

**DCA-Members forum 2019**  
**HDD-Technology**  
Workshop „Small Scale Drilling”

**Changes at the top**  
Marc Schnau announces resignation for 2019

**24th DCA Annual Congress**  
Event takes place in Krakow, Poland



# DCA

## Newsletter December 2018

**DCA Annual Congress 2018**  
Focus on „Digitization and Small Scale Drilling”



## **Impress**

Information according § 5 TMG:

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**Dear members and friends of the DCA,**

**Marc Schnau**  
President of the DCA



**A**nother year is coming to an end and we all probably ask ourselves again "where is the time gone?"

Initially, the HDD industry market was still somewhat cautious in the beginning of 2018, but then picked up speed, not least due to numerous projects, above all in broadband expansion and the construction of new high-voltage and extra-high-voltage power grids.

The DCA also continues to travel at a constantly high speed, on the one hand to routinely handle day-to-day business and on the other hand to push ahead with special projects for the further development of the association.

From an objective point of view, our annual congress in Frankfurt is also part of the routine, although with over 150 participants it can be described as record-breaking and therefore not an everyday occurrence. However, we would like to "get used" to such a lively response in the future, in order to be able to book this order of magnitude as routine at some point. We hope that we were able to meet the expectations of all participants in Frankfurt as far as possible. The positive response we have felt so far suggests that this is the case. But we would also like to ask for constructive criticism and suggestions for improvement.

We have already reported on this year's projects, e.g. the DCA working groups, the introduction of DCA representatives for certain countries or regions in Europe, etc. in Frankfurt and will further inform elsewhere in this newsletter. The latest project of the DCA board is a revision of our statutes. Essentially, we want to concretize and update the purpose and objectives of the association, revise the forms of membership and the structure of the board. All against the background that we want to place a significant focus on the interests of active drilling companies, both large and small, in connection with the assurance of quality standards. Because if the quality of the HDD process and the satisfaction of the drilling companies are guaranteed, all other participants in the HDD industry will automatically benefit as well.

As you can see, the DCA continues to work on positioning and aligning itself in such a way that the position of HDD technology as the most effective trenchless laying method is supported and expanded. With a view to the future, however, I would also like to inform you in this context that, as already announced in Frankfurt, I will not be available to stand for re-election as President of the DCA at our General Meeting in February 2019 due to a professional reorientation. But you can be assured that the board will present a proposal for the future board structure, which guarantees the continuity of the previous work and promotes positive further developments.

But first of all, we can look forward to Christmas. I wish you and your families a pleasant and reflective time and a good start into the new year 2019.

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Schnau', written in a cursive style.

Marc Schnau

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#### Companion programm

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#### DCA Annual Congress 2018

DCA Annual Congress in Frankfurt/Oberursel. President Marc Schnau welcomes the participants.

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#### 16<sup>th</sup> Ditch Witch Customer Event

DCA with information booth. A DCA membership could be won for one year.

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**DCA Members Meeting 2019**

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**24<sup>th</sup> DCA Annual Congress in Krakow**

The annual congress of the DCA will take place in 2019 in Krakow in the Qubus Hotel.

Read more about our venue at **Page 28**



**Company presentations**

4 new member companies introduce themselves

Read more **at Page 18**



**33<sup>rd</sup> Oldenburger Piping Forum**  
**Topic: Pipelines - transport medium for drinking water and waste water**

DCA with interesting lectures and the Drilling Salon.

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Review 23<sup>rd</sup> Annual Congress 2018

## Focus on digitisation

How great are the effects of digitization on the present and the future of controlled horizontal drilling technology? This was one of the main topics of the 23rd Annual Congress of the Drilling Contractors Association (DCA-Europe), which took place this year in Oberursel near Frankfurt.

DCA Executive Secretary Dietmar Quante was pleased with the great response in Oberursel. Nearly 150 participants were a record attendance for an annual congress of the association. One reason for this may have been the attractiveness of the venue and the lecture programme as well as the current activities of the DCA in its task groups, to which DCA President Marc Schnau referred in his welcoming speech.



DCA President Marc Schnau at his introduction

### Active task groups

Over the past few months, a task group has intensively researched the legal aspects as well as the various technical possibilities of processing and disposing of drilling fluids. "In practice, however, these possibilities repeatedly reach their limits," Schnau stated soberingly. "Unfortunately, the original goal of softening such limits, simplifying processes or developing special solutions together with the Ministry of the Environment could not be

achieved. Schnau announced that an information leaflet on this topic from the DCA will soon be made available to its members.

A second working group dealing with the topic of coating qualities is also on the verge of publishing its results. A new task group has been set up to review and revise the DCA guideline.



Well-filled congress room

Digitisation is moving the HDD industry in two respects. On the one hand, the expansion of the network infrastructure is ensuring full order books for many drilling companies. "On the other hand, digital technology offers new possibilities for control, automation, data acquisition and data transfer on the equipment and machines used in horizontal drilling technology and in project preparation", Schnau explained, describing the background for the motto of the DCA annual congress: "HDD towards 4.0".

### Digitization changes the world

In his opening speech on the Internet of Things, Adri Wischmann, innovation expert and owner of the Internet company IoT Netherlands, made clear the influence that the Internet and digital networking already has and will have today and even more so in the future on the most diverse areas of life. Digital networking in combination with artificial intelligence will dramatically change life in our homes, at work and in our cities, predicted Wisch-

mann and made this clear with illustrative examples. "You can have an alarm clock next to your bed that is connected to your online daily planner.



Adri Wischmann, IoT Netherlands Lecture on the topic of "Digitization"

At a morning appointment, the alarm clock can check the weather and traffic conditions, calculate the travel time and wake you up a little earlier if necessary. The clock could even check the tank capacity of your car to decide whether you need to stop at the petrol station and take this into account," Wischmann explained as an example of a possible scenario for a smart future. He also described the possibilities of new business models and gave a brief insight into the principle of blockchain and cryptocurrencies on the Internet.

### Network expansion making progress

Before Adri Wischmann's visions can fully become reality, however, the necessary infrastructure is required. Alexander Bruns reported on the technical status of the laying methods and the future prospects for the fibre-optic expansion at EWE Netz.



Alexander Bruns, EWE Netz GmbH

EWE is pushing ahead with the network expansion with high investments, Bruns explained. 1.2 billion is earmarked for broadband expansion over the next 10 years. EWE has analysed the different laying methods in the wide area and distribution networks for their respective strengths and weaknesses and uses them in accordance with the respective boundary conditions. The HDD method is primarily used in the wide area network outside the towns and villages and is the ideal solution, especially for crossings and intersections.



View into the congress room

With easy2jet, Bruns presented a still young flushing lance process for the production of house connection pipes, which is currently being tested at EWE. Water is pumped through a PE rod to the bevelled flushing lance head. This loosens the existing soil and the PE pipe can be pushed forward with muscle power. The rotation of the drill string is generated by a battery-operated hand drill. Based on previous experience, the method is ideally suited for sandy and loamy soils and enables low laying depths with FTTH expansion and higher daily outputs compared to open construction methods.

### Discussions in workshops

One focus in Oberursel was on two parallel workshops. One workshop was based on the motto of the annual congress and dealt with the digitization and auto-

mation of processes on the HDD construction site. As far as machine technology is concerned, the small drilling rigs are obviously a big step ahead of the large rigs in the acquisition, storage and provision of data or in the automation of processes such as the linkage change. It was discussed whether the DCA should develop a practice-oriented standard for the data generated on the construction site and thus channel the flood of data sensibly.



Ernst Fengler, DCA, at his lecture

It has been reported from Italy that surveying engineers are already supervising pilot drilling surveys from their offices far away from the construction site and at the same time taking care of more than one construction site. A similar development seems to be emerging in the measurement and evaluation of drilling fluid.



Workshop 1 - „HDD Small Scale Drilling“

All in all, digitisation is also progressing on HDD construction sites and offers considerable opportunities for the future. However, the qualification of the personnel remains indispensable, a conclusion of this discussion.

With a view to updating the techni-

cal DCA guidelines, the second workshop dealt with the question of whether the same requirements should apply to less complex small-scale drilling measures as in large-scale drilling technology or whether a differentiation should be made in the guidelines in line with the complexity of the respective measure. In the discussion it became clear that the size of the drilling equipment used was not suitable as a grid for such a possible differentiation. Whether a drilling is demanding or simple depends on other criteria.



Exhibition area of the congress

The speaker of the workshop, Tim Jaguttis, stressed that these considerations were not about softening the rules of the DCA. Rather, it is a matter of creating more validity and acceptance for the rules and thus the quality standards of the DCA in practice through possible adjustments. The workshop emphasized the role of the large contracting authorities and their tendering practice for compliance with quality standards in small drilling operations.



Udo Harer, Josef Rädlinger Ingenieurbau GmbH

Clear criticism was expressed that no representatives of these com-

## Review HDD workshops

panies took part in the annual congress and that they had missed the opportunity for exchange and dialogue with the industry.

### A look into practice

The second day of the congress was traditionally dedicated to practice. Two new members of the DCA, Josef Raedlinger Ingenieurbau and Anese from Italy took the opportunity to introduce themselves in more detail with the presentation of demanding drilling projects, before Dr. Hans Joachim Bayer in his concluding lecture raised the question of whether HDD technology could not also open up new fields of application and thus new markets in the field of geotechnical applications such as rock stabilization, drainage or tunnel construction in addition to the laying of pipelines.



Dr. Hans-Joachim Bayer,  
Tracto-Technik GmbH & Co. KG

Bayer's presentation concluded an informative and discussion-packed annual congress in Oberursel. And according to the motto: After the congress is before the congress, the date and place for the DCA Annual Congress 2019 have already been determined: From October 16 to 18, the European HDD industry will meet in Krakow, Poland.

*A. zu Eulenburg, bi*

## Workshop 1: HDD Small Drilling Technology

In workshop 1 the topic "DCA guidelines/requirements for small drilling technology" was discussed intensively about possible simplifications for small drilling technology in everyday business.

In the course of the discussion, however, it quickly became clear that there is still a considerable need for clarification and information among the members.

The Board was not concerned with lowering the minimum standard for HDD boreholes laid down in the guidelines, but with drawing up a recommendation for action for special types of HDD boreholes analogous to the categorisation in the guidelines.



Podium of Workshop 1

At this point, however, it is the small drilling technology companies in particular who are called upon to play an active role. In Oberursel unfortunately only a few active members were present in the workshop. It was also complained to the participants that there were too few contact persons from the area of the clients in the discussion.

Oberursel was therefore only a small approach. Further steps must and will follow here. At its last meeting, the Board therefore decided to focus on the topic of HDD small-scale drilling technology as part of the annual HDD Technology Forum for members at the beginning of 2019.

*D. Quante, DCA*

## Workshop 2A: Digitizations (german)

In this workshop the approx. 40 participants first discussed the existing possibilities of digitizing and automating horizontal drilling rigs. A possibility for automatic drilling data acquisition is now available on all newly delivered drilling rigs.



DCA President Marc Schnau at  
the workshop summary

However, the actual use of this possibility by drilling companies is still very limited, especially since a large amount of data cannot be used without further processing or filtering. In this context, it was suggested that the DCA should address the issue and develop a standard for data acquisition, filtering and evaluation. The DCA board has already decided to become active in this area.

Furthermore, the automation of drilling rigs was discussed. What is already being used on the smaller drilling rigs is currently not to be found on the large drilling rigs. In this segment, however, there was still no corresponding demand on the part of the drilling companies, according to the large equipment manufacturers.

On the other hand, there is apparently great demand for the combination of explosive ordnance exploration by means of or in the course of horizontal drilling. Here there are already tools which can be coupled with the measurement technology of borehole surveying. However, these devices or the investigations carried out with them are not yet accepted everywhere by the responsible authorities.

Other points of discussion included the possibilities for automatic mud measurement, digital drilling planning for small drilling projects and future requirements for drilling personnel as digitalisation and automation progresses.

It will therefore be interesting to see which of the new digital possibilities will change HDD technology in the future and to what extent.

*M.Schnau, DCA*

## Workshop 2B Digitizations (en)

**R**oughly 30 people attended the workshop, with a good mix of large and small rig manufacturers, contractors, steering companies and others. The hosts, Mr Atef Khemiri (HDI) and Jorn Stoelinga (LMR) used a PowerPoint presentation to provoke the participants. This worked well and lively discussions emerged.

In the subject of rig automation, it seems the small rig manufacturers have further developed. The group concluded that this is probably due to the mere size of the equipment, i.e. it is easier to make automated and integrated systems for handling small pipe weighing only 25 kg than it is for 9 m long pipes of 350 kg each. It may also have to do with the numbers of rigs produced, it is more economic to develop these items in larger numbers, on an industrial size.

Regarding logging of data systems are available for all rigs, although more promoted by the smaller producers. Nice reports can be produced, and viewed both by the crew, the engineers in the back office and if so desired, by the client's representatives. Although possible, the systems do not seem to be fully exploited.

More used are planners to create drilling profiles automatically and record the drill bit position. These are then combined into as-builts which can be sent to the office of the drilling company or client, immediately upon completion.

Intense discussions were held if these systems of sending data around the web are safe. Where

the manufacturers claim that they invest a lot of money to ensure the integrity of the systems, critics argue that hackers can find their way into every system.

Another interesting point the participants took from the workshop is that all this automation should allow the HDD companies to reduce the number of people in the field. Thus, saving not only on travel and hotel costs, but also using the capacity of specialists much more efficiently. One HDD company explained they already use one steering engineer in the office to work on three jobs simultaneously, on three different locations.

The group concluded that a lot is already possible, that existing systems are not yet fully deployed and that even more possibilities and inventions will become reality in the very near future. Fully automated drilling does not seem impossible within the next 10 years or so!

*J.Stoelinga, DCA*

## Review Company meeting Anese S.R.L.

### Anese SRL first Italian regular member in the DCA

#### Focus on professional exchange

At the DCA annual meeting in Oberursel, Germany, DCA executive secretary Dietmar Quante welcomed Anese SRL, the first Italian HDD drilling company to join the association.



The DCA welcomes the company Anese

The contact to Anese SRL, represented by Marcello Viti and Marco Berti, was established by the DCA representative for Italy, Renzo Chirulli. The representatives of Anese SRL immediately took the opportunity to introduce themselves to the present members at the congress with a very interesting lecture on current HDD projects.

The company Anese SRL, which is managed by Gino Anese SRL, was founded in the 1960s as an individual/crafts enterprise. Located in an area with extensive foundry re-cultivation projects, Anese SRL started its activities in the agricultural sector and later branched out into work related to irrigation and flood management and any form of infrastructure project. Over the years, Anese SRL has been increasingly involved in the realisation of important construction projects in Italy, such as the construction of motorways, the extension of the

waterway network and the extension of ports.

An essential part of the portfolio of Anese SRL in the field of infrastructure projects is the implementation of demanding HDD projects. The company has a total of 10 HDD drilling rigs with a total tractive force of approx. 6900 KN and DCA has been internally classified into member group 3. Contact person is Mr. Milco Anese.

On the fringes of the congress a first conversation took place between the representatives of Anese SRL and parts of the DCA board and the management. Background was among other things the current tender practice for HDD construction measures in Italy. In addition, the topic of quality standards at HDD was discussed.



Marcello Viti and Marco Berti, company Anese, at their lecture

Parts of the DCA guidelines have already been included in various documents in Italy in the past. According to Marcello Viti, close cooperation with the DCA will be very important in the coming years. One of the next opportunities to enter the discussion here would be the 37th International NODIG Conference, which will take place from 30.09-02.10.2019 in Fortezza da Basso in Florence. The DCA Board promised in principle a willingness to cooperate. It will address this issue at one of its next meetings.

All in all it can be stated that the DCA has now found a partner in

Anese SRL in Italy through the commitment of DCA representative Renzo Chirulli who would like to actively participate in the association's work. A good start on which to build.

*D.Quante, DCA*

### DCA visits Frankfurt am Main

This year's accompanying programme on the occasion of the 23rd DCA Annual Congress started on Wednesday afternoon (17.10.2018) with an obligatory city tour, this time in Frankfurt am Main. When the weather was fine, there were many interested conference participants who wanted to find out more about the city of Frankfurt.



The "Frankfurter Römerberg"

Four groups, three German-speaking and one English-speaking, set out to explore the "Mainhattan" under the guidance of expert city guides.

The starting point for the city tour under the motto "History and Present" was the Paulskirche. The striking elliptical central building made of red sandstone was Frankfurt's largest and most modern hall and served the National Assembly to create the first democratic

constitution; the first all-German parliament met here. Today, the Peace Prize of the German Book Trade and the Goethe Prize of the City of Frankfurt are awarded in the assembly hall on the upper floor.

On the Römerberg, the participants were then greeted by the world-famous and unmistakably Frankfurt silhouette of the Roman. Since the 9th century it has been used for markets and fairs, tournaments and festivals, as a place of execution and for imperial elections and coronations, and has been the seat of the city council since the 15th century. It was considered the most beautiful place in the Holy Roman Empire of the German Nation in the 16th century.

When considering the history and present of the city of Frankfurt, a special highlight, which was only recently completed, could not be missing.



DCA participants in the heart of Frankfurt

The "new old town" between the Römer and the Dom represents a project of the century for the reconstruction of the old town. Completely destroyed in the Second World War, the successful mixture of reconstructions and new buildings now recalls Frankfurt's eventful history as a European metropolis. During the walk through the quarter, visitors were quite divided in their opinions: these varied from very successful to quite artificial.

The tour continued with a visit to the imperial palace. The Archaeological Museum presents the former Archaeological Garden on the Cathedral Hill, in a new architectural and museum form and thus a shop window into the origins of the city of Frankfurt: a Roman bath, the walls of the Carolingian royal court, late medieval cellars - traces of around 1500 years of city history!

Arriving on the banks of the Main, the participants had a fantastic view of the Main with its promenade, the green spaces, the striking bridges of the city and the impressive skyline. Many Frankfurters and their guests use the paths to walk, jog or cycle along the banks. The excursion boats along the Main also start from here.



English-speaking group on the city tour

Art lovers also appreciate the numerous museums along the banks of the Main River, as Frankfurt is one of the most important museum locations in Europe.

After a lot of information about the individual buildings of the city, we finally crossed the bridge of the Iron Bridge to Sachsenhausen south of the Main River. The Frankfurt quarter was a village until the end of the 19th century and supplied the city of Frankfurt with fish, fruit and vegetables. While in the Middle Ages wine and beer were preferred as drinks, this changed in the middle of the 16th century. There was a climate change in the

Rhine-Main region which meant that no tasty wine could be produced. During Goethe's time, the Häckerwirtschaft, which originally sold wine, was transformed into the Fichtekränzi-Wirtschaft, which served apple wine.



The wine inn of Mrs. Rauscher

At the end of the city tour, the traditional apple wine inn of Mrs. Rauscher was visited in the Klapper-gasse. Some cider was tasted in a cosy ambience. Well then cheers! In addition there was the typical Hessian "Handkäs mit Musik", a sour milk cheese with traditional onion marinade.

Around 6 pm the participants returned to the Dorint Hotel in Oberursel.

A. Quante, DCA

## ! Please make a note !

24<sup>th</sup> DCA Annual congress

16. - 18.10.2019

Qubus Hotel Krakow, Poland

<https://www.qubushotel.com/de/hotel-krakow>

## Review companion program

## Companion programm of the Annual congress

On Thursday morning (18.10.2018) a mixed group of ladies of the DCA made their way from Oberursel to Frankfurt to the so-called "Weibertour".

At the tourist info at the Römerberg the city guide Mr. Krienke took over the program to give a short introduction on the Römerberg. He provided information about the architecture on the east side of the Römerberg, which was almost completely destroyed in the Second World War and rebuilt in 1986 according to historical plans. Haus Wertheim is the only half-timbered building in the old town to have survived the war and is considered a representative Renaissance half-timbered house (around 1600). The first bank was founded in this part of the town in the 17th century. Today, Haus Wertheim is home to the Condit Couture confectionery. In a small but fine ambience, the shop presents traditional French confectionery craftsmanship with the delights of the 21st century.

The first item on the programme invited the participants to a special event: under the expert guidance of the artist Mrs Kraus, each participant was able to individually design a postcard with a Frankfurt motif. The group set to work and created small works of art in different colours.

At the end of the first part of the program, a piece of the traditional Frankfurt cake was served with coffee. Created in 1735 by an unknown confectioner, the round cake with its shimmering golden shell of brittle and the shiny red cherries is reminiscent of a crown,

which is why its English and French names bear the word crown in their names: What is known elsewhere as "Frankfurt Crown" or "Couronne de Francfort" means "Frankfurter Kranz" in German and is considered a sweet reminiscence of Frankfurt as the coronation city. Towards the end of the first item on the programme, each participant was then given a bag of delicious almond biscuits to take with them on their way.



DCA participants in front of the confectionery

Well strengthened, the second item then took the participants into a very special shop: the so-called "Sündige Mode". Specialized especially in corsets, the shop's assortment offers something unusual for nice evenings, fashion for gothic, clubwear, burlesque and steampunk. Bridal accessories, classic evening wear, party and lifestyle wardrobe were also on offer. The collection put a smile on the faces of many participants and was perceived and looked through with interest. The shop "Sündige Mode" has been located in the city of Frankfurt since 2004 and won the founder's prize of the city of Frankfurt for its new establishment in 2005.

The next stop was the Maintower, a unique building for the city of Frankfurt, which invites its visitors to discover the city with its unique skyline from above on a 200-metre-high viewing platform. A highlight for every Frankfurt explorer! In the year 2000, the Main To-

wer of the Landesbank Hessen-Thüringen, designed by Schweger und Partner, opened with its clear design language reduced to the basic forms of circle and square. With its independent and unmistakable appearance, it blends harmoniously into the cityscape with balanced proportions. It takes up the height of the original buildings from the beginning of the 20th century and creates a close connection to the neighbouring skyscrapers. In beautiful weather, the participants were presented with a fantastic view from afar and a skyline reminiscent of New York.



On the Maintower at a lofty height

The exclusive restaurant on the 53rd floor of the Maintower then invited the participants to a well-earned lunch break. The exclusive, modern design and a first-class concept allowed the visitors to enjoy the food high above the rooftops of Frankfurt at a height of 187 metres and with a direct view of the city. The elegant and stylish restaurant presented a small excellent menu, perfect for a lunch snack. There was a view not only of the imposing skyline of the city, but also of two window cleaners working at dizzying heights on the outer facade of the Maintower.

In the afternoon, the last item on the agenda of the "Weibertour" was well prepared. At Alte Gasse 27 in Frankfurt, Mrs. Katharina Bäcker from Beet Root - the snack workshop - awaited us. Under expert guidance, pumpkin chutney

with apple wine and the famous Frankfurt Bethmännchen were produced.



View over Frankfurt

For the pastry researchers it is certain that it was a Frenchman who surprised the Bethmann family with his tasty idea. At the end of the 18th century, Jean Jacques Gauthier had formed small balls from the heavy, sweet pastry mass for the Brenten, which were already considered a Frankfurt speciality at the time. To please the Bethmann family, he decorated the sweets with four almonds each, one for each of the four sons Moritz, Karl, Alexander and Heinrich. When Heinrich died in 1845 at the age of 24, the "Bethmännchen" were only decorated with three almonds. The confectioners have not broken with this tradition to this day. It was kneaded, formed and then the pastry was finished in the oven.

In the meantime, it was time to prepare the autumn pumpkin chutney. Pumpkins, turnips, onions and ginger were peeled and chopped with great effort. In the restaurant kitchen the chutney, tasty seasoned with salt, pepper, chilli, coriander, cumin, some honey and of course the apple wine so famous for Frankfurt, simmered. At the end of the cooking event everyone was given a bag with a glass of chutney and Bethmännchen to try at home. All in all, the Weibertour was an experience for everyone that will remain in good memory for everyone.

Well strengthened, the participants started their return journey to Oberursel.

*A.Quante, DCA*

## DCA celebrates in Bad Homburg with unicycle artistry and smart band

**O**n Thursday evening, the DCA invited its conference participants to a special ambience. Three buses started from the Dorint Hotel in Oberursel for an evening trip to the neighbouring Bad Homburg, the so-called "Güterbahnhof". The imposing building of the former freight station is 700 m<sup>2</sup> in size and has thirteen gates with mighty sandstone edgings. The glass saddle roof is supported by wooden beam constructions, which rest on twelve pillars and lend the premises a rustic - modern ambience.

The arriving buses were received by the fun waiter Mr. Jagusch, who controlled the traffic in big gestures and led the guests into the goods station. There, the participants were welcomed by an ambience painted in red/blue tones, in keeping with the colours of the DCA, and gave the ballroom a very festive touch. At the cocktail reception, which was served with champag-

ne, Lillet Wild Berry, beer and delicious snacks, entertainer Jagusch mixed with the audience and relaxed the atmosphere with his statements. After intensive conversations and a glass or two, the participants took a seat at the festively set round tables to enjoy the rest of the evening.

The band Popsofa from Thuringia convinced in the background with guitarist, singer and keyboarder with their musical background of the evening.



Comedian's flower present to Antje Quante, DCA.

The four-course menu started with appetizers from the Mediterranean region and a speech by President Marc Schnau. After the third course the comedian Mr. Jagusch presented his stage show, a colourful cocktail of clowning, juggling, unicycle artistry and acrobatics. Best juggling with brooms and other household items was presented with a lot of humour.



DCA President Marc Schnau opens the evening

A ride on the unicycle required the support of two DCA participants to help the comedian gallantly into the saddle. The DCA participants were also present when making

## Review evening event, golf

music together later on. Each armed with a bell, they proved their abilities and gave their best under the request of Mr. Jagusch.



Entertainer Jagusch with his unicycle acrobatics

At the end of the menu the dessert buffet followed.



Making music with DCA participants

The band Popsofa added more music at a late hour and delivered fast danceable music, which was used by some of the attendees for dance interludes.



A convivial round at the Güterbahnhof

After an entertaining program and a tasty dinner, the return trip to the Dorint Hotel in Oberursel was started around midnight, where the evening ended in the hotel bar of the Dorint Hotel.

*A. Quante, DCA*

## The history of the Homburger Golf Club 1899 e.V.

The history of the Homburg Golf Club is unique because Bad Homburg is the cradle of golf in Germany. This fact is due to the former Prince of Wales and later King EDWARD VII of Great Britain and Ireland, the great-grandfather of Queen Elizabeth II, who always spent his summer holidays in Bad Homburg with great entourage 32 times with cures.



Homburger Golf Club 1899

As early as 1880 English spa guests drove their "Featheries" with hickory clubs in the spa park in front of them and from 1889 the Scottish Major General Robert William Duff and Colonel Gordon built the first golf course on German soil under the eyes of the Prince of Wales, today's "OLD COURSE" in the spa park. After Pau in southern France, it is the second oldest golf course on the European continent. The first golf tournament in Germany took place here in 1891.

In 1899 the club was founded as a registered club. At first it was purely English as HOMBURG GOLF CLUB, as the British royals and their relatives and friends from the imperial and royal houses of Russia, Siam, Japan, Greece and Germany, who also spent the summers in the imperial residence of Homburg, wanted to stay among themselves for the time being.

In 1902 a picturesque clubhouse was opened, which soon became the centre of social life in Bad Homburg and before which renowned tournaments took place every summer. In 1906 Baron John Brunner MP donated the "Gentlemen's Challenge Cup" as the first big gold cup. Later the beautiful "Ladies' Cup" and the "Macomber Cup" were added as team prizes. The most famous and oldest gold cups in German golf are still played every year.

Until the outbreak of World War I, the number of club members grew to 2,284 active and about 700 passive members, a number that today seems almost utopian. But in the best years it was almost a duty for the top ten thousand of Europe and America to belong. The two world wars were a bitter turning point for the traditional Homburg Golf Club, from which it recovered only very slowly over many years. Until 1978, the historic OLD COURSE in the Kurpark continued to be the centre of a club life that was slowly blossoming again. The construction of the Taunus Therme in Bad Homburg on the terrain of the two longest holes of the former nine-hole course in 1981 led to the club's switch to today's "NEW COURSE RÖDERWIESEN", which offers a dreamlike natural paradise beneath the famous Saalburg Roman fort on the idyllic Taunus slopes.

On the basis of this unique history, the Queen granted the club the right to call itself Royal Homburger Golf Club 1899 e.V. on April 8, 2013.

Of the currently existing 63 Royal Golf Clubs worldwide, only 2 are located on the European continent, namely Marienbad and now Bad Homburg.



View of the clubhouse

The story continues. On 19 October 2018 we had the honour and the pleasure to host this year's DCA Cup at this gem. For this season the weather was unique, the mood was good and the ambition to be the first to leave this place spurred us on to best performances.

After 18 holes there was a tie between Grady Bell and me. On hole 1 the due jump-off took place.



The winner Grady Bell, J.T. Miller LLC

With one stroke on Grady won the jump-off and the tournament. Well, was it incapacity or Host manner? Anyway, Grady was good and 2019 we bring the trophy back to Europe

*G.Paulisch, GP*

## Advanced Training Course according to DVGW Worksheet GW 329

This training course, which is important for technical supervision of HDD Drillings (GW302-GN2), took place eleven times. On 6th of December 2018 over 100 participants gathered again in Kassel to learn about the latest developments in the HDD market. As usual, the technical leadership was in the hands of DCA honorary member Hermann Lübbers. Lübbers had once again invited an interesting group of speakers with top-class technical topics. After the opening by Christoph Kreutz, brbv, two lectures took place on the topic "Drilling fluid". First, Stefan Gottschalk, AMC Europe, gave a lecture on "Drilling fluid in every soli conditions". This was followed by a lecture by Andreas Hagedorn from Beermann Umwelttechnik GmbH on the subject of "drilling mud disposal".

No less interesting was the following lecture by DCA board member Dr. Tim Jaguttis from de la Motte & Partner GmbH, who talked about "Tolerances in HDD, an unpopular topic... why tolerances at all? Interpretations and hints for practice", reported. A few weeks ago, the DCA presented a specification on the subject of tolerances in the DCA guidelines to the members.

After the lunch break there were further interesting lectures of Dr. Hans-Joachim Bayer, company Tracto-Technik, on the topic "New power lines in the country as underground cables in the HDD process" and finally of Timo Mücke,

company Beermann Bohrtechnik, on the topic "A drilling project for specialists, maxi-/mini-installations, large/small problems to lay economically".



Rohrleitungsbauverband e. V.  
verbinden. vertiefen. versorgen.



Spartenübergreifend

Steuerbare horizontale Spülbohrverfahren – Fortbildungsveranstaltung nach GW 329

6. Dezember 2018 in Kassel

The seminar, which was originally aimed primarily at technical supervisors, has established itself more than ever as a continuing education event for the entire industry.

At the end Hermann Lübbers informed the auditorium that he would hand over the organisation and technical leading after 11 years of successful work. He thanked all those present for their participation and wished the event continued success in the future.

We would like to take this opportunity to express our sincere thanks to all those involved, in particular to Hermann Lübbers, the event's coordinators, the speakers and the organisers of the brbv, for their commitment. See you in Kassel on 10th of december 2019!

*D.Quante, DCA*

## Review Ditch Witch Barcelona

### 16<sup>th</sup> Ditch Witch Barcelona Customer Event

#### DCA offers one year trial membership!

On October 27th, 2018 the 16th Ditch Witch Customer Event took place in Barcelona. At the invitation of European Sales Manager and DCA representative for Spain Brian Jorgensen, the DCA had an information stand on site. Board member Ernst Fengler of LMR Drilling from Oldenburg and DCA managing director Dietmar Quante could once again welcome many interested HDD companies from the field of "small drilling technology" at the DCA booth.



DCA booth at the Ditch Witch customer event

More than 450 participants from Europe and worldwide took the opportunity to see the latest developments on the company's premises and to try them out in part. Ditch Witch was thus able to extend the participation record set last year. According to Brian Jorgensen, however, the capacity was slowly reaching its end.

The site in Barcelona had been impressively prepared by Ditch Witch employees and equipped with machines for all work areas. For the area of HDD drilling technology, small mud drilling rigs with mud lances were also used to display various rock drilling rigs. In addition, another competition for three

HDD teams was prepared.

After the guests had arrived at the Ditch Witch site and got off the bus, the participants were greeted by the employees with a handshake and applause. A beautiful gesture of the organizer. After the introduction by Brian Jorgensen and presentation of the product range in the main building, the president of Ditch Witch, Mr. XXXX, who came from Oklahoma, welcomed the participants.

A highlight of the event was the competition of three HDD teams from Poland, Germany and Israel on the outdoor area of the event. The aim of the competition was to drill a HDD pilot hole as quickly and accurately as possible using a walkover system. This year's winner was the team from Germany, followed by Israel and Poland. The teams were again able to enjoy custom-made trophies from Ditch Witch.



Award ceremony of the drilling competition

On the DCA booth some new contacts could be made as already mentioned. Anyone interested could leave their business cards and take part in the evening raffle. The first prize was a free one-year trial membership in the DCA.

After the end of the day's event, Ditch Witch invited to dinner at the Vinery Codorníu outside Barcelona. Codorníu is the world's largest producer of bottle-aged sparkling wine produced according to the

traditional champagne method (méthode traditionnelle). The company was founded in 1551 in Catalonia. It produces 60 million bottles a year.

After arriving in the historic buildings, a very interesting guided tour took place, during which all steps of the sparkling wine production were impressively explained. Afterwards, a reception was followed by dinner in the cellar vault.



Vineyard Codorníu

The winner of the one-year trial membership was PGM-Tiefbau GmbH from Lautertal. Managing Director Gerhard Moritz already made it clear at the presentation of the certificate that PGM-Tiefbau GmbH had been interested in membership for a long time. He was therefore keen to become actively involved in the DCA beyond the trial year.

Congratulations and welcome to the DCA family!

Finally, the DCA would like to thank Ditch Witch once again for the invitation and support on site!

To a new one in autumn 2019!

*D. Quante, DCA*

## Task Group 1: Disposal of drilling mud and cuttings

After the working group submitted a preliminary final report to the Executive Board at the beginning of the year, the Executive Board intensively discussed how to proceed. The working group was able to research the legal aspects as well as the various technical possibilities for the preparation and disposal of drilling fluids. In practice, however, these possibilities repeatedly reach their limits.



Unfortunately, the original goal of softening such limits, simplifying processes or developing special solutions together with the Ministry of the Environment could not be achieved. Therefore, the DCA board took care of the further processing and finished the draft of an information leaflet. This is currently being examined by an external expert on soil and waste legislation. If no more extensive changes are necessary, this information document will be made available to the members at the beginning of 2019.

*M. Schnau, DCA*

## Task Group 2: Coating Quality

Due to holiday and other duties, the group only gathered once since June. During this meeting in Paris further steps were taken to optimise and complete the report. It was generally agreed that it should not include detailed descriptions of how the various (field) coatings must be applied, but more on the distribution of responsibilities, the various coatings that are available and under which conditions they can be used. Updates were agreed on these subjects and further detailed.



No further information is expected to be introduced. In the coming months, the group will finalise the report

The form of the report and how to present it to the members, possibly with some parts more public, and other parts for members only, was discussed and needs to be further detailed. This must also be shared with the DCA board.

*J. Stoelinga, DCA*

## Task Group 3: Revision of the DCA Guidelines

In recent months, taskgroup 3 has intensively dealt with the revision of the DCA guidelines. The last meeting took place during the annual congress in Oberursel last October. Another meeting will be held before Christmas.



**Technische Richtlinien  
des DCA**

Informationen und Empfehlungen  
für Planung, Bau und Instandhaltung  
von HDD-Projekten



In the course of the processing it turned out that the revision of the guidelines will take considerably more time than planned. The previous goal of being able to submit a robust draft to the members by the general meeting in 2019 has to be postponed until further notice after the results of the discussions held. However, working group leader and board member Ernst Fengler, LMR Drilling GmbH, assumes that a draft will be submitted before the end of 2019. As soon as reliable results are available, a new timetable for completion will be worked out. The draft of the planned changes will then be brought to the attention of the members as planned after it has been reviewed by the Executive Board.

*D. Quante, DCA*

## DCA Board at closed meeting

### DCA Board at closed meeting in Willingen

#### Focus on changes in the statutes and the topic "HDD small drilling technology"

At the invitation of Franz-Josef Kissing, DCA board member of DCA Open Grid Europe for many years, the last board meeting of the year took place in Willingen in the Sauerland region from 21-23 November 2018.



View to Willingen in the Sauerland region

Due to the large number of topics to be dealt with and the tight schedule at the end of the fiscal year, the meeting was merged with the meeting of the established Statutes Commission of the Board and held as a three-day closed meeting.

On November 21, the first meeting was held of the Articles of Incorporation Commission, which dealt with the proposals to change the membership and Board structure. As a result of the meeting, a proposal for a restructuring of the DCA was drawn up, which was then submitted to the Board for discussion and voting on the following day. The proposal adopted by the Board primarily provides for a restructuring of the membership structure and a reorganization of the Board positions. In addition to changes in the nomenclature of the classification of membership - it is

planned to replace the term active/passive etc. - the Board will propose the introduction of a personal membership.



Icy ambient temperatures

The main change, however, will be in the area of board offices. In the board offices, the HDD small drill technology will move closer into focus. In addition to the President, there will be three deputies for the areas of HDD large drilling technology, HDD small drilling technology and passive members. The Board hopes that this will lead to better acceptance as a professional association for the entire HDD industry. The DCA is not an association that is solely committed to large-scale drilling technology. The DCA wants to be understood as a general association of HDD technology and also wants to make this clear in the responsibilities of the board. The current admissions of HDD small drilling technology companies such as Dasenbrock Horizontalbohrtechnik GmbH from Vechta or Josef Rädlinger Ingenieurbau GmbH from Windorf encourage us to continue along the path we have chosen. The Board has now forwarded the proposed key points to a specialist lawyer for examination. The members will then receive the corresponding draft resolution of the Board for examination with the invitation to the General Meeting at the beginning of January 2019.

In addition to the planned changes to the articles of association, there will also be changes in the compo-

sition of the executive committee. As already reported, President Marc Schnau will no longer be available for a second term of office. Marc Schnau will reorient himself professionally and end his many years of service at Bohlen & Doyen at his own request at the end of 2018. At the beginning of 2019 he will then work with his own engineering office for planning and consulting in the HDD industry.



DCA board in wintertime Sauerland

Further important topics were discussed at the board meeting. In working groups 1 and 2, reliable drafts are now available, so that it is to be expected that the results on the subject of "mud disposal" and "coating" will be available at the general meeting in the first half of the year at the latest. According to working group leader Ernst Fengler, however, the revision of the technical guidelines will take some time (see also the separate report on this topic).

In addition to the work in the working groups, the DCA is also active with regard to the new version of GW 329. A first draft is currently being prepared in a special working group. Mr. Schnau is active here for the DCA and will continue this activity also after the general meeting.

With regard to HDD training, intensive discussions have been held with BAU ABC Rostrup in recent

years, which give rise to hopes that solutions can be found in the future which all those involved in the topic can support. The participation of the DCA in the programming of the GW 329 courses and the examination board remains open. The DCA is intensively involved in both aspects at the Bohrmeisterschule Celle. It remains to be seen how the further steps of the ABC Rost-rup will take place.



Two horsepower in the service of the DCA

The date of the DCA Member Forum - HDD Technik - has already been set for the 2019 business year. The one-day event will take place on 05.02.2019 in Aachen. The workshop on the subject of HDD small-scale drilling technology is primarily aimed at project and construction managers, technical supervisors, planners and clients, but is also open to foremen and equipment operators from HDD drilling technology trained according to GW 329. Participation in the event is free of charge and reserved exclusively for DCA member companies (see also separate report on this topic).



Graf-Stolberg hut

This year's Christmas party was also integrated into the three-day conference. The host, Franz-Josef Kissing, invited the participants on Thursday evening to a merry covered wagon trip to his hunting grounds not far from Willingen. At sub-zero temperatures and light snowfall, the 2-horsepower horse-drawn carriage found its way effortlessly to the Graf-Stolberg Hut at Diemelquelle. In the hut we had dinner before we went back to the hotel by taxi. We would like to thank the organizer very much.

*D. Quante, DCA*

the membership status "regular" and 71 companies are registered as "associated" members.

The development of regular members is encouraging. In addition to the aforementioned companies Dasenbrock Horizontalbohrtechnik and PPI Chrobok, three other regular members were gained: Josef Rädlinger Ingenieurbau GmbH, Max Streicher and Anese SRL. The first concrete inquiries for 2019 have already been received. Anese SRL is also the first regular member from Italy (see also further articles on Anese SRL in the newsletter).

Among the associated members, the company Tennet TSO GmbH was again able to win a client for cooperation in the DCA. Especially the cooperation of clients in the DCA is a special concern of the association. In the working groups, workshops and panel discussions, it is repeatedly evident that the discussion between clients and drilling companies is very important for the implementation of the DCA's objectives.

Further associated members were the newly founded company Optimum Trenchless Engineering from France, Neptco from the USA and J.T. Miller from the USA.

In the following some of the new members introduce themselves. This possibility exists naturally also for all existing memberships. The publication is free of charge.

*D. Quante, DCA*

## DCA still on track: 10 new members in 2018

### First regular member from Italy

**A**t the last board meeting in Willingen, three new members joined the DCA in the current year: Dasenbrock Horizontalbohrtechnik, Tennet TSO GmbH and the polish company PPI Chrobok. A total of 10 companies joined the DCA in 2018. The current membership amounts to 112 member companies, of which 41 companies have

## Information from the member companies

### Company Introduction: Anese S.R.L.



### Company Profile

Anese was established in the early 1960s by its founder Gino Anese.

In an area characterized by vast extensions of land, the main activities of the company consist in environmental rehabilitation, water defense/preservation work and earthmoving with the laying or removal of lithoid materials

The experience gained by the company over the years, the attention paid to the evolution of new technologies and the passion for the work it carries out, means that Anese is always open to the possibility of new opportunities.

This is why in 1978, the company began to apply new drainage techniques to agricultural land by laying, with trencher machines, corrugated micro-slotted pipes in place of the traditional open ditches.

This innovation proved to be extremely intuitive, to the point that even today, Anese is still the one of the best references.

Thanks to the increased expertise of the company together with greater construction precision, the company soon widened its horizons to road construction and the creation of water mains and sewage systems for both public and private bodies.

The reliability and flexibility shown by Anese make the company a privileged partner in terms of waterworks maintenance and emergency intervention in the event of natural disasters.

The company chose to improve and diversify its technical/commercial value and in 1996 it moved into the trenchless technologies field of Horizontal Directional Drilling (HDD).

Nowadays Anese has gained a significant experience in HDD and realized projects of various kind in different soils, for example, offshore approach and rock HDD also with pushed-reaming technique. The technical evolution has led to constant and consistent investments in equipment and machinery, thanks to this, the company managed to realized projects with a length of more than 2500m and with a pipe diameter until 56".

Another specific sector which Anese ventured into in 2003 was that of soil stabilization for ground improvement. This technique proved to be an excellent solution in the formation of road and rail civil engineering works as well as for the construction of inter ports, airports etc.

The Company is successfully managed by the Anese brothers, Milco (President) and Domenico (Vice-President). The professional skills of those who work for the company, starting off as just a few small units, now can count on a hundred of employees ranging from technical staff, managers, office workers and high specialized and qualified workers which, all together through their hard work and loyalty, have contributed to help the company maintain its family atmosphere and the values of entrepreneurial caution and seriousness.

The equipment park is constantly being renewed and strengthened allowing Anese to deal with any activity relating to the specific category and specialist activities relating to road construction, water and infrastructure works in general.

The main Customers are: Public Administrations such as Regions, Multi-utilities, Civil Protection Departments, Provinces, Public Civil Engineering Departments, Magistrato delle Acque di Venezia (Waterway Management Body of Venice), ANAS, SNAM, ENI, Consortia for Reclamation and private clients, industrial companies (Prysmian, Terna, Saipem, Air-Liquide, Solvay, Enel), road and telecommunication companies, etc.

**ANESE S.R.L.**  
P.IVA IT 01848780274  
C.F. 01848780274  
N.Iscr.R.I. VE 01848780274  
R.E.A. 181739  
Cap. Soc. € 2.000.000 i.v.

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[www.anese.it](http://www.anese.it)

## Company Introduction: Neptco



### Trace Safe® and Muletape®

NEPTCO has been at the forefront of underground utility construction for decades and pioneered the use of detectable MULETAPE for locating empty conduit and installing cables. Once again NEPTCO is at the forefront with breakthrough technology for locating underground utilities. Trace Safe®, the only water blocking tracer wire system on the market, is a high strength, locate wire with water blocking yarns and no strip, easy to use water blocking connectors. TRACE-SAFE exceeds expectations for strength, handling, lightning protection, abrasion, crush & impact resistance, corrosion resistance and most importantly locating.

### Would your tracer wire survive this?

The Darling Ranges to the north of Perth in Western Australia are a rocky and difficult terrain to horizontally direction drill through and special rock drilling bits are required to get through the solid granite. The job called for a tracer wire to be installed along with a 110 mm HDPE pipe and pulled back 80 meters which can be a difficult pull, but to make matters more challenging the size of the bore hole was only 130 mm wide. The HDPE pipe occupied 85% of the bore hole meaning the tracer wire had to be squeezed in with the pipe. Fortunately, the tracer wire used was Trace Safe, RT1800.

Trace Safe is unique due to its tough construction. Ordinary wires have a breaking strength of around 220 lb, (100 kgs), Trace Safe has a break strength of 1800 lb, (818 kgs). Under the outer robust HDPE jacket are polyester yarns, the same type of yarn used in radial tire cord, and it is these high tenacity yarns that absorb the stress of the pull, not the tin coated copper wire. Tough HDD applications require a tough tracer wire like Trace Safe.

Trace Safe goes a step further and the high tenacity yarns are treated with a super absorbent powder which means that if the out jacket is breached the yarn swells to prevent any water getting to the conductor.

Ideally a bore to duct ratio would allow for at least 50% head room, however, Trace Safe is designed for tough situations like this. Its 30 mil HDPE jacket and 1800 lb. tensile strength mean it has the toughness required to survive a tension pull back.



The wire was successfully pulled back and the process took less than 20 minutes to complete. A locate clip was attached so the wire could be easily accessed and energized by the locator.

[www.TRACE-SAFE.com](http://www.TRACE-SAFE.com)

[www.NEPTCO.com](http://www.NEPTCO.com)

NEPTCO Inc. – 30 Hamlet St – Pawtucket, RI 02861 – USA – Tel: +1 401 722 5500

OPTIMUM

## Company Introduction: Optimum trenchless engineering

Success of trenchless drilling projects depends on many factors. Incorrect, or more often incomplete, knowledge of underlying geological and geotechnical context is a major cause of technical difficulties and the resulting financial problems. Indeed, it is vital for all parties involved in a project to have a good knowledge of both the physical and mechanical soil conditions as well as the distribution of the various soil layers.

Using innovative methodologies and an individual approach for each client has been one of the keys to OPTIMUM's recent success. Since launching their trenchless engineering consultancy, François Gandard and Alexandre Cambier have applied a process which is rarely used in the European market. Thanks to their 25 years' hands-on experience on trenchless jobsites around the world and this 4-step approach, OPTIMUM delivers tailor-made solutions which minimize environmental impact, minimize delays and control costs.

Norms which were initially designed for foundation work in the French construction industry are particularly suitable for trenchless projects. Since the "NF94-500" norm separates work into distinct sections, using this method takes the guess work out of project development, increasing efficiency and minimizing risk.

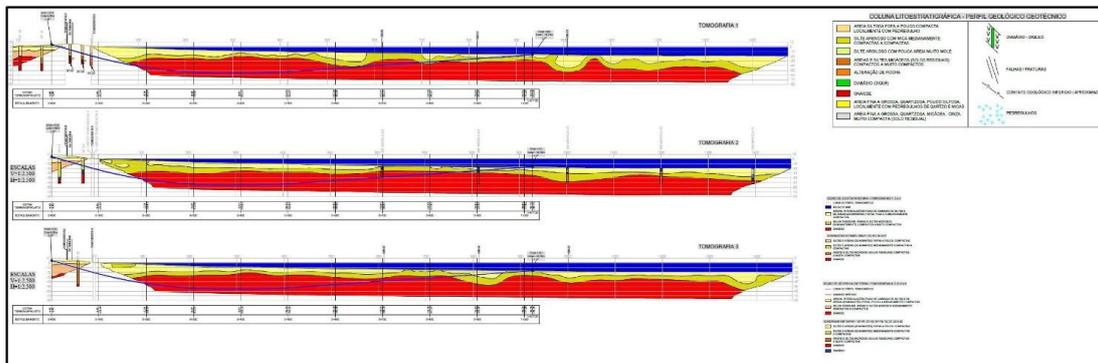
Potential technical and / or geological issues can be anticipated and mitigated for ahead of time. As a result, both the drilling contractor and the end customer have a more thorough understanding of ground conditions and a clearly defined plan before works begin, eliminating project uncertainties, time wastage and unnecessary expense. It is clear from the outset how and where the bore hole path should go and more importantly, why.

OPTIMUM uses the following 4-step process:

- G1 : Preliminary study
  - o Bibliographic research of the proposed job site to identify initial ground conditions and potential risks
  - o Site visit to confirm research findings and to identify additional parameters which need to be considered (fresh water proximity, access, nearby building density, overhead obstacles, etc.)
  - o Recommended geological testing program to be carried out in phase G2, including investigation locations, laboratory tests, geotechnical tests
  - o Anticipated geological conditions and associated risks
  - o Preliminary thoughts on the appropriate trenchless technique

## OPTIMUM

- G2 : Project development
  - o Coordination of soil / ground investigations
  - o Data collection and consolidation
  - o Development of the geological profile of the job site and along the full length of the bore path
  - o Risk assessment and identification of geological and geotechnical hazards
  - o Elaboration of drilling recommendations
  - o Justification and confirmation of the most appropriate trenchless technique
  - o Initial recommendations for the bore path trajectory
  - o Project feasibility recommendations



- G3 : Job execution (carried out by the drilling company)
  - o Geological testing of mud cuttings to confirm the expected soil conditions and characteristics indicated in phase G2
  - o In-situ calculations to ensure the correct path has been drilled
- G4 : Project supervision (carried out by engineering)
  - o Examination and analysis of drilling logs
  - o Supervision and control of geological and geotechnical parameters during works

By accompanying clients in this way, whether it be design offices, drilling contractors or the contracting authority, no unnecessary studies or onsite work will be billed for or carried out. It eliminates the need to redo studies which were developed based on incorrect assumptions, since the way forward will be clearly defined for all parties from the outset. This saves time and resources, as well as reducing potentially considerable client frustration.

The customer-focused and efficient approach mastered by OPTIMUM for all trenchless techniques (HDD, Direct pipe, Micro tunnelling, Pipe ramming, Auger boring) enables the study, management and completion of complex trenchless work in the most effective and efficient way possible.

## Company Introduction: TDC International AG

### - TDC International AG



TDC International (TDCI), founded in Germany in the early 1990's, is one of the leading specialist pipeline coating providers with its proprietary application process, pau wrap®. TDCI has grown throughout the years, advancing our technologies in order to continuously protect and extend the lifecycle of pipelines. Today our customer base consists of major European utilities, pipeline operators, construction companies, steel manufacturers and traders. We continue to expand our customer base, providing products and services in Europe and beyond.

TDCI's proprietary coating (ISO 9001:2015 certified), pau wrap®, is made from an extremely resilient composite of thermosetting materials, GRP, primarily consisting of polyester resins and glass-fibre. One of its major benefits is that it can be applied to various alternative base-layers of corrosion protection coatings on pipes and welded field joints such as polyethylene (PE), polypropylene (PP), fusion bonded epoxy (FBE) or polyurethane (PU). The GRP coating is one of the toughest external coating types available and it protects the outer (anti-corrosion) layer from damages caused by mechanical forces during installation (e.g. shear-forces, abrasion, indentation), as well as during handling and transportation. Normally, it is applied to a thickness of 5mm (standard pau wrap®), but that can be adjusted to accommodate any specific project requirements. At TDCI, we work together with our client in order to provide a customised, high-end coating solution and have a skilled team that provides the highest possible quality and insurance of the pau wrap® system.

Primarily, TDCI services are provided to companies operating or constructing pipelines which transport oil, gas, chemicals and water, particularly in situations where tough mechanical protection of the pipeline is needed. Most of the pipelines processed by TDCI are intended to be installed by trenchless application (i.e. Horizontal Directional Drilling, Auger Boring, Direct Pipe®) predominantly in environmental sensitive areas, where geological characteristics are not suitable for standard coatings. We recently worked on the Trans-Adriatic Pipeline (TAP) in Greece on some particularly geologically difficult river crossings using Direct Pipe® and other trenchless methods, where we coated 1100 m of line pipe in our factory and a total of 65 field joints locally with our dedicated job site team with a tailor-made pau wrap® coating.



pau wrap® coated pipes ready for HDD installation - Germany



pau wrap® coated pipes on route to TAP



Field Joint coating (pau wrap®) on TAP

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## Member forum "HDD technic"

### Workshop "HDD-Small Scale Drilling" 05.02.2019 in Aachen, Germany



#### Subject areas of the workshop:

##### HDD-Small Scale drilling?

Issues, approaches, solutions

- Dealing with poor planning on the construction site
- Dealing with unreasonable demands of the client
- Requirements in DCA guidelines (minimum standards)
- Categorization of HDD drillings in small scale drilling
- Mud Disposal
- Subsoil investigations
- Documentation

#### Workshop podium:

**Dipl.-Ing. (FH) Marc Schnau,**  
DCA-President



**Sebastian Lang, M. Eng.,**  
Bohrservice Rhein-Main Gesellschaft  
für Horizontalbohrungen mbH



**Dipl.-Ing. Edgar Mrotzek,**  
Bohlen & Doyen GmbH



**Dipl.-Ing. Marco Reinhard,**  
Leonhardt Weiss GmbH und Co. KG



**Dipl.-Ing. Ernst Fengler,**  
LMR Drilling GmbH



#### Target Group:

The workshop is primarily aimed at HDD-project and site managers, skilled supervisors, consultants and clients and also interesting machine operators. Participation in the event is free and reserved for DCA member companies only.

The conference language is German.

#### Venue:

Novotel Aachen City  
Peterstraße 66  
D-52062 Aachen, Germany



#### Program:

**09.00** Welcome, introduction and moderation  
Dipl.-Ing. (FH) Marc Schnau,  
President DCA

**09.15 - 10.00** Workshop - Session 1

**10.00 - 10.30** Coffee break

**10.30 - 11.30** Workshop - Session 2

**11.30 - 12.30** Workshop - Session 3

**12.30 - 13.30** Lunch break

**13.30 - 14.30** Workshop - Session 4

**14.30 - 15.30** Workshop - Session 5

**15.30 - 16.00** Final discussion

#### Registrations:

Please send your registration to the office by  
22.01.2019 at the latest ([dca@dca-europe.org](mailto:dca@dca-europe.org)).

Further information can be found on our  
Homepage at [www.dca-europe.org](http://www.dca-europe.org)

## Announcement Seminar Drilling Mud Technology 2019

**Mud technology  
seminar handling of HDD-muds  
and laboratory training  
04.02. - 06.02.2019 and  
18.02. - 20.02.2019 in Celle, Germany**



**BOHRMEISTERSCHULE CELLE**  
Staatlich anerkannte Fachschule  
für Bohr-, Förder- und Rohrleitungstechnik

in cooperation with  
Drilling Contractors  
Association (DCA)



**Programme priorities monday:**

- Basics of HDD
- Properties of HDD-muds
- Practical training in mud lab
- Practical training, equipment part 1
- Practical training in mud lab

**Programme priorities tuesday:**

- Geological Conditions
- Specifics of inhibited mud systems
- Practical training in mud lab
- Practical training, equipment part 2

**Programme priorities wednesday:**

- Mud circulation system on HDD-site, part 1
- Mud circulation system on HDD site, part 2
- Practical training in mud lab, conclusion
- Discussion of test results,  
Feedback and final discussion

**Audience:**

In the three-day seminar "Mud Technology", participants are taught basic specialist knowledge on the above-mentioned and other special subject areas. In addition to a theoretical part, practical applications such as mud measurements, the handling of a Marsh funnel or a rotary viscometer are also planned. These practical applications will be taught to the participants in the course of the seminar in a laboratory practical course.

The aim of the seminar is to train specialist personnel such as equipment operators or construction supervisors to become "specialists in mud technology on HDD construction measures". The speakers of the seminar consist of lecturers from the Bohrmeisterschule Celle and experts from the service industry for drilling fluids.

At the end of the seminar, a written performance review takes place. After a successful performance review, the participant will receive a certificate confirming that he/she has acquired the specialist qualification as a "rinsing technician for HDD construction measures".

**Organizer:**

Bohrmeisterschule Celle

**Venue:**

Breite Straße 1C  
D-29221 Celle, Germany

**Professional Support:**

Drilling Contractors Association (DCA)

**Leader:**

Dr. Udo Grossmann, Bohrmeisterschule Celle

**Registration:**

Please register for the event via Bohrmeisterschule Celle: Regina Heims.

[office@bohrmeisterschule.de](mailto:office@bohrmeisterschule.de)

Further information and the complete programme of this 3-day event can be found on our homepage at [www.dca-europe.org](http://www.dca-europe.org).

## Training courses according to DVGW Worksheet GW 329 in Celle

The training courses for specialist supervision, for site supervisors and equipment operators for horizontal mud drilling according to DVGW Code of Practice GW 329 will take place in 2018 at the Bohrmeisterschule Celle.

Below we have listed the corresponding courses.



Course      A: Drilling rigs < 400 kN Pulling forces  
                  B: Drilling rigs >400 kN Pulling forces

### 1.1.1 Skilled supervisor (A/B) for horizontal mud drilling method according to DVGW Worksheet GW 329

Topography and geology, drilling fluids, drill string, tools, location methods, raw materials, regulations, work safety

A: 07.-11.01.2019  
 A + B: 07.-30.01.2019

### 1.1.2 Site Manager (A/B) for horizontal mud drilling method according to DVGW Worksheet GW 329

Basic knowledge, topography, existing plants, soil parameters, drilling fluids and bore hydraulic systems, drilling rods, drilling tools, pipe coatings, pipe materials

A: 07.-18.01.2019  
 A + B: 07.-31.01.2019

### 1.1.3 Machine operator (A/B) for horizontal mud drilling method according to DVGW Worksheet GW 329

Mathematics, physics, structure and effect of horizontal mud drilling rigs, project basics, project implementation, drilling mud, mud circuit, mud pumps

A: 14.01.-25.01.2019  
 A + B: 14.01.-31.01.2019

If you have any questions, please contact the DCA office

Registrations: via Berufsförderungswerk des Rohrleitungsbauverbandes ([www.brbv.de](http://www.brbv.de))

Info: DCA members pay a discounted participation fee

## DCA - Members Meeting 2019



The Members Meeting of the Drilling Contractors Association (DCA) takes place at

**Wednesday, 13<sup>th</sup> February 2019, at 15.00 p.m. in Oldenburg  
at the Hotel Wöbken**

Members will receive an official invitation and agenda for the event in due time. As already announced, the Executive Board will submit an amendment to the Articles of Association for voting. The draft will also be sent to the members. As last year, a simultaneous translation (german/en) has been set up.

For further information please contact our office in Aachen.

### **Hotel Wöbken:**

Hundsmühler Straße 255

26131 Oldenburg

Tel.:+49 (0) 441 - 95577-0 ; Fax:+49 (0) 441 - 50232

E-mail: [info@HotelWoebken.de](mailto:info@HotelWoebken.de); internet: [www.HotelWoebken.de](http://www.HotelWoebken.de)



## 33<sup>rd</sup> Oldenburg Pipeline Forum 2019

"Pipelines - transport medium for drinking water and waste water"

14<sup>th</sup> to 15<sup>th</sup> February 2019



As usual, the DCA will also be present in 2019 at the 33<sup>rd</sup> Oldenburg Pipeline Forum with a booth and 2 lecture blocks on current HDD projects. The two lecture blocks, which will be chaired by DCA President Marc Schnau and the DCA-Representative for Further Education and Training Ernst Fengler, will once again this year include top class topics that present current aspects of the HDD industry in interesting projects.

### Block 1:

**Moderator:** Dipl.-Ing. Marc Schnau  
Drilling Contractors Association, Aachen

**Speech 1:** Entsorgungskonzept Bohrschlammentsorgung – Ein Praxisbeispiel aus Bayern  
Martin Zärle, LEW Netzservice GmbH

**Speech 2:** DTH-Bohrverfahren  
Raino Porvari, Oparex GmbH

**Speech 3:** HDD in der Trinkwasserversorgung  
Thomas Winkler, LMR Drilling GmbH

### Block 2:

**Moderator:** Dipl.-Ing. Ernst Fengler, LMR Drilling GmbH  
Board Drilling Contractors Association, Aachen

**Speech 4:** Energiewende im Einklang mit der Natur – Offshore-Energie von See an Land  
Ronald Siebel, TenneT Offshore GmbH

**Speech 5:** Neudefinition von Grenzen bei HDD im Festgestein in Norwegen  
Scott Stone, Visser & Smit Hanab b.v.

**Speech 6:** HDD sichert die Natur und das Naturkapital -  
Vergleichsbeispiele für naturschonenden Leitungsbau  
Dr. Hans-Joachim Bayer, Tracto-Technik GmbH



... and afterwards we'll meet in the drilling saloon!

## Announcement 24th DCA Annual Congress

## Krakow - Conference venue of the 24th DCA Annual Congress

**Please make a note:**

**16.-18.10.2019**

**Qubus Hotel Krakow**

The DCA invites you to its 24th annual congress in the royal city of Krakow, once the Polish capital and coronation city of kings, with numerous noble residences, castles and palaces, many of which are still preserved today.

In southern Poland, not far from the border with the Czech Republic, on the upper reaches of the Vistula River and surrounded by the Jurassic limestone mountains in the north and the Tatra Mountains in the south, about 100 km away, the city lies at the crossroads of important medieval trade routes and is regarded as the cradle of Polish statehood and Polish culture. In 2000 it was awarded the title of European Capital of Culture. In addition to several universities, there are numerous cultural institutions such as theatres, opera houses, philharmonic halls, museums, galleries and renowned restaurants.



Wawel-Schloss on top of Krakau

High above the city is the castle and cathedral of the same name built on the Wawel Hill above the Vistula. As a former residence of

the Polish kings, the castle and the old town of Krakow have been declared World Heritage Sites by UNESCO.

The old town of Krakow was designed as a 13th century merchant's town and has Europe's largest market square and numerous historic town houses, palaces and churches with magnificent interiors.



Market place in Krakau

There is an extraordinary density of monuments from different stylistic eras that have been preserved in their original form and decoration. The city of Krakow is known for its well-preserved medieval centre and the Jewish quarter of Kazimierz, which was the original location for Steven Spielberg's film "Schindler's List".



Municipal theatre of Krakow

In the city, which was once characterized by an intensive penetration of Christian and Jewish life and was incorporated into Krakow by the Austrians in 1800, it came to an abrupt end during the Second World War.

Today the quarter, whose buildings had remained largely intact, has

been largely renovated and has become an attraction with trendy cafés and bars for many domestic and foreign visitors.

*A.Quante, DCA*

## „Call for papers"

Qubus Hotel, Krakow



Proposals for presentations, in particular on interesting HDD projects from **large and small drilling technology**, can now be submitted to the office ([dca@dca-europe.org](mailto:dca@dca-europe.org)).

**Deadline: 31.03.19**





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