

BRANKAMP systems in use at Schroeder + Bauer GmbH & Co. KG

## Safe Production. Better Products.

Highest quality plays an ever more important role in the automobile and electrical industry. This requirement is naturally also passed on to the supplier. Schroeder + Bauer GmbH & Co. KG successfully meets the challenges and produces approximately 80 million stampings per month in Baden-Württemberg. The medium-sized organization relies on quality control via Process Monitoring systems from BRANKAMP in the production of precision components.

About 120 qualified employees work in the fields of stamping technology and tool manufacturing at the headquarters in Neulingen-Bauschlott near Pforzheim. "We produce high-quality stampings for our clients from the automobile, industrial electronics and telecommunications branches," says Alexander Frank, head of stamping technology at Schroeder + Bauer. "For example, we make micro-stampings, crimp and surface contacts,

*Continued on page 2*



*Quality is trump  
at Schroeder + Bauer*



*A BRANKAMP CMS-System at a Doosan Puma 300L.*

### Innovation

## Process Safety for small lot sizes

A newly developed technology makes a 100 percent quality prognosis economically interesting even for processes with small lot sizes. The QSLR system developed at Fraunhofer QPI accesses the signal data of already-present tool sensors in order to map process fluctuations. The QSLR system was adapted to a deep-draw process at the project partner Hörnlein Umformtechnik GmbH. For this the BRANKAMP PK 6000 Process Monitoring system was integrated into the process. The sensors delivered information about unknown process states, for example material fluctuations. The QSLR system then drew a concrete quality conclusion in a second stage.

## News

### SAFE ALL AROUND WITH BRANKAMP

The trend moves towards complete installation: ever more companies rely on a complete protection of their machines via Process Monitoring systems. 12 additional companies equipped their complete machine outfit with BRANKAMP systems in 2008 alone. The innovative systems reliably and promptly detect disruptions in the production process. Expensive machine downtimes can thus be avoided.



### BOSCH RELIES ON BRANKAMP

The employees of the Bosch factory in Turkish Bursa have already produced 50 million high-quality common rail injectors for diesel injectors. In order to ensure the quality, in Turkey Bosch also relies on Process Monitoring systems by BRANKAMP. In Bursa, all multi-spindle machines from Schütte are equipped with process monitoring from Erkrath.

### ELECTRO-OFFENSIVE

Daimler plans multiple international electric car projects. In the next year, more than 100 electric cars will drive through Rome, Milan or Pisa. 100 Electro-Smarts have already been underway in London since July of 2007. The Munich competitor BMW likewise relies on electric cars: soon 50 Electro-Minis should be driving in Berlin, another 50 in Greater London and 500 in the USA.

### QUOTE OF THE MONTH:

**»Crisis is a productive state. You just have to take care of the aftertaste of catastrophe.«**

*Max Frisch, Author*

## The special issue

**"Small Investment, Big Impact"**

page 3

## News

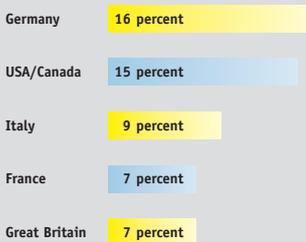
### INTERNATIONAL SUCCESS

The innovative "Adaptive Die Match" roller adjustment aid that BRANKAMP developed together with E.W. Menn is also internationally successful. Famous industry organizations such as the LISI Group from France or the SFS Group from Switzerland rely on the automatic tracking. With it the machine setting is continuously adapted to the course of the process.

### TOGNUM: 85 MILLION JOB

The drive system and energy system specialist Tognum AG has received a job from Asia worth 85 million euros. For this a consortium under the leadership of the Tognum sister corporation MTU Friedrichshafen delivered 13 emergency power plants to the south Chinese nuclear power station Yangjiang.

### FIGURES OF THE MONTH: The five top sites worldwide for the construction of design workshops.



Source: Ernst & Young - Caplign D

Germany is also a world leader in the field of design and is the most attractive country worldwide for organizations for the construction of design workshops. Canada and the USA come in second. Italy, France and Great Britain rank quite far behind.

### IMRPINT

#### Publisher:

Dr.-Ing. K. Brankamp System Prozessautomation GmbH,  
Max-Planck-Straße 9,  
D-40699 Erkrath, Germany

**Responsible for content  
under the German press  
law:** Tom Brankamp,  
Michael Tobias (enterprise)

## Portrait

# The pros in the metalworking field

When it comes to research and development questions in the metalworking field, there is no question at BRANKAMP as to the name of the solution: Opper and Terzyk. The Hanover residents have already shouldered the development of high end devices for the metalworking field within the BRANKAMP group for many years. At EuroBLECH the two specialists at the BRANKAMP stand will again be the in-demand conversation partners on the topic of stamping.

"One can say that we're the development forge for metalworking technology at BRANKAMP," states Dr. Thomas Terzyk proudly. The 51-year old is director of Prokos GmbH, together with Ferdinand Opper, 56. The organization based in Hanover has belonged to the BRANKAMP Group since 1992. "We worked for ten years together as assistants at the Institute for Metrology in Mechanical Engineering at the University of Hanover before we founded Prokos in 1989," recalls Opper. "The problem was just that we had no distributor and couldn't offer comprehensive service." With the entry of BRANKAMP, the young company of the two E-technology

engineers quickly took off. Today Prokos has ten employees. What's exciting about the job? "The fact that we always have to think of something new. We have to bring together knowledge from many different fields that otherwise seldom come together. That always brings new challenges." One event that the two metalworking specialists happily think back on is the certification by Bruderer: "When they certified us for their machines, it was like being accepted into an exclusive club", raved Opper. In their free time, however, the two engineers take separate paths – while Opper leans towards soccer, Terzyk is drawn to the tennis court.



Ferdinand Opper



Dr. Thomas Terzyk

Continued from page 1

## Safe Production. Better Products.

laser-welded contacts, mounting parts and complete modules." The highest quality is a must in these sensitive fields. Production disruptions that are caused by punchings, tool wear or similar factors can be significantly minimized with modern Process Monitoring systems. "Such production stops are time- and cost-intensive and lead to lower product quality. Schroeder + Bauer cannot and will not afford that," says Frank. Therefore the company has used BRANKAMP systems in production for one and a half years. "We introdu-

ced the BRANKAMP systems due to the excellent punching detection. That we additionally promptly detect important factors like tool wear, tool breakage, material doubling and lubrication failure as well is even more of an argument for the purchase." Four PK 4U systems have previously been used in Neulingen-Bauschlott. With success: "Our experiences with Process Monitoring from BRANKAMP are positive. Production changes are detected very quickly so that machine crashes can be avoided," as stamping expert Frank points out the

advantages. "An additional big plus is that the BRANKAMP system can also be used for older tools. A retrofitting is easily doable so that a safer production is also possible there." With Process Monitoring, Schroeder + Bauer is already at the forefront in systematic error prevention. In order to configure it as comprehensively as possible, in the future all 15 punching automatic punching machines should be equipped with Process Monitoring systems from BRANKAMP.

**You can find more information at [www.schroeder-bauer.de](http://www.schroeder-bauer.de).**

Tuning for the machine outfit

# Small Investment, Big Impact



Getting the most out of the existing machine outfit – in many operations, that is the declared goal during economic downturns. Longer machine runtimes, the minimization of losses, multi-machine operation and an unchanging high quality of the end products help to secure a competitive position. Such measures can be realized quickly via a fine-tuning of the existing machines with modern Process Monitoring systems.

“The general investment weakness also had an effect on our industry in the third quarter,” acknowledged Dr. Wilfried Schäfer, director of the German Machine Tool Builder’s Association (VDW). The VDW expected that the market would noticeably drop in the second half of 2008 anyway. However, the financial crisis and the drastic measures of the automobile industry additionally unsettled the organizations.

### Used Machines: Upgrading with the most modern technology

The result: consumer reticence. Many producing operations are waiting, or investing in used machines or an overhauling of the existing machine outfit instead of in new machines. Properly refurbished and equipped with the newest technology,

used machines can actually be a real alternative in production. Equipping them with Process Monitoring systems in particular guarantees the highest quality and optimal protection for tool and machine, even with the oldies. A second-hand machine that’s been “tuned” can be first class in every respect. Process monitoring ensures quality in production even with older models and at the same time protects tool and machine. Particularly interesting: Possible warranty questions can be better solved for all parties when Process Monitoring systems are employed with used machines.

### Insurance costs drop

When machines are equipped with BRANKAMP systems, large property insurers grant additional deductions on insurance premiums. “For

example, Westfälische Provinzial recommends the installation of our CMS system,” states BRANKAMP director Hans-Peter Schneider. And an expert delegation from R+V Versicherung was impressed after a practical test run.

### “Positive Feedback”

“Independent of insurance aspects, such a system is advantageous for the customer since every customer certainly has an increased interest in having as few downtimes as possible with a producing machine,” states Matthias Köster, directing registered manager and Group Leader of Technical Insurance at R+V Allgemeine Versicherung AG. “In our experience, customers that have machines equipped with such systems give consistently positive feedback.” The systems can protect

far more than just the machine. They also enable production in downtimes and multi-machine operation and are the basis for networking manufacturing via FactoryNet. “However, in economic downturns the safety aspect is naturally in the foreground,” gathers BRANKAMP machining expert Thomas Krieger. It’s just like the brakes in a car. Krieger: “Whether I drive 500 kilometers or 50,000 – the brakes have to be good.” And if a production line is used less, protection is even more important in order to keep a handle on costs.

### The systems already pay for themselves on the first day

For production experts, the magic word here is amortization time. Or, in other words: How long does it take until a Process Monitoring system has paid for itself? “Depending on the collision, you can already save four to five times the value of the device with the first stop,” calculates Schneider.

## INNOVATION IS THE FUTURE



Factory M



News Picker



Save and Rescue



Digital Tool Card



Article Storage



RFID

FactoryNet Start Center: Unlock new potential in production

### Convention Highlights at EuroBLECH

## FactoryNet: Hardly any down-time thanks to perfect process

New BRANKAMP solution networks Process Monitoring components and provides production transparency. The basis is the BRANKAMP Process Monitoring systems.

It verges on a miracle that German manufacturers of cold worked parts still hold their ground in the market. "Made in Germany stands for quality," emphasizes BRANKAMP director Hans-Peter Schneider. Process streamlining and better control is the key: he who wants to produce competitively must perfectly master processes. The solution: BRANKAMP FactoryNet. "Based on the individual BRANKAMP monitoring components, it enables the storage of tool data in a central database, and therefore an uncomplicated device exchange," explains Schneider. The heart of the system that consolidates all production data is the Facto-

ryNet Box. It is integrated as a computer into the company network and maintains a connection with the BRANKAMP servers in Erkrath. The BISS Box (BRANKAMP Intranet Security System) – a standard that the Federal Ministry of Finance also uses – provides for security. A remote administration from Erkrath is therefore no problem for the BRANKAMP specialists. In addition, if there is an exchange of a BRANKAMP Process Monitoring system, all data are secured on the FactoryNet Box and are automatically fed into the system again. And machine downtimes are minimized via the precise monitoring. RFID chip-based tool operation

cards that communicate with the BRANKAMP devices in production make the status of production components transparent. The advantages for daily production: thanks to features such as FactoryM, all production data are available at the office on every PC in real time; the News Picker ensures optimal information flow for the individual workers in the production – even via e-mail or SMS. "The entry into this new technology is possible without large one-off costs via attractive leasing models," says Hans-Peter Schneider. It's worth it: "On the one hand, FactoryNet positively affects production; on the other hand, the innovations generate more sales volume."

### What is...

## ... a Quality Counter?

Quality controls on a running process are a must in order to ensure a competitive production. Maintaining regular inspection intervals is child's play with the new Quality Counter by BRANKAMP.



The Quality Counter function assists the operator in conducting quality controls. The worker indicates at which intervals (i.e. at which piece number) the control is due. The system notifies the operator and reminds him or her of the inspection when approximately 80 percent of the set quantity have been produced. If this is conducted and acknowledged between 80 and 100 percent of the predetermined number, the counter resets to zero. If the production rises to over 100 percent without the inspection occurring, the machine automatically shuts down. A reliable compliance with the mandatory quality controls is guaranteed with the Quality Counter. Cost- and time-intensive product controls after the production are therefore done away with. The Quality Counter is presently available for the BRANKAMP PK 4U systems.

Dr.-Ing. K. Brankamp System Prozessautomation GmbH, Max-Planck-Str. 9, D-40699 Erkrath

#### BRANKAMP GMBH, GERMANY

Phone +49/ 211/ 25 07 60  
Fax +49/ 211/ 20 84 02  
eMail bpd@brankamp.com

#### BRANKAMP S.R.L., ITALY

Phone +39/ 039/ 60 81 917  
Fax +39/ 039/ 60 85 207  
eMail bpi@brankamp.com

#### BRANKAMP INC., USA

Phone +1/ 617/ 492 16 92  
Fax +1/ 617/ 497 56 75  
eMail bpa@brankamp.com