

TODO

# WORK PACKAGE

TITEL : Creation of Comprehensive Circuit Diagrams for the Rig

WOPA.Nr: 0002

CONTEST YEAR: 2023/2024

ISSUED BY: C. SOILEMEZIDIS

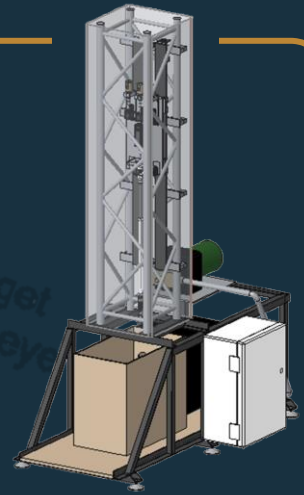


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Drillbotics® is a prestigious international university competition where teams from around the globe collaborate to design and develop an autonomous directional drilling rig. This challenge merges engineering expertise with innovation, aiming to revolutionize the drilling industry while promoting collaboration and hands-on experience.



## OBJECTIVE

DEADLINE: 31st December 2023

To thoroughly inspect the rig, identify all electrical components, and draft detailed circuit diagrams, with an emphasis on marking all voltage lines.

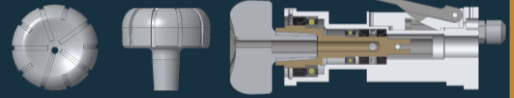
## OUTCOME

Upon completion, the student will deliver comprehensive circuit diagrams for all specified voltage lines, reflecting a detailed understanding and representation of the rig's electrical configuration.

## DESCRIPTION

The selected student will undertake a meticulous review of the rig, acquainting themselves with a plethora of electrical components. This immersive experience will provide insights into the intricacies of creating circuit diagrams for electrical machinery. The task's core lies in drafting circuit diagrams that accurately represent all voltage lines, including 5V, 12V, 24V, 48V, and 220V. The project's structure will involve dedicated lab days, where the student can capture in-depth notes and photographs. These resources will later be instrumental in ensuring the accuracy and comprehensiveness of the circuit diagrams.

## CONTACT



[drillbotics@tu-clausthal.de](mailto:drillbotics@tu-clausthal.de)

## Student Work Packages

Students interested in hands-on experience and applying their academic knowledge are encouraged to take on these work packages. If you're keen to express interest, apply for a work package, or seek more details, please contact us. It's up to you to decide whether the task aligns with your skills and interests. If you lack experience in the highlighted fields (in BLUE), seize the opportunity to learn with us. Don't worry; the primary requirement is motivation. This journey is all about learning and growing.

## Certificate of Completion for Work Packages

Upon successful and timely completion of the designated work package, and if the specified outcomes are met, a certificate will be issued to the individual responsible for the task. This certificate stands as an official recognition of the individual's diligence, skill, and commitment to the project.

### Complexity grade

1. 20h	3. 60h	5. 100h
2. 40h	4. 80h	6. >100h



Complexity grade

6
5
4
3
2
1



TUC Drillbotics®  
learning & creation



MECHANICAL



ELECTRICAL



ADMINISTRATIV



PROGRAMMING



AI



DESIGN