

HYDRAULIC MONITOR GMZ-45 «TORNADO»

Technology of hydraulic monitor jet stimulation for effective well bore filter cleaning and matrix stimulation of bottomhole formation zone with coil tubing.

FIELD OF APPLICATION

This innovative technology allows improving tubing flushing and small diameter borehole flushing.

ADVANTAGES

The technology allows:

- - producing pulsations and low-frequency high-amplitude oscillations with any intensifying reagents, including acid complexes;
- - destroying contaminations with pressure waves propagated by the equipment and causing cyclic loading.

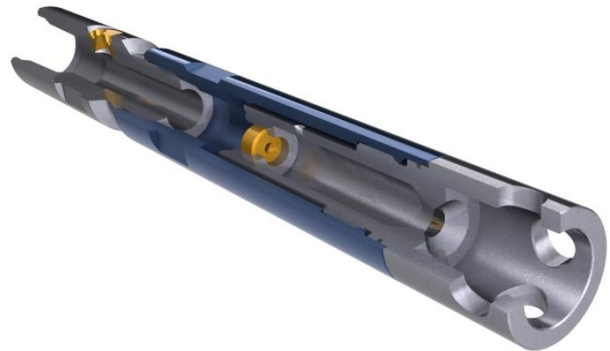
SOLUTION COMPARISON

Hydraulic jet cleaning technology provides the most efficient way to remove contaminations from lifting equipment surfaces and well bores due to oscillations and pulsations of injected active fluid flow. This technology is applicable for vertical and horizontal wells including oil, gas and injection wells. The innovation of this process consists in tuned frequency and amplitude of pressure impulses, which allows controlling the flow rate.

CHARACTERISTICS

The engineering solution is based on the use acoustic centrifugal and spray nozzles.

The bottomhole assembly is resistant to hydrogen sulfide and acid components



Acoustic centrifugal chambers improve efficiency of tubing cleaning and well bore cleaning

ENGINEERING DESIGN

Hydraulic jet cleaning with the use of GMZ-45 “Tornado”, lowered with the use of coil tubing, provides better removal of contaminations from lifting equipment surfaces and well bores due to oscillations and pulsations of injected active fluid flow.

ХАРАКТЕРИСТИКА ОБОРУДОВАНИЯ

Outer cylinder diameter, mm	45,0
Length, no less than, mm	300,0
Coupling thread	- 1.5 ASME
	- NKT – 33 GOST 633-80
Maximum operating pressure, no more than, MPa	10
Flow rate, at most, l/s	8

SAFETY

Equipment GMZ-45 “TORNADO” complies with safety requirements of Technical regulations of the Custom Union “On safety of machines and equipment” (TR CU 010/2011). The declaration is included in the Unified State Register of certificates and declarations of compliance. Registration number: EAEU №RU Д-РУ.РА09.В.43804/22

