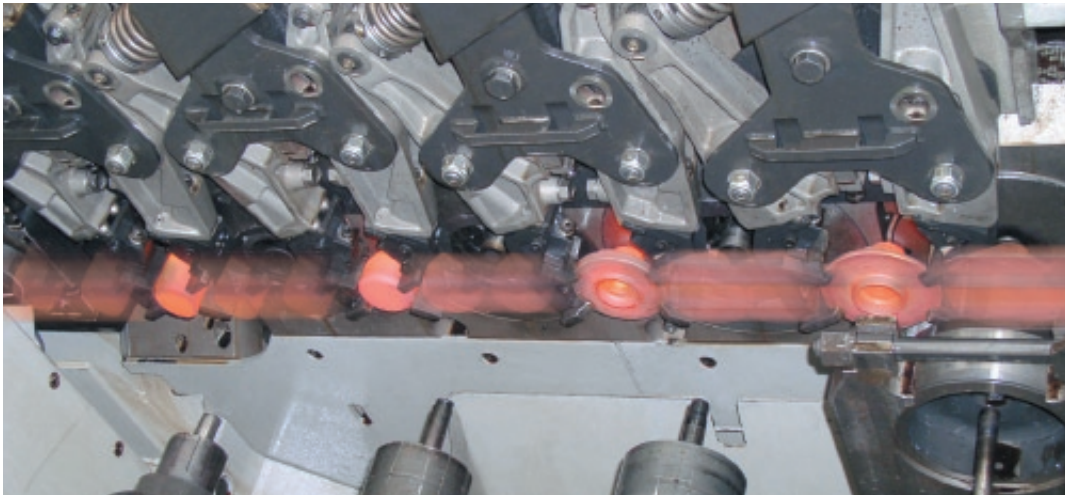


BRANKAMP: The world's largest monitor of hot forming lines

Hot business

Producing brake, clutch and steering parts for the automobile industry is a complicated process. In order to achieve the highest possible quality and reliability, companies across the globe use automatic multi-stage presses.



These use different forming stages to press the heated raw steel into its final form. The largest unit currently available, the HM 75 XL from Swiss manufacturer Hatebur,

can apply a total press force of up to 18,000 kilonewtons. „Automatic forging plants are capital intensive production facilities that frequently cause a bottleneck

in production. This is why high machine availability is so important. Hatebur and BRANKAMP have developed an adapted press

Continued on page 2

Crisis management with ProcessMonitoring



A BRANKAMP CMS in use on an Auerbach bed-type milling machine, type IA 5B. The powerful milling machine has a pivoting HSC spindle and is suited to many types of metal processing.

Stay competitive even in difficult times? ProcessMonitoring is an important instrument for asserting your position on the market. Experts know that in a crisis it is more important than ever to rouse the latent efficiency potential in production processes, this also includes minimising cost generating factors, while maintaining high quality. ProcessMonitoring systems from BRANKAMP make that possible with very little financial outlay. Field-proven entry models can protect machines from about ten Euros a day. BRANKAMP also offers attractive financing offers in conjunction with the akf bank.

The special issue

“Field-proven”

page 3

News

ABB FOR BMW

ABB has concluded an outline agreement with the BMW Group for over 2,100 new robots.

Delivery and commissioning will be between 2010 and 2014 at German sites in Munich, Regensburg and Leipzig as well as in Great Britain and the USA. The ABB robots are primarily used for handling, adhesion processes and spot welding for the BMW models series 1, 3, X5 and MINI.



HANNOVER TRADE SHOWS PULLS IN A POSITIVE RESULT

6,150 exhibitors from 61 nations and 210,000 visitors - the Hannover trade show pulled in a positive result with greater attendance than the previous year, and an overwhelmingly positive atmosphere. Trade show director Wolfram von Fritsch summarizes, „We had five really dynamic days. The entire show was a message from the business community: courage, innovative thinking and optimism.“ Companies showcased their innovative capacity at the world's most important technology event of the year, and displayed plenty of interesting approaches to overcoming the current crisis. A central theme of this industrial show was energy efficiency in industrial processes. For the first time, the „Wind“ trade fair presented its own exhibition platform for the wind power industry at the Hannover show.

QUOTE OF THE MONTH:

»To open a business is easy, to keep it open is the hard thing.«

Chinese saying

News

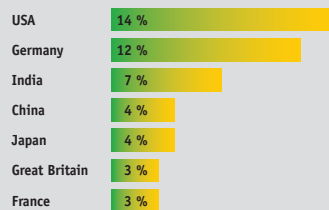
GILDEMEISTER COOPERATES WITH MORI SEIKI

The Bielefeld based company Gildemeister AG and Japanese machine tool manufacturer Mori Seiki have concluded a cooperative agreement. This global, strategic collaboration incorporates production, purchasing, machine development as well as sales and service in selected markets. The companies hope to expand their service and performance portfolio with this strategic partnership.

VW: ASSEMBLY IN JAKARTA

Volkswagen wants to assemble automobiles in Indonesia. An assembly shop is to be built in Jakarta to produce vehicles from individual car parts for the ASEAN market. The ASEAN economic group comprises ten southeast Asian countries, including Singapore, Indonesia and the Philippines.

FIGURES OF THE MONTH: The top sites for research and development



Source: Ernst & Young, Studie Standort Deutschland 2008

Germany takes second place after the USA for research and development. Asian countries follow way behind in places three to five. Germany's neighbours France and Great Britain trail behind in last place with just three percent each.

IMRPINT

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

Portrait

Home advantage to Italy

When Giovanni Bianchi came to Germany in 1993 he couldn't speak a word of German. After a successfully completed intensive language course, he signed up straightaway at BRANKAMP and has now been in charge of sales for his home country for 15 years.

The qualified electrical engineer manages about 100 customers in Italy, including Ferrari. He is actively supported in Italy by a four-man team. „I'm in Italy for about one week every month,“ says Bianchi. „It goes without saying that it's an advantage that I am Italian. It's not just the language; I also have an understanding of the mentality.“ Listening is especially important to Bianchi, as this is the only way

to develop a correct understanding of the expectations and aims of customers. At 43 years old, he is particularly keen on the combination of professional and interpersonal experiences. This father of two primarily spends his free time with his family. „I also find that sport, jogging and swimming, are an important balance to the job.“



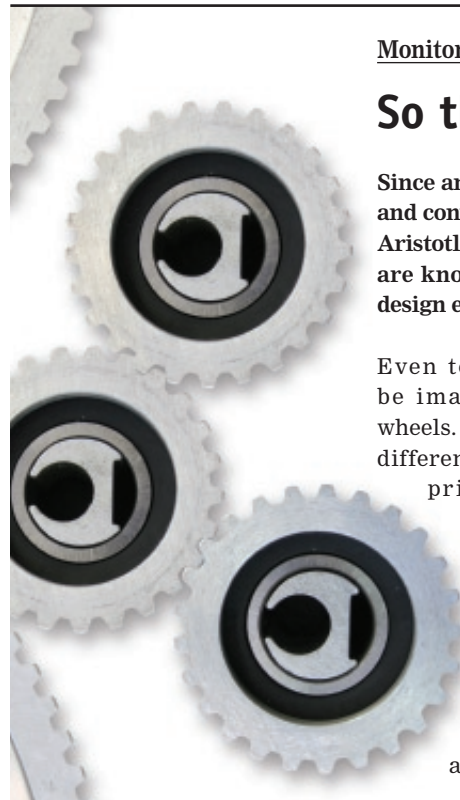
Monitored by BRANKAMP

So that it runs true

Since antiquity, people have used gears in order to transfer forces and convert energy into motion. They were already mentioned by Aristotle in 330 BC. The first practical applications of a gearwheel are known from Philon of Byzantium, the Greek inventor and design engineer around 230 BC.

Even today, daily life can't be imagined without gearwheels. They are used in many different technical fields. The principle is always the same: one wheel engages in a second wheel and thus transfers energy and velocity. A typical example of this is a modern transmission in which a crown wheel as a first gearwheel

and a pinion as a second gearwheel work together as a wheelset pair. The highest precision is sought in the production so that the gearwheels engage in one another with an accurate fit and the transmission functions without friction. Many manufacturers rely on Process Monitoring systems from first mover BRANKAMP out of Erkrath in order to ensure the high quality of gearwheels.



Continued from page 1

Hot business

force monitoring system especially for Hotmatic hot forming lines,“ says BRANKAMP employee Gerd Köster. Companies around the world rely on ProcessMonitoring systems from BRANKAMP. The Erkrath based company uses its PK5000, PK6000 and PK6000i systems to monitor about 50 Hatebur units worldwide. This makes

BRANKAMP the largest monitor of hot forming lines in the world. Even the three automatic multi-stage presses type HM 75 (which are currently in use around the world) are monitored by ProcessMonitoring systems „Made in Erkrath“. „This kind of automatic multi-stage press costs around ten million Euros. There's a huge

economic fallout if it crashes,“ says Mr. Köster. The BRANKAMP systems already support workers at tool setup. According to Köster, „Optimum process parameter settings mean that unwanted machine standstills are minimized right from the start. In addition to this, the line is protected against long-term excess strain.“

Innovative „Adaptive Die Match“ roller adjuster from E.W. Menn and BRANKAMP

Field-proven



For BRANKAMP, 2003 marks the beginning of an exceptionally innovative technological partnership in the field of flat die thread rollers. Together with E.W. Menn, Prokos GmbH, (part of the BRANKAMP Group) began to develop the first roller adjuster and it actually lives up to its name.

BRANKAMP authorised signatory Franz Saliger remembers, „The range of products on the market didn't do justice to the quality standards needed for thread manufacturing; they were just not up to scratch.“ Thread faults caused by incorrect tool settings were occurring more and more frequently. It often took time and effort to experiment in finding the optimum roller setting. Saliger explains, „The team leader worked on a trial and error basis

when it wasn't right, turning a bit here, a bit there. The result was not always ideal.“ Prokos boss Ferdinand Opiel is proud of the outcome of this research and development work: „We have been working concretely on the project since the end of 2003. In 2004 we presented our concept for the first time at a trade show, and in 2006 it was finished in its optimum form. It proved its reliability in the field a long time ago - the setup phase is now considerably more

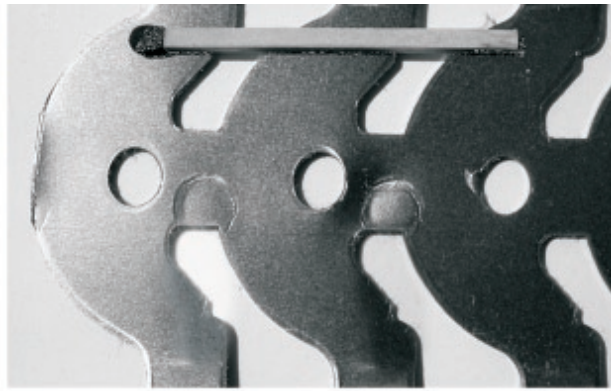
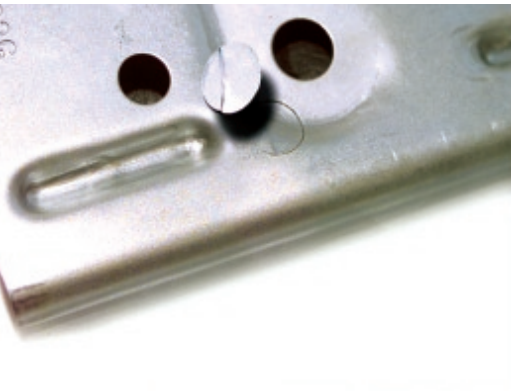
efficient and shorter. The track line is displayed to the worker via sensors on the rolling machine and if necessary corrections are suggested.“

Innovative solution: System directly adjusts the thread roller

Ernst W. Menn, managing director of this traditional company which bears his name, highlights the benefits: „The number of rejects is reduced by precisely displaying the track line; the machine is protected, productivity increased and tool service life improved. Even operators with less experience can easily handle the machines. The results of our many years of intense collaboration with BRANKAMP are impressive.“ Along side this basic version, there is also an advanced version which has been in existence since 2008: With the Adaptive Die Match, the track line is automatically corrected based on deviations in the measuring

signal. BRANKAMP authorised signatory Mr Saliger: „The machine does all the work itself.“ Both solutions have now become very popular: the semi-automatic system by displaying adjustment recommendations and the fully automatic system+ as an ADM version. „Since the measuring signal is fed into the machine controller on the advanced solution, the roller setting is regulated fully automatically and adjusts adaptively to the production situation,“ emphasizes engineer Mr Opiel. The system communicates directly with the machine in a closed control circuit. Settings are continuously adjusted and updated. The cooperation between E.W. Menn and BRANKAMP bears further fruit: „Recently, we sold our first systems to France and to Switzerland. And we also have interested prospective customers on the North American market,“ explains Franz Saliger.





What actually are ...

... slugs?

If travelling slugs get between tool and punching strip, they can lead to disruptions in production and have far-reaching effects, because these slugs are the cause of defective products and they also endanger the tool.



Slugs are pulled up from the slug channel by the cutting punches during the punching process and then get into random parts of the tool and lie between metal sheet and tool. They remain partially adhered in the tool, although often the slugs travel with the cut-out part out of the tool. Consequently, cut-out parts with a faulty surface are produced at non-foreseeable points in the production process. For many sectors where the visible surface of cut-out parts is viewed as a basic quality criteria, for example in industries for manufacturing covers and casings, and domestic appliances or amongst automobile suppliers, slug impressions mean a problematic disruption to the production process. Using the ultra-emission monitoring technique from BRANKAMP, punching waste can already be identified during the production process. In such an event the machine is stopped, thereby cost-effectively preventing parts with impressions from being produced and reaching the customer.

Put the cost brakes on with BRANKAMP

Fewer slugs, greater production output



Travelling slugs aren't just a nuisance, they're a nightmare. In two respects: if they are there, then they cost money; if they are not yet there, then you want to prevent them and that also costs money, as the necessary reduction in the number of strokes makes the parts produced a lot more expensive. Punching is an area where there is particular potential for disruption - from slugs to die break to die cracks. This can be counteracted by avoiding any errors before they occur ... through the use of modern ProcessMonitoring measures.

The ultra-emission monitoring process from BRANKAMP, for example, detects punching waste during production already. If necessary, the acoustic monitor stops the machine and so cost-effectively prevents parts with slug imprints from being produced and sent to the customer. This is especially valuable in those sectors needing flawless surfaces, such as manufacturing car bodies or covers and casings. Data

is evaluated by Quattromatic envelope curve monitoring, for example using the process monitoring package for punches and presses, PK4U.

But how much does such a slug incident cost exactly? Let's assume the process is disrupted while producing cylinder head gaskets. Worst case scenario: A travelling slug destroys the beading station. This can immediately cause

Euro 50,000 in damage to the tool module. The alternative is that the BRANKAMP ProcessMonitoring system detects the slug beforehand and prevents damage. Consequently ProcessMonitoring can generate savings on tool costs of about 85 percent! In addition to this, higher process reliability can increase the stroke number by 30 percent: Parts are not only produced to be better, they are also more cost-effective.

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