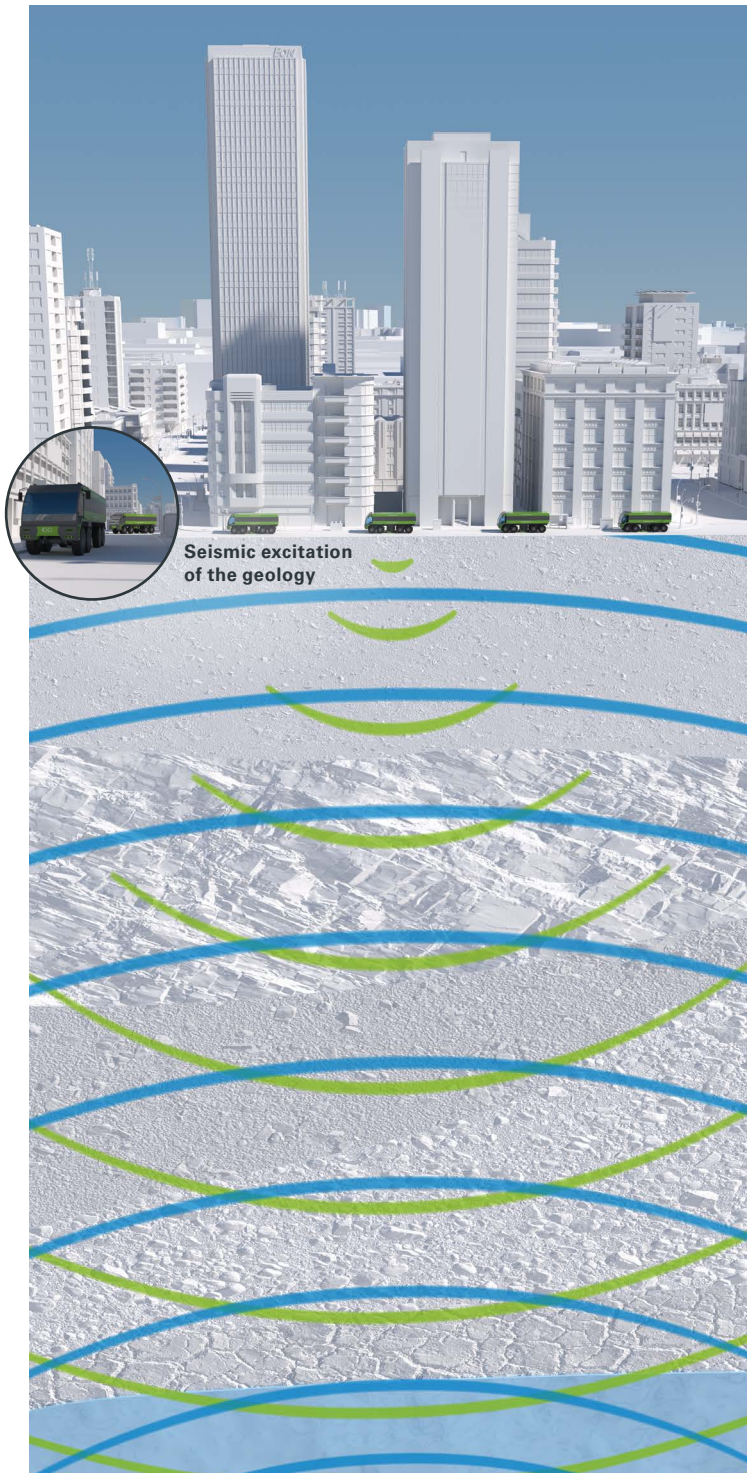


# URBANVIBROTRUCK

## INNOVATIVE MOBILE SHAKER FOR REFLECTION SEISMOLOGY – SPECIALLY OPTIMIZED FOR USE IN URBAN AREAS.

This project is implemented in close collaboration of Geophysical Institute of the Karlsruhe Institute of Technology (KIT) and Herrenknecht AG. The development project is supported by the Federal Ministry for Economic Affairs and Climate Action on the basis of a decision by the German Bundestag.

The Herrenknecht Urban Vibro Truck is a mobile P-wave vibrator for use in reflection seismic surveys. These subsurface exploitations are necessary to locate geothermal heat sources and assess its heat source potentials. The technology is therefore a crucial prerequisite for a successful transition to a decarbonized heat and power supply industry.



In collaboration with



Supported by



on the basis of a decision  
by the German Bundestag

**PIONEERING  
UNDERGROUND  
TECHNOLOGIES**



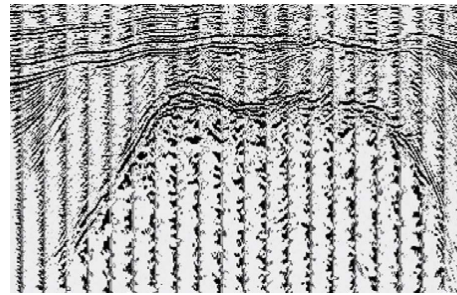
# URBANVIBROTRUCK

The new mobile vibrator will provide best performance in urban seismic surveys. Its maneuverability, agility and modern design will significantly improve the machine handling within urban regions, towns and cities. In addition, the machine complies with European standards and has EU road approval. All this will contribute to raise the general public's acceptance on conducting Vibroseis surveys in urban regions.

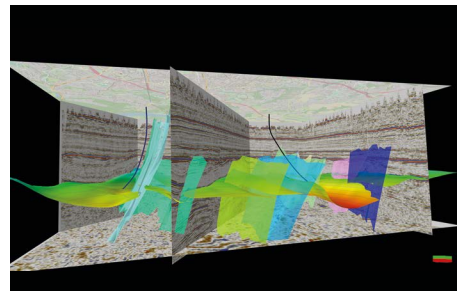
The new mobile vibrator's shaker provides broad frequency band capability with high peak force output at low frequencies. Improved system design brings better source signal quality that leads to deeper penetration depth compared to state-of-the-art products.



Current concept of the Herrenknecht UrbanVibroTruck



Drilling can be planned on the basis of the seismic survey.  
Source: DMT



On the basis of the subsurface mapping obtained, deep drilling for geothermal power plants can be planned.  
Source: DMT

## ADVANTAGES OF THE TRUCK AT A GLANCE

### TECHNICAL DATA:

- › Machine weight: 36t
- › Operational noise level: 65 dB
- › Maximum drive speed: 40 km/h
- › Width: 2.5m
- › Axle load: max. 9.5t
- › All-wheel steering
- › EU approval
- › Driving license class T
- › Collision Awareness System
- › Bird-View-Camera System
- › Road Surface Assessment System

### P-WAVE SHAKER:

- › Digital high response servo valve
- › Reaction mass: 6t
- › Ground peak force: 280 kN
- › Frequency range: 1 Hz to 180 Hz
- › Full force: from approx. 1 Hz to 120 Hz
- › Servo valve with digital feedback
- › Hydraulic oil with reduced compression module
- › High Performance Low Frequency Booster



› **FURTHER INFORMATION:**  
Please feel free to contact us personally.

**HERRENKNECHT AG**  
77963 Schwanau  
Germany  
Phone +49 7824 302-0  
mining@herrenknecht.com  
www.herrenknecht.com

