

Analysis on The Power System of Electric-Auxiliary Bicycle on Market

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ABSTRACT

In this decade, the sense of environmental protection is much higher than ever. Demands for the green product which is called "electric vehicle" is so urgent, as we can see in Taiwan and the other region. Taiwan is one of the top manufacturer of the world. At the same time, electric bicycle could be the most interested business for Taiwan manufacturers. The design of electric bicycle needs to consider two major topics, which are the performance and the energy consumption. In order to achieve these two purposes, the power system becomes significantly important. In this thesis, we suggest a considerable theory for the dynamic system of electric bicycle. We have tested the dynamic performance of electric bicycle which got from the latest products in the market. According to test results, we try to conclude a suitable norm for the choice of power system of electric bicycle. Secondly, we propose a reference for developing power system of electric bicycle in the way of efficiency consideration for a complete electric bicycle.

Keywords : Electric Bicycles, Electric-Auxiliary Bicycle, Power System.

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