# HYDRAULK PRESSE #200

Issue 2/2022

The HANSA-FLEX Group's customer and staff journal

An anniversary in our jubilee year

Celebrate the 200th issue of Hydraulikpresse with us



#### **COVER IMAGE**

2/2022

Hydraulikpresse, the HANSA-FLEX Group's customer and staff magazine, appeared for the first time in 1995, laying the foundations for a real success story. This anniversary issue is the 200th edition. The cover picture shows all 200 issues that have been published in the past 27 years.

The magazine is published four times a year and has a print run of over 40,000 copies, although the number of actual readers is probably many times higher. Since 2004 an English-language edition has taken account of HANSA-FLEX's increasing internationalisation in order to reach customers and staff worldwide.

Even though business and technology have changed considerably since the first issue, one thing has always remained the same: the aim of presenting fluid technology and HANSA-FLEX in all its facets in a way that is both reader-friendly and indepth. The mixture of company news, user reports, technical background articles, product presentations, employee portraits and entertaining stories gives readers the opportunity to put together their own individual mix of topics to read.

HANSA-FLEX is continually developing its Hydraulikpresse magazine, and this issue too features a number of innovations in layout and concept. The next stage of development is already being planned: in future the digital use of content will also play a greater role than before.



Christian-Hans Bültemeier

Thomas Armerding

Florian Wiedemeyer

#### DEAR READERS,

With this copy of Hydraulikpresse you are holding an anniversary issue in your hands in two respects.

Firstly, this is the 200th issue of our customer magazine. Even in the age of digitalisation, Hydraulikpresse remains an important means of communication for us. In the last issue we already implemented a range of new features, and received consistently positive feedback from you in return. Numerous new approaches have also been incorporated into this issue.

At the same time we are once again celebrating our 60th company anniversary. In the interview with our Chairman Thomas Armerding you can read what lies behind the slogan "60 years of passion", and why there can be no future without the past.

Christian van der Veen was one of the very first readers of Hydraulikpresse. The regional manager, who is an integral part of the company's history, looks back on 38 years at HANSA-FLEX. In this portrait you can find out what has changed since he trained under Günter Buschmann, the co-founder of HANSA-FLEX, what the duties of a regional manager are and why for him no two days are the same.

In addition, this anniversary magazine once again contains a variety of reports from the world of hydraulics. We hope you will enjoy reading our articles.

The Board of Management

**NEWS** 

WINNERS

#### **CURRENT MATTERS**



IS IN OPERATION

**JUST A** WORD



THE NEW PLANT IN BREMEN

WITHOUT THE PAST

Thomas Armerding on the future, tradition and passion at HANSA-FLEX

THERE IS NO FUTURE



**CLUB SPONSORSHIP 2022** 

**HANSA-FLEX SPONSORS** YOUNG E-RACING **DEVELOPERS** 



HANSA-FLEX CONTINUES **TO GROW** 

**HANSA-FLEX DONATES** 10.000 EUROS TO A **VOCATIONAL SCHOOL** 

#### IN PRACTICE



FLEXIBILITY IN SERIES PRODUCTION From design via prototyping to series production: Mecalac and

HANSA-FLEX work hand in hand

**MACHINES IN FIGURES** 



AN AIRCRAFT TOWING TRACTOR WITHOUT A TOWBAR FROM TREPEL

TREPEL's CHARGER 380 is a towbarless aircraft tow tractor designed for pushback, inter-gate services and maintenance towing of aircraft with a take-off weight of up to 380 tonnes.

#### A DAY IN THE LIFE **OF** ...



**COMMUNICATION IS** THE MAIN THING Christian van der Veen is a regional manager

#### IN PRACTICE



**SMART HOSE MANAGEMENT** FOR INDUSTRIAL PRODUCTION 4.0 Roto Frank Fenster- und Türtech-

nologie GmbH is digitalising its manufacturing processes in order to manage them optimally.

#### TYPICAL ...



**SOUTH AFRICA** The Rainbow Nation on the Tropic of Capricorn

#### TECH-**NOLOGY** & SAFETY



SAFETY THROUGH PRESSURE PULSE TESTING

The technology and hydraulics of the IHA pressure pulse/vibration test bench

#### **WORK** & LIFE



Good cooperation is important for every working relationship

#### **FOCUS PRODUCT**



FIRST AID FOR OIL LEAKS The HANSA-FLEX emergency kit in a practical rucksack format

**PRIZE GAME** 



& TECH-**NOLOGY** 

**NATURE** 

FIRMLY IN THE SADDLE

equestrian sport

Marie Abel is passionate about

**PEOPLE** 

AT HANSA-FLEX



THE POWER OF THE SEA Wave power plants as a contribution to the energy transition



**CROSSWORD PUZZLE** 

**PREVIEW CAREERS AT HANSA-FLEX LEGAL NOTICE** 

THE SMALL PRINT

**DID YOU KNOW ...?** 



**INTERESTING FACTS ABOUT** THE RAPID HYDRAULIC SERVICE



#### **WINNERS CLUB SPONSORSHIP 2022**

#	Club	Sport	Country	
1.	ACS Kinder	Football	Romania	
2.	ACSP Chinteni 2019	Football	Romania	
3.	AFC Universitatea Olimpia Cluj	Football	Romania	
4.	Aramäer Gütersloh e.V.	Football	Germany	
5.	BFC Daugavpils	Football	Latvia	
6.	Biedrība Basketbola klubs "Krāslava"	Basketball	Latvia	
7.	Bonaero 74 Football Club	Football	South Africa	
8.	BSC Hastedt	Football	Germany	
9.	DJK Großenried	Football	Germany	
10.	Elsterwerdaer SV 94	Handball	Germany	
11.	FC Aich	Football	Germany	
12.	FC Elva	Football	Estonia	
13.	FC Geisenfeld 1923 e. V.	Football	Germany	
14.	FC Neuenburg	Football	Germany	
15.	FC Tatran Klastor pod Znievom	Football	Slovakia	
16.	Futsal Akademija Zrinjski	Football	Bosnia and Herzegovina	
17.	FV Vaalserquartier	Football	Netherlands	
18.	HSV Nidderau	Handball	Germany	
19.	HVH Kamenz e. V.	Handball	Germany	
20.	KSV Aalen 05 e.V.	Wrestling	Germany	

The photo shows the winners from last year.

#	Club	Sport	Country
21.	Lenggrieser SC 46	Football	Germany
22.	MRK "Čakovec"	Handball	Croatia
23.	NK HASK	Football	Croatia
24.	NK SAVA JAKUSEVEC	Football	Croatia
25.	OŠK Rudno	Table tennis	Slovakia
26.	RSV 1921 Kleinmühlingen e. V.	Trick cycling	Germany
27.	SC Buer Hassel 1919	Football	Germany
28.	SG Wehrheim/Obernhain	Handball	·
			Germany
29.	SK Ernstbrunn	Football	Austria
30.	SK Zenit Kohtla-Järve	Football	Estonia
31.	SKL DOORSLAAR	Football	Belgium
32.	Spielgemeinschaft Oberes Mölltal	Football	Austria
33.	Sport Olympiques de Septèmes	Football	France
34.	Sportunion Aschbach	Football	Austria
35.	SpVgg Dietersdorf	Football	Germany
36.	SSC Dodesheide	Football	Germany
37.	SSV Gartenstadt	Handball	Germany
38.	SV Anger	Football	Austria
39.	SV DJK Geeste	Football	Germany
40.	SV Energie Cottbus e.V.	Volleyball	Germany
41.	SV Eschbach	Wrestling	Germany
42.	SV Eula 58	Football	Germany
43.	SV Haidlfing	Football	Germany
44.	SV Herschweiler-Pettersheim	Football	Germany
45.	SV Kubschütz e.V.	Fistball	Germany
46.	SV Lokomotive Uebigau e.V.	Football	Germany
47.	TSV Elgendorf	Football	Germany
48.	TSV Krähenwinkel/Kaltenweide	Football	Germany
49.	TSV Kromsdorf	Football	Germany
50.	TSV Reichenberg	Football	Germany
51.	TSV Trudering	Basketball	Germany
52.	TSV Unsernherrn	Football	Germany
53.	TuS 05 Daun	Handball	Germany
54.	TV Grundhof	Football	Germany
55.	TV Oyten	Handball	Germany
56.	TV Voerde	Handball	Germany
57.	TV Vohburg	Football	Germany
58.	Union Waldneukirchen	Football	Austria
59.	VfB Borussia Görzig	Football	Germany
60.	VfL Giershagen 1911	Football	Germany



#### **HANSA-FLEX SPONSORS**

#### YOUNG E-RACING **DEVELOPERS**

The reengine racing project was launched in 2012. At the time it involved a 60-strong team of trainees from various companies, including 13 trainees from HANSA-FLEX. Since then the programme for young designers to develop electric racing car prototypes has been run under the auspices of the Deefholt Dynamics e.V. association of the Private University of Applied Sciences in Vechta/Diepholz. This year we are again supporting the resourceful young developers with 5,000 euros.





#### **HANSA-FLEX CONTINUES** TO GROW

In 2022 the HANSA-FLEX group of companies metalworking facilities, and in the up-and-coming town of Silute in Lithuania.

supplied to Regensdorf (Switzerland), which is home to one of the largest industrial centres in the canton of Zurich. And another service vehicle has been put into operation in Bolzano (Italy), the largest city in



#### HANSA-FLEX DONATES

#### 10,000 EUROS TO A VOCATIONAL SCHOOL

HANSA-FLEX has made a donation of 10,000 euros to the sponsors' association of Bremen's Vocational School for Wholesaling, Foreign Trade and Transport. The association has been campaigning for years for the construction of a new school building. This is now being constructed on a site between Nordstrasse, Cuxhavener Strasse and the Überseetor.

With the donation we are helping to provide Bremen's Vocational School for Wholesaling, Foreign Trade and Transport with high-quality facilities for its students. The focus here is primarily on furnishing the communal areas.

HANSA-FLEX trainees have also been attending this school for many years during their training for the professions of office management, wholesale and foreign trade and marketing communications. This gives us a special bond with the school.



#### **ALL-ROUND HOSE MANAGEMENT** FROM HANSA-FLEX

My.HANSA-FLEX is the comprehensive service for the preventive maintenance of your hydraulic hose lines. Together with the portal our alphanumeric coding becomes the perfect tool for the well-managed organisation of all your hose lines.



Scan the QR code for more information

www.hansa-flex.com









# FLEXIBILITY IN SERIES PRODUCTION

From design via prototyping to series production:

Mecalac and HANSA-FLEX work hand in hand

Inner-city construction sites with limited space are the preferred territory of Mecalac's building machinery. After all, 70 years ago the company developed the world's first swivel loader – a wheel loader that can rotate its bucket arm by 90° and thus dump its load to the side to save space. Numerous innovations followed, such as highly manoeuvrable wheel loaders with articulated joints. The skid steer loaders of the MCL series are the latest addition to the company's extensive product portfolio.

Thanks to their compact dimensions, low weight and reduced turning circle these new MCL series skid steer loaders are highly versatile. They can be used on building sites, in landscaping and gardening or as yard load-

ers in agriculture. The compact loaders are manufactured by Mecalac Baumaschinen GmbH in Büdelsdorf, Schleswig-Holstein, the centre of excellence for wheel loaders within the European Mecalac group. The four models of the MCL series are manufactured on a newly built production line here. In addition, articulated wheel loaders of the AX series and the swing loaders of the AS family are produced on two other production lines.

#### **DEVELOPMENT ACROSS LOCATIONS**

The development of the new series required real teamwork: Mecalac head office in France was also involved in the design, while the prototypes were built at the Büdelsdorf site. Series production also takes place there. "We discussed the individual stages of develop-





The skid steer loaders place high demands on the hydraulic hose lines. The bending radii were successfully optimised without obstructing the flow in the hydraulic circuit.



ment together and, thanks to the engineering know-how of HANSA-FLEX, we were able to jointly optimise the design with regard to the hydraulics," recalls Alexander Hoppe, Head of Purchasing at Mecalac. The challenge was to optimally coordinate the factors of economy, reliability and efficient assembly, as well as ease of service. Due to the pandemic the coordination took place in the form of video conferences. "We succeeded, for example, in optimising the bending radii without obstructing the flow in the hydraulic circuit. In addition, we were able to save on screw fittings at one point or another and thus avoid potential problem areas for leaks in advance," says Oliver Sydow, Account Manager at HANSA-FLEX, providing insights into the cross-border coordination.

New wheel loader generation, new hose generation Skid steer loaders place high demands on hydraulic hose lines. This is because the confined installation space often requires a tighter bending radius than is the case in much larger excavators and wheel loaders. Mecalac therefore relies on the new KP700 hose generation from HANSA-FLEX, which is certified according to ISO 18752-CC. This especially flexible hose allows a bending radius of up to 120 mm – by comparison, conventional hose lines often only reach 240 mm.

#### PARTS PRODUCED OVERNIGHT

In order to avoid time delays in the construction of the prototypes, the team at the HANSA-FLEX Neumünster branch not only assembled the hose lines, but also manufactured pipelines themselves on the basis of CAD data and design drawings on site. "Depending on its customer structure, each branch has its own areas of focus. In order to be able to supply our customer Mecalac more quickly during the construction of the prototypes, we acquired a pipe bending machine with which we can bend pipelines in small quantities at



short notice and assemble them with all the necessary connections," explains Sydow. The series production of the pipelines, on the other hand, takes place in the pipe bending centre in Dresden-Weixdorf, and the coordination here is also handled by the branch. "We have a central contact person for all questions, who then pulls the strings for us in the background – this is an ideal set-up for Mecalac, because it saves time and effort," comments Alexander Hoppe.

#### **EFFICIENT SERIES PRODUCTION**

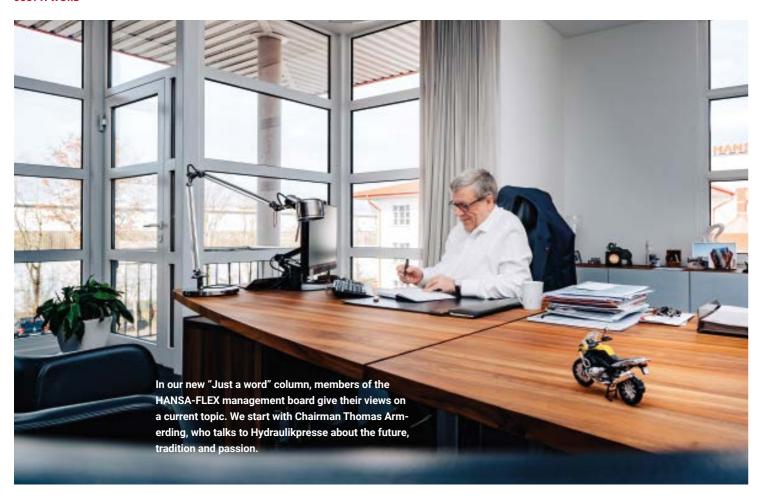
To ensure that the supply of parts is not interrupted during series production, Mecalac relies on a kanban warehouse that is stocked with hoses, pipelines, couplings and screw fittings. Incidentally, this supplies not only the new skid steer loaders, but also the other two production lines at the Büdelsdorf site, where articulated, swivel and telescopic loaders are built. The HANSA-FLEX field service is on site twice a week: on the one hand to replenish the stocks in the kanban warehouse, and on the other to discuss current topics relating to hydraulics and logistics. Flexibility is the key word at Mecalac, not only in terms of the possible applications of the construction machines, but also in the cooperation with its hydraulics partner. "We have been working closely together for many years. We particularly appreciate the solutions-oriented approach of our partner, which supports us quickly and competently," sums up Alexander Hoppe. However, the cooperation does not end with production. Sydow and the team at the Neumünster branch are also involved in the supply of spare parts for the after-sales service.

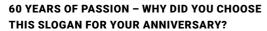




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Over the past 60 years HANSA-FLEX has undergone a tremendous development – from its literal beginnings as a garage company to a leading international enterprise. Many things have changed, indeed they have had to change. But one thing has always remained constant: the passion.

#### WHAT DOES PASSION MEAN TO YOU SPECIFICALLY IN CONNECTION WITH HANSA-FLEX?

When I look at our production sites and branches today, they of course no longer have much in common with my father's old green workbench. We work with state-of-the-art CNC machines, operate production lines, use automated high-bay warehouses and offer innovative services. There is passion in all of this. The passion to improve things again and again, not to stand still. The passion to go one step further, the passion to break new ground and leave our own comfort zone, the passion to find the best possible solution for every customer at all times.

#### ON THE SUBJECT OF BREAKING NEW GROUND, HOW DO YOU CARRY THIS PASSION FORWARD INTO THE FUTURE?

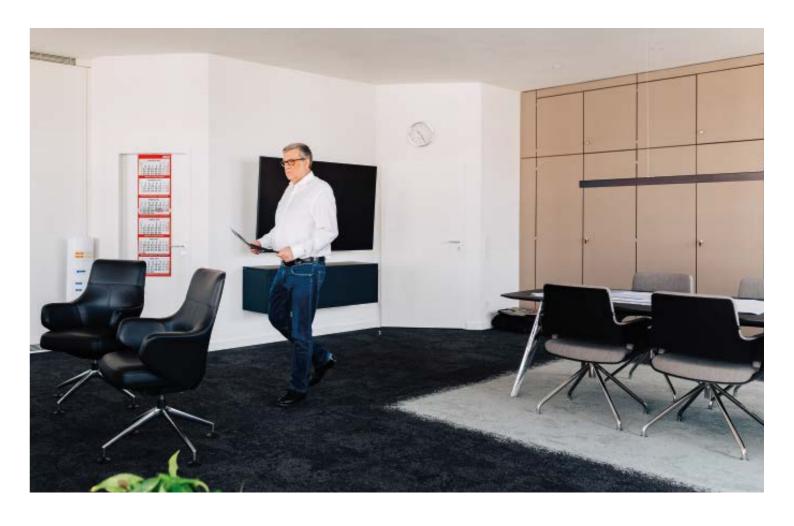
HANSA-FLEX stands for continuity as well as innovation. In order to combine these two aspects, we need to critically question old ways of thinking without ignoring our past. In other words, the future needs a foundation on which to build. We have grown with many of our customers – and they with us. We know from our own experience what change means. To ensure that our company history remains a success story in the future, I see four major fields of action: globalisation, digitalisation, a shortage of skilled workers and sustainability.

#### HOW DOES GLOBALISATION DETERMINE THE COURSE THAT HANSA-FLEX TAKES?

We have a clear commitment to be wherever our customers are. Today HANSA-FLEX is represented in over 40 countries worldwide. As our customers are increasingly global, we will continue to intensify this internationalisation strategy.

#### WHAT POSITIONING ARE YOU AIMING FOR IN THE GLOBAL COMPETITION?

Our competitors come from all over the world. One thing is clear: we cannot and do not want to enter the market everywhere solely on the basis of price. That would be too short-sighted. Quality and reliability are much more decisive. Here we aim to make our mark not only with our products, but also as a company with passion and innovative strength, in order to establish HANSA-FLEX as the world's leading hydraulics partner.



#### WHAT SIGNIFICANCE DOES THE DIGITAL TRANSFORMATION HAVE FOR HANSA-FLEX?

We regard digitalisation as an opportunity to make our services even more professional. You can't digitalise a hose line, of course, but you can digitalise the way you use it. The X-CODE was a milestone throughout the industry. We have further expanded this service with the X-CODE Manager service portal. It provides customers with a direct overview of all their company's hose lines – including automatic reminders of maintenance intervals. We also aim to set new standards in the industry with our web shop. To ensure that material and service technicians reach the customer even faster, we have further digitalised our business processes with our PHOENIX project, and can offer our customers a number of convenient features.

#### WHAT DOES THE TOPIC OF SUSTAINABILITY MEAN TO YOU?

This topic is particularly close to my heart. After all, as the manager of a family business I am not only responsible for our company and our employees, but also for the environment, in order to ensure that we all have a future worth living.

#### WHAT SPECIFIC MEASURES DO YOU USE TO PROMOTE SUSTAINABILITY?

We follow a number of different approaches. On the

one hand our engineering departments are continuously working on further improving the energy efficiency of hydraulic systems. At the same time we also address the question of how we can optimise our own processes in manufacturing, logistics, service and management in a way that conserves resources as much as possible.

#### CAN YOU GIVE US AN EXAMPLE TO ILLUSTRATE THIS POINT?

Certainly. We now offer adsorption filters as a re-usable product, with which the granulate can simply be refilled without having to replace the entire filter unit, as is the case with conventional disposable products. The granulate is delivered in cartons made of recycled paper, which means we massively reduce the amount of plastic. And, even if we deliberately don't publicise this fact, for many years we have supported projects that improve living conditions in developing countries with our Christmas campaign.

#### A FINAL REMARK?

We can only shape the future together. I am optimistic about the coming years, because passion is in the DNA of all our employees. So when I look at the past and the future, I must first express my thanks to our employees who make all this possible.

# AN AIRCRAFT TOWING TRACTOR WITHOUT A TOWBAR FROM TREPEL

TREPEL's CHARGER 380 is a towbarless aircraft tow tractor designed for pushback, inter-gate services and maintenance towing of aircraft with a take-off weight of up to 380 tonnes. With up to 309 kW engine power, it is the ideal vehicle for airlines, airports and ground crews who wish to handle a large number of different aircraft with one machine.

OPEN CIRCUIT
for operating hydraulics.



for increased driving comfort.

AIRCRAFT SUPPORT with a lifting capacity of 41.200 kg.

CLOSED CIRCUIT



SUSPENSION LIFT CAB hydraulically height adjustable from 1,650 mm to 1,960 mm.

**HYDRAULIC ACKERMAN STEERING,** which enables a turning radius of 9,700 mm.



# COMMUNICA-TION IS THE MAIN THING

Christian van der Veen is a regional manager

Christian van der Veen has been with HANSA-FLEX for 38 years. He has held various positions in the company and is now Regional Manager for the Osnabrück/Oldenburg region. For him, good communication is the key to keeping all the branches in his region on track for success.

"When I joined the company HANSA-FLEX only had 14 branches in total. Today I'm responsible for 19 of our 449 branches worldwide. I have more or less grown with the business, there have always been interesting new tasks, and before you know it you have been with the company for 38 years," says the 57-year-old, looking back on his many years of service. He only spent a few months elsewhere at the beginning of the 1990s, but otherwise van der Veen has been with HANSA-FLEX all the way. In 1984 he was one of the company's first apprentices and began his training as a wholesale and foreign trade specialist at HANSA-FLEX Osnabrück under Günter Buschmann, co-founder and long-standing Managing Director of the company. After a successful apprenticeship and three years of further training to become a marketing specialist with Chamber of Commerce and Industry qualifications, he became operations manager at Kopsel Hannover (the company belonged to HANSA FLEX). After six years he moved to the commercial office staff at HANSA-FLEX Münster, followed by five years as a field sales representative in Bielefeld, before taking over the Osnabrück regional management from Jörg Buschmann in 2009. Since the merger of the Osnabrück and Oldenburg regions in 2014 he has been responsible for both.

#### NO DAY IS LIKE ANY OTHER

As Regional Manager Christian van der Veen is responsible for sales, the organisational structure and the branches and their employees. In the process he always has to keep an eye on the overall HANSA-FLEX picture and align the goals of the regional branches with company policy. "There is close interaction with head office, but we're allowed to make a lot of decisions for ourselves, which is also a privilege because a lot of trust is placed in us," van der Veen explains. He doesn't have a typical daily routine. Many tasks arise at short notice. Every day there are new customer requirements to coordinate, personnel issues to manage, quotations to follow up, project progress to check on. Communication is an important part of the daily business. "I call the sales department and the branches and follow up on their daily requirements." This is not only about business, but also about personal matters. Christian van der Veen makes it a point to always have an open ear for the everyday problems of employees. In addition, there is a lot of organisation and process analysis as well as communication with the Back Office Manager of his region Vartan Günbilek, the production units, mobile services and other sections of the

#### IN A CRISIS PEOPLE NEED TO WORK TOGETHER

The Corona pandemic and the ongoing supply crisis have changed many things in Christian van der Veen's field of activity. "Instead of meeting on site, we all had to learn to communicate via video calls. Getting used to

with his colleagues Vartan Günbilek (Back Office Manager in Osnabrück) on the left and Leif Schulze (back office employee) on the right.









it was a challenge at first, especially at a time when a much higher level of communication is required in order to relieve both staff and customers of worries, hardships or fears." In spite of this the Regional Manager has managed to continue to maintain good links with the branches and departments. "Crisis management is only possible by sticking together. We were already close before, but now we are showing even more solidarity," he says, praising the cohesion of the employees in his region.

#### SUCCESS THROUGH COMMITMENT

"My commitment to my job has not diminished one bit over the years," says Christian van der Veen. In his 38 years at HANSA-FLEX he has witnessed how much the compa-

"You shouldn't try to be something you're not, you have to be the way you are and you need good antennae to be able to read between the lines." ny has developed and is proud to be part of the success story. "The greatest passion we have at HANSA-FLEX is customer satisfaction. We achieve this by having employees who share this passion and also communicate this to the customer. That's why our workforce is our greatest asset." This is why for Christian van der Veen empathy and sincerity are two important qualities that a regional manager should have. "You shouldn't try to be something you're not, you have to be the way you are and you need good antennae to be able to read between the lines." This also applies when it comes to

developing up-and-coming junior staff for future activities with the company. Current challenges such as digitalisation, supply problems and a rethink in the professional world are bringing about a change that needs to be steered into successful channels during training the next generation.



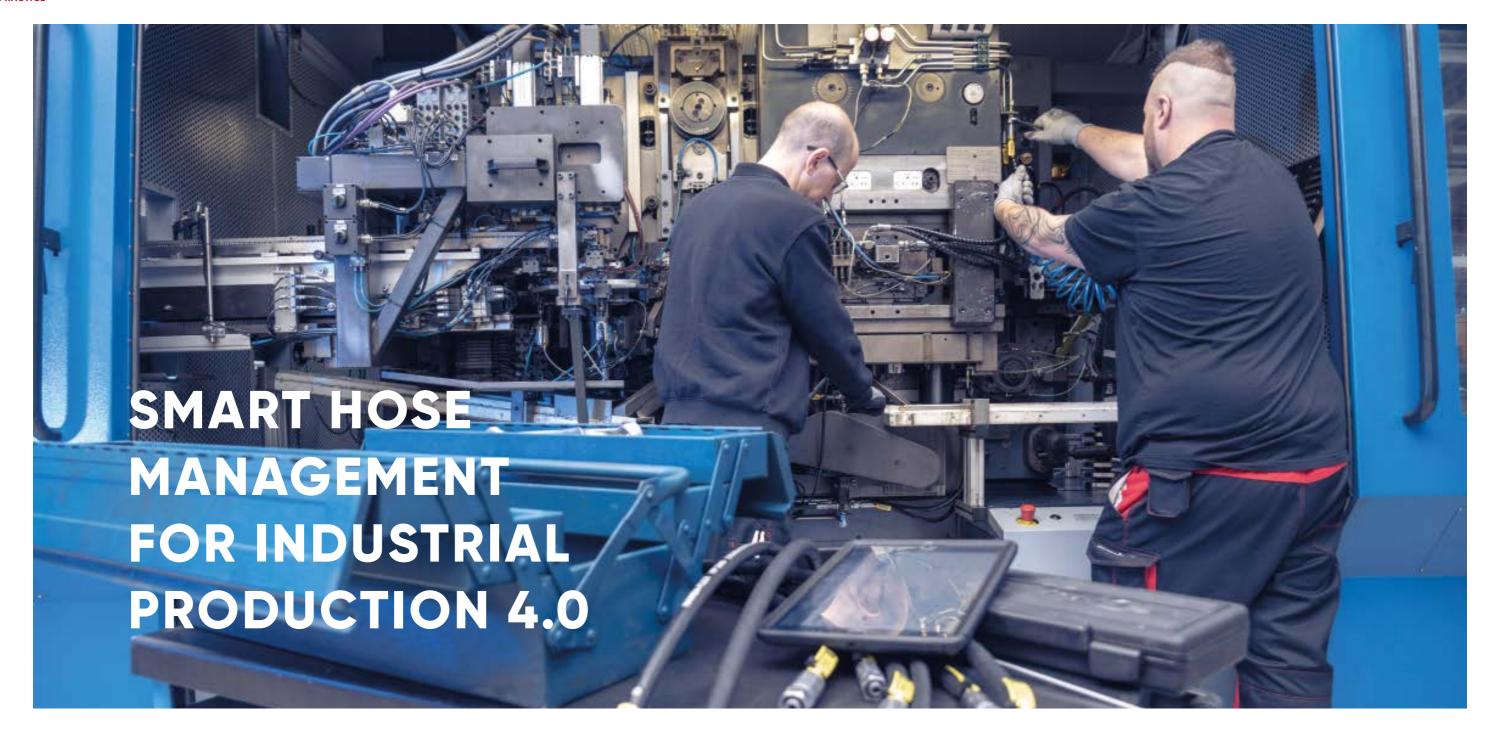
#### **ONLY A CLICK AWAY**

The HANSA-FLEX online shop offers more than 80,000 premium-quality hydraulic articles for your machines. We stock a comprehensive range, clearly structured in 16 categories and with a wide variety of practical service functions.





Scan the QR code for more information shop.hansa-flex.com



Roto Frank Fenster- und Türtechnologie GmbH is digitalising its manufacturing processes in order to manage them optimally. In 2021 the maintenance management of its hydraulic hose lines was also upgraded: HANSA-FLEX equipped the 300 hose lines of 15 punching presses with X-CODES without the need for production to be halted.

Roto Frank Fenster- und Türtechnologie GmbH (FTT) develops, produces and markets fittings for windows and exterior doors featuring all types of opening system and frame materials. The company is based in Leinfelden-Echterdingen near Stuttgart. FTT employs around 3,700 people worldwide and is, among other things, the global market leader for tilt-turn fittings. FTT is committed to Industrial Production 4.0 in order to optimise its processes. As part of the digitalisation and optimisation of the company's production facilities, in 2021 HANSA-FLEX replaced 300 hydraulic hose lines for FTT in Leinfelden in the area of punching machinery, providing the new hose lines with X-CODEs and recording them in the X-CODE Manager.

#### PEAK FLEXIBILITY AND RELIABILITY REQUIRED

FTT's punching machine section consists of almost two dozen production lines. These include punch presses, cold forming equipment and highly complex punching-bending-laser systems, all of them operating at full capacity. "Our focus is on absolute process reliability," explains Wolfgang Oschwald. As manager in charge of punching and forming he is responsible for ensuring that production runs smoothly. He praises the positive cooperation, stating: "HANSA-FLEX is an absolutely reliable partner thanks to its high flexibility and fast provision of the components we need." When it comes to preventive maintenance of the systems, Wolfgang Oschwald coordinates with HANSA-FLEX's internal



maintenance section and Industrial Service, and then draws up a maintenance schedule. The decisive factor here is that the maintenance work can be carried out without interfering with production. This requires maximum flexibility and reliability. "Wolfgang Oschwald works closely with us on every project in order to plan the maintenance dates optimally. Especially in times of Corona this isn't always easy, but both sides are always solutions-oriented and work together to ensure that everything goes smoothly despite these challenging conditions," reports HANSA-FLEX Service Manager Dominic Toffel.

To call up all the information on the individual hose line, it is sufficient to read the label or scan the QR code using the X-CODE Manager app.



Herbert Dräger is in charge of semi-finished parts production and toolmaking at FTT. In this capacity he is mainly responsible for the trouble-free supply of semi-finished parts. He, too, appreciates HANSA-FLEX's expertise and availability: "Both the high level of employee expertise and HANSA-FLEX's closeness to our site in Leinfelden-Echterdingen are big advantages."

#### HANSA-FLEX IMPRESSES WITH EXPERTISE AND AVAILABILITY

When it comes to highly complex machinery and systems such as those used by FTT, special expertise is required in the field of hydraulics. Customised shapes have to be precisely reproduced and pipeline routes optimised. "In addition, during inspections often only a few decimetres of a several-metre-long hose line are recognisable. The technician must nevertheless be able to identify the line correctly," emphasises Dominic Toffel. Another challenge in the repair and digitalisation of hose lines was last year's shortage of materials on the global market. "However, we were able to offset this effectively thanks to our dense branch network and our two large, well-stocked central warehouses," reports Toffel.

#### DIGITAL HOSE MANAGEMENT WITH THE X-CODE MANAGER

Thanks to the new X-CODEs, barely visible hose assemblies at FTT can now also be quickly and reliably identified by the internal maintenance department. It is sufficient to read the label or scan the QR code to call up all the information on the individual hose line clearly on a tablet, notebook or mobile phone using the X-CODE Manager app. "This provides the necessary traceability. You can always see which hose line was serviced on what date, and when it needs to be replaced again," says Julia Rau, a member of the HANSA-FLEX field service team. In addition, FTT can transmit the X-CODE of a hose line directly to the local HANSA-FLEX branch. The line is stored there in the IT system and can be manufactured immediately with total precision: length, material, fittings - everything is one hundred percent correct. This saves FTT a considerable amount of time and increases process reliability, as there is no risk of confusion thanks to the individual X-CODE. The X-CODE Manager clearly displays all recorded hose assemblies with their most important features. Hose lines can be grouped and assigned to machines, while there is a reminder function for upcoming maintenance dates and many other smart functions. This is how HANSA-FLEX makes an important contribution to digitalisation and Industrial Production 4.0 at FTT.





Wolfgang Oschwald, Head of Punching and Forming Technology at Roto Frank Fensterund Türtechnologie GmbH in Leinfelden-Echterdingen.



After the maintenance work has been successfully carried out, the next period for preventive maintenance is determined and documented with a sticker directly on the machine. This prevents any unscheduled downtime.

#### TYPICAL ...

# SOUTH AFRICA

# THE RAINBOW NATION ON THE TROPIC OF CAPRICORN

The name says it all: the Republic of South Africa (RSA) is located in the very south of the African continent. Six states border the country: Namibia, Botswana and Zimbabwe to the north, and Mozambique and Eswatini to the east. The Kingdom of Lesotho is an enclave entirely surrounded by South African territory.

South Africa's coastlines on the Atlantic and Indian Oceans stretch over 2,500 km. South Africa's mesa country, the Highveld plateau, is up to 2,000 m above sea level. With forests, savannahs, heathlands, mountains and deserts the landscape captivates with its extraordinary diversity, as well as its fascinating and varied animal and plant kingdom.

Influenced by its past, South Africa today is home to a colourful mixture of Africans and the descendants of European and Asian immigrants. In view of such cultural and ethnic richness it's no wonder that the country is called the "Rainbow Nation".

As the only African country to belong to the G20 economic group, South Africa is considered Africa's largest financial and economic power. Above all, the country has made a name for itself as an exporter of agricultural products and mineral resources such as gold, platinum, chrome, manganese, titanium and diamonds. Tourism is also an important and growing source of income.

With its promenade of palm trees, white sandy beach and majestic mountains in the background, Camps Bay is a popular seaside resort, party spot and trendsetter.



## GENERAL FACTS



 $1,219,912\ km^2$  the total area of South Africa



60.1 million



18.8 °C



Pretoria (Tshwane) the capital



Bloemfontein seat of the Supreme Court

#### The country's largest city VREDEFORT CRATER A UNESCO World Heritage Site, the oldest meteorite crater on earth, formed 2 billion years ago **TUGELA FALLS** ORANJE The world's second highest The longest river - 1,860 km waterfalls - 948 m NAMAQUALAND Flowering of the desert in the region around Springbok SOUTH ATLANTIC INDIAN OCEAN OCEAN **WINE ROUTE R62** The world's longest wine road from Cape Town to Oudtshoorn MAFADI The highest mountain - 3.450 m WORCESTER **CANGO CAVES IN OUDTSHOORN** Centre of brandy and Famous stalactite caves wine production **CAPE OF GOOD HOPE CAPE AGULHAS CAPE FOLD MOUNTAINS** Africa's most south-westerly point South Africa's southernmost 250 million years ago, rock layers point, where the Atlantic and overlapped and mountains were "folded".

**JOHANNESBURG** 

Indian oceans meet

#### THE FLAG

A recumbent green Y framed by white and yellow stripes, plus a red, blue and black field: the national flag, which was introduced in 1994, is as colourful as the country itself. The colours are meant to represent national unity. "Unity is strength" is therefore also the motto of the flag.

# HANSA-FLEX SOUTH AFRICA

Johannesburg

2001 company founded

4 branches

83 employees

10

service vehicles



#### FLORA & **FAUNA**

For nostalgia fans:

relax and watch wild animals on the luxury Blue Train from Cape Town to Pretoria, including butler and laundry service.





#### For culture lovers:

the spectacular mountain world of the Drakensberg is a UNESCO World Heritage Site. Here visitors can marvel at 3,000-year-old rock and cave paintings (approx. 600 sites with 40,000 images).

#### For the adventurous:

the Garden Route in the Western Cape features enchanting beaches, ancient forests and pretty coastal towns. And surfing with dolphins in Plettenberg Bay.

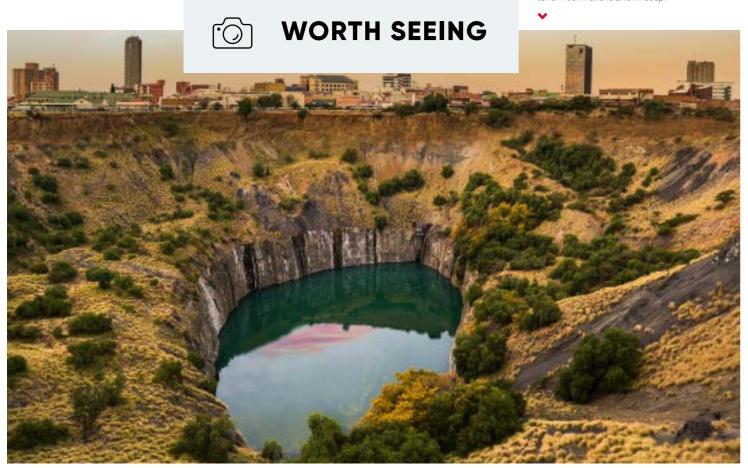
6 per cent of South Africa's total area is under nature conservation

20 national parks

300 mammal, over 500 bird & about 100 reptile species live in South Africa

1,400 native plant species exist on Table Mountain alone

The Big Hole near Kimberley: diamonds were mined here until 1914. It has a circumference of 1.6 km, a diameter of 460 m and is 240 m deep.



#### **BASIC CULINARY KNOW-HOW**

South Africa offers a diverse cuisine. Traditional local dishes are mixed with Dutch, Indian and English influences. Meat dishes with lamb, ostrich or chicken are very popular. In the so-called 'braai', meat is barbecued directly over wood. Biltong, dried meat, is also popular. And the strongly spiced boerewors is reminiscent of the German bratwurst.

#### **THE WEST**

Fish, milipap (maize porridge with potato slices and optionally meat), isidudu made from traditional pap (porridge made from maize flour) with pumpkin and beef liver, vetkoek (pâté with minced beef).



Fish dishes, bobotie (cake made of sweet meat, with sultanas and dried fruit), roti (flat bread), mashonzha or mopane worms (dish made of cooked and dried worms).

#### **THE SOUTH**

Boerewors (spiral-shaped bratwurst made of veal with spices), bunny chow (bread with curry filling), potjiekos (stew with meat, vegetables, rice and potatoes), koeksuster (braid-shaped deep-fried dough with sugar syrup).

THE NORTH

and spices).

Lamb and stews with pumpkin, carrots,

beans or corn, preserves and cakes with dried fruits, monkey gland steak (sauce with fruits



621.5

grammes was the weight of the world's largest diamond, which was found in South Africa. Called the Cullinan Diamond, its largest pieces form part of Britain's crown jewels.

400

baboons live on the outskirts of Cape Town. There is a baboon emergency hotline here for people who are harassed by the protected animals.

100

and more paths lead up to the top of Table Mountain as well as a cable car (climbs the height of 700 m).

millimetres in height are the smallest plants in the world, the succulents, while the mighty baobab trees (traditional gathering places) can reach heights of up to 20 m.

30

different animal and plant species per km² are found in South Africa's grasslands - a greater diversity even than in the rainforest.

official languages are in use. English and Afrikaans as well as Ndebele, Northern Sotho, Sesotho, Siswati, Tsonga, Tswana, Venda, Xhosa and Zulu.





# SAFETY THROUGH PRESSURE PULSE TESTING

The technology and hydraulics of the IHA pressure pulse/vibration test bench

Energy transmission in hydraulic systems takes place through pressurised fluid. In hydraulic systems the pressure can be subject to strong fluctuations. Components in hydraulic systems are therefore frequently exposed to load changes. Testing the components with regard to these alternating stresses serves as a reliable assessment of the system's configuration and design.

Such tests can be carried out with the International Hydraulics Academy's pressure pulse/vibration test bench, which was put into operation in 2020. For example, pressure pulse tests without bending are possible up to 1,300 bar for hydraulic hose lines made of rubber or plastic in accordance with ISO 6803. In a second test chamber, combined pressure pulse/vibration tests can be carried out for metal tube fittings in accordance with ISO 19879. In this test the tube fittings are subjected to pressure pulses with simultaneous vibration by

an oscillating device. A special challenge in the implementation of the pressure profile is the high dynamics and the narrow tolerance band. According to the standard, a rate of pressure increase of up to 17,000 bar/s is possible, depending on the test

pressure and the test frequency. However, a limit deviation of  $\pm\,10\,\%$  has to be observed.

Several factors make this test bench unique. On the one hand, pressure pulse tests with a high pulse volume of up to 1.1 l can be carried out. On the other hand, tests with pressure pulses of up to 1,300 bar are possible. Due to this fact the test bench is equipped with two pressure intensifiers. Depending on the selected pressure pulse, the pressure intensifier required for

the test is selected by the test stand software. On the other hand, depending on the pressure pulse the pressure stage of the main pump of 270 bar or 350 bar is controlled fully automatically. The main pump supplies the pressure intensifiers with a maximum volume flow of 400 l/min. The pump is driven by a water-cooled asynchronous motor with an output of 250 kW. In total, the pressure pulse/vibration test bench has a maximum connected load of 300 kW with a weight of 16 t. The main components of the test bench are the pressure intensifiers. They can be compared to hydraulic cylinders, whose piston rods generate the translated pressure. Experience shows that the sealing system of the pressure intensifier – especially in the high-pressure range - is the weakest point. Due to the high number of load cycles, the wear of the high-pressure seals is significantly higher than in normal applications of hydraulic cylinders. On average, the pressure intensifier experiences 500,000 load changes or strokes per

pulse test. At a frequency of 1 Hz, a pulse test is completed after approx. 6 days. This results in up to 20 million load changes per year. Another reason for the increased wear of the sealing system is the transmitted pressure of up to 1,300 bar. Standard

soft seals for hydraulic cylinders are available up to a maximum pressure of 700 bar. An important measure for reducing maintenance time/costs with regard to the pressure intensifiers is sealing by means of piston rings instead of soft seals. Due to the principle of sealing with piston rings, leakage is present and this reduces the efficiency of the pressure intensifier. However, this sealing system has not caused any failures so far, so that no maintenance has been necessary. The



"According to the standard, a

rate of pressure increase of

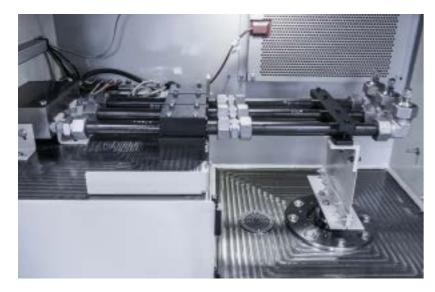
up to 17,000 bar/s is possible,

depending on the test pressure

and the test frequency."

Test chamber for pressure pulse tests of hydraulic hose lines without bending

#### 36-37 TECHNOLOGY & SAFETY



Test chamber for pres sure pulse/vibration tests of pipe fittings dynamics of the pressure intensifier should also be emphasised. Due to the interaction of 250 kW hydraulic power and bladder accumulators with a total volume of 100 l, the pressure intensifier can perform a stroke of 280 mm within 100 ms. This corresponds to a travel speed of 2.8 m/s. Such speeds and accelerations can only be achieved with servo-valve technology. The pressure intensifiers are actuated by pilot-controlled servo-valves with a maximum flow rate of 3,000 l/min.

These dynamics place high demands on the pressure supply, the valve technology and the sealing system. However, the design of the return flow line is equally important for stable operation. A particular challenge here is the avoidance of pressure peaks caused by the abrupt volume flow of the servo valves.

In terms of design and performance the test bench of the International Hydraulics Academy is unique in the class of pulse test benches. Without any difficulty hose lines with a nominal diameter of 50 mm can be tested with a pressure pulse of 700 bar or pipe fittings up to a pressure pulse of 1,300 bar.

Author:
Robert Becker
Test engineer
Trainer: fluid technology



#### **SCHULUNGSTERMINE** Juni 2022 - August 2022



DIE HYDRAULIK

Juni 2022		AKADEMIE
13.06.2022 - 17.06.2022	Hydraulik II - Aufbauseminar	Dresden
14.06.2022 - 16.06.2022	Projektieren wie ein Hydraulik-Profi	Dresden
20.06.2022 - 24.06.2022	Hydraulik – Wartung & Instandhaltung	Dresden
27.06.2022 - 01.07.2022	Hydraulik I - Die Basics	Stockstadt am Rhein
27.06.2022 - 30.06.2022	Hydraulik II - Aufbauseminar	Linz (AT)
27.06.2022 - 29.06.2022	Druckspeicher in hydraulischen Anlagen	Dresden
28.06.2022	Hydraulik-Kupplungen – Die Basics	Geisenfeld
30.06.2022	Jahressicherheitsunterweisung für Elektrofachkräfte für festgelegte Tätigkeiten nach DGUV Vorschrift 1	Dresden
Juli 2022		
05.07.2022 - 06.07.2022	Hydraulik-Öle in der Praxis	Geisenfeld
05.07.2022 - 06.07.2022	Hydraulik-Rohrleitungen in Theorie und Praxis	Dresder
18.07.2022 - 22.07.2022	Elektrofachkraft für festgelegte Tätigkeiten	Dresder
19.07.2022 - 20.07.2022	Vermittlung der Fachkunde der zur Prüfung befähigten Person der hydraulischen Leitungstechnik gem. BetrSichV und TRBS 1203- 2019	Geisenfeld
25.07.2022 - 29.07.2022	Hydraulik I - Die Basics	Dresder
August 2022		
02.08.2022	Hydraulik-Kupplungen – Die Basics	Bremer
09.08.2022 - 10.08.2022	Vermittlung der Fachkunde der zur Prüfung befähigten Person der hydraulischen Leitungstechnik gem. BetrSichV und TRBS 1203- 2019	Bremer
11.08.2022	Workshop und Auffrischung der zur Prüfung befähigten Person der hydraulischen Leitungstechnik gem. BetrSichV und TRBS 1203- 2019	Bremer
22.08.2022 - 26.08.2022	Mobilhydraulik II - Das Load-Sensing-System	Stockstadt am Rheir
22.08.2022 - 24.08.2022	Pneumatik - Theorie und Praxis	Dresder
29.08.2022 - 02.09.2022	Hydraulik I - Die Basics	Stockstadt am Rheir

Weitere Termine zu Schulungen ab September 2022 finden Sie auf unserer Homepage.

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### Good cooperation is important for every working relationship

The success of a company is largely determined by its employees. They need to be competent, well-trained, friendly and able to work in a team. And they should enjoy their work as much as possible and feel good in the workplace. This keeps staff fluctuation and often also absence due to illness low, increases productivity and enhances well-being. Appreciation in the workplace therefore often counts for more than a salary increase. And last but not least, a good working atmosphere is helpful in recruiting skilled new staff. Management can do a lot to promote togetherness in the workplace, but the employees themselves can also take the initiative if they want to create a good working atmosphere.

#### SHARED MEALS BRING PEOPLE TOGETHER

Why not spend your lunch break together for a change? Everyone can bring something for the common meal table or, if this is too time-consuming, eats his or her own dish - recipe swapping not excluded! In this way shared meals even work for purely virtual teams. When a target is achieved or a project is completed this should be celebrated properly, for example with a meal, breakfast







or cake buffet, at which you can talk to your colleagues and get to know them better.

#### TAKE ADVANTAGE OF REGIONAL ATTRACTIONS AFTER WORK

Is there an interesting new exhibition at a local art gallery or museum? Why not go with your colleagues and talk to them about the exhibits afterwards? Discuss what you liked and what you didn't like. Maybe you would like to explore the city again. Guided tours of the city are offered almost everywhere, often with a special theme. For example, you could participate in a night watchman's tour after work. Visits to the theatre and cinema are also suitable as group activities if you make sure that you can talk about the experience afterwards or the next day. It's therefore best to plan your visit in such a way that there is time for a trip to the pub afterwards. In more and more cities there are so-called "art nights", at which you can paint a picture on canvas as a group. No previous experience is necessary, but everyone goes home with a picture they have painted themselves. Perhaps these could even be used to decorate the walls of your company in the near future?

#### **SPORT PROMOTES A SENSE OF TOGETHERNESS**

Sporting activity is not for everyone. Nevertheless, there are plenty of opportunities to create community experiences through physical activity. Mini-golf, bowling or skittles, for example, are particularly low-threshold activities. For larger groups, teams can be formed in which colleagues support each other. If the bats or balls are swung with fun and enthusiasm no one will be annoyed about coming in last. Gymnastics or yoga are generally also suitable for less athletic people and try-out sessions are offered by many studios and clubs. A yoga instructor may be able to come to the company. If the focus is more on relaxation, meditation sessions

and guided imaginary journeys work well against stress and are also fun together. A visit to a salt grotto or a salt spa is a good way to take a deep breath together and shake off the stress of everyday life. Perhaps colleagues would like to try something that is new for everyone: archery or a visit to a climbing or trampoline park or an escape room could be examples here.

#### **BUILDING A STRONG BOND WITH THE COMPANY**

Management can specifically promote cohesion among employees and loyalty to the company. Invitations are generally extended to corporate events so that there are no costs for the staff. For example, the annual Christmas party is also a thank-you to everyone for their hard work. A company outing to the surrounding area can also take place once a year, perhaps even with an overnight stay on special occasions. Of course, appropriate food and drink will be provided. If it isn't to be so lavish, in the summer a barbecue afternoon and evening or a party on Midsummer's Eve can be organised. The management can also organise tournaments with prizes for the winners: cards, chess or bingo are ideal for this. Quiz and puzzle evenings, tastings or scavenger hunts are also becoming increasingly popular.



# FIRMLY IN THE SADDLE



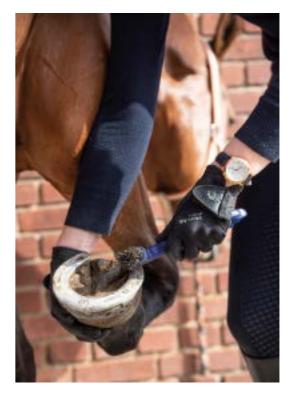
Whether it's show jumping, dressage, riding in the Wadden Sea, training horses or coaching young riders: for Marie Abel equestrian sport has been an integral part of her life since childhood. The dedicated horsewoman demonstrates that riding is much more than just sitting on a horse.

Marie Abel's introduction to horse riding began in a very traditional way: at the age of six she sat on the back of a pony for the first time - the beginning of a real passion that has stayed with her to the present day. Looking back, the 23-year-old from Lower Saxony says: "After I had learned the basics I was seized by the ambition to take part in competitions one day." Her training intensified, and at the age of ten she started competing in tournaments. The next important step was getting her first horse, an Oldenburg chestnut mare called Leoni, at the age of twelve. "From then on my first stop after school - and later university - was always the stable. A horse also means a lot of work. I couldn't have done it without the support of family and friends." For two years now she has also been the proud owner of Shiva, a Hanoverian show jumper mare that Marie Abel trains herself with great enthusiasm.

#### LOTS OF TITLES

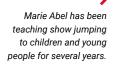
Even though Marie Abel focuses on versatility when she trains with her horses, she is especially devoted to show jumping. "Jumping is like flying. Once you have jumped over obstacles with a horse weighing over 500 kg you want to experience it again and again, you immediately become addicted," is how she sums up her passion. At tournaments she competes up to the intermediate M class, where she has to jump up to ten obstacles with a maximum height of 130 centimetres. Together with her chestnut mare Leoni the dedicated rider has achieved almost 40 victories, including several district championship titles. In addition to training at home and lots of concentration in the saddle, these successes are also the result of meticulous study of the competition course. "Show jumping is always a thinking sport. It's important to find the best routes between the obstacles, which on the one hand need to fit the rhythm of the horse and on the other hand of course be as time-saving as possible." This is because, in addition to penalty points for obstacles not cleared, the time required is also taken into account in the scoring.





#### PEOPLE AT HANSA-FLEX







#### A UNIQUE SETTING

The Niedersachsenhalle in the traditional equestrian town of Verden is a real institution among horse riding fans. By participating in tournaments and show competitions in Verden, Marie Abel has already fulfilled one of her dreams several times. But even away from the competition arena there is plenty of scope for dreams. She counts the ride across the Wadden Sea from Cuxhaven Bay to the island of Neuwerk and back as one of the absolute highlights of her riding career. "The Wadden Sea natural heritage site not only provides a unique backdrop, but also exceptional conditions for my horse. Since the mudflats have no obstacles such as roots or stones you can gallop endlessly here - you won't find conditions like this anywhere else."

#### VALUABLE PERSONALITY DEVELOPMENT

For Marie Abel equestrian sport is much more than just outdoor sports involving horses. "The widespread prejudice about spoiled girls in riding stables who spend all day plaiting their horses' braids is simply not true at all," explains the owner of two horses. Riding is much more about the development of personal and social skills. "First of all, working with horses promotes a sense of responsibility. After all, a horse is not a piece of sports equipment like a football that



you can just leave in the corner for a few days." In addition, it increases your ability to look critically at yourself when your own skills are assessed in training and at competitions. For many tasks real teamwork is also required. Last but not least, training horses requires a lot of patience and trust in the horse as a partner. Explaining her commitment to working with up-and-coming young riders the qualified trainer, who has been teaching children and young people show jumping for a number of years now, says: "I'm grateful that horses have shaped my life from an early age, because riding and dealing with horses has had a great impact on my personality development. Passing on this great gift is close to my heart and motivates me". In addition, until the middle of last year she was active as a founding member in the youth team of the Hanover Equestrian Association. The enthusiastic rider also sees the importance of these key skills in her everyday work. After successfully completing her dual studies at HANSA-FLEX, she is now supporting the Human Resources and Personnel Development department there as a working student during her Master's degree course. "Clear goals are important. Just as important is an environment that encourages and challenges you," says Marie Abel, drawing parallels between equestrian sport and the world of work.





#### Alles aus einer Hand

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# NATURE & TECHNOLOGY HYDRAULIKPRESSE

# Wave power plants as a contribution to the energy transition

The future belongs to regenerative energy sources. While wind turbines and photovoltaic systems have become an integral part of the energy landscape, wave power offers a potential that has so far been almost untapped.

Waves offer far more than just the opportunity for surfing or fun and games on a seaside holiday. Experts estimate that, depending on their location, over a comparable area waves carry around 20 to 200 times more energy than the sun's rays. While tidal power plants rely on the ebb and flow of the tide to generate energy, wave power plants use the surf and the continuous rise and fall of waves on our seas and oceans.

#### **ELECTRICITY FROM WAVES**

But how can the power of the sea be harnessed? Put simply, it is a matter of converting the kinetic energy of the waves into electrical energy. There are many different ways and means of doing this. One of the bestknown wave power plants is definitely the Pelamis pilot project. Pelamis, the Greek name for sea serpent, represents the design: the floating power plant, about 150 m long, consisted of several floats connected to each other by hydraulic cylinders. The waves caused the links of the serpent to twist, the hydraulic oil was pressurised and drove a hydraulic motor, which in turn supplied energy to an electricity generator. The Oyster project, on the other hand, relied on the use of waves above and below the water surface. The principle is based on the current of the water opening and closing a large flap whose shape is reminiscent of the oyster that gives it its name. Here, too, the kinetic energy is transmitted by hydraulic cylinders, comparable to a bellows. The Wave Dragon project has strong similarities to a conventional hydroelectric power plant, in that the waves are directed into a turbine via a ramp. A power plant in the Basque country that is still active today works not with water but with air: waves push water into a tube, the air inside is then compressed and drives a wind turbine that is connected to a generator. When the water flows out the resulting negative pressure sucks in air, and this air flow is also used by the turbine.

#### **WAVES, WIND AND SUN**

With a few exceptions the pilot projects that were launched with great euphoria in the 2010s have been shut down today. Not only did salt water and storms take their toll on the power plants, the pilot projects also failed due to their excessive complexity. For this reason the German wave power pioneer SINN Power is currently pursuing an approach that relies on standardised components and materials that have not only proved their worth in the maritime environment, but

#### **NATURE & TECHNOLOGY**



The Ocean Hybrid Platform SOcean from SINN Power is modular and can be customised with three different renewable energy sources, depending on the location and conditions there, as well as on customer requirements.

can also be mass-produced and transported at low cost. The functional principle is simple but efficient: the up and down movements of the waves set a float in motion, which is connected to a 10 m long lifting rod. A generator unit is attached to the lifting rod and converts every movement of the rod into electrical energy. Several such modules can also be combined to form a fixed structure that can float freely on the surface of the sea. The standardised design makes it easy to implement wave power plants of various sizes. With the Ocean Hybrid Platform SOcean SINN Power is going even further and linking a floating wave power plant with wind turbines and photovoltaic panels. The SOcean solution is designed so robustly that it can withstand wave heights of up to 20 m.

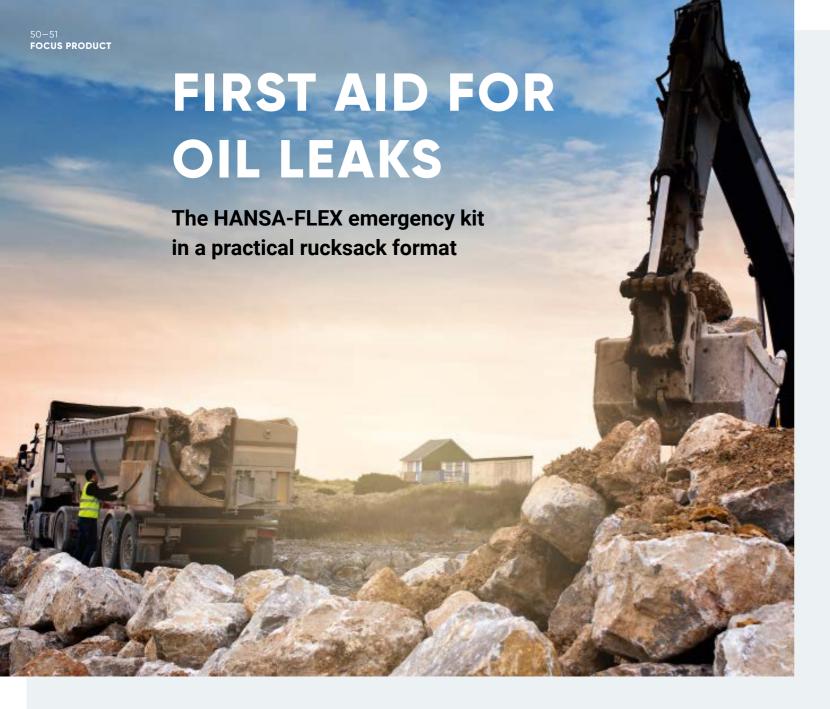
#### **READY FOR TOMORROW**

Even if wave power plants are not yet available in sufficient numbers to make a significant contribution to energy production, their enormous potential should

not be neglected. After all, they supply electricity even when the sun isn't shining or the wind isn't blowing. Wave power plants can therefore usefully supplement the mix of renewable energies and help to balance out fluctuations in energy production. Another advantage is that wave power plants are quicker and easier to set up than offshore wind farms. Instead of costly foundations, all that is required is an anchor. Smaller plants are recommended as emission-free replacements for conventional diesel generators, for example in remote tourist destinations. The plan: to turn niche applications into scalable, profitable plants on a large scale - as has already been successfully implemented with wind energy and electromobility as role models.



The floats move up and down in rhythm with the waves, generating electricity. Smaller plants are recommended as emission-free replacements for conventional diesel generators, for an aquaculture facility with a self-sufficient energy supply for example.



Hydraulic hose lines perform at high levels and are often exposed to harsh conditions. Dust in production facilities, the effects of the weather on construction sites and mechanical impacts can lead to unforeseen leaks. If liquids that are hazardous to the environment and health leak out, a quick response is required to protect people and the surroundings. This is where the HANSA-FLEX emergency kit comes in.

Unforeseen leaks of hydraulic fluid, engine oil, fuel or other critical fluids are unpleasant and also pose a potential risk to people, machines, materials and the environment. The practical HANSA-FLEX emergency kit contains everything required for the quick and safe removal of leaking hydraulic and engine oil as well as other fluids. It has been put together by experienced HANSA-FLEX service technicians and is ideally suited to the requirements of industry, construction and agriculture. Its compact size and low weight make the emergency kit the ideal companion for every mobile application, for example in work, construction or service vehicles. Even in stationary use in production facilities, the emergency kit finds a place everywhere so that it is quickly at hand when needed.

#### A FULL SET OF EQUIPMENT FOR VERSATILE USE

At all locations and at all times this practical kit offers everything needed to stop, bind and collect spilled hydraulic and engine oil, petrol, diesel and lubricants.

#### STOP AND PROTECT

Oil spills need to be contained as quickly as possible to prevent contamination of surfaces, substrates, waterways and sewage systems. The so-called 'socks' included in the kit (2 pieces of 120 cm each) are designed for this purpose. These are flexible oil barriers that actually look like oversized socks. The highly malleable binder sleeves adapt to corners and bends as well as uneven surfaces, and reliably stop escaping oil. The socks can also be used as a ring-shaped oil barrier to protect gutters and other surface drains.

#### **ABSORBING AND BINDING**

The emergency kit is equipped with 10 oil binding mats as well as 2 kg of an oil binding agent. The oil binding mats are suitable, for example, as an underlay in cases where oil is leaking at specific points, or for absorbing and binding puddles on flat surfaces. The absorbing effect of the oil binding mats is based on the use of fleece materials made of homopolymer polypropylene (PP). The material is very light,

exceptionally absorbent and has a very high chemical stability.

The oil binding agent is suitable for absorbing oil or similar substances on road surfaces, floors and even water. It consists of 100 % hydrophobic natural fibre, which means it is fully water-repellent. Thanks to its excellent absorbency, the oil binder can absorb oil quantities up to 4 times its own weight.

#### **CLEANING OF SURFACES**

To remove even the last traces of oil from surfaces, the emergency kit contains a special oil stain remover (200 ml spray). This highly effective cleaning spray completely removes even deeply penetrated oil stains on composite stone, concrete, exposed aggregate concrete, ceramics, screed and natural stone.

#### **FURTHER ACCESSORIES**

In addition to the oil-binding equipment, each emergency kit contains a pair of safety gloves (size 10). The tried and tested hydraulic work gloves offer secure protection against oil and other liquids. In addition, tear-proof 120-litre refuse sacks with a drawstring are part of the equipment so that oil binding agents and contaminated materials can be transported safely.

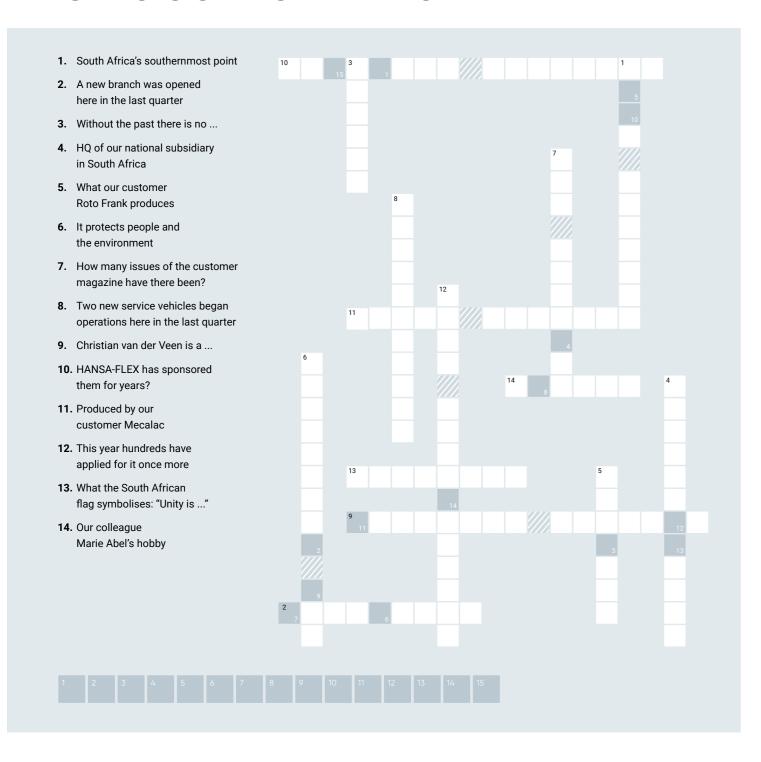


You can order the HANSA-FLEX emergency kit now at shop.hansa-flex.com or at any HANSA-FLEX branch

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#### CROSSWORD PUZZLE



#### WIN A GLOBETROTTER VOUCHER

In this issue we are holding a prize draw for five shopping vouchers worth 200 euros each, redeemable in all participating Globetrotter shops or online at www.globetrotter.de. Please email your answer to marketing@hansa-flex.com or by post. Don't forget to include your name and address as the sender. The deadline for entries is 27 July 2022. Each participant may submit only one entry. Legal recourse is excluded, as is any liability as far as legally permissible. No cash equivalent is available. Best of luck!

**SOLUTION HP 1/2022** 

**PASSION** 

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Gravis Gift Cards U. Geesner, Emmerich, Germany

J. Reier, Viernheim, Germany

E. Tiessen, Wolvertem, Belgium

M. Nebel, Karlsruhe, Germany

I. Bergemann, Hanau, Germany



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at our company HQ in Bremen, such as a call center agent, accounts payable clerk, export operations specialist, IT service specialist, purchaser of technical products etc.

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# DID YOU KNOW ...?

1,700 SPARE-PARTS

are standard on board an average service van.

Part of the range is adapted for the regular customers in the area. Thanks to the dense network of branches with over 200 locations in Germany, rarer parts can be procured very quickly within a short distance.

141,145

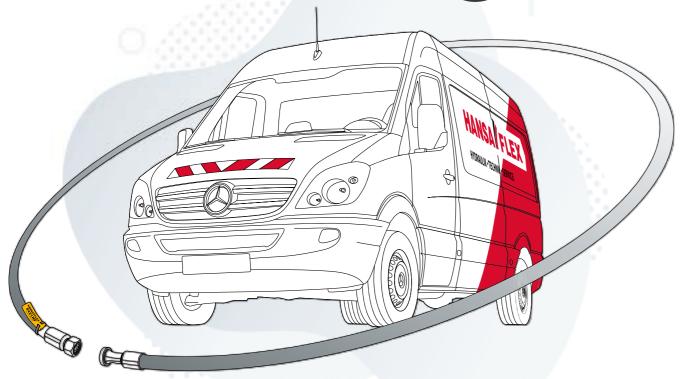
**HOSE ASSEMBLIES** 

were manufactured by the Mobile Hydraulic Service in Germany alone in 2021

6

m<sup>2</sup>

is the mobile workshop space in the service vans, making them by far the smallest workshops at HANSA-FLEX.



MINUTE

is all a service engineer needs
to see whether they have all
the necessary parts on board.
They can immediately check the
order-relevant stock levels in every
service vehicle and branch office
at any time using the X-CODE and the direct SAP
connection to their service software.

6.5

**YEARS** 

was the average length of service of our service engineers in 2021.

3,088

was how long the Mobile Hydraulic Service engineers

spent on training and further education in Germany alone in 2021, despite the Covid-19





# RAPID HYDRAULIC SERVICE IMMEDIATELY ON SITE 24/7

Our 280 Rapid Hydraulic Service vehicles are ready to go right around the clock. If a machine breaks down all the necessary repair work is carried out on site – in person, quickly and reliably.

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