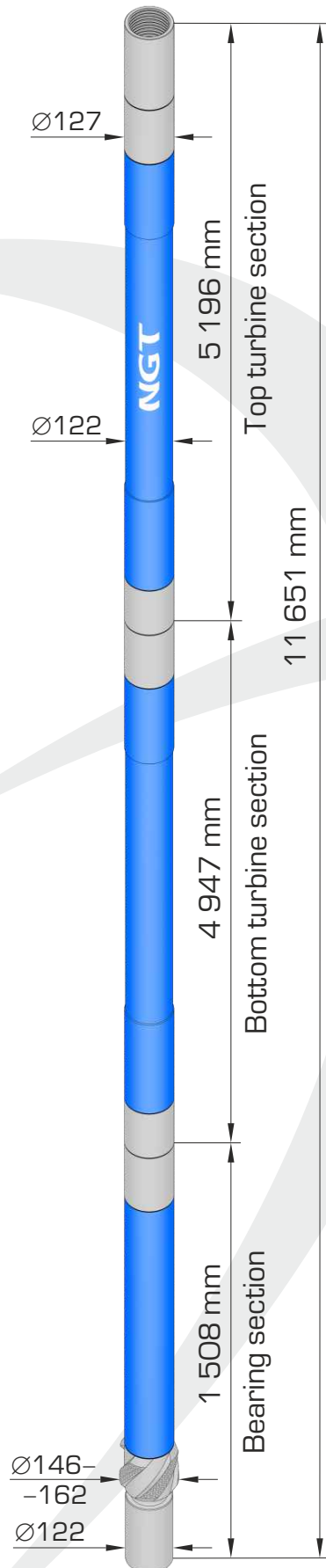


## T2-127.NGT.M1



Turbodrill T2-127.NGT.M1 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 out 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 <sup>3</sup> | 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  | 14–16     |
| Mud density, g/cm <sup>3</sup>                              | 1,0       |
| Stall torque, N*m   | 1100–1450 |
| Speed of rotation at operating condition, min <sup>-1</sup> | 1151–1316 |
| Pressure drop, MPa  | 6,3–8,2   |
| Max. power, kW  | 63–93     |