Tests

Drilling

Test1

Place: GreenFabLab, KampLintfort, Germany.
Date: 16/April/2021

This test was made to check the behavior of a drill to get familiar with the process and consider it for machine structure requirements. Soil type: Clayey

Materials:

1. Drill:
- Brand and model: Bosch GSR 18V-21
- Torque: 21/55Nm

2. Drill bit:
- Diameter: 32mm
- Length: 500mm



Process:

The first time, I got to drill 30cm depth.



The second time, I got to drill 50cm, which is the total length of the bit.



Outlook: From this test, I observed that it can not take the soil sample by drilling in one go, separate the total depth on multiple phases would be the best in this case. Measuring the torque in every moment, then when the torque demanded increases, finish that phase, clean the bit and continue with the next one.

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Last update: **2021/08/24 17:34**