

# Low-pressure energy storage containers for drilling sites





## Overview

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Can electric energy storage systems be used for drilling rigs?

The work to develop electric energy storage systems for drilling rigs has been underway worldwide for the last 5 years, however, mainly targeting isolated offshore rigs.

How can energy storage improve land drilling operations?

Overall, energy storage solutions integrated with natural gas, dual-fuel, or diesel technology can reinvent land drilling operations by lowering fuel costs, maximizing capital efficiency, and meeting lower emissions regulations. This hybrid system is a significant reduction in the total cost of ownership for drilling contractors and operators.

Which rigs have energy storage systems for onshore drilling?

The energy storage system developed for onshore drilling is among the world's first ones. As a foreign analog, only the project of the German rig manufacturer Bentec implemented in Oman can be highlighted. In 2017, the container-type 0.9 MW Bentec ESS with a storage capacity of 0.3 MW was put into trial operation on the KCA Deuteg T-94 rig.

Can electric energy storage be used for drilling based on electric-chemical generators?

The article outlines development of an electric energy storage system for drilling based on electric-chemical generators. Description and generalization are given for the main objectives for this system when used on drilling rigs isolated within a single pad, whether these are fed from diesel gensets, gas piston power plants, or 6–10 kV HV lines.



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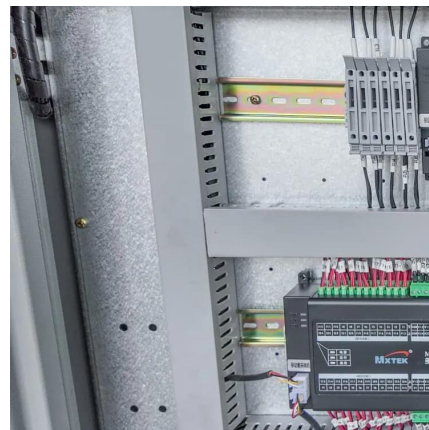
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