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STAMPER

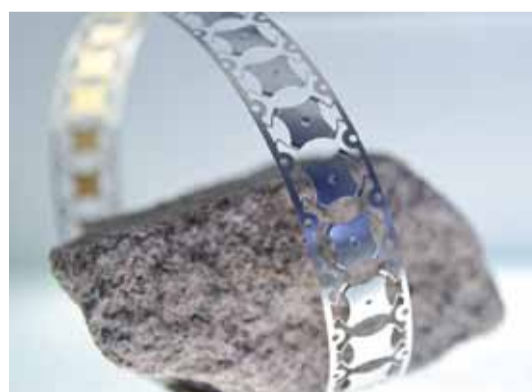
The magazine for high-performance punching technology



See you at EuroBLECH 2012

BRUDERER will be presenting its newly-developed BPG 22 planetary gearbox at EuroBLECH. This technology enables the high-performance BSTA 510 punching press to also be used for testing and running in tools.

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Innovative solutions from KLEINER GmbH

The company from Pforzheim in Germany supplies demanding customers with innovative solutions and products while relying on stamping technology from BRUDERER's high-performance punching presses.

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BRUDERER precision for China

Using a BSTA 1600-117, BBV 450 feed and ARKU peripheral devices, Shanghai Mint – a subsidiary of the state-run China Bank Note Printing and Minting Corporation (CBPM) – stamps blanks for Chinese coins. The BRUDERER punching press is set up to ensure the ultimate in precision and increased production levels.

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Editorial



State of change

Just two years ago, the economy in general and the stamping industry in particular were in an upswing that started out slowly but which very quickly took on an incredible dynamic. Today the facts and indicators are already tending back towards a flattening, and these ups and downs and the permanent state of change have quite simply become part of our everyday lives – each and every one of us simply needs to approach this situation as openly and positively as possible.

Our market environment has undergone similar changes, in a very short space of time. Companies have been snapped up and whole business units have changed ownership. Some are being bolstered with new additional capital, others are having to shut down since their markets are rapidly declining. These certainly are turbulent times and – as always – a genuine calming of the storm is not in sight at the moment.

And how is BRUDERER coping with these troubled times? We are a solid family business with equally solid products and services. Customers know that we are a reliable partner as well as a one-stop shop for everything from providing new machines and replacement parts to retrofitting punching presses that have already put in years of service. The only surprises they will get are pleasant ones in the form of new developments such as the BRUDERER BPG 22 planetary gearbox, a world first which we were able to showcase to stamping professionals from around the world at our in-house exhibition in May. Its next appearance will be at this year's EuroBLECH in Hanover where it will be shown in combination with a BSTA 510-125.

In this second edition of Stamper for 2012, we will again be giving you various insights into the universe of our customers. The Shanghai Mint in China for example produces coins and houses a BRUDERER machine that stamps coin blanks. And while this is something that we ourselves are very familiar with, for the customer it was their first chance to get to know the unmistakable precision and reliability of our high-performance punching presses. We also feature two other long-term partners: KLEINER from Germany and BATTEN & ALLEN from the UK. Both of them have come to rely on our machines over a number of years now, and despite all the various ups and downs, these are the kind of relationships that remain. Happy reading,

Andreas Fischer, CEO

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Looking forward to the EuroBLECH 2012

With the stamping world assembling at the EuroBLECH in Hanover from 23 – 27 October 2012, this will give the BRUDERER stand the opportunity to showcase the new BPG 22 planetary gearbox. The switchable gear can be adjusted by hand which means that tools with low stroke rates can be tested and run in at the same time as regular stamping processes.

This world-first, which was unveiled at the BRUDERER in-house exhibition in Frasnacht, Switzerland in May, will be enjoying a second premiere in Hanover in front of a larger public. The main features of the BPG 22 are the hand-held controls which enable the frequency of the ram to be adjusted manually and at variable speeds down to one stroke per minute – a function which will open up new horizons in terms of tool-making.
 Come and see us in **Halle 27, Stand G42.**



The newly-developed BRUDERER BPG 22 planetary gearbox fitted onto a BSTA 510-125.



The ideal meeting-place: BRUDERER at the EuroBLECH 2012

New head of BRUDERER customer services



Lukas Rohner was named head of BRUDERER customer services in Frasnacht on 1 May 2012. He and his team of 20 employees are responsible for installation and commissioning, replacement parts and training courses as well as servicing in Switzerland and abroad.

Rohner is a trained mechanic who, early in his career, worked for many years around the world as a commissioning engineer and head of training, enabling him to get plenty of hands-on servicing experience. He then carried out further training to widen his scope, obtaining diplomas in electrical engineering and business administration. His most recent post, which he occupied with an internationally-renowned Swiss manufacturer of milling machines and machining centres, was as product manager customer support.

38-year-old Rohner is married and has a young daughter. And when he is out of the office and needs the help of a customer services department, he expects expert advice and reliability first and foremost – customer services should always be serving clients in the best way possible with their satisfaction being the ultimate aim, he believes.

He also knows that he has a well-qualified team that he can count on, and is looking forward to new challenges with BRUDERER. "Being in charge of the customer services department of such a renowned manufacturer is setting the bar high, and that's just what I like," says Rohner.

www.bruderer-presses.com

BRUDERER at trade shows 2012/213			
TATEF	Turkey	02.10. – 07.10.2012	
Vienna-Tec	Austria	09.10. – 12.10.2012	
EuroBLECH	Germany	23.10. – 27.10.2012	
FABTECH	USA	12.11. – 14.11.2012	
DMP	China	14.11. – 17.11.2012	
Southern Manufacturing	UK	13.02. – 14.02.2013	
MTA Asia	Singapore	09.04. – 12.04.2013	
Kongress Stanztechnik	Germany	15.04. – 16.04.2013	
BLECH India	India	17.04. – 20.04.2013	
CANNEX	USA	01.05. – 03.05.2013	
BLECH China	China	14.05. – 16.05.2013	
Asia Mold	China	September 2013	

KLEINER GMBH – Thinking in terms of solutions

Innovation, ultra-modern technologies and highly-motivated expert employees are the recipe for the healthy growth that KLEINER GmbH company has continually achieved. Part of this success is also down to strategic partnerships with customers and suppliers, and since the early 1990s, the Pforzheim-based company in Germany has been relying for its stamping technology and toolmaking on Swiss-made BRUDERER punching presses.



Joachim Kleiner, managing partner of the company

In 2011 alone, KLEINER increased its machine park by 18 machines, eight of them BSTA 510-125 high-performance punching presses and one even including the new BRUDERER BPG 22 planetary gearbox. The reason behind this investment was the significant demand for stamped products among strategic customers. The company's Eisingen factory has no fewer than eight punching presses which make around a billion electrical contacts each year via single-stage three-shift production. This enables two strips to be stamped at the same time – one of them for the base body, the other for the oversprings – and then assembled in the tool to make one part. The bands worked on can range from 11 to 30 mm in width, with thicknesses between 0.12 and 0.3 mm.



KLEINER's headquarters in Pforzheim, Germany

Demanding customers

Orders like these come from customers who are highly demanding when it comes to the punched parts to be manufactured, the tool used and the suppliers involved. And in KLEINER GmbH, they have partner who can meet these requirements to the letter with their products and services. The firm has everything in-house required to produce and deliver top products, namely highly-motivated and qualified employees and ultra-modern manufacturing and measuring technology.

Regardless of whether customers already have a precise idea of what they need or if they are still in the development phase, KLEINER can find the right contact person to implement their project with the required quality, within the agreed timeframe and at competitive prices. Part of the company's success can be attributed to strategic partnerships, both with customers, with targeted investments

providing the necessary basis, and also with suppliers, enabling them to offer customers complete solutions and to sustain the strong growth levels. Joachim Kleiner, who along with his brother Thomas is a managing partner of the company, is convinced that this kind of collaboration is the only way for the segment that their firm operates in to produce high-quality products.

Healthy growth

Joachim and Thomas Kleiner, both master tool-makers, founded the company in 1985 as a two-man business just outside Pforzheim in the south German village of Königsbach-Stein. Once the first stamping orders started coming they soon needed to move to bigger premises. 1998 saw them take up residence in what is now factory number 2 in Eisingen, and since 2008 the family business has been headquartered in Pforzheim in a modern new building stretching over some 12,000 square metres with easy access to the motorway, meaning that "nobody gets past us, quite literally", as Joachim proudly states. The brothers have continued to develop the company over the years, setting up a research and development department and investing in the component assembly sector. In organisational terms, the firm is divided into three strategic business groups: stamping technology, tool technology and development & components.

KLEINER GmbH has around 300 employees and an annual turnover of 42 million euros. The company punches over two billion parts per year and manufactures around 50 follow-on composite tools. Their customers come primarily from the automotive industry, with plenty of reputable companies including some from Tier 1, from the electrical engineering and electronics sector, and from medical, plastics and renewable energy technology. The majority of production is for German-speaking countries with other markets including Asia, Eastern Europe and the Americas. Joachim and Thomas Kleiner have also prioritised training both for future employees and for the continued development of those already on the company's books. They currently have 40 young people who are training on-the-job in manual and commercial positions, and consistently provide further training for their staff based on strategic, operational and individual needs.

Innovative products

As well as complex punching tools, the company also produces high-quality micro-punched parts, snap domes and stamping grids which are steadily replacing classic circuit boards in a number of applications. Snap domes, which are used in a wide variety of keyboards and switches, represent a relatively new venture and one in which the company has been able to showcase its creative talents by



Snap domes coated with spot gold

manufacturing a snap dome with spot gold. A new technique was developed in close collaboration with a strategic electroplating partner to use this precious metal in a targeted way in areas where it is a technical necessity. It provides real cost savings, particularly with the price of raw materials being so high at the moment. These high-quality snap domes have become a strategic product with growth potential for KLEINER, and the development department is constantly looking for new implementations for this promising innovation, with the firm investing in tools, measuring methods and electroplating.

KLEINER has its own research and development team of around ten employees. They carry out market analyses and get involved in sector-specific clusters and research projects which give rise to new developments and innovations that can be patented, all of which help to maintain the firm's leading position. They also receive important indicators from their work in conjunction with technical universities and other establishments such as the Fraunhofer Institut. In the future, KLEINER is anticipating growing demand in the electromobility sector and also for punched parts for high-current power supply and contacting. There is also a definite trend towards ever smaller and more complex parts capable of even greater performance.

Stamping technology – KLEINER'S core competency

Stamping technology is at the heart of the KLEINER GmbH company. They stamp copper, brass, steel, aluminium and precious metals on a three-shift basis to bandwidths of up to 320 millimetres and thicknesses of 0.06 to 4 millimetres. They are capable of assuring both pre-production and serial production at speeds of anything between 30 and 1,200 strokes per minute. The company has 40 machines with press capacities of up to 250 tonnes, three-quarters of them being BRUDERER fully-automated punching presses. Joachim Kleiner favours them for their reliability and precision, particularly since the company often has to deal with tight deadlines and close tolerances – two areas in which the Swiss-manufactured machines really show their class. KLEINER also value human resources just as highly as technical ones and their qualified professionals are another key reason behind the leading position that they have acquired in their sector. These factors combined mean that the company has plenty of scope for developing its growth and its stamping technology.

www.kleiner-gmbh.de

Ultra-modern technology for innovative products in the stamping shop



Serving the world's biggest population, with the help of the BSTA 1600-117

When a company is producing coins for a population of over a billion, they need the ultimate in efficiency and productivity. This is why the Shanghai Mint has chosen to rely on BRUDERER state-of-the-art technology.



Shanghai Mint – one of three official mints in China

Coins have been minted in Shanghai – a city which is home to a seaport that opened China up to trade with the western world back in the 19th century – for around 100 years now. The Chinese government commissioned architect Clifford Hewitt to design a neoclassical building in the same style as the US Mint in Philadelphia, and in 1933 the first coins were struck and put into circulation.

With over 1.3 billion people living in China, one mint alone could not cope with the production of the entire country's coinage. There are therefore three mints around China, located in Nanjing, Shenyang and Shanghai, which provide the country not only with its currency but also with special coins for collectors

Three billion coins per year

The Shanghai Mint now has a staff of around 1,400 employees, producing around three billion coins per year. They also make the blanks required to mint the coins – several billions of them every year.

It also produces collectors' coins using all kinds of metals and alloys at a rate of around 50 million. Some two million ounces (over 6,000 kilograms) of gold and over eight million ounces (25,000 kilograms) of silver were used for this purpose in the last quarter of the 20th century. Nowadays one million ounces (3,000 kilograms) per year of precious metals are used purely for the production of gold and silver bullion coins.

Increased output thanks to BRUDERER precision

With that kind of output, you need the best high-performance punching presses in the business, so the Shanghai Mint turned to BRUDERER, specifically to stamp its coin blanks, to a thickness of 1.35 mm. This was the first time that the Swiss company had delivered a press for coin-stamping to a Chinese customer, although it had provided various mints around the world with individual high-performance punching presses in the past.

The first trials were carried out in April 2011 in the company's Frasnacht headquarters, and once the BRUDERER high-performance punching press had been set up in China it soon began to fulfil the Shanghai Mint's requirements in terms of coin blanking. The team using the press derives

enormous benefits from the transverse crankshaft concept supported by multi-row high-precision roller bearings – a concept which has been specially produced in-house by BRUDERER. Its tried and trusted design principle provides outstanding accuracy, high performance, an extended machine life and the reliability on which the Swiss manufacturer has built its reputation.

The ram guidance system takes place at the strip feed level and any deflection caused by off-centre loads is contained by a series of plain bearings at the four corners of the machine guide columns ensuring enhanced tool life between regrinding. These bearings also adjust to changes in thermal variations of the machine.

The perfect combination

The Shanghai Mint uses a BSTA 1600-117 with a B2 control system and a tool loading area of 1170 millimetres. It features an ARKU unit which provides the desired strip track effects by up-coiling and straightening the strip and then de-coiling the remaining strip on a reel after the stamping process to be disposed of. It is a 160-ton machine, thus providing the necessary press capacity, and since the customer was looking to ensure the maximum in terms of system security, it is also fitted with a BBV 450 with motorised feed pitch adjustment.

The machine has a highly impressive operating speed of up to 825 strokes per minute. The Mint is currently operating the BSTA 1600-117 at 600 strokes per minute, which has enabled an increase in output. Overall, the machine offers reduced tool-wear and greater precision throughout the process and in the end result.

The BSTA 1600-117 is also capable of working at higher speeds with a stable punching force. This is due to the fact that it has unique bottom dead point control (BDC) of +/- 0.005 mm, which offers far more precision than any of its competitors. The press has a stable production process and provides high levels of process security.

Building on generations of skills with R&D

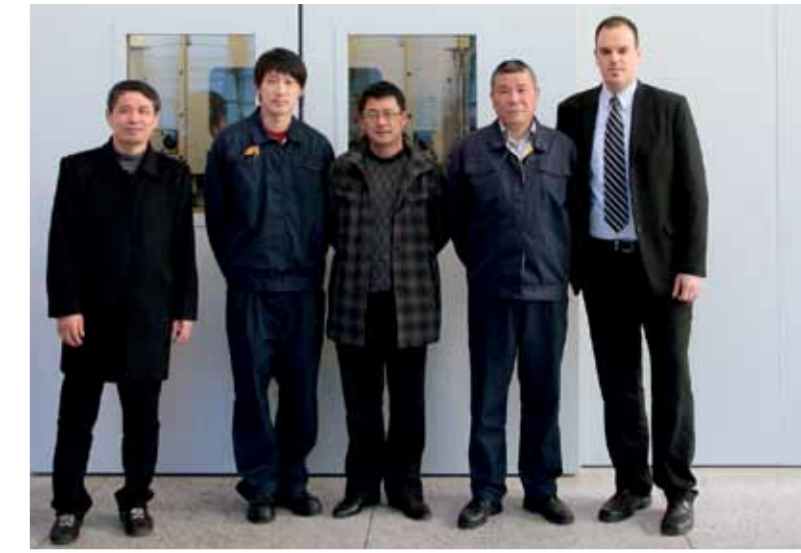
Since the beginning of the new millennium, the Shanghai Mint has changed its focus. The basic minting skills had been passed down from generation to generation, but now its attention has primarily turned to research and develop-



The BSTA 1600-117 produces coin blanks with the utmost precision and efficiency behind the doors of the sound-proof cabin.



The strip remaining after the punching process is fed onto the reel using an ARKU re-winder.



The project team made up of specialists from Shanghai Mint, BRUDERER (left) and ARKU (right).

ment, and in particular technical innovation. In 2005, the Mint built a technical centre to provide five main functions, namely science and technology management, technical development, craft management, environmental management and scientific testing.

The Shanghai Mint has thus transformed itself into a modern key minting enterprise with strong productivity, high skill and quality levels and a strong economic basis, thanks in no small part to the support which the government has afforded it. In 2008, it adopted what is known in China as the "modern enterprise system" whereby former state-owned enterprises gain more independence. The company was renamed "Shanghai Mint Co., Ltd" and has implemented a sound management system adapted to an open market economy.

This focus on progress has seen the Mint garner a whole host of awards over the years, primarily from the People's Bank of China. In 2001, it won prizes for the development of rim lettering and for the etching process on a silver blank surface. The success continued throughout the following years with more awards, in categories as diverse as coining without acid cleaning and proof coin surface protection.

Quality of service from BRUDERER Machinery (Suzhou)

With all of the changes that research and development and constant updating of technology requires, the Shanghai Mint was also looking for a supplier which could look after the complete production line, and BRUDERER was more than happy to comply, with Xueliang Yu, Sales Manager Asia stepping in as project manager. Having a complete automatic packing line significantly reduces the labour intensity required meaning that staff can be streamlined and productivity increased, whilst also contributing to greater employee safety.

The ideal combination of the BRUDERER high-performance punching press and ARKU's winding technology ensures the ultimate in productivity.

This is all part of the excellent service which the Swiss manufacturer is able to provide, courtesy of BRUDERER Machinery (Suzhou). With over 800 BRUDERER punching presses operating in China, the company decided to open up a new competence centre in the country in April 2005. As well as important pre-sales and after-sales activities, the centre carries out machine overhauls and stamping trials.

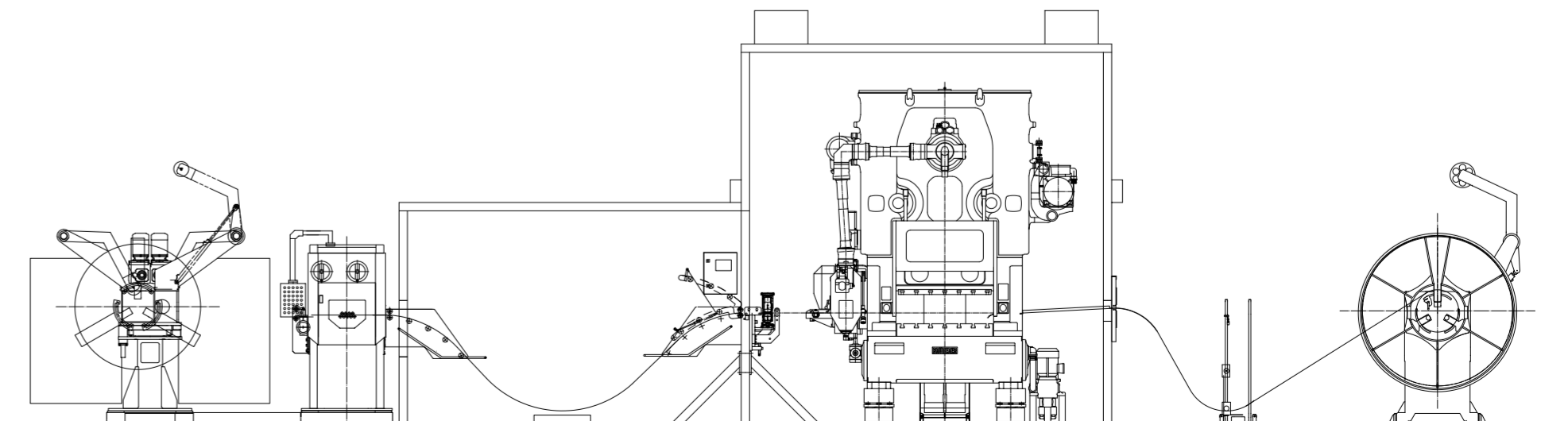
BRUDERER Machinery (Suzhou) has total of 20 employees on-site with nine working as service engineers (six mechanical and three electrical), most of whom were trained by BRUDERER's Switzerland or Singapore-based technical experts and who have been working for the centre of competence for at least four years already. They also keep around 1,000 different spare parts in stock for normal repair use, some of which are components that are specific to the Shanghai mint. Their speciality is quick responses, with a service engineer usually able to arrive at a customer's site within two-to-four hours for service call. The BRUDERER Machinery (Suzhou) service team is also incredibly flexible and can work with customers either during normal working hours, overnight or even at weekends, in order to provide companies with the ultimate in support.

With the Shanghai Mint setting such store by progress and research, they will be working in close collaboration in the future with BRUDERER, particularly in terms of the next development steps for the minting sector. As a customer, the Mint is delighted to be able to have such a good working relationship with a supplier. Knowing that they can rely on a trusted partner is invaluable in terms of developing new technology and improving overall product quality.

The Shanghai Mint is a subsidiary of the China Bank Note Printing and Minting Corporation. While its major activities are the minting and melting circulation and commemorative coins, it also produces commemorative medals and similar products for government institutions and businesses.

Timeline

- 1920** The Shanghai Mint is established in Shanghai, China.
- 1928** The Shanghai Mint is renamed as the Central Mint of China (CMC), operating under the aegis of the Ministry of Finance. The plant and the equipment used made it the most advanced mint in China at that time.
- 1933** The CMC officially starts minting silver circulation coins and silver bars. This coincides with the reform of the monetary system, with the abolition of the liang and the adoption of the yuan as part of the unification of the country's currency.
- 1935** The mint starts the manufacturing of copper and nickel coins.
- 1937** Outbreak of the second Sino-Japanese war. The CMC follows the Kuomintang government and moves to safety, opening several branches in elsewhere around the country. All branches are closed after the war.
- 1946** The CMC moves back to Shanghai.
- 1949** The new government takes over the Shanghai Mint.
- 1955** The CMC mints the first set of renminbi coins.
- 1982** Manufacturing of investment coins begins. Panda gold and silver coins with different panda designs are produced every year, followed by the introduction of the panda bullion coin (struck from precious metal and kept as a store of value), which becomes one of the five most famous investment coins in the world.
- 1983** Panda gold and silver coins are awarded "Best Gold Coin" and "Best Silver Coin" at the Coin of the Year (COTY) awards.
- 2008** Shanghai Mint is renamed "Shanghai Mint Co., Ltd.", and recommences production of gold bars at the same time.
- 2011** The Mint begins to use BRUDERER fully automated punching presses for the first time.



Pressworking productivity doubled

The generous working area and power of a new BRUDERER BSTA 510-125 high-speed press with twin servo feeds installed in April 2011 at the Cirencester factory of BATTEN & ALLEN is proving particularly versatile for the precision stamping specialist. It can accommodate two tools, side-by-side or in-line.



The two die sets mounted in-line (right for blanking and left for forming) allow to produce earthing strips from coil in one continuous operation.

The 1,250 mm length of the machine's bolster plate allows room for two large progression dies to be mounted in-line for manufacturing complex components in one continuous operation. Alternatively, there is sufficient bed width for two tools to be mounted side-by-side and fed with separate coils. In both cases, production output is doubled.

Furthermore, punching capacity of 51 tons, which provides sufficient power for two tools to be used simultaneously, also enables heavier pressworking of automotive and other parts if one tool is used, expanding the range of industries that BATTEN & ALLEN can serve. Stamping speed is up to 1,050 strokes per minute, slower than the lighter duty presses on site but still an impressive 17.5 hits per second.

A 50-ton BRUDERER long-bed press, BATTEN & ALLEN's first of that size, was installed at Cirencester in 2006. It has been employed continually to fulfil a long-running contract to make throttle components for a supplier to Fiat cars. Tools for producing electronic components have been routinely transferred from 20-ton and 25-ton presses on site to the larger machine to utilise its capacity.

BATTEN & ALLEN then won additional work from a US competitor for producing 50 million ear-ring clasps annually, which surprisingly also requires the higher power of a 50-ton press.

More recently, two further contracts were awarded for producing fly-by-wire throttle system components destined for motor cycles and golf buggies. These parts also need heavier pressworking capability, so managing director Shawn Batten took the decision to install the BSTA 510-125 to provide additional capacity as well as back-up for the first 50-ton press.

However this time, after an in-depth discussion with BRUDERER UK's managing director, Adrian Haller on BATTEN & ALLEN's continued plans for consistent investment, he opted for a package that is substantially different from the original 50-ton machine.

Twin BRUDERER BSV 75 servo feeds feed separate coils simultaneously through two tools side by side.

Servo feeds provides extra accuracy and productivity

Apart from having slightly higher tonnage, the press is fitted with a bolster plate that is extended by 150 mm to 1,250 mm, providing extra room for a longer progression tool, or two tools in-line. Bolster width is the same at 650 mm and to take advantage of the wide bed, the option of using two die sets side-by-side was created by specifying twin BRUDERER BSV 75 servo feed units to push two strips up to 75 mm wide through the dies in parallel. Alternatively they will accept one wide strip. Both the upper and lower feed rollers are driven so that pressure is transmitted evenly to the strip.

Servo feed technology was not new to BATTEN & ALLEN, as it ordered a similar unit with a BSTA 300-85 press bought at the end of 2007. Maintenance manager at Cirencester, Alan Gilbert, commented: "Accuracy of feeding is around plus or minus one thousandth of the pitch length, much the same as for mechanical roll or gripper feeds."

The servo technology provides significantly better possibilities in terms of control as it can be programmed to optimise the intermediate ventilation and the feed angle.



Shawn Batten (right) in front of the new BSTA 510-125 high-speed press

A soft start gradually advances the strip for greater feed length accuracy, with or without pilot release, while the facility to control material advance independently of the machine stroke is particularly beneficial if there is a lot of forming, or if parts are delicate.

Moreover, unlike with mechanical feeding, pitch length using a servo is infinitely variable and without limit, and is quickly set at the B-Control system on the press, as is material thickness and all other parameters for the job. The entire program can be saved for immediate reuse next time.

Overall, Alan Gilbert said that the first BSV unit has been very reliable and accurate and has led to higher production rates. He also suggests that its ease of use has resulted in a reduction of 10 to 15 minutes in set-up time per job.

Shawn Batten confirmed that mechanically driven roll feeds are still good for a majority of stamping work. Nevertheless, with the trend towards ever greater accuracy and complexity of parts, underpinned by statistical process control requirements and PPAP (production part approval process) in the automotive sector, servo feed technology is likely to be the norm for future press installations at BATTEN & ALLEN.



Up until now, the tin-plated copper earthing strips had been produced on smaller machines.

Since the installation of two presses with servo feeds, BATTEN & ALLEN has been awarded a contract for stamping foil that is 11 microns thick and 65 millimetres wide. The process has now been perfected and BATTEN & ALLEN are investigating potential new applications for this ultra-fine stamping.

First applications for the BSTA 510-125

The first job put on the new BRUDERER press did not utilise its twin servo feeds, but exploited the long bed to accommodate two existing tools in series that were previously used on separate 25-ton presses. Designed to produce tin-plated copper earthing strips for a telecommunications equipment manufacturer, one tool carries out the blanking while the other completes the subsequent forming. All operations are now performed in one continuous process in the 51-ton press.

Shawn Batten continued, "This technique results in a substantial saving in unit manufacturing cost, not least through reduced labour content."

"The next job, for which we are currently making the tooling, is for producing 300 mm long by 7 mm wide process bars and will involve scrapless blanking of two 1 mm gauge aluminium strips simultaneously, side by side."

"Again, the low unit cost we were able to quote was instrumental in our winning this new business, which requires quantities of 70 million per year."

He added that a major benefit of parallel stamping is that, whilst the above job is new and will use a single tool to run the two strips through, future use of the press in this mode can utilise two existing, separate die sets from other presses to provide extra, high productivity stamping capacity for all components. Increasing use of multi-out progression tools, which can produce up to 28 components across the strip at each blow of the press, also assists in maximising output.

Within the carrier bar contract, there is a requirement for a second type, this time 237 mm long by 20 mm wide. It has been decided that the most cost-effective way to blank this component will be to feed a single strip through a tool on a 40-ton press from front to back.

In both carrier bar applications, despite operations being relatively simple, tolerances are very tight. Length must be within approx. 0.05 mm, flatness within approx. 0.05 mm, and twist over the length of the component less than 0.1 mm.

To save floor space occupied by twin decoilers and recoilers, a double-deck configuration will be installed rather than two separate units. Tool monitoring is being fitted to check for pitch accuracy and double thickness, as well as a vacuum sensor to detect floating slugs and strip lubrication to promote long tool life.

There are currently 23 Swiss-built BRUDERER presses on the Cirencester site installed in a temperature controlled, 'closed-door' environment, a concept which is important to customers in the medical sector. All machines have pallet decoilers and auto recoilers, as production is predominantly automated, reel-to-reel stamping.

PC-based control speeds changeover

The last 11 presses to be installed have been equipped with the BRUDERER's PC-based B-Control system, which facilitates exchanging a full set of modular tools in 20 minutes, three times faster than on earlier machines.

As data on each new tool is programmed into the B-control system, it is a simple matter during a repeat run to call up the number of the tool, bolt it onto the press and follow the on-screen prompts to load the program and make the initial and fine adjustments.

Operating under Windows NT, the B-control system uses easy-to-follow menus on the colour screen and provides process visualisation, press force measurement with tool protection, storage capacity for several hundred data sets including data not only on the tool but on the order and material as well, as well as control of the NC axes.

Accurate tools a necessity

In-house design and manufacture of tools at Cirencester is helped by on-going investment in Swiss CNC wire erosion machines and all the key areas of the company to make the dies more intricate and accurate.

Shawn Batten explains: "Our customers' components often stipulate forming tolerances as small as 25 microns. This requires complex tools and most of our competitors would struggle to hold such tolerances on blanked dimensions, let alone formed features."

"By making our tools in-house, we can control the relative positions of tool, stripper plate and die to within close tolerances and ensure that each set is manufactured to the highest quality."

"Good tools produce longer runs before they need re-furbishing, saving costs and maximising the up-time of the BRUDERER presses."

The company was founded by Alan Batten and Les Allen back in 1972, in a small garage in Swindon. One key point of the founders' philosophy was, and remains, close working relationships with existing and potential customers and partners. They purchased their first BRUDERER press in 1974 and the Swiss company has gone on to become a preferred supplier. Today, BATTEN & ALLEN have a total of 23 BRUDERER presses, ranging from 20 to 51-tonnes. BATTEN & ALLEN celebrated their 40th anniversary as well as their longstanding relationship with BRUDERER at

the latter's Open House in Frasnacht in May 2012.

At the end of the interview, Shawn Batten and Alan Gilbert agreed that BRUDERER presses have proved very reliable and capable over the years, with some models still working two shifts after 25 years. Support from BRUDERER UK was singled out for praise, and so too was the diagnostics package in the B-Control with modem link to the BRUDERER factory in Switzerland, which allows software issues to be dealt with immediately.

They also commended spares availability, saying it is possible to receive from the manufacturer the day following order any replacement part for presses dating back to the 1980s - and they always fit first time.

www.batten-allen.com

Celebrating the 40th anniversary of BATTEN & ALLEN at BRUDERER's Open House (left to right): Andy Fischer, Adrian Bruderer, Shawn Batten and Adrian Haller.





Guests galore at the BRUDERER in-house exhibition

Guests from Switzerland and abroad flocked to Frasnacht for the BRUDERER in-house exhibition from 7 – 11 May 2012. They were treated to a tour of the production and assembly areas and saw various high-performance punching presses and manufacturing equipment. The main attractions of the event were the new BRUDERER BPG 22 planetary gearbox and the well-attended expert presentations of this new development.

More than 600 visitors representing around 300 companies from 18 different companies took up the invitation to come to Frasnacht, including CEOs, heads of production and stamping departments, toolmakers, suppliers and also companies which give work contracts to BRUDERER.

The assembly room had a BSTA 510-125 with the BRUDERER BPG 22 planetary gearbox as well as other high-performance punching presses on show, some of them fitted with peripheral devices and in full working order. The BSTA 200-70 with a high-performance combination STEPPER stamping tool and SOPREM strip feeding, on which board-to-board connectors were punched at 2,000 strokes per minute at seven parts per stroke, was a particular hit amongst the visitors. The BSTA 280-88 with a high-performance ZETKA stamping tool and an SLE belt lubrication system also attracted a lot of attention, as did the BSTA 510-125 which had been equipped with tool and decoilers by SCHROEDER + BAUER.

There was also a 1996-built BSTA 400 which had been retrofitted for the in-house exhibition and brought up to the latest specification, showing

visitors how BRUDERER can completely overhaul old machines. There were also bigger machines on display, with a BSTA 1600-220 fitted with a long die-mounting area and a BRUDERER BSV 300 servo feed and a BSTA 2500-250 machine housing, with guests viewing from a special platform and getting an insight into the insides of the ram with its four supports.

The depth of manufacturing services which BRUDERER provides was showcased during the tour of the production department with its various different stations, workspaces and displays. The storage area also gave a clear indication of the great availability of replacement parts.

The event was rounded off with fine food and wine which trusted catering partners La Culina served the guests in a mini tented village which they had set up specially for the occasion.

BRUDERER's in-house exhibition demonstrated both the breadth of the high-performance punching press company's offer and the fact that they are a genuine one-stop shop.

www.bruderer-presses.com

