



No run-of-the-milling equipment as investment rules

Laserpac, a specialist die-maker and manufacturer of press-ready tooling for the corrugated and folding carton converting sectors has made major investments in enhancing its rule processing and milling capabilities.

For over 20 years, Laserpac has offered a comprehensive flatbed and rotary die manufacturing service, which encompasses flat bed dies, steel plates, stripping tools, embossing and blanking tools for autoplatens and high-speed rotary die-cutters.

'Our mission has always been benchmarking our products against international counterparts so that corrugated and folding carton converters have access to world-class tooling and in turn support local manufacturing rather than importing the dies and affiliated tooling,' explains MD, Craig Beswick.

Die-making operations, he points out, have evolved in leaps and bounds in recent times to the point where far greater levels of automation allow the company to utilise state-of-the-art CNC machinery for the bulk of the tool making process so that only minor touch up operations and skills are required as opposed to having to process everything by hand, which leads to inconsistent results. Artisans are able to use the machinery efficiently so that they just have touch up and tweak.

This trend has also allowed Laserpac to help customers save time and operations in premake-ready by supplying complete press-ready dies and tooling which has been developed specifically for African materials, substrates and operating conditions where skills can be limited. 'These days, we supply such sophisticated tooling that any operator can take our products directly from the stores, insert it in the machine and set up with minimal adjustments before going into production,' says Craig.

'Many of our customers use a wide variety of substrates and material combinations that are unique and have been developed in conjunction with their customers for a specific application. This means that the tooling needs to be adapted accordingly and that a set of imported tooling is often not suited to their needs. Laserpac provides an alternative by doing

the necessary research and development, running and trialling it and when successful, continuing with development,' he states. 'We are fortunate that we can also easily tap into the American and/or European way of doing things for inspiration and guidance as a starting point but then we are able to tailor make a suitable alternative specifically for our conditions. We value and encourage open communication during this process to ensure our customers are completely satisfied with the offering.'

Bending the rules

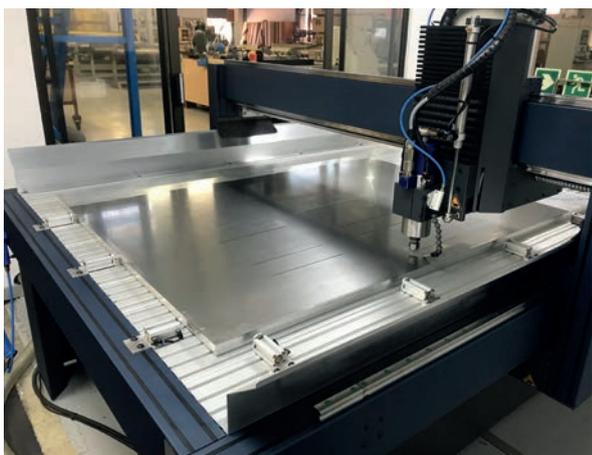
In its ongoing quest for improved customer service, the Cape Town branch has invested in a fully automated rule processor for flat and rotary die rules (pictured below). Craig adds that the major advantage of this processor is that it automatically bends and cuts curved rules to the right length every time. 'This curved form is difficult to measure in a length and then bend manually on a consistent basis,' he states. 'It previously took our skilled die-makers one or two attempts to get to the rule size right.'



The processor's versatility also enables Laserpac to respond more quickly to the growing demand for specialist rules such as non-stock cut-crease or combination perf rules, and to supply spare rules more easily when shipping to centres around the country or to overseas markets. Craig notes that it's especially important to include a few key rules as back-up when exporting to other African markets, as these corrugated board and carton converters tend not to have in-house facilities for repair work.

He adds that blades for cutting, scoring and tearing are becoming increasingly popular in the corrugated sector because cartons are used more frequently as retail-ready packaging for storing products such as fruit in-store, and featuring tear-aways, to create neat displays. Although the variety of specialist blades is too great to hold stock of, Laserpac can customise blades for the right purpose and board grade – thus assisting customers to increase their output quality and productivity levels.

Onsite repairs are quicker thanks to the rule manufacturing capability, cutting down on the necessity to collect and return dies to customers. Where the board is tearing too easily or the tear is a little too rough, Laserpac can manufacture the alternate rule to specification and send it directly to the customer. Larger converters have an onsite die-maker who can then execute the necessary repair work.



Channelling greater all-around efficiency and quality

In September 2018, the company's Johannesburg branch invested in a state-of-art milling machine for producing phenolic creasing counters and steel cutting plates (pictured above). This has greatly increased both quality and capacity. Small details, like deburring the channels on the cutting plates, ensures that the carton doesn't snag on high-speed machines and the sheet is released from the crease as efficiently as possible.

The industry plate standard has evolved from softer to harder steel that offers greater performance and



Rubber bands together collaborators

LASERPAC has collaborated with Netherlands-based Poly-Mx for the past decade in developing the highly-durable Polytop rubber range, consisting of soft to hard varieties, which often outlasts the rules.

Craig Beswick states that this range, in combination with waterjet cutting of the Polytop rubber to exact shapes and sizes and in-house specially designed cutting rule, has become the industry standard in South Africa for high-production lines requiring high-quality dies because it meets the evolving needs of the corrugated board market, especially in the rotary die market.

Die manufacturing is different now to five or ten years ago because boards are recycled more often and contain less virgin fibre material, making them trickier to die-cut. Conventional rubber products tend to break down quickly due to these more abrasive materials as well as continuous compression, fluorescent lights and inks.

Polytop rubber alleviates these traditional problems and issues. It is a long lasting ejection material that allows for a faster production process with less pressure and maintenance. Machine speeds are much higher with less dust, wear and tear at the anvils and knives. Furthermore, set-up and downtime are dramatically reduced.

longevity. The key advantage is harder plates prevent the rules from cutting into the steel surface. Laserpac has kept pace with this development by changing to a much harder plate for longer job runs and a medium-hard plate for shorter runs and quicker change-over work.

The company also manufactures Stabilo laminated resin dies with a combination of materials including a thin aluminium foil coating on the top and bottom to prevent moisture penetration and keep the die surface absolutely flat and stable. Apart from moisture control, this coating enables the easy application and removal of the ejection rubber so that dies can be rebuilt far more times than their wooden equivalents.



Confidentiality is key!

As dedicated die-makers, we guarantee the security of your sensitive customer files and product developments.

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