Words **Simon Eccles**

In this series of features, Printweek is highlighting some of the UK's world-beating development and engineering businesses

Rollem plays its cards right

This developer of bespoke finishing devices is marking 90 years of manufacturing this year

About half of our Best of British subjects and future candidates have surprisingly long histories. They've survived by adapting to the huge changes in technologies, social and economic conditions over the years and still manage to present relevant products to the market. Often they're successful exporters too. Rollem certainly ticks these boxes. The end of this year marks its 90th birthday and today's products remain on the (literal) cutting edge, integrating finishing with digital and analogue presses. Turnover is currently £3m, with 80% of work exported.

Its machines can be configured and customised to finish products including playing and trading cards, business cards, photobooks, mailings, shelf edge labels, postcards, CD inlays and raised print. Customers include international brands such as Bluetree Design & Print, Hasbro, Panini, Pokémon and Xerox.

Backwards beginning

If you always thought that the name Rollem was something to do with printing machinery, cylinders and rollers and so on, you'd only be partly correct. It's actually the surname of the company founder, Joseph Mellor, spelt backwards.

In late 1929 Mellor set up a general engineering firm in Sheffield, South Yorkshire, specialising in brass casting. The company expanded into subcontract machining and developed its first products for the print industry, which were machines to crease and perforate paper.

Legend has it that its first premises in High Green burned down in 1942 when the next-door cinema's projection box caught fire. Rollem then moved into an old corn mill in Ecclesfield and grew from an organisation of six people to its size today, when it employs about 40 people.

Notably, in 1954, the company was bought by Jim Hill who was to be the chief engineer, owner and "the gaffer" until 2006. Many of today's systems are a tribute to his imagination – fulfilled by a skilled and ever-growing team over the years.

In 2006 a management buyout by Stuart Murphy and Colin Pears established today's organisation. Pears had been with the business from leaving school, and retired in April 2017. Today, Murphy is the owner and managing director. Andy Longston is general manager and Stewart Dyer is European sales manager having joined in 2017 after 17 years at QuadTech.

In 2012 Rollem moved into a new 2,000sqm factory in Tankersley, just south of Barnsley and north of Sheffield, handily close to the M1. Murphy says "We have manufacturing capability including machine shop, welding bay, paint booth, stores for parts and spares, assembly area."

All manufacturing is done on-site he says. "Our skilled engineers design the bespoke systems, our service engineers also visit customer sites to install the equipment, providing operator training and then ongoing maintenance."

When looking to recruit, Murphy says that Rollem looks for "Electrical engineers, mechanical engineers, design engineers, engineering graduates, time-served skilled fabricators, machinists and fitters." These people are backed by staff in admin roles, including business management, production management, purchasing, sales and accounts.

"Rollem machines are assembled and tested in our factory. Often the customer will come to the factory to see the machine running before shipping," says Murphy. "Our engineers will then go out to the customer site with the system to install, commission and provide operator training."

> *"Innovation, integration and automation are becoming more important, and customers are increasingly looking to combine processes"* **Stuart Murphy**

Nameless versatility

The company makes modular finishing systems that run either offline or inline with printing presses. These can carry out a range of actions including feed, slit, cut, punch-perforate, microperforate, trim, stack, collate, round-corner, punch-cut and wrap.

Its systems can be customised to be bespoke for every customer, with potential for variations in sheet size, thickness of paper stock, speed as well as functional modules. For this reason Rollem has largely abandoned the use of names for particular product lines in the past 18 months and prefers to configure and sell sets of functional modules as appropriate to each customer's size, speed and functionality requirements.

Systems with rotary wheels for trimming, slitting, perforating and creasing in one pass can be highly efficient alternatives to guillotines for all sorts of work. The ability to

ROLLEM
Some of the team (top) and the factory floor

handle gutters of as little as 1.6mm between cards means that you can get 25 business cards from an SRA3 sheet instead of just 16 with the wider gutters needed for guillotining.

Digitally printed photobooks are another example, where Rollem's systems can cope with different numbers of pages per book, keeping track of the sets with built-in barcode readers and offset-stacking them for easy separation in subsequent binding processes.

For handling a lot of cards at once, Rollem's AutoPunch module can punch a whole stack or deck in one operation, with round corners if needed. It handles paper, card or plastic up to 150x100mm at 40 decks per minute. It's used for playing cards where it offers 'casino' tolerances of 0.001in (0.0254mm). It's also suited to business card finishing lines, though they go to different customers with different configuration needs. A separate round-cornering module is available if you don't use the punch.

Playing its cards right

The company is particularly strong in the playing and trading card market, thanks in part to those exceptionally tight tolerances. A Rollem card finishing line with integral AutoPunch can start with printed sheets ranging from SRA3 up to B1 formats. It can feed up to 1,000sph, autocollate, slit, remove blanks, punch, collect and wrap (using Marden Edwards wrapping technology).

All the major playing card manufacturers in the US have systems supplied by Rollem, which reckons that 90% of the cards used in Las Vegas are made on its machines. Game cards too: if you've played Monopoly, Trivial Pursuit or Cranium, those cards were finished on Rollem kit.

Trading cards, usually offered as swappable collectibles, are also big business today. All official Pokémon trading cards are finished on Rollem kit, indeed the use of Rollem is stipulated in the licensing terms.

Export markets

The largest export market is the US, where Rollem International was set up in 1963. Today it's based in Anaheim, California, with offices in New York, Florida, and Illinois. Rollem International has designed its own rotary die-cutter range, called Insignia, which is so far only sold on the US market.

STAR PRODUCT

The Slipstream MK II is a turnkey high-speed card slitting and collating system that converts printed sheets into finished products, eliminating multiple steps used in the past.

"In the last couple of years, we have been pushing hard to increase sales in other regions, especially Europe," says Murphy. "This has been highly successful, and we are seeing increased interest in our products from many new markets other than the US. We have recently sold large lines to Indonesia, Russia, Malaysia, Japan, Poland, Italy and Algeria, as well as our more established customer base in the USA."

"Innovation, integration and automation are becoming more important, and customers are increasingly looking to combine processes to improve capacity and productivity," Murphy explains. "We are in the process of updating our entire machine control systems and drive technology to make integration easier, with increased reliability and flexibility. Servicing and support are available remotely over the internet, and machines can be interrogated, diagnosed and even upgraded from our UK headquarters, potentially saving travel costs and time.

"We work with upstream and downstream equipment suppliers to provide vertically integrated lines, which operate seamlessly through single user interfaces. Product is automatically processed and transferred from one operation to the next without any additional handling or accumulation, to reduce delays, lower costs and eliminate work in progress.

Among these integration partners is Xerox, which sells a Rollem-built inline/nearline finishing system called JetSlit, while last year Konica Minolta announced a finishing solution for its B2 AccurioJet KM-1 inkjet press, with a new automatic bridge developed by Rollem that directs sheets to inline or nearline units. An electronic link synchronises start/stop commands for press and finishers. HP Indigo presses can also be run inline with Rollem finishers.

Still going strong

What Murphy calls the "Rollem benchmark machine," the SlipStream, was "redesigned for the 21st century" and launched as the SlipStream II at Ipex 2014. This one has kept its name as it's so well known in the customer base. It's a modular finishing system for paper or card, combining functions such as feeding, rotary slitting and perforation, round-cornering, punching and either stacking or inline wrapping.

Many decades of production means that there are Rollem machines of all ages still operating around the industry, especially SlipStreams. "Many original examples are still in use after almost 40 years," Murphy says. "I recently came across a couple from the early 1980s. If anyone has any of the early machines, we would be delighted to hear from them."

Rollem recently introduced a refurbishment service for older SlipStreams, with one of the first to go through being a 1989 model. This brings the original machines up to the current Slipstream II standard with new or refurbished parts as required.

"We supply a range of spares and consumables for all the Rollem equipment both still in production and legacy machines, including consumables," Murphy says. "I recently had an enquiry from someone for some help on a machine dating from 1959. Could we run a competition to find the oldest Rollem machines out there? We could offer a prize for the oldest – send us a photograph of the serial number plate as an entry. The oldest SlipStream would get a special prize!" P