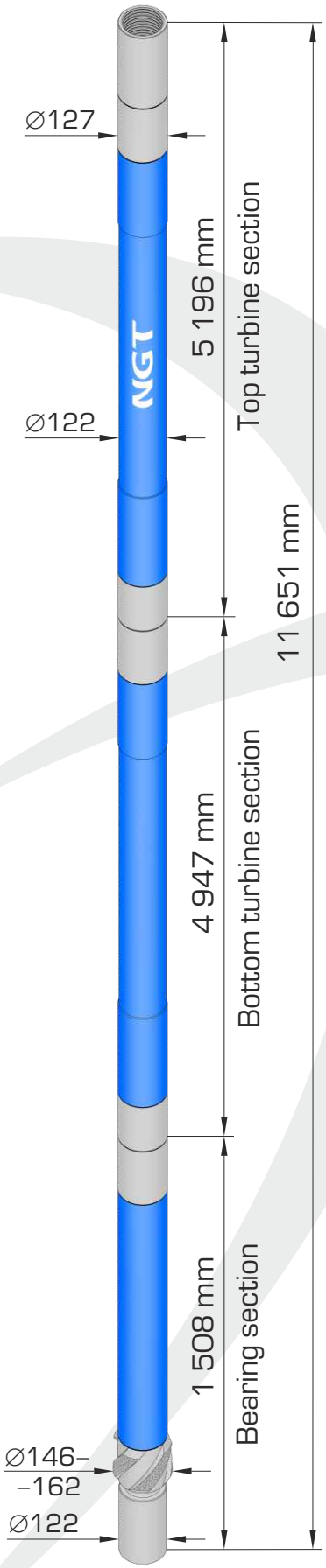
T2–127.NGT.M2



Turbodrill T2–127.NGT.M2 has high speed of rotation and is used for drilling of wells with combination and impregnated bits of small diameter.

The turbodrill contains two turbine sections and bearing section. The turbine sections incorporate the turbine of high speed of rotation and low pressure drop. The turbine efficiency constitutes 68–70% at max. power. The turbodrill bearing section operates in mud and has axial sliding bearing, the operating surfaces made of synthetic diamond. This allows reaching high power characteristics and overhaul operation life (not less than 300 hours).

Turbodrill specification

Housing OD, mm	122
OD of threaded connections, mm	127
Diameters of bits used, mm	146,0–171,4
Turbodrill length, mm	11 651
Length of top turbine section, mm	5 196
Length of bottom turbine section, mm	4 947
Length of bearing section, mm	1 508
Connecting thread to drill pipes	3 1/2 Reg
Connecting thread to bit	3 1/2 Reg
Max. density of mud, g/cm^3	1,9
Max. axial load, kN	50
Weight, kg	750
Max. temperature in well, °C	250

Turbodrill power characteristic

Quantity of turbine sections, pc.	2
Mud flow rate, l/sec	10
Mud density, g/cm^3	1,0
Stall torque, N*m	988
Speed of rotation at operating condition, min^{-1}	1236
Pressure drop, MPa	9,2
Max. power, kW	54