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Zhungeer Energy's Heidaigou Mine Passes Acceptance Inspection for China's First Group of Intelligent Demonstration Coal Mines

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On March 2, the Heidaigou open-pit coal mine and its auxiliary coal preparation plant under Zhungeer Energy Group passed the acceptance inspection for China's first group of intelligent demonstration coal mines. Meeting the standards of intermediate intelligent mines, Heidaigou has become a leading state-class open-pit coal mine in terms of intelligent mining, providing the "Zhungeer Energy model" for intelligent transformation of other open-pit coal mines.

After strict and careful assessment and evaluation, the expert group concluded that Zhungeer Energy Group's Heidaigou mine has built a 5G network that covers the office area and the unmanned operation area under the pit, and established a 140G optical transmission network system that realizes high-speed communication of video surveillance devices, industrial network and office network. The coal mine has established a geological surveying and mining information management system, which realizes the intelligent design of three-dimensional mining and combines functions such as geological information management, mining and drainage planning, production planning design, blasting design, and quantity calculation. The application of the blasting digital integrated processing system, explosive mixed loading vehicles, intelligent drilling rigs, gun hole measurement robot, etc. enables automatic drilling design, intelligent hole placement, independent hole finding, intelligent drilling and other functions, realizing full-process intelligent control of drilling and blasting. The single-bucket truck interruption technology realizes the intelligent coordination of "mining, transportation and drainage", and the coal mine is equipped with 18 300-tonne unmanned trucks. The throwing and blasting technology, coupled with bucket shovel reverse stacking process, allows the coal mine to integrate "mining, transportation and drainage" and save manpower. Moreover, the mine connects information of diverse sectors, combines production and operation data, and fully integrates various information with finance, achieving statistics and tracking of planning, production, scheduling, materials, equipment, sales, and financial information.

In addition, an intelligent dispatching command platform and a comprehensive management platform have been built to achieve visualized, controllable intelligent management of personnel and equipment, improving management efficiency and personnel safety management and control capabilities. Its coal preparation plant has built an intelligent management platform, which realizes intelligent raw coal transportation, jig sorting, shallow-trough sorting, slime water treatment, and refined coal loading, thus increasing the coal washing and washing efficiency. Members of the expert group unanimously agreed that the Heidaigou open-pit coal mine had met the standards for intermediate intelligent demonstration coal mines, and its supporting coal dressing plant had met the requirements for an intermediate intelligent coal preparation plant.



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

Global Peers

- Glencore
- BHP
- Iberdrola
- E.ON
- Duke Energy
- CHUBU
- Peabody Energy
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- Enel Group
- RWE
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