

Advancing Performance

Boost drilling performance every day with proven technology designed with the driller in mind. Contact us for more specific package details at drilling@afglobalcorp.com.



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PERFORMANCE DRILLING PACKAGE

Getting the Most Out of Closed-loop Operations



Task-specific intelligent controls enhance precision with built-in algorithms for applying surface back pressure, automating ramping schedules, early kick detection, and other standard applications. A minimal set of valves, chokes, and other specialized equipment completes the toolkit in a low-footprint package that easily integrates with the rig.

The Performance Drilling Advantage

Our Performance Drilling suite of products puts the advantages of closed-loop circulating systems in the hands of the crews who use it every day. We make closed-loop operations a practical reality for drillers, delivering the benefits of active pressure management while maximizing efficiency and reducing complexity.

Our equipment package and software provide the rig with the following capabilities:

- Applied surface back pressure (ASBP)
- Automated ramp schedules during connections
- Early kick loss detection (EKLD)
- Choke condition-based monitoring (CBM)

Our extensive experience in engineering, operations, and manufacturing has produced the optimal tools for tasks with the driller in mind. The cornerstone of our toolkit is the L-Series RCD, designed specifically for the efficiency and performance required in land rig operations. This innovative

RCD and bearing design provides the driller with a high performance, compact solution—delivering lower OPEX over the life of the tool.

Built around our industry-leading RCD technology, metering and measurement package, and task-specific intelligent control, our closed-loop toolkit enables drilling contractors to safely and efficiently maximize performance with industry-proven solutions that deliver.

- Increased ROP
- Improved safety
- Increased hole stability
- Reduced stuck pipe incidents

Performance Drilling Manifold

AFGlobal's Performance Drilling manifold is a pressure control and metering block manifold, consisting of a durable MPD drilling choke and a purpose-built flowmeter. This manifold is designed for deployment on land rigs, offshore jack-up rigs, and platform drilling units, as part of an MPD or closed-loop system.

Key features include:

- Advanced choke controller for accurate ASBP
- Flowmeter installed upstream of the MPD choke to provide more accurate fluid flow rate measurement
- Compact pipe and block manifold with minimal footprint, including integral DNV lifting frame for temporary installations on jack-up rigs.

L-Series Rotating Control Device

AFGlobal's L-Series (land) rotating control device (RCD) is designed to help operators and drilling contractors

confidently overcome the challenges of drilling in extreme environments onshore. From the seal element geometry to the housing material selection, all components of the L-Series RCD ensure the safety of the rig crew by creating a leak-free seal between the annulus and the drill pipe. This seal enables the operator to safely divert fluid returns during drilling and stripping operations.

The advanced bearing design and internal dynamic seals extend the life of the bearing, resulting in fewer bearing assembly change-outs and a reduction in non-productive time (NPT). The unique bearing design enables the rig crew to take full ownership of their bearing maintenance and redress, which significantly reduces the life cycle cost of the L-Series RCD.

The clamp-less hydraulic latching dog mechanism enables quick one-piece bearing and seal assembly installation, and removes the requirement for rig personnel in hazardous zones.



Technical Overview:

- Manufactured in accordance with API 16RCD
- Static ratings up to 5,000 psi
- Unique seal carrier design for extended rotary seal life
- Bearings mounted specifically for increased radial load capacity
- Precise bearing preload without the use of springs or shims
- Circulated or sealed bearing options
- Rotational speeds in excess of 220 rev/min