

# SMALL-SIZED SELF-PROPELLED DRILLING RIG BBU-001 "OPENOK-S"





With hydraulic drive of the mobile rotary head

#### **Technical characteristics**

Feed mechanism: chained hydrocylinder		
Feed stroke, mm	1 400	
Drilling angles	0-90	
Feed force down, N (kgF)	15 000 (1 500)	
Feed force up, N (kgF)	15 000 (1 500)	
Max. length the drill rods applied, mm	1 000/ 750*	
Max length of the casing pipe, mm	2 000	
Max. diameter of the casing pipes, mm	168	

## Application:

- Geotechnical investigation;
- Water drilling;
- Exploration;
- Technical wells at construction

Hydraulic mobile rotary head		
Torque, N*m (kgF*m)	1 500 (150)	
Rotation frequency, rpm	0 - 700	
Speed of feed, mps	0,1/0,4	
Mast with the winch		
Winch load capacity, kgs	400	
	'	
Dimensions		
Working position (LxWxH)	2300x1800x2100	
Height with winch/with mast and winch, mm	4340	

<sup>\*</sup>drill rod length at DTH drilling \*\*depending on the engine

Max. mass of the rig with winch/without winch, kgs



920\*\*/990



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#### **Drilling technologies applied**

Drilling technologies	Conditional drilling depth, m
Rotary drilling with washing/airflush	50
Core drilling dry/with washing/with airflush	30/100/50
DTH drilling	50
Auger drilling	25

#### The drilling rig has following advantages

- **1. High mobility.** The small size of the drill rig allows for convenient transportation by auto trailer, car body or vehicle carrier
- Under-carriage. Cushion tracks with remote controls allows to move the rig around the working site without damaging the landscape.
- **3. Efficiency.** Time-proved petrol engine "Honda" provides is highly cost-efficient, saves on fuels and wearing parts.
- **4. Chain feed.** In comparison with reeving system or rope feed, does not stretch and provides much higher durability

**5. Ergonomic control panel.** To make sure the drill master had enough time to construct the perfect borehole the controls are placed conveniently and are all named.





#### With hydraulic drive of the mobile rotary head

#### **Base configuration**

- Frame
- Rubber under-carriage
- Turning-support
- Mast
- Rotary head

- Power drive
- Energy block
- Oil-cooler
- Control panel
- Mast set-up hydrocylinder

#### Additional equipment



**Casing centralizer.** For drill rods, casing pipes centration at drilling.



**Hydrohummer** is intended for lowering sampling rods with diameter 121 mm to collect undisturbed samples at geotechnical investigations.

**Elevator-bail with swivel.** For efficient DTH drilling.

#### Applied mud pumps and compressors

Compressor parameters	Movable compressor KV-5/10P
Max. Flow rate, m³/min	5
Max. Pressure, MPa	1
Power, kW	35,4
Drive	Diesel
Mass, kgs	810

Mud pump parameters	NB1-25/16
Feed, Ipm	25
Max. pressure, MPa	1,6
Power, kW	3
Drive	ICE petrol
Mass, kg	45



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#### Cases







