

Intelligent machine allocation in vacation periods:

Reduced costs with ProcessMonitoring

Smooth production flow in vacation periods has great potential - experts predict a 15% increase in productivity. Additional absentee days make up about another 5%. Modern ProcessMonitoring systems help to tap this potential systematically.



Vacation periods: rest and relaxation for the worker

Many production facilities still live by the old standard: if a machine operator is on vacation, production stops at "his" machine.

Production continues at a reduced level at best. A substantial loss of productivity is often simply accepted during vacation periods in many places. This hidden potential can be easily tapped, however. First, production needs to be restructured so that the process only requires a small amount of monitoring and infrequent interventions. At the same time, production must flow smoothly to a large extent. Another component includes flexible operator allocation and reliable systems that allow machines to be operated at a professional level, even

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News

BRANKAMP AT THE IMTEX 2007

The ProcessMonitoring specialists from Erkrath were also present at



this year's International Machine Tool Exhibition, the IMTEX 2007, in Bangalore, India. The Indian representatives of BRANKAMP, Kriti Inter Trade, presented the innovative ProcessMonitoring systems from Erkrath to an international gathering of specialists from January 18 to 24, 2007.

LOW-BUDGET CAR FOR ASIA

Affordability is key - Fiat wants to offer a car for only 1,700 euros in India and Latin America starting in 2008. The low-budget car will be produced in the subcontinent in cooperation with the Indian corporation Tata. Tata is interested in a more extensive partnership with the Italian automobile producer. Company executive Ratan Tata feels that there is market potential to be tapped beyond the extremely affordable car.

MACHINES MADE IN EUROPE

Europe continues to be the leading production location for machines and systems. In 2005, 41% of production worldwide for machines and systems, valued at 470 billion euros, took place in Europe. The largest producers include Germany, Italy, France and Great Britain with about 70%.

QUOTE OF THE MONTH:

"There were times when no one spoke of globalization, but the VW Beetle was driven all over the world."

*Horst Koehler,
Federal President of Germany*



A look at the production process: The tried and tested BRANKAMP CMS ProcessMonitoring system in operation at a CNC HITEC Turn 40G lathe from Hitachi Seiki.

VW

Green light for factory in Russia



The foundation for the new VW production facility in Kaluga, Russia, has been laid. The automobile producer wants to begin producing partially-disassembled VW and Skoda cars next year. Starting in 2009, 115,000 vehicles are to be produced for the Russian market each year. VW plans to create about 3,500 jobs at the new plant.

The special issue

Efficiency, safety and mobility (part 1)

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News

SUNDRAM PURCHASES PEINER

The Indian automobile supplier SUNDRAM Fasteners Ltd. has purchased Peiner Umformtechnik, a subsidiary of Textron. For the time being, nothing will change for the 325 employees in Peine - production will continue. The exclusive group of customers served by the German legacy firm is an important factor in the purchase. Peiner Umformtechnik delivers to such manufacturers as Renault, DaimlerChrysler and BPW.

EMO 2007 – IN GREAT DEMAND

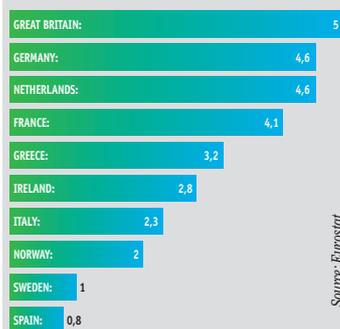
Even now – six months before the exhibition – the demand for exhibition space at the EMO 2007 in Hanover is enormous. At the



beginning of the year, 1,530 exhibitors from 36 nations had already reserved space for the largest and most international metalworking exhibition (September 17 – 22). A total of 142,000 square meters of net exhibition space has already been rented.

FIGURE OF THE MONTH: Weekly overtime hours 2004/2005

in a European comparison



Workers in the UK have the most overtime, with an average of five hours each week. Germany and the Netherlands share second place with 4.6 hours of overtime each. France follows at third place with 4.1 hours.

Franz Saliger celebrates 25 years of service

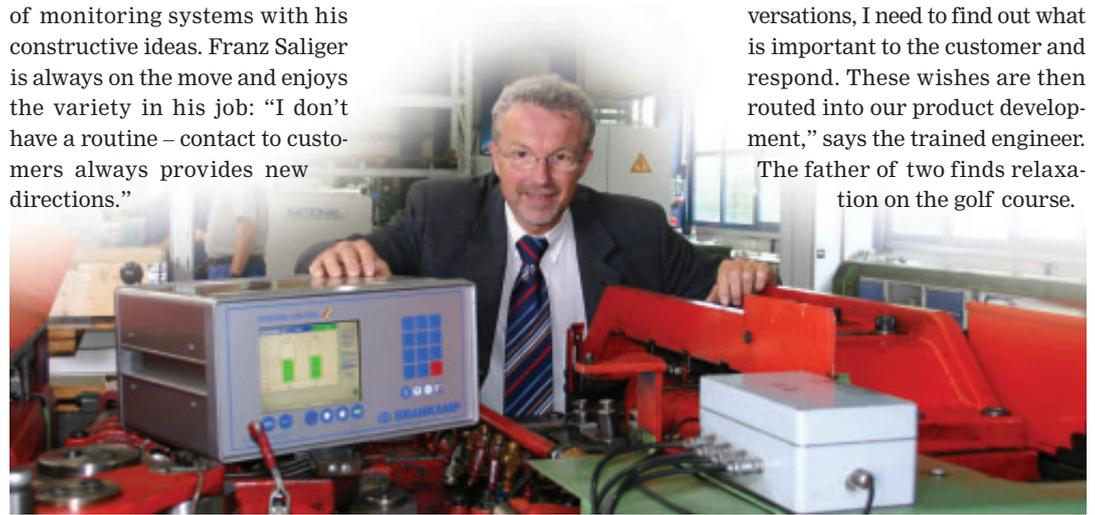
The Listener

As sales director, Franz Saliger is the middleman between the company and the customer. Listening and responding to customer requests have been his most important instruments for success – for 25 years. In November, the 53 year-old had been working for BRANKAMP for a quarter century.

He has been with BRANKAMP nearly from the beginning and played a role in the development of monitoring systems with his constructive ideas. Franz Saliger is always on the move and enjoys the variety in his job: “I don’t have a routine – contact to customers always provides new directions.”

He shares his experiences from the sales department and ensures a constant flow of information

between the customer and the company. “Listening is an absolute necessity in my job. In conversations, I need to find out what is important to the customer and respond. These wishes are then routed into our product development,” says the trained engineer. The father of two finds relaxation on the golf course.



Monitored by BRANKAMP

Burning rubber with Goodyear

Charles Goodyear had a passion for rubber. He wanted to make it useful for everyday life. But in those days, rubber melted in the heat and cracked when it was cold. The energetic Goodyear experimented steadfastly with the material – much to the dismay of his wife Clarissa.

As she came home earlier than expected one day in 1839, Goodyear hid his latest experiment with rubber and sulfur in the oven. Later, when he revisited his newest mixture, he found that the rubber had taken on completely different properties. Charles Goodyear had invented vulcanization

purely by accident, a process that forms the foundation of modern automobile tire production. The company named after Goodyear, the inventor of vulcanization, is now one of the largest tire producers worldwide with more than 80,000 employees. At the toolmaking shop of its factory in Luxem-

burg, the global player uses ProcessMonitoring systems from the first mover and world market leader BRANKAMP.



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Reduced costs with ProcessMonitoring

without the experienced operator present. Control of the running production process on the basis of reference data is also an elementary part of a smooth production flow during vacations. Innovative tools such as the function “Quick Mobile Alarm” that notify per-

sonnel performing multi-machine operation or a foreman of stoppages via SMS expand the possibilities presented by modern ProcessMonitoring systems. Allowing access to essential production data from anywhere in the world via an Internet browser

such as Internet Explorer helps to optimize production control. The BRANKAMP Factory M system ensures that essential production control data are only a mouse-click away. This information could, at least theoretically, be viewed on a laptop computer on the beach.

Set-up aids for presses in automobile production

Efficiency, safety and mobility (part 1)

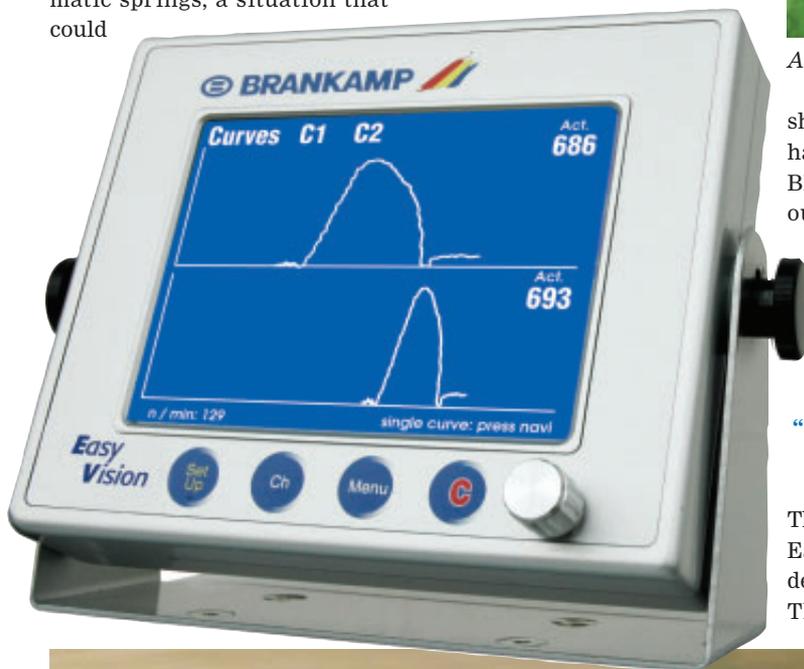
250,000 automobiles are made by Ford each year in Genk. About 5,000 employees produce the models Mondeo, S-Max and Galaxy in the Belgian factory. One of the most important departments is the press shop with its giant 2,000 ton presses. "Our spectrum includes everything from sidewalls to fenders to reinforcement parts," says Hans Josef Richner, an electrical engineer for Ford in Cologne. Just one of the presses in Genk is as tall as a small single-family home. The press tools are often larger than 4.5 by 2.5 meters. "The critical moment in our production process is the set-up phase of a new tool."

Tools are often replaced and set up again on a press line once a day. This takes an average of about 30 minutes," says Richner. This has presented a problem for the automobile manufacturer for some time, even when pressing normal-sized objects. As an example, force may not be applied at the bottom dead center of a press when working with pneumatic springs, a situation that could

fail to be recognized. As a result, the machines are overworked or even damaged, particularly when beginning work with new tools. "We needed a set-up aid for our machines," says the production expert Richner. Since August 2006, Ford has utilized Process-Monitoring systems from the world market leader and first mover BRANKAMP in its press



A look at the production process: the Ford factory in Genk



shop in Genk. "We have already had good experiences with the BRANKAMP PK 4000 system in our wheel production department," says Werner Vaesen, mechanical engineer in the Genk press shop. "That's how we became aware of the company."

"Good experiences with ProcessMonitoring"

The initial focus of interest is the EasyVision system, a set-up aid designed especially for presses. The innovative BRANKAMP

system detects when a tool has not been aligned properly and comes into contact with a stop block after a cut sequence without being noticed. "This causes unnecessary strain on the machine. EasyVision displays a force curve on the monitor to show if the tool is optimally aligned. Personnel can also use EasyVision to observe resonance behavior during production," explains the BRANKAMP expert Andreas Steinhauer.

To be continued in the next BRANKAMP Journal





User-friendliness

Information with a single click

Modern machines need to balance high-performance functionality with simple operation. Confusing systems with vast arrays of buttons belong to the past. ProcessMonitoring systems from BRANKAMP show how this balance can be achieved, such as with the direct selection of various functions on the PK 4000.



The multisensor measuring device allows monitoring functions such as maximum force, envelope curves or trends to be selected at the push of a button. The straightforward color graphical display on the front panel shows the functions as icons. These self-explanatory and language-independent symbols make operation simpler. If the operator wants to see an overview of the production status based on a certain function, he can call up the information by pushing the corresponding icon on the screen. Direct selection of the icon makes navigating through submenus unnecessary. Simply put, the worker can quickly and easily obtain information about the current production process.

Factory M

Eye on production

For a smooth production flow, communication between management and production departments is a decisive factor. That's why it is more important than ever to have access to all relevant production data in real-time. BRANKAMP's ten part modular ProductionMonitoring concept is an affordable and innovative software solution that can be expanded in a modular fashion as needed.

The FactoryM module **production overview** allows the foreman or manager to keep an eye on the entire production process. There are six powerful templates to choose from. For example, the Stop and Go diagram shows how long each machine has been running and how long it has been idle.

Another Stop and Go mask also shows the number of cycles performed on the machines. Another diagram gives precise informa-

tion about the current machine status. For effective use of all machines, it is also important to know how each machine is being used. The Service Life Factors mask shows the rate of utilization for each machine in easy-to-read pie charts. Statistics regarding the hours of continuous operation of the machines can be seen in the overview "Time Classes - Continuous Production".

The mask "Time Classes - Down-Time" shows the average down-

times for the production systems. For only 299 euros, the FactoryM module **production overview** is an optimum control tool for up to eight machines. The user interface is based on the technology of an Internet browser, thus guaranteeing simple operation.

The various FactoryM diagrams can be seen at any PC terminal. If no ProcessMonitoring systems are being used, the necessary data are gathered with a BRANKAMP IMC box.

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