

Drilling Insights

Intelligent well data solutions



Access and analyze all your drilling data through real-time predictive analytics and multiwell data driven learnings with Drilling Insights intelligent well data solutions, part of our Delfi™ digital platform collaborative technology.

Applications

Onshore and offshore drilling

How it improves performance

- Accesses and aggregates all surface, downhole, and equipment data for visualization and analysis
- Intelligently monitors drilling conditions
- Delivers automated and predictive analytics
- Optimizes real-time drilling performance
- Improves decision making to reduce risks
- Minimizes nonproductive time (NPT)
- Accelerates learning through systematic multiwell performance analysis

How it works

Drilling Insights intelligent well data solutions, provides rapid access to data anytime, aggregating it and curating it to enable both real-time decision support, through automated intelligent surveillance with AI-driven predictive analytics, and data driven learnings, by integrating past and present data to deliver systematic multiwell performance analysis and learnings for E&P well operators. Used in stand-alone mode, with a choice of workflows, or fully integrated with the DrillPlan™ coherent well planning solution and DrillOps™ on-target well delivery solution, Drilling Insights helps visualize multiwell drilling data in real time on a single screen, so that you can address critical issues quickly. With built-in customizable smart alarms, the solution automatically flags out-of-spec conditions and recommends appropriate actions to help you optimize drilling performance, avoid risks, and minimize NPT. Drilling Insights delivers data-driven learnings by extracting actionable insights from drilling data, helping to improve the quality and speed of decision-making during planning and operations. With custom visualization dashboards and intuitive multiwell analysis, computation of KPIs across rig fleets is rapidly available. Now with mobile compatibility, you can access your data analysis at any time.

Smart, automated, and predictive analytics

Drilling Insights provides intelligent, automated analytics that guide you through all the intricacies of the drilling process, delivering performance improvement and optimization. Data is rapidly delivered and undergoes automated quality assurance and quality control checks to enable AI workflows for performance optimization. A stuck-pipe feature shows continuous torque and drag data as drilling progresses to monitor friction at connections and help you avoid stuck-pipe incidents. Vibrations in the drillstring are flagged if they violate constraints and reported with a recommendation for corrective actions. Real-time performance statistics, alerts, and recommendations of this nature are available throughout the drilling, tripping, and casing processes. The system helps ensure well integrity by using real-time hydraulics modeling to minimize risk of influxes, losses, and wellbore stability. Drillstring integrity calculations use machine learning to automatically flag problematic drillstring dynamics and eliminate washouts.

The system automatically monitors and reports data-quality issues and alerts you when key real-time data channels are missing or require calibration. Having all wells and rigs viewable in a single dashboard reduces the need for additional resources.



Automatically calibrated real-time hydraulics modeling ensures accurate assessment of the risk of influx, losses, and wellbore instability.

Data driven learning with Performance Insights

Drilling Insights has a multiwell analytics platform, Performance Insights, which aggregates rig data and reporting data. Drilling Engineers can use this functionality to analyze operational performance and events more efficiently, adding context to the analysis, and storing the results as lessons learned or best practice.

A set of curated workflows have already been developed to enable optimized data driven learning.

Drilling data insights on Delfi

The takeaways

Drilling Insights runs on the Delfi™ digital platform and comprises multiple workflows delivering realtime decision support and data driven learnings. It is available stand alone or can be integrated with the DrillPlan and DrillOps solutions. Companion solutions include Techlog™ wellbore software platform and IDS Reporting. Drilling Insights provides both onshore and offshore exploration to production (E&P) well operators with a comprehensive end-to-end drilling data solution—they are better equipped to deal with well construction drilling data challenges, from planning to operations.

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.

