

Press

Headlines

Operation Highlights

Technology
Innovation

Shengli Energy's Unmanned Trucks Operate for Over 300 Consecutive Days

Author: Source: Pubdate: 2023-12-13 Font size: 【L M S】

Shengli Energy's unmanned mining trucks have achieved continuous operation 24-hour a day for more than 300 days, with a comprehensive average efficiency reaching 90% of that of manned trucks.

Since the beginning of this year, in order to improve operational efficiency and ensure safe operation, Shengli Energy has introduced a unmanned system and organized technical personnel to go deep into the mining site four times to conduct specific research and full-process surveys on topics ranging from unmanned loading, transportation, earth discharge, and dispatching management, to vehicle status monitoring. They have identified 31 bottlenecks hindering the enhancement of efficiency. Based on in-depth research and analysis, such efforts have effectively shortened the vehicle entry and change time, increased the vehicle speeds, improve the safety of cooperative operation terminals, and improved the operation efficiency, safety guarantee ability and adaptive ability of the unmanned driving system while ensuring safe operation through optimizing the loading and replacement logic, vehicle speed planning and mechanical braking and electric braking input logic, increasing sound and light alarms, developing remote parking function and other measures.

The company has built a complete set of intelligent unmanned production and transportation control system, and completed the unmanned transformation of seven 220-tonne dump trucks. Through coordinating with auxiliary equipment such as electric shovels, bulldozers, and sprinkler trucks, it has realized the all-weather regular operation of 220-tonne mining dump trucks without in-vehicle safety personnel for the first time in China. To date, its unmanned trucks have completed transportation operation 60,254 times, with a total mileage of more than 270,000 kilometers and transporting more than 5.72 million cubic meters of earthwork. The maximum daily number of unmanned trucks in operation reached 358, with an hourly operation of 20 vehicles. The average efficiency reached 85% of that of manual operations, with the maximal efficiency being 95%.



China Shenhua WeChat

Parent Company

- CHN ENERGY

Domestic Peers

- Shandong Energy Group
- Shaanxi Coal and Chemical
- Shanxi Coking Coal Group
- China Huaneng Group
- China Huadian
- Daqin Railway
- Jinneng Holding Group
- Jizhong Energy
- Henan Enery and Chemical
- China Datang
- State Power Investment
- Qinhuangdao Port

Global Peers

- Glencore
- BHP
- Iberdrola
- E.ON
- Duke Energy
- CHUBU
- Peabody Energy
- Riotinto
- AngloAmerican
- Enel Group
- RWE
- TEPCO
- Kansai Electric Power