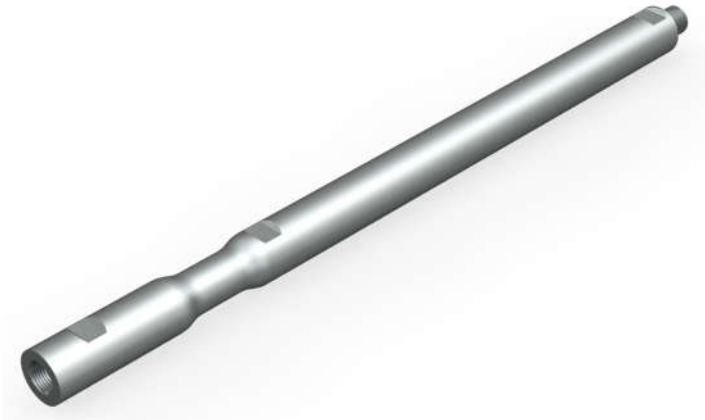DOWNHOLE TOOL
SAF. SNT (Type 604)

Short description.

Downhole tool **SAF. SNT** is designed for diagnostic studies of wells. Autonomous memory instrument is equipped with a highly sensitive noise sensor.

Tool specification.

Working environment	oil, gas, water
Maximum pressure, bar (Psi)	1 000 (15 000)
Maximum temperature, °C (F)	150 (300)
Spectral noise channel:	
Frequency range, Hz	8 - 60 000
Resolution, % Hz	56
Dynamic range, Db	80
Number of channels	1024
Recording speed, sample/sec	2
Memory capacity, hour	36
Housing material	Titan
Outside Diameter, mm	32
Length, mm	500
Connecting thread	3/4 "-16 UNF

** - the device can be used the following batteries:
1. EMMB ER14505S(black) work up to 150 ° C.
2. EMMB ER14505M (blue) work up to 85 °C.

Functions.

- Record the value of the sensors in the device memory
- Start recording at the specified time
- Start recording after the specified time
- Algorithmic recording with the creation of breaks
- Algorithmic recording with creation of different settings for time intervals
Downloading data from the tool.
Direct measurement for out-of-well testing.

Design

The device is made in the form of a cylindrical container.
It is located in the red zone electronic board, battery compartment and connector for programming.
The green zone located noise sensor. In the blue zone there is a valve for oil filling.

Package.

Tool SNT	1 pc.
Tool nose	1 pc.
Cable connection to PC	1 pc.
Packing box	1 pc.
Software	1 pc.
Set of spare rubber rings	1 pc.
Tube with lubricant for rubber rings	1 pc.
Operation manual	1 pc.

Operation with the device.

The user is allowed to open the housing for programming the device and changing the batteries. It is necessary to remove the hausing using only a wrench. (pic. 1)

To replace the batteries (pic.2)
- open the battery compartment cover
- place the batteries in positive contact inwards
- close the battery compartment cover

To connect/disconnect the device to the computer (pic.3)
- Connect the connectors as shown in the picture
- After completion of the instrument programming, disconnect the connectors

Work with Software.

To program the toll and download the recorded data, use the **Toolex** software.
To view the recorded data and combine them with the depth, use the **Grafit** software.
To interpret and generate reports, use the **OpenLog** software.

The sequence.
Make sure the driver CP210xVCP is installed
To connect the device to the serial port of the computer through a cable connection.
Run the **Toolex** software. Select **"Interface"** as **"Noise-3f"**, Select Port.

Direct measurement.
Use the **"Measurement"** tab to ensure that the instrument works. Use the "connect" button to establish communication with the tool. Make sure that everything is good, break the connection with the "disconnect" button.

Set up the device for recording.
Use the **"Set to recording"** tab to create parameters and a record algorithm.

Downloading data from the device.
Use the **"Download"** tab to get the recorded data.

More detailed information for working with the software you can find out from their manuals.

Tool maintenance.

To maintain the tool, the user must:
- Replace damaged O-rings
- Apply special grease to O-rings
- Clean after spraying with hot water under pressure
- Perform an external inspection and detect damage to the housing

Tool repair.

Repair is performed only by trained personnel according to the manufacturer's instructions.

Keeping

The product must be stored in assembled form with the batteries removed, in the package.

Transportation

Transportation of the product must be carried out in shockproof cases with a paralon bed.

Calibration and metrology

Calibration of the product must be carried out every two years at the manufacturer.
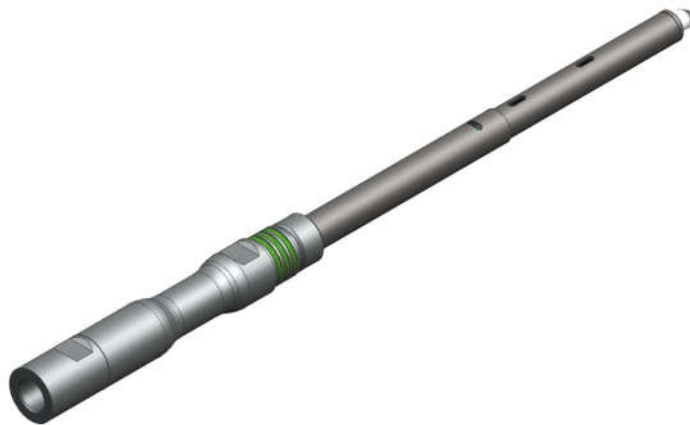
The safety

- Use the instrument for its intended purpose.
- Do not exceed the maximum pressure and temperature.
- Follow the operating instructions.

Manufacturer's warranty.

The manufacturer guarantees the conformity of products to technical requirements if the consumer terms and rules of operation and maintenance. The warranty period is 12 months from the date of sale. The warranty does not cover products with mechanical damage, as well as the repair person not authorized by the manufacturer.

Pictures.

Pic.1

Pic.2

Pic.3