



## DSC

Drilling Simulator Celle

### Hardware Test Stand for Downhole Tools in Full Scale

The DSC has a full-scale hardware test stand that reproduces the lower section of a deep well in a horizontal position and in the future also vertically on a real scale. Components to be tested can be mounted at the lower end of the BHA with a diameter of up to 8.5/8 inches. Using the two triplex pumps, a variably equipped rock chamber, and a choke in the annulus, the conditions of a deep well can be realistically and pressurized experimentally simulated. In its basic configuration, the test stand enables full-scale investigations of new prototype downhole tools such as new drill bits, pulsers, or hammers. Due to its modular design, the test stand can be flexibly adapted to your specific requirements.





# TU Clausthal

Clausthal University of Technology

The hardware test stand currently has the following specifications:

## Drilling Rig

Stroke	5m	16.3 ft
ROP	10 m/h	32 ft/h
WOB	10 t	
Torque	8.8 kNm	6.5 klbsft
RPM	220 1/min	
Power	200 kW	270 hp

## Flushing System

2 Triplex pumps Schäfer & Urbach BT 60/70

Power	1200 kW	1600 hp
Flow rate	max. 5000l/min	1300gal/min
Pressure	max. 350 bar	5000 psi

## Autoclave

BHA length	23 m	75 ft
Formation	5 m	16.3 ft
Pressure	100 bar	1500 psi
Diameter	222 mm	8 ¾"

If you have any questions about this or other service offerings, please feel free to contact us.

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## Contact

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