility with graphic design. Customers can have multiple colors of foil because you colorize it on the press while you're printing."

Cartamundi USA has an Eco-Eagle cold foil system on a KBA 106 10-color press at its Dallas, Texas, facility. The unit was installed last year. Cartamundi prints playing and trading cards as well as folding cartons for its Elite Packaging Division on the KBA



Scott Marris, Marris Printing & Packaging



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press. Bob Nickel, Vice President of Specialty Packaging, says the machine is user friendly and does not interfere with the normal operation of the press. "Once it's on the machine, it's on the machine. If you're not using it, it's just another unit. You power the unit off and it's like it's not there. It's a very easy interface."



Bob Nickel, Cartamundi USA

Makeready varies from 15 to 30 minutes. "Setup on new jobs for cold foil was much better than I anticipated," Nickel says. "We had allotted a certain amount of time per job and we were able to turn that up because of the efficiency of the machine simplification."

A roll handling system allows users to set up the unit with additional rolls of foil. "When you're switching from one roll to the next you don't have to get a crane. The roll is already there," Cote says. "That was a nice benefit."

Another benefit is the ability to run narrow widths, which contributes to significant cost savings. King says his system can run narrow webs — two to three inches — easily and consistently. "A very high percentage of Eagle users run narrow web because that's the most beneficial way of saving foil," he says.

DJ Cabler, Pressroom and Graphics Manager of Cenvéo agrees. "The ability to run narrow web was important. That was a huge cost savings to help the customer," he says. Cenvéo, a commercial printing and packaging company, has an Eagle Systems cold foil unit on a KBA 106 eight-color press at its Jacksonville, Florida, facility. Cabler says the unit was purchased to give customers more options with single pass efficiency. "We can now run screens and add spot colors in a single pass and I can get an infinite number of colors. We run the cold foil at 12,000 sheets or higher."



DJ Cabler, Cenvéo



Eagle Systems founder Mike King.

### Market Opportunity

Cold foil technology has opened up new markets and added growth opportunities for many of the carton converters that have installed the process. Margins can be as high as 40 to 50 percent. “The packaging world is blowing wide open and we’re dedicating money and resources into educating designers and customers on how to get the benefit out of cold foil. One of the major areas is shelf presence,” King says.

Unlike hot foil, which tends to have a richer and flatter look, cold foil projects a disco ball effect, attracting attention from every angle. “When you’re walking down a store aisle and there is a product that has been hot foil stamped you might need to get in front of it before you see it because there’s only one angle of reflection,” King explains. “Cold foil takes the shape of the adhesive and the substrate because there is no pressure. It’s applied with adhesive on paper so the foil sits high on the substrate creating the reflection angles. You get more shelf presence. The whole idea of putting foil on any package is to get it to jump off the shelf.”

Cold foil is not a replacement for hot foil, which requires an entirely different process. “This is not a substitute by any means,”

Nickel says. “We have a complete customer base for hot stamping. Cold foil is in addition to hot foil.”

“Hot foil has its place, but you can actually integrate cold foil into the graphic design,” Cabler says. “That’s where you make cold foil pop. If you just want a silver foil on top of a black carton, hot foil will excel at that. Cold foil is a completely different option.”

When Cenvéo installed the cold foil capable KBA 106 in 2013, the process was new to the company’s four folding carton facilities. In order to promote the new process, Cenvéo created a nationwide marketing campaign and theme around the single-pass efficiency—CenvéoHitsTheNotes.com—which promoted the in-line cold foil as well as the in-line print and multiple coating capabilities of the press. King and Cabler played an important role in the production of sales samples for the campaign, making sure every facet of the cold foil process was complete perfection for the effective marketing campaign. Cabler says King’s knowledge and support with the process and campaign launch took them into a new market with new opportunities and endless possibilities. “When we purchased it, I was

in charge of educating the sales team about cold foil and how to sell it,” Cabler says.

“Mike traveled with me to all of the meetings with our sales team and assisted me truly as a partner.”

Cabler says Eagle Systems also excels at follow-up technical support. “I would put them at the top of the list for support. Regardless of the time, day, weekend, whatever, I can make a phone call and in the worst case scenario they’re calling me back in five minutes. The support is amazing.”

Cote agrees. “The level of service we get from Eagle Systems is second to none. In the middle of the night, weekends, holidays, they’re very focused on ensuring our manufacturing does not suffer because of a process substrate or process issue. Mike truly lives for his foil.”

“That’s one of the great services that we offer,” King says. “We become a partner with customers. They can get retraining whenever they want and support on any specialty jobs. They can call me any time when they’re struggling with a job or a certain substrate. And we upgrade our machines for the life of the machine.”

### New Web Unit

All of the hot and cold foil units are manufactured at Eagle Systems’ new 18,000-sq-ft headquarters in Ocean, New Jersey. The facility has an expanded R&D lab for the development of new products.

King is finalizing the details and getting ready to introduce the new Eagle web offset cold foil unit. The machine will have 16,000 meter capacity. Flying splice for both rewind and unwind will also be available. “The Eagle will allow what it is known for, the multiple narrow web feature, which is true cold foil savings,” he says. “We will not be ramping up to web speeds as we will be running full steam right out of the gate. A true partnership is in the works and will be announced shortly.”

The target market is packaging, however, any substrates allowed through the web press will be a potential target, he says. ■