



STAMPER

MAGAZINE FOR HIGH PERFORMANCE STAMPING TECHNIQUE

■ IT'S AMAZING WHAT SOMETHING SO SMALL CAN ACHIEVE.

BSTA 200 is persuasive in terms of its unique economic price/performance ratio and jumps through all the hoops with regard to reliability, precision and productivity.

■ INNOVATIONS AROUND THE PRODUCTION PROCESS.

Interesting reports concerning solutions for process optimisation and strip lubrication systems with an integrated interface to the BRUDERER B-Control.

■ SAXONIA-FRANKE: SWABIAN QUALITIES MOVE INTO THE FAST LANE.

"Only an extraordinary level of commitment generates extraordinary performance" is the belief of the company founder, Jörg Franke, from Göppingen.

■ THE B-ESSENTIAL – SIMPLY INGENUOUS.

What is actually "essential" about the new machine control? Facts concerning the starting point, the background to the design, definition of functional scope and range of use.



Günter Kögel

Long-standing editor-in-chief of BLECH – the leading German language magazine for the sheet metalworking industry.

The Formula One in its Field

What Formula One is to motor sport, high-performance automatic stamping presses are to sheet metalworking: in speed, precision and advanced technology, both are thoroughbreds in their disciplines.

But the differences are massive. In Formula One speed is bought with a huge amount of effort and resources. The extreme speeds can only be achieved with outrageous fuel consumption, multiple refuelling stops and several sets of tyres for each race. And as far as endurance is concerned, the spirit of Colin Chapman continues to hover over the racetrack. Chapman was for many years the Chief Designer of Team Lotus, and under his regime Lotus was one of the most successful Formula One teams in the 1960s and 1970s.

For Chapman, who turned motor sport upside down every few years with completely new design concepts, a Formula One car was perfectly designed if it won the race and then fell apart shortly after reaching the finishing line. Anything else was viewed as over-engineered. But the lightweight construction that resulted from this philosophy also led to technical failures and accidents. Not without reason, the driver Graham Hill said: "If I saw a wheel overtaking me, then I knew that I was sitting in a Lotus!"

For high-performance automatic stamping presses it is a totally different world: the racing cars of the sheet metalworking circuit generate their high performance not just for a few hours, but over years and decades. And all this without a large, ever-present pit crew that changes the oil and introduces new equipment every half an hour.

On the contrary: most stamping presses work for most of their time without any human supervision or support whatsoever. Because, in contrast to Formula One, a peak performance that can only be maintained for a short time does not rate in this industry. What people want is rather a highly efficient, economical, and consistent operation that fulfils the most demanding requirements for process safety and security. Precision and reliability are more important than maximum speed. In motor sports a run of victories soon means that the one or two failures are quickly forgotten, but the customers in our industry require top quality with no defects - from the first to the last component.

Yours Günter Kögel

The waiting has been worthwhile: BSTA 200-60BE

Finally the new stamping press BSTA 200-60BE is launched and sets new standards in terms of technology and price vs. benefit ratio.

This machine will set new standards in the world of high performance stamping when it comes to perfect price and customer benefit ratio. The machine was designed with the manufacturers of small and precision parts in mind. Where small connectors, contacts or watch parts are produced, the tonnage required is not essential but the accuracy and the



process safety and all for reasonable costs. The pressure from Asia and Eastern Europe in this segment is so big and the possibility to reduce costs by higher degree of automation or higher output is not substantial, that BRUDERER is offering the BSTA 200-60BE in order to help reducing the costs and hence stay competitive. The standard machine is available in a fixed stroke version but for those customers who need more flexibility it is also offered with an adjustable stroke.

The new BRUDERER high performance stamping press of type BSTA 200-60BE combines precision mechanics, modern elec-

tronics and trendsetting innovations. The drive mechanism embodies traditional BRUDERER technology in its most advanced form. The heart of the machine is the short and rigid main shaft that is mounted in transverse direction. The power on the ram is transmitted by means of two connecting rods, the unique lever system and two push rods. In combination with the perfected mass balancing system the BSTA 200 guarantees unsurpassed life time, perfect precision and high rigidity. The hardened and ground spindles of the ram adjustment are mounted outside the power flow and hence allow a precise setting of the ram height during the punching process for most accurate parts.



The new machine that can be seen for the first time in Europe at the BLECHEXPO in Stuttgart, is also coming with the new BBV 180 type mechanical roller feed unit. This innovative roller feeder is equipped with the quick roller change system and other features to increase the efficiency like an automatic thickness adjustments among others.

The last feature of the new BSTA 200-60BE is the also newly developed machine control. On the big touch screen all relevant process data are visible and easily changeable without the need to go through a time consuming programming and retooling mode. Our goal to offer a control with less limitation and a high grade of freedom which our customers were used to have in the past is reached with the B-Essential.

Technical data		BSTA 200-60BE	BSTA 200-70BE
Press force	kN	200	200
Tool loading area L-R	mm	600	700
Speed min.	min ⁻¹	100	100
- Fixed stroke max.	min ⁻¹	2000	2000
- Adjustable stroke max.	min ⁻¹	1800	1800
Fixed stroke (standard)	mm	15	15
Fixed stroke (option)	mm	8, 25	8, 25
Adjustable stroke (option)	mm	8, 13, 16, 19, 25, 32, 38	8, 13, 16, 19, 25, 32, 38
Ram adjustment range	mm	40	40
Strip feed unit		standard: BBV 180 option: BSV 75, BSV 170, VGB 20, VGB 30	

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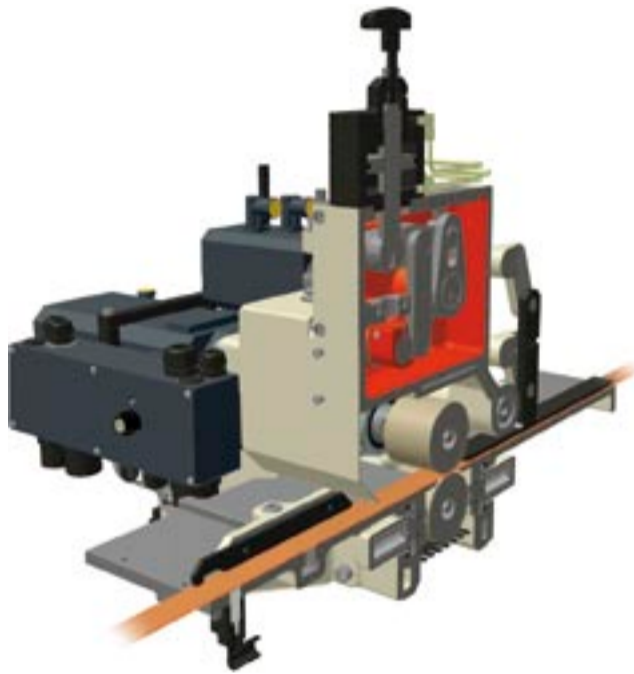
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Preview: Servo feeder BSV 300

After the smaller servo feeders BSV 75 and BSV 170 have successfully been introduced to the market, BRUDERER will launch the bigger BSV 300 in November 2007. This servo feeder has been designed to fulfil the demand of many of our customers which asked for a bigger version for machines with higher tonnages. We have therefore designed a feeder perfectly suitable for deep drawing applications as well as for parts with big bendings and stamping dies including assembly operations or thread forming where a bigger useful stroke is required.



Flexibility is the first priority for the BSV 300. Both the feed angle and the start for pilot release are variable and can be programmed according to the needs of the process. This feature allows optimizing the die and machine utilisation which will lead to an increase of productivity and reduction of costs.

The unique construction of the BRUDERER servo feeder allows a production without a clamping bar which guarantees an absolute minimum of stress on the material and hence does not leave marks even on sensitive surfaces. The feed rollers

can be exchanged very easy and very fast due to a special and unique design. This makes the feeder a perfect choice for stamping operations where pre-stamped and profiled strip material is used. The strip and feeder data are in the memory of the allocated die and will be adjusted automatically during the retooling from one die set to another.

This feeder is also available as a retrofit package on existing BSTA machines, no matter of the age and control version and can increase the performance of the existing stamping line big time.



Technical data		BSV 300
Pitch length		no mechanical limits
Strip width max.	mm	300
Strip thickness max.	mm	5
Roller width	mm	120
Pitch angle		variable
Lifting angle		start angle variable
Speed max.	min ⁻¹	1200
Attachable to		BSTA 2500 BSTA 1600 BSTA 1250 BSTA 800 BSTA 500

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New roller feeder BBV 180

There is also a new development from BRUDERER in the field of mechanical roller feeds. In the course of development of the BSTA 200-60BE a roller feed has also been developed to meet today's requirements. The result is the BBV 180, which stands out in terms of high performance, and also in its flexibility, ease of operation and "sensitivity".

The most prominent features on the new BBV 180 are the vertical drive and the modified mode of operation for (manual) settings of strip data. In other respects it looks quite similar externally to its predecessor, the BBV 190. However, in actual fact this similarity is limited to just the exterior.

Internally a great deal has altered and the new technical features aid the operator with easier adjustment of the pilot release and exchange of feed rollers. Adjustment of the strip thickness has disappeared entirely! As a result of the ingenious arrangement of components on the rocker arm the strip thickness adjusts itself automatically.

Not only has operability been improved, but the BBV 180 also has something to offer with regard to feed lengths and strip widths. It is now possible to feed material up to a width of 200 mm into the press and feed pitches up to 100 mm are possible.

At first the new BBV 180 will only be available on the BSTA 200, but in future it will be available for other types of machines also.

Technical data		BBV 180
Pitch length	mm	0-100
Strip width max.	mm	200
Strip thickness max.	mm	4
Roller width	mm	70
Pitch angle	°	180
Lifting angle		variable
Speed max.	min ⁻¹	2000

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Preview BLECHEXPO'07

Take part in the vibrant world of stamping and visit us at this year's BLECHEXPO in Stuttgart. The venue of the show, which takes part in the brand new halls of Messe Stuttgart, is the right frame for the first public appearance in Europe of the brand new BSTA 200-60BE. BRUDERER exhibits the new machine, the new BBV 180 roller feeder and the new B-Essential machine control integrated into a complete production line.

In the inviting and elegant stand layout which incorporates technical and colourful design we are going to present our latest invention. The new BSTA 200-60BE! This machine will set new standards in the world of high performance stamping when it comes to perfect price and customer benefit ratio. We are proud that we were able to sell 8 machines into the electronic and watch industry even before the first machine was delivered to the customer.

The machine forms the heart of an interesting stamping line which is displayed together with a high performance stamping tool from Stepper and peripheral equipment from SLE as well as Schröder + Bauer.

In co-operation with our competent colleagues and co-exhibitors, we offer you an interesting information platform all around the world of stamping and will be pleased to discuss with you the latest trends and technologies in control engineering. We will also be happy to advise you on individual questions in a pleasant atmosphere at our booth 5205 in hall 5.



www.bruderer-presses.com
www.blechexpo-messe.de

BRUDERER internal

Introducing Mr Andreas Fischer

In January 2007 Mr Andreas Fischer joined our company as deputy managing director, and next year will assume overall responsibility for BRUDERER AG.



Against this background he will be spending time in various areas of the organisation during his initial period of familiarisation. With the departure of Dr. Peter Wägli he has, since the end of February, studied the Asiatic markets intensively and concerned himself with our subsidiary companies resident in that region. In the second half of the year he will then turn to Europe and the USA.

Andreas Fischer (50) is a mechanical engineer and a graduate in business administration (MBA). In the past 15 years he has managed family companies internationally active in the technology sector, including a number of years in sales subsidiaries abroad. He is married, has three young children and lives with his family in nearby Erlen.

We extend a very warm welcome to Andreas Fischer and wish him much success and fulfilment with our company.

Adrian M. Bruderer

President of the board of BRUDERER Management-Holding AG

SAXONIA-FRANKE



Göppingen. The town of the Hohenstaufen dynasty of German princes that lies at the foot of the Swabian Alps has an excellent reputation far beyond the boundaries of the state of Baden-Württemberg. As the home of successful companies that bring together tradition and innovation, Göppingen has contributed much to ensure that Baden-Württemberg's slogan "We can do anything – apart from Standard German!" wins worldwide recognition.

Mink-Bürsten, Leder-Bader and Märklin are companies that should be mentioned at this point, but other Göppingen companies are also on track for success. When thinking of precision stamped and bent parts and injected moulded plastic parts, the name of Saxonia-Franke automatically comes to mind for any professional in the sector.

As a supplier to international automotive, electrical and construction industries, the company founded by Jörg Franke in 1981 has made a name for itself in an astonishingly short space of time as a specialist amongst specialists, and as an



indispensable associate of famous companies such as DaimlerChrysler, BMW, Audi, VW and Hilti. As a partner in design and development and a key innovator Saxonia-Franke works with the end customer towards an optimal product solution from the start of the manufacturing process.

One look at the company's portfolio of machinery underlines Jörg Franke's philosophy: "Perfect results can only be achieved with state-of-the-art technology." The company, which has been expanding steadily since 1987, sets store by proof of worth. The electro-erosion process department is a good example. None of the six Agie wire and die erosion machines used is yet three years old. "Staying ahead of the game in this field", is an urgent concern for Jörg Franke, who wishes to extract maximum utilisation from such advances in technology.

The collaboration with BRUDERER goes back to the year 1991. "Only an extraordinary level of commitment generates extraordinary performance" is the credo – and this is made particularly clear by an example: "In our portfolio we range from thin to

very thick materials, and from planishing applications through to parts featuring extreme bending and stamping. BRUDERER provide us with a perfect solution for our many variants. The car industry in particular does not tolerate any defects – but with the BRUDERER automatic punching presses we know that we have eliminated for once and for all such presses as a source of defects, and can concern ourselves exclusively with the process itself" explains Jörg Franke his decision to install the BSTA series of machines.



As a total package it makes sense. Alongside the step change in the quality of the machines and ancillary equipment the comprehensive support provided by the service staff is a further plus point that puts BRUDERER in the running for yet more challenging tasks. And the last chapter of this success story is without doubt not yet written.

Setting the pace for the company's resounding success is innovation and total commitment to the highest levels of quality. From design, via the production of the standard tools, through to the manufacture and finishing of parts – all activities take

place under one roof. The "one-stop shop" concept is making an impact and is opening up totally new perspectives. An air of expectancy can be detected in all parts of the site.

There is much to be done. Saxonia-Franke seizes the initiative.

Creation of new initiatives even in economically turbulent times – Jörg Franke sees this as his particular strength. A finely developed sensitivity to his customers' expectations may also be lending a strong impetus to his ideas. He sees the



current market situation and increasing levels of globalisation as providing potential opportunities and synergies for a company that is primarily active in Germany, and both Western and Eastern Europe. "Our team of 145 employees has been very steady for years. In the future we would like to carry this inner stability forward into our external relationships even more strongly than before", remarks the 5-times father and family man, who can now look back on almost three decades of experience in the sector.

In the Swiss factory in Matzingen 80 staff members are employed at the present time – and numbers are rising. On this

Swabian qualities move into the fast lane



site activities are focussed on the manufacture of fine stampings on Feintool fine blanking presses with a capacity of 100 to 800 tons, and also on module assembly. In the Slovenian factory in Trzic 60 staffers are currently employed. In the field of injection casting the company works particularly closely together with its Slovenian subsidiary in an active "internal market".

As a result of just-in-time manufacture and the resultant disappearance of stocks of spare parts many customers have a market need for such items. "We offer our customers the best

few years one daughter and one son will be standing alongside Jörg Franke on the bridge. One may be curious as to the course that Saxonia-Franke will adopt, but one thing is already certain: from this company one can confidently expect something big.



possible delivery times, even if it costs us something. We owe this to our customers", says Jörg Franke, commenting on a way of doing business that is not very common in this sector. Typical Saxonia-Franke. Here too new ways are being explored and the well-trodden paths are being abandoned.

In order to give young people similar opportunities in the future particular value is placed on training and further education. So, for example, two sheet metalworkers and two tool fitters are being trained each year. And the next generation of the Franke family is already on the starting blocks. In a



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VESTER Elektronik GmbH: Optimized processes from one source

In tough competition, the experience accumulated over decades and the extensive know-how of VESTER Elektronik GmbH concerning the "subject punching" provides decisive advantages with regard to quality, flexibility and economic efficiency. The network of well-known customers and partners from the world of punch-production is the reference for effective synergies in the optimization and supervision of punching processes, as well as for quality assurance.



The harmonized portfolio of effective components and complete system-technologies, as well as the distinctive efficiency in automation engineering – such as for example the efficient integration of digital image processing – provides conclusive patterns for the optimization and interlinking of production processes concerned with punching-, pressing- and injection-mold technology. Since the founding of the company in 1968, the distinctively innovative spirit and the confiding, open-minded communication, as well as the close cooperation with many customers has led to a whole pallet of sophisticated products relating to punching technology. Also to be included here is the long-standing cooperation with the company BRUDERER.

The consistent product- and corporate philosophy proved to be a guarantor for the clear growth of the company Vester Elektronik GmbH. Currently, about 65 highly qualified employees are providing a superb scope of know-how to master various disciplines. As a supplier of high-tech products, it is a matter of course for the enterprise, that the development and the production of products is performed utilizing the most modern technologies.



All core proficiencies of the enterprise are concentrated on over 3,500 m² in the new corporate building in Straubenhardt near Pforzheim. This concerns construction, the development of hard- and software, the application laboratory, sales and distribution, as well as the production facilities with their own profound vertical range of manufacture. The range of production includes visual sensors, process monitoring systems, minimum oil spraying systems for strip-oiling, quality control systems with integrated image processing, automatic testing- and sorting machinery, as well as the new laser marking system.

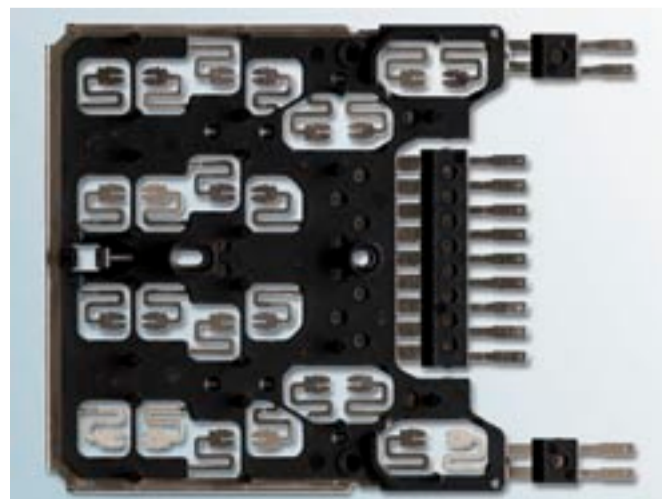
With sales-outlets in the North-west und East of Germany, Vester has re-enforced its well-defined customer service. For more than 15 years there has been a close partnership with the Swiss company Heinz Siegfried AG, the manufacturer of the process monitoring systems and the systems for minimum lubrication technology. The result of this firm partnership is the joint subsidiary, Siegfried & Vester France SAS, located in Barr. Further sales- and distribution partners within the EU round off the network. BRUDERER USA is the new distribution partner for the complete sensor-program in the United States.

The broad basis of discipline-specific experience and technological know-how was particularly supplemented within the last few years by developing the provision of services connected with the punching- and forming industries, such as for example job order / contract sorting with one-hundred-percent quality control. To be able to absolutely ensure a maximum level of precision and a streamlined production with an integrated one-hundred-percent quality control requires a whole chain of right decisions. An example of the complexity of such an objective and of the fitting solution is the testing of insulation displacement connections (IDC) with the testing cell VIDEOcheck VVC 600.



The IDC-components are checked with highest precision using four cameras with a resolution of 1400 x 1000 pixels, tele-centric lens systems, as well as tele-centric illumination.

The installation is reliably providing its service in multiple-shift operation. The 24 insulation displacement connections and the contour of the injection-molding are respectively examined with extreme precision for a whole series of characteristic features. Only qualitatively absolutely faultless parts will reach the final customer. A very high degree of reproducibility of the testing assignment is indispensable. The specifications of the automotive industry regarding the measuring equipment qualification stipulating a measuring precision of 2 μm are fulfilled. The complete component is checked by four high-

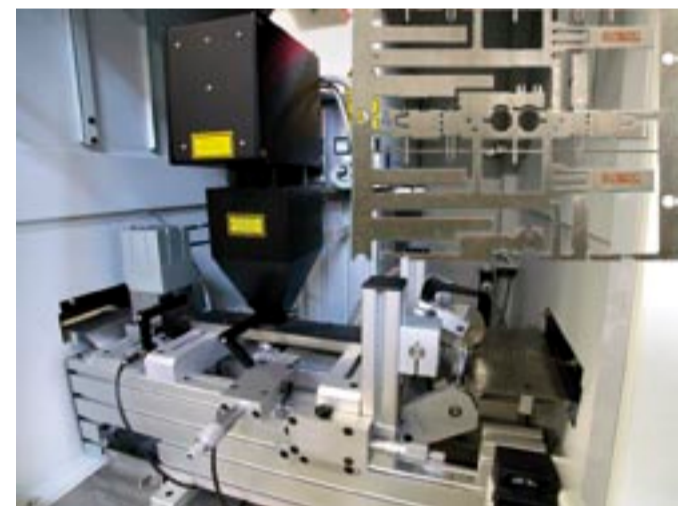


The respective 24 contacts, as well as the contour of the injection-molding are simultaneously examined with extreme precision for a whole series of characteristic features using image processing.

definition cameras with 1400 x 1000 pixels. Both, tele-centric lens systems and tele-centric illuminations are utilized for this testing assignment. The examination is carried out at production speed in real time. This demanding task required the harmonization of a whole number of minor details, also including issues regarding process- and measurement data analysis.

The demand for smooth process chains requires components in one hundred per cent quality, and the exclusion of any mix-up. Total traceability is the linchpin of modern production strategy. Product liability, certified quality assurance, economy, and customer satisfaction have a great strategic impact on the image of the enterprise.

The laser marking cell VLM 600 renders high marking precision at a simultaneously very large throughput. The marking of codes and also of small graphics (trademarks) is performed by applying the so-called "marking on the fly" - principle under continuous material feed-in, without stop- and start cycles in material conveyance. The special capacities of this system ensure a maximum degree of flexibility in production processes.



In the laser marking cell VLM 600, the individual parts are marked with codes very fast and extremely precise, applying the Direct-Part-Mark (DPM) method. Codes and trademarks are applied durably and counterfeit-proof.



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SLE electronic GmbH: Strip spraying systems BSS 5000 and BSS 7000 with communication interface to the BRUDERER B-Control

"In our opinion the fitter should be able to concentrate on the essential elements of the work process – setting up the punching tools – and should not spend his time adjusting the strip spraying systems!", so says Herbert Winter, head of surface technology at SLE electronic GmbH, when talking about the market introduction of a new generation of integrated strip spraying systems from the Bavarian high-tech company. "In advanced technology areas of production with high performance automatic punching presses, the ancillary equipment – such as strip sprayers – should have to receive close attention once and once only."



With the new control of the strip spraying systems provided by the B-Control on the BRUDERER automatic punching presses it is possible to regulate all the important parameters for the strip spraying system – such as oil quantity, nozzle activation and deactivation for selective oiling, and automatically to switch between types of oil. This means that if the punching

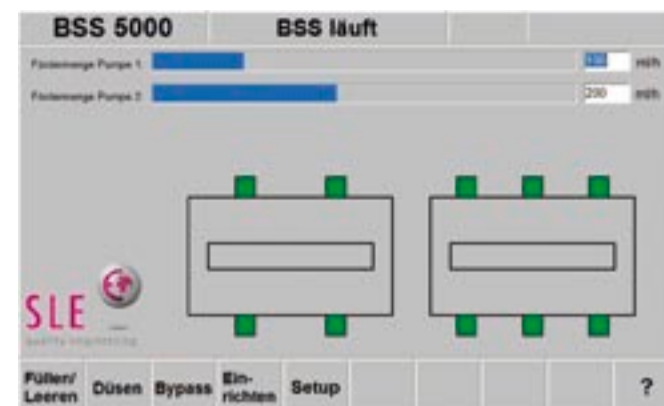
oil used must be changed at the same time as the changeover from one product to another, the system evacuates itself independently and fully automatically. If necessary a washing procedure is carried out using the cleaning agent, and then the changeover made to the new oil.

9 years after the market introduction of the BSS 6000 strip spraying systems it is now followed by the next generation BSS 5000 and BSS 7000 with an integrated interface to the BRUDERER B-Control, or available as a stand-alone version with touch panel. Operation of the BSS 5000 system (with



out oil mist extraction) can involve three different oils plus a cleaning agent. The BSS 7000 (with oil mist extraction) can accommodate two different oils plus a cleaning agent. The oil change procedure – including emptying, washing and refilling of the lines – operates in the background while the fitter busies himself with setting up the automatic punching presses.

Conversion to the BSS 5000 and BSS 7000 strip spraying system family guarantees optimal surface treatment: reduction of manufacturing costs, lowering of scrap rates, at the same time with an increase in productivity – and all this to the advantage of the environment!



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France and Switzerland stamping to the same beat

On the first of April a BRUDERER daughter company was formed near Paris under the name of BRUDERER Presses France S.A.R.L. (BPF). Following the retirement of our collaborative partner of many years the activities in this important market can therefore be pursued without interruption and directed towards the future.

With this step BRUDERER wishes to secure its current position in France and expand it further. It has taken over the business activity and the majority of the personnel from its independent agency and in this respect is continuing the successful partnership of many years.

We have been able to persuade Mrs Véra Chevillion to accept the position of Managing Director of BRUDERER Presses France S.A.R.L. This is an excellent start for the new company, since Mrs Chevillion has been working in a similar function in the previous agency for some years, is very familiar with the business functions, and has many years of general professional experience.

In Sales and Marketing Mr Gérard Kirsch is assuming responsibility for marketing the whole BRUDERER product range in France and will thus be the direct contact with all customers regarding new, overhauled and pre-owned machines. Mr Sacha von Graeve, who used to occupy that position, is leaving the company in order to take up a new challenge outside the BRUDERER group. Under the leadership of Mr Ilidio Costa the Customer Service team will look after the servicing and maintenance functions, and the supply of spare parts.

Of course the new subsidiary will want to provide its customers not only with good advice but also with excellent active support. Machine repairs will be carried out at the customer's site or in certain cases in the company's own workshop in Ecquevilly. Neither does the customer need to worry about procurement and availability of replacement parts, since the warehouse designed for this purpose will guarantee speedy responses, quick deliveries and a high level of operational efficiency.

Of course all communication between BRUDERER Presses France S.A.R.L. and BRUDERER AG in Frasnacht will be even better and will guarantee the highest quality of sales and service in France also.



Responsible for sales and customer service; from left to right: Véra Chevillion, Gérard Kirsch, Catherine Avelange, Michelle Roy, Ilidio Costa.

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News from the UK

New Managing Director for BRUDERER UK LTD.

With effect from 1st January 2007, Adrian Haller has been appointed Managing Director of BRUDERER UK LTD., Luton. Mr. Haller succeeds Bill Burrell, who has stepped down after 38 years with the company.

We would like to take the opportunity and thank Bill Burrell for the great job he has done and wish him a long and happy retirement!

Adrian Haller has been with our UK daughter company for some nine years, initially joining the sales team and progressing to run the sales and marketing department. He was promoted to Technical Director/Managing Director designate at the beginning of 2006 and now takes over full responsibility for BRUDERER UK LTD.

BRUDERER UK offer full turnkey production solutions to the UK Metal Forming Industry, and have several complementary sole agencies, inclusive of FIBRO (precision tooling components), P/A INDUSTRIES (servo feeds, coilers, and auto rewind systems), UNIDOR (press tool safety equipment), LEICHT (strip welding machines, & winding technology), plus SLE (in-line washing & lubrication machines), and HPM Technologies (press tool spraying systems), all of which are world class leaders in their respective sectors.

A comprehensive stock of pre-owned BRUDERER presses is also available from BRUDERER UK's Luton showroom.

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The B-Essential – simply ingenious

In the 2/06 issue of STAMPER we succeeded in making our readers curious about the coming generation of machine controls. The new control with the “B-Essential” designation will to begin with be available exclusively on the likewise new BSTA 200-60BE automatic stamping press. The objective was ease of operation and a reduced functional scope. The result has exceeded all expectations.

What’s special about this new machine control? What significance does the word “essential” have in this respect? Has the market been looking for a new solution in this sector, and what practical benefits will the new generation of control bring to the customer? Is the “B-Essential” a direct competitor to the B-Control?

A definition of “essential”

As is well known, this word can have a wide variety of meanings. In terms of the machine control it can be freely interpreted as “simple” or “ingenious”. Implementation from the idea through to the actual control has been simple – and thus - ingenious. Is it enough, however, to develop a “simple” machine control to survive in a world that is becoming ever more complex and technological? This is exactly the question that the BRUDERER “Essential” project has had to answer while looking to the future.

Starting point for the “Essential” project

At the start of the project there were 3 principal objectives: 1. simplicity of operation, 2. robust components to ensure high availability, and 3. reduction of costs compared with the B-Control. The design of the hardware is the key to availability. Thus, for example, there are no longer any rotating elements used in the cooling system and hard disc drive. In addition to standardisation of software and hardware the functional scope must be reduced and its definition anchored down if the cost objectives are to be achieved.

The greatest challenge for the project team was that of designing a new machine control that would still merit the term “simple” after it had been fully developed. Many interviews with customers around the world regarding their requirements for a simple to operate machine control have even complicated the exam question. Asia and Europe diverge in many respects and it is difficult to find a common denominator between them.



BSTA 200-60BE automated punching press in conjunction with the B-Essential control as a space-saving single cabinet solution 50 x 80 x 190 cm (W x D x H)

B-Essential: will it be competing with the B-Controller?

The B-Essential in no way represents a competitor from the same stable. In terms of technology there are a number of common features that are not to be discounted. However with regard to software and upgradeability/flexibility there are enormous differences to be discovered.

The familiar B-Control is the best solution for all customers setting high requirements on process safety and security and the integration of external equipment, and also wanting a high degree of automation. In contrast the functional scope of the B-Essential is clearly limited and has been deliberately restricted to what is absolutely essential. As has already been described above the new machine control is designed to satisfy customers who have simpler punching processes that only partially utilise the technical options of the familiar B-Controller. Nevertheless it is designed to satisfy the high demands on process safety and security, as well as outstanding accuracy of parts.

From the very extensive customer wish lists our designers have interpreted a solution that must combine the simplicity of the old H-Control with the latest technical achievements of the B-Control! We are dealing here, so to speak, with a genuine multitalent.

The result

The B-Essential is simple and intuitive to operate via a large touch screen. The small number of control functions on the control and the operating interfaces are arranged such that hardly any instruction of the operating personnel is required. Machine parameters can be optimised during production and directly stored in the memory; inputs have an immediate effect on the process. The machine can either be retooled in a manner familiar from the old H-Control or the tool data can be stored and an automatic tool changeover undertaken.

The fixed functional scope of the B-Essential fulfils all the essential demands on a modern controller. Optional process functions such as tool safety and monitoring, press force monitoring or analogue ram position monitoring complete the total package.

standardised machine functions include:

- ▶ stroke adjustment manual or fixed stroke
- ▶ manual feed length adjustment
- ▶ motorised ram height adjustment, with static and dynamic correction of the BDC during operation
- ▶ BBV 180/BSV/VGB feeds
- ▶ TDC stop with automatic correction
- ▶ energy control

standardised system functions include:

- ▶ choice of language, date/time
- ▶ data storage for tool/customer/machine
- ▶ variable retooling procedure
- ▶ information system, temperature monitoring

standardised process functions include:

- ▶ lubrication and blow out cams, parts counter
- ▶ programmable cams on terminal board
- ▶ socket for immediate stop function from external units
- ▶ peripheral control interfaces

optional process functions include:

- ▶ tool monitoring, press force monitoring
- ▶ analogue position monitoring
- ▶ ram height regulation with distance measurement in tool
- ▶ port for strip lubrication unit
- ▶ MDE/BDE hardware interface
- ▶ external start of the machine for continuous operation



The combination of the H-Control, still very much appreciated by customers, with the latest technology:

- touch screen
- external USB port behind screw closure
- emergency stop function
- main drive on/off
- operating mode selector switch set-up/production
- clutch engaged
- clutch disengaged

Reader survey STAMPER

Dear Reader

Your opinion is important to us. That is why in the autumn of last year we carried out a comprehensive reader survey for the STAMPER magazine. The response was excellent and the analysis of the information obtained is now available. At this point we would like to thank you very much indeed for the large amount of feedback submitted.

Is the magazine well received? Do you like the selection of topics? Does this medium fulfil your expectations? Do you have any recommendations for improvement with regard to format and readability? From your comments in the future we want to be able to answer these and similar questions to your full satisfaction.

The analysis has shown that on the whole the STAMPER is highly appreciated with regard to the contents and images, and that the approx 3'000 copies each in German and English are read with great interest as specialist information. In the coming issues of the STAMPER we will try hard to meet your wishes, often expressed, for more practically-oriented coverage. Our objective is “to be even closer to the mark”. We hope that you will enjoy the comprehensive coverage of interesting applications and production processes of our customers and partners.

Your BRUDERER Team

Preview STAMPER 2/07

- ▶ How does the BSTA 200 prove itself in practice? Customer statements to the new stamping press
- ▶ Preview of the StampingDays'07
- ▶ Retrofit solutions for servo feeders
- ▶ International BRUDERER news
- ▶ Next issue: beginning of September 07