

## What is the Nitrogen Backpressure\* solution?

The Nitrogen BackPressure\* unit offers a unique solution in the MPD world as it does not rely on tying into the mud circulating system to provide extra energy necessary to maintain the desired backpressure at surface while pumps are off.

Instead of pumping drilling fluid, either via an auxiliary pump or a separate pumping manifold, Beyond's Nitrogen BackPressure\* Unit injects a small volume of nitrogen at a pre-set pressure (defined by the user according to well requirements) in the MPD lines, allowing to maintain the pressure at surface if the choke fails to reach the necessary pressure at surface or if the surface backpressure starts to decrease during static periods (e.g. pipe connections)



## Why using the Nitrogen Backpressure\* solution?

- No need to rig-up lines to the rig pumping manifold or mud tanks
- Minimal to no field maintenance required
- The unit storage bottles can supply nitrogen for long periods of time without the need of external power
- The nitrogen generation unit can refill the storage bottles on-site, eliminating the need for bottle refilling operations
- Integrated into the Automated MPD System: The Automated MPD System will automatically start the Nitrogen system if necessary in order to maintain the surface backpressure value.
- One-button solution: In semi-automated systems, the pressure provided by the Nitrogen Backpressure\* system is activated via a regulated valve that injects the nitrogen at the desired pressure immediately, without the need to start any pump or working on opening and closing several valves in a manifold
- Minimal footprint: The unit is shipped in a 20' x 8' container, no additional lines to rig systems are required

## Applications

- Managed Pressure Drilling
- Underbalanced Drilling
- Pressurized Mud Cap Drilling

**We do  
Managed  
Pressure  
Drilling.**



\* Patent Pending

# B.E.S.T. Nitrogen BackPressure Unit\*

## Technical Specifications

Maximum Working Pressure	5,000psi	34.5 MPa
Container Dimensions	20' x 8'	6.1m x 2.5m
Nitrogen Purity	> 95%	
Bottle Bank Storage Capacity	120 USgal	454 liters
Nitrogen Generation Capacity	17.5 sft <sup>3</sup> /min	0.5 sm <sup>3</sup> /min



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