

機場助航燈系統模擬器獲設計專利 服務質素再提升

Service Quality Further Enhanced with Patented Design of Airfield Ground Lighting Power Transfer Simulator

機電署不斷研發新系統，以提升服務質素。繼機場助航燈固定電流調節器測試平台獲得設計專利後，我們與香港機場管理局(機管局)再接再厲，合作設計及建造機場助航燈系統不斷電切換模擬器。由於該模擬器設計新穎、意念創新和實用性高，我們因此再次取得設計專利，這不但肯定了團隊的努力，更彰顯出我們為客戶持續創新、精益求精的服務精神。

為確保機場助航燈的供電系統保持穩定，我們在不阻礙日常航班升降的情況下，積極為客戶開發更佳方案，以少於一年的時間完成模擬器的設計及建造工作。該模擬

器不但可提升機場助航燈的操作和維修保養效率，而且成為了我們重要的技術訓練平台。該模擬器具有多項優點。第一，由於該模擬器是複製現有供電系統的模式，因此可用來測試元件；而元件通過測試後，可立即安裝於正式的供電系統上，從而縮短現場維修的時間，減少對跑道運作造成的影響。第二，該模擬器可模擬故障發生，協助負責維修的同事找出故障的潛在原因和制訂相應的糾正措施，以減少緊急維修的時間，提高維修效率。最後，該模擬器可用作教學平台，藉以培訓機管局和機電署的員工。

如客戶有意與我們合作研究申請專利，歡迎聯絡我們的高級工程師周旭麒先生(電話：2808 3804)。

EMSD is dedicated to developing new systems to enhance our service quality. After receiving the patent on the design of the Airfield Ground Lighting (AGL) constant current regulator testing platform, we worked again with the Airport Authority Hong Kong (AA) to design and build the AGL uninterruptable power transfer simulator (PTS). With the novel design, innovative concept and high degree of practicality of the PTS, our design was

patented once again. This not only affirms our team's efforts, but also showcases our service culture which embraces continuous innovation and enhancement for our clients.

To ensure a stable power supply system for the AGL, we have actively looked for better solutions for our clients without interrupting the regular aircraft traffic, and eventually completed the design and building of the PTS in less than a year. The PTS not only enhances our efficiency in terms of operation and maintenance of the AGL, but also serves as an important platform for technical training. It has a number of advantages. Firstly, since the PTS is a model replicating the existing power supply system, it can be used to test parts and components. Once the parts and components pass the test, they can be installed immediately in the working power supply system. This helps reduce on-site maintenance time and the impact on the runway operation. Secondly, the PTS can simulate various faulty conditions, assisting our colleagues responsible for maintenance to identify the possible causes of failures and work out remedial measures



模擬器可作教學用途，透過模擬不同情景，讓員工更了解供電系統的運作。
The PTS can be used for training purposes. By simulating different scenarios, it gives the staff a better understanding of the operation of the power supply system.

accordingly so as to reduce the time for emergency repairs and enhance maintenance efficiency. Finally, the PTS can be used as a teaching platform to train the staff of the AA and EMSD.

If clients are interested to apply design patent with us, please feel free to contact Mr. Yorkie Chow, Senior Engineer, at 2808 3804.