

# Customizing high-tech converting

**DELTA** Industrial offers label and packaging converters tailored converting equipment, most recently bringing together inkjet and laser die cutting into one system. Danielle Jerschevske reports

One of the big buzzes at Labelexpo Americas last September was the rise of inkjet. A central question is how inkjet technology will be integrated into converting systems to add value to a converter's operations. One company with a very interesting answer is Delta Industrial Services, Inc., headquartered in Minneapolis, Minnesota, which demonstrated an in-line, fully digital print and finishing system incorporating Xaar print heads and an Edge laser die cutting module.

Established in 1977 as an automation specialist in the computer/servo drive machine tool industry, Delta quickly expanded into manufacturing servo-driven control systems for web handling machinery. By the mid-eighties Delta was focusing on its modular technology, Delta Mod-Tech, which was quickly married with its servo-driven systems to produce flexible mechanical converting equipment.

'At Delta, we build robust, well-engineered products around our customer's needs,' says founder Dave Schiebout. 'This allows our customers the latitude to be in control of production.'

Delta sees its systems meeting the growing demand for better track and trace systems and more complex product authentication verifiers. Its systems are highly modular, so the digital print module could additionally be added to its Spectrum finishing system – using semi-rotary technology for cutting and a coating module for finishing - or a user's own system.

The Edge laser die cutting module provides a way for converters to cut costs and increase flexibility. 'We saw that short run converters needed to reduce tooling costs and the logical solution was this 'digital replacement' for hard tooling,' Schiebout explains. 'Laser cutting works for details, perfs, deep cutting, etcetera.'

A particularly versatile module is Delta's island placement unit, which allows the user to pick and place high value components onto a web with

extreme accuracy. This has been used, for example, to apply transdermal medicated adhesive patches or RFID tags.

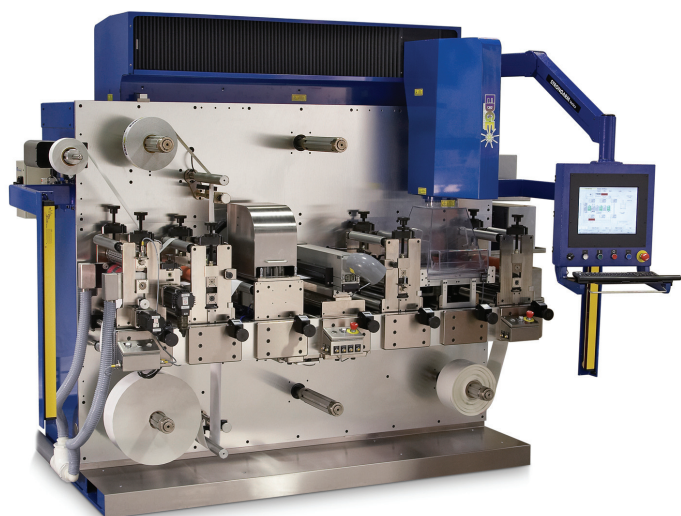
Delta can offer both read and write RFID modules, and when combined with digital printing, a system can be configured to integrate 2D and 3D barcodes with RFID tags to provide related sequential data throughout a supply chain.

'We look ahead of the trends and oftentimes we come up with a solution for a customer in one industry that can be translated into success for a customer in another one,' says Schiebout. 'This allows us to get into new niches and provide our customers with the capability to produce a variety of products and packaged goods that they've never dreamed they could do.'

The design and quoting process is integral to the successful manufacture of Delta's equipment. While around eighty percent of the parts needed to fabricate a customized machine are pulled from one of the 'plug and play' standard modules, the remaining components can often require more innovative design, further engineering and/or personalized IT development, and subsequent testing. Each machine's modules can be independently programmed, providing more flexibility, orchestrated precision, tight tolerances and better overall control.

During this development period, the engineering department identifies customer specific trouble areas to ensure that solutions can be provided within the given quote. 'We have solid design concepts in place when we quote a project,' says Jason Newville, design engineer. Any risky processes are proven up front before manufacturing begins. This both protects Delta's customers and eliminates risk for the company. Delta strives to release quotes within one week; the average manufacturing time is around 29 weeks.

The formula certainly seems a successful one. For the last decade the company has grown at an average of 20-25 percent annually. 'Until recently, ninety percent of our client base was repeat customers,' concludes Schiebout. 'But now, only 58 percent of our customers are repeat and we have become much more diversified.' Already one quarter of the company's sales are outside the US.



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At Labelexpo this year, Delta sold three machines and acquired as many quality leads in one day as it had over the entire show in 2006. 'It was a hot show for us,' Schiebout says. 'There was a lot of diversity, with interest from all over the world – Russia, South America, India and the US.'