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歡迎第一艘郵輪 停泊啟德郵輪碼頭

Fanfare for First Arrivals at Cruise Terminal



隨着我們為1號泊位負責的各項工程竣工,「海洋水手號」在2013年6月12日徐徐駛進啟德郵輪碼頭,為

督港旅避耒埼阳和一貝。 Upon completion of our work for berth 1, Mariner of the Seas was approaching Kai Tak Cruise Terminal on 12 June 2013, marking a historic moment of Hong Kong tourism industry.

級郵輪「海洋水手號」於2013年 6月12日在啟德郵輪碼頭順利停泊, 標誌着機電工程署為郵輪碼頭1號泊位 負責的各項工程均按時圓滿完成。

機電工程署致力為每位郵輪乘客提供愉快的旅遊經驗,並為香港旅遊業的蓬勃發展作出貢獻。我們與旅遊事務署簽訂服務水平協議,自2010年5月開始,我們已負責為郵輪碼頭前沿區設施、家具與設備的設計工作、項目推展,提供顧問和項目管理服務。

郵輪碼頭有兩個泊位,最多可停泊三艘 郵輪,另設有五座乘客登船橋。我們在1號 泊位的工作項目,包括興建其中三座 登船橋。每座登船橋重約170噸,是 On 12 June 2013, the super cruiser Mariner of the Seas successfully docked at the Kai Tak Cruise Terminal (KTCT), marking the timely and satisfactory completion of EMSD works on berth 1 of the project.

EMSD is committed to giving a joyful travelling experience to cruise passengers and contributing to the prosperous development of tourism industry of Hong Kong. Since May 2010, we have been involved, under a Service Level Agreement (SLA) with Tourism Commission (TC), in the provision of consultancy and project management services for the design and implementation of KTCT's apron facilities, furniture and equipment items.

The Cruise Terminal will have two berths equipped with five Seaport Passenger Boarding Bridges (SPBBs) to

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ISSUE本期重點 HIGHLIGHTS

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全球歷來製造的最大型活動登船橋! 它的操作靈活,無論是小型郵輪或 最大的「創世紀計劃號」級別郵輪, 皆可應付自如。

每座乘客登船橋均由五條互相連接的 全天候空調行人道組成,鑲以透明的 雙層玻璃幕牆,乘客可以舒適往來, 避免強烈的陽光、風吹和雨打,亦可 同時欣賞維港的美麗景色。行人道的 最大坡度限制為1:12,乘坐輪椅的乘客 可享用無障礙的通道往來郵輪與碼頭 之間。

此外,郵輪碼頭的外牆和客運連接廊的 底部分別安裝了泛光燈和筒燈,組成 前沿區照明系統,讓郵輪安全停泊。 碼頭亦設有電子資訊顯示系統及安檢 設施,確保碼頭運作暢順安全。為減少 泊岸郵輪的空氣污染物排放,環境保護 署正就安裝岸上供電系統進行可行性 研究,而機電署亦受委託提供技術支援。

啟德郵輪碼頭備受國際矚目, 穩妥可靠 的維修保養當然至為重要。有見及此, 旅遊事務署已就郵輪碼頭的工程系統和 設備的操作及維修保養服務,與機電署 簽訂了為期十年的新服務水平協議。



我們的技術員檢測在郵輪碼頭新安裝的X光機。綠燈亮起,表示進行測試的行李通過X光

Our technician tests the X-ray machine newly installed at the Cruise Terminal. The green light is illuminated to indicate the test baggage has passed the X-ray security

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accommodate a maximum of three cruise vessels. Our work for berth 1 includes construction of three of the five SPBBs. Weighing about 170 tons each, they are the largest movable SPBBs ever manufactured in the world! They can cope with vessels ranging from small cruise vessels up to the largest "Genesis Class" super cruisers.

Each SPBB consists of five interconnected, all-weather and air-conditioned walkways with transparent, double-glazed glass. Passengers can walk comfortably inside, get away from strong solar heat, wind and rain while enjoying a spectacular harbour view. With the slope of each walkway limited to a maximum of 1:12, wheelchair passengers can enjoy barrier-free access to the terminal building at their leisure.

The Cruise Terminal has also been equipped with the Apron Lighting System comprising floodlights mounted on the terminal's façade and down lights installed underneath the concourse to enable the vessel to dock safely and quickly. Moreover, electronic information display system and security check equipment are put in place to ensure smooth and safe operation of the terminal. In order to reduce air emissions from berthing cruise vessels, Environmental Protection Department is looking into the feasibility of installing an on-shore power system in KTCT and EMSD is entrusted to provide technical support.

Given the importance of reliable maintenance for a facility with such an international profile, the TC has entered into a new ten-year Service Level Agreement with EMSD on the operation and maintenance services for the terminal's engineering systems and equipment.

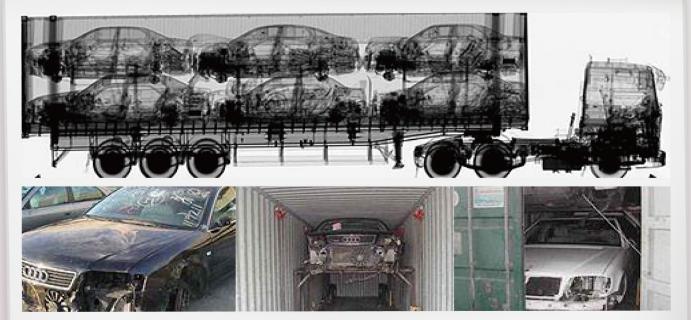


為郵輪碼頭度身訂造的乘客登船橋,不單將郵輪和碼頭大樓連接起來,更可調校高度以配合不同郵輪的層級和 潮位,令乘客上落郵輪更輕鬆方便。

The SPBB of tailor-made design not only connects the cruise with the terminal building, but also adjusts its height in accordance with the level of different cruises and tide level, facilitating the embarkation of passengers.



http://www.emsd.gov.hk/ emsd/EMSTFar/1213/v1.html 訪問短片 手機即看 Shoot and view our video



落馬洲管制站的香港海關人員偵破一宗走私案件。在一輛出境往內地的貨櫃車內,檢獲六部已拆散的私家車。(資料來源:香港海關年刊2005-2006) C&ED officers of Lok Ma Chau Control Point detected a smuggling case in which six dismantled private cars were seized from a container truck departing for the Mainland.(Source: C&ED Departmental Review 2005-2006)

延續億元X光系統的壽命

Life of Hundred Million Dollars X-ray System Extended

个 電署人員利用虛擬機器技術, 延長香港海關一個用以探測違禁品的 重要系統的壽命,讓它繼續發揮功能。

香港海關自2003年起使用固定X光車輛檢查系統(X光系統)在落馬洲管制站堵截違禁品。落馬洲管制站是香港最繁忙的陸路邊境管制站,在2012年內,在該處過境的車輛數目超過900萬架次。

在投入服務近十年後,X光系統的電腦硬件已經過時,而控制軟件也只能在裝設該種硬件的舊版本電腦作業系統下運行。此外,製造商亦已停止支援該已過時的電腦硬件和軟件。一旦電腦發生故障,香港海關可能要暫停X光系統的運作,嚴重影響到落馬洲的邊境管制服務。

為支援X光系統繼續提供服務,機電署進行研究,利用虛擬機器技術在新的電腦硬件上模擬X光系統的舊有軟件作業環境。我們成功應用這項技術的同時,亦解決了過時電腦硬件和軟件日後的維修保養問題。

應用虛擬機器技術的費用為數十萬元, 這不但延長了一個價值億元X光系統的 使用年期,也讓香港海關有更多時間 籌劃將來系統的更換。 The service life of a crucial system used by the Customs and Excise Department (C&ED) to detect contraband has been extended through the application of Virtual Machine Technology.

Since 2003 C&ED has been using the Fixed X-ray Vehicle Inspection System (X-ray System) to intercept contraband at the Lok Ma Chau Control Point, the busiest of Hong Kong's land boundary control points where over nine million vehicles were transited in 2012.

After nearly ten years of service, the computer hardware for the X-ray System has

become obsolete and the control software can only be executed on the old version computer operating system installed with the hardware. Moreover, the manufacturer has discontinued support for the obsolete computer hardware and software. In case of computer failure, the operation of the X-ray System may be suspended causing serious impact to the border control services at Lok Ma Chau.

In order to support the continued service for the X-ray System, EMSD explored and applied the Virtual Machine (VM) technology to simulate the old software operating environment at the newly upgraded computer hardware for the X-ray system. The success of this application has also solved the future maintenance problem for the obsolete computer hardware and software.

This several hundred thousand dollars VM technology project has not only extended the service life of a hundred million dollars X-ray System, but has also allowed more time for C&ED to plan for future system replacement.



我們利用虛擬機器技術,成功延長了落馬洲管制站X光系統的壽命。 Our staff successfully applied the Virtual Machine technology to Lok Ma Chau Control Point Fixed X-ray System to extend its life span.

公務員優質服務獎勵計劃 2013 Civil Service Outstanding Service Award Scheme

大线 電署為消防處提供技術支援,以提升消防安全教育及消防培訓的水平。

消防安全教育巴士

為本港引入第一輛雙層消防安全教育 巴士是一項技術挑戰。

機電署負責巴士的採購和巴士上各種 系統的設計和安裝工作。巴士以低地台 設計,全面照顧殘疾人士的進出需要; 引擎屬歐盟環保五期,可減少廢氣排放 對大氣的污染。而位於巴士上層的火場 逃生體驗室,使用了製煙及發熱裝置, 再配合影像、燈光和聲音效果,模擬 一個濃煙密佈的火場,市民可快速學習 如何因應現場環境,作出反應。市民 亦可透過滅火及消防喉轆操作訓練, 學習選擇及使用適當的滅火工具。 我們亦顧及市民的安全,在巴士上配備 監測和控制系統,方便和各參與 人士保持聯絡,並監察他們的活動 情況;而車內裝設的抽氣系統,更可 在短時間內從模擬火警現場抽出所有 煙霧。

該輛巴士廣受市民歡迎,在2013年 公務員優質服務獎勵計劃中為消防處和 機電署贏得部門合作獎類別的優異獎。

實火模擬事故訓練設施

作為一個國際城市,香港人煙稠密,



我們為消防處設計的消防安全教育巴士廣受市民歡迎,在2013年公務員優質服務獎勵計劃中為消防處和機電署贏得部門合作獎類別的優異獎。行政長官梁振英先生(右二)於頒獎禮上頒發優異獎予機電工程師/車輛合約劉鏡昌先生(右一)。

The popular Fire Safety Education Bus designed by EMSD for FSD, has won both departments the Meritorious Award under the Partnership Award category of the Civil Service Outstanding Service Award Scheme 2013. The Chief Executive the Honourable C Y Leung (2nd from left) presents the Meritorious Award to our Mr. Lau Keng-cheong, Electrical and Mechanical Engineer/Vehicle Contract (1st from left) at the prize presentation ceremony.

為消防安全教育及滅火培訓提供支援

Lending a Hand to Fire Safety Education and Fire Services Training

摩天建築和基礎設施比比皆是,消防和救援行動是一個重大挑戰。為準備應付複雜的緊急情況,機電署團隊獲委託為將軍澳新消防訓練學校的實火模擬事故訓練設施的供應及安裝,提供項目管理服務。訓練學校將設有不同的戶外及戶內實火模擬事故訓練設施,就涉及

高樓大廈、船舶、飛機、路面車輛、 鐵路車站、汽油站,以及油缸和石油 氣缸的火警及拯救任務製作模擬場景, 方便學員在受控制和安全的環境下進行 培訓,令他們成為滅火精英,為市民 提供更多安全保障。



THURS OF THE PROPERTY OF THE P

本署員工為消防喉轆進行檢查,確保能為參觀人士提供服務。 Our staff conducts checks to the fire hose reel system to ensure services for visitors.

導師向學童介紹消防安全教育巴士。這輛雙層巴士由機電署為消防處採購及設計,用作推廣消防安全。 School kids are being introduced the Fire Safety Education Bus by instructors. This double-decker bus is procured and designed by EMSD for FSD to promote fire safety.



將軍澳現正興建的新消防訓練學校構思圖。我們將 為其實火模擬事故訓練設施的供應及安裝,提供項 目管理服務。

Artist impression of the new FSTS being constructed at Tseung Kwan O. We will provide project management services for the supply and installation of live fire simulators.

MSD provides technical support to the Fire Services Department (FSD) in enhancing fire safety education and fire services training.

Fire Safety Education Bus

Introduction of a double-decker bus for fire safety education, the first of its kind in Hong Kong, was a technical challenge.

EMSD was responsible for procuring the bus as well as the design and installation of various systems. The bus, which was designed with low floor to facilitate disabled access, uses Euro V Environmental-friendly diesel engine to minimise emission of

atmospheric pollution. Well equipped with smoke generation and heat effect systems, the evacuation exercise chamber on the upper deck simulates a fire and dense smoke scene using visual, lighting and sound effects. Visitors will quickly learn how to respond to different fire environments. Or they can learn via the fire suppression and hose reel operation training systems to choose and use the appropriate fire extinguishers effectively to suppress fire. For the visitors' safety, the bus is also installed with a monitoring and control system to facilitate communications with visitors and monitor their activities. An exhaust system is designed to extract smoke from fire simulations in a short time.

The bus has proved popular with the community and has won FSD and EMSD the Meritorious Award under the Partnership Award category of the Civil Service Outstanding Service Award Scheme 2013.

Live Fire Simulators at New Fire Services Training School (FSTS)

In light that Hong Kong is a densely populated world city with a proliferation of high-rise buildings and infrastructure, fire fighting and rescue operation is a significant challenge. To prepare for complex emergency scenarios, EMSD was entrusted to provide project management services for the supply and installation of live fire simulators at the new FSTS in Tseung Kwan O.

The school will include a range of outdoor and indoor live fire simulators that will be used to recreate fire and rescue scenarios involving high-rise buildings, ships, aircraft, road vehicles, railway stations, petrol stations, and oil and LPG tanks. The use of simulators would allow realistic training for fire fighters in a controlled and safe environment, training them to become fire elites and providing additional safety protection to the public.



模擬飛機失火的場景。新消防訓練學校將會安裝 多個實火模擬事故訓練設施,加強對消防員的 訓練,以保障市民安全。

A simulated fire scenario occurs in an aircraft. A range of live fire simulators will be installed at the new FSTS, reinforcing fire fighters' training to provide maximum safety protection to public.



當時的香港工程師學會會長蔡健權教授(中)向高級工程師/工程策劃5陳永祥先生(右)頒發優異獎,表彰本署研發的雙效能節水省電「太陽能發電感應水龍頭和水力發電感應水龍頭」。

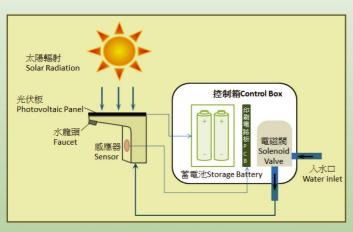
Mr. Chan Wing-cheung (right), Senior Engineer/Project 5, received the Merit Award from Professor Choy Kin-kuen (middle), the then President of The Hong Kong Institution of Engineers, in recognition of double savings from solar sensor water taps and hydro-powered sensor water taps.

綠色科技創意大獎

Innovation Award for Green Technologies

電署一直致力透過推廣環保科技和可再生能源,提升市民的日常生活質素。這方面的工作,最近在香港工程師學會首次舉辦的「卓越工程巡禮2013」中贏得殊榮。

本署人員憑創意項目「太陽能發電感應水龍頭和水力發電感應水龍頭」,在「工程創意大獎」科技組別中獲頒優異獎。本署為政府建築物及學校開發的可再生能源水龍頭,都配備了微型渦輪



太陽能節水水龍頭的運作原理。由太陽光產生的電力可儲存於電池內,為水龍頭供電。

Operation principle of the solar-powered water-saving tap. Electricity generated from sunlight can be stored in batteries for powering the tap.

MSD's efforts to improve the public's daily life through the promotion of environmental technologies and renewable energy were given recognition recently, at the Hong Kong Institution of Engineers' inaugural Engineering Week 2013.

"Solar Sensor Water Taps Hydro-powered Sensor Water Taps", an innovation developed by our staff, received the Merit Award under the Technology Category of the Innovation Award for Engineering Industry. The renewable energy taps developed for Government buildings and schools are fitted with hydro-powered micro-turbine or solar-powered sensors for the automatic sensing devices to control water flow, thus saving both electricity and water. So far, we have installed 476 water taps of this kind as part of the Water Supplies Department's project for schools received positive feedback from users.

全力推動建造業安全

Taking Centre Stage for Construction Safety

電署全力支持當局最近為推廣 建造業安全而舉辦的零意外誓師大會及 公德地盤嘉許計劃。

機雷署應發展局的要求,為設計及構建 零意外誓師大會的網上直播系統提供 技術支援。此外,也為架設4米高、20米 闊的LED屏幕及視像傳輸網絡提供專業 意見,用以展示全港三萬多名工友同步 做早操及進行「零意外誓師」的盛況。 我們的資訊科技人員並為此編寫了一個 工具軟件,在實地示範時將用戶對特別 影像效果的構思展現出來,以便微調及 確定系統的最終要求。

除了為這項重要活動提供技術支援, 機電署也在「公德地盤嘉許計劃」中 獲頒兩個獎項。我們為政府物業的升降機 及自動梯提供保養及維修服務的定期合約 獲頒銅獎,而啟德郵輪碼頭發展工程的 岸上污水收集、岸上食水供應及消防 龍頭供水系統工程合約則獲頒優異獎。



政府代表及其他嘉賓聯同工友出席啟德發展區的

Representatives from the Government and other honourable guests, together with construction workers attended the ceremony at the Kai Tak Development area

MSD was at the heart of recent efforts to promote construction safety through the Zero Accident Declaration Ceremony and the Considerate Contractors Site Award Scheme

In response to the Development Bureau's request, EMSD provided technical support and advice on the design and construction of the webcasting system for the event and the setting up of 4m high, 20m wide LED screens and video-links to showcase the participation of 30,000 construction workers in the morning assembly and safety pledge throughout the territory. Our IT colleagues also developed software tools to visualise,



during on-site demonstration, user ideas about special display effects to facilitate finetuning and finalising the requirements.

In addition to providing technical support for the special event, EMSD was also at centre stage, as the recipient of two Considerate Contractors Site Awards. We received the Bronze Award for a term contract for the maintenance and repair of lifts and escalators in Government buildings and a Merit Award for the contract for provision of on-shore sewage collection, on-shore fresh water supply and fire hydrant water supply systems at the Kai Tak Cruise Terminal project.



機 電 署 監 督 的 兩 個 合 約 工 務 工 程 地 盤 , 在 「2012年公德地盤嘉許計劃」中分別獲頒銅獎及

Two contracts supervised by EMSD won the Bronze Award and Merit Award for two public work sites in the Considerate Contractors Site Award Scheme



EMSD arranged on-site demonstration at Shing Mun Valley Sports Ground for the Development Bureau and the Construction Industry Council to simulate the display of video signals from remote construction sites.



消防處救護車隊副救護總長沈國良先生(左四)、救護監督(車隊管理)張健東先生(右三)與機電署管理層一同出席 PAS 55 認證頒發儀式。 Mr. Shum Kwok-leung, Deputy Chief Ambulance Officer (4th from left) and Mr. Cheung Kin-tung, Tony, Superintendent (3rd from right) attended the PAS 55 certification ceremony together with the EMSD management team.

作送 電署深明高質素資產管理的重要,並為消防處救護車隊提供的專業服務(包括採購、維修保養及改裝),成功引進並取得世界級水平的PAS 55認證。

PAS 55是英國資產管理協會研創的資產管理系統。這個國際資產管理標準為衡量和監察與資產管理相關的活動提供了工具和方法。PAS 55的管理模式涵蓋有關資產「從生到死」的整個運作周期,由考慮應否購置或建造有關資產,至資產停用後的處置事宜,都逐一顧及。





我們為救護車隊提供涵蓋採購、維修保養與改裝的 周全服務。技術員正為救護車進行檢查和維修 保養。

Our comprehensive services for the ambulance fleet include procurement, maintenance and modifications. Technicians are conducting inspection and maintenance work for the ambulance.

引進卓越資產管理系統以提供優質服務

Delivery of Quality Service

through Asset Management

為救護車隊的管理實施PAS 55,可提升救護車的可供調派率,原因是救護車故障次數已透過對重複出現的問題進行預防性維修保養而減少,令處理時間和行政程序得以簡化。

機電署正為運輸署全港交通燈系統的維修保養引進PAS 55。客戶部門如希望取得更多關於PAS 55的資訊,及/或能否通過服務水平協議實施PAS 55,歡迎與我們聯絡。

In full recognition of the importance of high quality asset management, EMSD has successfully introduced and acquired world standard PAS 55 certification for its professional services on the ambulance fleet of Fire Services Department, including purchasing, maintenance and modifications.

PAS 55 is an asset management system originated from The Institute of Asset Management of UK. The international asset management standard provides a tool as well as methodology for measuring and monitoring activities related to asset management. It adopts a "cradle to grave" approach, from considering whether an asset should be acquired or built through to its disposal, and has been successfully implemented worldwide.

Application of PAS 55 to the ambulance fleet services can enhance the availability of



機電署的PAS 55證書。 EMSD's PAS 55 certification.

ambulances due to reduction in vehicle breakdowns by preventive maintenance on repeated faults found, thus streamlining both the handling time and the administrative processes.

EMSD is also introducing PAS 55 to the maintenance of the Transport Department's territory-wide traffic light system. Client departments interested in knowing more about PAS 55 and/or the possibility of adopting it under their SLAs are welcome to contact us for details.

機電署員工頻獲嘉獎

Accolades Flow for EMSD Staff

大线 電署員工勤奮工作、竭誠盡責, 最近先後獲得不同機構的嘉許。

機電署工程師/能源效益郭穎妍女士獲香港工程師學會環境分部頒授年青綠色領袖2012嘉許狀。

與此同時,機電工程署見習技術員繼 2009、2010及2011年連續三年奪得 職業訓練局每年舉辦的「傑出學徒及 見習員獎勵計劃」獎項後,2012年再 接再厲,機電署學徒陳奇中先生和 范廸龍先生也分別獲得2012年傑出 學徒獎及2012年優異學徒獎。

我們謹此祝賀各位取得傑出成就的 同事。



傑出學徒陳奇中先生(右三)和優異學徒范廸龍先生(右四)與機電署訓練組同事分享獲獎的喜悦。
The Outstanding Apprentice, Mr. Chan Ki-chung (3rd from right), together with the Apprentice of Excellent Performance, Mr. Fan Dik-lung (4th from right) shared their joy with other EMSD members in the Training Unit.



EMSD's hardworking and committed staff received recognition from different organisations recently.

Ms. Kwok Wing-yin, Wendy, Engineer/ Energy Efficiency of EMSD, was presented with a Certificate of Merit at the Young Green Leader Award 2012 organised by The Hong Kong Institution of Engineers Environmental Division.

EMSD technician trainees were recipients of the Outstanding Apprentices and

Trainee Awards organised annually by the Vocational Training Council in the last three years (2009, 2010 & 2011). Again, apprentices Mr. Chan Ki-chung and Mr. Fan Dik-lung were recognised by the Vocational Training Council "The Outstanding Apprentice 2012 Award" and "Apprentice of Excellent Performance 2012 Award" respectively.

We congratulate the colleagues on their achievements.

您的寶貴意見對我們非常重要!如大家對《機電傳聲》有任何意見或回應,請隨時聯絡我們,讓我們不斷改進。 如果您的同事有興趣收取本通訊及加入郵寄名單,歡迎以電郵 (bssd@emsd.gov.hk) 或傳真 (傳真號碼: 2882 1574)方式 通知我們。如果您希望我們從郵寄名單中刪除您的名字,或更新您的資料,請透過電郵 (bssd@emsd.gov.hk)與我們聯絡。

Your opinion is very important to our continuous improvement in VoiceLink!

If you have any comments or feedback for the newsletter, please do not hesitate to let us know anytime.

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