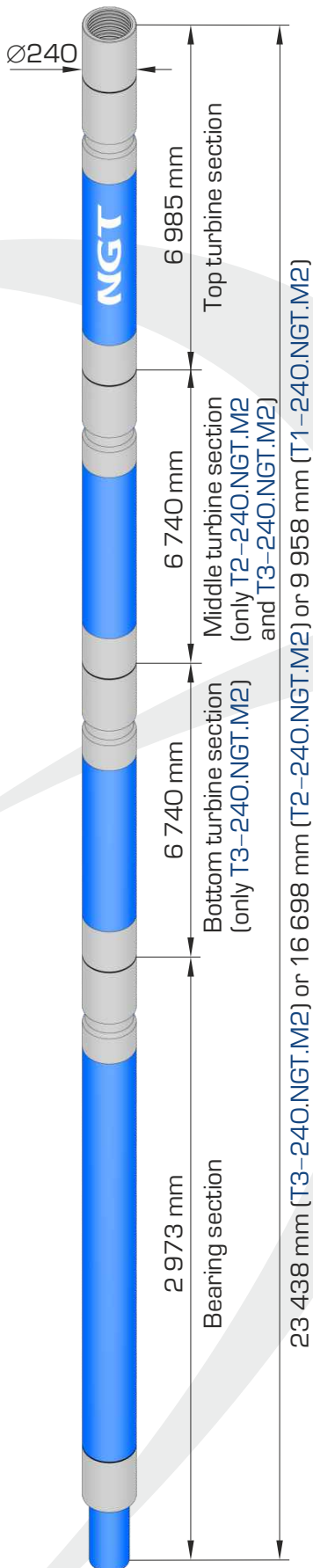


T1-240.NGT.M2, T2-240.NGT.M2 and T3-240.NGT.M2



The turbodrill incorporates one (T1-240.NGT.M2), two (T2-195.NGT.M1) or three (T3-195.NGT.M2) turbine sections and bearing section. Medium speed turbine is used in the turbine sections which provides suitable characteristics in double-section version. This turbine has high torque and is recommended to drill with rock bits in soft and medium rocks.

The turbodrill bearing section operates in mud medium and has a combined axial bearing: multi-row thrust ball bearing with toroidal raceways and rubber-metal heels. Friction surfaces of radial bearings are reinforced with plates made of hard alloy. This allows reaching high power characteristics and increased overhaul life.

Turbodrill specification

Code of turbodrill	T1-240.NGT.M2	T2-240.NGT.M2	T3-240.NGT.M2
OD of threaded connections, mm	240		
Diameters of bits used, mm	269,9–393,7		
Turbodrill length, mm	9 958	16 698	23 438
Length of top turbine section, mm	6 985	6 985	6 985
Length of middle turbine section, mm	–	6 740	6 740
Length of bottom turbine section, mm	–	–	6 740
Length of bearing section, mm	2 973	2 973	2 973
Connecting thread to drill pipes	6 5/8 FH		
Connecting thread to bit	6 5/8 Reg		
Max. density of mud, g/cm ³	1,9		
Max. axial load, kN	300		
Weight, kg	2 535	4 275	6 015
Max. temperature in well, °C	110		

Turbodrill power characteristic

Quantity of turbine sections, pc.	1	2	3
Mud flow rate, l/sec	45–50	34–45	32–34
Mud density, g/cm ³	1,0		
Stall torque, N*m	3626–4477	4140–7252	5501–6210
Speed of rotation at operating condition, min ⁻¹	619–688	468–619	440–468
Pressure drop, MPa	3,8–4,6	4,3–7,5	5,7–6,4
Max. power, kW	118–161	101–235	127–152