

# Sponsoring Report

Season 2024/25

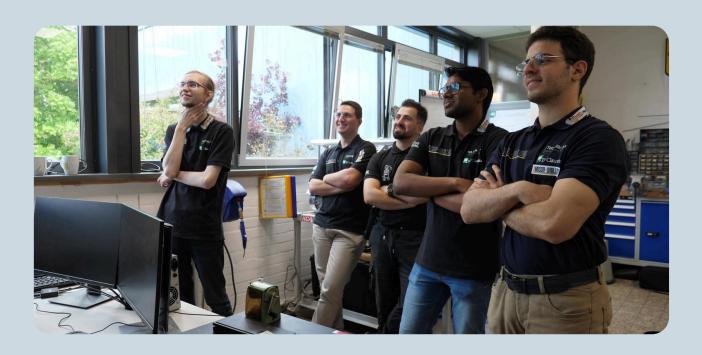


### Our Mission

Our mission is to help young professionals overcome their hesitation toward new technologies. We aim to create an environment that fosters innovation and encourages students to push the boundaries of technological progress.

### Our Vision

Our Goal is to automate the drilling industry by making it more efficient, more secure and cheaper



### **Abstract**

- The TUC Drillbotics Team TU Clausthal's largest student project – continues to lead innovation in automated and sustainable drilling technologies, driven by 14 dedicated members.
- A newly acquired workshop that will serve as a central hub for technical development, research, and hands-on petroleum engineering education, supporting both academic and industrial projects.
- The team gained major visibility through participation in national and international events, including the SPE/IADC International Drilling Conference 2025 in Stavanger, the Student Technical Congress (STC), and the Open Day in Celle.
- Strong industry collaborations and sponsorships with Micon Drilling, TPS Technitube, Baker Hughes, KCA Deutag, and Würth Elektronik enabled technical advancements, professional exposure, and representation at global conferences.
- In collaboration with the SG Rover Team of TU Braunschweig, the team initiated the design and development of the Deep Sampling Device (DSD) for the Mars rover ORTHOS, marking an important step toward interdisciplinary space engineering, especially in planetary exploration.
- Close partnerships with ERIG e.V. (TU Braunschweig) and the SPE Student Chapter TU Clausthal fostered interdisciplinary cooperation, outreach, and academic engagement.
- The 2024/25 season reflects a year of growth, innovation, and sustainability, reinforcing the project's mission to bridge academic excellence with industrial relevance.

### Our Precence at the STC



At this year's Student Technical Congress (STC) in Clausthal-Zellerfeld, our team had the opportunity to present its latest developments in drilling and automation technology. The event, organised by the SPE Student Chapter of TU Clausthal, provided an excellent platform for exchanging ideas with students and professionals from the fields of petroleum engineering, geothermal energy, and related geosciences.



Our sponsors were showcased in various ways — on team shirts, flyers, banners, and directly on our exhibited automated drilling system. In addition, we included a special acknowledgement slide in our technical presentation.

The focus was on advancements in directional drilling automation, downhole instrumentation, and system optimisation. Presenting in front of a professional audience provided an ideal opportunity to strategically position our partners' brands within an academic and industrial context. We would like to thank our sponsors for their ongoing support, which makes presentations like these and the expansion of our technical expertise possible in the first place.

#### International Drilling Conference 2025 – Stavanger



In March 2025, our team participated in the renowned SPE/IADC International Drilling Conference in Stavanger, Norway — one of the most significant events in the field of drilling technology worldwide. The conference provided an excellent opportunity to present our latest developments in drilling automation and our new collaboration with ERIG e.V. to an international audience of experts, while also building valuable connections with industry and research representatives.

Our sponsors were prominently showcased in various ways — on team shirts, banners at our booth, a special acknowledgement slide in our technical presentation, and in this report, which is distributed within our academic and industrial network.



#### International Drilling Conference 2025 – Stavanger



A particular highlight was the presentation of our autonomous drilling system, which attracted great interest from numerous industry professionals. Many attendees engaged in discussions with our team and were impressed by the innovative strength of the students and the practical relevance of our project.

We extend our sincere thanks to our sponsors for their support, which made our participation in this prestigious conference possible and thus contributed significantly to the visibility and further development of our work in an international context.



### Our Precence in Celle

On May 17, our team participated in the Open Day of the Drilling Simulator in Celle. More than 100 visitors — including students, families, and professionals from the drilling and energy sectors — attended the event.

We presented our prototype of an automated drilling rig, explaining its functionality and its relevance for sustainable drilling technologies. The exhibited sandstone core section, in particular, attracted considerable attention and sparked many interesting discussions. Visitors were actively engaged, asked detailed questions, and showed great interest in the practical applications of our project.



We extend our sincere thanks to our sponsors — their support not only enabled us to participate, but also to give a professional presentation. Their logos were prominently displayed on our flyers, highlighting their commitment to forward-looking technologies.

At the same time, we were able to represent our university and introduce a wide audience to the ongoing research in the field of automated drilling technology.

### Campus-Run



On June 17, our team participated in the 36th Campus Run as part of the Campus Open Air event, celebrating the 250th anniversary of TU Clausthal.

We used the occasion to represent our sponsors, Würth Elektronik and TPS Technitube Röhrenwerke GmbH — two strong partners whose focus on innovation, quality, and sustainability aligns perfectly with our project in the field of autonomous drilling technology.

Würth Elektronik and TPS Technitube impressed us with their commitment, which goes beyond sponsorship. To show our special appreciation, we specifically supported them with advertising measures during the campus run.

Their logos were prominently displayed on our team shirts throughout the event, emphasising their dedication to technological innovation and the support of young talent.

The event also provided a valuable opportunity to connect with the university community and present our project in a dynamic and engaging environment.



## Campus Clean-Up



On May 8, our team actively took part in the annual Campus Clean Up at TU Clausthal, an initiative aimed at promoting environmental awareness and sustainable action.

By collecting litter from public paths and communal areas, we demonstrated our commitment to a greener campus and to the core values of our project: responsibility, teamwork, and sustainability.

During the event, we proudly wore our team shirts featuring our sponsors' logos. This not only highlighted our partnership but also emphasised their role as supporters of sustainable engineering initiatives.

Participating in such events not only strengthens the sense of community but also enhances the public perception of their brand in the context of positive social impact.

# More Room for Innovation - Our New Workshop and Its Impact



Over the past year, we have successfully established ourselves as the largest student project at TU Clausthal through a variety of initiatives. With now 14 dedicated team members, we have impressively consolidated this status. A key milestone was the organisation of a large-scale workshop and the noticeable expansion of our reach. Relevant social media posts – including recognition of our sponsors – are regularly published through TU Clausthal's official channels.

Our new workshop is located in the former workspace of the Green Voltage Racing Team, which was disbanded in early 2020. In the meantime, the building had been used as a parts donor and storage space. Through targeted internal branding efforts, we were able to preserve and revitalise this space. Initial cleanup actions laid the foundation for setting up our technical equipment and reviewing the existing inventory. It quickly became clear that many tool sets were incomplete, essential devices were missing, and the IT infrastructure was severely outdated. We are currently working intensively not only to complete the equipment but also to modernise it sustainably.

In addition to our involvement in practical teaching formats, we also present the project – including our sponsors – in lectures across various university departments. This not only enhances the brand visibility of our supporters but also attracts potential new members who are passionate about technology, innovation, and teamwork.

# More Room for Innovation - Our New Workshop and Its Impact



Our cooperation partner ERIG e.V. at TU Braunschweig also continues to promote our project in its public appearances – among other things, by representing us at trade fair stands and displaying our marketing materials.

With the newly designed workshop, we were able to support teaching in the field of petroleum engineering actively. As part of practical live test drilling, prospective engineers were able to gain experience directly on the scaled rig. Banners visibly represented our sponsors, and we had the opportunity to showcase the donated components.

Note: The new workshop offers even more space for additional banner advertising.



### **Our Sponsorship Classes**



#### **Bronze-Sponsor**

- Banner placement on our website
- Mention in our publications

1000€



#### Silver-Sponsor

- Same range of benefits as the Bronze Sponsor
- Presence of your logo on our rig (size S) in time for the international competition

2000€



#### **Diamond-Sponsor**

- Banner placement on our website
- Mention in our publications
- Your logo on our team Tshirt
- Your banner on our mast
- Awareness campaign for your recruitment efforts

5000€



#### **Gold-Sponsor**

- Same range of benefits as the Bronze Sponsor
- Your logo on our rig (size M) for the international competition
- Your logo on our team T-shirt

3000€

#### **MEET OUR TEAM**



Wolfgang Hollstein Supervisor



Nils Hölzner Head of IT



Kanaan Al Maasarani Teamlead



Gabriel Dörfler
Head of Marketing



Sari Abdan



Doruk Ustaoglu



**Charalampos Soilemedzidis** 



Ahmed Alsherif



Farouk Jamali



**Christine Abbenhaus** 



Abin Alukkal



Ahmad Talib



Joost Palucki



Kaiser Dawara

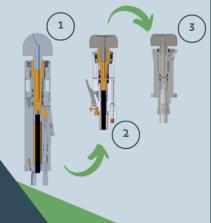
Partner with Purpose – Build with Us!

## Our Flyer

#### THE **BOTTOM** HOLE **ASSEMBLY**

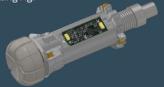
Our current BHA underwent multiple generations before finally being able to control and steer a

The third-generation BHA achieved a build rate of up to 35° per 10 cm.



## WHAT DO WE DO?

For the past 9 years, the TUC Drillbotics team, composed of motivated students, has been participating in the international Drillbotics competition, holding the world champion title for 2 consecutive years. The objective of the competition is to develop and build a fully automated scaled directional drilling rig.



New since semester 24/25 is cooperation with the student project SG Rover of the TU Braunschweig. In close collaboration, we will design and construct the deep sampling device of the Mars rover ORTHOS.



**Our Gold Sponsors:** 

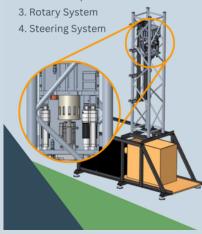




#### **OUR RIG**

The modular, highly mobile rig (2m x 1m x 3m) simulates key systems of a full-size rotary drilling rig within a controlled lab environment, enabling efficient and cost-effective R&D. Key components include:

- 1. Hoisting System
- 2. Closed-loop Circulation



### DEEP SAMPLING DEVICE

New this semester is a cooperation with the SG Rover Team of the TU Braunschweig, where we will design and construct the Deep Sampling Device (DSD) of the Mars rover ORTHOS.



For the first time, we have to work with volume, current and centre of gravity budgets. The aim is to extract, analyse and transport a 100 gram sample without mixing from a depth of >300 mm from simulated Martian regolith. The DSD module will compete together with ORTHOS at the international European Rover Challenge in Krakow.



**Our Silver Sponsors:** 



Baker Hughes >>



WURTH ELEKTRONIK

Contact Us:





Agricolastraße 10, Clausthal-Zellerfeld



# Our Sponsors Season 2024/25















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tuc.drillbotics 🔘





We would like to thank all supporters who have made our project and mission possible. Together, we have not only overcome challenges but also created wonderful, lasting memories!

