

INNOBRISTLE® - COMPLETION LINER DRIFT AND CLEANING TOOL

Superior liner brush for cleaning and drifting ahead of the completion string

APPLICATIONS

- Drift Guide for completion string
- Cleaning of casing wall
- Bottom sub fitted with Innovar magnets to pick-up metal debris

FEATURES

- Maximized fluid by-pass
- Drift size solid bottom sub
- Magnets inserted in bottom sub
- Flexible Steel brush to clean packer sealing areas
- Can be equipped with a plugged top sub
- Optional Self-aligning mule shoe to overcome restrictions/shoulders

BENEFITS

- The casing is drifted as completion string goes in the well
- The packer is not exposed to small debris that may be detrimental
- The casing wall is cleaned immediately before sealing elements are activated
- Large fluids by-pass is ensured

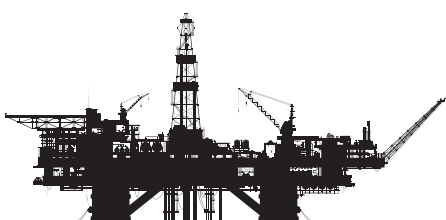
Running BHA containing multiple packers and external control lines is a high-risk operation. Mechanical well cleaning operations is recommended and is an efficient insurance, but no guarantee for a debris free well. The Innovar InnoBristle® is designed to reduce this risk by improving running conditions.

Running a bottom sub with an OD slightly larger than the packer OD, ensures that the hole is not restricted. The InnoBristle bottom sub is a solid steel component capable of taking heavy forces and yet being retrieved, as may not be the case for a packer.

To further enhance the ability to reach packer dept, the InnoBristle® bottom sub is equipped with magnets capable of picking up debris. The InnoBristle® also have a flexible brush which passes over immediately prior to activating the packer element, improving the packer ability to generate a seal against the casing wall.

As multiple packer BHAs often are equipped with sleeves and are run with plugged bottom, the InnoBristle can be equipped with a closed top sub.

A multiple packer BHA with several control lines clamped on the outside, can be very difficult to rotate. To overcome this the InnoBristle can be equipped with a self-aligning mule shoe that rotates 180 deg by simple downward force.



INNOBRISTLE® CLEANING AND DRIFT TOOL EXAMPLES*

Dimensional data		
Model	IB 100	IB 104
Max OD, inch	5,95	6,05
Min ID, inch	2,99	2,99
Length, mm	2100	3220
Material properties		
Body material	13% CR	13% CR
Magnet size, mm	Ø20x10	Ø20x10
Magnet quantity, nos	14	14
Magnet type	Innovar specified	Innovar specified
Operational data		
Top sub open or plugged	Plugged	Plugged
Connection	3 1/2" Vam Top	3 1/2" Vam Top
Circulation ports, inch	20 ports each Ø1/2"	18 ports each Ø1"
Transport Data		
Weight, kg	63	97

* The Innobristle® is a customized tool based on well specifications such as material, threads, OD and choice of self-aligning mule shoe, as well as open or plugged top sub

