The HoD® Continuous Circulation System is an innovative sub based continuous circulation technology designed to guarantee high safety standard on the rig floor through Drillmec proprietary design solutions.

During connections, flow-switching sequences are remote controlled using a HMI located in a safe area on the rig floor. Moreover, the design characterizing the HoD® subs guarantees a double safety barrier always in place both on rig floor and in the well.

Recognized Benefits with Continuous Circulation technology

- Enables drilling difficult formations with narrow pore/frac pressure windows.
- Provides constant ECD while drilling and tripping along the entire drilling phase.
- Improves borehole stability and cleaning.
- No kicks during connections and tripping phases.
- No ballooning effects.
- Reduces mud losses.
- Reduces chance of stuck pipe incidents.
- No bottom hole temperature variations due to stopped circulation.
- Allows real-time monitoring during connections.

*Stop/Start Circulation* drilling

*Continuous Circulation* drilling
HoD SUBS

HoD® Subs, mounted on top of drillpipe stands, integrates a special lateral valve characterized by the Drillmec patented technical solution that ensures the constant presence of two (2) independent safety barrier between the mud pressure inside the pipe and the outside.

- One per stand installed.
- Only for define drilling phase.
- Wireline intervention possible, if needed.
- Flexible in design to meet drillpipe specifications.

HoD MANIFOLD

The HoD® Manifold, crossed by the mud flow only during connections, ensures fast mud flow switching from top drive to sub side port and vice versa without flow rate variations.

- 5,000–7,500 psi pressure rated, 1,200 gpm max flow rate.
- ESD to immediately isolate the Manifold from the mud circuit in case of emergency.
- Pressure relief valve to immediately detect and adjust abnormal pressure in the Clamp line and divert the mud flow to the bleed off line.
- Easy integration in the rig mud system.

HoD AUTOMATED CLAMP

The HoD® Clamp provides the sub side port opening / closing without manual actions. The operative sequence is performed in a fully automated way by means of a HMI located in a safe area on the rig floor.

- Integrated control system.
- Hydraulics suspension device.
- Easy, fast and ergonomic handling.
- Very low space required on the rig floor.

XHoD CONTROL SYSTEM

The XHoD Control System, integrated in the HoD® Manifold, it gives the operators the capability to easily manage and control the operative sequences related to drillpipe connections without mud flow interruptions away from risk areas on the rig floor.

Flow switching procedure is automatic and controlled by PLC with fail safe features.

COMPLETE FIELD SERVICE

Skilled Crew
- Equipment installation
- Operations
- Maintenance
- Training

Engineering Support
- Complete engineering support for rig survey, installation layout and operations on-site.

HoD CC Set
- Complete set suitable to drill with continuous circulation one or more drilling phases as required by drilling program.

Workshop Container
- Workshop container complete of spare parts and tools to perform maintenance directly on-site.