

DrillOps

On-target well delivery solution



Deliver consistency and performance improvement with DrillOps™ on target well delivery solution, part of our Delfi™ digital platform collaborative technology.

Applications

Onshore and offshore drilling

How it improves performance

- Provides consistent rig performance.
- Increases efficiency by improving ROP and enhancing bit and tool performance.
- Reduces operational downtime by autonomously mitigating risks.
- Coordinate planning and execution workflows digitally.
- Track the sequence, duration, and completion of all planned and unplanned activities.
- Display operations in weekly and monthly views to improve logistics.
- Manage risks and prevent service quality events by displaying risks in the right context.
- Capture knowledge at any point during well construction.
- Provides AI-driven advisory support for drilling, steering and tripping operations.

How it works

The DrillOps™ on-target well delivery solution is the execution component of our integrated and interconnected digital well constructing planning and operations solution. The DrillOps solution ensures rigs are operating at peak performance throughout the execution of the digital drilling plan—it is an opportunity to build new levels of digitalization, optimization, automation, and cognition directly into existing drilling operations. With the DrillOps solution, operators can accomplish this in a consistent way that delivers autonomous drilling, while securing progress towards their own business goals for drilling efficiency and more productive wells. The DrillOps solution consists of multiple workflows that provide automation, orchestration and advisory functionality.

DrillOps Orchestrate workflows

DrillOps Orchestration workflows execute the digital drilling plan and ensure plan adherence. They improve collaboration and coordination by directing the relevant information to the right people, at the right time, and in the right context. Since workflows are curated centrally by the system, step-by-step activity plans are automatically generated for individual operations teams, to keep all teams aligned (town and rig). With all well construction activities from tripping to cementing continually monitored and dynamically updated with the latest operational activity, your operations team is always up to date.



DrillOps solution drillers view dashboard with automation delivering performance optimization

DrillOps Advisory workflows

DrillOps Advisory workflows are smart software applications providing real-time recommendations to the driller to optimize a particular activity ranging from drilling optimization (increasing ROP and managing drilling dysfunctions and hard stringers) to motor steering optimization (for trajectory control purposes). A new tripping advisor is currently under development. These smart applications or advisors were developed with a clear understanding of the importance of usability and situational awareness to empower drillers to easily follow the recommendations, increase their competency levels, always feel confident and in control, and most importantly, to deliver outstanding and consistent performance and safe operations.

DrillOps Automation workflows

DrillOps Automation workflows use AI and a goal-based approach to handle constantly changing drilling conditions. The software implements contextually relevant procedures to deliver efficient, consistent, standardized well construction operations while enhancing safety and reducing NPT. It directs the rig control system to command the surface equipment (drawworks, autodriller, top drive, and pumps) within the context of standard operating procedures (SOPs) and best practices. It uses powerful data analysis and learning systems to assist and enhance every task from optimizing ROP, to drilling a stand autonomously. Automation ensures procedural adherence and delivers unparalleled consistency, helping you achieve maximum performance on every well.

Drilling operations on Delfi

The takeaways

The DrillOps solution runs on the Delfi™ digital platform and is fully integrated with DrillPlan and Drilling Insights solutions. Companion solutions include the, Techlog™ wellbore software platform and IDS Reporting. Available as stand-alone solutions or together, as integrated solutions providing both onshore and offshore E&P well operators with a comprehensive end-to-end drilling solution—they are better equipped to deal with well construction challenges, from initial well planning to well execution completion.

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What is the Delfi platform?

The secure, scalable, and open cloud-based Delfi platform offers solutions, apps, AI, physics-based science, and advanced edge and IoT solutions, with free-flowing data, to improve their exploration, development, drilling, production, and new energy operations. The Delfi platform connects workflows across E&P, so your domain teams can collaborate seamlessly and innovate faster at enterprise-level, driving maximum business performance, lower cost and lower carbon.