

The Study and Test for 1MW High Temperature Superconducting Motor

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Abstract - High Temperature Superconducting (HTS) motors have a good prospect in application of marine propulsion and wind energy for its benefits of lighter, more compact and high efficiency. A 1 MW, 500-rpm, 4 pole HTS motor was designed and tested by Wuhan Institute of Marine Electric Propulsion (WIMEP). This paper provides a summary of the key technologies, main structure and test results of the motor. This project was sponsored by China Ministry of Science and Technology funding. The aim of the project is to solve some key technologies of HTS motor and set foundation for high capacity HTS motor.

Keywords - 1 MW HTS motor, marine propulsion, wind energy

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