

流動製冷系統獲設計專利

Mobile Chiller System Earned Design Patent

一直以來，機電署致力推動創新科技和研發新系統。為此，我們研發「流動製冷系統」，並花了一年半時間完成設計和建造工作。「流動製冷系統」憑其創新設計、實用性高，成為環球市場首例，並成功獲得香港專利。

為確保公營醫院和診所空調系統突然出現故障或定期維修時保持穩定的空調供應，我們設計了容易組裝的「流動製冷系統」，可隨時隨地運送、安裝並接駁到固定的中央空調系統，提供緊急冷凍水後備供應。醫管局讚揚此系統的成效，能為醫院的中央製冷系統提供緊急支援，從而提高醫院的運作水平。

「流動製冷系統」靈活性高，四台製冷機可合併運作，也可因應需要分拆到不同地方，獨立提供臨時空調，以便在不同環境、不同建築物，甚至供不同界別(例如建造業)使用。此外，又可在冷水機組更換期間提供備用冷凍水，避免集中安排在冬季更換機組，有助紓緩人手不足，為客戶降低工程成本和加快工程進度。

我們樂意與客戶分享「流動製冷系統」的應用和運作，如有興趣，請致電 3155 4003 與高級工程師張敏婕女士聯絡。



「流動製冷系統」先後在青山醫院(上圖)、大埔王少清家庭醫學中心和將軍澳醫院進行實地測試，只需數小時就能完成安裝接駁。

The test run of the Mobile Chiller System has been conducted at Castle Peak Hospital (as shown in the picture above), Wong Siu Ching Family Medicine Centre in Tai Po and Tseung Kwan O Hospital. It only takes a few hours to complete the installation and connection.

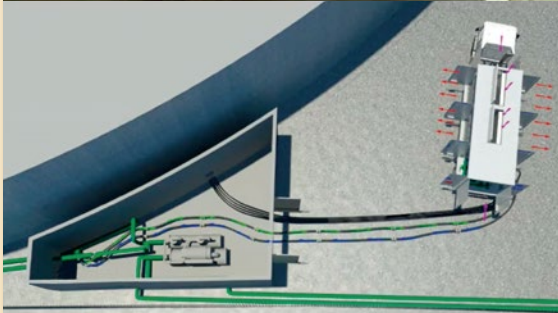
The EMSD has always been committed to promoting innovative technologies and developing new systems. To this end, we have developed the Mobile Chiller System and spent one and a half years completing the design and construction work. With an innovative design and high practicality, the Mobile Chiller System is the first of its kind in the global market and has successfully obtained a patent in Hong Kong.

The easily assembled Mobile Chiller System is designed to sustain air-conditioning service for public hospitals and clinics during abrupt breakdowns or regular maintenance of their air-conditioning systems. It can be transported, installed and connected to a central air-conditioning system anywhere and anytime, providing emergency backup chilled water supply. The system is highly regarded by the Hospital Authority for its effectiveness in offering emergency support to central chiller systems in hospitals, thereby enhancing their operational capability.

The Mobile Chiller System is versatile in that it can suit different applications. The four modular chiller units installed therein can be grouped together to

perform tasks. In order to meet operational needs, they can also be separated to provide air-conditioning individually, at different locations, under different environments, in different buildings, or even for different sectors, e.g., the construction industry. Furthermore, it provides backup chilled water supply to an air-conditioning system during the replacement of its chiller units, enabling chiller replacement work to be carried out throughout the year rather than concentrated in the winter season. This helps relieve manpower shortage, and allows our clients to reduce costs and time.

We are happy to share with our clients the applications and operation of the Mobile Chiller System. Please contact our Senior Engineer, Ms. Jovian Cheung, at 3155 4003.



虛擬的三維設計不但營造良好視覺效果，而且有助進行精準的數據分析和場景模擬。我們採用「建築信息模擬」為主要繪圖工具，在設計和安裝「流動製冷系統」時起重要作用。

The virtual 3D design not only creates good visual effect, but also facilitates precision data analysis and scenario simulation. Building Information Modelling is used as a drawing tool which plays an important role in the design and installation of the Mobile Chiller System.

