

DCA mourns for honorary member
Hermann Lübbers deceased

DCA Member forum 2020
Workshop takes place in Aachen

25 years DCA
Anniversary event takes place in Brussels



DCA

Newsletter December 2019

DCA Annual Congress 2019
Under the sign of environmental protection



Impress

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Dear members and friends of the DCA,

Jorn Stoelinga
President of the DCA



We are slowly going towards the winter, traditionally a time of the year where work outside is a little less. With the current market situation however many of us still have a lot of crew and equipment on the job sites. We can look back at a very busy year for most companies in this booming economy, where we are still expanding networks for more traditional energy, as well as working very hard on a grid for more sustainable energy sources such as electricity and district heating.

As an organisation we can look back at a successful congress in Krakow, Poland. With lectures sketching the situation in our host country, as well as interesting presentations from large projects, the challenges in small scale works, as well as a special application using HDD.

The workshops were well received with active participation of the attendees; apparently the development of electrical rigs as well as the alternative technologies developed on the basis of HDD and/or microtunnelling are interesting subjects. Many participated in the lively discussions, and it was interesting to see that both the German and the English language groups came to similar conclusions. Among technicians, borders apparently are not so important.

Unfortunately, the event was overshadowed by the news of the death of Mr Hermann Lübbers from Beermann Bohrtechnik GmbH, former president and honorary member of the DCA and Mr Jürgen Hecht from Prime Drilling. Two people who have meant a lot to our industry. Our thoughts are with their families, and we wish them all the strength they need in this difficult time.

In the board we are currently preparing for the new year, with all the usual activities for our members, like the further education in Kassel in December, the members forum in January and of course the members meeting in February next year.

In May 2020 the DCA celebrates its 25th anniversary and we would be happy to welcome many of you in the heart of Europe.

On behalf of my fellow board members, I wish you all a merry Christmas and a happy new year with interesting and profitable job sites!

Sincerely,

A handwritten signature in blue ink, appearing to be 'J. Stoelinga', written in a cursive style.

Jorn Stoelinga

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25. DCA Annual Congress in Bonn/Königswinter

The annual congress of the DCA will take place in 2020 in Bonn/Königswinter in Hotel Maritim

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Obituary Hermann Lübbers

DCA mourns the loss of Hermann Lübbers

The co-founder, former president and honorary member of the Drilling Contractors Association (DCA), Hermann Lübbers, who last worked as a project manager for large-scale drilling technology at Beermann Bohrtechnik GmbH, died on 16 October 2019 at the age of 65 after a long and serious illness.



At the end of 1993, Hermann Lübbers and Dr. Rüdiger Kögler had the idea of founding an association for Horizontal Directional Drilling Technology. On 10 November 1993 the first official meeting of the working group "Horizontal Drilling Technology" took place in Wallenhorst in the Hotel Bitter. The association was founded only one year later.

At the first meeting of the DCA, Hermann Lübbers became Protocol Secretary under the presidency of Claus Schmidt, who unfortunately had also died. The preparation of the first Technical Guideline of the DCA in German and English and the establishment of the office in Aachen fell into this founding period.

When Hans Ringers was elected as president in 1997, Hermann Lübbers became Vice-President and was significantly involved when the first drillmaster and foreman courses were realised in Celle. He also had a leading role establishing a standard display for HDD drillings. But as vice-president he really put emphasis on developing DVGW's worksheets GW 321 and GW 329 (for supervisors and skilled staff at HDD drillings), and later on the certifications related to these. This measure at that time was one, if not the milestone in view of quality protection in DCA's history. For the first time minimum standards could be put into effect in this industry in the course of certification.

In the years between 2002 and 2006, under the presidency of Gerard P. Hoogveld, who also unfortunately passed away, the focus of his board work was on the training and further education of personnel on the equipment and the promotion of young scientists in industry.

The members meeting in 2007 then elected Hermann Lübbers as 4th president of the DCA. During his term of office the Technical Guidelines were completely revised twice and considerably expanded. The last and topical edition was published under his direction in three languages in 2015.

Representatively for all the other objectives that were achieved stands the implementation of own DIN standards for HDD drillings. It is primarily due to Hermann Lübbers that the new DIN standards overcame so many obstacles within the shortest time possible. Furthermore he could achieve that the DCA as association was specifically mentioned in the VOB; only very few others ever succeeded in that.

Hermann Lübbers remained associated with the DCA even after his resignation from the board at the beginning of 2017. After coordination with the board, he continued his activities with regard to training and further education. This applied primarily to the HDD training at the Bohrmeisterschule Celle and to the further training seminar according to GW 329 in Kassel.

Hermann Lübbers's work will always be both an incentive and an obligation for the DCA and its members. The DCA will honour his memory.

Drilling Contractors Association (DCA)
For the Board and the Management

Jorn Stoelinga

Dietmar Quante

24th Annual Congress in Krakow

Under the sign of environmental protection

DCA executive secretary Dietmar Quante welcomed about 145 participants at the 24th annual congress on 16-18 October 2019 in Krakow. The environmental factor in particular was the focus of attention, including drilling in nature reserves and electrically operated drilling rigs.



The DCA as a guest in Krakow

The event was sponsored by the Polish companies Heads, PPI Chobrok and Janicki.

In Poland, a lot has happened in the field of HDD, especially in recent years. This was demonstrated by Roland Koška of Gaz-System S.A. in his lecture. Over the past ten years, the gas network operator has continuously expanded its network, using HDD in particular in



Sponsors of the annual congress

addition to the Microtunneling and Direct Pipe processes (in more recent projects). In the past, however, inadequate equipment, faulty planning and lack of construction supervision made the work more

difficult. More uniform standards and significantly more competition on the Polish HDD market have considerably improved the situation in recent years, according to Koška.

Technical solutions instead of lifestyle changes

"HDD is considered a green environmentally friendly technology, but there is always room for improve-



DCA President Jorn Stoelinga opens the 24th Annual Congress

ment in our industry," said DCA President Jorn Stoelinga.

In his opinion, HDD can be made smarter and more environmentally friendly. Prof. Dr. Dr. Dr. h.c. explained what is necessary for this. Franz-Josef Radermacher put it in a nutshell: Technical solutions are the key, said the Professor of Computer Science at the University of Ulm and a member of the Club of Rome. Against the background of population growth and climate change, less consumption and lifestyle changes, as called for in many philosophical debates, are hardly effective. "Instead of expressions of fear, we should rather ask ourselves which solutions make it possible to achieve a certain standard of living for more people in the world," said Prof. Radermacher with a small side blow to climate activist Greta Thunberg. "Technologies can change the world, but we need resources for that." Green energy in particular, for example in the form of synthetic fuels, is an important building block here.

E-Rigs a real alternative?

Environmental protection was also one of the aspects discussed in the parallel workshops. The first one dealt with electrically operated drilling rigs. While last year the small HDD devices were in the foreground when it came to digitization, electrical systems are obviously more interesting for large drilling technology, even though there is a lack of long-term experience with fully or partially electric devices.

The workshop participants identified reduced emissions in particular as the main advantages of electrically operated drilling rigs. Thus, the use in sensitive areas is also possible under compliance with special environmental regulations. With regard to noise emissions, the use of E-rigs is particularly advantageous for residents, but also for machine operators.



Dr Tim Jaguttis leads through the Workshop 1

An oil change and any environmentally harmful leaks are no longer necessary for electrical systems. In addition, maintenance costs for electrical systems are lower and control over speed and control is more precise, as one participant reported. It is also interesting to electrify the high-pressure pumps because of the great savings potential.

On the other hand, the greater (transport) weight and the high acquisition costs for electrical drilling equipment prove to be disadvantageous. All in all, the technology still

Review 24th Annual Congress

has to mature in many areas, e.g. when it comes to the correct cooling of electric motors or mobility (moving the equipment) on the construction site, and greater competition is naturally conducive to further development.

The second workshop presented and discussed the trenchless pipe-laying methods currently available on the market for the HDD process (Microtunneling, Easy2Jet, System 2, E-Power Pipe, Pilot Pipe Jacking, Pilot Pipe Jacking, Direct Drill, Easy2Jet, HDD Arc Drilling, Direct Pipe). The level of knowledge of the participants was very different. Nevertheless, advantages and disadvantages compared to the HDD procedure could be worked out, whereby quite objectively and without the "HDD glasses" was judged. Some methods, such as Microtunneling or Direct Pipe, are suitable as independent methods for a wide range of applications, while others represent a modification of methods for special applications.



Workshop 2 guided by Marc Schnau

The participants suggested to create an understandable overview of the available processes and their specifics. The DCA will continue to work on this topic on the Members Forum in January (See page 28)

Drilling in (nature) reserves



Silke Goldschmidt talks about small scale drilling

Before Dipl.-Ing. Silke Goldschmidt, WBW GmbH, spoke about challenges in small scale drilling technology and, among other things, identified inaccurate descriptions in tenders as well as missing information on the part of clients or planners, e.g. on the subsoil or on possible construction roads as problems, Dipl.-Geol. Dr. Hans-Joachim Bayer and Dipl.-Ing. Dan Lingenauber from Tracto-Technik dedicated themselves to the "construction of glass fibre cables in HDD processes in biotopes and biosphere reserves".

Dr. Bayer presented four glass fiber and one wastewater project in Germany and Switzerland, in which pipes were laid in strictly protected areas. In addition to the drilling requirements in sometimes very difficult terrain, he explained in particular the very specific nature conservation requirements that had to be observed in the HDD measures.



View into the congress room

Lingenauber continued the lecture with an overview of the large number of different protected areas. He pointed out that HDD projects often

offer unique possibilities for pipeline construction in protected areas and make this possible in valuable ecosystems in the first place. On the other hand, there are also high biological construction requirements for the drilling work, said Lingenauber.

James Worth, project manager at Volker Trenchless Solutions (VTS), then reported on the mega-project "East Anglia One". This is a huge offshore wind farm in the North Sea, which is currently being built off the coast of England. 148 HDD wells were drilled under various conditions. For example, the routes were partly in nature reserves, where there were strict requirements on noise emissions and animal welfare. Many helpers were involved in archaeological reconnaissance work in order to secure any finds; in some cases even new routes had to be found.

The lecture programme of another successful informative annual congress in Krakow ended with a lecture on crossing the Oder by means of a 40" pipeline over a length of 1,180 metres.

In addition to the lecture programme, the DCA also offered an interesting spouse programme for all participants. In addition to a visit to the city of Krakow, which is well worth seeing, and a guided tour on the subject of "Jewish Life in Krakow", including a visit to Oskar Schindler's factory, the evening event took place on Thursday at the Wieliczka 135 m salt mine in the Warsaw Festival Hall. An unusual place for an event.

Last but not least, the location of the next Annual Congress was traditionally revealed at the end of the congress: The choice fell on

Königswinter near Bonn. A few months before, there is every reason to celebrate: The DCA will be 25 years old and invites all members to the European capital to Brussels on 7th of May 2020.

B. Valdix, B_I Umweltbau

Informative workshops during the DCA - congress 2019

Continuation of Workshop 2 in the Member Forum

The HDD workshops held as part of the DCA Annual Congress 2019 were again crowned with success. The workshop sessions held at this year's DCA congress once again proved to be a resounding success.

Each was proposed in both English and German so that everybody present could benefit from this collaborative, knowledge sharing opportunity. This year, the workshops all took place in separate rooms outside the main conference room. Due to the fact that some participants had changed their mind at short notice, there was only standing room left in some of the rooms, which did not interfere with the processing in the workshops. On the contrary, there was a lively discussion and debate, which is only conducive to workshops.

The first workshop entitled, "Electrically operated drilling rigs: advantages and disadvantages, state of development and prospects", was presented by DCA President Jorn Stoelinga and François Gandard from the company OPTIMUM. Tim Jaguttis, DCA vice president, and Günter Kruse, LMR Drilling GmbH, presented the German session.



Francois Gandard and Jorn Stoelinga in the exchange with the participants

During the congress the workshop on electrified drilling rigs was not the one attracting the most people. This was probably because most members are not very familiar with it and may think this is still far away.

The company Janicki from Poland, where a plant has been in operation for 4 years, shared their positive experiences in interesting conversations in the workshop. Other rigs have recently been purchased by various contractors, and their experiences up to now are very positive as well. The benefits such as e.g. power fuel consumption (lower carbon footprint!), less maintenance, better control over parameters and easy set up were put at the table.

Although the work group leaders tried to bring up some negative points such as e.g. danger of electrocution, the groups concluded these were unlikely and not more than with any other electrical equipment already on site. During the discussions, the participants were getting convinced that there

is a bright future for this type of rigs.

The second workshop, "New trenchless techniques linked to HDD technology" was presented by Alexandre Cambier from the company OPTIMUM. Marc Schnau, DCA board member and together with Jörg Himmerich, Dr.-Ing. Veenker Ingenieurgesellschaft mbH, presented the German session.



Participants at Workshop 2

Discussions focused on the merits of a variety of trenchless drilling systems compared to HDD, notably Microtunnelling, Direct Pipe, System 2, E-Power-Pipe, Easy2Jet, HDD Arc Drilling, Direct Drill and Pilot Pipe Jacking. Many of the questions raised related to landfall projects and the use of direct pipe was discussed at some length.

D.Quante, DCA

Lecture on the topic: The world in 2050 - Overcoming the inter- national energy and cli- mate crisis by Prof. Dr. F. - J. Radermacher

The 24th DCA Annual Congress in Krakow was opened on Thursday morning with a highly interesting lecture on "The World in 2050". Prof. Dr. Dr. Dr. h.c. Franz-Josef Radermacher, Professor of Computer Science at the University of Ulm and Director of the Research Institute for Application-Oriented Knowledge Processing (FAW/n) Ulm, also a member of the Club of Rome, was able to give the participants a very striking introduction to the topic.



Prof. Dr. Franz-Josef Radermacher during his lecture

The core of his presentation was his thesis: *"Overcoming the international energy and climate crisis - methanol economy and soil improvement close the carbon cycle"*.

According to him, the global energy and climate crisis can be solved in a way that is compatible with growth and promoting prosperity. The now almost panic-stricken public debates about the end of the world, a planned economy for the climate, the electrification of the entire mobility sector, etc. would in no way do justice to the multi-dimensionality of the challenge.

Three essential elements should be combined:

- Methanol economy,
- Soils as carbon stores and
- carbon offsetting projects promoting SGD implementation.

The part of the economy based on fossil fuels could be increased by 50% by 2050. By recycling carbon on average four times in the context of a hydrogen/methanol economy, CO₂ emissions of the energy sector would be reduced to only about 10 billion tonnes per year (currently 34 billion tonnes per year), despite significant economic growth.

A corresponding investment and conversion program could be realized solely by the fossil energy sector, one of the most powerful economic sectors in the world, by 2050. The necessary investments in methanol and other synthetic fuels would amount to around 600 billion euros per year. Through persistent protection of the rainforests, massive worldwide reforestation, especially on degraded soils in the tropics, through foresting humus formation for agriculture, especially in semi-arid areas, through the use of biochar, etc., forests and soils could become a carbon sink for the remaining 10 billion tons of CO₂ per year. At the same time, this increases agricultural productivity and would prove necessary anyway for massively increasing demand for food in an envisioned world in prosperity with 10 billion people.

All in all, the carbon cycle can be closed this way. Forestry and agricultural projects play a central role in the Alliance for Development and Climate Change launched by the German BMZ in 2018 (see www.bmz.de).

In addition to international climate protection, the alliance would also promote development and thus the social aspect of the path into future. By means of high-quality projects in non-industrialized countries, co-benefits to all SDGs and positive effects on the climate would be achieved at the same time. This would offer great opportunities for the goal of reaching a world population peak at 10 billion people in 2050, followed by a gradual decline afterwards.



The methanol economy and synthetic fuels in general are the key to the solution described. They would be based on cheap desert electricity from the Earth's sunbelt. Just as the invention of the steam engine 300 years ago was the foundation for fully unfolding the potential of coal to increase the prosperity of humankind, renewable energy technologies combined with the solar potential of large deserts (Desertec 2.0) are the key to getting humankind out of the current impasse regarding development, energy and climate with a hydrogen/methanol economy as a major basis.



Auditorium at the lecture

Following the approximately 1.5-hour lecture, there was a lively discussion on the topic, which made many participants think. Prof. Dr. Dr. Dr. h.c. believes that the global climate crisis can be a major challenge. Radermacher can only be achieved by a globally oriented effort of all states. Small-scale island-based solutions such as those currently being discussed in Germany are extremely expensive and, against the background of the rapidly growing global population in the emerging countries and the associated hunger for energy, are not the solution for saving the climate.



The DCA thanks to Prof. Dr. Radermacher for his lecture

At this point, reference is made to the further remarks made by Prof. Dr. Dr. Dr. h.c. Radermacher in numerous publications on this subject. Due to the topicality of the climate protection debate, a commentary on Greta Thunberg's speech by Prof. Dr. Radermacher is included in this newsletter.

D. Quante, DCA

Greta Thunberg: "How dare you?"

A Commentary by Prof. Dr. Radermacher

The phrase "How dare you?" has moved many people and also outraged many people, in politics in particular, who have long been committed to more climate

protection: From the UN Framework Convention on Climate Change and the Kyoto Protocol to the Paris Agreement or the Renewable Energy Sources Act in Germany. In my view, the sentence was well prepared as a calculated provocation. It "missed the point", but studiously and deliberately. In any case, it reflects - if you take it literally - a deep misunderstanding about the legal possibilities of the representatives of the States gathered in New York. They are not allowed to decide almost anything of relevance on the basis of their mandates. Quite apart from the fact that any courageous decisions by these actors still have to be ratified (e.g. by parliamentary majorities) before they become legally binding. If politicians did more, they would indeed dare a lot. They would then be deposed and perhaps even imprisoned, including Mrs Merkel. In this case one could justifiably ask "How dare you?". In fact, the politicians do not dare much. They operate within the framework of their legal possibilities and political mandates. And that is a good thing.

Greta Thunberg spoke in New York to politicians and administrators who are just as familiar with the climate problems as she is. To date, there are no affordable solutions of technical nature to resolve the problems. These are not yet available, at best visible on the horizon. Nature-based solutions are another building block of a solution. They can perhaps solve a fifth of the problem and are also supported by Greta Thunberg (see the interesting video "Protect, Restore, Fund", by Greta Thunberg and George Monbiot). Here, we are talking about consistent rainforest protection, massive reforestation, humus formation in agriculture, etc., and thus also about removing

CO₂ from the atmosphere (biological sequestration/ negative emissions).



Greta Thunberg

Greta Thunberg also once spoke out in favor of extending the operating lives of safe nuclear power plants. This is also a wise proposal, but it has not reappeared. Cutting consumption in favor of more sufficiency also helps only to a limited extent. The problem is the money saved.

What happens with it next? If you use the money freed up by giving up consumption to improve the living conditions of plants, animals and people in poorer countries in such a way that natural resources are protected and the climate situation sees net improvement simultaneously, you have done everything right. This applies, for example, to the nature-based solutions mentioned above. But the people who consume fewer resources by renouncing their lifestyle usually want to keep the money saved for themselves and their relatives, for example. Then the positive effect of sufficiency is lost again.

Without additional new technical solutions, preventing the climate catastrophe currently requires above all a significant reduction in the standard of living for most people - whether with or without the use of nature-based solutions. Even in such a scenario, certain groups will continue to make profits. The real problem is the danger

Review lecture program

that considerable losses may have to be distributed, with the initial conditions of the actors being completely unequal and with a high degree of uncertainty as to whether the goals can be achieved at all through the path chosen. It is largely a question of burden sharing between States while the legitimate aspirations of poor countries with still rapidly growing populations for catch-up development are of central importance. In addition, there is the question of burden sharing among the citizens of each individual State, including among young and old.

The politicians in New York had no consensus on all these questions. And there is no such consensus among the people as a whole - worldwide. There is also no consensus within the European States, e.g. on domestic distribution issues. The heads of government gathered in New York had good will, but operated within the limits of constitutions / laws (often in democracies) and within the framework of international treaties (e.g. WTO), which cannot be unilaterally changed.

The struggle over Brexit clearly shows how difficult it is to find majorities for solutions with large distribution effects in situations with several options and how much hatred can be generated or arises when distribution questions occur. It should be emphasized that the Brexit questions, which are discussed within a single country (Britain) with enforceable governance and a high level of prosperity, are simple in relation to what would have to be agreed and enforced globally in the relation of climate change.

So what does "How dare you" mean? Ultimately, politicians dare nothing. They act within the framework of their mandates (these permit little) and otherwise let happen what happens "ob-servantly" and rather "helplessly", maybe except for the president of the United States. Few States, such as the USA and China, have great influence, but also their own plans and ideas. CO₂ emissions are rising not because of the inadequacies of the politicians involved, but for systemic reasons, because the vast majority of people live as they do and want to live as they do - and tend to do so even better/more intensively. There are also more and more people and more and more people want more and more prosperity. This requires energy for various uses. Low-cost solutions are missing. As a result, it will be necessary to limit oneself if no new technical solutions are found but the climate catastrophe is to be avoided anyway. This is difficult if, for example, several children are supposed to receive an education and the family has to pay off a house in addition.

The politicians Greta Thunberg relies on are integrated into structures that would immediately depose them, perhaps even imprison them for violating the law, if they dared to do much of what Greta Thunberg might imagine. That also applies to our Chancellor. And in elections, the respective populations would probably immediately vote for people who would not do most of what Greta Thunberg imagines. And perhaps she herself would not want to live in the world that would arise if the measures she imagines were to materialize. What is to be done in this situation, in which climate protection consistent with current technology would

essentially lead to other lifestyles and in the end to impoverishment? We need technical solutions, as we did 300 years ago at the time of Carl von Carlowitz, when the problem was not fossil fuels, but the clearing and burning of woodland and wood, respectively. Apart from nature-based solutions, we should concentrate on technical solutions but we do not. These include, above all, applications that would make it possible to generate a large proportion of the primary energy currently used from renewable sources and then store and transport it as needed. These applications have to be produced to a large extent in the sun-drenched deserts of the Earth in order to be competitive, in terms of the costs of the entire production process including the required infrastructure, with today's energy supply from fossil sources. Batteries play only a limited role here. High-energy gases (especially hydrogen) and liquids, such as methanol, are likely to be much more important in order to obtain functional solutions in transport and storage that batteries cannot provide.

In panic, we are currently not pursuing such solutions but are focusing on strategies that will make the situation even more difficult. In particular, this is due to the fact that primarily national solutions are being discussed which mainly focus on saving and reducing CO₂ and which are many times more expensive per ton of CO₂ saved than, for example, the implementation of nature-based solutions in non-industrialized countries. The strategies currently pursued also do not help in relation to world population growth and catch-up development. The funds invested nationally and inefficiently will lack elsewhere in the future, e.g. in sha-

ping digitization, main-taining a high level of education, stabilizing the middle class, providing for an ageing society, maintaining a strong (including digital) infrastructure, and the challenges caused by refugees who have to leave their homes because of war, civil war and economic and/or climatic reasons. As a result, the mess in national politics will increase. On the horizon, the loss of agency is looming.

In times of threat, you have to keep a smart head. Greta Thunberg could, with the support of scientists, call on the "leaders" of the world to create more space for innovations that will do much for the climate with little effort and without any loss of prosperity and, in particular, that will allow for the prosperity expectations of the growing populations in Africa, on the Indian subcontinent and elsewhere to be satisfied without further burdening the resource base and the climate system. Perhaps with another video of hers of the kind that already exists for nature-based solutions. Such a path, if it can be found, will preserve peace and perhaps enable international consensus on the way to global climate protection.

Despite all the debate, one thing should not be forgotten: A clever distribution of growing prosperity is often possible in heterogeneous political structures. That does not hold true for the management and distribution of significant losses, not even asymmetric ones. The latter usually only works through war and civil war. If we do not find suitable technical solutions, this may well happen.

Prof. Dr. Franz - Josef Radermacher, University Ulm

Krakow is always worth a visit!

To kick off the 24th DCA Annual Congress, the DCA took its participants on the first day of the congress, Wednesday, 16.10.2019, on a tour through Krakow. The tour started with a bus ride from the Qubus Hotel to the Sheraton Hotel not far from the Royal Wawel Hill and the Royal Palace.



Castle Wawelhill in Krakow

Just got off the bus, 5 Krakow tour guides were waiting for the participants to divide them into 3 German-speaking and 2 English-speaking groups.

At first the Wawel Hill was visited. This is a limestone rock that rises in the centre of Krakow above the Vistula on its left bank and houses the magnificent castle of the former residence of the Polish kings from 1040-1795. Together with Krakow's Old Town, the ensemble is a UNESCO World Heritage Site and is a magnificent sight to behold.



At the sculpture of the "terrible dragon" during the city tour

Following Krakow's history, a "terrible dragon" once lived in the Dragon's Cave at the foot of Wawel.

He is said to have been killed by a trick of knight Krak, after which the city of Krakow was founded at this place and named after him. A sculpture of the dragon still stands there today to remember the story. Some of the participants took the story as an opportunity to buy a souvenir and take it home.



Fred Blomsma „with the terrible dragon“

On Wawel hill, the groups crossed Europe's largest Renaissance courtyard and the cathedral, the necropolis of kings, national heroes and poets. It is noteworthy at this point that the complex buildings run through all stylistic epochs and thus represent a reflection of over 1000 years of building history. A detour was made to the three-storey arcaded courtyard as part of the royal residence, which unfortunately made inglorious history in World War II. There resided the governor general of Poland, Hans Frank, who actively participated in the so-called "Final Solution of the Jewish Question".

The city tour took its course and the Wawel Hill was left through the Herbowa Gate towards the Old Town. The participants strolled through Kanonicza Street, one of Cracow's most beautiful streets and part of the Royal Road. This most popular route through the Old Town shows the way the kings took to the coronation. The houses there were built in the Middle Ages and were later constantly rebuilt, so that their facades show stylistic features of different epochs. In the

Review companion program

16th century, many were converted into Renaissance palaces. The groups admired arcades, beautiful portals and loggias.

The next highlight of the tour was the ominous market square in Krakow. With an area of approx. 40,000 m² it is one of the largest medieval squares in Europe and caused some astonishment. Framed by palaces and churches, in the centre you will find the cloth halls in Renaissance style as a symbol of Krakow as a Hanseatic city and the flourishing European commercial centre, flanked by the landmark of Krakow, St. Mary's Church, with its various towers. A truly impressive impression!



Fabric halls of Krakow

We continued through Grodzka Street, also one of the oldest streets in Krakow, which marks the former north-south trade road from the Middle Ages. Here, too, visitors could expect a wonderful mixture of different architectural styles. Next to the Romanesque St. Andrew's Church, the participants strolled past the first baroque church in Cracow, St. Peter's and Paul's Church. It always takes a little time to process so many new impressions and so the DCA had organized this year again a humid conclusion of the sightseeing tour.

At the end of Grodzka Street, not far from Wawel Hill, a typical Polish restaurant awaited the participants of the tour: Pod Wawelem! The large group of participants was enter-

tained with delicious drinks, mostly made of hops, in a large round at cosy wooden tables.



Cosy round at Pod Wawelem

Shortly before there was a short moment of shock for the organizers. After they had discussed everything organizational with the boss of the house beforehand, the pretty servants didn't want to know anything more about it this afternoon.

However, an explanation was not long in coming when the head of the house appeared and had to admit that he had not informed his employees. Nevertheless, the beer was really delicious and everyone was happy about a little small talk at the tables. Around 18 o'clock the executive secretary blew then to the departure. After a short walk the buses were reached and the group went back to the Qubus Hotel.

A. Quante, DCA

Jewish life in Krakow - then and now

On the second day of the DCA Annual Congress (Thursday, 17.10.2019) the accompanying program was dedicated to Jewish life in Krakow. 13 participants gathered in the lobby of the Qubus Hotel at morning hour and were very excited about the course of the day. The travel guide Tomasz, already known by most people from the "Discover Krakow Tour" the day before, arrived punctually and took the group under his wing. It was astonished when two Krakow golf carts stood outside instead of the usual bus.



Discover Krakow with Golf Carts

The group was divided into a German-speaking and an English-speaking group and climbed the open carts. Electrically operated and therefore quite environmentally friendly, they first went to the Podgórze quarter not far from the Qubus Hotel. Located in the south of Krakow as an up-and-coming district and today inhabited by many students, the place became known above all for the tragic history of the Jews during the Second World War.

The first stop was at the triangular market square of Podgórze with a view of the Josefskirche church. From there we went to the Place Bohaterów Getta. In March 1941 a Jewish ghetto was built there by the Nazis. After two relocations to

the Belzec extermination camp, the ghetto was divided into two areas: Ghetto A for Jews capable of work, Ghetto B for the elderly, the sick and children.



Place Bohaterów Getta

The following year, in March 1943, about 4,000 Jews were deported from today's Platz der Helden des Ghettos, those capable of work to the Plaszow concentration camp and the others to the Auschwitz-Birkenau extermination camp. More than 100 ghetto inhabitants were shot directly on these days. The memorial, erected in 2005, consists of 70 metal chairs and reminds today of the deportations. It is supposed to symbolize the furniture that was the only one left by the inhabitants. The travel guide referred to the bullet holes in the few facades that had not yet been renovated. The effect of this place on the group caused many to pause. The ghetto was surrounded by a stone wall in the cynical shape of a Jewish tombstone, of which hardly anything remains today. The journey continued and led past two preserved wall fragments. The travel guide Tomasz provided the group with a lot of background information and did not tire of pointing out interesting things.

From Podgórze the golf carts moved through the morning traffic to the Kazimierz district in Krakow. Before the Second World War, Krakow was the cultural and religious centre of the Jews in Poland.



Quarter of Kazimierz

About 70,000 Jewish inhabitants lived there. Today Kazimierz is a very peculiar place with only about 120 Jewish community members.

During the tour the participants experienced many opposing impressions: Joy in the discovery of the unique history, culture and traditions of the Polish Jews, sadness and melancholy in the face of the lost world of the pre-war days and joy in the rebirth of Jewish life in this place.



Café Mleczarnia

A small coffee house, so typical for the Kazimierz quarter, awaited the visitors for a little refreshment. Café Mleczarnia is a place of nostalgia and melancholy that shines in the spirit of old Kazimierz. The restaurant welcomed visitors with old family photos in black and white, metal signs and posters on the wooden walls, antique furniture. The coffee table was thrown together from furniture, nothing was perfect, everything seemed provisional and yet harmonious. It felt like being in a museum in a bygone era. Travel guide Tomasz served coffee and tea and delicious cakes. So they exchanged experiences and enjoyed the break.

Back on the street in front of the café we briefly went into the beer garden with the adjacent building complex opposite. Steven Spielberg once shot some scenes there for his famous film Schindler's List. The search for Jewish culture in Kazimierz continued on foot. Occasionally Hebrew characters could be found above the shops and cafés. Nowy Square in the heart of Kazimierz used to be the old Jewish market. Today the district is a hip student and artist district with a mixture of folklore and youth culture.

As the tour progressed through Kazimierz, the participants discovered a number of synagogues as a symbol of Judaism, which were gradually being renovated. The Old Synagogue now houses the Municipal Museum of Jewish History and Culture. The private project of the Izaak Synagogue tries to bring back the lost world of the Krakow Jews. The small Remuh synagogue, built in the middle of the 16th century, is still regularly used by the Jewish community for church services, as is the temple synagogue.

It went on into Szeroka Street, the heart of the Jewish city in Kazimierz. Once there were 4 synagogues, today you can see the birthplace of the cosmetics manufacturer Helena Rubinstein as well as the building of the former ritual bath next to several restaurants. The Hamsa, an Israeli restaurant that received the participants of the DCA tour for lunch, is located directly at the front of the long square. "Make hummus not war" is the slogan of Hamsa, which offers both Israeli and Arabic dishes.

The ladies sat down at a long table and enjoyed a tasty lunch from the Middle East.

Review companion program



Lunch at Restaurant Hamsa

Well strengthened, the tour took its course. The trip went by golf carts to the old town of Krakow. There the sightseeing of the landmark of Krakow, the St. Mary's church, was on the program. The church with its various towers is one of the most precious Gothic monuments in Poland.



Church of St. Mary in Krakow

The higher of the two towers has been the watchtower of the town since the Middle Ages, from which a tower blower blows an hourly signal. The ladies were impressed by the fascinating interior of the church, a quiet place with exceptional values such as the Gothic mosaic windows, which are among the most valuable in Poland.

At the end of the day's tour, the tour went once again to the Podgórze district to visit the museum in the former administration buildings of the Oscar Schindler enamelware factory. In Lipowa 4 ul. he employed hundreds of Jews during the war and saved them from death. In the administration building, the museum "Schindler's Factory" today shows the history of Krakow and its Jews during the

German occupation of 1939-1945. The everyday life of the civilian population is impressively recreated by means of video sequences, exhibits, room furnishings and tape recordings. A rotunda at the end of the exhibition shows the names of all those rescued by Oscar Schindler as inscriptions.



Enamelware manufacture of Oscar Schindler

The tour guide Tomasz led the DCA group through the labyrinth-like corridors as in a journey through time from 1939 to 1945. Many comments and explanations were given in a sometimes quite oppressive and stirring atmosphere. After the visit of the museum we went back to the Qubus Hotel by golf carts.

A. Quante, DCA

DCA celebrates in Wieliczka salt mine, 135 m underground

On Thursday evening of the annual congress a very special ambience awaited the participants of the DCA for the festive dinner. After the participants had arrived in front of the hotel entrance at 5.45 p.m., the buses left for the town of Wieliczka on time. The journey was filled in the bus with nice conversations among each other and already the buses arrived after short journey on the area of the famous salt mine from the 12th century. The Wieliczka Salt Mine is one of the most impressive industrial monuments in Poland and is a UNESCO World Heritage Site. After a short walk the entrance was reached, where the participants were welcomed by tourist guides in typical miners' uniforms.



Salt mine „Wieliczka“

The organizers divided the groups into English and German-speaking groups, who then entered the mine with their tour guides at different times.

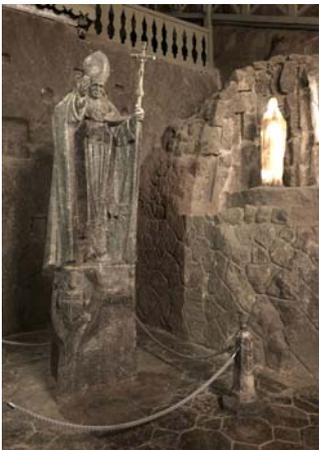
The tour began with the descent over a wooden construction of innumerable stairs that led into the mine to a depth of 135 metres. The less daring and runners among the participants, however, used the miner's lift. Some of them were busy counting the individual steps and were then received on the 135 m level by a man who was eager to

squeeze a bag of rock salt from the mine into each participant's hand.



Inside the salt mine

The half hour sightseeing tour led the visitors over a small part of the almost 3 km winding corridors to large chambers carved into rock salt, past underground salt lakes and in chapels decorated with figures and wall reliefs of religious themes. During the hike, the guides informed their guests about the forces of nature and the hard work of the miners. Stories and secrets of the salt mine were told.



Religious figures in the salt mine

At the end of the tour, the participants approached the Wisla Chamber, a larger corridor-like area, and were greeted by the powerful sounds of a miner's chapel. We continued into the entrance area of the adjacent Warszawa chamber for a cocktail reception. Prosecco and beer as well as delicious snacks compensated the visitors for one or the other effort on the tour.

After the reception, the guests were immediately transferred to the banqueting hall of the chamber, which provided a very harmonious picture with its round tables and was illuminated in the DCA colours. On stage a band member of the 8-headed "One Night Band" from Poland provided soft saxophone sounds.



Dinner in the ballroom

At the President's Welcome there was an event that was not on the programme. Jorn Stoelinga unfortunately had to announce the death of Hermann Lübbers, ex-president of the DCA for many years. His death, marked by a serious illness, shocked many present and a minute's silence was observed.

The participants then used the opportunity to exchange ideas and to process what they had experienced. It is well known that sad and beautiful things often lie close together and so the gala evening took its further course.

A special performance from the host country was ready after the main course: a Polish folklore dance group. To the sound of traditional Polish folklore songs, the dancers, dressed in typical costumes, swirled around and performed a wide variety of dance figures. In the second part of their performance the DCA participants of the event were asked. The dancers challenged their "new" dance partners from the crowd of spectators, who in turn put in a lot of effort to

present a good picture on stage.

After the work was done, they went back into the relaxation mode to the sounds of the "One Night Band", which conjured up more and more musicians on stage in the course of their music pieces.



Folklore dance group of Poland

After the dessert and the enjoyment of Polish vodka in different variations, several guests of the evening presented their own dance style on the dance floor. At the end of the event, after a short walk in the miner's lift of the Daniłowicz shaft, the guests drove towards the surface of the earth. Another short walk through the fresh air of the evening and the buses were boarded. Arriving at the Qubus Hotel in Krakow, many took the opportunity to visit the hotel's bar and enjoy a tasty drink or two.

A.Quante, DCA

Events

DCA present at UKSTT Roadshow

The DCA were present at the UKSTT event which was held on 17th of September at the De Vere Tortworth Court Hotel which is located between Bristol and Gloucester in the South West of England.



De Vere Tortworth Court Hotel

The event consisted of suppliers providing information on their products which are all related to the trenchless industry with some there exhibitors specialising in supplying the HDD industry. This indoor event is held bi-annually prior to the societies annual awards dinner which was sponsored by Wessex Water. The dinner in the evening was as normal a great success where a number of awards were handed out over several different categories with the category of new installation this year was won by VolkerTrenchless Solutions who installed 148 drillings, which were predominately HDD solutions over a 40 km cable route.



Meeting room at the hotel



DCA at the UKSTT

We are now looking forward to 2020 UKSTT "No-Dig live" event which will once again be at the Peterborough Arena between 15th - 17th September.

S.Stone, DCA

- Global and Polish trenchless projects - a review
- Technology selection for trenchless rehabilitation projects
- Technology selection for trenchless pipeline installation projects
- Economy of trenchless projects
- Legal and financial aspects of investments
- Optimization of drilling processes.

As in previous years, the DCA was one of the partners of the event and was represented in Tomaszowice by Vice-President Atef Khemiri, HDI. Mr. Khemiri gave an interesting lecture on "The Challenges of Multiple Large Diameter Crossings on TAP Project".

17. Trenchless Engineering Conference in Poland

Poland's largest trenchless industry meeting, the international conference, exhibition and technology fair "Trenchless Engineering" took place from 11 to 14 June 2019 in Tomaszowice near Krakow. On the two main days of the conference there were morning lectures as workshops with exciting discussions and in the afternoon technology shows.



The following topics were the focus of the lectures:

- Global trends and trenchless industrial development directions

The TYTAN 2019 Awards were presented regularly during the event. In the category Design of the year - new Installation the award went to DCA member ZRB Janicki for the project "HDD crossing of the Odra River in Ratowice (length - 1180 meters) in the course of installation of DN1000 gas Zdzieszowice-Warsaw".

D.Quante, DCA

Please make a note:

25th DCA Annual Congress
07.10. - 09.10.2020
Maritim Hotel
Bonn/Königswinter



„Ditch Witch Barcelona Event" for the 18th time

The event at Ditch Witch Barcelona took place in cooperation with American Augers for the 18th time. This time around 350 guests enjoyed the good weather in Barcelona. "It is a wonderful tradition and it is a unique atmosphere, that can be created when 350 people from 29 different nationalities get together.



President of Ditch Witch, American Augers and Trencor, Dennis Wierzbicki, greeting a customer

We all have the interest for the underground utility installations in common and you can see many different solutions in one place, I think that is quite unique. It also gives us a chance to meet and talk to customers from many different countries" says Brian Jorgensen, European Sales Manager for Ditch Witch, American Augers and Trencor.

The DCA participated in the past years with a booth at the event and it was planned to join this event also this year. Everything was organised but due to the death of the former president and co-founder of the DCA Hermann Lübbers the board decided to pay his last respects and to participate the funeral as a whole which took place on the same day.

Ditch Witch, American Augers, Trencor, Subsite and Hammer-Head were represented by about 50 factory representatives. They all gave a warm welcome when the customers came in the morning.



Customers could see and operate the equipment

Innovations such as the powerful SK3000 stand-on platform skid steer and the new JT24 horizontal drilling rig were presented to the expert audience. The JT24 is a very compact drill in the 12T class with a new Stage V engine. In 2020, the JT24 will have a cabin option.



The JT24 on the outdoor area of the exhibition

The visitors particularly appreciated the demonstration of all the machines and the opportunity to try them out for themselves. 12 different drills, trench cutters, micro trench cutters, burst lining, moles and control systems from Subsite electronics by Ditch Witch and American Augers were presented.

Like every year at this event, a HDD competition was offered on the outdoor area of the event. The customers enjoyed the HDD challenge – drilling completion in the afternoon at the Ditch Witch ser-

vice centre. Teams were from Poland, Germany, Romania and Sweden. Company Alteks from Poland won the competition.



A view of the field with the drilling competition

Later on in the evening Ditch Witch hosted an outdoor reception and a gala dinner with typical musical entertainment of the country.



Flamenco dancers at the gala dinner.

Finally the DCA congratulate Ditch Witch and Brian Jorgensen and his team to this successful event. See you again in 2020 in Barcelona!

B. Jorgensen, Ditch Witch-EMEA

Events

37th International Nodig Conference Florence

DCA present with lecture

From 30.09. to 02.10.2019 the 37th International Nodig Conference took place in Florence, Italy. The international event serves to promote trenchless technology and leading innovations in the underground infrastructure market. The annual international conference is the most important event of the International Society for Trenchless Technology (ISTT) and was organized this year under the leadership of the national organization IATT under the leadership of President Paolo Trombetti.



Das Fortezza da Basso in Florence

The event took place in the Fortezza da Basso. The Fortezza da Basso is a 16th century fortress of architectural and historical importance, located north of the main railway station. The bastionary fortress was built as a Renaissance complex on a pentagonal ground plan. Built by Pier Francesco da Viterbo and Antonio da Sangallo between 1534 and 1537 under Alessandro de' Medici, the fortress was used for military purposes for a long time and remained under military administration until 1967. It served both as a defence against external attacks and as a refuge in the event of internal unrest. The fortress now houses a restoration workshop as well as

concert and event halls used for the Nodig Conference.

The DCA was represented at the three-day event, which was moderately attended, with a lecture on "The Drilling Contractors Association (DCA-Europe) - A European organization for Quality and Education in HDD". The lecture was given by DCA President Jorn Stoelinga. Further lectures on interesting topics were presented by DCA members Tracto Technik, LMR Drilling GmbH, Forexi, Brownline and Vermeer Netherlands.



DCA president Jorn Stoelinga lectured about the DCA

In addition to the lecture blocks, an exhibition area was part of the event, which was used by some members of the DCA to present their own portfolio. During the visit of the exhibition some interesting conversations could be held with the two representatives of the DCA Brian Jorgensen, Ditch Witch, and Renzo Chirulli, Vermeer. Among other things, the association would like to promote the recruitment of new members in 2020 and gain a foothold especially in the Scandinavian countries. Brian Jorgensen promises his support here.



The DCA at the stand of ANESE S.R.L.

In addition, further discussions took place with Transco Downhole Drilling Tools GmbH, an extraordinary member of the DCA, and Anese, the first full member from Italy to join the DCA in 2018. Anese then invited the DCA to an HDD workshop followed by a reception.



DCA on a visit to Chrobok PPI

Furthermore the contacts with new member PPI Chrobok from Poland could be intensified, who supported the activities of the DCA as sponsor at this year's congress in Krakow. During the meeting, DCA President Jorn Stoelinga and IATT President Paolo Trombetti met to discuss future cooperation between the two organizations. Further topics of discussion were the uniform application of the technical guidelines, the possible support by the DCA in the field of education in Italy and the development of standards. In the past, the IATT has already developed a kind of code of conduct for HDD and microtunneling, which DCA has yet to review. As a summary of the event, it can be stated that the DCA was able to further intensify the existing contacts through its presence at the conference. The participation in the event, in the lectures and in the exhibition area was clearly too low and from the DCA's point of view rather disappointing. The elaborately created exhibition area and the large number of interesting lectures would have deserved a much larger number of participants.

D.Quante, DCA

Task Group 1: Disposal of drilling mud and cuttings

As already reported in the last newsletter, task group 1 "Disposal of drilling cuttings and drilling mud from HDD drillings" has completed its work. The final report was presented and sent to the members of the DCA via member information. In the meantime, an English version of the final report has been prepared and internally reviewed. The final version will be sent to the members at the beginning of January 2020, first by e-mail and later as hard copy. Both versions (German/English) can also be downloaded online from the DCA homepage after the Members Meeting.



M. Schnau, DCA

Task Group 2: Coating quality

In task group 2, which is in the final phase of processing, further appointments have taken place in the meantime. Among other things, a further date took place in the middle of November in Aachen, where the current draft of the final report was discussed in detail. The processing will claim some more dates in 2020. In the middle of January the next date is planned at the company Steffel in Lachendorf.



J. Stoelinga, DCA

Task Group 3: Technical guidelines

Task Group 3 "Revision of the Technical Guidelines" under the direction of Ernst Fengler has completed the first round of revisions as described. Currently, intensive work is being done on the revision of Chapter 10 "Categorization of HDD drillings", which was excluded in the first revision round. At the board meeting at the end of November in Utrecht, another meeting took place between board members Scott Stone and Marco Reinhard, who are currently working on the topic. As a result of the meeting, it can be stated that there is still a need for intensive coordination in this area and that work is to be continued at the beginning of 2020. All in all, it must still be noted that the revision of the guidelines will take some time. Completion of the 5th edition is currently not expected before the end of 2020.



D. Quante, DCA

Task Group 4: Digitization

The workgroup 4 – „Digitization“ has commenced work with its first joint meeting in November. With participation from rig manufacturers, owners and engineers this workgroup aims to draft a DCA recommendation on this topic. Beyond a compilation of all relevant process parameters this recommendation shall also cover standards for data transmission and recording. At the workgroup's kick-off meeting members discussed current industry practices for this subject as well as their expectations towards future development. The general importance of the workgroup topic is presently increasing also beyond the area of HDD applications. German VDMA and their partners for example are working on a similar subject with the broader focus of construction machinery. Our workgroup will seek contact to investigate the possibility for an exchange of knowledge or cooperation.



Dr. Tim Jaguttis, DCA

DCA Board at closed meeting

DCA Board at closed meeting in Utrecht

The DCA is to become more European - in focus

At the invitation of DCA President Jorn Stoelinga of DCA member LMR Drilling GmbH, the last board meeting of the year took place in Utrecht in the Netherlands from 27 to 29 November 2019.



As in 2018, the meeting was extended to several working meetings due to the large number of topics to be dealt with and the tight schedule at the end of the fiscal year.

Within the framework of the closed meeting, the deceased founder of the association, former president and honorary member Hermann Lübbers, who died at the age of 65 after a long and serious illness in mid-October, was commemorated. With Hermann Lübbers, the HDD industry loses one of its most committed advocates with regard to quality assurance and quality protection (see obituary to the death of Hermann Lübbers).

Following the election of Jorn Stoelinga as President of the DCA in February 2019 and the adoption of the amendment to the Articles of Association, which included the establishment of Vice Presidents for Large and Small Drilling Technology and Extraordinary Members, the focus of work in the current fiscal year has been on making the DCA

more European. The establishment of representatives in Europe, the discussion on the preparation of a European standard for HDD and the implementation and participation in events in Poland and Italy represent this course. With the new board member Scott Stone from Visser Smit Hanab b.V., we were also able to win over a highly experienced colleague who is also well versed in the HDD industry.

Other important topics were discussed at the Board meeting. Task groups 2 and 3 are currently working intensively on robust drafts. However, the topics are very complex, so that the work cannot be expected to be completed before the end of 2020. Task Group 4 "Digitisation" has now started its work after some initial difficulties. In mid-November, task group leader Dr. Tim Jaguttis welcomed a total of 6 members to the office in Reinbek (see separate reports on the task groups).



Utrecht as meetin venue

In the area of training courses for technical supervisors, site managers and equipment operators at the Bohrmeisterschule Celle, there will be changes in the composition of the speakers at the beginning of 2020. After the departure of Gerhard Herrmann, who had covered several course topics in the past, the succession had to be reorganised. Board member Marc Schnau, jointly responsible for training and further education at the DCA, reported at the board meeting that

there is now a viable solution in the pipeline that still has to be finalised. The course topics would be spread over several shoulders and primarily covered by experienced DCA members.



Old town of Utrecht

With regard to HDD training at BAU ABC Rostrup, intensive discussions have taken place in the past, which continue to give rise to hopes that solutions will be found in the future that everyone involved in the subject can support. According to Marc Schnau, however, the vote has unfortunately come to a standstill at the moment. It remains to be seen how the further steps of the construction of ABC Rostrup will take place.

The date of the DCA Member Forum - HDD Technology has already been set for the financial year 2020. The one-day event for members only will take place on 23.01.2020 in Aachen. As in previous years, the topic of the workshop is based on the output of the workshops at the annual congress. At the board meeting it was therefore decided to continue the topic of Workshop 2 "New trenchless technologies in the field of HDD technology". The workshop is primarily aimed at decision-makers, project and construction managers as well as technical supervisors, planners and clients. Participation in the event is free of charge and reserved exclusively for DCA member companies (see also separate report on this topic).

The date of the DCA anniversary celebration, which will take place in Brussels at the beginning of May next year, should also be noted. On 01.12.2019 the DCA celebrated its 25th birthday. On this occasion and in order to make the DCA more European, a festive event will take place on 07.05.2020 in the "European capital". The reception in the EU Parliament followed by a visit to the House of European History is already firmly scheduled. On this occasion, the invitation will explicitly be extended to accompany the members. The registration documents will be sent out at the beginning of 2020. The board hopes for an active participation.

Sky Diving: Board goes up „in the Air“



Registration at Sky Diving Center

This year's Christmas party of the board was also integrated into the conference. President Jorn Stoeltinga had invited the board members to the SkyDiving Center in Utrecht as a passionate skydiver.



Anticipation of the flight

Here the participants could test the wind tunnel and try out flying live. An experienced instructor gave a detailed briefing before the flights

and explained the flying technique. Flying in a steady stream of wind would be "relatively easy" to learn, so that the participants were stable in the air after only a few seconds in the wind tunnel and could start their first flight movements.



DCA Board after the flight

A great experience overall, which will certainly remain in the participants' memories for a long time as a special Team Challenge.

After the "Sky Diving" the Christmas party of the board took place in a cosy atmosphere. We would like to take this opportunity to thank all members of the board for their commitment to the association's goals.

D. Quante, DCA

First member from Lithuania in DCA

119 companies organized in the association

So far this year, seven companies have joined the DCA. UAB "Dividus" is the first member from Lithuania to join the DCA as a regular member. Furthermore the DCA could welcome as associate members the Texan company Sharewell with branch in the Netherlands, the German companies x-plan schnau engineering from Aurich, Digital Control GmbH from Marktheidenfeld Spibo Spielhoff-Bohrwerkzeuge GmbH from Castrop-Rauxel as well as Adviesbureau Schrijvers from the Netherlands and International Drilling Services LTD from England.



Welcome to the DCA!



A total of 119 companies are organized in the DCA, divided into 43 regular and 76 associate members.

A. Quante, DCA

Dasenbrock Group receives the innogy Supplier Award Sustainability 2019

There are many good reasons to celebrate in Essen and Vechta right now: The energy company innogy SE honored suppliers with the "innogy Supplier Award" today. Since 2009, innogy has given this award to committed and innovative suppliers in the categories "Global", "Regional" and "Innovation". And for the first time there will be an "innogy Supplier Award Sustainability" this year. With the newly created prize, innogy takes account of the high economic and social significance of sustainability in procurement. Visibly proud, Horst and Thomas Dasenbrock accepted the award on behalf of the family and the 120-people strong workforce of the Dasenbrock Group. Frank Werner, as Vice President Procurement Strategy & Processes at innogy, responsible for procurement strategies and processes, presented the award with great pleasure to the medium-sized family business from Lower Saxony, with whom innogy has been working for many years.

Dasenbrock lives sustainability at all levels

The Dasenbrock Group is a specialist in underground pipeline and cable construction, with a focus on horizontal directional drilling technology. In the building industry, the group is well known as a fair service partner and employer. For more than 20 years, Dasenbrock has been laying pipes, conduits and cables throughout Germany in a way that protects the environment and resources, i.a. for innogy

and for the digital expansion with broadband cables. For this, the agile Dasenbrock teams only need small entrance and receiving pits located on the roads. The further laying is done underground by a surfaced launched drilling rig, reducing the damages normally caused by opening up streets, noise, dirt and traffic disruption to the bare minimum. The materials drilled with a bentonite drilling suspension are processed and reused directly at the construction site using a certified recycling process. This method saves loading and unloading times, transport of soil and the purchase of new materials. Dasenbrock controls all processes on the construction sites digitally. Customers like Innogy and Partners, who hire Dasenbrock as a full-service provider, appreciate this transparent and efficient all-round service. In addition, the CO2 footprint of a construction project using the horizontal directional drilling method is significantly lower than in conventional civil engineering.



Smiling faces at the innogy Supplier Awards Sustainability 2019 in Essen

Modesty, humanity and a crystal-clear vision

Over the decades, Dasenbrock, founded by Hans Dasenbrock in 1949 as a sand and gravel transport company, has developed into an innovative and sustainable group of companies. "Familial modesty and humanity are tangibly li-

ved at Dasenbrock," says Ralf Bukowski, Innogy Purchasing Manager for the distribution network. His laudatory speech on the Sustainability Award stated: "When I visited Dasenbrock for the first time, the warm-hearted working atmosphere was immediately noticeable to me."

A comfortable working atmosphere and the opportunity to develop one's own strength is the supreme maxim for Horst and Thomas Dasenbrock for their employees. At the same time, all construction and administration processes were digitized at a very early stage. The administrative work in the very tidy looking Dasenbrock-offices are consistently done without paper, which saves a great deal of material, time and money. For the innogy purchasing department, it is important to work with partners who automate the necessary, but non-value adding processes. "This is the only way we can focus on the entrepreneurial and strategic issues," explains Ralf Bukowski. "Partners like Dasenbrock offer people a secure future and create space and time for creative ideas in the company. The Dasenbrock-employees have clear goals in mind and see sense in the work they make. That generates motivation and fun. And only those who have fun, have success. "

Digitization and sustainability go hand in hand at Dasenbrock

The project management and the monitoring of the construction sites are done completely digital. Exemplary for this advance is an innovative software implemented in the company which provides real-time images from the construction sites when needed. The information

flows among each other, to customers and to the project partners are also digitized and therefore transparent for all. In their digital transformation, Horst and Thomas Dasenbrock have involved the workforce right from the start and taken it with them mentally, and that too is lived sustainability. In addition, Thomas Dasenbrock has just created the position of "Commissioner for Environmental Protection", probably the first of its kind nationwide in horizontal directional drilling technology. He will act as a mediator between economics and ecology and as a link between civil engineering, clients and relevant authorities. The vision of Thomas Dasenbrock: "We want to even further anchor the protective and responsible usage of the valuable resources of our planet in the customer and partner circle." At the same time, he is working with a team of experts on the further development of a recycling plant for used bentonite drilling fluids. As a result, Dasenbrock will be able to significantly reduce the need for fresh water and bentonite, a naturally occurring mix of clay minerals, in their future projects.

About the Dasenbrock Group



The group was founded in 1949 by Hans Dasenbrock as a haulage company for sand and gravel. Today Dasenbrock is a medium-sized group of companies with three companies and a total of 120 employees* at four locations in Vechta, Bremen, Mannheim and Warstein. The largest of the three companies is Dasenbrock Horizontalbohrtechnik GmbH in Vechta, a specialist for the efficient and envi-

ronmentally friendly laying of pipelines. With this technology, pipelines made of a wide variety of materials can be laid trenchlessly, cleanly and in an extremely resource-saving manner. The method is suitable for steel pipes, ductile cast iron pipes, HDPE plastic pipes, drainage pipes and cable protection pipes, as well as for telecommunications lines and cables. The second company in the group is Dasenbrock Rohr- und Kabelverlegung GmbH, based in Bremen. Its main focus is on conventional pipeline construction, i.e. laying gas, water and heat pipes, power and telecommunications cables and the corresponding empty and protective pipes. The third company, Dasenbrock Grundstücks- und Verwaltungsgesellschaft GbR, also based in Vechta, manages all commercial processes and ensures the smooth planning and control of all construction projects. It is the digital hub that implements sustainability in the administrative area and provides all employees with direct, digital-based access to relevant project information. The Dasenbrock group of companies has received numerous certifications, including DVGW certification as a specialist company for pipeline construction GW 301 and horizontal drilling technology GW 302, certificates from the building trade association AMS BAU and RAL quality mark for underground construction. Dasenbrock has also recently been recognised as a specialist disposal company by TÜV Nord. The group of companies is still family-run, now in the second generation, the third is in training.

More Information: <https://dasenbrock.de/>

About innogy SE

innogy SE is a leading German energy company with a turnover of around 37 billion euros (2018) and around 43,000 employees. With its three divisions Renewable Energies, Grid & Infrastructure and Sales innogy addresses the requirements of a modern decarbonized, decentralized and digital energy world. The activities of innogy are focused on its approximately 22 million customers. innogy offers them innovative and sustainable products and services with which they can use energy more efficiently and increase their quality of life. The most important markets are Germany, Great Britain, the Netherlands and Belgium as well as some countries in Central Eastern and South Eastern Europe. With a total capacity of 4.0 gigawatts innogy is also active outside these regions, e.g. in Spain, Italy and the USA. As an innovation leader in future topics such as eMobility, innogy is represented at the international hotspots of the technology industry such as Silicon Valley, Tel Aviv or Berlin. innogy combines the broad know-how of its energy technicians and engineers with digital technology partners, from startups to large corporations.

*More Information:
<https://iam.innogy.com/ueber-innogy>*

Company Introduction: PGM - Tiefbau GmbH



Digitalization is progressing faster and faster in all areas of business and life and is the central driver of our social and economic development.

PGM is a reliable full-service provider for nationwide planning and construction of broadband networks, cable networks, energy networks and infrastructural supply facilities.

The company accompanies the projects from the consultation and planning over the conversion and start-up up to the documentation and offers all services 'turnkey' and from a hand.

PGM is optimally complemented by the parallel engineering office Gerhard Moritz (IBGM) in the implementation of projects and tasks. Mr. Gerhard Moritz led the broadband project Odenwaldkreis, which was awarded in 2012 at the federal level and is considered to be a pioneer in the area-wide broadband expansion in rural regions.

<https://www.pgm-tiefbau.de/>

Company Introduction: Adviesbureau Schrijvers



Schrijvers Consulting develops software to calculate stress in underground pipelines according to the Dutch standards. The program Sigma provides tools for the design of a pipeline installation in a trench and trenchless installation. Hydro fracture risks can be calculated and evaluated using Sigma. The user interface is very friendly. And important, the calculations can be checked by everybody with a calculator. We show every formula so there are no black boxes. Transparency is very important for us.

The program Sigma is used in many country's to calculate horizontal directional drilling's. In the Netherlands it is accepted by ProRail (responsible for the rail network), Dutch ministry of infrastructure and water management, the Dutch waterboards (canals, rivers and dikes). The Dutch institute KIWA uses Sigma to teach students about pipeline engineering. Drilling company's use Sigma to design their HDD's. Utility company's calculate their pipelines and ducts with Sigma and recalculate submitted applications.

At this moment we develop Sigma HDD. With this program we combine theory and practice. A few highlights:

Strength calculations single pipe or bundle, mud pressure calculations, pulling forces in vertical and horizontal bends, you can use as many soil profiles in the bore profile as necessary, traffic loads, influence of settlement, bore and reaming phases, bentonite use etc. etc. Finally you can even make a cost calculation with the basic data we show you. Any bore firm can combine Sigma HDD with their own specifics about their drill rigs and rods.

<https://schrijvers.nl/>

Company Introduction: Digital Control GmbH

19625 62nd Ave South Suite
B103
Kent, WA 98032 USA



DCI was founded in 1990 by longtime friends, colleagues, aeronautical engineers, and avid pilots John Mercer and Peter Hambling. The result was the most technologically advanced Horizontal Directional Drilling (HDD) locating and tracking system in the market. Backed by extraordinary customer service, DCI has led the way for HDD innovation for nearly 30 years.

In 1991, DCI revolutionized the HDD industry with the introduction of the DigiTrak® locating system. The unique features of the system provided greater accuracy and confidence in measuring the depth and location of the drill head. Taking notes from the aviation industry, DCI introduced two critical drilling parameters, pitch and roll, putting the DigiTrak® miles ahead of any other locating system. Knowing pitch and roll allowed operators to advance much faster, ultimately leading to more accurate and productive drilling operations.

In 2016, DCI launched a new locating technology known as Falcon, which allows the operator to measure active interference on the jobsite and select the best frequencies to carry the depth and data signals beyond it. Active interference is a major obstacle to completing HDD jobs. Falcon is the only locating system that uses a wide-band approach to carry the underground signal. Falcon allows up to 25 frequencies at a time, an important advantage to avoid interference on the job.

In 2020, DCI will release the TeraTrak R1 worldwide. The first of many in the new TeraTrak product family, the R1 provides vital terrain and distance data in a fast and easy-to-use manner. This terrain data allows the operator to map the jobsite terrain and input the location of utilities, waypoints, pins, and notes to provide relevant bore planning information to the crew. This information helps the operator navigate underground obstacles in real time, resulting in quicker decisions, fewer bent rods, and an overall increase in productivity.

After a strong 30 years in business, DCI maintains its mission to lead the HDD industry in developing products and services that make underground construction safer and more profitable for contractors. DCI drives innovation by identifying unresolved industry problems and listening carefully to its customers.

Company Introduction: International Drilling Services LTD



Based near Sheffield in the north of England, International Drilling Services (IDS) Ltd began as a specialist manufacturer and supplier of down-hole drilling equipment in 1981 and has extended its operations over the decades to offer an extensive range of drill string components and down-hole tooling products and services for various drilling applications worldwide including Horizontal / Directional, Offshore and Onshore site investigation, Mineral exploration, Waterwell, Environmental, Oil & Gas

With an emphasis on high quality products and services using strict Quality Control and Inspection procedures certified to ISO 9001/2015 standard IDS has exported to over 130 countries since its incorporation.

Working closely with clients IDS has developed & designed tooling to meet the challenges often experienced in some of the toughest & remotest regions of the world. Industry experienced design and production engineers dedicated to quality engineering compliment the in-house and state of the art CNC machinery and inspection facilities.

For the HDD market IDS has manufactured & supplied full rig kits & drill strings for mini to mega rigs including reamers up to 72" diameter of which the IDS Hybrid design is used successfully worldwide for a variety of ground conditions.

IDS is proud to be a member of the DCA & looks forward to contributing to the development of the industry in partnership with all involved.

<http://idsuk.com/>

Company Introduction: UAB Dividus



UAB "Dividus" – team of professionals in the construction of horizontal directional drilling technologies . Our specialists have extensive experience in projects in many European countries: Finland, Sweden, Norway, Great Britain, Denmark and others.

Project implementation is based on most advanced Ditch Witch drilling and tracking technology, that can:

Drilling a hole up to 500 millimetres wide, pull-back up to 10 pipes at one time through a drilled hole. The length of a continuous channel can reach up to 350 metres.

In 2018 drilled distance reaches up to 51 Km in Lithuania

www.dividus.lt

Company Introduction: SPIBO Spielhoff - Bohrwerkzeuge GmbH



SPIBO Spielhoff-Bohrwerkzeuge GmbH, based in Castrop-Rauxel, offers you as a high-performance partner quality drilling tools for a wide variety of applications. For more than 50 years, the company has stood for competent specialist advice, technical know-how and extensive service offers and is one of the market leaders for the sale of high-quality drill bits, down-the-hole hammers and injection systems from well-known manufacturers such as HÄNY, HALCO or VAREL.

Our tools guarantee a high level of innovation and enable use under the most difficult conditions. We develop specific solutions for individual requirements and manufacture special designs or modifications of existing tools. Because we also know that downtimes are expensive, especially with extensive construction projects. Service is a top priority at SPIBO, that's not just buzzwords, we live it: Above-average stocking of down-the-hole hammers, button-, wing-, PDC- or tricone-bits allows us to deliver just in time if necessary.

As a general agency in Germany for HÄNY/ Switzerland, we offer mixing and injection machines and their individual components for purchase or for rent or hire purchase. In addition, SPIBO has a unique selling point in Europe for the repair service and maintenance of HÄNY machines.

In the HDD area, we have an extensive stock of drilling tools or tricone-bits that are required for pilot drilling. VAREL has specially developed chisels for HDD use. The Target series is available in different sizes and designs. The patented EdgeGuard™ wear protection on the head lip and the special bearings for HDD applications significantly increase the service life.



Announcement Members Forum 2020 Aachen

Member forum „HDD-technology“

Workshop on the topic "New trenchless techniques linked to HDD- technology" on 23.01.2020 in Aachen



Workshop on the topic "New trenchless techniques linked to HDD- technology"

Topics of the workshop

- What are the application limits and where do they lie?
- What are the advantages and disadvantages of the process (compared to HDD)?
- What knowledge is required for the application (HDD or Microtunneling or...)?
- Which methods could be a useful addition to the range of services offered by HDD companies?
- Can the HDD process make up for disadvantages compared to other processes in the future?

Workshop podium:

Jorn Stoelinga, B.Sc.,
DCA president



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



Dr. Tim Jaguttis,
de la Motte & Partner
Ingenieurgesellschaft mbH



Dipl.-Ing. (FH) Marc Schnau,
X-Plan Schnau Engineering



Dipl.-Ing. (FH) Jörg Himmerich,
Dr.-Ing. Veenker Ingenieurgesellschaft mbH



Target Group:

The workshop is primarily aimed at HDD-project and site managers, skilled supervisors, consultants and clients and also foremen and GW 329 trained HDD machine operators. The participation in the event is free of charge and exclusive of DCA member companies reserved.

Conference language is German.

Venue:

Innside Aachen
Sandkaulstraße 20
D-52062 Aachen



Program:

09.00 Uhr Begrüßung, Einführung und Moderation
Jorn Stoelinga, B.Sc. (Präsident 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

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
13.01.2020 the latest (a.quante@dca-europe.org)

Further information can be found on our homepage at
www.dca-europe.org.

**Mud technology
seminar handling of HDD–muds
and laboratory training
10.02. - 12.02.2019
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

Professional Support:

Drilling Contractors Association (DCA)

Leader:

Dr. Udo Grossmann, Bohrmeisterschule Celle

Registration:

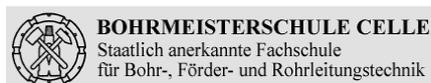
Please register for the event via Bohrmeisterschule
Celle: Regina Heims.

office@bohrmeisterschule.de

Training courses according to DVGW Worksheet GW 329 in Celle

The training courses for specialist supervision, for site supervisor and equipment operators for horizontal mud drilling according to DVGW Code of Practice GW 329 will take place in 2020 at the Bohrmeisterschule Celle.

Below we have listed the corresponding courses for you.



Course A: Drilling rigs ≤400 kN Rückzugskraft
 B: Drilling rigs >400 kN Rückzugskraft

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, locating methods, raw materials, regulations, work safety

A: 06.-10.01.2020

B: 27.-29.01.2020

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: 06.-17.01.2020

B: 27.-30.01.2020

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

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

A: 13.01.-24.01.2020

B: 27.01.-30.01.2020

If you have any questions, please contact the DCA office

Registrations: via Berufsförderungswerk des Rohrleitungsbauverbandes (www.brbv.de)

Info: DCA members pay a reduced participation fee

DCA - Members Meeting 2020



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

**Wednesday, 12th Februar 2020, at 15.00 p.m. in Oldenburg
at Hotel Wöbken**

Members will receive an official invitation and agenda for the event. As last year, a simultaneous translation (German/English) has been set up.

For further information please contact our office in Aachen.

Hotel Wöbken:

Hundsmühler Straße 255

26131 Oldenburg

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

E-mail: info@HotelWoebken.de; internet: www.HotelWoebken.de



34th Oldenburg Pipe Forum 2020

"Tubes and Cables - Wires for a Modern Infrastructure"

13th to 14th February 2020



As usual, the DCA will also appear in 2020 at the 34th Oldenburg Piping Forum with a stand and 2 lecture blocks on current HDD projects. The two lecture blocks, which will be led by DCA President Jorn Stoelinga and DCA Board Member Marc Schnau, will again include top-class topics in 2020 that will present current aspects of the HDD industry in interesting projects.

Block 1:

Moderator: Jorn Stoelinga, B.Sc. (LMR Drilling GmbH)

President of the Drilling Contractors Association (DCA-Europe), Aachen

Lecture 1: HDD-Bohrungen für die 56 Zoll-Gaspipeline EUGAL - eine besondere Dimension

Mohammad Alikab, Bohlen & Doyen GmbH, Wiesmoor

Lecture 2: Anforderung an die zusätzliche GFK-Rohrbeschichtung und GFK-Schweißnahtbeschichtung bei der grabenlosen Verlegung von PE-Ummantelten Stahlleitungen

Stefan Wittke, TDC International AG, Luzern

Lecture 3: Horizontalbohrtechnik im Einsatz: Anlandungen von Kabelleerrohren auf Norderney für das Offshore-Netzanbindungssystem DolWin6

Simon Herrenknecht, Herrenknecht AG

Dipl.-Ing. (FH) Timo Mücke, Beermann Bohrtechnik GmbH, Hörstel-Riesenbeck

Block 2:

Moderator: Marc Schnau, x-plan schnau engineering, Aurich

Board member Drilling Contractors Association (DCA-Europe), Aachen

Lecture 4: "Holland in Not"

Thomas Winkler, LMR Drilling GmbH, Oldenburg

Lecture 5: Horizontal Directional Drilling - forward pipeline installation

Henk Kruse, Deltares

Lecture 6: Entsorgungskonzept Bohrschlammentsorgung – Ein Praxisbeispiel aus Bayern

Dr. Gregor Silvers, Max Wild GmbH, Berkheim



... and afterwards we'll meet in the Drilling Saloon!

Bonn/Königswinter Congress venue of the 25th DCA Annual Congress

Please make a note:

07.10. - 09.10.2020

Maritim Hotel Königswinter

D. The city of Bonn, today with a population of 320,000, the birth-place of Beethoven lies picturesquely on the banks of the Rhine and is one of the oldest cities in Germany. The Federal Republic of Germany began here and was ruled from there until 1990.



Rhine bank in Bonn

More than 2,000 years of history have shaped the city and all, whether Romans, archbishops, merchants or parliamentarians, have left their mark. The composer Robert Schumann and the painter August Macke lived and worked in Bonn.



Old Bonn City Hall

The former federal capital on the Rhine delights with buildings from the Baroque, Gründerzeit and avant-garde periods, with muse-

ums on German history, international art and in honour of Beethoven. Roman legionary camp, residence of the Cologne electors, Prussian administrative centre - the city on the Rhine has a long and eventful history.

Picturesque baroque buildings, elegant Wilhelminian villas and modern museum buildings bear witness to this. When Bonn became the capital of the new Federal Republic of Germany in 1949, it provided a worthy setting for ministers and deputies, chancellors and presidents.

When parliament, government and most ministries moved to Berlin in the 1990s, Bonn distinguished itself as a center of international organizations. The UN maintains a campus here with 18 institutions.

The cathedral of Bonn, the Catholic main church, is a landmark of the city. With its five towers and mighty crossing tower, it dominates the silhouette of the city from afar.



Catholic Main Church
"Bonner Münster"

On the other bank of the Rhine is the Siebengebirge mountain range, which is also responsible for the mild climate in the area along the Rhine as protection against the cool north and east weather. Picturesque hiking trails and old castles create a romantic and incomparable picture and bring past times to life.

Königswinter, where the congress hotel is located, is located on the eastern side of the Rhine opposite Bonn, on the edge of the Sieben-

gebirge, at the foot of Drachenfels and Petersberg. For centuries, the former was used as a quarry to extract stone for famous buildings such as the Roman Limes or Cologne Cathedral. In the times when Bonn was still the seat of government, many national and international conferences of the Federal Government were held on the Petersberg, to which heads of state from all over the world were invited. The congress hotel Maritim Königswinter is located in an exposed location, directly on the Rhine promenade.



Maritim Hotel Königswinter

Join us on the Rhine to Königswinter for the DCA Annual Congress 2020 and experience the flair of great history and an unforgettable congress.

A. Quante, DCA

„Call for papers"

Topic: „From Pipe to Cable"

Proposals for papers for the DCA Annual Congress 2020, especially on the above-mentioned topic, can be submitted to the office immediately (dca@dca-europe.org).

Deadline: 31.03.2020

Site manager seminar

at Tracto Technik
18. März 2020



The next advanced training seminar for HDD site managers will take place on 18.03.2020 at Tracto-Technik GmbH & Co. KG in Lennestadt in the Sauerland region on the topic "Soil description for HDD projects - Application of DIN 18324". The seminar, which has been held for several years in cooperation with the DCA and the companies Mollprd and AMC, is aimed at owners and managing directors of special construction companies and drilling companies, site managers and HDD project managers who already have experience in the field of calculation, planning, execution and execution of HDD projects.

The application of DIN 18324 is presented with regard to the importance of subsoil investigation for own projects and the use in project planning. With the introduction of this DIN, which replaces soil classes with homogeneous areas, the requirements for soil investigation in the run-up to a project have increased. The information content has increased considerably due to characteristic values for individual subsoil properties.

The seminar includes:

- The significance of DIN 18324 in comparison to other DCA and DVGW standards and regulations
- Explanation of the characteristic values for homogeneous areas according to DIN 18324
- Use of characteristic values when planning HDD projects
- Use of the characteristic values in drilling mud planning.

The further training seminar is held in German. Further information can be obtained from www.tracto-technik.de.

Please register via: training@TRACTO-Technik.de.

HDD training in the Netherlands

The training courses in the Netherlands have been held since 2018 under the roof of DCA member Deltares.



The training courses will take place next year as follows:

HDD Course 1: Equipment < 40 t 20.-24.01.2020

HDD Course 2: Equipment > 40 t 27.-31.01.2020

The courses at Deltares are led by Henk Kruse and Mike Woning.

Please register at www.deltares.nl

DCA celebrates birthday in the heart of Europe

HDD professional association celebrates its 25th anniversary



The 25th anniversary of the Drilling Contractors Association (DCA), which was founded on 01.12.1994 on the premises of Düsseldorf Airport as a European association, will be celebrated next year in Brussels. On this occasion, the DCA invites its members to a festive event in the "European capital" on 7 May 2020.



EU-Parliament in Brussels

Brussels is the mainstay of European policy; the EU institutions have their headquarters there. The city's central location, linguistic diversity and good transport connections were the plus points in the decision to make Brussels the capital of the European Union (EU). Brussels is home to 19 independent cities, each with its own mayor, town hall, markets, nightlife and shopping streets. Brussels has about 1.2 million inhabitants, but more than 30 percent of Brussels

residents are not Belgians. Brussels has long been shaped by many different cultures. Today it is the EU and NATO, among others, that ensure that people from all over the world meet here.



Plenary Chamber of the EU-Parliament

After the reception and lunch in the hotel, the DCA's anniversary celebration will be followed by a reception in the EU Parliament, at which Mrs. Sabine Verheyen could be won as a member of the European Parliament. Ms Verheyen is Chairwoman of the Committee on Culture and Education (CULT), member of the Committee on Development and Budgetary Control (CONT), local political spokeswoman of the CDU/CSU Group in the European Parliament and member of the Delegation for Pan Africa, deputy member of the Delegation for South Africa.



Sabine Verheyen ©FKPH

After a keynote speech by Ms Verheyen in English, a visit to the House of European History and the Parliamentary Assembly as the European Parliament's visitor centre will take place, where the history of the European Union and the functioning of the European Parliament will be presented interactively.



Grand Place of Brussels

Following the visit of the Parliament, the guests can look forward to a festive evening event in Brussels. On this occasion, the invitation will also explicitly include the accompaniment of the Members.

The registration documents for the event will be sent to the companies at the beginning of 2020 via member information. We ask you to register as soon as possible, as the number of seats available for visits to the Parliament is limited.

The board hopes for an active participation.

D. Quante, DCA



Drilling Contractors Association (DCA-Europe)
Verband Güteschutz Horizontalbohrungen e.V.
Association des Entrepreneurs de Forage Dirigé

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52068 Aachen
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