DRILLMEC
DRILLING TECHNOLOGIES

GREEN SOLUTIONS

DELIVERING SUSTAINABLE DRILLING OPERATIONS WORLDWIDE

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Setting a progressive example for the industry, promoting sustainable drilling practices and contributing to a greener tomorrow

By embracing this environmentally conscious solutions, Drillmec sets a positive example for the industry, promoting the adoption of greener practices in the realm of drilling operations.

These operational enhancements directly translate into lower operating costs, making drilling rigs more economically competitive, while contributing to a greener and more sustainable drilling industry.
As the world moves towards stricter environmental standards, rigs equipped with this cutting-edge technology can readily adapt to comply with the emerging requirements, ensuring long-term sustainability and market competitiveness.

PANORAMIC VIEW

Green Solutions

GRID LINE CONNECTION

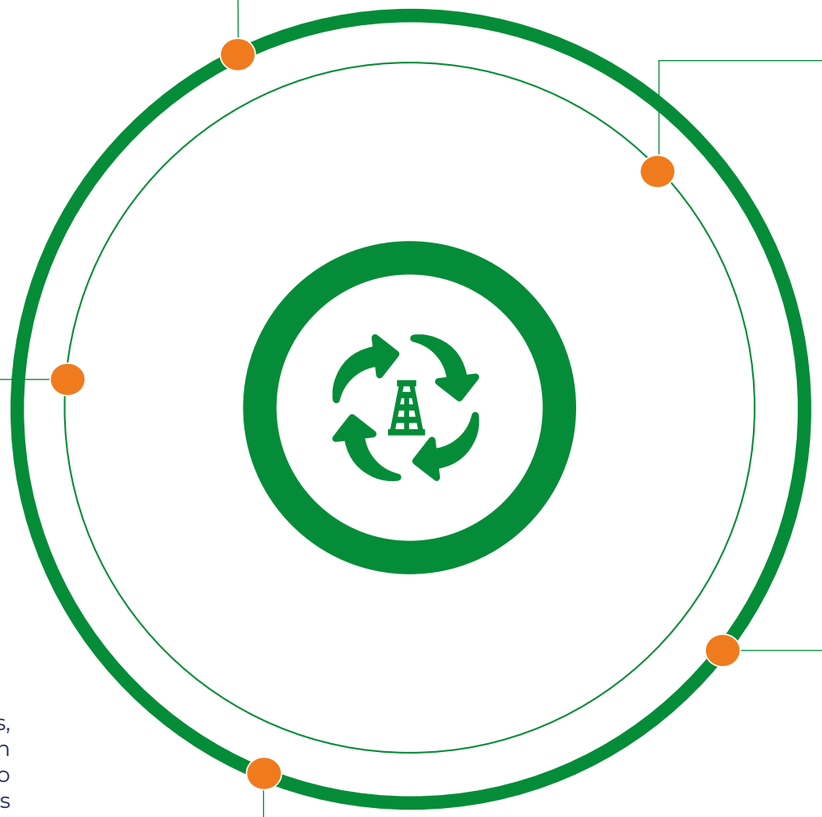
Through the preparation of the PCR for the installation of a Transformer, and with the installation of the transformer itself, it is possible to power the rig and its related utilities. This eliminates the need for generators drastically **cutting CO2 emissions** (the emergency generator remains in case the grid power fails).

BATTERY POWER SYSTEM (**BPS**)

The implementation of the Battery Energy Storage System represents a transformative step in the drilling industry, offering a Hybrid Power Solution that brings about remarkable benefits for both rig operations and the environment.

ECO POWER MANAGEMENT (**EPM**)

The EPM (Eco Power Management) system monitors, compares and optimizes optimize power consumption against obtained ROP. As a result, it suggests how to reduce gas consumption, fuel emissions, working hours of the generators, preventing gear overload and favoring scheduled maintenance.



RIG ELECTRIFICATION

Over the years, based on requests for modifications of individual Drillmec equipment, a comprehensive rig electrification service has been developed. This involves replacing all combustion engines present in the rig/equipment with electric motors and integrating a PCR into the package for managing these motors.

CARBON FOOTPRINT DECLARATION

In collaboration with an external certification body, Drillmec is capable of issuing and providing customers with Carbon Footprint Declarations, certifications of the specific rig's environmental impact. The certificates are prepared in close connection with the rig's characteristics, thus varying from case to case depending on the composition.

Grid Line Connection

By relying on the Grid Line Connection and its power supply, the rig's operations become more environmentally friendly and sustainable, removing almost all rig's emissions.

The Grid Line connection is established by carefully preparing the Power Control Room (PCR) for the seamless installation of a Transformer. Once the transformer is successfully integrated into the system, it becomes a viable means to power the rig and all its associated utilities. This transformative approach brings with it a host of advantages, most notably the elimination of conventional generators and the associated emissions they produce.

The introduction of the Transformer allows the rig to tap into the existing power grid, utilizing electricity as the primary source of energy instead of relying solely on combustion-based generators. As a result, harmful emissions are significantly reduced, contributing to a cleaner and greener operational environment. By adopting this eco-conscious solution, Drillmec demonstrates a commitment to environmental responsibility and the reduction of its carbon footprint.

While the Grid Line connection offers substantial benefits, Drillmec recognizes the importance of ensuring uninterrupted power supply to maintain operational continuity. To address this concern, an emergency generator remains on standby, ready to activate automatically in the event of any grid power failures. This contingency measure ensures that the rig's critical functions can continue without interruption, further enhancing operational reliability and safety.

In summary, the Grid Line connection, facilitated by the installation of a Transformer and supported by an emergency generator, presents a modern and sustainable approach to power the rig and its utilities. By embracing this environmentally conscious solution, Drillmec sets a positive example for the industry, promoting the adoption of greener practices in the realm of drilling operations.

Battery Power System (BPS)

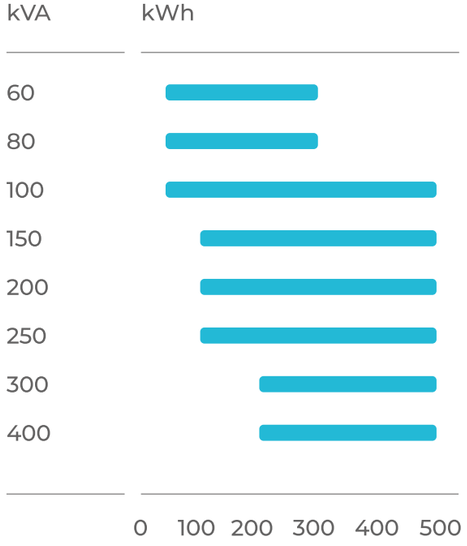
A win-win solution leading to significant engine runtime reductions and diesel savings, making rigs more competitive.

By harnessing the capabilities of the Battery Energy Storage System, drilling rigs gain the flexibility to run with fewer engines or at lower engine loads. This adaptability optimizes energy consumption, resulting in significant reductions in engine runtime. As a result, rigs experience improved fuel efficiency, leading to substantial diesel savings. These operational enhancements directly translate into lower operating costs, making drilling rigs more economically competitive.

Beyond the economic advantages, adopting this Hybrid Power Solution is a testament to Drillmec's commitment to environmental stewardship. The reduced engine runtime and diesel consumption have a direct positive impact on carbon emissions, contributing to a greener and more sustainable drilling industry. By embracing the Battery Energy Storage System, Drillmec positions itself as an industry leader in adopting eco-friendly practices and demonstrates its readiness to meet increasing environmental regulations in future markets.

Moreover, by investing in the Battery Energy Storage System technology, drilling rigs become more resilient and prepared for the evolving landscape of environmental regulations. As the world moves towards stricter environmental standards, rigs equipped with this cutting-edge technology can readily adapt to comply with the emerging requirements, ensuring long-term sustainability and market competitiveness.

This innovative Hybrid Power Solution not only positively impacts operating costs but also safeguards the rig's future viability in the face of increasingly stringent environmental regulations. By adopting this technology, Drillmec showcases its dedication to sustainable practices and sets a progressive example for the drilling industry.



Eco Power Management (**EPM**)

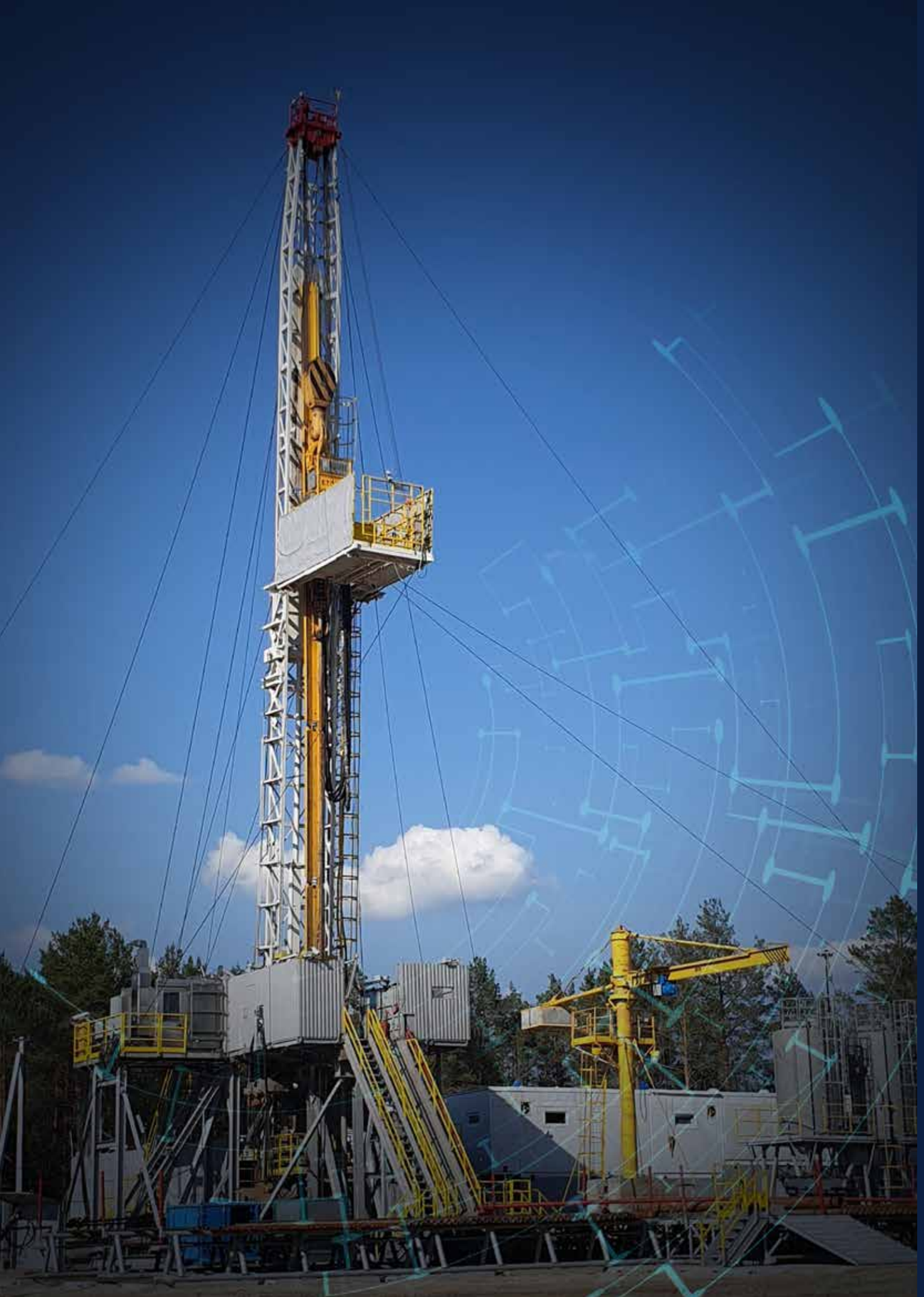
The Eco Power Management (**EPM**) is a cutting-edge technological solution designed to revolutionize power consumption ensuring that every watt of electricity is utilized efficiently, minimizing environmental footprint while maximizing performance and cost savings.

At its core, the EPM system utilizes advanced sensors and data analytics to continuously monitor and analyze power consumption patterns in real-time. By comparing the actual power consumption with the obtained ROP (Rate of Production), the system identifies potential areas of improvement and opportunities for optimization.

One of the primary benefits of the EPM system is its ability to provide actionable insights on reducing gas consumption and fuel emissions. Moreover, this system plays a pivotal role in optimizing the working hours of generators. By dynamically adjusting power usage based on production demands and load requirements, the system ensures that generators operate at their most efficient levels, avoiding unnecessary energy wastage. This not only reduces operational costs but also prolongs the lifespan of the generators, translating into long-term savings and reduced maintenance expenses.

Additionally, the EPM system acts as a protective shield against gear overload. Through real-time monitoring of equipment performance, the system can detect any signs of stress or potential malfunctions, promptly alerting operators to take preventive measures. By proactively addressing such issues, the system prevents costly breakdowns, minimizing downtime, and enhancing overall productivity.

Scheduled maintenance is another critical aspect that the EPM system excels in. By analyzing historical performance data and predictive algorithms, the system can generate optimized maintenance schedules. This ensures that maintenance activities are carried out at the most opportune times, avoiding disruptions to production while optimizing equipment health and performance.



Rig Electrification

Refining and expanding its rig electrification service, has led to the development of a comprehensive solution that revolutionizes the way rigs are powered and operated, paving the way for a greener and more sustainable future in the drilling industry.

The core of the rig electrification process lies in the systematic replacement of all conventional combustion engines present in both the rig and associated equipment. These traditional engines are substituted with advanced electric motors, which offer enhanced efficiency and lower environmental impact. By making this transition, Drillmec takes significant strides towards reducing greenhouse gas emissions and minimizing the rig's carbon footprint.

To ensure seamless integration and optimal performance of the newly installed electric motors, a Power Control Room (PCR) is integrated into the electrification package. This central command center is equipped with cutting-edge technologies to monitor, control, and optimize the operation of the electric motors. The PCR plays a crucial role in managing power distribution, ensuring energy efficiency, and contributing to the overall sustainability of rig operations.

As a result of successful rig electrification, the next step involves the potential installation of a transformer. This strategic addition allows the rig to tap into external power sources, such as the Grid Line connection, further reducing reliance on conventional generators and fossil fuels.

In conclusion, Drillmec's rig electrification service sets a progressive example for the industry, promoting sustainable drilling practices and contributing to a greener tomorrow.

Carbon Footprint Declaration

Drillmec has established a collaborative partnership with an external certification body to offer an invaluable service known as Carbon Footprint Declaration.

The process of obtaining a Carbon Footprint Declaration involves a meticulous and data-driven approach. Working closely with the certification body, Drillmec conducts a detailed assessment of the rig's operations, taking into account various factors such as energy usage, fuel consumption, waste management, and other relevant parameters. This thorough evaluation ensures that the resulting declaration accurately reflects the rig's carbon footprint and its ecological impact.

The certificates issued are tailored to each rig's unique characteristics and operational profile. As no two rigs are exactly alike in their setup and activities, the Carbon Footprint Declaration varies from case to case, providing a personalized and precise representation of the rig's environmental performance.

By offering Carbon Footprint Declarations, Drillmec demonstrates its proactive stance towards sustainability and environmental accountability. This service not only showcases the company's dedication to reducing its carbon footprint but also empowers its customers to engage in environmentally conscious practices. Armed with the valuable insights provided by the certification, customers can identify areas where improvements can be made and implement strategies to enhance their ecological performance.

As Drillmec continues to collaborate with the certification body, it reaffirms its role as a responsible and forward-thinking industry leader. By providing customers with transparent information on the environmental impact of their rigs, Drillmec fosters a culture of environmental awareness and responsibility within the drilling sector. Embracing the Carbon Footprint Declaration service, both Drillmec and its customers contribute to a more sustainable future, one rig at a time.

HH Series Rigs
The shape of things to come

Drillmec's hydraulic drilling rigs emerged from the need to meet the demands of today's E&P companies that require a rig with high performance, lower NPT, lower operational cost, least environmental impact, and high safety.

Drillmec fused all these criteria in the HH Series rigs. This series of hydraulic drilling machines are specially designed for safety, efficiency, and speed as well. This is a masterpiece rig ready to deliver optimal results safely. Long before Green Economy was a trend, Drillmec designed the **HH Series** with two main objectives: **performance** and **sustainability**. Throughout our history, we have always striven to **improve rig performance** in a **conscious way.** We implemented our vision to hit and exceed stringent environmental and technical requirements by developing the **HH Series rigs**: top tier technology in an **environmentally-friendly rig**.

Innovation. Deep down.

ITALY | PIACENZA

USA | HOUSTON

INDIA | HYDERABAD

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