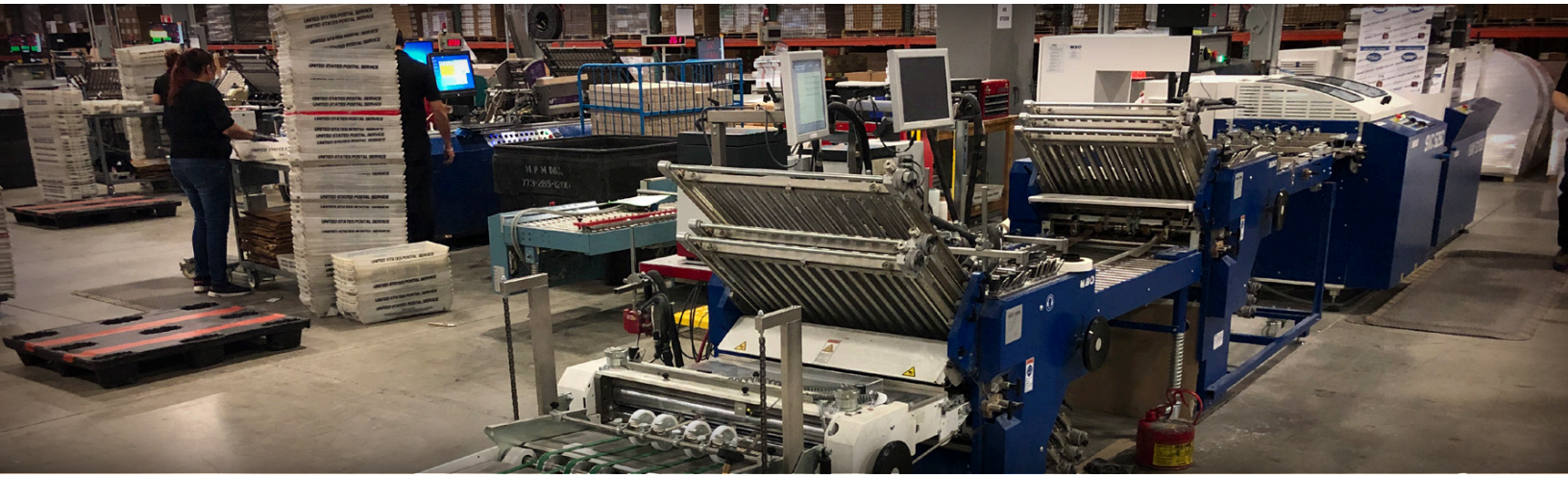
MBO
KOMORI Group

Case Study



Darwill Transforms to White Paper Inkjet Production to Enhance Speed to Market for Data-driven Direct Mail

Darwill, Inc. is a national, integrated marketing company that offers proven direct marketing solutions for companies of all sizes. Founded in 1951, it is a family-run business with a commitment to deliver the highest quality solutions that drive ROI for its customers. Today, Darwill circulates over 500 million pieces of direct mail per year, executing every aspect of a direct mail campaign for companies in nearly every industry.

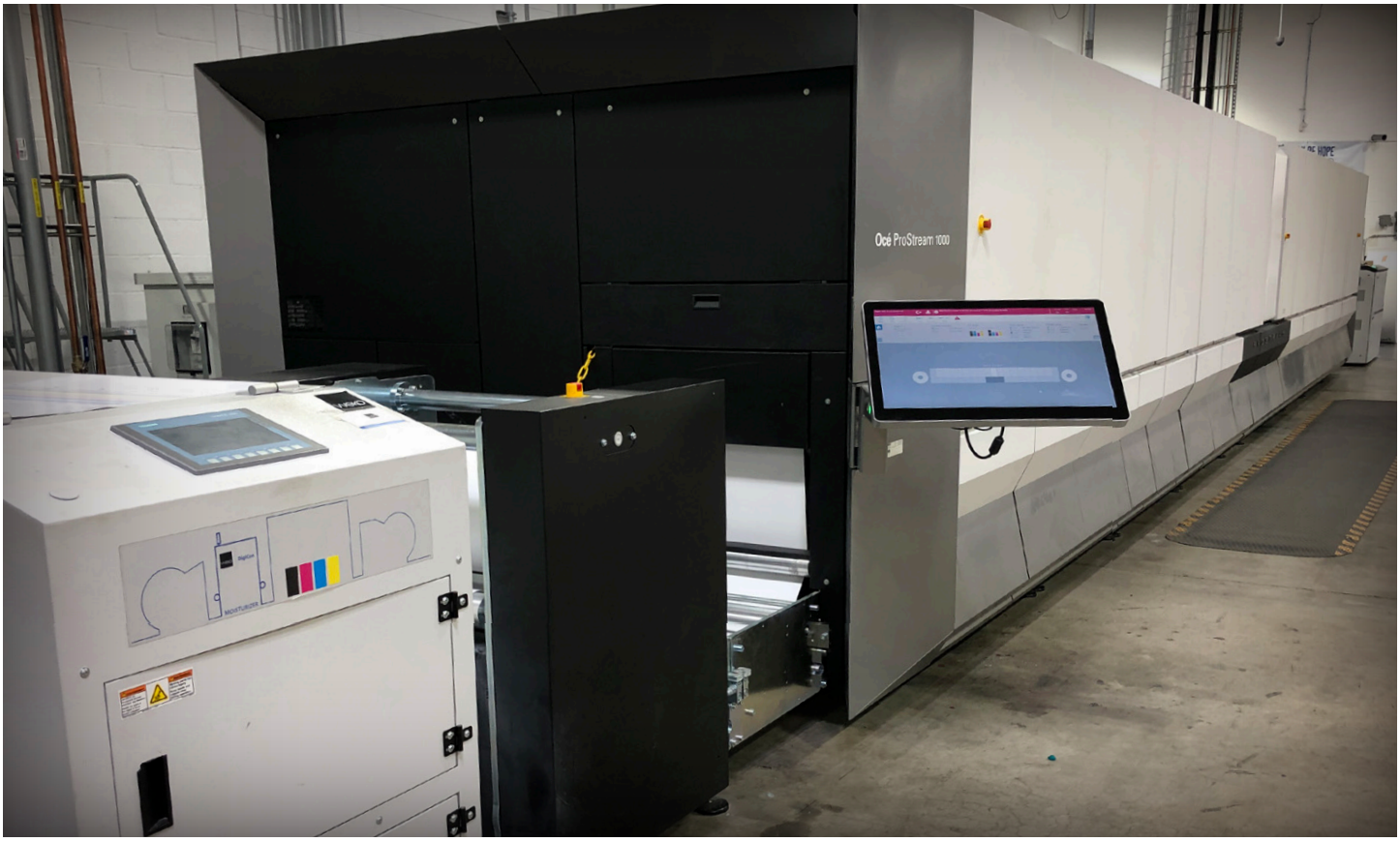
Several years ago, Darwill decided to transform from its roots as a sheet-fed commercial offset printer to using white paper continuous feed inkjet production. Driving this move was the fact that customers were beginning to ask for more sophisticated, personalized direct marketing applications. Darwill's original print and finish model for their commercial print and direct mail work was to print shells on offset and feed the shells into digital offline addressing/data systems to add the variable data. The "live" print would then be taken to an offline folder or mailer line to be formed into the direct marketing piece. This traditional process used the high-quality print of offset with the variable data capabilities of digital print to make a competitive direct mail, advertising piece. It was, however, a slower, multi-step process, requiring multiple touches and many machines to keep production rates high. As the market grew, demanding higher volumes, more variability, shorter turn times and more data usage, Darwill found their shell process cumbersome.

"We saw that we couldn't compete efficiently when it came to certain types of direct marketing applications because of the equipment configuration that goes with being a sheet-fed operation," said Mark DeBoer, Senior Vice President for Darwill. "We first looked at possibly getting a web press for these applications and then we decided to go straight to continuous high-speed inkjet because it was the cutting-edge technology and offered what our customers were requesting."

Enter high-quality, high-speed inkjet

High-speed production inkjet had advanced greatly to this point. The incredible color reproduction, consistency from job to job, system reliability, low waste and high web speeds made it a great fit for the commercial market. After a thorough investigation of the market's top inkjet engine providers, Darwill chose Canon Solutions America and its line-up of inkjet web presses. This line-up includes the ProStream platform with output quality that meets the needs of both the commercial print and direct mail markets. As early adopters of the Canon equipment (Darwill now has four), they loved the efficiency of feeding in white paper from a roll to create a completely variable product in one fast, high-quality step. The incredible print quality and the ability to use a wide range of papers was also appealing. These capabilities changed the company's business model completely.

Along with the Canon digital presses, Darwill also invested in the addition of a data science team that takes an analytical deep dive into customer data to provide highly customized, targeted pieces for clients. "Because we're using such sophisticated data-driven processes, we need to make sure the timeliness in delivering these messages is quick. Fresh data gives our clients better response rates," said DeBoer. "We can't take four weeks to print something, fold it and get it out. The fact that we needed equipment that supported delivering customized pieces with high quantities and faster turnaround drove us to invest in the digital presses and finishing options that are built for this type of work."



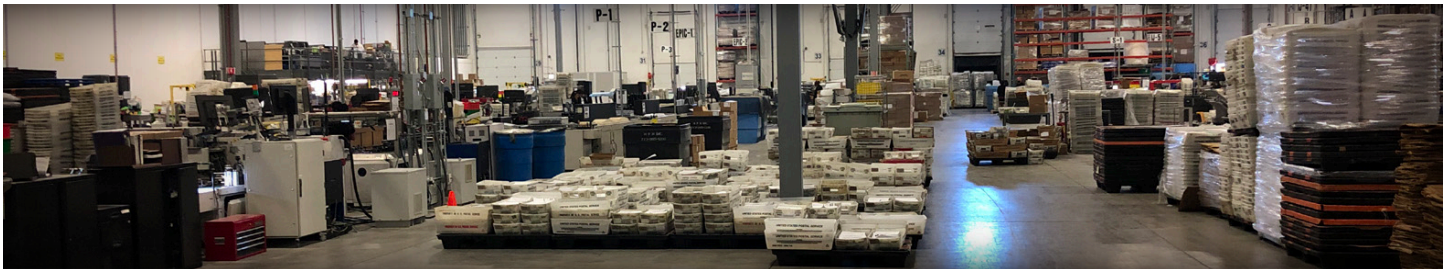
The challenges of change

Going from a conventional cut-sheet model to figuring out how to process printed rolls presented an initial challenge. Because of Darwill's earlier expertise in processing cut sheets into final direct mail pieces, setting up inline cut-and-stack sheeting directly off the press allowed them to use much of their original finishing department and seemed to be a good method. "Once the paper was cut, we knew how to fold it and how to do the rest of the work because that was the environment that we were accustomed to," said DeBoer. "We started to see that there could be some advantages if we were to invest in finishing equipment that could accept the roll input. Initially, we thought inline was the way to go because as the print web reaches the finishing line, it is immediately cut to size. Then we would stack product on a skid and walk it the over to our original folder, fold it and do the inserting. We learned that, while initially this seemed to be a more efficient process, it also had its challenges."

Darwill's first press installation used an inline cut-and-stack sheeting system. But even with this simple inline finishing process, they saw the challenges of keeping the press at a high uptime. "If things go wrong on the back end of these presses, there is so much time and labor wasted when this press could just be printing non-stop. We were not getting the amount of linear feet that we should have been. A large part of that was because we were having inline finishing issues, preventing the press from printing. That's when we decided to pull the finishing off our presses and look for a better way," said DeBoer.

The discussion of inline or near-line finishing is always a lively debate. The overriding factor remains that the inkjet press has its best efficiency when it stays running. Since the press is commonly the largest capital investment system, it makes sense to keep it running at its best efficiency. Additionally, modern, continuous form inkjet web presses are capable of over 95% efficiency when working in a high-uptime environment. On the other hand, finishing is the part of the process that is fraught with challenges. Perfing, scoring, slitting, cutting, folding, gluing and embellishing the product post-press has more touches and those touches are inherently more aggressive, with higher risk. High-level commercial finishing has a greater chance of a paper jam or web break or the like. Skill sets of operators, training and flexibility also come into play. When looking at this big picture, most commercial finishing gets moved near-line to keep the press running.

Darwill found a better way to finish its product when MBO came in and showed them how to put two steps into one with its Roll Fed Finishing platform. "MBO has been a great support through the development of our company with other products, so we knew the reliability of the equipment and this particular solution they brought us was a perfect one. They have helped us in so many ways to move from a sheet-fed environment to a roll-fed environment where we can see big strides in our efficiency of output and the quantity that we're able to produce each day," said DeBoer.



Transforming the process

MBO's Roll Fed Finishing platform is the most widely used roll-to-product solution in the commercial print sector, targeting the marketing, advertising, direct mail and specialty segments. It is a modular solution that benefits a high-speed, roll-to-roll digital press environment and creates economies of scale by eliminating the need to have a dedicated finishing line for each press. For the kind of high-speed, high-volume inkjet printing Darwill does, roll-to-roll printing and near-line, modular finishing are the most efficient methods of production. There is little press downtime in this scenario, as was experienced with Darwill's inline finishing experiment. The presses run continuously, delivering to Darwill maximum print productivity. Darwill liked that the MBO solution provided a more efficient process, as well as being extremely fast.

"We love that now we can feed in white paper from a roll and have a completely variable product come out ready to go to finishing," said DeBoer. "The roll is taken to the MBO finishing line and it is cut, trimmed and folded in one step, also at high speed. There are so many benefits to this process. Labor is reduced, waste is reduced and turn time is short. All of this makes our time to market faster by having a highly effective, highly efficient piece of equipment that allows us to better serve our customers and deliver a timely message to the right person at the right time."

Darwill's newest inkjet press, the Canon ProStream, prints up to 436 feet per minute with an output of 26,160, 12" x 18", 4/4 products per hour. A machine like this requires high-speed finishing equipment to keep up. The MBO platform commonly runs typical folds for 2-up forms at 500 feet per minute and is capable of up to 800 feet per minute max speed. The high production rates of this finishing platform, plus the types of folds and formats it can handle, make it the ideal solution for the white paper print model Darwill is finding to be so successful.

"For us, our focus is really about building a simple way for our customers to execute an omni-channel strategy, which includes digital and direct mail efforts. A large part of that is about proving out an ROI in all these different channels and spending the money where it makes the most sense," said DeBoer. "MBO has always been in support of the inkjet workflow that's been growing and building momentum over the past eight to 10 years. After working with MBO and seeing the ROI we are receiving for our customers, we are true believers that roll-to-roll on the press, then roll-to-finish with just two touches is the only way to go."