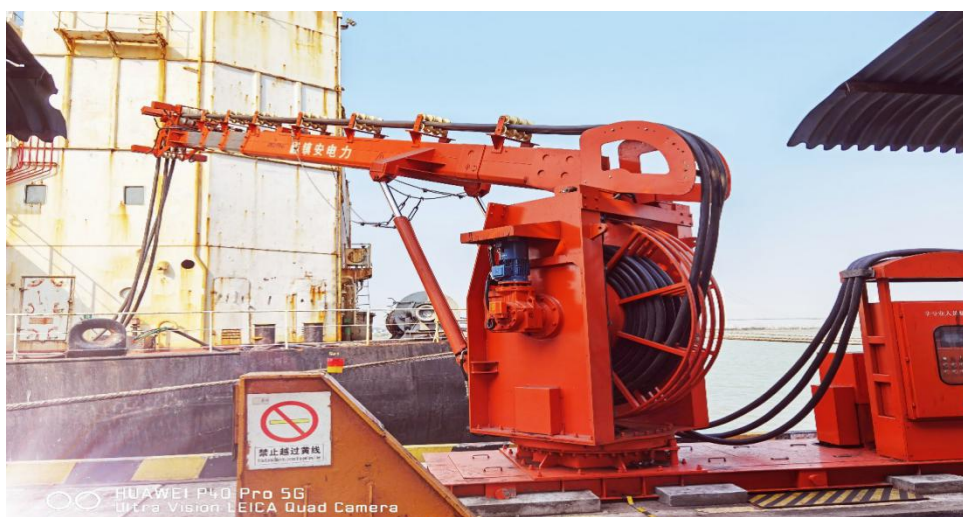


Port of Guangzhou China Resources Thermal Power Co., Ltd.-Improve the Rate and Reliability of the Connection of Shore Power to Ships

As a pioneer of green energy ports in Guangdong-Hong Kong-Macao Greater Bay Area in China, based on the background of the construction of the "Beautiful China", the company actively promoted the construction and application of the port shore power. The construction of the port shore power facilities of the company began on January 10th, 2018 and passed acceptance and was put into operation on February 8th. The shore power facilities can replace 211.82 tons of standard oil per year and the annual carbon dioxide emission reduction is 656.32 tons.



The port shore power project of Guangzhou China Resources Thermal Power Co., Ltd. has a design capacity of 1,000kVA, an output of high voltage of 6.6kV(60Hz) and 6kV(50Hz), an output of low voltage of 440V/(60Hz) and 400V(50Hz), and several power connection modes. It can meet the demands of power supply during the berthing and operation of a 50,000-ton ship. The whole shore power system includes the shore power supply system, a socket box of the shore-based power supply on the port, the local and remote monitoring management system, etc. It has functions such as synchronous grid connection, monitoring, protection, and communication of the shore power supply system. In the process of connecting to and exiting from the power supply of a ship, the ship can switch seamlessly without power failure.



To implement the sustainable development strategy of harmonious coexistence between human and nature and practice the concept of green development, low-carbon development, and sustainable development, due to the publicity of the government and our port, people's awareness of environmental protection has been further improved and more and more ships on the berth use shore power instead of fuel oil. Our company took a series of technical measures and management measures. The reliability of connection of port shore power to ships was up to 100% and the rate of connection of shore power to ships increased from 5.4% to 59.6%.

Contacts



- Shi Weimin
- Deputy Head of Power Generation Department (Port Manager of Guangzhou China Resources Thermal Power Co., Ltd.)
- Shiweimin1@crpower.com.cn



- Peng Huolang
- Specialist Engineer of Fuel Operation (Port Manager of Guangzhou China Resources Thermal Power Co., Ltd.)
- penghuolang@crpower.com.cn