



# 香港空調及冷凍商會有限公司

## THE HONG KONG AIR CONDITIONING AND REFRIGERATION ASSOCIATION LIMITED

Newsletter **Summer 09**

**會員通訊**

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### MESSAGE FROM THE PRESIDENT



**Daniel Chong**  
President

Thanks to the hard work of all council and sub-committee members for their great effort devoted into the Association, I would like to report that our membership numbers have continued to grow in the last six months, also we still stand at a reasonably healthy financial position. There is a sign of slowly recovery on the economy in the 3<sup>rd</sup> quarter of the year. A number of HKSAR's small scale A&A works plus the launching of the core projects and the works from the commercial sectors, fellow members may perhaps take this opportunity to formulate better business strategies for the challenge and possible workload in the near future.

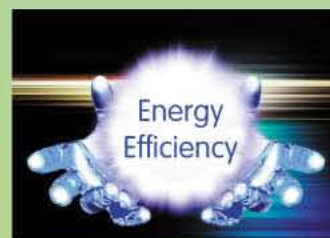
I adore the flexibility, efficiency and the working spirit of all engaged in the field of the construction industry. There has been a lot of unpleasant experience to many of us years ago when the downturn of the construction business in Hong Kong whereby companies are cutting-throat in biting projects struggling for survival. Whether this is right or wrong, another wave is approaching. Those remained in this lifelong marathon would certainly be repeated the painful exercise if all wake up everyday focus the same way on their feet. I certainly hope "Family and Belongings" can help in promoting the value of life and passing on wealth. Time for us to reunite, one can do little about it, but with your voice and active participation, that would be possible. Hong Kong, a much more positive, safe and potential city for us and our next generations.....people with cheerful smile on their faces, this is our home. ◦

### CARBON AUDIT And ENERGY EFFICIENCY WORKS

#### *Energy-Cum-Carbon Audits and Energy Efficiency Projects under the Environmental and Conservation Fund*

The Environment Bureau of the Hong Kong SAR Government launched a HK\$450 million funding scheme on 9 April 09 to help building owners go green by driving the reduction of Hong Kong's carbon emissions. About 60 percent of the city's carbon footprint is caused by electricity consumption, 90 percent of which is related to buildings. The funding scheme is funded by the Environment and Conservation Fund and will pay building owners to measure their carbon footprints and implement energy saving projects. Some HK\$150 million will be for energy-cum-carbon audits of buildings. The other HK\$300 million will be for energy saving projects like fitting variable speed drives and water-cooled air conditioners.

The building owners will employ the professional auditor to review the use of energy and quantity greenhouse gas emissions. The audits will also identify ways to improve energy efficiency and conservation. Chosen building owners will each be subsidized half of the audit costs - or up to HK\$150,000 - and half of project capital costs, or up to HKD500, 000. It is expected that 1,600 buildings will benefit. A vetting committee led by an accountant has been formed to scrutinize applications.



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Officials said the vetting might take an average of four months. The scheme will be open for applications from 8 April 2009 for three years but it might end earlier if the money was fully allocated. A positive response to the scheme was expected as it would allow building owners to go green and save money at the same time. There were 500 professionals had been trained to help conduct the audits and more trained personnel were in the pipeline. Both the Hong Kong Institution of Engineers and Hong Kong Association of Energy Engineers are organizing training courses and seminars for conducting the audits.

Based on the estimation of Friends of the Earth, there was a huge market potential for energy efficiency in Hong Kong, which was worth at least HK\$4 billion a year, or about 10 per cent of total electricity payments last year. The switch from air-cooled chiller to a water cooled air-conditioning plant alone can significantly reduce power use or carbon dioxide emissions of the building. It needs a bigger investment, but the impact on the environment is much bigger. In general, five to six years' savings in electricity costs will cover the cost of the switching of the cooling system. However, the ceiling of HK\$1 million (half from the property owner and half from the funding scheme) can allow the improvement works in small air-conditioning systems.



For more detailed information, please kindly visit the web site at [www.building-energy-funds.gov.hk](http://www.building-energy-funds.gov.hk)

## Summary

### A. Energy-Cum-Carbon Audit Scheme

1. Scope  
Communal areas of commercial, residential industrial buildings or composite buildings comprising any two of these three types
2. Eligibility of Applicants
  - Owners' corporations
  - Owners' organizations or residents' organizations
  - Application could also be submitted by a property management company or a qualified service provider on behalf of the above organizations
3. Qualified Service Provider
  - A Registered Professional Engineer in Building Services, Electrical, Mechanical or Environmental discipline registered under the Engineers Registration Ordinance (Cap. 409); or
  - A corporate member of the Hong Kong Institution of Engineers in Building Services, Electrical, Mechanical or Environmental discipline, who has no less than 1 year relevant post qualification working experience and has attended seminar/training related to this scheme to be announced by the Government
4. Submission of Audit Reports
  - 1<sup>st</sup> audit to commence within 6 months after the approval of the application
  - Includes recommendations or programmes to improve GHG emission and energy efficiency and conservation of the building
  - Certified by qualified service provider and signed off by the person-in-charge
5. Amount of Grant
  - for a single building - a limit of 50% of total actual expenditure, subject to a maximum of HK\$150,000 per application
  - for application involving more than 1 building - a limit of 50% of total actual expenditure without a maximum cap.
6. Submission of Progress Reports
  - 3 subsequent annual progress reports before the date agreed with Government
  - Includes major follow up actions taken to improve GHG emission and energy conservation of the building
  - Certified by qualified service provider and signed off by person-in-charge





## 7. Vetting Criteria

- Contribute to promoting a low carbon economy
- Non-profit making in nature
- Technical and project management capability of the applicant
- Proposed project schedule of implementation
- Proposed budget
- Alternative sources of funding
- Duplication of work
- Priority to applications with high potential of energy saving and reduction in carbon emission
- Priority to applications with other initiatives to promote environmental protection

## 8. Procurement of Capital Items, Goods and Services

- Obtains Tender from at least 2 suppliers when HKD5,000 < Aggregate Value ≤ HK\$10,000
- Obtains Tender from at least 3 suppliers when HKD10,000 < Aggregate Value ≤ HK\$200,000
- Obtains Tender from at least 5 suppliers when HK\$200,000 < Aggregate Value

## B. Energy Efficiency Project Scheme

### 1. Scope

- Alternation, addition or improvement works to upgrade the energy efficiency performance of building services installations for communal use in commercial, residential, industrial buildings or composite buildings comprising any two of these three types
- Building services installations
  - ▶ Lighting, electrical, air-conditioning, lift and escalator
  - ▶ Comply with or be more energy-efficient than the Building Energy Codes (2007 edition) issued by the EMSD

### 2. Eligibility of Applicants

- Owners' corporations
- Application could also be submitted by a property management company or a qualified service provider on behalf of an applicant

### 3. Qualified Service Provider

- A Registered Professional Engineer in Building Services, Electrical, Mechanical or Environmental discipline registered under the Engineers Registration Ordinance (Cap. 409); or
- A corporate member of the Hong Kong Institution of Engineers in Building Services, Electrical, Mechanical or Environmental discipline, who has no less than 1 year relevant post qualification working experience

### 4. Submission of Reports

- All completion reports should be submitted in 6 months after the completion of the project
- Certified by qualified service provider and signed off by the person-in-charge
- Report formats as prescribed in Completion Report Form

### 5. Amount of Grant

- for a single building - a limit of 50% of total actual expenditure, subject to a maximum of HK\$500,000 per application
- for application involving more than 1 building - a limit of 50% of total actual expenditure without a maximum cap.

### 6. Vetting Criteria

- Similar to requirements of Energy-Cum-Carbon Audit Scheme
- Priority will be given to buildings that have conducted energy or carbon audits or the energy-cum-carbon audits
- Due considerations will be given to repeated applications for individual building(s)

### 7. Procurement of Capital Items, Goods and Services

- Obtains Tender from at least 2 suppliers when HKD5,000 < Aggregate Value ≤ HK\$10,000
- Obtains Tender from at least 3 suppliers when HKD10,000 < Aggregate Value ≤ HK\$200,000
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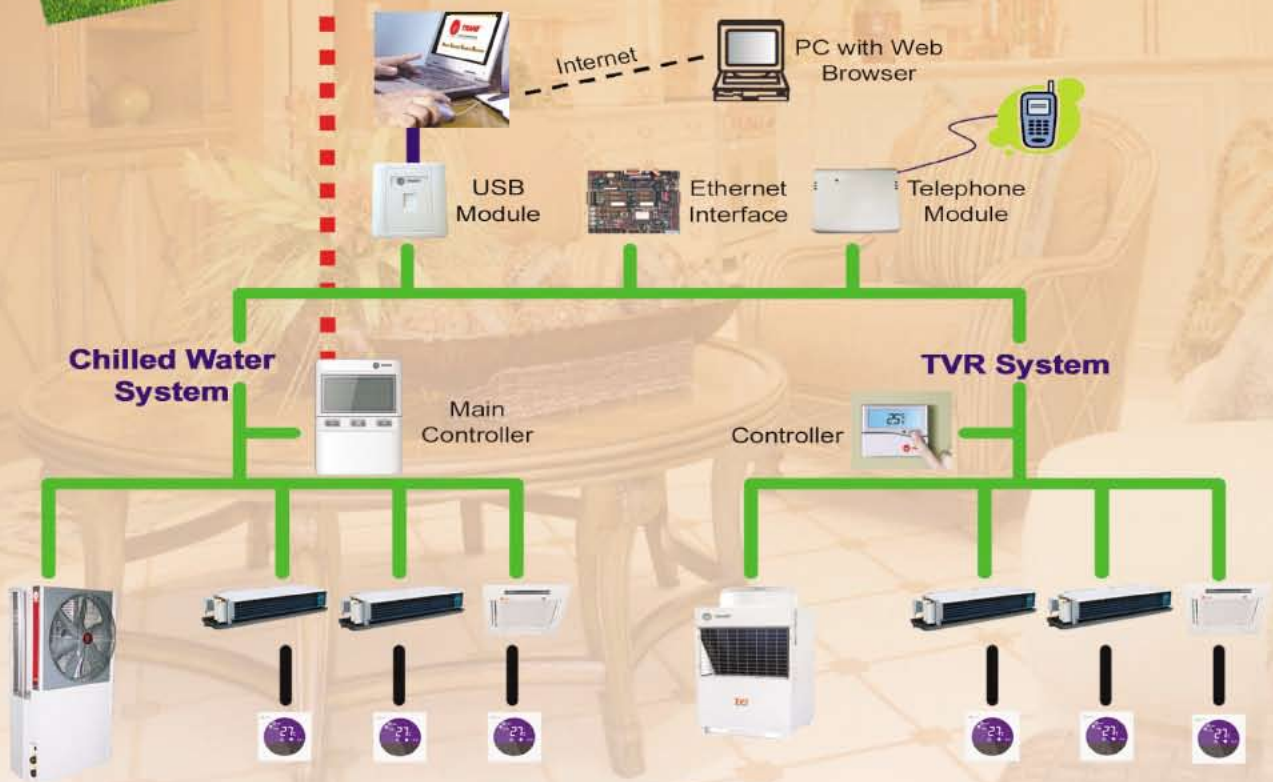




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提升能源效益是現時城中熱門話題，誰想到這些事情，其實早於十多年前已經是香港政府定下來的目標之一。從討論到制定方面，以致逐步推動至成為事實，當中都需要高瞻遠矚及有能力之士掌舵，且聽能源效益事務處第一任舵手陳正華(Ronald Chin)工程師為我們分享他的故事。

## 光榮歲月，由我掌舵

Ronald年少時在澳門渡過，1965年中學畢業後來港加入當時的太古船塢為電機工程學徒。太古船塢主要是以造船及維修為主，在東南亞非常著名。Ronald一面工作，一面進修。一個星期有一天及兩個晚上在香港工專（香港理工大學前身）修讀電機工程學科。1969年，經過嚴格選拔，拿到太古船塢的獎學金，遠赴英國PAISLEY COLLEGE OF TECHNOLOGY修讀為期四年的電機工程課程。每隔半年，學生需要到商業機構實習半年，才能繼續學習理論的科目。在這四年裏，Ronald有機會被派到SERCK Controls實習，怪不得他對屋宇設備自控的認識能有這麼深厚。在這段期間內，太古船塢跟黃埔船塢合併，成為現時的聯合船塢。Ronald 終於在1973年學成回港，繼續在聯合船塢工作，並在1977年獲得英國註冊工程師的資格。在1978年通過香港政府的公開招聘計劃加入建築處的屋宇裝備分部擔任工程師。Ronald說當時政府招聘工程師，不會指派特定的政府部門，自己可以選擇心儀的部門去服務，可以說是「事求人」，而且是手快有手慢就遲。Ronald在同一時間得到四個政府部門的垂青，由於建築處屋宇裝備分部是第一個對Ronald投下信任及欣賞的部門，Ronald馬上答應加入。

當1982年機電工程處和建築處屋宇裝備分部合併為機電工程署之後，Ronald 就加入機電工程署的大家庭直至退休。其實在90-91年，Ronald曾經被調派到工務局工作了一年。返回機電工程署後，主要統籌該署的電腦系統工作。由於當時能源效益是政府嶄新的發展方向，Ronald聯同利振球、林錦權、黃達平及郭民生等工程師一起被派送到英國的The College of Petroleum and Energy Studies, Oxford修讀Postgraduate Diploma of Energy。在1994年，香港政府為回應社會的訴求，成立了能源效益事務處(EEO)去推動有效地使用能源。在1995年，Ronald 更當上EEO第一任的總工程師。後來在1999再被調派回建築署擔任助理署長一職，到2009年年中便會正式退休。

雖然Ronald本身是電機出身，但在聯合船塢的日子時，已經接觸到暖通空調。當時的鑽油船行業為了吸引招聘者，提供設有空調設備的宿舍。在鑽油裝置的冷卻系統也採用渦漩式壓縮機，在當時來說已是十分先進。

在75年時，更利用Induction System提供更寧靜的空調系統予鑽油台的浮動酒店上，整個設計及安裝，都是在Ronald監察下完成。

在提升能源效益方面，Ronald於1978年已開始用變風量末端裝置(VAV)系統於多幢政府大樓，包括菲臘牙科醫院、沙田威爾斯醫院及灣仔政府大樓等等。

一般內部範圍都是用VAV系統，在大樓外圍就採用定風量(CAV)系統，這種設計一直沿用到90年代。

後來Ronald認識到室內空氣質素和能源效益是不能同時兼得，所以就改用整體能源概念的方法，把廢熱用來提昇室內空氣質素上。THERMAL HEATWHEEL和課室用鮮風機，就是在這概念下得以大力推行。

踏入2000年，由於變頻器的普及，使到能源效益提昇到更高境界。在部份負荷下，電機可以利用變頻器從而減少所需輸入功率，使耗電量能大大減少，現在很多政府大樓也不斷更新這些設備。

## 難忘往事

要說難忘經歷，就要數沙田威爾斯醫院政府跟建築及機電承辦商的合約糾紛，最後要經過仲裁才能把事情解決。Ronald的體驗是項目管理是一項非常複雜的事情，即時的記錄往往較後來提出的證據重要得多，所以在合理時間內正確地記錄事情，是項目管理非常重要的一環。

EEO在1994年正式成立，Ronald於1995年成為EEO首位總工程師，並定下多個基本目標，在這十多年裡很多都能一一落實。今年即將推行的強制實施（建築物能源效益守則）如果可以如期推行，Ronald也可以說是功成身退。

## 座右銘

Ronald寄語年青一輩的工程師，凡事都要親力親為，不要只聽別人描述。在見習過程中，尤其是在整個屋宇設備系統上的調試過程，一定要親自參與，定能終身受用。要成為一個專業工程師，不能夠只是紙上談兵，要具備豐富的實戰經驗，才能設計出一個高效的屋宇設備系統。

## 退休生活

Ronald雖然剛剛退休，但在很多不同的學會上還是非常活躍，現時他擔任英國屋宇裝備工程師學會香港分會前任會長和香港能源工程師學會主席的職務，積極推行能源效益及可持續發展的能源。Ronald除了對航天及航海的发展感興趣外，對新科技也是一個不節不拘的支持者。閒時也喜歡旅遊到世界各地，找尋新事物及科技。如果有一天能到月球旅行，不知會否碰上Ronald?。



陳正華

Ronald Chin



# 穿梭科技有限公司 Brisky Limited

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# DDS 人工智能暖氣系統

oooO 感覺就是舒適 Oooo



## DDS 智能恆溫控制器

高溫斷路 - 手動式重置  
智能恆溫控制 4 - 20 mA 輸出  
LED 數字溫度顯示  
LED 狀態顯示

## WIN POWER SCR

SCR 功率控制器  
多種控制信號輸入選擇  
0-10V 0-5V 4-20mA...  
LED 狀態顯示及安全保護  
重量輕體積小,安裝容易



## DDS 不鏽鋼電發熱管

不發紅類別  
工作電源 220 - 240 VAC  
多種功率可供選擇  
(500W 至 5,000W)



## DDS 電熱管接線箱

多類型號及呎吋,可訂做



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電話: 2511-2118 傳真: 2507-5078 聯絡人: Ricky Sun / Calvin Wong

Web: [www.deltapyramax.com](http://www.deltapyramax.com) email: [rickysun@dpx.hk](mailto:rickysun@dpx.hk) / [calvinwong@dpx.hk](mailto:calvinwong@dpx.hk)





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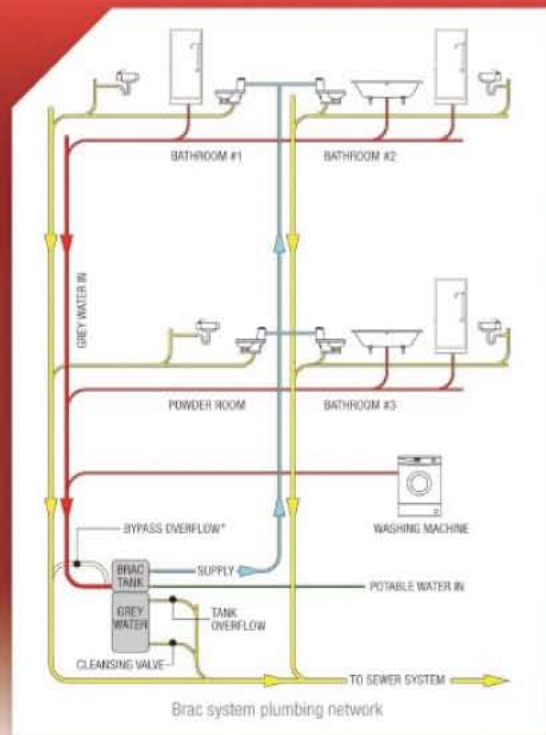
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48 Hoi Yuen Road, Kwun Tong, Kowloon.  
電話 Tel: (852) 3590 4656 傳真 Fax: (852) 2566 1321

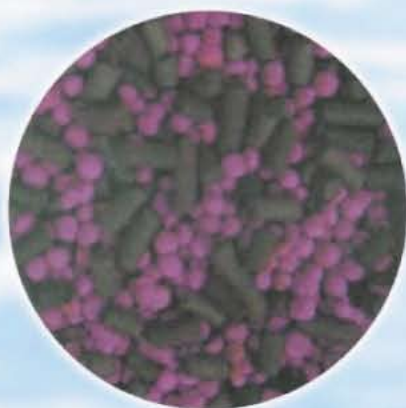
Website: [www.eaxon-group.com](http://www.eaxon-group.com)  
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E-mail: [info@eaxon-group.com](mailto:info@eaxon-group.com)





# 佛山市順德區怡輝空調設備有限公司

## FO SHAN SHUN DE EFATAR AIR-CONDITIONING EQUIPMENT CO., LTD.



### 簡介

佛山市順德區怡輝空調設備有限公司為具有25年歷史的香港怡輝興業集團屬下子公司，1994年在順德投資成立，是一家中央空調專業生產廠家。“高美”是我們的專有品牌。產品主要有空氣處理機組、潔淨式組合風櫃、風機盤管、風冷式凍水機組、水冷式凍水機組、熱泵機組等。產品廣泛適用於酒店、商場、工廠、醫院和製藥廠等場所。產品主要供應中國大陸、香港、東南亞、南非、納米比亞以及澳洲等，在各地同行業中享有較高聲譽，深得用戶的好評。該公司管理先進，已通過ISO9001及ISO14001認證、獲得廣東省“先進技術企業”證書和順德政府頒發的“科技進步獎”，成為首批通過“國家高新技術企業”認定企業；產品品質可靠，性能優異，先後獲得了以嚴格著稱的“歐洲認證”、“廣東省重點新產品”證書、“節能產品博覽會金獎”等，為“全國工業產品生產許可證”企業。

### PROFILE

Shunde Efatar Air-conditioning Equipment Co., Ltd is a Hong Kong funded enterprise. It was set up in 1994. Its parent company, Efatar Holding Ltd was founded in 1982. It's engaged in the production of Central Air-conditioning Systems. Its major products include such as AHU, Fan Coil Unit, Air Cool Chiller, Water Cool Chiller, Heat Pump. "Cold Magic" is our brand. Productions popularly used in hotel, super marker, factory, hospital and medicine factory. Our major markets are China, Hong Kong, Southeast Asian, South Africa, Namibia and Australia. Our products have enjoyed high reputation in above mentioned countries. It has been highly praised by the consuming consumer. Our company has been certified by ISO9001 and ISO14001 System. Guangdong province government has led to our company being selected as "an advanced technology enterprise". We are the first partial company checked by the Hi-tech enterprise.

Our company has "progress prize in science and technology of Shunde City Government". Our products with stable quality and excellent in function, it has EUROVENT, important new products certificate, a gold medal at Saving Energy Production Exposition, Chinese industrial product production license. •

### 佛山市順德區怡輝空調設備有限公司

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Address：Bijiang Industrial Development Zone, Beijiao Shunde District, Foshan City Guangdong Province, China.

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Tel: (852) 2764 1200 Fax: (852) 2764 0465 Website: [www.winston-hk.com](http://www.winston-hk.com)





## Landmark East

A 43-storey glass twin tower complex containing 1.2 million square feet (sqft) of Grade A office had been developed at the heart of Kwun Tong district, named Landmark East. Tower 1 and 2 provide 36 and 34 levels of office space accordingly. Landmark East is well equipped with user-oriented facilities and technologies. This new development has a 35,000 sqft landscaped garden with water feature and outdoor sculptures, alongside a 100,000 sqft public open space. This "green" approach continues inside the gallery-like main entrance lobbies with 13.3-metre high ceilings. There are over 450 of car parking spaces and only just 3 minutes walk away between the Kwun Tong MTR station and the APM shopping centre.



### High Efficiency Air Conditioning Systems and Equipment

This project adopted the most energy efficient water cooled screw type chillers of total 7,050-ton. There were four chiller plants located at the towers and the entire chiller plant control system through BACnet interfaced with the BMS supplier. In order to provide a comfortable, quiet and environmental friendly ambience for the entire building, the fan power variable air volume (VAV) system was also adopted for the project. There was over 150 air handling units and 2,700 VAV boxes had been installed at the office towers. A key feature of a VAV system was its ability to realize both fans and refrigeration energy savings at part-load conditions.

### System Optimization

Optimization is defined as minimizing the cost to operate the entire HVAC system, while still maintain the human comfort for the tenants. Therefore, the owner decided to accept the approach of integrated comfort solution, it consists the chillers, air handling unit with VAV boxes and the HVAC control system for achieving the system optimization and energy saving purpose. The entire HVAC control system would be interfaced with the Building Management System (BMS) through BACnet protocol. Besides of VAV system offers optimum comfort at a minimum of power use, the chiller plant control and the chiller equipment were supplied by the same manufacturer, it was not only minimizing the coordination problem during the installation stage but also can achieve the higher system efficiency during their part load conditions due to the knowledge of the chiller system, control and its application.

### Wireless Zone Thermostat

There is also a key innovation approach in this project. There are over 2,700 thermostats, among them 1,600 wireless zone thermostats were installed for the office tower. Although the initiate cost of the wireless thermostat is higher the traditional one, the higher flexibility will bring to the owners or tenants in future. As the office is a new mark in Kwun Tong district and the building owner understand that the flexibility of the office is very important to the tenants. Besides, the use of the raised floor system and fiber optic cable pre-wired, the wireless thermostat was also used to meet these requirements and needs; it is because the tenants are able to relocate the thermostat without involving the high installation cost again when they change their office partitions.



### Project Summary

Project Site:	102 How Ming Street, Kwun Tong
Client:	Winsor Properties Holdings Ltd and USI Holding Ltd.
Architect:	Arthur C S Kwok Associates
E & M Consultant:	Thomas Anderson & Partners (HK) Ltd.
HVAC Contractor:	Hsin Chong Aster Building Services Limited
Chiller Supplier:	Trane
AHU & VAV Supplier:	Trane
BMS:	Honeywell Ltd.
HVAC Control System:	Trane
Completion Date:	Q3 2009



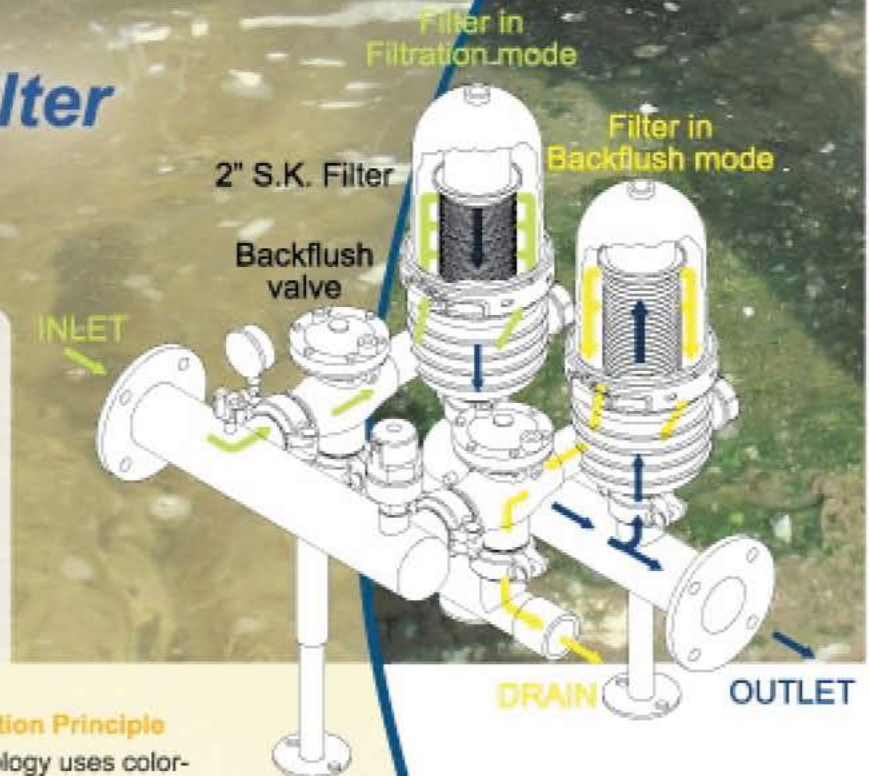
# Latest Technology in Cooling Tower Filtration

**ATAL**  
Air-Conditioning Solution

## pep Disc Filter

### Features

- Water Conservation
- Permanent Media
- Compact Design
- Lower Maintenance Costs
- Operation Flow Rate Starts from 50GPM



### Disc filter Operation Principle

Spin Klin® technology uses color-coded polypropylene discs, stacked and compressed on a specially designed spine. When stacked, the groove on top runs opposite to the groove below, creating a filtration element with a statistically significant series of intersecting grooves which trap the solids.

Filtration has become an indispensable part of an open-type cooling tower system.

Currently, centrifugal separators and sand filters are the main stream of technologies but both have their limitations and drawbacks.



### Filtration Mode

Water flows through the discs from outside to inside. The micro-grooves on each side of the discs form a matrix trapping particulate in the intersections.

### Automatic Backwash Mode

During the backwash process, the spine spring piston rises up, releasing the pressure on the discs. Tangential jets of clean water are pumped at high pressure in the opposite direction through nozzles at the center of the spine. The discs spin free and clear, loosening the trapped solids. Solids are quickly and efficiently flushed out through the drain.



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**ATAL**

**Analogue Technical Agencies Ltd.**

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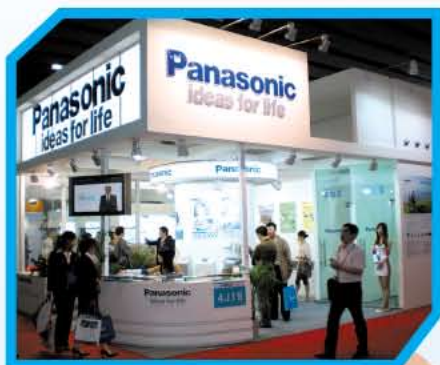
# 中国制冷展 2009

## CHINA REFRIGERATION 2009

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Firm Confidence by Being with You All

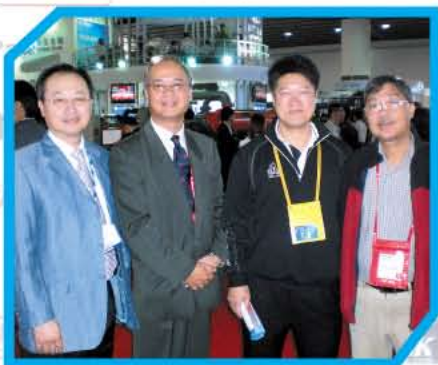
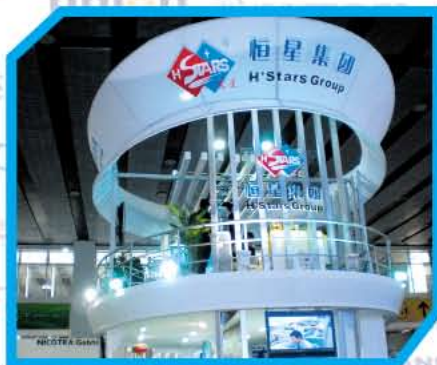
第二十屆中國制冷展已於2009年4月5日至7日在廣州琶州展覽館盛大舉行。一如往年，本會會長莊國明先生和主席葉啟賢先生受到大會邀請出席歡迎晚會及開幕酒會。今年受到金融風暴的影響，很多外資廠家都沒有參展，但整體反應也非常良好，展銷攤位也高達900多家，大部份以國內廠家為主。香港空調及制冷商會聯同其他有關商會及學會，於4月6日早上也安排了參觀團從香港出發到廣州中國制冷展參觀，行程由秘書黃宗傑先生組織和帶領，並即日往返，以示支持。







明年中國制冷展會移師到北京中國國際展覽中心新館舉行，日期定為2010年4月7至9日。今年錯過了的朋友，記得明年提早登記及安排。••







# 明發冷氣有限公司 HONEST AIR - CONDITIONING LIMITED

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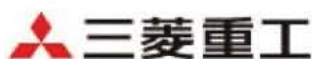
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KX變頻多聯系列



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Email : [aircond@netvigator.com](mailto:aircond@netvigator.com) Website : [www.achonest.biz.com.hk](http://www.achonest.biz.com.hk)



## ACRA Annual Dinner 2008

The annual dinner of 2008 was held on 24 November 2008 at Ball Room of the J W Marriott Hotel. More than 500 participants including members and friends from the industry attended this event. It is our honor to have Ms Carrie Lam, Secretary of Development of the Hong Kong Special Administrative Region Government as our Guest of Honor and delivered the opening speech for this annual dinner. Every body enjoyed the program and the atmosphere throughout the evening.



Ms Carrie Lam



## Safety Walk 2009



由香港機電工程商聯會與香港機電業工會聯合會舉辦之機電安全健步嘉年華2008已於12月7日(星期日)在元朗大棠?枝山莊舉行,舉辦是次活動之目的是繼續推廣機電行業職業安全及提升工地機電安全。當日節目豐富,計有郊外步行,健身操,安全問答遊戲及自助燒烤外,大會更安排免費派發每人乙份精美紀念品,令大家可以享受一個開心愉快的家庭同樂日!



## ACRA Spring Dinner 2009



ACRA 2009 Spring Dinner was held successfully on 27 February at the King Palace in Wanchai area. More than 120 participants including members and friends from the industry attended the event. WELCOME AIR-TECH LTD. sponsored and invited Mr. Eiji Mori and Mr. Chew Boon Hur from SANYO Japan and Singapore as guest speakers and conducted "SANYO Product and Technical Presentation". There was a fundraising drive during the dinner time to help the redevelopment of Sichuan Earthquake, afterward; there were also very exciting beer competition, games and lucky draw as some of the highlights of the evening. Everybody had enjoyed this great dinner and gathering.





COMPANY NAME	CONTACT NO.	TRADE	
ATAL Engineering Ltd.	2565 3339	E&M Contracting	ACRA Fellow Members
Carrier Hong Kong Ltd.	2694 5618	Air-Conditioning Equipment Supplier	
Krueger Engineering (Asia) Ltd.	2860 7333	Air-Conditioning, Electrical, Fire Services, Plumbing & Drainage Installation	
Newland Engineering Ltd.	2967 8620	Registered Contractor in AQMV & Electrical Installation	
Ryoden Engineering Co., Ltd.	2619 8082	E&M Contracting	
Shinyo (Hong Kong) Ltd.	2237 8624	Building Services, E&M Contractor	
Shun Hing Engineering Contracting Co., Ltd.	2419 8282	Contracting	
The Jardine Engineering Corporation Ltd.	2807 4511	Contracting / Supplier / Building Automation / Energy Service	
Trane Hong Kong	3128 4764	Air-Conditioning Equipment Supplier	
Winston Air Conditioning & Engineering (HK) Co., Ltd.	2764 1200	Contracting	
York International (Northern Asia) Ltd.	2331 9286	Manufacture of Air-Conditioning Equipment	ACRA Corporate Members
Young's Engineering Co., Ltd.	2235 0900	Design, Supply & Installation of Electrical & Mechanical Services, Routine Maintenance Work	
Alliance Contracting Co., Ltd.	2891 9083	Contracting	
Analogical Technical Agencies Ltd.	2561 8278	Air-Conditioning Equipment Supplier 'Hitachi', 'Evapco', etc.	
Chevalier (HK) Ltd. A/C Division	2111 4811	Contracting	
China Overseas Mechanical & Electrical Engineering Ltd.	2823 7888	Contracting	
Chun Wo E & M Engineering Ltd.	3758 8007	Contracting	
Dalton Airconditioning (Hong Kong) Ltd.	2570 2786	Air-Conditioning Equipment Supplier	
Elstar Engineering Co., Ltd.	2606 6922	Supplier and Contracting	
Honeywell Ltd.	2331 9133	Building Automation Contracting	
Hong Kong Thermo Industries Ltd.	2674 6876	Supplier and Contracting	ACRA Associate Members
Hsin Chong Aster Building Services Ltd.	2579 8238	E&M Contracting	
Johnson Controls Hong Kong Ltd.	2590 0012	Supply, Install & Maintenance of HVAC, Fire Services, E&M, Security & Extra Low Voltage System	
Kervin Engineering Co., Ltd.	2422 3110	HVAC Contracting E & M Engineering	
K-Thom Engineering Co., Ltd.	2481 2918	Air-Conditioning & Electrical Installation	
Lucky Engineering Co., Ltd.	2780 5285	E&M Contractor	
McQuay Air-Conditioning Ltd.	2893 6261	Split type A/C, Chilled Water Fan Coil Unit, Water Cooled Package & Split Type Water Source Heat Pump Chiller Supplier	
Meco Engineering Ltd.	2891 8722	Engineering Contractor	
Quad-Tech Engineering (HK) Co., Ltd.	2573 1832	Contracting	
Ryowo (Holding) Ltd.	2319 8381	Manufacturer for Water Cooling Towers, Water Tanks & Pumps, etc.	
Siemens Ltd.	2856 3813	Building Automation AFA, Security, CCTV & ELV System	ACRA Associate Members
Skyforce Engineering Ltd.	2885 1620	Building Services Installation	
Southa Co., Ltd.	2963 7175	Supplier of A/C Equipment	
Standard Refrigeration & Engineering Co., Ltd.	2781 0871	Design, Supply, Installation and Maintenance of HVAC System	
Takasago Thermal Engineering Co., Ltd.	2520 2403	Contracting	
Technicon Engineering Ltd.	3193 1300	Building Services Design, Installation and Maintenance	
Welcome Oncho Denki Ltd.	2806 8316	Supplier of HVAC Equipment	
Westco Air Conditioning Ltd.	2426 3123	Contracting	
A & R Engineering Co., Ltd.	2408 2960	Contracting	
Air Master International Ltd.	2764 0307	Manufacturing of Air-Conditioning Equipment & Component	ACRA Associate Members
Air Trade Centre Ltd.	2887 7000	Contracting & Supplier of Air Conditioning Product	
Alison M & E Engineering Ltd.	2595 1199	Contractor	
Alpha Appliances Ltd.	2529 7555	Authorized Distributor of 'General' Air-Conditioner	
Astern Technologies (HK) Ltd.	2647 8163	Contracting	
Atway Engineering Co., Ltd.	2598 4228	Supplier	
Armstrong Asia Ltd.	2574 8376	Armflex 'Insulation Manufacturer	
Arnold & Co., Ltd.	2807 9400	To Market and Distribute A/C and Engineering Equipment for Building Construction Industry of HK & China Market	
Brightwell Air-Conditioning Ltd.	2331 8559	Supplier of HVAC Equipment	
Brisky Limited	2511 3161	Supply & Install Window / Split Type & Packaged VRV Systems	ACRA Associate Members
Bun Kee (International) Ltd.	2748 9319	Wholesale	
C.J. Wishing International Ltd.	2799 9797	Supplier of Air-Conditioning Products - Daikin-Japan, Kimukoh-Japan, Inaba-Japan, Taco-USA, etc.	
Chung Hing Electric Co., Ltd.	2365 0288	Supply of Electrical Products of brand 'MK', 'LEGRAND' & 'HAGER', Cable of brand 'DRAKA', 'PIRELLA' & 'AEI'	
Cydeman Engineering Ltd.	2332 3591	E & M Contracting	
Crowntin Limited	8202 0830	Contracting / Supplier / Building Automation	
Dah Chong Hong (Engineering) Ltd.	2768 3595	HVAC Installation, E & M Packaged Installation	
Delta Pyramax Co., Ltd.	2511 2118	Supplier	
Dynamic Success Co., Ltd.	2116 9021	Supplier of Water Treatment	
Eaton (HK) Co., Ltd.	3590 4656	Supply of HVAC Equipment	ACRA Associate Members
Enviro-Tech Engineering Co., Ltd.	2827 0688	Supplier	
Extensive Trading Co., Ltd.	2889 1681	Supply of Mechanical Equipment, Building Materials, Environmental Products	
Fook Loong (HK) Ltd.	2393 7773	HVAC/R Supply of 'Phenotherm' Phenolic Foam, 'P-flex', 'Winflex 33', 'PAL' Accessories, CR Pump & BANFF Valves	
Fungs E & M Engineering Co., Ltd.	2682 7200	E & M Contracting	
Euro Airconditioning Ltd.	2323 0809	Supplier (Authorized Dealer of AC Products - Daikin, Toyo, Valmatic, Honeywell-MNG)	
GTECH Services (Hong Kong) Ltd.	2123 0888	Contracting	
GELEC (HK) Ltd.	2919 8383	Supplier	
Gether-Force Air-Conditioning Engineering Co., Ltd.	2890 2622	Contracting	
Getwick Engineers Limited	2893 3600	Contracting	ACRA Associate Members
Goodways International Ltd.	2575 8770	Manufacturer's Representative	
Gotop Engineering (HK) Ltd.	2459 3038	Electrical & Mechanical: MVAC Engineering	
Hang Shun Engineering Co.	2428 8640	Aluminum Cladding for Air-Conditioning	
Hersen System Engineering Ltd.	2884 9001	Building Automation	
Honest Air Conditioning Ltd.	2396 8108	Contracting & Supplier	
H.W. International Air-Conditioning Ltd.	2796 8888	Manufacturer of Air-Conditioning Equipment	
IES (Hong Kong) Limited	2992 0830	Supply & Install Central Hot Water Plant and Seawater Plant, Supply of Equipment	
IMS International Limited	2881 8011	Manufacturer of 'IMASU' Ventilation Product	
Kinden Corporation	2368 6136	Building Services - E & M Works	ACRA Associate Members
Kinetics Noise Control (Asia) Ltd.	2191 2488	Supply of Acoustic Materials, Vibration Isolators, Floating Floor & Barrier Materials	
Kings View Airconditioning Engineering Co., Ltd.	2796 2417	HVAC Contracting & Maintenance	
Kembla (HK) Limited	2528 0999	Supplier	
Lee Tack Engineering Co., Ltd.	2305 3111	Registered Ventilation Contractor	
Link The Best Company Ltd.	2568 4092	Supply Pre-insulated Pipe Air Filter, Butterfly Valve, Electrostatic Precipitator, UV Sterilizer & Other Building Material	
Man Po Environment Technologies Co., Ltd.	2429 0088	Supplier	
Mega Power Engineering Co., Ltd.	2474 9832	Contracting, Supplier of A/C Equipment	
Mesan Fiberglass Engineering (Int'l) Ltd.	2787 5717	Manufacturer of 'MESAN' water cooling tower; Distributor of Air-Conditioning Equipment	
Midea Electric (HK) Ltd.	3669 4888	Supplier & Manufacturer of 'MD' Product	ACRA Associate Members
NAP Acoustics (Far East) Ltd.	2866 2886	Design, Supply, Installation of Acoustic Treatment and Vibration Control Products	
Oxprime (International) Ltd.	2590 8088	Pump, Cooling Tower, VAV Box, Vibration Isolators, Dura Duct, Liquid-Solids Separation Systems, Fibreglass Supplier	
Peterson Engineering Ltd.	2365 0372	Contracting	
Practical Engineering (HK) Co., Ltd.	2402 2772	Contracting & Supplier	
Raising Engineering Ltd.	2395 6081	Authorized Distributor of Toshiba & Carrier Product Registered Contractor	
Richmax Air-Conditioning Co., Ltd.	2698 3423	Distributor of HVAC Product	
Sanby Trading Co., Ltd.	2573 4219	Specializing in Trading Construction Insulation Material such as Phenolic Foam, Fibreglass	
Savills Engineering Ltd.	2534 1688	Contracting & Energy Service	
Shun Hing Ref. A/C Engineering Ltd.	2387 2882	Design, Supply & Installation of Air-Conditioning	ACRA Associate Members
Sing Kin Ltd.	2333 1518	Contracting	
Stars (HK) A/C & R Co., Ltd.	6116 7832	Manufacturing	
Southa Engineering Limited	2963 7241	Air-Conditioning & Refrigeration Installation	
Super Mark (HK) Engineering Co., Ltd.	2595 1122	Supplier / Distributor for Electrostatic Precipitator	
Teambase Development Ltd.	2554 6263	Supplier / Distributor for Electrostatic Precipitator, MVAC System & Electrical Installation	
Thermtech Building Products	2756 3837	Contracting / Supplier for Weatherproof / Fire Resistant Materials to E & M Services	
Tom's Equipment Co., Ltd.	2757 5539	Insulation Material Supplier	
Union Manor Ltd.	2797 2168	Contracting	
Viewco Building Services & Eng. Co., Ltd.	2543 0610	Contracting	ACRA Associate Members
Vital Engineering Co., Ltd.	2571 5382	Contracting	
Wai Luen Air Conditioning Ltd.	2890 9321	Contracting	
Wolter Asia Ltd.	2456 0198	Supply & Manufacturing of Full Range of Ventilation Fans	
Wysermann Co., Ltd.	2614 2213	Supply & Manufacturing Air Conditioning Accessories	
Yordland Engineering Ltd.	2362 2186	Design, Supply & Installation and Maintenance of HVAC, Electrical and Fire Services System	