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THE PROCESSMONITORING COMPANY

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Kuka Systems GmbH relies on BRANKAMP

Quality tools for the automotive industry

Construction tools for the automotive industry have been produced in Schwarzenberg in the ore mountains of Saxony, Germany, for over 100 years now. The tool construction department of KUKA Systems GmbH Augsburg is located in Schwarzenberg, where it specializes in the development and production of cutting and shaping tools for making sheet metal parts into automotive bodies.

„We design and produce large-scale tools from 2.5 to 5 meters [approx. 2.75 to 5.5 yards] for customers who primarily stem from the automotive sector. Our performance range covers method planning and design, right up to tool construction," says Peter Rößner, Service manager at KUKA tool construction, as he summarizes the company's portfolio. KUKA large-scale tools are, for example, used to produce car wings, engine hoods and entire automobile side walls from sheet metal parts. „Thanks to our extensive knowledge base and decades of experience, we are an important partner for the international automotive

KUKA man Andreas Fritzsch (left) and BRANKAMP representative Thomas Martin (HEYDE Maschinen-Service GmbH) next to an Auerbach milling machine.

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Two films, one result: Two films, one result:

What you see is what you get

The new film from BRANKAMP illustrates how slugs, that don't end up in the right container but which are drawn up through the cutting punch during punching, are identified before causing damage. Process monitoring experts simulated the creation of slugs and the response by the BRANKAMP Process Monitoring System in a series of impressive tests at SCHROEDER + BAUER GmbH. The film can be seen online at *YouTube* or at *www.brankamp.com* - available in English, German, Italian and French. Both sites also have a BRANKAMP film showing a series of tests at SHW Werkzeugmaschinen GmbH in Aalen. Several collisions were simulated in these tests to clearly illustrate the way the BRANKAMP CMS works. Whether it's a light tap with a rubber hammer or an inadvertent increase in the forward feed during a drilling operation, the machine protection system responds in seconds to the smallest of changes and stops the machine. This creates a clear reduction in costs resulting from such collisions.

The special issue *page 3*
"Low investment for high profits ..."

News

AN AWARD FOR GERMAN TECHNOLOGY

This year eleven of the twelve International Engine of the Year Awards go to German companies. The prize, which was awarded by the trade magazine Engine Technology International, acknowledged outstanding performances in the drive technology sector. The 1.4 liter TSI Twincharger from VW was chosen as the best international engine of the year and also the most eco-friendly. Top German brands BMW, Mercedes, Porsche and Audi also received awards for engine developments.

GILDEMEISTER INVESTS IN ITALY

In July, Graziano Tortona S.r.l., a company belonging to the Gildemeister corporate group, opened two new assembly shops and a new logistics warehouse. A total of about 4.9 million US dollars have been invested in the Italian site. Graziano specializes in the manufacture of high-tech, CTX series turning machines.

CHINA: DAIMLER ON COURSE FOR GROWTH

Mercedes-Benz Cars in China achieved a record turnover of 28,200 vehicles from local and foreign production between January and June 2009. This corresponds to a growth of 40 percent compared with last year. And the prospects continue to look good: There are already 6,000 advance orders for the new E class. From the middle of 2010, a special model from the new E class will be manufactured exclusively in China for the Chinese market.

QUOTE OF THE MONTH:

»It is more difficult to destroy a preconceived opinion than it is to destroy an atom.«

Albert Einstein, 1879 – 1955

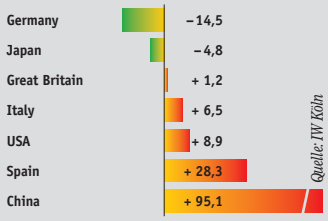
News

SCRAPPAGE SCHEME AN EXPORT HIT

The scrappage scheme is working! In Germany at the beginning of July, there were around 1.725 million applications for the scrappage „bonus“ and reservations for the bonus amounting to just over $ 3500. In the meantime, numerous other countries have followed the German model for stabilizing the economy and the automobile industry. Austria, France, Portugal, Romania, Spain, Italy and Cyprus are joining in, but with extremely different bonus rates. Great Britain has also launched the scrappage scheme and awards a discount of nearly $3,000 when replacing a car that is at least ten years old with a new one. US President Barack Obama is planning a similar approach to supporting the American automotive industry with a scrappage scheme.

FIGURES OF THE MONTH:
Germany has cleaner drivers

Carbon dioxide emissions from road traffic: Change from 1999 to 2006 in percent.



The ecological impact of German traffic is something to be proud of. Since 1999, traffic-related carbon dioxide emissions dropped by 14 percent, a minus quantity of 25 million tones. That‘s more than any other industrial country.

IMRPINT

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Portrait

Mission: Multi-tasking

Andreas Steinhauer‘s schedule is booked up: as Helpro product manager and contact partner for all questions relating to leasing, and as the man in charge of marketing and PR, this 43 year-old certainly has his hands full.

Steinhauer began his training in 1988 as an industrial administrator at BRANKAMP, ending with a position working in the purchasing department. Between 1993 and 2003 he completed his Master of Business Administration degree, while working at another company. „I have been back on-board at BRANKAMP for five years now,“ says Steinhauer. His duties include coordinating in-house marketing administration. At the same time, he is Helpro product manager working in support of representatives and customers both at home and abroad, and he is also responsible for organizing Helpro trade show appearances. And if you need to know about leasing, he‘s your man. „Good organization, the capacity to work independently and remain flexible are all important,“ says Steinhauer. „These skills are needed to stay informed as a point of contact for various processes and to get the best out of things for our customers.“ What does this long-standing

employee particularly like about working here? „Being part of the BRANKAMP team, continually moving forwards and developing new things. We always strive to be better and better.“

Monitored by BRANKAMP

Green energy

„Renewable energies“ is more than just a sound-bite: alternative energy production (for example by wind power) is gaining in importance. In 2008, 20,301 wind power plants in Germany generated a total output of 23,902 megawatts. The American market is also gaining in significance for the German wind power industry: in 2008, the US market became the world‘s strongest market for the fourth time consecutively with 8,000 to 9,000 megawatts of newly installed power.

The German sector is taking prime position on an international platform and is one of the leaders in technology and on the global market for the production of plants and plant parts. The proportion of German manufacturers and suppliers on the global market is one third; the export quota is over 80 percent. Meanwhile, Germany is the world‘s largest market for wind power plants with sales amounting to nearly 11 billion US dollars and with approx. 90,000 employees working in the industry. According to a forecast by the German Institute for Wind Energy (Deutsches Windenergie-Institut - DEWI), around 210,000 megawatts of wind power will be installed by 2014. In order to expand its pole position, numerous German companies rely on Process Monitoring systems from BRANKAMP for producing important wind power plant components.

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Quality tools for the automotive industry

industry,“ says Rößner. The tool specialists at KUKA have been relying on CMS 100 systems from BRANKAMP since 2004 to ensure product quality and smooth-running production. „It was when we bought an SHW machine tool that we got to know the production protection offered by BRANKAMP - and it won us over,“ says Peter Rößner. „By using the BRANKAMP CMS 100 we can effectively protect our machines against damage. For example we can prevent machine drives from being overloaded or milling heads from being damaged.“ In March 2009, we will be fitting another three portal-type milling machines with the BRANKAMP CMS 100.

Machine protection from BRANKAMP is worth it

Low investment for high profits: reliable production, higher productivity, more quality

Production companies must continually push to optimize their processes in order to stay ahead of the game in an increasingly competitive environment. Innovative machine protection systems play an important role here.

The BRANKAMP PK 4U, for example, protects machine tools against costly and time-consuming machine standstills. Sensitive sensors react to the smallest irregularity in the production process and issue an appropriate signal. This means that typical punching problems, such as slugs or stamp breakage, can be avoided. The earlier and more reliably that faulty parts are identified, the better production will run, which also reduces the risk of faulty parts getting through to the customer. There are frequently conflicts between the piece number and quality during punching: the slower the production, the greater the piece costs; the quicker the production, the greater the risk of slugs and of lower quality. The PK 4U from BRANKAMP does the trick by increasing the stroke number while simultaneously ensuring quality. The upshot: using field-proven Process Monitoring systems is worth it, as subsequent costs arising from a machine standstill or a customer complaint are considerably higher than the investment in a BRANKAMP PK 4U.

Example calculation for faulty stamping items

Mistakes in production create expensive machine standstills and increase rejects. This includes those typical punching problems that occur repeatedly.

Description of error: Cavity on forming edge – on average this problem occurs once a month and generates costs amounting to nearly $2000.

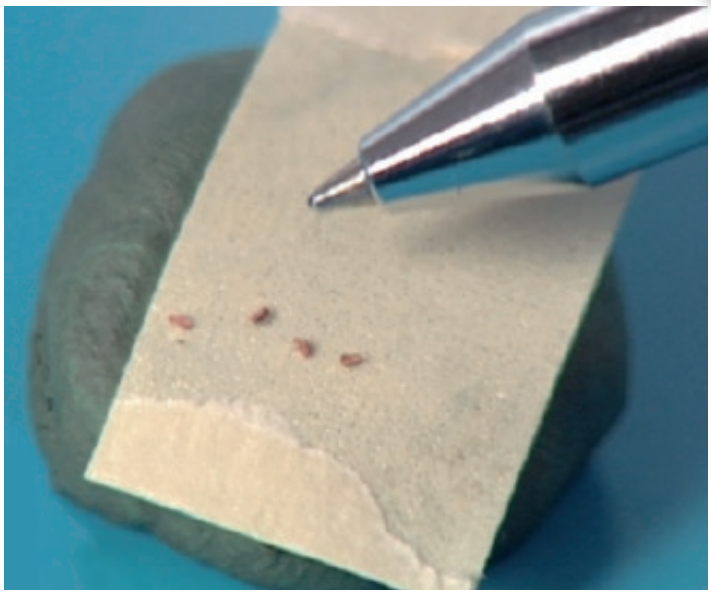
Consequence
Scrap
of 12 x 1,000 parts — approx. $ 23,000

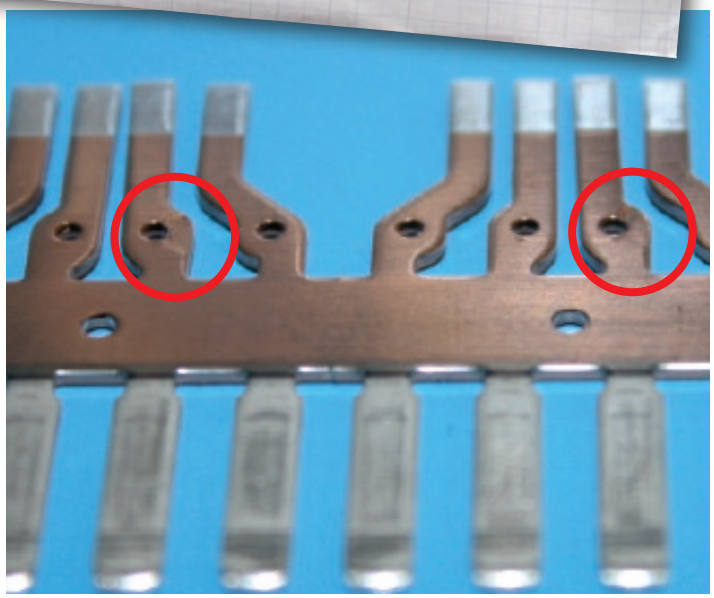
Solution
One-off acquisition
BRANKAMP PK 4U — approx. $ 19500

Saving
In the first year — approx. $ 3,600
From the second year — approx. $ 23,000

This production problem can be substantially reduced by using a BRANKAMP PK 4U. Using this system brings enormous cost savings with more effective production. In this example, without even increasing the stroke number, the BRANKAMP PK 4U amortizes after about ten months.

If travelling slugs get between tool and punching strip, they can lead to disruptions in production, such as faulty parts.





The BRANKAMP alarm module

Always have your finger on the pulse

Have you checked your cell phone today, or your e-mail account? No? Then maybe you've missed a text message or e-mail from your production machine. The BRANKAMP alarm module keeps foremen and factory managers informed about the production process at all times.

The innovative BRANKAMP system gives information, for example, about machine standstills or the end of a production run for an order. The result: the person in charge can react immediately. This also reduces machine standstill times and saves ready cash. The foreman or factory manager decides how he/she wants to receive information from the machine, with a choice of text message or e-mail.

The alarm module itself can also be set individually, so the operator can decide what news to receive immediately and what could potentially wait until the next day.

Of course it's extremely important in the event of more major problems to react immediately. The intelligent notification system from BRANKAMP can be easily retrofitted to all Process Monitoring systems. Companies can control their production processes efficiently and with state-of-the-art techniques using the alarm module from Erkrath based Process Monitoring specialist BRANKAMP.

What actually are ...

... Shortening response time?

Suddenly a ball rolls onto the road in front of a car. It takes just a second to reach for the brakes: a second when the car still has to cover 15 yards when traveling at about 30 miles an hour. And these can be crucial yards. Response times play a similarly important role in industrial production.

The aim is to protect machines and tools from major damage in the event of a crash. An experienced machine operator will hear a crash straightaway, but up to ten seconds can pass before he reacts. BRANKAMP systems such as the tried and tested CMS shorten this response time to 1/1000 of a second. The CMS system immediately recognizes an irregularity and issues a stop command to the machine control system. The result: The machine stands still sooner and damage to tool and machine is reduced to a minimum.

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