BRANKAMP Rotator detects transfer errors

Screws with a "smart head"

When manufacturing screws, transfer in the correct position for the final forming stage is important. Especially at high production speeds, this is an area where process errors can occur. On collar screws with a hexagon head, the characteristic "ears" are pressed. The cause for this is a loosening anti-rotation lock on the ejector or incorrect adjustment of the hook finger.

Errors like these can be avoided by using the BRANKAMP ROTATOR. BRANKAMP ROTATOR is an innovative new process monitoring system which has been especially developed to detect transfer errors and avoid their consequences. Even the smallest of signal changes are recorded by the high-performance Kombiflex sensor. Using Quattromatic envelope curve technology makes signal evaluation simplicity itself. The advantages are self-evident: in addition to a cost-favorable guarantee of screw quality using in-process quality control directly in the

Manufactoring error: screw with ears

machine, the arrangement also dispenses with time-intensive downstream end-checks on each individual part using cost-intensive optical testing

BRANKAMP ProcessMonitoring systems are also increasingly being used on robots and handling units. In our example, they are monitoring a welding robot which manufactures for the automotive industry. The systems have already proven their worth in a large number of other applications in manufacturing practice.

The special issue

ProcessMonitoring: found the world over

When the production location serves as the brand

Star performers from Germany

"Made in Germany" – the slogan still carries an outstanding reputation internationally, and is a byword for high-quality products from Germany. In 2006, German companies exported goods with a total value of EUR 893.6 billion. And German engineering, in particular, is vastly popular abroad. The strong demand for first-class technology is also confirmed by BRANKAMP, the Erkrath-based ProcessMonitoring specialist. "We have grown to around 50,000 BRANKAMP applications in use around the world. And the trend is rising," comments Managing Director Hans-Peter Schneider.

News

NEW MEASUREMENT TECHNOLOGY FOR THREAD-FORMERS

BRANKAMP has developed a new measurement technology for punches. It makes it possible to monitor thread-formers. "Using this new technology, not only can we measure the break point, but also the wear on thread-formers," says Bernd Tepass. This means that faults can be detected early and machine breakdowns avoided.

PORSCHE EMBRACES THE HYBRID DRIVE

Newly-developed: at the IAA 2007, the sports car manufacturer exhibited the ready-to-drive development of its hybrid off-road vehicle, based on the current Cayenne. On the "parallel hybrid", the hybrid unit is installed between the combustion engine and the standard automatic transmission. Porsche is aiming to launch the series production vehicle in two years and sell the new generation of its Cayenne series with a hybrid drive.

GM LOOKING TO CLOSE 13 PLANTS

US car constructor General Motors Corp. (GM) is looking to close a total of 13 plants in the USA over the next four years, according to a report in the New York Times.

QUOTE OF THE MONTH:

"The difficulty lies not so much in developing new ideas as in escaping from old ones."
John Maynard Keynes (05.06.1883 – 21.04.1946), economist

News

## INDIA: TECHNOLOGY CENTER FOR NISSAN AND RENAULT

The two sister car constructors Nissan and Renault are planning a joint R&D center in the Indian city of Chennai (formerly Madras). The plant is set to go into operation from 2008. By 2010, around 1,500 people should be employed in the new technology center.

BRANKAMP PK 4U NOW WITH BLUETOOTH

The BRANKAMP PK 4U is now also available with the innovative Bluetooth function. The wireless connection serves as an interface for the transmission of important production data. Quantities and downtimes can be sent via Bluetooth directly to a cell computer.

FIGURE OF THE MONTH:
Top locations in Europe for transport and logistics.

GERMANY
34%
30%

GREAT BRITAIN
13%
19%

FRANCE
17%
14%

NETHERLANDS
7%
4%

■ 2005
■ 2006
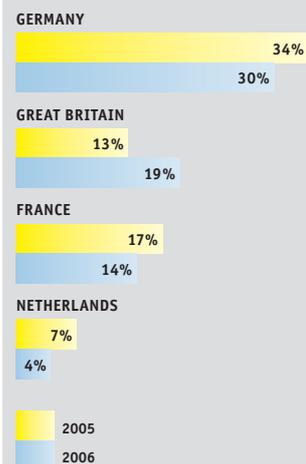
Quelle: Ernst & Young – Kennzeichen D: Standortanalyse 2006

When it comes to transport and logistics, Germany is the top location in Europe, with 30%. Compared with the previous year, however, Germany has shed four percentage points. In second place for the most popular transport and logistics location is Great Britain (19%), followed by France (14%).

Portrait

Professional flair for organisation

Order processing, materials management system and organization for trade fairs – the range of responsibilities for Heike Meyer is extensive. But an equally extensive talent for organization and skilful time management means that this graduate in Business Management keeps on top of everything.

When an order is received, Heike Meyer gathers the information relating to it from Sales, forwards it to Engineering, and then keeps an eye on delivery. As the interface between Sales, Production and the customer, she ensures smooth handling of orders. "The key thing is the ability to organize and coordinate," says Meyer, who has been with BRANKAMP for 18 years. "The planning and implementation of a trade fair stand, for example, always involves very tight scheduling – the coordination between those staffing the stand, those erecting the stand, and the exhibition pieces themselves calls for optimal organization." Working together with Sales, Meyer developed the current and highly successful trade fair concept, and is always passionate when it comes to devising and implementing the plan for the individual stands. "The great thing is the variety in my work. Every day is different and brings new challenges – you won't find 'routine' in my dictionary," is how Meyer sums up the benefits of her job. In her free time, Meyer keeps fit through Nordic Walking. In summer, the 48-year old often visits the Dutch coast and sails on the Westerschelde.

Monitored by BRANKAMP

Lock and key

You can't imagine daily life without locks these days. Whether it is on the locker at the fitness center, on your own front door or on your case – locks are used everywhere, in all kinds of sizes and finishes. But they all have one thing in common: they are manufactured in metal and must satisfy the highest quality standards.

The production of locks began around 5000 B.C. in ancient Egypt. The first locks known to us, however, bear little relation to the types we use today, as they were made of wood. It was only in 1844 that the American Linius Yale senior developed the first cylinder lock, as is still used today in a similar form. To ensure that lock and key are a 100% match for one another, everything has to roll smoothly during production. To guarantee optimum quality, manufacturers like BKS, Fuhr, Abus, König and Winkemann rely on BRANKAMP ProcessMonitoring solutions.

Screws with a "smart head"

stations. Furthermore, the system allows for high productivity with no loss of quality – even at high production speeds. The operator is supported right from the set-up phase, since adjustment errors are immediately detected via the BRANKAMP ROTATOR signals. The system recognizes excessive reject production, with no prior time delay. Immediate correction of the press settings can eliminate further rejects. BRANKAMP ROTATOR can be retrofitted on newer-type BRANKAMP PK systems which have already been installed. A further recommended product is BRANKAMP ScrewScout. This deflector unit ensures problem-free production flows and is thus the ideal add-on.

BRANKAMP offers comprehensive, world-wide service

ProcessMonitoring: found the world over

There is very little white space on the BRANKAMP service map. With 43 agencies, subsidiaries in Italy and the USA, and a service team operating on a global footing, the world market leader in ProcessMonitoring systems maintains a truly global presence. The six-strong BRANKAMP service crew based at its head office in Erkrath itself covers 420,000 kilometers a year on land, sea and air. As a comparison, this is the equivalent of close on 11 trips around the earth.
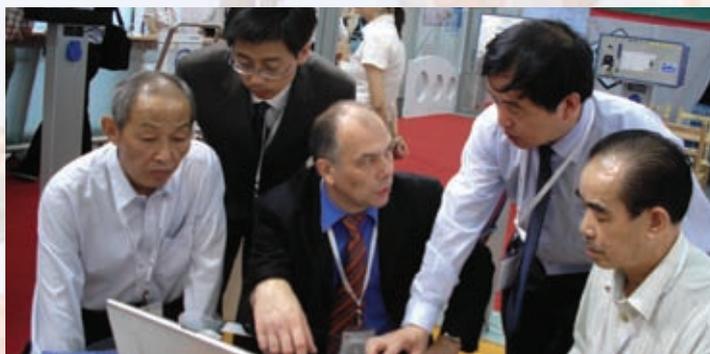
For BRANKAMP Gerd Köster travels around the world

Volker Simon is visiting the Elring Klinger factory in Mexico

China, India, Malaysia, Singapore, Korea, Japan, Israel, the Philippines, Brazil, Mexico and Turkey: you'll find the stamps jostling for space with one another in Gerd Köster's passport. The 45-year old sales professional is there when his customers need him. He travels overseas for 140 days a year. Recently, his trips have increasingly taken him to Asia. "China is currently stokking up significantly on ProcessMonitoring," comments Köster. But he also identifies strongly-

increasing demand in Brazil too. Volker Simon is another who gets around for BRANKAMP. This experienced service engineer for cold forming and punching has a range of responsibilities: "From installing ProcessMonitoring systems to commissioning to maintenance," says the 47-year old. His richly-varied day-to-day schedule also takes in regular training events. "After all, the job isn't done just by installing a system and then leaving our customers to get on with it," says

Simon. "It goes without saying that we also demonstrate how to achieve optimum production using the BRANKAMP systems." Currently, around 50,000 applications from the global market leader BRANKAMP are in use worldwide – from stand-alone ProcessMonitoring systems to complex production networking. With 43 longstanding partner companies and its own subsidiaries in Italy and the USA, BRANKAMP enjoys a global presence. "We are a first-class partner – and,

of course, especially for German industrial companies operating on a world-wide footing," says BRANKAMP Managing Director Hans-Peter Schneider. The BRANKAMP team has enjoyed all kinds of experiences around the world – including some scary ones. "We came across a driver in India who simply switched off the car's lights when driving out of town at night. The reason? There was nothing to see, so you didn't need the light!" explains Köster.
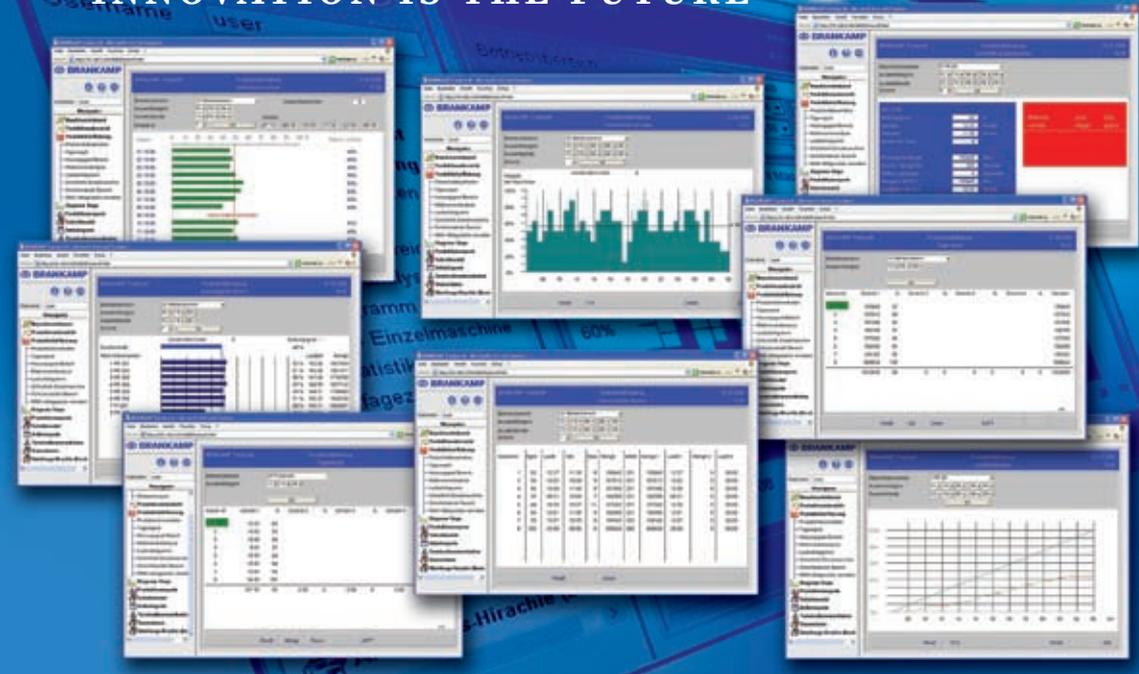
Innovation is the future

FactoryM: individual, and an individually precise fit

A special fleet of machines, a special product or high standards in the sector: managing today's production operations presents the production manager in any company with a whole series of challenges. BRANKAMP FactoryM software modules offer innovative tools for mastering these challenges.

Achieving the greatest possible efficiency is the uppermost aim of any production manager. The BRANKAMP FactoryM System Module 3 supports precisely that objective. The third element focuses on monitoring productivity and use of the manufacturing process. The "Productivity Behavior – Skyline" mask shows the operator the level of capacity utilization on machines. For optimum transparency in the production flow, it is important to know at the end of the day how many parts have been produced. The "Daily Report" mask shows productivity – as hours of operation or number of parts – for the individual shifts.

Detailed information about the various shifts and the respective machines is provided for the production manager via the "Shift Info, Individual Machine" mask. Often a single operation is broken down into several production areas. The individual sections need to be examined closely to obtain a full overview of efficiency. This is where the Module 3 mask "Level of Use, Production Area" comes in useful. It records the level of use of capacity for an entire production area, with hours of operation for machines and the production volume. A virtual tour of operations is similarly no problem using Module 3 in the FactoryM

concept. Using "Multi-Moment Analysis", the production operation is measured digitally at defined intervals. A further key function in this third module is the hours of operation diagram. It shows the target/actual comparison for Production as a line diagram. Module 3 (EUR 299) is one in a total of nine FactoryM modules. Productivity and use of capacity on up to eight machines can thus be monitored. As with the other modules, the masks are displayed in the browser. One further advantage is that the FactoryM functions can be used at all times – either with or without ProcessMonitoring on the machines.