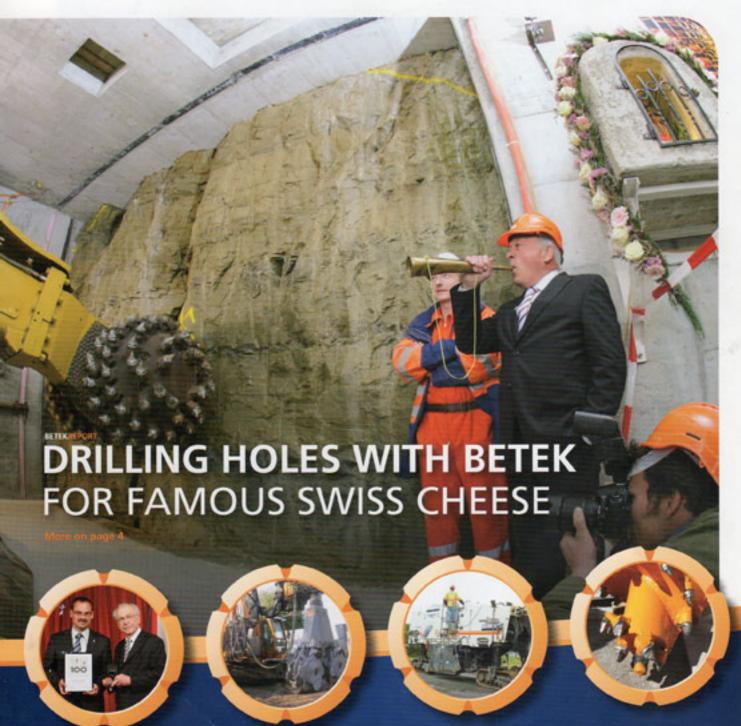
BETEKNEVVS

Progress!

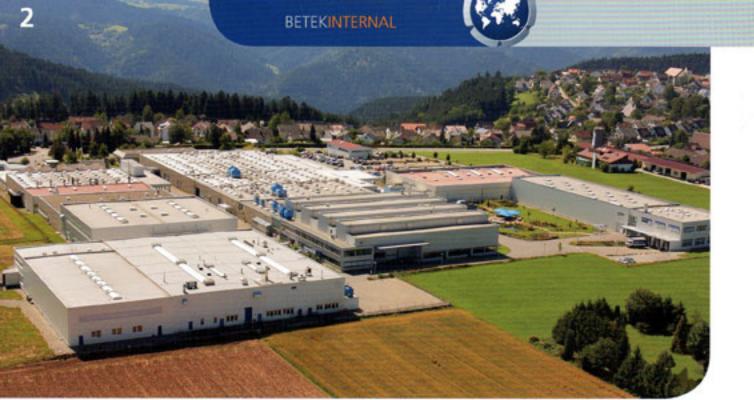


BETEK WINS TOP INNOVATOR AWARD 'Top 100' Seal of Approval NEW SB38DC CUTS IN EVERY DIRECTION - FOR-WARDS AND BACKWARDS

OPTIMUM CUTTING TECHNOLOGY MINIMISES WEAR

The right bits led to success More on page B

DRAGON'S TOOTH FOUR TIMES BETTER THAN RIVAL TOOL





I EDITORIAL

Dear Betek Partners and Readers.

Actually we've got good reason to celebrate, but that wouldn't be in tune with the overall economic situation and certainly not in keeping with our down-toearth Swabian mentality! As you will see in the adjacent article, Betek has won an award as one of the innovative and best German companies in the SME sector. That is due recognition of our hardfought success - but will not cause us to sit on our laurels. Quite the opposite! We are well aware that we are being closely watched and that others are not sleeping. And this has always made Betek faster and more alert - including, for many years, way beyond our national borders. On the following pages you will see reports from Poland, Venezuela, Portugal, China and Alaska - the list could continue ad infinitum and would quickly become like a journey around the globe. At Betek shaping innovative processes means working closely with partners, suppliers and clients - and in reality that means "keeping our eyes and ears open wherever

we happen to be and taking a serious approach to fostering personal contacts and the exchange of ideas with experts in their field". While our key account managers and support staff are asked every day for help and advice all around the globe and are present even on the most remote construction sites, at home research and development is running at full tilt and our production department responds quickly to individual client requirements. It's this that makes us 'small SME companies' strong and flexible. It's what welds us together at Betek as a family and what gets reflected not least in top quality. The fact that we feel particularly good when, for example in the 'product piracy land' of China, where our tools are constantly being copied, prestigious construction firms put their faith in the original (see page 7), is probably something that I don't need to unduly stress!

Being honoured as a 'Top Innovator' and receiving a 'Top 100 Seal of Approval' is to us both a welcome award and an obligation. The award's effect is not least to motivate me and my staff to keep thinking of new ideas. We want to do one thing: to make progress! Naturally, in partnership with you!

With this in mind, I welcome you warmly to this latest newsletter and thank you for your faith in our company. I look forward to continuing our successful collaboration.

Yours,

Karl Kammerer

Managing Director, BETEK Berghau- und Hartmetalhechnik Karl-Heinz Simon GrobH & Co. KG 'TOP 100' SEAL OF APPROVAL

BETEK WINS

TOP INNOVATOR AWARD

The staff and management at Betek in Aichhalden are overjoyed: BETEK Bergbau- und Hartmetalltechnik Karl-Heinz Simon GmbH & Co. KG is one of the 100 most innovative companies in the German SME sector. That was the finding of the latest study conducted as part of the nationwide, cross-industry 'Top 100' business comparison survey. In this 17th running of the prestigious business initiative, it was Betek's made-to-measure innovation management that truly impressed. Lothar Späth, retired former Minister President of Baden-Württemberg, presented the cherished 'Top 100' award to Betek HR Director Gerold Klausmann.

In so doing the mentor of this SME initiative was honouring Betek's achievements in the areas of 'Pro-Innovation Top Management', Innovation Climate', 'Innovative Processes and Organisation', 'Innovation Marketing' and 'Innovation Success'.

As an SME business, Betek, which has 162 employees, received the award in particular for its success through innovation. At Betek shaping innovative processes means working closely with partners, suppliers and clients. Just how successful the industrious Swabians are is shown by the fact that the company now has over 50 active patents, as well as by the fact that the technologies concerned frequently get copied in Asia. The Aichhalden-based business expends 4.5 million on the development of new products. One of its greatest innovative successes of recent years has been the round shank cutter bit based on the so-called R-system. It rotates permanently about its own axis and keeps automatically sharpening itself as it penetrates into the asphalt. Equally successful is a system that was jointly developed with Munich Technical University and has now been in use for over a year and a half. It utilises optical recognition



Former Minister President Lothar Spath presents the award to Betek HR Director Gerold Klausmann, who shows his delight with fellow Betek employees at belonging to one of the most innovative companies in the German SME sector.

technologies in order to better shape the collaboration of man and robot. "Whenever we've developed something new, we don't sit on laurels, but consider instead how we can make it even better," says Karl Kammerer, Betek's managing director.

Facing challenges with vigour

In order to gain this honour Betek had to come through a strict, two-stage procedure run by the University of Economics and Business in Vienna. "Our findings show that the 100 top innovators approach challenges with great vigour and thus, for example, are well equipped for the current economic situation. At most of these companies innovation has boardroom-level priority," remarks Professor Nikolaus Franke, the study's academic director, commenting on the analysis. The awardwinning companies consequently generated two thirds of their turnover with innovations and innovative improvements of the past three years - while in a comparative group of German SME businesses the figure was no more than 30%. Furthermore, through process innovations the top 100 companies were able to save a full 12% of their costs,

while 'average SMEs' saved just 4%. As a result this year's 'Top 100' include 54 national market leaders, 22 of which are even number one worldwide in their field of business. Karl Kammerer is delighted by the company's success: "Our innovative process is now proven to be amongst the best that the German SME sector has to offer. That enhances our credibility and generates confidence amongst staff, partners and, of course, clients. There can scarcely be a better way to face tough economic times." In total 319 companies took part this year in the 'Top 100' initiative.



WORLD'S LARGEST UNDERGROUND CHEESE STORE

DRILLING HOLES WITH BETEK FOR FAMOUS SWISS CHEESE

To prevent any misunderstanding right from the off: we're not talking here about the famous holes in the cheese, but rather the huge holes being driven into the sandstone in order to create more space for the famous Kaltbach cheese from Emmi in Switzerland to rest and mature.



Fritz Wyss, then Head of Administration at Emmi AG, gives the signal for the construction work to begin.

As the construction work is being carried out below ground, an official service to St Barbara was held as part of opening up of the cave prior to the formal ceremony to pray for an accident-free construction period.



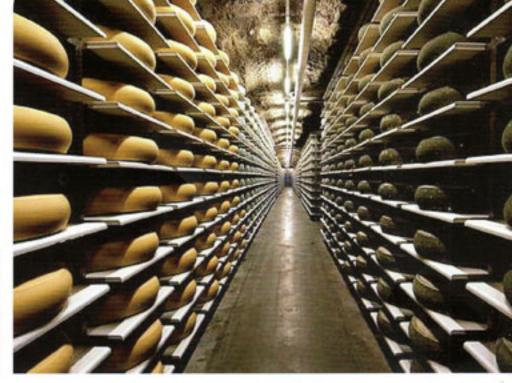
Tunnel construction firm Rothpletz, Lienhard + Cie AG was contracted by Emmi to carry out the excavation work to extend the rock cellar in Kaltbach. The picture shows the anchor work in the entrance area. Only the first 30 metres were secured with a reinforced shotcreting construction and anchors. For months already, work has been going on boring an extensive gallery system, which connects to the centuries-old labyrinth of underground caves, within the Santenberg, an elongated sandstone hill in the northwest of Sursee, in the Canton of Lucerne. All in all, a total of around 50,000m³ of sandstone is being excavated from the Santenberg.

The excavation work is being done by longestablished tunnel construction specialists Rothpletz, Lienhard + Cie AG. They are using a 63-ton Eickhoff ET 2500 road header and putting complete faith in quality tools from the Black Forest. Working in tandem with Betek's customer support team, Swiss Betek partner BAZ Service AG from Horgen proposed a combination of two tried and tested bits for the job. The road header's cross-cutting head is thus fitted with a mix of Betek B47GK19/70E and B47GK17.5LK75/E round shank cutter bits. This enables the machine's operators to master the greatly changing sandstone strata, which have differing levels of compression and a high quartz content, making cutting away the

rock a more difficult task. The excavation cross-sections vary from 25.5m² to 32m². The storage galleries are being cut out to a width of 4.8m and a height of 5.7m. The dust separation scheme used for the excavation work is remarkable. The driver's cabin was completely sealed for the job and gets provided with filtered fresh air. The extraction vent behind the machine is spread over four airduct lines and built directly onto the arm. The dust thus gets sucked up directly behind the cutting head – and adherence to the prescribed limits is thus also assured.

A good climate for maturing cheese

The new gallery system inside the Santenberg lies within the solid sandstone formations of the upper marine molasses, which formed around 16 to 22 million years ago. The sandstone is ideally suited for maturing cheese, as it regulates the humidity. The climate in the cave is stable all year round with an air humidity level of 94% and temperature of ten to at most 12.5°C. The



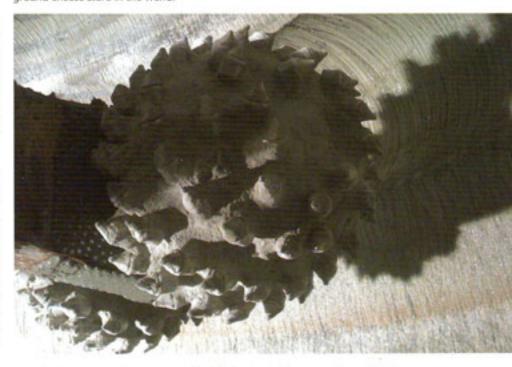
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Control of the road header is computer assisted. A high level of cutting accuracy is thus automatically achieved.

Resting and maturing in the complex underground labyrinth of caves are numerous culinary gems. Row upon row of cheese wheels. Maturing in the cheese cellar are 12,000 Emmental cheeses, 4,000 Gruyère and 120,000 wheels of semi-hard cheese. When put into store the cheeses are still young and have a golden yellow rind. Over the subsequent months they are nurtured in the cave until they reach optimum maturity and develop their typical dark patina. The further extension of the rock cellar is creating at Emmi in Switzerland the largest underground cheese store in the world.

cheese matures naturally in the cave, i.e. without any artificial climate control. In other words, any sealing of the surface of the rock in the cheese maturing storage galleries with sprayed concrete is not wanted. The rock, which in the actual gallery areas is fortunately practically free of any cracks or open seams, is left bare and fixed with individual GRP rock anchors.

Cheese aficionados appreciate this, because fine cheese behaves like choice wine. Only through careful storage under precisely controlled conditions does it become a complete delight. Kaltbach Emmental AOC cheese from Emmi is, however, recognisable not only for its unique taste, but also for its appearance. The blackish brown patina is the natural product of long, careful maturing in the mineralised air of the Emmi sandstone cave. The thinner the rind, the better the cheese. This is a detail to which the Emmi cheese masters devote many, many hours.



Greatly changing sandstone strata with differing levels of compression and high quartz content make cutting away the rock no easy task. The road header (with twin header)

MAKING FAST PROGRESS

NEW SB38DC CUTS IN EVERY DIRECTION

FORWARDS AND BACKWARDS

The Romans called the Limia River the 'Lethe' and in classic mythology it was surrounded by legends as a river of forgetfulness and perfidy. When it came to laying a water pipeline under this river only one thing was perfidious: the geological and spatial conditions. However, thanks to a specific excavation method and the fitting of the milling machine with newly developed cutting teeth these challenges were soon forgotten.



'Changing teeth' and thus any extraction of the milling machine was a thing of the past for Geo Rumo's machine operators – saving them 30 minutes per panel. And, as everywhere, on construction sites 'time is money'!



The milling wheels can be driven in both directions. Specially developed by Betek together with Bauer for this process: the SB38DC (double cut) milling tooth, with which milling can be done in both directions.

A water pipeline was laid under the Limia in Portugal using a micro-tunnelling system. To do this, initial shafts first had to be built. An experienced special underground construction firm, Geo Rumo, had the contract to produce the retaining walls. They were produced using the CSM (cutter soil mixing) process with an RTG RG25S. 24 panels were cut per shaft, 23 metres deep, using a BCM5 (800mm milling wheel) developed by Bauer Machines.

The cutter-soil-mixing process is derived from the diaphragm wall milling technique. The ground is loosened using milling wheels, which rotate around a horizontal axis. Through the rotary movement of the wheels and the addition of a self-hardening suspension it is then mixed into a soil and cement mortar. At the heart of the Bauer machine are two milling drives that power standard cutting wheels. The wheels can be driven in both directions. The suspension gets pumped via a central opening between the cutting wheels and mixed by the rotation of the wheels with the loosened soil. The wheels and deflectors located between the cutting teeth act like a positive mixer.

Cutting tooth optimises the loosening of soil

Betek together with Bauer developed the SB-38DC cutting tooth specifically for the CSM process and this was tested for the first time at the construction site in Ponte de Lima in Portugal. This cutting tooth is what you might call a 'little all-directions biter' – using this cutter you are able to mill in both directions. That's important in order to optimise the loosening up of the ground. Apart from that it also enables the milling machine to be corrected in order to get a straight panel. The ground conditions at this construction site provide everything from soft topsoil, varying layers of gravel and sand, clay and stone, all the way to very hard slate. Right from the very first test run it was evident that the twin-cutting SB38DC milling tooth was perfect for such jobs. Wear was more than appreciably minimised and the loosening of the ground optimised. The machine runs much more quietly and delivers a constantly high feed rate.

Any drawing back of the milling machine after 15m, which due to the complex geology found in this case used to be necessary for inspecting and possibly changing the teeth, was no longer required. On this construction site that meant a time saving of around 30 minutes per panel. Grossed up, with 24 panels per shaft, that makes twelve hours – now if that's not a good reason...

ROAD BITS

MAKING FAST PROGRESS

WITH THE IDEAL TOOL FITTING

Europe's largest road construction site is currently Poland, where the A1 motorway is being built. For lovers of large construction machines this site is sometimes a veritable feast for the eyes: during the first phase of construction almost 100 Wirtgen Group machines were involved both in the earth-moving work and the laying and compression of the roadbed all the way to work on the asphalt top surface. Included amongst the factors ensuring that the road construction makes fast progress are Betek tools, with all of the machines fitted with Betek road construction tools.



With a new base in Poznan Betek's partner Wirtgen has further developed its presence in an important European market.

A1 fload bits for the A1: all of the machines on Europe's largest road construction site are fitted with Betek road construction tools.

Civil engineering and road construction firm Skanska Poland has already successfully completed the first 90-kilometre section of the new motorway and has already started to tackle the second section from Grudziadz to Czerniewice. This 62-kilometre section is split into four construction jobs and work is being started simultaneously on all four.

Betek's Thomas Allgaier is in close contact with the users: "The road construction guys in Poland know that with our road bits they have high productivity, great cutting capacity and a long service life guaranteed. The long life of our bits in combination with our holder protection is something they can rely on. And they know that if they encounter any special challenges, we'll guickly be there on site." As an expert partner for innovative road construction technologies Wirtgen is valued by road construction firms around the globe. Early this year, Wirtgen opened a new base in Poznan and thus has its finger on the pulse of the mega A1 project. On the construction site itself the company has three service techniciars and
a coordinator
permanently on duty,
as all of the machines
have to be operational day and night. The
Wirtgen technicians in
Poland know that they can
rely on the advice of their partners at Betek.

The A1 motorway is part of the pan-European VI corridor, which links the Baltic Sea area in northern Europe with the Czech Republic, Slovakia and Austria. In Poland the A1 represents a link between the ports of Gdynia and Dansk, as well as with Katowice in the industrial region of Silesia. With the new motorway the upgrade of the infrastructure is helping to foster Poland's links with other Central European countries.



THE RIGHT BITS LED TO SUCCESS

OPTIMUM CUTTING TECHNOLOGY MINIMISES WEAR



After the Wirtgen machines had been fitted with the ideal combination for such use of Twin Stop sleeves and Betek road bits, road construction firm Swank were able to reduce the level of wear. The bits used were round shank bits based on the so-called R-series. They rotate permanently about their own axis and keep automatically sharpening themselves as they penetrate into the concrete. Difficult construction site situations often call for teamwork. That was the case on a road construction project in Portland, USA. Road construction firm Swank had a contract to mill a concrete road – which due to particularly high concrete quality proved to be very difficult to do. As a result of cutting bit tests carried out jointly by Swank, Wirtgen America and Betek, the company was finally able to tip the Wirtgen machines in such a way that excellent milling performance was possible and an end was put to the excessive wear.





Very course granite had been used as an aggregate for the concrete. This made the milling work a real challenge.

The concrete to be milled was studded with lots of granite and produced excessive wear of the cutting bits. In tandem with Thomas Allgaier of Betek, Keith Pacific of Wirtgen America adjusted the milling machines to the optimum configuration for this extreme task. Allgaier: "In an application like this in particular the Eco Cutters have a major impact on the level of success and cost-efficiency. We fitted the Eco Cutter milling drum with the Betek W1-17/22R. Betek's twin-stop sleeves helped to achieve good productivity." Keith Pacific emphasised: "When you're working in concrete, it is important that not only the bits are right, but also that the bit holders are functioning perfectly as well. It was not until we had this combination and the special Eco Cutters that we had success here."

And the success that the 'Swank/Wirtgen America/Betek' team achieved on this construction site was very impressive. The cutting bits did not reach 80% wear until a section of road 2,000 metres long had been milled. They were then changed in order to protect the bit holders. With the rival tools used previously Swank had to change the complete bit set every 180 metres. The milling services provider was thus naturally delighted by the uncomplicated advice and help received from the Wirtgen and Betek specialists.

QUALITY CAN'T BE BEATEN

CHINESE RELY ON

'MADE IN GERMANY'

China's highest building – and the second highest in the world – is currently being built in Pudong, a district of Shanghai. Already known as the 'Shanghai Tower', the building is set to soar half a kilometre or, to be more precise, 632 metres up into the sky. As always, however, the first job is drilling deep into the ground and it's not the appearance but the construction details that fascinate interested observers.



The Shanghai Tower is made up of nine cylinder-shaped buildings stacked on top of on each other, all completely encased in glass. The impressive, 128-storey building is intended to embody China's dynamic future and is due to be finished by 2014. Precisely a year ago, the foundation work began. In the construction of this skyscraper great attention is being paid to sustainability – the aim is for the building to be environmentally friendly and sparing on energy consumption. Betek business partner Lewis Lim of Bauer Machines in Singapore played host this summer to Thomas Neff of Betek Sales and Support,



who was on a business trip to Asia. During a stopover in Shanghai, Lewis Lim showed him the construction site, where the bored piles for the sealing walls were then being made. Bauer diaphragm wall milling machines and grabs are being used for this, all completely fitted with Betek cutting teeth. In China, too, people put their faith in 'Made in Germany' – Betek tools are admittedly often copied in this country, but the quality never gets matched. Fortunately there are partners like Lewis Lim, who champion the original and are thus able to win customers over with high productivity and good cost-efficiency.

LOW WEAR AND TEAR

BLACK FOREST TOOLS

PASS TOUGH TEST IN ALASKA

From Aichhalden to Alaska – Betek tools help to secure the extraction of raw materials even in the most hidden corners of the world.

Since summer 2007, Canadian company GAIA Inc., working closely with Bauer Resources Canada Ltd., has been building a slurry wall, up to 50m deep, to seal off a waste water treatment reservoir at one of the most productive zinc mines in the world, the Red Dog Mirie in Alaska. Using a Bauer BC 40 trench cutter plus MAT mixing and separating systems, the company is creating 55,000m2 of sealing wall in very hard rock formations. The workers on site had to combat two different challenges: on the one hand providing construction site supplies for a project north of the polar circle proved to be a logistical challenge, and on the other the demanding geological conditions represented a tough

test for the machines. Commenting on the choice of tools, an excerpt from an academic work produced by the Technical University of Berlin reads as follows: "After a series of attempts with different types of teeth and milling wheels, the tool that proved well suited was a rock milling wheel set, designed specifically for such conditions, which is predominantly fitted with round shank bits. This so-called round shank bit milling wheel set represents the best compromise between the milling progress required in the varying conditions of the backfill and in the compact rock. The progressive design of the teeth arrangement also enables wear to be kept within acceptable bounds, even in these extreme conditions." It goes without saying that the bits mentioned in this academic report are the tried and tested precision tools made by Betek from the Black Forest.





GREAT SUCCESS

DRAGON'S TOOTH FOUR TIMES BETTER THAN RIVAL TOOL



Fitted with the new Dragon's Tooth the 'Rock Auger' accomplished four times as many bored piles as with rival tools.

Bored pile jobs in difficult geological conditions are appreciably more effective with the 'Dragon's Tooth' than with other tools. A great example of this comes from the experience on a construction site in Venezuela, where switching to Betek tools got the cost-to-performance ratio back on track.

The successful tool test is confirmed by the executives of Resansil, Betek's business part-

ner in Venezuela, who markets the tools. Cimarpi, a local operator, reported immense difficulties with bored pile work. They were supposed to be driving 800 piles 12 to 17 metres into the ground. But after just eight metres a gravel and quartz stratum created difficulties that could not be overcome with the tools they were using, a competitor's flat teeth. Under these conditions Cimarpi was only managing one bored pile a day. The company's profit margin was thus virtually nil.

A complete tool change produced a sensational impact: by using Betek's Dragon's Tooth BFR07 and the associated BHR 133 holder the work progressed significantly more quickly and effectively. The machine operators and workers on the construction site were very happy and reported enthusiastically on their success. They were now finally making good progress, achieving four bored piles a day. The drilling machine ran much more easily and quietly. Wear and the cost of upkeep and retooling were also substantially reduced – in turn resulting in the use of fewer personnel and linked to that a lower risk of workplace accidents.





THE EVENT OF 2010

TO BAUMA

No trade fair in the sector has a broader range of products and services or is more international than the 'bauma' trade fair in Munich. This is a show where all of the market leaders and key players are represented and where innovations for every area of the industry are shown.

Also set to be there is Betek, with presentations of new and proven products related to all aspects of wear-resistant tool systems made of tungsten carbide.

With over half a million square metres of exhibition space, bauma is by some way the largest and certainly the most impressive trade fair of the lot. It will be taking place from 19th to 20th April 2010 on the Neue Messe trade fair site in Munich. Betek, the global player with innovative tool solutions from the Black Forest, is looking forward to meeting existing business partners and potential new clients – and promises even now that a visit to the Betek stand is guaranteed to be well worth it for every trade fair visitor.

JOBS FAIR

SCHOOL LEAVERS DISCOVER JOBS WITH A FUTURE



Company Group

What are you going to do when you leave school? That's a question that many boys and girls have to face in the months before the end of their final school term. In summer 2009, the 'jams' careers information fair in Schramberg sought to arouse interest in a variety of careers that offer ongoing training – and along with others at the show as an exhibitor and on the 'lookout for new talent' was the Simon Group.

One of the Simon Group's strengths lies in the training the company gives to its own young employees - thus ensuring continuity and the transfer of know-how. Apprenticeships are provided in a variety of commercial and technical disciplines, with 21 young people currently learning a trade at Simon and playing their part in the company's success. And they are repeatedly given exciting tasks. The business trainees, for instance, were allowed to design the show stand themselves - naturally Betek's design team also lent a hand. Along with their training manager Harald Arndt, the youngsters were responsible for everything - from designing the backdrop to the cocktail tables. Such enthusiasm is infec-



tious – at the show itself the trainees were naturally also present, arousing the curiosity of the school leavers, who picked up copious information. Thanks to the diversity of the Simon Group's range of business activities, the company offers school leavers a great opportunity for comprehensive training in many different areas of the industry. The training-based careers offered by Simon include jobs as: Surface Coaters, Mechatronics Engineers, Tool Mechanics, Industrial Mechanics, Technical Drawers, Retail/Industrial Managers (a BA course), Industrial Business Managers and Mechatronics Engineers in Transformation Technology.





NEW CORPORATE DESIGN

CONSISTENT LOOK AIDS RECOGNITION

Everything that comes out of the Simon Group from Aichhalden will in future be even easier to recognise: the group's logos have all been standardised to make the fact that the individual companies belong together even clearer.

Even though from common beginnings a multitude of areas of activity have evolved, the fact that the companies are related can

be guessed from just one glance at the new logos. The large letters and the strong dark blue are the same for every company. If you put all of the logos side by side, the clear, consistent look is evident. This well-structured and easily recognisable image is necessary in order to set the group clearly apart from its competitors not only with premium products but also with a consistent appearance.

SIMON BETEK SITEK SIKU

+ + + WELCOME ON BOARD! + + + WELCOME TO AICHHALDEN! + + +



Sarah Bitzer from Oberndorf joined the sales team in June. Sarah already knows the company and her colleagues, as she has moved jobs within the Simon Group. She previously worked at sister company Sitek, also in sales.



Pascal Detemple from Schramberg is doing a post-graduate master's degree in General Management and has been with us in the Key Account Management department since June. He is working primarily on special projects looking at solutions for protection against wear.



Alexander Moosmann from Hardt is a new member of the Simon team's central services and since 1st September has been working on automation in the Electronics department. After training as an industrial mechanic at the Carl Haas company, Alexander studied Mechanical Engineering, majoring in automation, at Furtwangen Technical College.



Björn Höhle from Harthausen joined the Betek team on 1st October in the area of benchmarking and complaints management. Björn knows the Simon Group well, as he has moved to Betek from a position in Simon powder metallurgy department.

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