

Drilling rig URB-210

Designed for:

- Hydrogeological, industrial water well drilling
- Drilling for water depression wells, ventilation bore-holes, bumping wells, energy wells, freezing wells

Applied drilling technologies:

- Rotary drilling with direct water circulation
- Rotary with reverse water circulation drilling (air lift technology)



Technical characteristics:

Applied chassis	URAL, KAMAZ, semitrailers
Rig drive	Main vehicle engine through PTO to Transfer box
Nominal power take off capacity, kW	160
Nominal hydraulic system pressure Mpa (kgf/sm ²) no less	20 (204)
MAST	Vertical, framework designed
Height, m	12
Payload, tf (kN)	20 (196)
CROWN BLOCK	One string; 2-4 lines stringup
1-st Rotary head version:	For rotary drilling with reverse water circulation drilling (air lift technology) method
Rotary head frequency (1-st range), r/min	0-60
Rotary head torque (1-st range), kgsm	1500
Rotary head frequency (2-nd range), r/min	0-130
Rotary head torque (2-nd range), kgsm	700
Rotary head payload, kgf	20000
Diameter of the Rotary head straight through spindle hole, mm, no less	130
Rotary head equipment set for rotary drilling with reverse water circulation drilling (air lift technology) method with use of separate compressor	Upper swivel with hole 130 mm. Down air swivel with inner tool-joint thread 3-171 for the special drilling pipes and air pressure line connection
2-nd Rotary head version:	For rotary drilling with wash/airflush
Rotary head frequency (1-st range), r/min	0-60
Rotary head torque (1-st range), kgsm	1500
Rotary head frequency (2-nd range), r/min	0-400
Rotary head torque (2-nd range), kgsm	400
Rotary head payload, kgf	20000
Delivery mechanism	Hydraulic cylinder with polyspast-ropes delivery mechanism
Max. well bottom towing capacity, tf (kN)	6,5 (64,46)
Max. lifting capacity, tf (kN)	20 (19,5)
Rotary head stroke, m	7,1
Max. drilling rods length, m	6,0
Drilling winch	Hydraulic drive, reversed
Winch towing capacity, tf	3,0/5,0/10,0*
Nominal drilling depth, m:	
- with reverse water circulation (air lift)	150
- with direct wash	800
Drilling diameter, mm:	
- with reverse water circulation (air lift)	up to 1000
- with direct wash initial/final	up to 530 / up to 152

* - by special request





Technical specifications:

- **1-st Rotary head type:**

- hydraulic with the right side of the well's axis diversion possibility by the hydraulic cylinder operated from the driller's control panel
- hydraulic with rotation in forward direction from the drilling axis up to the 90 degrees angle, which makes safe and rapid hoisting possible during the rig's assembled/disassembled process;

- **2-nd Rotary head type:**

- hydraulic with a side diversion by hydraulic cylinder;
- all of unit's operating elements are hydraulically driven. Because of that additional technological equipments supplying without significant construction design changes is possible. Depending on the rig purpose application could be supplying by drilling rotary heads (technical characteristics could be different from the presented); different hoisting equipments (pipe's rotation/clamp equipments depending from the using diameter). Operational labour intensity decreases in comparison with the mechanical transmission driven drilling rigs;
- hydraulic system operation provides the exact drilling tuning and operational control;
- the driller's workplace is organized on a hinged platform, fixed on the rear side of the platform rig;
- for the DTH drilling implementation in hard geological-technical conditions rigs could be supplying of lubricator for the immersible DTH machinery;
- wide range of the accessories available on request provides the basic operations with the different types of the drilling tools and additional operations mechanisation.



Including components:

- drilling pumps NB-50 / NB-80

For equipment purchase and additional information:

www.geomash.ru/en/

«Geomash-Centre»
Russia, 121351, Moscow,
Kuntsevskaya st, 9/2
+7 (495) 902-55-20