

Base for the success

Quality assurance in production

By Prof. Dr.-Ing. Klaus Brankamp

22,000 cheques booked against false accounts every hour, 500 malfunctions per week and one hour of polluted drinking water per month – a life in which we were content with only 99,9% quality would be quite dangerous.

Having an active and continuous quality management in production industries is specially important. Could we allow ourselves to produce even one car a day with fractures in the steering lever, or 20 untightened wheel bolts, or 80 faults per car overall?

Hardly! After all, the high reputation of German industry, especially the automotive



Embodiment of Quality: German Beetle

industry, to remain with the example, rests on the high quality.

However, the Wirtschaftswoche believes it has found the first scratches to mar the good image. Never before have so many cars been recalled to the workshops as in 2001. The

paper writes: „This ‘break down virus’ threatens to tarnish the halo of the German car manufacturers, who, ever since the advent of the VW Beetle (‘It runs and runs and runs’), were taken to be the epitome of soundness and reliability.“

continued on page 2

Integrated ProcessMonitoring

Bruderer certifies BRANKAMP

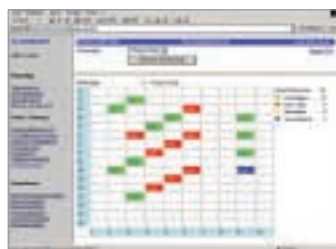
The Swiss manufacturer of heavy-duty automatic punching machines, Bruderer AG, has certified the PK 6000i Brankamp software as the

first and only program for B control. Because of this, the MDC / ODC module can now be conveniently used in a user-friendly manner via the machine control. In the 2001 financial year, Bruderer AG with its staff of roughly 700 achieved sales amounting to just under 100 million Euro.

ProductionMonitoring

eR5 also in action in Austria

The Online ProductionMonitoring System eR5 from BRANKAMP is conquering new markets. The system has just been installed in Austria for the first time. A service team has installed the eR5 – a system which caters for optimal production transparency – in a firm in Hainfeld, Southwest of Vienna.



The special issue:

“Costs down thanks to ProcessMonitoring“

page 3

Forward Thinking

News

FEDERAL MOGUL: PROCESSMONITORING IN ALL FACTORIES

The globally producing automotive supplier Federal Mogul has signed an exclusive rights contract



with BRANKAMP to equip its factories with ProcessMonitoring Systems. „The modern, open concept, our decades of experience and the global presence of our service organisations were what clinched it for Federal Mogul,“ says Chris Kane, Sales Vice President of BRANKAMP Process Automation, who negotiated the contract with the concern’s headquarters based at Southfield, Michigan.

SEISSENSCHMIDT AG: RECORD TURNOVER IN 2002

The Plettenberger automotive supplier Seissenschmidt AG has recorded a turnover of 77.7 million euro for last year. This means the company’s turnover is 19.1 percent up on the previous year.

SACMA SC 500 WITH BRANKAMP TECHNOLOGY

The Italian machine manufacturer Sacma Limbiate SpA is trusting on the expertise of BRANKAMP in the production and development of its new process-monitoring systems. The SC 500 is equipped by BRANKAMP with hardware and software. The replacement model of the SC 50 has been designed for use on multi-stage and combination presses.



QUOTE OF THE MONTH:

„It is not because it is difficult that we do not dare; it is because we do not dare that things are difficult.“

Lucius Annaeus Seneca, Roman philosopher

News

DAIMLERCHRYSLER: PROFIT INCREASE TO 5.8 THOUSAND MILLION EURO

According to initial figures, the operating profit of Daimler-Chrysler last year was about 5.8 thousand million euro.



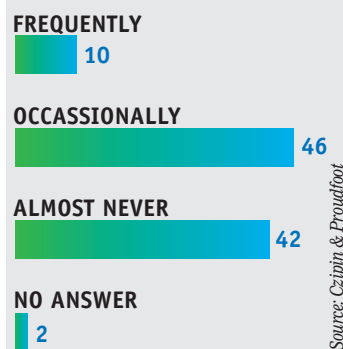
For comparison: in the 2001 financial year, the concern achieved a profit of 1.3 thousand million euro.

GILDEMEISTER: TURNOVER TRAGET ACHIEVED

The Bielefeld-based machine manufacturer Gildemeister AG has reached its declared turnover target for the year 2001 with 1,032.8 mil. euro despite difficult world-market conditions. The turnover lay ten percent below the previous year's level.

FIGURE OF THE MONTH: FLEXIBLE MANAGERS

How often do German managers defer meetings or deadlines in %?



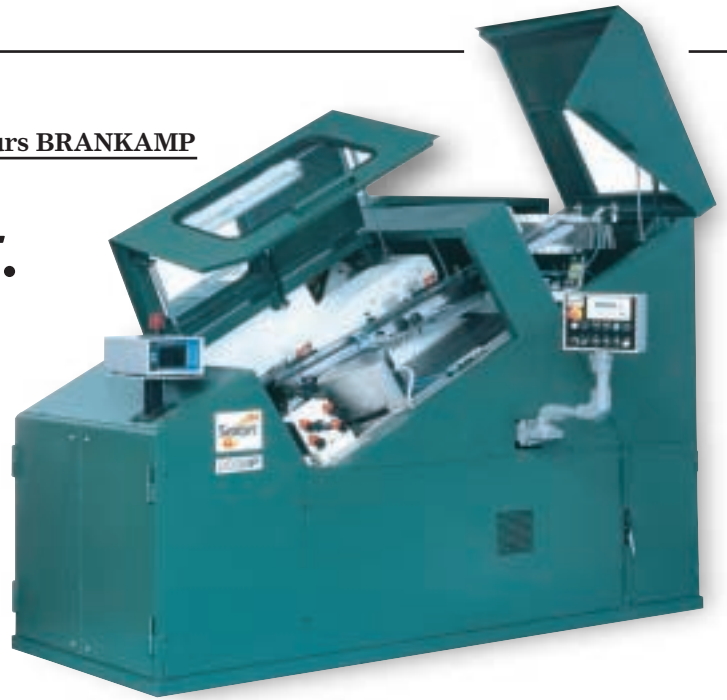
Source: Czipin & Proudfoot

Ten percent of German managers frequently have a laid-back attitude to punctuality, almost half of them are occasionally so inclined. This is the result of a survey of 2,400 managers from nine countries. Germany occupies third place in the league of countries – behind the leaders France and USA.

Machine manufacturer favours BRANKAMP

Co-operation with S.M.A.R.T.

The Italian thread roller manufacturers S.M.A.R.T. Srl, based in Tortona, will be intensively working together with BRANKAMP in future. Our photo shows a BRANKAMP PK 4000-Process-Monitoring System in use on a S.M.A.R.T. NG, the latest generation of machine. The Italian company claims these flat jaw thread rollers offer high precision, better dynamics and maintenance-free operation.



continued from page 2

Quality assurance in production

Product liability forces higher quality

But whoever takes a closer look will soon find other attempted explanations. According to an interview with Wolfgang Barth from the Kraftfahrtbundesamt (Federal Motor Transport Authority) it is: „The sharpened product liability.“ He adds: „This is why many car manufacturers have become more critical and have shown a greater

tendency to recall vehicles than before.“

Yet it is exactly this product liability of course which obligates manufacturers to redouble their efforts to obtain the best results in terms of quality. Ever shorter innovation cycles plus fast reaction to specific customer wishes place the highest requirements on quality assurance and quality management.

Quality begins in production

Quality arises first and foremost on the machines and production systems used. It is not added later by the test procedure. An observation of the production process with ProcessMonitoring Systems and an effective in-process check will therefore always help to improve the quality. This applies equally to punching, forming and cutting processes. After all, 99.9% is still just a compromise.

A look at Slovenia

Kovikor uses Process-Monitoring Systems

The Slovenian automotive supplier Kovikor is using Process-Monitoring Systems from BRANKAMP in screw and bolt

production at the Smartno pri Litjii site. Fifteen machines were equipped and networked with B 400 systems. An Intranet



The BRANKAMP B 400 in action at Kovikor

connection allows the current production data to be viewed from any location. At the same time, BRANKAMP can perform online maintenance on the ProcessMonitoring Systems. Kovikor has around 40 employees and supply firms including Audi, BMW and Citroën.



Christian Grzegorzek, Head of Maintenance at Siemens Power Generation in Mülheim/Ruhr, and Werner Ebeling authorised signatory from the Erkrath based company Brankamp at a Liechti-HSC milling centres with integrated ProcessMonitoring.

Siemens' reckoning pays off:

Costs down thanks to ProcessMonitoring

For about a year now, Siemens AG in Mülheim have been making their first experiences with the use of ProcessMonitoring equipment in their Power Generation division. Taking stock, Christian Grzegorzek, responsible for the new technology at Siemens, states: „Our investment has been completely recovered within twelve months.“

In their Mülheim works Siemens manufactures steam turbines for power stations, like those for the black pump at the Garzweiler plant. The most important components here are the turbine blades – „they are the heart of the power station,“ states Christian Grzegorzek, Head of Maintenance at Siemens. A turbine consists of around 10,000 blades, arranged in about 100 rows,



each with around 100 blades of different shapes and sizes.

Siemens manufactures the blades from high-temperature stainless steel on Turbo Mill 1200 six-axis high-speed milling centres made by Liechti. The most problematic part of this machine – especially in financial terms – is the HSC spindle made

by Fischer. The costs for one single spindle of this type amount to over 25,000 euros. Consequently, a collision can give rise to considerable financial damage.

ProcessMonitoring is a main feature to reduce costs

For this reason, in 2001, Siemens drew up a catalogue of actions for

reducing the costs incurred by collisions and the consequences thereof. A central feature of this was to introduce systems for ProcessMonitoring. Right from the very beginning, the company's contact was Werner Ebeling – authorised signatory from the Erkrath-based firm Dr. Ing. K. Brankamp System Prozessautomation GmbH – who extensively advised and supported Siemens in introducing the new technology. As a result, Siemens Power Generation in Mülheim fitted all 25 high-speed milling centres with BRANKAMP-CMS units. These BRANKAMP systems are especially suited for collision monitoring because they immediately detect rapid changes in forces on the machine tool. In this way they provide optimum protection against collision damage resulting from programming, setting-up or operating errors. These BRANKAMP units can be used on any CNC machine and can be retrofitted without a lot of work.

No problems introducing ProcessMonitoring

„The ProcessMonitoring equipment really was introduced without any problems,“ confirms maintenance boss Christian Grzegorzek. The 90 or so employees from the turbine-blade area who actually deal with the new technology apparently also quickly came to terms with it. Admittedly, an internal training session was held for all employees, although in practice this was almost superfluous since the BRANKAMP units were found to be most user-friendly, „After all, the systems function using the 'Plug 'n' Play' principle.“ An opinion that was also shared by operators such as Ronny from Felbert who works with the new technology day-in, day-out: „Actually, there were no problems at all. On the contrary: the new systems are an excellent support for us.“

continuation in the next BRANKAMP Journal international

Exclusively marketed by BRANKAMP

AccuForm™ 2000 – ProcessMonitoring for cold massive forming



BRANKAMP produces and exclusively markets the new ProcessMonitoring Systems of the Textron concern world-wide.

The US company is the world's largest cold massive

former and is ranked 125th amongst America's 500 largest firms. The AccuForm™ 2000 ProcessMonitoring System was developed on the basis of many years experience in Textron's 100-plus production locations in 17 countries.

The new AccuForm™ 2000 meets the highest demands placed on modern process-monitoring systems – whether this concerns setting-up, running or stopping the machine. Due by no small means to the simple operation, adapting to the changing conditions of production has now become an easily overcome challenge.

The real-time data acquisition allows trends to be detected fast. This means that tool life can be optimally determined – replacing the tool either too early or too late is now a thing of the past.

The AccuForm™ 2000 system is based on PC technology and offers comprehensive advantages:

- guaranteed production quality
- reduced production costs
- higher productivity
- shorter downtimes
- significant reduction of substandard parts

Interested?
Call us on +49 211-250760
or mail us at
bpd@brankamp.com.

User-friendliness

GT-Series: Please touch

Whether it's at the airport, the bus-stop or in the supermarket, life without Touch Screen monitors would now be unimaginable.

In manufacturing too, this technology is becoming increasingly more significant. BRANKAMP is the first company to equip its ProcessMonitoring Systems with Touch-Screen monitors as well.



Robert Bosch GmbH was one of the first clients to opt for this new-kind of technology in the production department as well. This meant the highest demands would need to be met: after all, the screens must be able to deal with the harsh factory floor environment, yet still be able to react to a simple touch.

The BRANKAMP GT-series systems fulfilled these expectations right from the very beginning. Many of the firms, which have since decided for this tactile menu guidance, now no longer want to be without the advantages of this intuitive and simple way of operation.

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