>Editorial

Megacities bring new opportunities

Dear readers,

The progressive concentration of cities has a major impact across the globe. In 30 years time at the latest three quarters of the world's population will live in so-called megacities, the new global hubs and centres of power. Megacities are growing rapidly and they need a good infrastructure to work, for example lots of big cities like Cairo or Mexico City need tunnels and routes for efficient underground systems. Cities' waste water and supply systems have to be continually expanded, maintained and repaired, as well as road and rail networks.

The lack of space in cities is already being counteracted with increasingly tall buildings that need special deep foundations.

Bridges anchored into the ground will be used

more and more to shorten routes and connect sites. As a consequence of infrastructure expansions docks and dwellings will appear near the coasts and they need deep foundations too.

A topical example from our region is the "Stuttgart 21" station project whose construction has been recently approved. 16 new tunnels have to be laid for this project alone and a further 10 are required for a connecting route that is also planned!

Our customers' machines, equipped with our tools, are there for all these projects.

Megacities are in: Mega opportunities for our customers and for us.

Yours, Karl Kammerer

Yor Launan

Information for Our Customers and Staff

BETEKNE

> Strong brands!

Betek shows its image: Dynamic design for the product range

It's easy to see that BETEK is a strong brand just by the appearance of its products. The design of all construction ranges is currently being reworked and consists of typical distinguishing features that make the tools unmistakable and recognisable everywhere and in every installation situation. For some items in our round shank bit series, e.g. the innovative "rotation series" for road construction, the redesign has already been done successfully since BAUMA 2007 and not only looks unique but features lots of technically beneficial details. For 2008 the product redesign in the form of a dynamic groove profile will be implemented universally and progressively from construction onwards in all current and new BETEK tool models. Why a groove design? When they're used, BETEK tools create a groove profile that can be seen, e.g. in the typical milled finish of a road milling machine.





Like the logo and the slogan, the product design is "key visual", an essential part of the company's own corporate designs.

The new look of the products will not only give the BETEK brand an unmistakable visual character but also protects against product piracy in the tools sector.







When surfaces are milled e.g. for road development, a typical groove structure is formed and this is taken up in the new design.

Successful implementation in the new "rotation series" > Indestructible: Betek tools pave the way for the Pipeline Project in Yemen.



Project engineer Ulrich Krämer on site at the testing of Betek tool solutions for the construction of a pipeline trench.

Yemen: A new 250km long gas pipeline was made from a port in the Gulf of Aden in the direction of the capital Sanaa in 2007 as part of the expansion of the infrastructure. The project is already underway but the project team had to tackle various geological problems in the desert area. Progress was difficult and halting during selective milling of the 1.4m wide and 2.5m deep pipeline in rocky areas because we had to deal with a transition from pure sand and a mixture of different boulders, some of which were large and sharp-edged. The milling tools used did not perform as required and within just a short time the tool holders became clogged up with the material, stopped rotating and wore out quickly, so frequent breaks were required to replace the tools. The tool holders were so badly deformed that it was virtually impossible to change them.

So BETEK was drafted in to solve the problem and we got it right with our user-friendly solution: The tool problems were able to be alleviated quickly by equipping the special milling chain for selective milling of the "stone cocktail" with two different strength tool models from the BKF round shank bit series. The fixing elements were also swapped for BETEK \$35/22 and were immediately successful in the test: The special tool geometry meant that the tool holders no longer became clogged up with the material and the milling bits remained able to rotate, dramatically reducing wear. The special ring locks for the tools and the matching changing tool also made handling easy during changes, which meant that part of the project could be completed twice as fast, much to the satisfaction of the team and the client.

> Lasts and lasts and lasts! Wear protection from Betek

In the surface wear protection sector BETEK have successfully managed to cover increasingly complex parts with tungsten carbide. Wear protection solutions such as this are of particular interest for the industrial sector, which transports and processes particularly abrasive bulk materials. The coverings are particularly tough and, depending on the operating conditions, far outlast conventional reinforcements, like those made from metal sheets for example. BETEK also offers special features like edge reinforcements, covered screws and specially cut junctions.



> The low down: Special civil engineering project for the Emirate Qatar.

In Emirate Qatar a pile foundation project for setting up a new high voltage line on a 120km stretch of desert between the cities of Ras Fallam and Doha has been realised. A total of 1,750 piles with diameters of between 0.8 and 1.2m were set up for the new power supply line. The depth of the bore holes was 6m. The desert climate exacted high performance from the pile drilling machines and the BETEK tools used, which not only had to eat their way through the hot desert sand but also through the dolomite limestone and pure do-

lomite rock. They courageously completed the masterpiece and proved themselves so well that the project was able to be completed earlier than planned. Round shank bits were predominantly used but tools with special tungsten carbide welding bars also performed remarkably well during this project.

> Practical training

This autumn lots of visitor groups came to BETEK to take part in training and factory visits. These included two large delegations that came from South America to Aichhalden. One of the groups received practical training on a nearby road building site. The participants were able to see the new powerful BETEK road milling generation in action.



> Innovative: Betek study project

Due to the great potential for growth in the rock anchor product family, which is used for securing rocks during drift in tunnelling and mining, we are planning to automate various steps in the assembly of anchor crowns using robot technology. The project originated as a practical study project by both machine construction and mechatronics students Michael Kreuzberger (r.) and Alexander Moosmann and is now being put into practice following successful conclusion with support from BETEK construction.





> Trade fair visit in China

The China Coal & Mining Expo is the oldest and most traditional Chinese industrial trade fair with over 300 international exhibitors on an exhibition area of over 17.000m³, all about coal mining. This year BETEK was at the trade fair too. Our mining tools were well received at the Krummenauer tradefair stand. This year BETEK was at the trade fair too. Our mining tools were well received at the Krummenauer tradefair stand.



> News: Coal from China

Coal is celebrating a come-back as a fuel. The Republic of China, alone the world's largest producer of coal, imported more coal in 2007 than in the year before following abolishment of import duty for coal. Coal export has increased by around 20%. The first official coal stock exchange has recently been approved in China and business in the coal mining machinery sector is booming. The importance of coal is increasing again and creating opportunities for BETEK mining tools.

> News: Bad marks for US infrastructure

US infrastructure is in very poor condition, according to studies by the American association of engineers. Roads, bridges, dikes, electricity and water supply lines are old and in extreme need of redevelopment, like much of this equipment. The association summarises that over the next 5 years \$1.6 billion would be necessary in order to redevelop the equipment. There's a lot to be done in the USA!

> Unstoppable: the railways are booming

The future belongs to safe, fast and environmentally friendly transport. Modern rail-bound transport meets all of these requirements and that's why it has been forecast to have enormous potential for growth across the world. An increase of 17% in carriage of people and 37% in carriage of goods is foreseen in Europe alone (Eastern European expansion countries not included). Rail transport has enormous potential for growth all over the world: Major opportunities for special BETEK tools for railway construction and maintenance!

> On the Road with SSO

The new joint advertising campaign by road development company SSO and BETEK is really eye-catching. The entire, very impressive SSO machine fleet was equipped with securely installed advertising flags this summer. They can be spotted from a distance when used on building sites. "We always achieve our goal" is the message from the advertisement in BETEK colours.

> Green light for visionary super station: "Stuttgart 21" is coming!

After 13 years of planning and discussion the Federal Government, the railways, the state of Baden-Württemberg and the city of Stuttgart have agreed to finance the major railway station project "Stuttgart 21". In 2010 work is supposed to start with the construction of the underground station, the connection of the Stuttgart region to the ICE network and in parallel the construction of an ICE line from Stuttgart to Augsburg.

The main railway station in Stuttgart is supposed to be converted from a terminus into a through-station. The costs for realising individual building projects should be around 4.8 billion. A number of orders for the building industry and several thousand new work places will be created by the project itself and construction of new connecting roads, railway lines, tunnels, bridges and buildings, which will also be necessary.



> New projects: Tunnel project "down under"



Australia: A modern four-track motorway double tunnel is currently under construction in the city of Brisbane to make crossing the city faster.

The North-South Bypass Tunnel is growing at a rate of around two metres a day at fewer than 10 metres deep right underneath the city, with no perceptible noise or vibrations. Brisbane has a very special and very stable layer of rock, the "Brisbane Tuff" that makes geological conditions very safe. The 3 billion dollar mega project should be finished in the 2nd half of 2010. At the moment preparatory road headers are being used with BETEK tools and from 2008 a powerful tunnelling machine with a capacity of 20m / day is being used.

> Prevents forest and climate damage: Mulching not slash and burn

In lots of countries slash and burn is still practised in order to gain planting areas and to "clean" existing plantations. Many millions of hectares of valuable rainforest, home to rare plants and animals, often fall victim to uncontrollable fires. Targeted use of mulching units can help against this type of deforestation.

There is great potential for them in Indonesia where problems are particularly dramatic because of progressive slash and burn operations in the jungle. Targeted use of mulching machines is currently being tested in palm oil plantations. A test machine with BETEK mulching tools is already being used successfully.



Successful cooperation: Key account manager Bernhard Moosmann (I.) gives the first flag to Mr. Scherer from SSO.

> Fit for the future: Hi-tech for Betek development and manufacture

In 2007 a few things happened in BETEK to advance development and manufacture and to combine greater capacity with more advanced technology for customers. In the second half of the year a new sinter HIP facility was added, the second this year, a modern robot stocks and labels BETEK toolboxes and saves employees from heavy lifting work. The new prototyping plant has been in constant use since it was commissioned and it produces complex sample tools for every customer requirement. There's also something new planned for 2008, e.g. a driverless transport system for BETEK manufacturing.





> Betek internal news

> New to the Betek team

Welcome on board!

Sven Lechte has been a quality controller at BETEK since July 1. The industrial mechanic was previously employed in an industrial company in the development and quality control sector.

Alexander Moosmann has been an intern at BETEK since September 1. He's studying machine construction and mechantronics at Furtwangen University. Mr. Moosmann provides us with support in automation projects for manufacture.





Wolfgang Salatino will be supporting our key account team as a service engineer from December. Mr. Salatino will be working from the external office at Bergkamen in Westphalia for BETEK. Mr. Salatino had previously worked in the same role for a US company.

Dr. Wolfgang Strelsky will be working as development manager for BETEK from January 2008. He was previously responsible for the metallurgy and product development sectors in an international industrial company.

We hope they get off to a good start and wish them lots of success in their new jobs!

> NEWS from the SIMON GROUP

New in the office

In October 2007 Mr. Thomas Fred Herkommer was employed by INDUS Holiding AG as a General Manager of all of the companies in the SIMON Group. He is taking over from Mr. Gerd Frers who will be retiring at the end of March 2008. On behalf of the whole INDUS board I would like to wish Mr. Herkommer and Kammerer lots of luck in their future roles and ask all employees for the usual enthusiastic support of the

He previously worked as a foreign-business manager of an internationally active industrial company in the vehicle technology sector. He has comprehensive experience in the areas of production technology and product organisation.

New regulations for management

From January 2008 Mr. Karl Kammerer will be – in addition to his present role as manager at BETEK – employed as a General Manager of all other companies in the SIMON group. Mr. Herkommer and Mr. Kammerer will both jointly manage the business of all of the companies in the SIMON group. Their cooperation is based on a jointly determined business distribution plan with a comprehensive mutual representation rule.

Mr. Frers will mainly be taking care of drawing up annual accounts for 2007 until he retires and will also be available as a consultant for the INDUS board.



new management team.

Dr. Johannes Schmidt, INDUS Holding AG Director



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D-78731 Aichhalden

Tel.: +49 (0)74 22 / 565-0 Fax: +49 (0)74 22 / 565-122

E-Mail: info@betek.de http://www.betek.de

Editorial staff: Anne-Christine Jahnke

Responsible in accordance with press law: Karl Kammerer