12000+!Set off towards the depths of the Earth again!

Recently, DEC HongHua successfully won an order for a 12,000-meter ultra-deep drilling rig project.This project is scheduled to commence drilling in Xinjiang within the current year.In 2024, We will set forth once again, armed with advanced technology.Marching steadily towards the Earth’s depths of 12,000 meters.

General Secretary Xi Jinping proposed, "Advancing into the depths of the Earth is a strategic technological challenge that we must address."

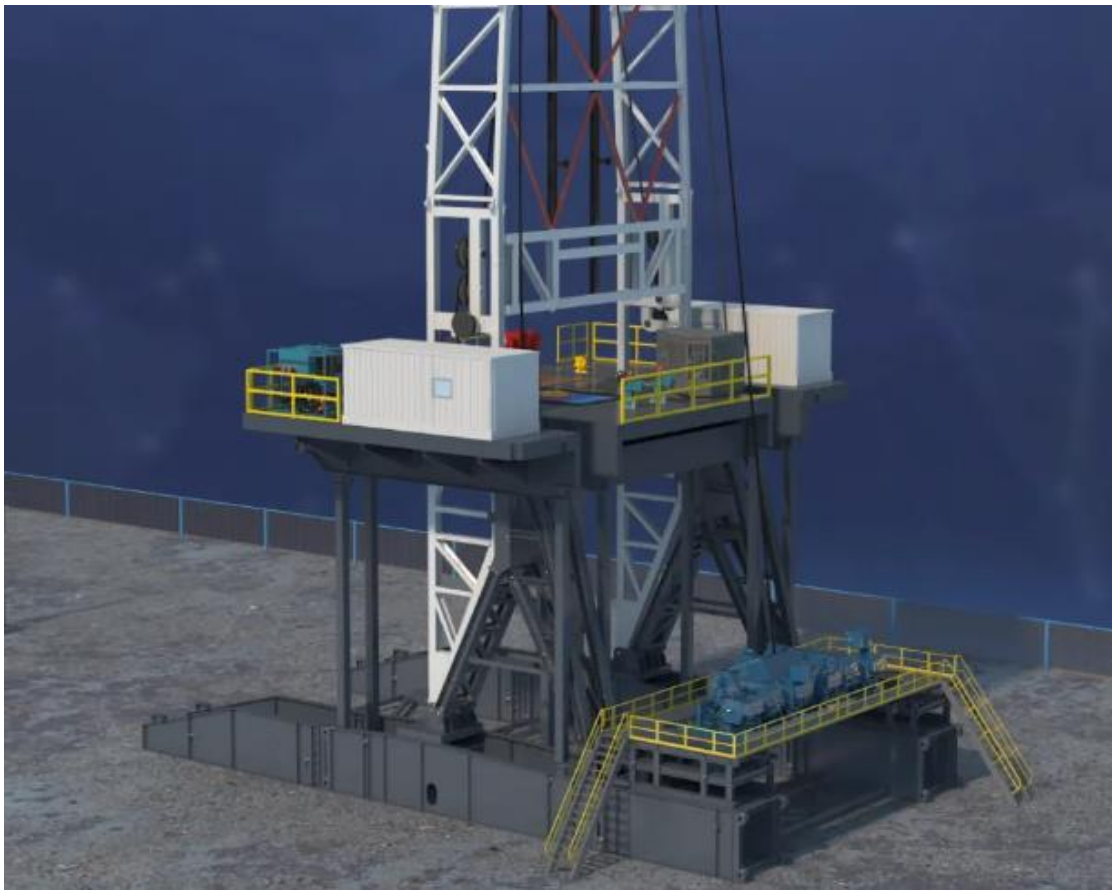
In 2018, DEC HongHua actively responded to the national strategy with the "Crust No.1" 10,000-meter scientific drilling rig, setting a new record for continental scientific drilling in Asian countries. It stands as the world's first onshore drill penetrating the scientific strata dating back approximately 65 to 145 million years in the Cretaceous period.

Xinjiang, as a primary region for the growth of China's oil and gas production and the largest strategic replacement area for the petroleum and natural gas industry, has become a crucial

growth center for oil and gas production in recent years through deep exploration and development. The 12,000-meter enhanced drilling rig in this case possesses key core technologies for "grand ambitions" in Xinjiang, including advanced drilling techniques, efficient rock analysis and evaluation technologies, and globally leading underground automated operation technologies. By comprehensively applying these technologies, the drilling rig aims to enhance exploration and development efficiency, reduce costs, and contribute to the ambitious plans for the Xinjiang region.

Feature one：Tremendous Bearing Capacity

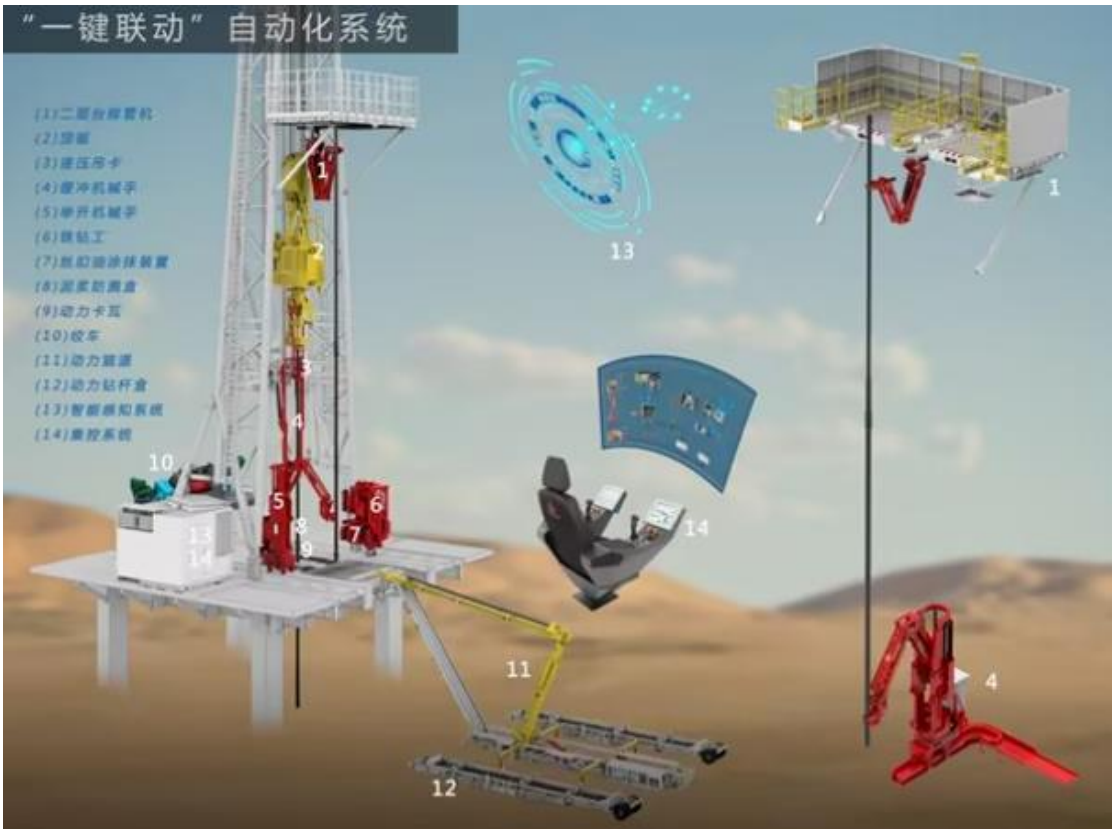
The newly developed 12,000-meter ultra-deep intelligent drilling rig. As the largest load-bearing drilling rig from DEC Hong hua, its hook load capacity can reach 1000 tons. The load capacity of the mast and substructure exceeds international standards by 10%, meeting the demand for discharging more stands when drilling deep wells. It can not only meet the requirements of ultra-deep wells such as 12,000 meters but also continue to expand to achieve depths beyond 12,000 meters.



Feature two:"RTS"（Raping tripping system）HH

To achieve safe and efficient operation, the structural safety, reliability, and operation intelligence of the drilling rig are crucial. In conjunction with DEC Honghua's self-developed "one-click linkage" automatic pipe handing system RTS, which integrated lifting and transportation, multi-system coordination, intelligent perception, and integrated control, the iron floor Man and pipe handing system on the monkey board are synchronized actions. This system enables vertical transfer and handover of the

drill pipes, facilitating automated operations in the major areas: ground level, rig floor and elevated areas. This lays a solid foundation for the efficient and safe operation of the drilling rig in ultra-deep environments.



Feature Three: Splitting from "Large Objects" to "Small Objects"

In terms of drilling rig installation and transportation, the 12,000-meter ultra-deep intelligent drilling rig adopts modular design to achieve the splitting from "large objects" to "small objects." This not only facilitates assembly but also enables adaptation to poor road conditions, ensuring the safe and intact transfer of components. It enhances efficiency in installation and drilling operations.

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Feature four: Optimization of the mud processing flow

In terms of the solid control system, optimization of the mud processing flow has been conducted to maintain stable drilling fluid performance and improve liner life. Integrated design is adopted to reduce the number of moving modules, thereby significantly reducing transportation costs.

Feature Five: Significant Enhancement in Drawworks Hoisting Capacity

Adopting a monolithic structure, small in size, lightweight, and easy to transport.Utilizing high-power dedicated motors, reducing the overall rotational inertia of the draw works , resulting in faster acceleration.The disc brake hydraulic station is integrated into the draw works skid, providing quick brake response and fewer transportation modules.The drum adopts a removable structure with rope grooves and side plates, allowing for quick replacement after wear without disassembling the drum and shaft.

In 2024, DEC Honghua will carry the newly developed 12,000-meter ultra-deep domestically produced intelligent drilling rig, along with automated equipment, top drives, and other devices, along with leading drilling and completion

technologies, to venture into the depths of the Earth beyond 12,000 meters. This will greatly contribute to the exploration and development of deep oil and gas resources and enhance China's capabilities in ultra-deep drilling and petroleum equipment technology services.