



# HYDRAULIKPRESSE

## The truth lies in the oil

Quality determines

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## Editorial

### *Dear reader,*

The still young year 2008 started immediately with a significant event for the construction branch. The major VDBUM seminar, the professional association for construction engineers and master builders, is on the schedule. As a hydraulics system partner, this is an appointment for listening and learning. We will learn first hand what the construction branch expects from a service provider, we will learn about new trends and can develop new stimuli for improved service ourselves.

With our core competence in hydraulics, we are a sought after partner by service companies. To understand how this type of cooperation could look, we have provided pages 6 and 14 in this edition. HANSA-FLEX has developed various concepts with two of the most significant service providers in the construction industry – Baumaschinen Könicke and Schlüter Baumaschinen – and in cooperation with them, we are able to offer the customers in the construction industry made-to-order service quality. A synergy effect is the result of the interaction between strong partners and it does everyone good. Our goal is to become even closer partners and to optimise the advantages for the customers with well coordinated service.

The examples provided do represent a certain group of customers and apply to other HANSA-FLEX partners from the entire construction branch, but is naturally meant to show the commitment of HANSA-FLEX in the industry for continual improvement to service quality. As a partner that is in demand by service companies, HANSA-FLEX can contribute in the generation of additional services for customer advantages with similar solutions in many other branches.

Optimised services require competence. Therefore, we are taking a satisfied look at the foundation of the International Hydraulic Academy GmbH (INHYDRA) in Dresden. Our contributions to this project provide long-term support for the requirements for professional, practical training provision for fluid technology and expand our capacities in the training area.

Only a few more days separate us from the start of the XWORLD Tour. On the 8th of March, the convoy will be taking off in special off-road vehicles from Bremen. The first stage will take the participants directly to Istanbul. We are looking forward to an eventful journey and hope that all participants have a great time.

The managing directors

Uwe Buschmann



Thomas Armerding





XWORLD

## On the trail of Marco Polo Half-way around the world in a Landcruiser

*The controls are in my hand. The 173 horsepower engine growls. The four wheels speed the Toyota Landcruiser from zero to 100 kph in 11.5 seconds. We slam on the brakes because a little stream appears ahead. Without hesitating and getting wet, we drive right through. Looking through the windshield, we see the water spraying up at the sides. Pure adventure! Now it is only a test drive through fields, some woods and small creeks but will soon become serious.*

As of March we will be taking these special off-road jeeps through 34 countries, in 43 segments over 150,000 kilometers. This is a rally half way around the world. The great "HANSA-FLEX XWORLD Tour" with a guarantee for action!

### **Everybody drives themselves**

The thrill in it is: Every participant is also the driver. Whether over dunes, through rivers or mountainous hills of gravel – the vehicle will be driven by the guests themselves. We will be face to face with the nature and people of the various countries as is almost impossible otherwise. It is an indescribable feeling driving through the oriental-oriented

natural landscapes and myth entwined towns of the old silk route, the main route of which connects the Mediterranean with East Asia. At the same time, taking in the unique flora and fauna. Not to mention, going for a walk on the Great Wall of China while taking a break in China. Or driving over the 5,000 meter high pass on Mount Everest and spending the night at a base camp while there. These impressions are not possible anywhere else in the concentration offered on the XWORLD Tour.

### **Mongolia – A land of superlatives**

I am especially looking forward to the eighth stage, a round circuit with the start and finish line in the town of Ulan Bator. Mongolia is the land of superlatives of course. Thinly populated but offering an untouched natural paradise unlike any other country on earth. We are driving over mountainous terrain of rock, observing herds of Yak as they pass and crossing through woodlands of Siberian character. Simply an amazing adventure. On the sixth day, our travels are along the 4,000 meter high mountains of the Altai mountains and we are staying overnight in

a camp at the foot. At the end of the stage, we will be visiting the famous Orkhon waterfall and the city of Karakorum, which has already been designated as a World Heritage Site by UNESCO.

When five jeeps take off from Bremen on the 8th of March in the direction of Istanbul, those that are participating are probably headed for the most exciting time of their lives. Half of the accommodation will be in Hotels and in Camps, which will provide another extra portion of excitement. The flexibility of the specially built Toyota Landcruiser gives us the chance to experience highlights on the tour that are not in the travel guide and to discover things that could otherwise only be seen on television. Every stage is accompanied by professional expedition guides and technicians.

I'm pleased to be a part!  
Patrick Gombotc

Whoever has an appetite for adventure can obtain more information under [www.xworld.cc](http://www.xworld.cc) or by telephone under +49-661-440 772 770.





XWORLD



**Join the tour!**

## **2 x 1 XWORLD trips can be won**

### ***On the trail of the pearls of Buddha***

Come on the drive through the sixth stage from Kyrgyzstan to China. Fantastic experiences await you from the 17th to the 29th of May, 2008 on the route from Bishkek to Urumqi.

Just answer the following question and you are entered to win the draw!

**Question: On which day are we touring the flaming mountains and the oasis of Turfan?**

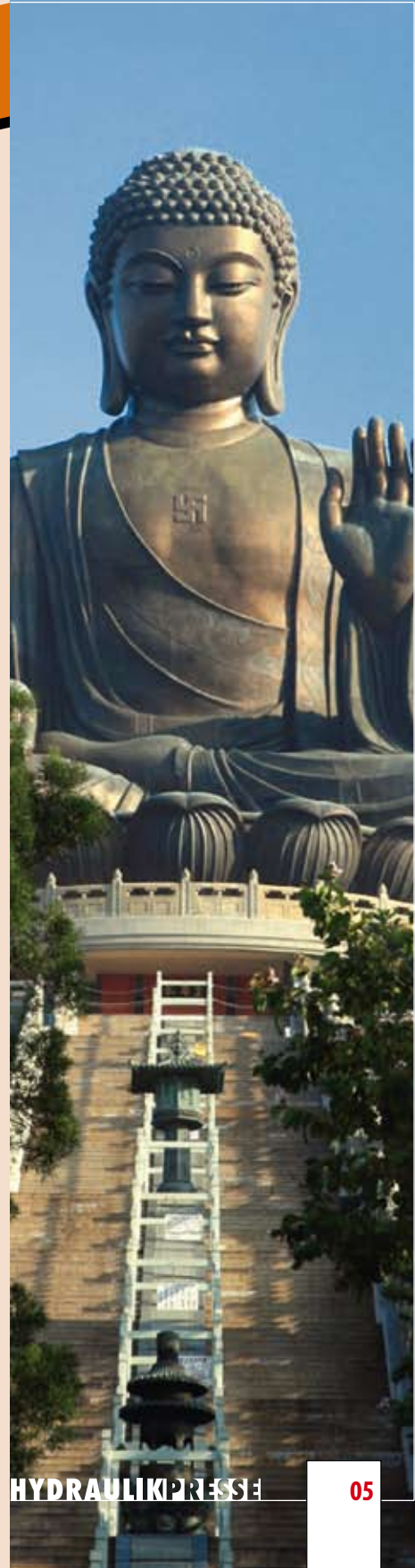
**A: On 1st day  
B: On 10th day**

The right answer is found under Stage 06 in the travel brochure. For example under [www.xworld.cc](http://www.xworld.cc)

Please send the answer in by Email to [ma@hansa-flex.com](mailto:ma@hansa-flex.com) or by post. Please do not forget to indicate your name and your address. The deadline for entries is the 10th of February, 2008. The draw will be made for 2 x 1 trips according to the description in the catalogue. One entry per participant will be considered for the draw. Terms and conditions apply for legal recourse and liability. A cash payment for the prize is not possible. Employees and members of HANSA-FLEX are excluded from participating.

### ***Deadline for entries: 10th February 2008***

Travel to and from the start/finish of the winner's trip will also be fully paid by HANSA-FLEX







## Close cooperation Pilot project workshop container



On the Nordbau 2007 exhibition HANSA-FLEX and Konicke construction machines in Garbsen closed ranks. The cooperation that was recommended at the time and is now fully functional utilises the strengths of each partner to put improved service on the market.

Konicke machines, with the full Volvo construction machine program is a full-liner, holding the right machines ready, from mini-backhoes to powerful wheeled loaders, from hydraulic hoes to dumpers for any application in construction. Within the Volvo network, all-terrain vehicles for management or towing machines for the transport of construction machines can all be ordered through Konicke. And this is precisely the full program sought by construction companies for their construction sites since it minimises the efforts in coordinating maintenance and service for the machines. "That is the measure of all things", envisions Konicke Managing Director Marcell Ollesch, "our customers expect machines

and full-service all in one, optimal construction site service without gateways to service providers."

In order to offer exactly that, HANSA-FLEX as a system provider and because of the close-knit network of service centres, is the ideal partner for Konicke. Konicke is underway with their own service vehicles to provide service quickly at construction sites. To make the service technician's lives easier and to give them an extra edge, HANSA-FLEX and Konicke have added to their cooperation. The construction machine dealer will be setting up workshop containers in 8 chosen locations on the properties of HANSA-FLEX branches. The pilot project will begin in March; if the project proves to be successful, the service containers will be set up on a greater scale.

### Reloading points for parts

In the stations that show the sign of cooperation in the company logo of both partners, Konicke will po-

sition special Konicke tools, replacement and wear parts for their area service technicians, who will then have local access to the parts required. Service technicians can store parts to go for repair in the containers and can also pick up Volvo original replacement parts. The container is a reloading point for parts in a manner of speaking. This is where HANSA-FLEX takes on a role; because the respective branch location also has access to this container. The Konicke area service technician can also store a defective hydraulic cylinder at any time of the day for example, and HANSA-FLEX handles the shipping and makes sure of repairs. The technician can order the required hydraulic components and hoses at the branch location, which will then be available in the container just-in-time. The Konicke service technicians are not only provided with a fixed reference point with the container, in which they can store consumable materials and tools but are also aided in organisational things so that they can devote their efforts to the service work at hand.

HANSA-FLEX also receives parts from shippers and stores them in the container this way. Normally these are original parts from Volvo, with which Konicke guarantees their customers that all parts conform with the strict quality requirements of Volvo. Only this way can fault-free operation of the construction machines be guaranteed. The use of original parts prevents non-authorized service providers from performing any work on the machines or from using parts that are similar to the manufacturer's parts on the surface but will not hold up under the specified conditions, since these companies do not know the specifications of the manufacturer regarding alloys and compositions of steel or the geometries of the components. Not only can no-name products lead to early wear and complete failure of a machine but they also nullify the guarantee options.





### ***Fleet service on top***

To enhance the expansion of the Konicke service offer helping HANSA-FLEX support customers, it must be close to the customer on large construction sites. Anywhere that Volvo fleets are in large scale operations, Konicke offers service with completely equipped hydraulic workshops. These are workshops implemented by HANSA-FLEX, in which a structure machine program is available to quickly produce hoses, on-site, without any time loss. An additional service provision by the machine supplier for the construction site operator.

The extent that service-oriented cooperation can still be expanded between the hydraulic service supplier and Konicke is now being evaluated. The two have been cooperating in the BeNeLux countries for a long time already. Construction companies therefore have less coordination requirements, the downtimes of machines are reduced and service and maintenance has been optimised. HANSA-FLEX and Konicke plan to expand this service for Volvo customers in other countries as well.

### ***Other advantages***

Extensive service provisions require man-power. Konicke supplies the personnel base for these positions through training. At present, 80 young people in the company are being trained in technical and commercial trades.

And that is also service: As a construction machine dealership, Konicke takes approx. 1,000 used machines in on trade, including "exotic" models from manufacturer's that have been off the market for years or are stationed far away in other countries so that replacement part deliveries are only possible with longer waiting times. These use machines are refurbished in the central operation in Garbsen and are prepared for sale. Konicke brings in HANSA-FLEX to support by replacing the machine hoses, repairing hydraulic cylinders and producing seals.







## *For tough applications* **Seawater resistant industrial hoses**

As the lifeline for powerful, rumbling ship diesel, on wave-tossed drilling islands and wind and weather beaten offshore wind energy plants, are industrial hoses that not only have to be robust but also seawater resistant and vibration resistant. HANSA-FLEX, as a hydraulics system provider, keeps such industrial hoses ready for the respective range of applications.

Customers prefer partners that provide all lines for transporting fluids from a single source. This realisation caused HANSA-FLEX to expand their program of industrial hoses consistently, and to therefore be able to offer their customers all connecting elements for the fluid technology from a single source. Hoses for different types of fluids such as hydraulic oil, water, chemicals, special oils such as lubricating oil, fuel oil for ship diesel, coolants and air for starter compressors are available. There are also hoses for use with abrasive materials such as cement or waste water. A total of 1,400 products make up the basis for always being able to make quick deliveries. After discussion with the customer, special parts that do not yet belong in the scope of the supply program can be introduced as supply parts and held ready in the respective quantities.

The supply program is supplemented with seawater-resistant industrial hoses, manufactured in rated diameters of 25 to 200. These are not only the lifeline of a ship diesel, but because of their specifications are ideally suited for use in offshore wind energy systems, on drilling islands or stationary in power stations. Therefore, everywhere that hoses are subjected to special conditions. Wind, sun, seawater, vibrations and hot fluids affect the hoses just as much as unintentional stress. In order to withstand these conditions, HANSA-FLEX industrial hoses are not only seawater-resistant and vibration-resistant but are also temperature and ozone-resistant and flame-resistant. This offer also includes HANSA-FLEX metal tubing PTFE cor-

rugated hose for ventilation, which also retains its inner diameter with a tight bending radius; it will not kink even if it has to be routed under extremely cramped conditions.

### ***Specialists from the coast***

Customers are coached in the use of industrial hoses by experienced specialists from HANSA-FLEX, who are trained precisely in the characteristics of the individual hoses. They know which hose is to be used and where or which safety provisions have to be considered. This ensures that customers receive an optimal hose for the respective application. In the special case of the seawater-resistant industrial hoses, used for water or air or as suction and pressure hoses, specialist personnel from the two Hamburg HANSA-FLEX locations in Wilhelmsburg and Stellingen are standing by with specialist knowledge, ready to help the customers. All branch locations can call upon the knowledge from Hamburg if required.

Since the foundation, both branch locations maintain their relationships with shipping lines and ship yards and service this sector of clientele with success since the beginning. These years of experience are paying off now, the employees in Wilhelmsburg and Stellingen consult customers with excellent professional knowledge and support the use of industrial hoses in seawater applications with tailor-made solutions that require in depth knowledge. Knowledge that is different from that required with hydraulic hoses. For example, the length-elongation characteristics with industrial hoses are very different, which means that special knowledge is required for producing these hoses.

The experts in Wilhelmsburg and Stellingen ensure proper dimensioning of the hoses with their many years of experience. Both branch locations are especially audited by the high quality testing and certi-







fication firm Germanischer Lloyd and implement all requirements of the Pressure Equipment Directives. HANSA-FLEX knows its responsibilities concerning the confrontation of hazards to people and the environment. After all, the parts are always relevant to the safety of the area and the areas are sensitive in these ranges of applications.

### ***Don't use just any replacement part***

The use of seawater-resistant industrial hoses requires a significant degree of consultation, whereby HANSA-FLEX often develops solutions with the cooperation of the customers and their construction departments. HANSA-FLEX designs all types of hoses in their function as contract partner to well known ship engine manufacturers in cooperation with the customers. In these cases, the hydraulic service supplier creates the prototype, optimises the parts until they are ready for series, runs all tests and takes care of the certification procedures and documentation for the parts as well.

This, as is for many other customers in this sector, is where the X-CODE is put to use. This is advantageous for hoses, for example, that are used on drilling islands or offshore wind energy systems. If a defect occurs on a hose there, not only is fast service required – because every hour of downtime costs a lot of money – but the precise identification of the required replacement part is a must. Especially in these times of increasing globalisation, the logistics for replacements absolutely must be harmonised with the customers. HANSA-FLEX supports them with the X-CODE. If a replacement part is required and is taken to its installation location, whether by helicopter or supply ship, X-CODE ensures that this replacement part fits precisely.

In regard to the significance of X-CODE, the designation is engraved directly into the fitting, because not only is a perfect fitting replacement part abso-

lutely necessary, it also has to meet the required specifications. After all, the special fabrications are often required for seawater-resistant industrial hoses and these are subject to clear specifications in the construction and they often hide the special solutions inside, i.e. other providers would not be able to tell the difference by looking. This is the case for instance, with parts that are used specifically for preventing galvanic currents. These occur if metals are apart from one another in the electric series. Seawater, by the way, works as a catalyst and accelerates the advance of wear.

Another word concerning the fixtures that are subject to special requirements in these application ranges: These must be manufactured "from a solid", i.e. from a single block of material as one single piece.





## Talking with: Thorsten Hellmann "Recognising potential in employees"

*As Rolf Hellmann adjourned as an associate of the HANSA-FLEX Group in Solingen in 2006, the group was split into two regions. Thorsten Hellmann, the son of the former pathfinder of the group, manages the area with branches in Solingen, Frechen (was Cologne-Marsdorf), Würselen (Aachen), Unna, Cologne-Rath, Olpe and Euskirchen.*

The educated tool maker Thorsten Hellmann joined HANSA-FLEX on the 1st of November 1988, where he began in the Solingen workshop with the production of hydraulic hoses. Shortly thereafter, he used his chances and started his carrier in field service in the area of Cologne, Bonn and Aachen collecting valuable experience and convincing new customers with HANSA-FLEX. Because of his successful activities, the second branch of the Solingen office was created in Cologne-Marsdorf in 1993 and in 1994 the third was founded in Würselen by Aachen, which Thorsten Hellmann managed as branch manager. An economically interesting region that he developed for HANSA-FLEX along with the Belgian and Dutch border districts. Since 1999, he has filled the function as regional manager in the Solingen group and since 2001, he is especially active in supporting the field service. HYDRAULIK-PRESSE spoke with Thorsten Hellmann concerning his agenda for the development of the region:

**HYDRAULIK-PRESSE:** You were able to boost the turnover in your operation by around 25 percent in 2007 already, what do you see happening as far as further developments go for the region?

**Thorsten Hellmann:** We want to continue to increase turnovers by investing in contact with customers, to offer them even more service and solutions from a single source and to ensure new service capacity. We aren't going to force anything, just attracting new customer circles to plan. The growing competence of HANSA-FLEX as a hydraulics system provider opens doors for us that were closed just a few years ago.

That provides us with the ability to attend to customers even better. They are provided with every-



thing from one course – a contact, one who is responsible for preventing interfacing problems and lastly, an invoice. I want to support my field service technicians so that they can work intensively with the customers to familiarise them with the product program and the service readiness of HANSA-FLEX.

**HYDRAULIK-PRESSE:** Are you considering starting other branch locations?

**Thorsten Hellmann:** At the moment, I have new branch locations planned for Siegen and Leverkusen areas. However, we have to thoroughly weigh and consider all aspects first. Success actually means producing customer satisfaction and earning money at the same time. This brings up the question of where we can get the required personnel because ensuring the high degree of quality of HANSA-FLEX is the issue here. Training, training and training is required and a training centre would be helpful in this case. Working independently, handling responsibilities and producing customer satisfaction can only be done by well-trained employees. Only with the right training are employees in the position to make spontaneous decisions, to be more motivated,

be more involved and to identify with their job.

We also have to demand a change to the traditional work culture. Today, the HANSA-FLEX Group and the satisfaction of the customers are the focus; area restrictions are a thing of the past.

**HYDRAULIK-PRESSE:** Do you have any special wishes concerning new branch locations?

**Thorsten Hellmann:** Yes, the Dortmund area. This is a strong economical region with large and medium sized operations and hydraulics are used throughout. Well set up cooperation with colleagues that are active there can improve efficiency for HANSA-FLEX and the customers.

**HYDRAULIK-PRESSE:** The latest new establishment was the branch location in Euskirchen?

**Thorsten Hellmann:** In July 2007, we opened under the workshop management of Hans-Albert Kluth. Here as well, we did a thorough analysis of market potential and presented the question of which customers could be won in advance. Naturally we never started at ground level in Euskirchen





either, the field service personnel had already been operating in the area. The location mainly serves customers from the forestry sector, strongly represented in the Eifel area. Damage to hoses is inevitable on the fellers, skidders and handling devices because of jammed or falling branches and this damage has to be rectified as quickly as possible. Prominent petrochemical companies are situated in the region and these again have special requirements that we can handle with our program of PTFE and metal hoses. Numerous small and medium sized operations are also located in the area and we can't forget the amusement park Phantasialand in Brühl with its hydraulically and pneumatically driven fun rides.

This scattered client structure makes HANSA-FLEX independent of branch cycles. If the client decides on having us as a system partner, it is another advantage of a permanent market presence. You are provided with the security of being supplied with the identical parts if you authorise it for your production lines.



**HYDRAULIK PRESSE:** What role does the system supplier concept play in your plans?

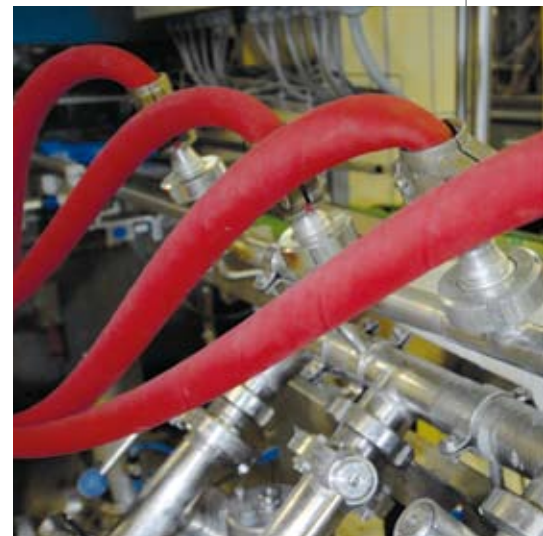
**Thorsten Hellmann:** We also have to support this personally by recognising and developing on the potential of our employees. An example: One of our employees in Frechen (was Cologne-Marsdorf), Nils Jablonski, came to us after working as a workshop employee and wanted to leave HANSA-FLEX to go back to his old job. We determined from Mr. Jablonski's qualifications, that he was capable of representing the complete program of hydraulic components and of professionally handling the designing of hydraulic cylinders. Together, we defined a qualification program and after in-depth training in the HANSA-FLEX operation for hydraulic cylinder repair in Königshofen and in the Dresden operation for hydraulic components, he took over customer support in this important sector of hydraulic systems in the large Solingen Group.

**HYDRAULIK PRESSE:** Employees of the group are advised to bring up the discussion if they are striving to achieve new positions?

**Thorsten Hellmann:** We make the way clear whenever possible. Currently, I am working on compiling the occupational information and the wishes of our employees in the workshops to set up an installation team. We have electricians, machinists, tool makers, one-time millwrights and those with other technical occupations that can be qualified for installations for customers with the respective support. Our customers increasingly expect that we offer installation service as well as the parts for hydraulic systems. We are very efficient in this aspect with small installation parties.

**HYDRAULIK PRESSE:** Following the new foundation at Euskirchen, you moved the successful operation in Cologne-Marsdorf to Frechen. Did you not have logistic problems to be solved?

**Thorsten Hellmann:** The new location is a sign of growth. It is only 1,000 metres from the old loca-



tion, is twice the size and represents the continual growth of our customer base. I am quite proud of our employees that accomplished the move without interrupting operations. They hung in there and over a two week period, transported all stores and storage equipment that were not absolutely necessary in Cologne-Marsdorf to Frechen. Dismantling the machinery to move it to Frechen was begun on a Friday at 5:00 PM. The operation was opened with full capabilities on Monday morning at 7:00 AM. Again, I am very grateful to those that helped out, from other operations and from HANSA-FLEX groups, in making the move. Everything went according to plan, which shows how dedicated our employees are and how closely the employees of the various HANSA-FLEX groups work together.



## Demolition and metal recycling with oil precision

### Oil analysis concerning early wear

*Metal scrap as raw material for producing new steel is booming. More than half of the world's steel is now produced from scrap and in modern electric steel plants it is even 100 percent. The prerequisite is naturally that the metal scrap is all of the same type and does not contain any other materials.*

Recycling companies ensure a pure, proper collection and reconditioning of old materials and they focus on recycling these old metals as secondary raw materials. One of these profiled companies that deals with metal scrap and wood preparation is Kaatsch GmbH in Plochingen, who run a mobile fleet as demolition and disassembly specialists. What began decades ago with a small trolley and the collection of tatters and old iron has now grown into a company, rich in tradition, with 145 employees. On a stockyard of 70,000 square meters, Kaatsch GmbH handles over 350,000 tonnes of scrap and old wood per year. Steel mills and foundries all over the EC, overseas and in Asia are customers of the recycling organisation.

Demolition work throughout Germany is carried out by track hoes, excavator shears and wheeled loaders. Work is normally to tight deadlines, even up to 24 hours non-stop. If anything breaks down – a hose can break easily during demolition work – replacements have to be available quickly. In these cases, Kaatsch-shop manager Reinhold Kern holds the services of his hydraulics service provider HANSA-FLEX in high regard. "I'm glad that the tight service network can get us hoses at any time and anywhere. We have introduced X-CODE little by little for our machines, which has generated the advantage of quick replacement part deliveries without any mistakes caused by incorrect measurements or specification problems. That explains HANSA-FLEX." Kaatsch partners also appreciate the quick help given by the FLEXPRESS, the mobile hydraulic service, if anything breaks down on-site during demolition work. Also in this case: Thanks

to X-CODE, the service technicians are able to bring the required parts on the first run.

The HANSA-FLEX branch Leinfelden/Echterdingen has been trustworthy and intensively serving Kaatsch customers for many years, delivering hoses, hydraulic components and handling cylinder repair work. Field technician Hans-Joachim Mayer makes regular visits to the company. During one of these visits, the topic of proper hydraulic oil handling came up – and a cost reduction that could be achieved thereby. The trigger for this discussion was the large shears and a baling press on the work-site that Kaatsch uses for crushing old metal, which are subject to isolated operational breakdowns. These machines cut and press up to 50 tonnes of metal scrap per hour, whereby they are subjected to especially high load situations. The hydraulic oil in these machines is therefore under stress from dust, shavings, condensation and naturally the extremely high cycle count. All of this leads to heavy wear, which can be minimized to a great extent with the respective oil maintenance however.

#### **Getting to the bottom of the oil**

To get a grip on the problems associated with the shears and baling presses, Hans-Joachim Mayer of HANSA-FLEX recommended Fluid-Service-Specialist Rudi Apic. The consultant focused on the topic of oil service and began by taking some oil samples to have analysed in the short-term by a specialist laboratory. These analyses provided a great deal of information on the status of the oil and the machines – because "the oil is practically the DNA of a machine". This data then enabled targeted solutions for developing optimised oil and systems. The first analysis at Kaatsch showed that metal abrasion was leading to faults, whereby the type of metal particles quickly localised the pumps as the source of the metal wear. Everything pointed at one or more hydraulic pumps in an advanced state of wear. The







oil analysis also showed that the additive package as well as the viscosity were alright. The next step was to filter the oil using a secondary flow where the oil was then cleaned – absolutely – by filters of 10 µm filter fineness. When complete, the laboratory report still showed an existing constant superfine particle quantity (less than 10 µm) of iron, chrome and copper particles. Therefore, a second run was made cleaning to 6 µm – absolute – filter fineness. Since system filter elements of 20 µm are installed by the factory on the shear and press systems, Rudi Apic, recommended that the hydraulic oil also be filtered continuously with the secondary flow method. This minimises faults caused by metal abrasion and general contamination. The life-spans of the oil have been greatly increased and the operational availability of the system improved.

With a quantity of 14,000 litres in the hydraulic system of the plant, this cleaning process by HANSA-FLEX ran for several weeks, whereby since customers were still sceptical in the early stages, the secondary flow filter system (NSFA) was provided for cleaning the oil free of charge for test purposes. Only the required filter elements (FE) had to be paid for. The sustained success of the oil analysis completely satisfied Kaatsch Managing Director Hermann Wager. In the meantime, the same type of secondary flow filter systems have been permanently installed on a shear system. Others are in planning stages. "An excellent precaution for avoiding breakdowns", mentioned Reinhold Kern, very confident of the secondary flow filter system. It extends the life of the oil and lowers costs.

### ***If a Porsche disappears in the oil circulatory system***

The savings that careful and consistent oil maintenance make, just at Kaatsch can be made evident in a simple calculative example: Oil quantities of 14,000, 6,000 and 4,000 litres are implemented in

the large systems of the metal and wood recyclers. Approximately 24,000 litres of oil must be replaced per oil change. Since it is absolutely necessary to flush the system before filling with the new oil, another 24,000 litres of oil are required for flushing. And the old oil must be disposed of properly of course, which also costs money. Add the costs for the fresh oil and the disposal and you'll quickly come to the price of a new Porsche.

It is worth a lot of money. Not only that but contaminated oil leads to functional damages in the systems, minimised power and early wear and the total failure of fixtures, pumps and cylinders. All of this makes a good case for maintaining the hydraulic oil carefully and regular oil service.





## Always solution-based Secret to the success of a construction machine dealer

When engineer Caspar-Heinrich Schlüter founded the Schlüter company for construction machines in 1964, he went to market with the backhoe-loader by Massey-Ferguson, which was the first hydraulic construction machine of the times. In the meantime, Schlüter marketed the so-called Full-Liner of construction machines in the Komatsu machine program, based on the merchant centre model.

Nothing has changed as far as the company philosophy goes, which can be derived from the claim "Service with Heart". In the early years, the machines from Schlüter were in operation for road-working companies and underground construction companies in the Erwitte region and today, the machines are used in the same territory, besides the classic customer structure, cement works, quarries, disposal operations in the waste industry and port operations as well as in numerous industrial and agricultural operations.

270 employees work in twelve locations in the region, of which only 26 are active as external sales representatives. They exchange experiences and are provided with the new information from the product program in a monthly sales meeting. Being in-the-know and the sale of construction machines with services such as consultation as well as combining development, construction and engineering for special equipment, that is the secret of the Schlüter merchant centre model.

As a system supplier for construction machines, Schlüter doesn't only sell 700 new machines per year but offers full service, 24 hours a day and seven days per week, provides original replacement parts and keeps approximately 400 rental machines ready at all times.

### Made to order

In the construction machine sector, almost every machine has become a custom solution for a certain task. A special section of Schlüter develops and manufactures attachment devices such as sweep-

ers, high-tilt buckets and mulch-gripper buckets as well as buckets of any type for the quite often very unusual requirements of their customers. Special solutions such as a high-tilt grabber bucket, which can be used for efficiently and quickly loading the light yellow sacks of a waste disposal unit in high containers with versatile wheel loaders.

Since the Schlüter engineers perform all planning in 3-D on computers, they can provide the customers with a solid foundation for their decisions early on in the development process. The Komatsu dealership naturally have all technical reference numbers of the machine, so that the manufacturing engineers are able to consider any distinctive features of the machine and to introduce them into the construction from the beginning. This ensures that the respective attachment device is precisely suited to the machine, the engineers know all leverages and tip-points and know how the device influences the machine. Power losses or advance wear is also avoided this way.

A plus for the attachment devices is the quick-change system for wheel loaders developed by Schlüter. On every machine that is equipped with one of these, the operator can switch attachment devices quickly without even having to exit the vehicle.

### Made on-site

Schlüter is happy to provide any consultation on HANSA-FLEX required in these situations. 40 years ago, the first hydraulic construction machines still worked with hoses and fixtures that took some effort to thread together. Then, 30 years ago, Juergen Marx from HANSA-FLEX offered the dealers hoses with fixtures in the reliable and economical pressed technology and has been providing them with all required replacement parts ever since. Matthias Lenniger was just born in that year but would later complete practical training at Schlüter and is now responsible for the resources to supply all hydraulic hoses in Erwitte. For this job, he was specially trained for hose production in the HANSA-FLEX es-







tablishment in Paderborn, where Schlüter customers are now serviced by Diethelm Kappe.

More and more often, customers required more replacement parts from Schlüter and more quickly and each time, the parts had to be retrieved from the location in Paderborn, which was 40 km away. The demand grew and a Schlüter employee picked up parts several times per day, an avoidable cost factor. Manfred Becker, the manager of the replacement parts service at Schlüter and Diethelm Kappe came up with a solution. In 2001, Schlüter bought an over-dimensioned workshop container from HANSA-FLEX, equipped with a bark stripper, a press, hose storage, fixtures, quick-connectors and threaded connections. Here, 80 percent of manufacturing done by Matthias Lenniger is for Schlüter's own production requirements and 20 percent is for customers in the region that have come to appreciate the local hydraulic service. In 2007, a new oversized container was put into service to take on the regular supplements to material stores for HANSA-FLEX. Cooperation is enhanced by HANSA-FLEX with field service employee Uwe Schmidt who supports the Schlüter engineers with up-to-date know-how if they are presented with especially tricky challenges with the hydraulics on attachment devices.

### **Coded security**

The in-house production of hoses is also advantageous in prototype testing. The capabilities of a hose or the effect of a certain hose material rigidity can quickly be determined in practise, on-site.

The close cooperation also shows in the coding. Schlüter, along with HANSA-FLEX has applied 38,000 parts with their own part codes and has stored these codes with the respective HANSA-FLEX code in the EDP. This provides capabilities for any of the twelve dealership locations in Germany to order a replacement part that corresponds with the specifications of Schlüter at any time, from any HANSA-FLEX establishment.

"Customer satisfaction is the key for us," says Petra Schlüter, who is responsible for Marketing in the company. "However, the true situation is highlighted in the normal course of daily business because the customers do not only expect perfect machines that we offer them in the Komatsu machines but they also expect that these machines will run without any problems." This is why 70 service vehicles with qualified technicians provide permanent service readiness. Anywhere that no standstill is permitted, such as when tearing down a highway

bridge, which is normally done at night or on weekends or in cement factories where the furnaces have to run full time, Schlüter provides the customers with the security of receiving help, quickly, 24 hours a day. In these situations, HANSA-FLEX is always on board.







## *Specialists for special tasks* *Hydraulic helpers indispensable*

*The logistics branch is booming but nowhere near all products are transported in containers or via rail and waterways. The majority of transport is still done by truck. And there are always special transport requirements to satisfy.*

Tank-trucks, designed for different transport tasks, are rolling down the roads for example. These bring the required fuels such as Diesel or Gas from the refineries to the filling stations. Each time, approx. 40,000 litres, absolute safety is demanded for people and the environment. Other tank-trucks transport cooking oil, milk or orange juice for the food and beverages industries, from its origin to the manufacturers – perfect cleanliness is absolutely necessary, which is why stainless steel tanks are preferred for the transport solutions. Those tankers that haul chemicals across the country must be especially safe on the other hand, because acids and bases are considered to be hazardous goods.

When constructing these vehicles, the Belgian-Polish Special vehicle manufacturer STOKOTA is an experienced partner. The manufacturer, with the main headquarters in Lokeren, Belgium doesn't only have tank-trucks of all types in the program. The expanding company has divided its competence into the sectors "fuel and energy", "construction and logistics" and "waste management". As a specialist for transport-trucks that transport waste and waste-water, STOKOTA works closely with communal clients, since the company has special know-how especially in this sensitive area of transporting waste products and waste-water.

Besides these communal vehicles, STOKOTA also builds specialty equipment for heavy transport that cannot be handled with standard vehicles. Semi-trailers for instance, that are used for transporting the large blades on the wind turbines. These special low-bed trailers have hydraulic segments so that the position of the blade can be changed while driving. This way, trucks can make it through possible bottlenecks on the route to the installation site.







### *Nothing off the rack*

Just in these examples, it is already evident that STOKOTA supplies nothing that is off the rack but is specialised at individual made-to-measure work; the vehicles are exclusively manufactured in single pieces or in small series production. The engineers of the manufacturer work closely with the customers on common technical solutions for the respective transport tasks. Since STOKOTA has developed a modular system, the best quality can be secured cheaply in Kielce.

The basis for every vehicle construction is the chassis of the motor vehicle specified by the customer to start with. On this standard vehicle – it can originate from any reputable manufacturer – STOKOTA then defines the special production for the respective transport requirements, by adapting the chassis to the various tasks. In this case for example, the frame is strengthened, various power units are fit into the structure and hydraulic systems are integrated. Fasteners for tank attachments or special transport platforms or the integration of on-board loading cranes and extending hydraulic supports are also added. On vehicles for the waste industry, STOKOTA provides solutions based on their specialised know-how in order to pump the waste-water at a high capacity per minute for example. Besides the high-quality industrial hoses, high pressure is also required for working effectively with unmanageable materials.

Modern trucks for special tasks almost unimaginable or even impossible to construct without hydraulic equipment these days. Hydraulics ease the simple handling of heavy hoses for sewer cleanout services whereby mobile hose-drums are implemented. Equipment that enable hydraulic lifting and lowering of loading areas ensure trouble-free loading of bulky materials. In short, the hydraulics handle many jobs that go unseen without which the special vehicles would be almost impossible to make.

### *Ideally suited hydraulics make the job easier*

HANSA-FLEX is involved in ensuring that STOKOTA can fully utilise this know-how. The customers in Kielce – another operation of the manufacturer is located in Elblag in Poland – has been supported with timely hydraulic solutions and service readiness since 2003. In this case, the fluid service provider not only supplies the full spectrum of hoses and bent pipes as well as the respective threaded connections but has also already been designated by the customer for working on the construction of vehicle. HANSA-FLEX sales engineer Karl-Heinz Loose from Bremen and Maciej Szulc, HANSA-FLEX in Poznań, Poland keep in close contact with STOKOTA in this case.

It seems as if the customer presents the requirements or the job definition that they expect from the transport vehicle and STOKOTA then develops the initial ideas and a concept for the special vehicle.

Just like STOKOTA doesn't supply anything off the shelf, HANSA-FLEX produces special fixtures and small series-production items for the special vehicles for STOKOTA in Poznań. Numerous solutions had their beginnings here. HANSA-FLEX creates short-term prototypes and follows the path of the parts until certification for the installation when designing the hydraulic systems.

The construction and assembly of the vehicle is then done while following all relevant international regulations as well as the questions of safety with chemicals and combustible or aggressive products. The regulations for materials handling for the food and beverage industry are also to be considered.

After the transfer of the special vehicles, STOKOTA supports their customers in every situation, quickly and flexibly with elaborate service management. Whether short-term provision of replacement hoses for hydraulics or pipes and other elements of line engineering, HANSA-FLEX is also on location.



### Industrial hoses – new from HANSA-FLEX

All the hose assemblies you need from a single source – this is how HANSA-FLEX lives up to customer demands. And from now on, the hydraulics service provider will also include industrial hoses in its product range as an expansion of its system provider concept. These are available through any branch location from the central warehouse in Telfs, Austria, where a broad spectrum of industrial hoses is kept ready with 1,400 different items. These can be used as water or air hoses, for example in tunnel construction, or in foodstuff logistics and milk processing. Industrial hoses are also used as suction or pressure hoses for handling abrasive media such as concrete and sewage. Concrete hoses with nominal diameters of up to 5 inches are produced according to customer dimensions and delivered completely assembled.



## *Diluted deadlines Water in the oil and the results*

*A short time ago, a message went through the press indicating that technical problems in setting up the ski-jump in Garmisch-Partenkirchen had delayed work by several hours. The reason: Humidity had gotten into the hydraulic pumps that were to erect the 500 tonne start tower.*

The work on the jump had to be interrupted for several hours; it is almost impossible to catch up to the tight schedules with a delay like this. This example shows the effects that the slightest contamination in the hydraulic oil can have. Extensive damage statistics from insurance agencies substantiate that approx. 80 percent of all hydraulic failures are caused by contamination. And next to contamination by dust and wear, water counts as the most frequent contamination in oils and greases. Water in the oil hinders the grease film build-up of lubricants and is therefore normally the cause of corrosion on machines and systems. The oil must be capable of coating all moving parts with a non-abrasive film of lubricant at all times.

Now, traces of water can be found in any oil, even fresh oil is not absolutely water-free. A water-content of 500 to 800 ppm can be tolerated in hydraulic oils. In order to prevent any significant contamination of the oil with water, we must know what the causes are. These causes could be from many different sources and so often depend on the oil expanding when heated and contracting when cold; with a temperature difference of 50°C, the volume of a 100 litre oil filling changes by almost 3.5 litres. Therefore, condensation can get into the oil, even in oil containers standing in the open and alternating between cold and warm outside temperatures. Incorrect container storage with the vent openings at the top can lead to rain water infiltrating the barrels. The oil in a system is always heated for short periods in stop-and-go operation. When the machine cools, the low operating temperatures cause condensation to build up. Gearbox housings or containers of circulation systems frequently "breathe"

through the filler neck. A screen in the neck will normally prevent dust or water from entering but humid air that creates condensation can still enter.

Water can get into the oil even when cleaning the machine. Shaft guides, hydraulic cylinders or oil filler necks are often thoroughly treated with a high-pressure cleaner, because oil that has been exuded in these points acts as a dust binding agent. Since modern steam jet cleaners work with a pressure of over 80 bar, the seals will not hold up against it in many cases and water can get into the lubricant or even into the entire system. If the steam cleaner water contains a grease solvent as a cleaning agent, the oil filling can even start to foam in many cases. If too much surface foam occurs in these cases or oil contains air, the system is close to collapsing.

### *Serious consequences*

Independent of how the water gets into the hydraulic oil, it can have serious consequences for the system. This is because, like any other contamination, water accelerates the aging process of lubricants. Water drops in the oil prevent the build-up of a stable film of lubricant in these areas and a mechanically abrasive deterioration occurs. This also occurs if rust particles and non-ferrous heavy metals, such as copper for example, are worn away by corrosion enter the oil because of rust and corrosion of iron and non-iron metals caused by water. At operating temperatures of over 80°C, water that has entered starts to evaporate. This causes bubbles of steam that then cause cavitation – especially in hydraulic pumps. Cavitation means that cavities are created in liquids, which are then initiated if the local static pressure in a fluid drops below a critical level. On the other side, temperatures under freezing can cause crystallisation, whereby the oil becomes less capable of flowing and can no longer fulfil its tasks as a lubricant. Hydraulic oils and gear oils are especially affected in this case.







### *Early recognition – Damage prevention*

These few examples should already make it clear how important it is to prevent the infiltration of water into the oil, in order to prevent a total failure of the system. Contamination can be detected early on with oil analyses. Many machine manufacturers specify analyses or at least recommend regularly analyses; especially if bio-oils will be used, since the danger of ester molecules splitting in aggressive fatty acids and alcohol. To ensure that no water is contained in the hydraulic oil used, an oil analysis by HANSA-FLEX will help. The oil sample that is taken allows the hydraulic service technician to analyse the oil in an independent laboratory and to inspect for an increased water-content, in several steps. This is first done with a visual examination. Since water is 10 percent heavier than oil, it sinks to the bottom of the sample container as clear water, if the oil has more water than from the oil itself or from the dispersing – finely distributed – additives in the suspension. The contamination is therefore clearly detectable this way. With synthetic oils, streaking occurs; the opacity of the oil therefore shows an increased water-content in the oil just as good.

Independent of the outer appearance of the oil, each sample of oil in the laboratory is tested for water-content with a so-called FT-infrared spectroscopy, with which the water values or 0.05 percent can be determined precisely, as long as the fresh oil is established. If this is not the case however, water is also verified in the oil samples using a “crackle test”. An oil drop (0.2 ml) is dropped onto a hot-plate in this test. If the oil has more than 0.1 percent water, it foams briefly and the water disappears will a crackling sound. With the required experience, adequate precision can be achieved with this test.

This exact results of the oil analysis makes it possible for HANSA-FLEX to introduce the required measures for oil maintenance.



### Oil maintenance instructions

Instructions for oil maintenance are not only provided by HANSA-FLEX in special-seminars in their own training centre in Dresden-Weixdorf, but also on-site at the operation with the customer. An initial overview of hydraulic fluids and oil maintenance is provided in the training handbook “Basics of Fluid Technology”.





## Suak Nie looking forward to XWORLD visit Flight to the rain forest

*In less than a year, the XWORLD Tour will be making a station in Suak Nie. Already around the end of November 2007, Nadine Beneke and XWORLD project head Enrico Kieschnick from HANSA-FLEX headquarters took a flight to visit the Indonesian village that HANSA-FLEX employees and management gave assiduously for the reconstruction after the Tsunami catastrophe in 2004.*

On this trip, the two didn't just want to get a look at the reconstruction of the small village that was made possible with the money but to use the visit to check out a few program points for the XWORLD Tour and to discuss details of the upcoming visit with the residents in Suak Nie.

At the end of November 2007, the two HANSA-FLEX representatives first met in Medan, Sumatra, with Sri Eni Purnamawati and Roosa Sibarani from the relief organisation "terre des hommes" as well as with representatives of their partner organisation "KKSP", the relief project organised for the regions affected by the Tsunami. Suak Nie residence construction is taken care of by the KKSP, which translated means children's relief. Otherwise, the so-called non-government organisation, founded in 1987, dedicates themselves mainly to children in difficult situations. They ensure the protection of children on one hand and on the other they support groups that stand up for the rights of children.

From Medan, the flight carried on to Meulaboh, a seaport with 50,000 inhabitants on the coast of the Indian ocean. Meulaboh is only 150 kilometres from the epicentre of the earthquake of 26 December 2004 and was therefore the hardest hit by the tidal wave.

The delegation then travelled from Meulaboh on the trail of the XWORLD Tour to Suak Nie. The original place of Suak Nie was flooded out on December 26, 2004 by the Tsunami, whereby only 26 of the original 47 families survived. The survivors of the tidal wave have now cleared approximately three kilometres inland to construct a new village, to which the donations of HANSA-FLEX employees and the management contributed. About six months after the catastrophe, exactly 18,000 Euro benefited the fund-raising campaign initiated by terre des hommes and Radio Bremen. Under the management of KKSP, the donations have been used for building new houses for a new village over the last few years.

### Money well spent

Nadine Beneke and Enrico Kieschnick were the first HANSA-FLEX employees that were able to see this new village with about 50 houses. They met the mayor and other officials of the village for a tour. The project made it possible to keep the village community, the construction work kept the inhabitants together and made it possible for them to make a new life in new houses. The houses that have been build over the last few years are all identical: They are 40 square metres in size, have three simple rooms, one kitchen, a bathroom and a toilet. The foundation is mortared, the upper construction of the first houses is completely of wood, those built later are also of stone. Each house is designed so that expansions can be made later. Around 2,100 Euro was required for each house.

Construction of the houses was mainly done by the inhabitants of the village themselves, whereby







their tools and construction materials were provided. The next step has also been started, creating and operating their own common fields. All of the inhabitants of Suak Nie are also working on projects to make their own living as well.

### ***Almost inaccessible Aceh***

The HANSA-FLEX tour group also had discussions with the inhabitants of Suak Nie and were able to determine that there was a great deal of anticipation concerning the visit of the XWORLD convoy. The adventure tour will be stationed in Suak Nie to visit the village on the sixth day of the 22nd stage of the tour from Medan to Jakarta. From there, the tour continues to the Aceh region to be crossed on the seventh day. Aceh is the region that was hit the hardest by the Tsunami and can only be accessed with a special visa; it is not a tourist region as is found in Bali or Java. Aceh is an Indonesian province on the north-western point of the island of Sumatra with the capital Banda Aceh. The people that live there have been at war for their independence for centuries. Since the peace-agreements of 2005, the province enjoys special rights of self-government as a special region. This is one of the regions for which the Bremen township, the Bremen Senate and the Board of Trade became sponsors for reconstruction after the flooding catastrophe. Crossing through the region of Aceh will therefore be a special experience for the participants of the 22nd stage of the XWORLD Tour, since tourists normally have a hard time gaining access to Aceh.

During the final part of the visit, Nadine Beneke and Enrico Kieschnick drove with the mayor of Suak Nie and a few residents of the village to the loca-

tion of the old village. "It is a very emotional feeling to stand where 126 inhabitants of the village lost their lives under a twelve metre high wave within just a few seconds", stated Enrico Kieschnick who experienced those feelings at the site of the horror.

The return trip was then managed from Suak Nie to Medan by car and offered the chance to take in a few of the program points of the XWORLD stage in advance. From Suak Nie, the route of the XWORLD Tour was taken back to Medan in the capital of the province North Sumatra, where the population is somewhat more than three million; in the metropolis region with adjacent sea port, over six million people.

The travels took them over a very adventurous but also very attractive route along the Indian ocean and through the mountainous region of the Gunung-Leuser National Parks. Past at the foot of the still active Sibayak volcano, from where the XWORLD route will take a detour to the Sipisopiso waterfall in the coming year. This point offers the participants a fascinating view out to the largest sea in South-eastern Asia, The Toba sea. During the following drive through the rain forestry of Indonesia, a visit to the Orang-Utan village Bukit Lawang is planned for example, and a camp will be made for spending the night in nearby. The conclusion of the trip to Suak Nie was explained by Enrico Kieschnick with the words: "This 22nd stage of the X-WORLD Tour, like all the others, will be a special experience for the participants."





## For elevated jobs Safely to the top with telescopic work-platforms

*A ladder doesn't always reach. When putting up the stage and lighting equipment in the great concert halls, when doing maintenance and cleaning work on house facades, industrial buildings or for construction maintenance and electrical maintenance on infrastructural equipment – anywhere that the work is up high, ESDA work-platforms raise the level.*

The ESDA-Fahrzeugwerke GmbH has been manufacturing work-platforms for these types of applications for over 20 years in the company location and production facility in Göttingen. The medium-sized company constructs special attachments on the chassis from vehicle manufacturers for various application possibilities. Criteria defined in advance by customers is used by ESDA to build the respective telescopic arms and work cages of their own proven lightweight construction. The special vehicles are mobile and therefore easy to transport to any location. Simple and safe to operation, the advantages are shown in the most versatile of tasks. ESDA is therefore a flexible player with the greats, reacting to customer desires and equipping every work-platform according to individual requirements. This is verified for example with four versions of telescoping trailer work-platforms with working heights between 15 and 26 metres, which have been constructed in a modular system and a support width of only 3.96 metres.

The portfolio of the manufacturer also comprises the construction series of telescopic articulating platforms and telescoping platforms as well as working platforms of a simple articulating series as introduction to the truck-mount working platform class. From the articulating arm truck-mount working platform to telescoping arm working platform with work-cage and control unit, the right working platform is available for any application. Compact and terrain-suitable, robust and reliable, these vehicles can be used in impassable terrain and can also handle seemingly unconquerable hindrances. Anodised aluminium telescoping tubes give the working platforms an appealing exterior that is

retained after years of use. At the same time, it increases the surface protection; Material wear as well as the wear to the slider system in the telescope are reduced.

The show horse at ESDA is the vehicle mount telescoping unit (LT) series with work heights between 16.5 and 27.5 metres and constant lateral reaching distances over the entire pivot range. The working platforms of this series are controlled the same as the other models, with a control panel in the cage that is identical to that on the transit vehicle and that can be exchanged for the other at any time. Unexpected failures of a control panel do not interrupt work.

Besides the TL series, ESDA has also built an 18 m working platform with equipment case in the telescopic articulating platform series, which is optimised for municipality work and energy providers and is characterised by its small support width of approx. 2,500 millimetres. The working platform is made of fibreglass strengthened plastic and is series-insulated against voltages of up to 1,000 volts.

For additional security of the working platform, an electronic load torque limiter is used, which continuously queries the reach distance depending on the nominal load in the working cage and the position of the telescopic boom.

### Heights with hydraulics

The working platforms supplied by ESDA are equipped with many hydraulics, starting with the hydraulically actuated stabilisers that provide for quick construction, right up to the clever hydraulics for the flexible, up to 27.5 metre extending telescopic arm. Hydraulic designed to be positioned on the inside if possible, which will be especially stressed when used hard.

Since the end of 2003, ESDA is cared for by the HANSA-FLEX location in Northeim where hose







technology is concerned, delivering custom made hydraulic hoses and fixtures. From the location that is only ten minutes away from the customer, Franz-Josef Dohmann will stop in, sometimes several times per day, at the customer site, to provide his help in designing the hoses and the routes that they will take. Naturally, the hoses that are used on the working platforms are specially designed for their requirements. Basically, only ozone-resistant hoses are used. Since lifting work-platforms are mainly used outdoors, the ozone-stress leads to early fatigue on standard hoses. The elastomere hardens early, cracks appear and therefore the possibility of the hose failing increases.

In especially neuralgic points – for example, at the transition between the support arm and the working platform – TAF- or TBF-hoses that will not conduct electricity are used. This prevents generating a shock if coming into accidental contact with power lines when working in the vicinity. If working platforms are used in the electricity sector, this hose feature is mandatory. With all hoses used, ESDA

considers quality to be of the greatest importance to ensure that the customers are provided with reliable equipment to last a long time.

### *Quality grows from knowledge*

As the headline indicates; as OEM, ESDA naturally relies on X-CODE, applied to every hydraulic hose. This gives the manufacturer the guarantee that the exact specifications lay behind the hoses for every working platform so that other hose sets can be referred to for procurement without any extra effort. If the rotational replacements should be required after six years of working platform use, the complete set of hoses can still be ordered easily. Even if a hose has to be replaced at short notice, an identical part can be underway immediately based on the X-CODE identification.

In order to expand the hydraulic competence of their own employees, ESDA values the qualifications of their installation team. That is why the manufacturer runs a training course on hydraulics

on-site in their own plant. Wolf-Rüdiger Schmidt, training manager for hydraulics in the HANSA-FLEX training centre in Dresden-Weixdorf, trains the ESDA employees in a three-day training session on topics such as reading circuit diagrams, basics of hose technology, introduction to valve technology and everything about the functionality of hydraulic cylinders.





## Quality products in demand for high standards



Since the 1st of January 2007, Bulgaria belongs to the European Union. The year before, HANSA-FLEX Bulgaria Ltd. was founded in the south-eastern European country on the Black Sea. Developed from a joint venture by HANSA-FLEX International GmbH, Bremen and the Bullad Ltd. Stamboljiski played the role of the youngest member, with over 600 customers, already in a leading role on the Bulgarian hydraulic hose market.

On October 15, 2007, the official opening of the branch location in Plovdiv took place. The GmbH is taken care of by manager Angel Delev, who has more than 30 years of experience in the fluid technology sector. Twelve highly qualified employees are specialised in manufacturing and selling high-pressure hydraulic hoses, PTFE hoses for aggressive materials and high-temperature metal hoses for extreme temperatures or for steam and water flow. The hoses are manufactured for companies all over Bulgaria. Business with connection hoses and special fittings also belongs to the core-competence of the branch location.

Customers are serviced in the sectors of machine construction, the automobile and agricultural machinery industry –Bulgaria was characterised by agriculture – as well as mining and ship building. As an important transit country between Central Europe and the Orient, many road construction and rail traffic companies are HANSA-FLEX customers, just as are the companies in the chemical and the food and beverage industry. The qualitatively distinguished and fast service of the new branch have already contributed to bringing many new long-term customers into discussions as a reliable and professional partner.



### All-encompassing service for customers

In order to expand the range of customers, HANSA-FLEX Bulgaria was already active at the international technical exhibition in Plovdiv in the first year of existence and will be participating in international trade shows in the future as well. The Bulgarian branch offers their customers personal all-encompassing support in the hydraulic hose sector. The respective structure is available for this task, since a motivated, highly qualified, young team approaches every customer request with attractive ideas. Competence and years of experience from the employees contribute to HANSA-FLEX Bulgaria producing hydraulic hoses that meet the most stringent of international regulations and the ISO 9000:2001 quality standards. The standardised products applied with quality certification are completed aesthetically, durable, functional and safe. They are also equipped with X-CODE since 2007, to improve service in ordering replacement parts with the identification information.

Thanks to continuous market research, we know the requirements of Bulgarian customers and are able to meet the high demands with German quality. Germany is the most important trade partner of Bulgaria by the way. Over 4,500 German companies are active in trade with Bulgaria and 1,200 are represented on-site.

HANSA-FLEX Bulgaria is planning in the long term as well as the short time future. 2008 is the planned opening time for a subsidiary in the capital of Sofia and others are to be opened in all economical and industrial centres of the country.





## ***Network on the fringes of the Erz mountains Customer satisfaction in the forest and on the construction site***

*The HANSA-FLEX Freiberg branch, based close to Dresden is still relatively new. In this region, at the foot of the Erz mountains, known to many people more for its traditional wooden figures and Christmas pyramids, the field service of HANSA-FLEX Dresden and Chemnitz as built up a client base this year.*

In order to be represented closer to the customers and therefore to accelerate development in the area, HANSA-FLEX opened the Freiberg location in 2005. Branch managers Mike Meusel and Udo Wagner service an emerging customer base, made up of 45 percent construction industry, 25 percent forestry and agriculture and 30 percent from industrial operations. Important ideas and stimuli for the development of the group in this region were provided by HANSA-FLEX associate Jürgen Böttger, who also contributed to the success of the location.

The replacement part service is currently dominant in the branch but all customers are also profiting "from the awesome network", states Mike Meusel. Freiberg is integrated in the network of the HANSA-FLEX operation all around Dresden/Weixdorf: If in an emergency situation, the customer doesn't only require a hose, but needs hydraulic components, seals, special hoses and special fixtures as well, they can be obtained within two to three hours without any problem. An advantage against the competition, giving the customer the security that their system will be up and running again within the shortest amount of time.

The fast availability of replacement parts is naturally a decisive plus. While performing high-pressure work in the forests of the Erz mountain a short time ago, clearing brush left by the Kyrill storm, numerous contracting companies were engaged in the area because the fight against the infestation of the forest by vermin would tolerate no postponements. When working in tough forest applications, skidders can easily rip a hose off, if they are caught on a branch or are hit by a falling branch. "Then we need help and quickly", reminded Mike Meusel. And

once when a pump failed and the machine manufacturer indicated to the customer that the delivery time was a week, the component was procured through the HANSA-FLEX operation for hydraulic components from Dresden/Weixdorf.

### ***Dedication***

These moments, Mike Meusel and Udo Wagner know, are an excellent chance to build relationships with the customers; the best basis for excellent collaboration. Especially on large construction sites like the demolition work that is currently underway on empty residences in Freiberg, help is quite often needed urgently. These jobs are often under



the tight schedules of everyday life. If these applications can be planned in advance however, the people in Freiberg cooperate with the colleagues in Dresden, where Thomas Thieme takes on jobs with his service vehicle handling hoses, tubing, repairs, service and installations.

Branch manager Mike Meusel is confident of this network and the logistics of the HANSA-FLEX Group. The central storage facility with 70,000 different hydraulic components, which can be delivered within 24 hours, plays a major role in customer satisfaction. "This is the foundation that we are building on and we are now catering to new customers in the industry", foresees Mike Meusel with an optimistic view of the future of HANSA-FLEX Freiberg.



## Skilled hydraulic specialists HWK – The first alumni graduate with flying colours



At HANSA-FLEX, we are very proud of the graduates of the first advance training in specialised hydraulics HWK. At the beginning of January, Michael Kemmer, Rico Schwarze, Faris Speckhardt, Oliver Steenwerth and Marvin Vassilopanos passed their exam in Regensburg in front of the Chamber of Trades Lower Bavaria/Upper Palatinate. With excellent scores. All graduates passed the written exam with "Very good", the four practical also with "Very good", one with "Good".

All five have graduated the commercial training at HANSA-FLEX in the summer of 2007 and then volunteered for the advanced education experiment.

As a part of an evaluation workshop in Bremen, the management thanked all that participated for their dedication and wished the graduates all the best in the future. A special thanks also went to the training centre in Dresden-Weixdorf. The training

centre took on the responsibility for running the four month long intensive course.

### Planning for the 2008 transition is underway

All experiences have been evaluated jointly with the human resources development department, the trainers and the participants. The concept was continued with new momentum and an optimised training program. Thomas Armerding, manager of HANSA-FLEX Hydraulik GmbH: "The growth of the HANSA-FLEX Group demands specific personnel development from us. We are catering to these technical requirements with the skilled hydraulic specialists HWK. The advanced education activities will be expanded. The next training session is planned for September 2008".

In the April edition, the Hydraulikpresse will include details on the training profile and the requirements.







## iPod nano draw in December

The winner was P. Doll, Leipzig.

The big draw this month is found on page 5. Win one of two XWORLD trips. Lots of luck!

### Openings

### Facts & Figures

#### December 2007

HANSA-FLEX Hydraulik GmbH	Gustaf-de-Laval-Str. 9	29683 Bad Fallingbostel	Germany
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#### January 2008

HANSA-FLEX Hydraulik GmbH	Am Emsdeich 4	26789 Leer	Germany
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Total

Germany

318

177



### Anniversary

February 2008: HANSA-FLEX Barleben 10 years  
HANSA-FLEX Zwenkau 10 years  
March 2008: HANSA-FLEX Dubrovnik 10 years  
HANSA-FLEX Zadar 10 years  
HANSA-FLEX Zittau 10 years



172

98

### Preview

The following topics will be run in the next edition...

04/08

**XWORLD Adventure 2008/2009**  
**Discussion with...**  
**Campina Gütersloh**  
**Bochumer Verein Verkehrstechnik**  
**MAN B&W Augsburg**  
**Training centre**

The Tour is underway  
Regional manager Joachim Foltan  
PTFE-corrugated hose ensures flexibility  
Precision wheels for the track  
Marine engines for ships  
Laying the foundation for the International Hydraulics Academy

Editorial deadline: 20. January 2008

EXPERIENCING THE ELEMENTS

WE ARE OFF  
ON THE 8TH OF MARCH.  
COME WITH US!

Adventure 2008 / 2009

# XWORLD

by **HANSA FLEX**

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