



邁向五十周年
Anniversary



會員通訊

Winter 2010 Newsletter

香港空調及冷凍商會有限公司
THE HONG KONG AIR CONDITIONING AND
REFRIGERATION ASSOCIATION LIMITED



CONTENTS

Message from the President	1
Council Members (2010-2012)	2
Feature Article - Buildings of our Community are turning to Green	3
People Interview - Mr. Y. W. Chan	12
New Technology - Sustainable & Carbon Reducing HVAC System For Residential Development	18
Project Highlight- MVAC Installation in PolyU Redevelopment of Pak Siu Yuen Project	26
Zhuhai Energy Saving Seminar	27
Charity Fund	30
ACRA Activities	35
Member List	39

Editorial Board
Chairman : Allan Cheung
Adviser : K. L. Chan

Member :
(in alphabetical order)

Cannisa Au
Polly Mui
Nicole Wong
C.H. Wu

ACRC Office:

Room 1801,
Tung Wai Commercial Bldg.,
109-111 Gloucester Road,
Wanchai, Hong Kong.
Tel : (852) 2598 0101
Fax : (852) 2598 0102
E-mail : info@acra.org.hk
Web Site : www.acra.org.hk



MESSAGE FROM THE PRESIDENT

邁向五十周年



Mr. K.Y. Ip
President

ACRA was formed 49 years ago in 1961 by 4 founding members to serve the air conditioning and refrigeration industry, today we have developed to over 100 members covering contractors, suppliers, manufacturers and services providers representing a wide portfolio of interests and contribution in the present structure. Let's look forward to celebrating ACRA's 50th anniversary next year in 2011!

In June this year, the Council for the current term year 2010 to 2012 comprising 20 Council Members was elected for serving the members and the industry towards ACRA's 50th anniversary. It is my honour as President in joint spirit and endeavour with the Council Members to serve and continue the mission and vision along the history and culture of ACRA. I must express my wholehearted thanks to the support of our members extended to the Council and ACRA throughout.

There are no lack of new faces and young members in the Council, Subcommittees and member representatives joining the executive meetings, working groups and liaisons making ACRA even more energetic and dynamic. The development and sustainability of ACRA are nurtured by the intake of new blood for succession and the unfailing support and contribution of the present and retired Councils.

In the mission of bringing ACRA to a new era, taskforces had been working for a series of campaigns to further strengthen our services to the members and bring ACRA even more close to the industry and community. This includes improved administration, enriched training and CPD programmes for theory, practical knowledge, regulatory requirements and craftsman skills opened for members and non-members, facelift and redesign of ACRA website, 50th anniversary booklet with a theme on the history and prominent people of air conditioning and refrigeration in Hong Kong and strengthened tie and cooperation with the external bodies through active participation in liaisons, working groups and jointly organized workshops and events. July this year, the donation of fans to elderly and needy under our "Caring for Community Mission" had received strong support from members, and in coming December we will continue another event to organize a winter solstice dinner gathering for the elderly.

Looking forward the construction market and its job turnover, they are exciting in the years ahead when the major infrastructure projects in construction stage and active property market and development are in the making. The challenges and threats faced by the industry and players such as shortfall of technicals and professionals, aging construction workers, materials fluctuation, inflating labour and staff costs, currency risks, unhealthy price competition, unfair contract terms and payment problem are just a snapshot. The prospect of the industry and how it can be sustained in greater extent are in the hands of the industry through new ideas, discipline and self regulation coupled with effective government policy and initiatives, such as security of payment legislation, to reshape our industry and its direction.

I wish you all the prosperities and successes in capitalising the upcoming opportunities. Last but not least, I also wish to thank FEMC, Constituent Associations, government, professional bodies, institutions and associations for their support to ACRA enabling us to strive ahead for the voice and common interests of the members, industry and society. ◊

President
KY Ip



Young's Eng. Co., Ltd.

Honorary Life President
Raymond Lin



The Jardine Eng.
Corp. Ltd.

Immediate Past President
Daniel Chong



Winston A/C Eng.
(HK) Co., Ltd.

Advisor
Victor Law



ATAL Eng. Ltd.

Advisor
K L Chan



Trane Hong Kong

Chairman
Ringo Shea



Southa Co., Ltd.

Vice President
Dave Chan



ATAL Eng. Ltd.

Vice President
Victor Wong



Trane Hong Kong

Secretary
C F Wu



Shinryo (Hong Kong) Ltd.

Treasurer
Antonio Chan



REC Eng. Co., Ltd.

Admin Officer
Polly Mui



Council Member

Kenneth Tsang



Bun Kee (International) Ltd.

Nicole Wong



Carrier Hong Kong Ltd.

Wendy Cheng



Efatar Eng. Co., Ltd.

Derek Leung



Fook Loong (HK) Ltd.

Allan Cheung



Honeywell Ltd.

M T Law



Hsin Cheong Aster Bldg. Services Ltd.

Winnie Ng



Johnson Controls HK Ltd.

Raymond Synn



Kureger Eng. (Asia) Ltd.

W G Chu



Meco Eng. Ltd.

C H Wu



Shun Hing Eng.
Contracting Co., Ltd.

Frankline Lau



The Jardine Eng.
Corp. Ltd.

Pachu Leung



Welcome Oncho
Denki Ltd.

Bill Cheung



York Int'l
(Northern Asia) Ltd.

Buildings of Our Community are turning to Green

By: Ir Victor Wong, LEED-AP, BEAM Pro,
Mr. Glorison Wong, LEED-AP, BEAM Pro

Recently, more and more buildings are seeking green certification. Other than developing an image of environmental sustainability for their corporations and gaining international recognition, what are the other driving forces?

One of the main forces is that our community is beginning to realize that the environmental impact of buildings is significant and that it is linked with carbon emissions. EMSD energy end-user data indicates that in 2008, over 90% of electrical energy consumption was used by buildings in Hong Kong. A typical commercial construction project generates up to 10 kg of solid waste per square metre. Conversely, even though Hong Kong is still enjoying a reliable fresh water supply from mainland China, with the increasing industrialization of Guangdong Province there will be greater competition for water supply in the future. In addition, building development shifts land usage away from natural, biologically diverse habitats to landscape that is impervious and devoid of biodiversity. The far-reaching influence of the built environment necessitates action to minimize its impact.

On the other hand, many building owners may come across an unpleasant experience that even paying premium amount to purchase all the individual building equipment and components that are green and energy saving, but the final result in system levels that are far below expectations. In fact, no matter how sophisticated and outstanding the system is designed, it is going to end up with mediocre and even poor performance because of "stereotyped" T&C working procedures, and over-reacting "safety" operation by switching the system to manual mode most of the time.

Green building certifications are looking at the whole life cycle consideration of the building to maximize energy efficiency while at the same time minimizing the impact on the environment, society and economy. There are various green building certifications, such as BREEAM, Green Star and Green Mark, etc. (For the popularity of various green building certifications around the world, please refer to the below map.)

Trends of Green Building Certification Systems



Among the above green building certifications, BEAM Plus and LEED are the most popular and relevant in Hong Kong. What commonality does BEAM Plus and LEED hold?

BEAM (Building Environmental Assessment Method) is a voluntary initiative to measure, improve and label the environmental performance of buildings and has been adopted by over 190 premises (covering over 9 million square metres) in Hong Kong. BEAM provides building users with a single performance label that demonstrates the overall quality of a building, be it a new or refurbished building, or one that is already in use. A BEAM assessed building is safer, healthier, more comfortable, more functional and more efficient than a similar building that has not achieved the prescribed levels of performance.

LEED (Leadership in Energy and Environmental Design) certification, developed in the US, provides independent, third-party verification that a building project meets the highest green building and performance measures. Sustainable building strategies should be considered early in the development cycle. An integrated project team will include the major stakeholders of the project such as the developer/owner, architect, engineer, landscape architect, contractor and asset and property management staff. Implementing an integrated, systems-oriented approach to green project design, development and operations can yield synergies and improve the overall performance of a building. Initial LEED assessment will bring the project team together to evaluate and articulate the project's goals and the certification level sought. There are both environmental and financial benefits to achieving LEED certification.

Commonality of BEAM Plus and LEED

1. Links the architect, building owner, mechanical engineer and contractor by imposing the responsibility of environment protection during the stages of building design, construction, T&C and operation.
2. Energy saving becomes the dominant factor in these certifications. An example is the LEED Energy Atmosphere section: in version 2.2, the full score is only 17 out of 69 points (24.6%), but in the latest 2009 version, it is 35 out of 110 points (31.8%); the overall weighting has seen an increment of more than 7%, and the Energy Atmosphere section carries the HIGHEST score of all the sections. BEAM Plus follows a similar pattern.
3. Although the energy issue is the key concern, both certifications would not compromise with a lower grade of human comfort criteria. In their Indoor Environmental Quality (IEQ) sections, various factors are considered and there are stringent requirements on hygiene, IAQ, quality of ventilation, thermal comfort and lighting quality.
4. In view of the latest technologies, most of the renewable energy systems cannot be justified by the life cycle cost calculation, but these certifications still provide credits for the use of on-site renewable energy as a substitute whenever possible. Solar thermal systems and wind turbines may be possible solutions. Of course, it is also important to simulate and compare renewable energy possibilities by using accredited energy simulation software tools to ensure the overall environmental and economic benefit.
5. The overall impact of refrigerants is considered instead of merely fulfilling the requirements of the Montreal Protocol. They are given more comprehensive consideration by using a formula* to weigh the effects of global warming potential, ozone depletion potential, weight of refrigerant per cooling ton and leakage rate. This ensures that the refrigerants have minimum impact on the environment.

The proposed approach to revise the credit is to use performance-based metrics of the life cycle ozone depletion index and life cycle direct global warming index of the refrigerant used by HVAC for a building, normalized per ton of cooling capacity and per year of equipment life for the HVAC equipment. The equations describing these two factors are:

$$LCODI = \frac{ODP_r \times R_c \times (L_r \times Life + M_r)}{Life}$$

$$LCGWI_d = \frac{GWP_r \times R_c \times (L_r \times Life + M_r)}{Life}$$



Formulas are given to determine life cycle ozone depletion and life cycle global warming

- LCODI* : Life cycle ozone depletion index
LCGWI_d : Life cycle direct global warming index
ODP_r : Ozone depletion potential of refrigerant
GWP_r : Global warming potential of refrigerant
L_r : Refrigerant leakage rate (percentage of charge per year)
M_r : End-of-life loss (percentage of charge)
R_c : Refrigerant charge (lb refrigerant per ton of cooling capacity)
Life : Equipment life (years)

$$LCGWI_d + (100,000 \times LCODI) \leq 100 \text{ for LEED (British Unit)}$$

and

$$LCGWI_d + (100,000 \times LCODI) \leq 775 \text{ for BEAM Plus (SI Unit)}$$

6. Effective T&C processes and documentation are also encouraged to maintain performance throughout the building's life. Both certifications empower T&C work by employing an independent T&C engineer, CxA, who has a much higher authority than before and can conduct a commissioning design review prior to mind-construction documents, and review building operation within 10-12 months after substantial completion. The CxA reports directly to the owner.
7. Measurement and verification are compulsory to ensure system performance. Recommissioning is crucial to ensure the minimum total cost of building ownership.
8. Construction waste management is crucial to minimize the environmental impact. Use of an off-site precast process to reduce on-site waste, shorten construction times, enhance workmanship consistency, as well as guarantee system performance and quality are encouraged. With a similar approach, the prefabrication and factory mounted control (FMC) design of HVAC equipment is encouraged to achieve this goal.
9. Encourage natural resource conservation through material reuse, rainwater harvesting and waste management, etc.
10. Emphasize the concept of "good neighbour", and ensure the selection of your building location can be well connected with the local community by sharing amenities and the public transportation network. In addition, this can minimize the heat island effect, wind distortion and light pollution of the surroundings.
11. Extraordinary high standard of the requirements: comply with or even exceed market standards and local practice Building Energy Code (BEC), ISO 14000, ISO 18000, ASHRAE 62, ASHRAE 90.1, etc.
12. Premium scores would be given to building designs with innovative green solutions.
13. An extra score will be awarded to the project team with BEAM Pro and LEED AP for the BEAM Plus and LEED certifications respectively.



As services and/or product providers in the industry, what are the implications for us?

1. Are you familiar with the Green Building Standards?

If not, spend some time to take a learning course on this to keep abreast of the best practices in Green Buildings. Nowadays, it is crucial to understand the needs and the characteristics of the industries that our customers are operating in, so that you can become a good "partner of choice".

2. Are the features of your offered designs, products or services "green" enough to offer extra scores on the green building certifications?

Please aware that your designs/products/services features have to be substantial under a stringent T&C procedure, and also can be testified by continuous metering system throughout the whole life of the building. Hence, sustainability is another key challenge.

3. Are there any innovative environmental designs, products or services to help building owners maintain system performance throughout the building's life, particularly for the stages of recommissioning, replacement, retrofit and upgrade?

Please bare in mind that LEED and BEAM Plus are seeking for designs, products and services with 5 "R" which are Reduce, Reuse, Recycle, Renewable and Rapidly Renewable.

Our Government is now taking the leadership role to advocate Green Building Certification in Hong Kong. Are you ready? .

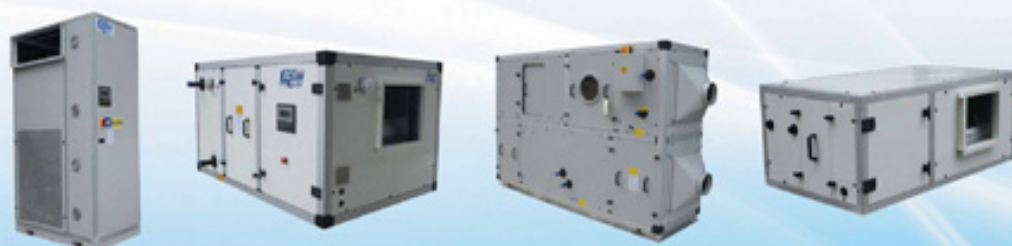
References:

<http://www.hkgbc.org.hk/eng/BEAMGreenBuildingCertification.aspx>

<http://www.usgbc.org/>



嘉毅冷凍空調設備有限公司
EVER COOL REFRIGERATING & AIR CONDITIONING CO. LTD.



Distributor of



tub-e
for sure



HVAC

Premium copper tubing for Air Conditioning and Refrigeration industry applications

Europe Coil and Straight Copper Tubes to

ASTM-B88

R410A

EN12735-1

EN1057

ASME B16-22 Fittings

www.tub-e.com

INSUTECH-PIP®
PRE-INSULATED PIPE SYSTEM



PROVIDES EASY INSTALLATION, ENVIRONMENTAL FRIENDLY
& RELIABLE PRE-INSULATED PIPING FOR HVAC SYSTEM

LOGSTOR

PRE-INSULATED PIPE FOR DISTRICT COOLING TO EN253 & EN448

Getting district cooling right



LOGSTOR provides the most reliable and energy-efficient solution to District Cooling transmission requirements

- Versatile and Reliable
- Long Service Life
- Easy Installation
- Low Maintenance
- Euroheat & Power Certified

P.S.P (PUSAN)

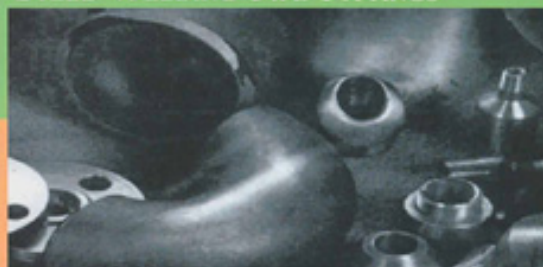
SeAH Steel Corporation

Steel pipe to EN10255 & EN10217-1



P. S. F

STEEL WELDING PIPE FITTINGS



SK-I Stainless Steel Rolled Sheet and Coil



SPLCO

HOT-DIP GALVANIZED STEEL SHEET & COIL

南極光 熱浸鍍鋅卷板



彬記 (國際) 有限公司
BUN KEE (INTERNATIONAL) LIMITED

九龍尖沙咀柯士甸路22-26號好亮年行1座12樓
電話: 2728 7237 傳真: 2387 2999

網址: <http://www.bunkee.com>
電郵: info@bunkeintl.com.hk

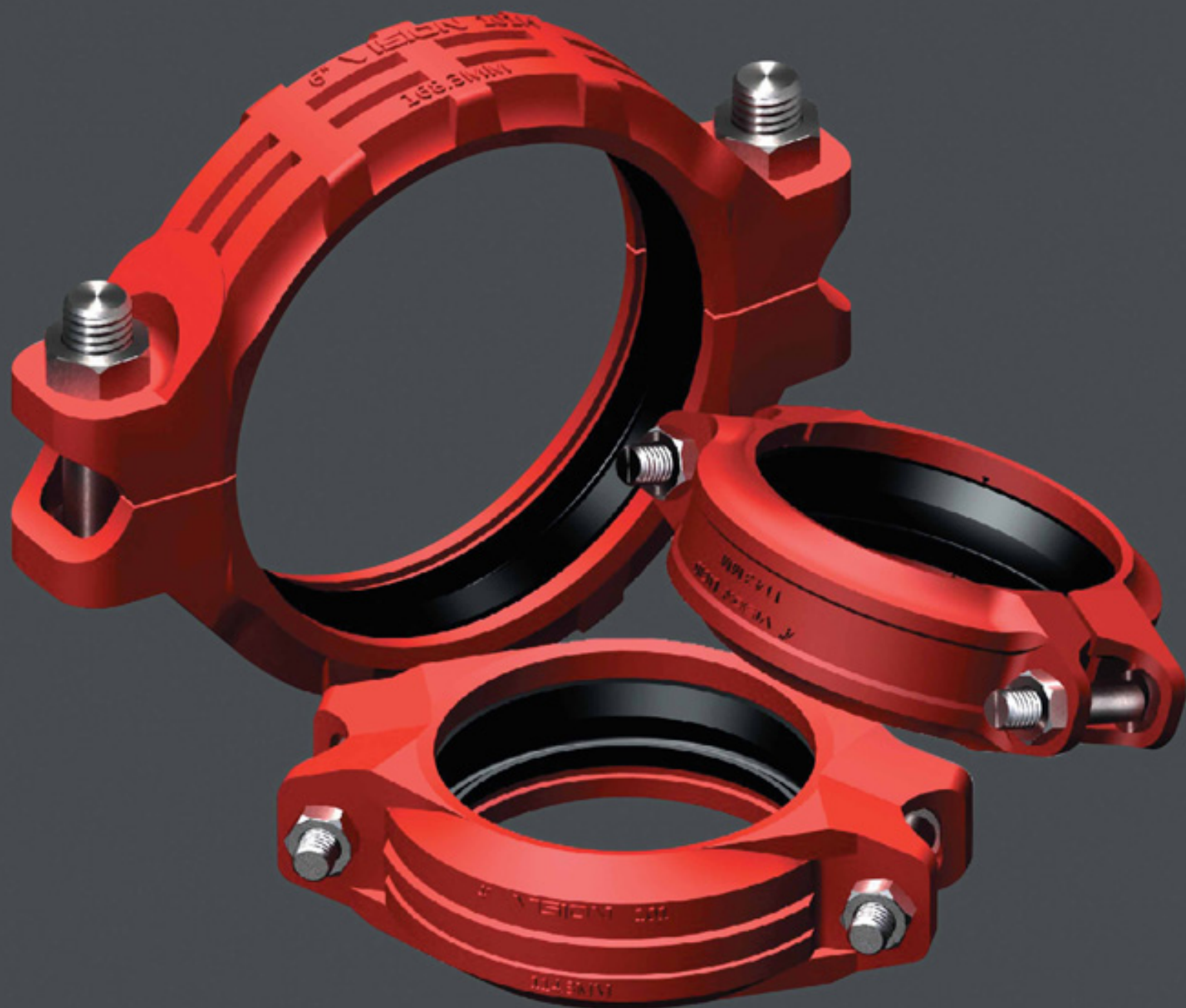
門市部: 九龍旺角上海街618號地下
新界元朗合益路30號地下
香港灣仔大馬路7-11號地下A舖
澳門沙梨頭海邊街13號康寧樓地下B舖
中國辦事處: 中國上海市人民路885號淮海中華大廈2803室 (郵編: 200010)

電話: (852) 2395 0181 傳真: (852) 2787 3421
電話: (852) 2473 3660 傳真: (852) 2442 2766
電話: (852) 2866 6001 傳真: (852) 2866 6339
電話: (853) 2855 3693 傳真: (853) 2895 1020
電話: (86) 21-6366 9755 傳真: (86) 21-6355 9699



GROOVED COUPLING AND FITTINGS

- Reliance from Professionalism



Sino Year International Limited

漢年國際有限公司

Unit 4, 5/F, Tower 1, Harbour Centre, 1 Hok Cheung Street, Hung Hom, Kowloon.

Tel: 2764 1200 Fax: 2764 0465

Contact: Kenny Wong [mobile: 9190 1117 email: kenny.wong@sinoyear.com]



CLYDEMAN



WINSTON

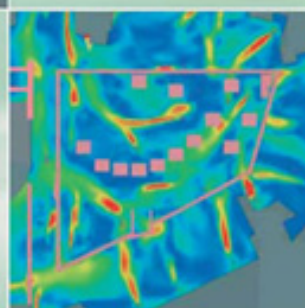
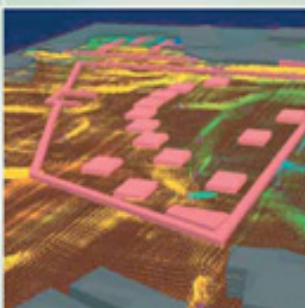


Wolter GREEN Inducing Fans

The Innovation in Compartment Ventilation



Application: Hall, Classroom, Carpark, Passage Way, Garage, Warehouse, Lobby, Foyer, Station Platform, Shopping Mall etc. ... anywhere requires better air circulation.



**Reducing energy cost by
nearly 60% compared to
conventional motors**



Sino Year International Limited

漢年國際有限公司

Unit 4, 5/F, Tower 1, Harbour Centre, 1 Hok Cheung Street, Hung Hom, Kowloon.

Tel: 2764 1200 Fax: 2764 0465

Contact: Kenny Wong [mobile: 9190 1117 email: kenny.wong@sinoyear.com]



ATAL

Air-Conditioning Solution inspire your Cooling Experience

Evapco Cooling Tower

An outdoor equipment can now be installed indoor



Invisible discharge louver provide quiet environment and tidy outlook



- Our forced draft cooling tower installed in a roof park plantroom which is close to residential blocks
- Forced draft cooling tower provides sufficient static pressure for indoor environment

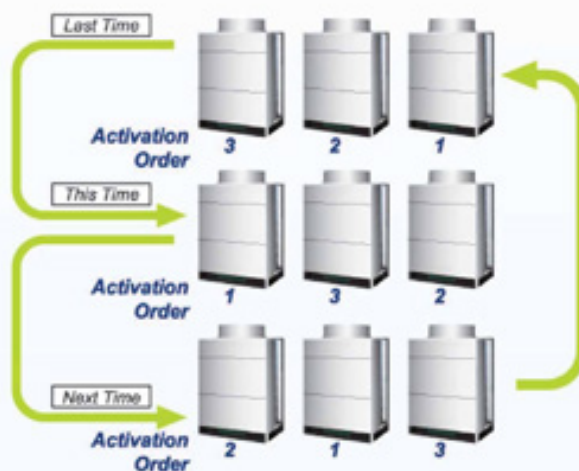
Hitachi VRF System

HITACHI
Inspire the Next

VRF Set-free FSXN (Modular Type)



The latest HITACHI 2-pipe heat pump and 3-pipe heat recovery modular type VRF system capacity from 8HP up to 54HP



ATAL

Data Centre Solution help your Data Centre to go green



Precision Air Conditioning



ME Series

- Modular Design
- ESP up to 350Pa



Series 9

- 6-30 Tons
- Central telecom switching centre
- Computer room, data centre



Series 6

- 2-5 Tons
- Small IT Hub Room



Series 8

- 6-10 Tons
- Small Data Centre

STANDARD FEATURES

- Intelligent graphical display controller
- Standard air cool, water cool, chilled water cool model
- Dual cooling coil (Direct expansion, chilled water)
- Upflow, downflow option
- Standard 3 stage reheat, SCR as option

ATAL

Analogue Technical Agencies Ltd.

Website: www.analogue.com.hk Email: enquiry@analogue.com.hk



陳遠威先生

這次與今期「人物專訪」的主人翁 - 太古地產高級工程項目經理陳遠威先生 (FHKIE, FIMechE, FCIBSE) 進行訪問的地方，就是在港島東中心的辦公大樓。當陳遠威悠悠的坐下來，開始接受訪問時，他親切自在又精神抖擻的態度，與我們身後港島東的開揚景緻一樣，令人頓時感覺心情輕鬆。就在這樣的氣氛下，我們逐步認識陳遠威先生……

事業起點・打好根基

陳遠威在 1972 年工專（即理工學院前身）高級文憑畢業後隨即加入怡和機器公司工作，由助理工程師做起。在入職最初的三年，可說是「自學訓練期」。當年與今天不一樣，很少機構能提供完善的培訓制度，所以陳遠威就唯有邊做邊學，一邊不停翻閱大量產品目錄及參考資料，一邊細心觀察前輩的工作情況，逐步累積自己的知識和經驗。而另一作為工程師的條件，就是要有能力兼顧大小事情。由於當時原裝空調機組不普遍，所以空調工程師必須能「一腳踢」，由基本系統設計、選擇機件及配套、繪圖、撰寫計劃書、草擬報價單以至監督工程安裝等都要全程跟進。

陳遠威特別記得當時市面上有關空調冷凝工程的書籍不多，遇着需要參考資料，就常靠由兩間主要空調設備生產廠商撰寫的技術資料手冊：分別是 Carrier 的 Carrier Handbook（主力解構有關不同空調系統的應用）以及 Trane 的 Trane Air Conditioning Manual（集中講解空調系統設計的原理）及其出版有關空調冷凝的書籍及文章。由於這些資料既詳細又能深入淺出地說明各項理論及實際應用方案，工程師們都視它們為「職場天書」呢！

在這樣的自學工作環境下，陳遠威獲得很多機會參與櫃機 (Packaged Units) 項目，包括住宅、酒樓、戲院、馬會及銀行分行、工廠等。雖然項目規模不大，只由幾噸至一百幾十冷噸，但因為工程種類多，週期短，在密集式的工作日程安排下，也就成為另一種很好的基礎培訓。

留學的好時光

在幾年後，雖然工作漸漸上了軌道，但陳遠威有感在學術方面有更上一層樓的渴望，便選擇以停薪留職的方式，自費到位於英國倫敦，以工程學科聞名的 Brunel University 攻讀屋宇設備碩士學位課程。他有這個打算，主要是看到屋宇設備工程在當時來說是一門很新又有發展潛力的學科。

可是大家不要以為陳遠威只懂得工作和讀書，他亦有為這段在英國的時間訂下另外 2 個目標：享受外國生活 + 多認識不同國籍的同學！就這樣，他在英國度過了 13 個月的美好時光。除了豐富了自己的知識技術和擴闊眼界外，他更體驗到英國的教育制度比較注重學生的學習態度和開發個人才能，這亦有助他應付當時各種功課及考試，順利於 1979 年取得碩士學位。但唯一有個小小遺憾 - 因為公司馬上有連串工作安排，陳遠威沒能趕及出席畢業禮，便需立即返回香港投入工作。

事業另一里程

到 1980 年中，陳遠威經朋友介紹，開始涉足中國的工程項目，並加入一個計劃在內地發展旅遊事業的財團擔任總工程師。當時該財團有長遠計劃於全國主要城市興建酒店，並首先與北京市政府一次過簽定了多個酒店合作項目，而香山飯店、西苑飯店和民族飯店（全新改造）就是第一批完成的作品。為了打響頭炮，這些項目只用了 3 年半時間，用上最好的設計和設備，並與北京市設計院、I M Pei、JRP、Levett & Bailey 等多間知名建築師及顧問公司合力完成。而陳遠威亦通過這次機會，成功令自己由冷氣行頭轉型至機電及土建工程領域。

其實在這段時間陳遠威可算吃足苦頭。當年通訊科技不如現在方便，既沒有電郵亦沒有傳真機！圖紙由香港的顧問修改後，不能即時傳送至內地。所以他每月至少需要親手攜帶大量圖紙前往內地 2 至 3 次，每次都要從廣州轉機至北京（通常午夜才抵達），然後逗留最少一星期，更遑論週末可以休息……而當時香港和內地的建築行業體制又不相同，內地施工單位只按圖施工，所以很多時香港的施工圖都被評為「深度不夠，不能施工」而遭退回，要求更仔細或按施工單位要求重做。所以身為總工程師的陳遠威就必須要經常處理工程進度受阻或超支等情況。

在 1983 年底陳遠威加盟瑞安集團之顧問公司，參與香港及內地項目。到 1990 年初再轉職至太古地產工作，負責項目管理一直至今。

猜不到的挑戰

大家可能會認為摩天大廈、酒店或超級商場才能讓項目管理人員頭痛，但曾參與過無數大小項目的陳遠威直言住宅項目可算是屬於難度最高的。難度在於滿足市場的需要，優良的設計及嚴格的質量控制。過千名小業主在收樓時期一同向收樓部投訴登記「執漏」事項是個非常頭痛的問題，而在交樓期間不幸遇着樓市下滑，小業主的情緒就更加不耐煩，所以怎去安撫小業主，並以最快的速度與方法去處理大量跟進工作，正是他與他的團隊經常會遇到的挑戰。另一方面，及時地取得物業的入伙紙及滿意紙也是另一項充滿挑戰及刺激的任務。

總結這些年來的經驗，陳遠威認為如能堅守維持預算、保持品質上乘、施工安全及注重環保事項，很多不如意情況都可以儘量避免。

給後輩的話

「機會無限」是陳遠威的格言。

他認為年青人無需過於執著於一個大學學位。其實有志加入空調工程行業年青人可選擇 IVE 或其他渠道，並積極一步步進修和考取有關專業資格；最重要的是要有上進心、鬥志和正面的工作態度，成功之門依然會為大家打開。



此外陳遠威還建議工程師從業員需保持開放的眼光和態度，找一個自己最熟悉的專業作為基石，再大膽嘗試涉獵其他領域，才可以好好抓緊現今社會專業橫向發展的優勢。

陳遠威先生在建築物的空調、機電工程及整體項目管理的經驗與貢獻良多，對後輩的指導及同行的經歷分享更為可貴，相信各位認識陳遠威的空調工程同業都有同感。香港空調及冷凍商會向陳先生接受這次訪問再次致以尊敬的謝意。



RAISING 威信工程有限公司
ENGINEERING LIMITED

邁向十五年 與你齊共進
15th Anniversary

Turn-Key Building Services Contractor
Design and Build E & M Services
System and Energy Audit
Upgrading and Improvement of Existing Plant

Tel: 2395 6081 Fax: 2395 6933
Email: admin@raising.com.hk

商界展關懷
caringcompany
Awarded by the Hong Kong Council of Social Service
香港社會服務會頒發





Alstern Technologies (HK) Ltd.

Your Trusted One-Stop Pipeline Solutions Provider

ALSTERN TECHNOLOGIES is a pipeline solutions provider. We provide **One-stop cost-effective pipeline solutions** to our customers with the objective of optimizing their assets while **Minimizing operational downtime**.

We are serving the Oil & Gas, Petrochemical, Marine, Pharmaceutical, Marine, Public Utilities, Commercial, etc. industries in the Asia Pacific region.

OUR SERVICES:

- Pipe Freezing
- Hot Tapping
- Line Stopping/ Pipeline By-Pass
- Leak Detection
- Leak Repair
- Leak Sealing
- Corrosion Repair
- Flow Measurement
- Thickness Measurement/ Pipeline Metal Loss
- Tie-in Project
- NDT Consultancy Services
- Environmental Monitoring Service
- Hot / Cold Insulation (Polyurethane foam)
- Infrared Thermography



Pipe Freezing Service



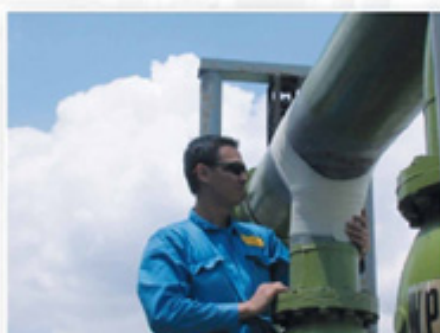
Hot Tapping Service



Line Stopping Service



Pipe Insulation



Leak Repair Service



Corrosion Repair



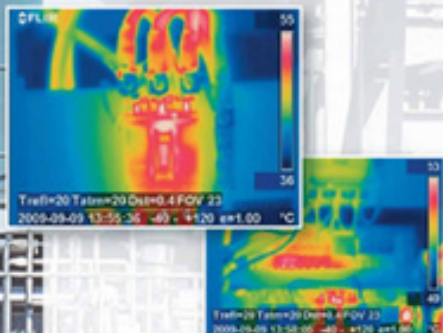
Flow Measurement



Leak Sealing



Thickness Measurement



Infrared Thermography



Wrap Seal -
Quick Leak Repair Kit



Seal Stic - Quick Cure Epoxy



Environmental Monitoring



Leak Detection



Wrap Clamp -
Leak Repair Clamps



alstern

奥思(香港)有限公司
Alstern Technologies (HK) Ltd.

Room 1208, Block B, New Trade Plaza
6 On Ping Street, Shatin, N.T., Hong Kong
Tel: +852 2647 8163

Fax: (852) 2647 4163

Email: enquiry@alstern-technologies.com

Website: [http:// www.alstern-technologies.com](http://www.alstern-technologies.com)

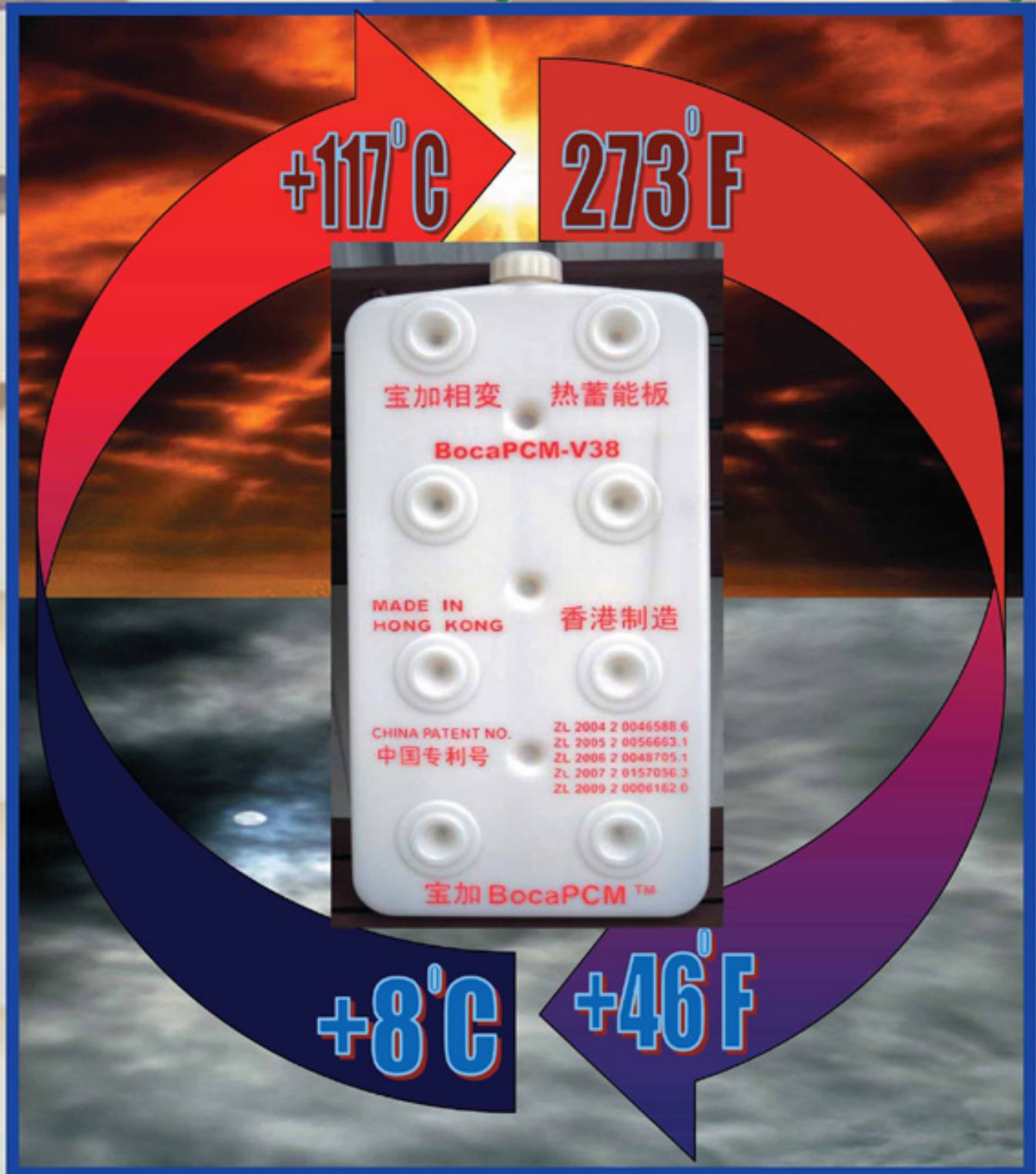
寶加相變熱蓄能系統

宝加BocaPCM™

Boca Phase Change Material Thermal Energy Storage Systems

Reduce >50% Chiller Plant Running Cost and

Reduce >50% Global Warming Effect due to Air-Conditioning



Invented & manufactured in Hong Kong by:
寶加國際有限公司 BOCA INTERNATIONAL LIMITED

456, Shui Lau Tin, Pat Heung, Yuen Long, N.T., Hong Kong.

香港新界元朗八鄉水流田456號

Tel: +852-31766028 Fax: +852-31766099 Email: Dr.RichardChan@Gmail.com



自動清洗過濾器 - 全不銹鋼(316)設計，
可過濾大於十微米物質，
適用於海水系統，冷卻塔系統等等...

- 工程履歷**
- 東頭邨 (HKHA)
 - 彩雲道3B一期 (HKHA)
 - 上環警察總部 (ASD)
 - 鴨脷洲公園 (EMSD)



- 工程履歷**
- 大埔教育學院
 - 蒲崗村道
 - 新鴻基中心

韓國製避震器

NSV CO., LTD.

Noise, Shock & Vibration Control



- 工程履歷**
- 朗豪坊
 - 如心廣場
 - 香港科學園
 - 擎天半島
 - 曼克頓山
 - 香港生產力促進局

CHARLATTE
réservoirs
FAYAT GROUP



"Charlotte" 差利水錘器

- 1) 已有多多年解決水錘問題經驗，
- 2) 適合任何水務系統。

新法機械有限公司

香港九龍新蒲崗六合街六合工業大廈22樓F室

電話:(852) 2325 6892 傳真:(852) 2322 1768 電郵:ham@newway.com.hk 網址:www.newway.com.hk

Sustainable & Carbon Reducing MVAC System For Residential Development

By: Ir Daniel Chong
FHKIE, MIMechE, MCIBSE
MIMarE, MIE(Aust), RPE

Waste Energy Generated from Air Cooled Plant

Hong Kong is getting warmer and more humid these days. Years ago we still can enjoy reasonably cool weather conditions during the evening in hot summer. However, the development in technology and up-lifting on standard of living, air conditioning system is being a must for every building, of which, the majority are the air cooled MVAC system. Hot air generated from the air cooled condenser contributing higher outdoor temperature. In the recent years, upon HKSAR promoting wider use of fresh water in MVAC system, cooling tower is becoming popular in central chiller plant of the commercial buildings. The energy saving can be up to 30% over the conventional air-cooled chiller plant. However, waste heat is still being dumped into the atmosphere or drained into the sea by means of heat exchanger.

With a few exceptions, nearly all residential buildings in Hong Kong are adopting air cooled direct expansion units or window type air conditioners. Plus the club house MVAC facilities, all that are the sources of adding temperature and nuisance to the environment.

Sustainable Carbon Footprint Reducing Considerations:

In fact, waste heat can be utilized by innovated engineering effort with total considerations on sustainable, green and reducing environmental footprint approach. In the planning and design stage of a project, one can carry out an overall appraisal on all associated facilities that required air conditioning, heating and/or combination of both. Hence a balanced energy efficient heat pump and waste heat utilization facilities can be developed. In particular, the swimming pool and the shower facilities can utilize most of the waste heating energy discharged from the MVAC plant. Other value-added design including the following can also set the trend on the carbon reduction charter:

- 1) To reheat the conditioned supply air to achieve the relative humidity(RH) level of the indoor area to 50%-55%RH so that the indoor temperature can be set at 25 degree C to maintain the indoor conditions within the human comfort zone. The additional cost and energy consumption for lowering the indoor temperature to 22-24 degree C to suit the actual RH of over 65% for most of the system in H.K. cannot be underestimated.
- 2) To supply hot water for laundry facilities, catering and kitchens, and the under-floor heating system as applicable.
- 3) To supply hot water to the designated residence at the designated low level floors.
- 4) To use swimming pool as heat-sink during the summer even though hot water is not required. There is no significant effect to the swimming pool users when the pool temperature is slightly increased from standard 33 degree C to a just a few more degrees.

Present Practical Solutions:

Figure 1 shows a simplified MVAC plant schematic for a typical residential establishment with club house and an outdoor swimming pool. Total energy heat pump is adopted in lieu of the conventional air cooled chiller. Due to the climate conditions of Hong Kong, it is required to include an auxiliary small duty air cooled heat pump or electric boiler to supplement the hot water supply to the outdoor swimming pool during the cold days in winter. However, for environmental and energy saving considerations, this auxiliary system can be cancelled by implementing certain operation policy or plant shutdown and overhaul program during such a period.

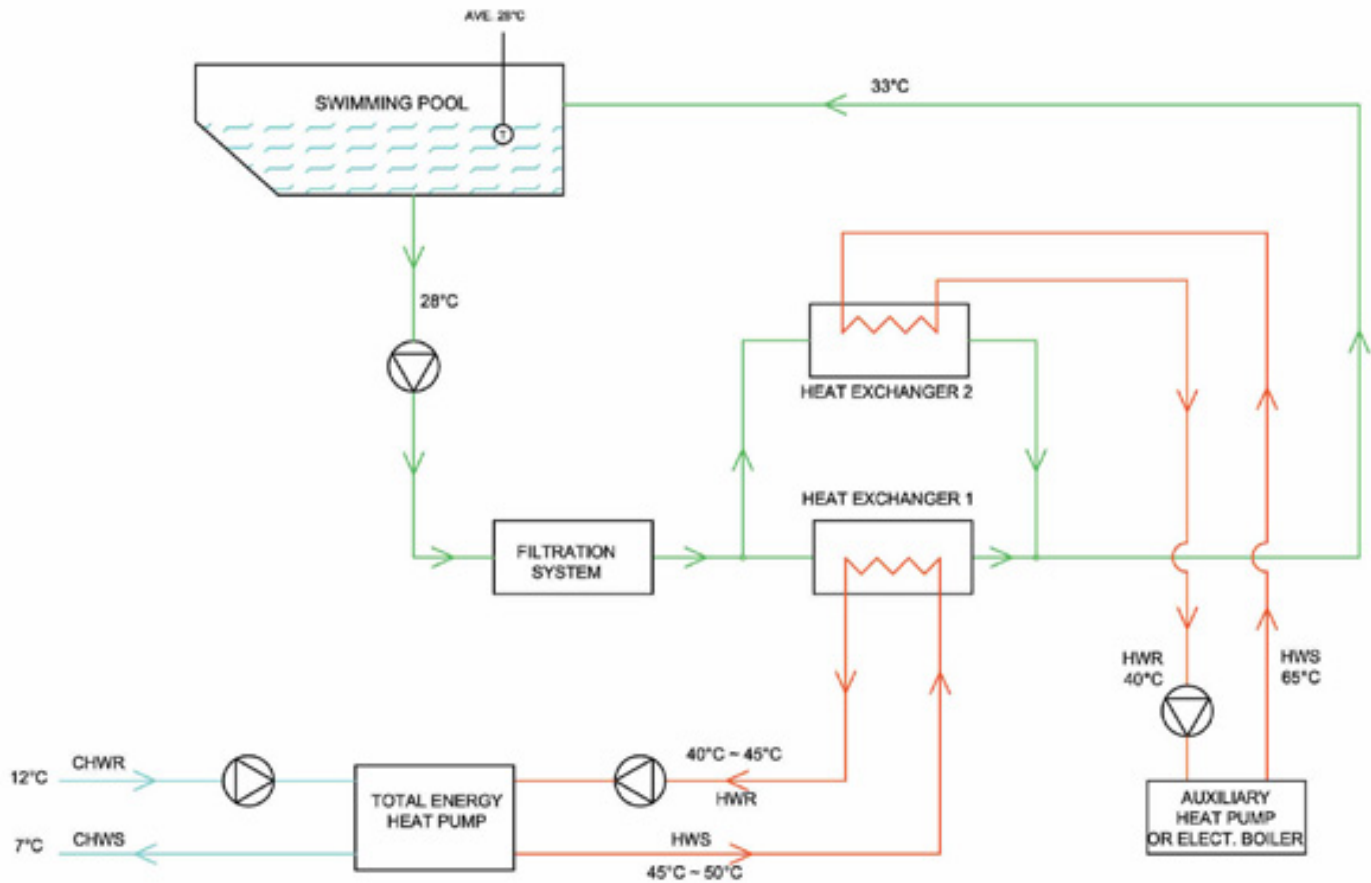


FIGURE 1 : SIMPLIFIED MVAC SYSTEM SCHEMATIC


Possible Way Forward

The concept on district cooling plant can be applied for residential development whereas the extent of which can be scaled down to individual establishment. The application of which is totally matching with the needs and loading profile is feasible in system design, i.e.;

- 1) Air-conditioning is required for all residential flats;
- 2) Daily living needs hot water supply;
- 3) All public facilities as mentioned here-in-above are equipped with both heating and cooling elements.

Just imagine how nice it is for residential buildings in future to be with:

- 1) No air-conditioning units hanging outside the external wall;
- 2) No irritated A/C engine noise echoed in the air both day and night.
- 3) No hot A/C exhaust air generated around the windows.
- 4) No A/C condensing water drops and cause nuisance to the public areas.

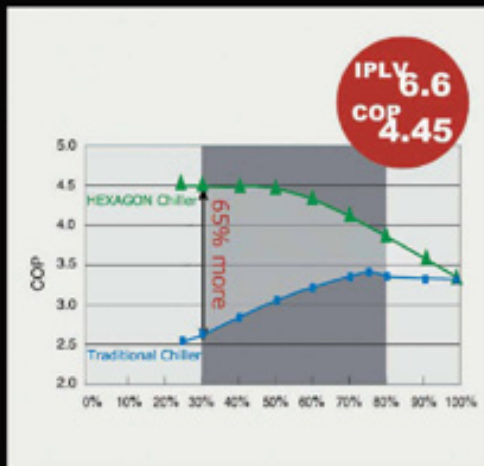
The merits of which are ready to be felt, however it may require joint effect of all in striding out for sustainable residential development with emphasis on carbon footprint reduction on MVAC system that we all can enjoy and our next generation smiles better too. Yes, we breathe better air! 

HEXAGON

MODULE CHILLER

New Shape New Idea

New idea of hexagonal body shape, which maximizes surface area of air-cooled condenser coil.

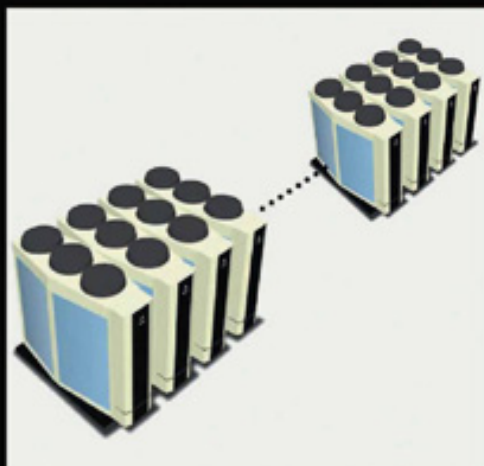


Premium Efficiency

The use of DC inverter compressor and unique hexagon design achieves IPLV 6.6 , COP 4.45.

Compactness

The hexagonal body shape saves on installation space.
25% space saving compared to traditional air-cooled chiller.



Modular Design

HEXAGON provides multiple modules, which covers a wide cooling capacity range from 100kW to 2000kW.

Engineered for flexibility and performance.™



NEXT GENERATION HERE TODAY



McQuay
Air Conditioning

JIMCO

UV-C & OZONE

UV-C & Ozone System

- * Enviromental Friendly
- * Eliminates Cooking Oil Mist & Odour
- * Controls Nuisance Odour
- * Controls Air Polluting Emissions
- * Sterilize Indoor Air
- * Wastewater Treatment



BacComber

Non Chemical Water Treatment System



- * Enviromental Friendly
- * Scale Control
- * Corrosion Control
- * Biological Control
- * For Light or Heavy Industries
- HVAC
- Cold or Hot Water
- Power Station
- Any Water Circulating System



Before

After



Before

After



DSL Dynamic Success Co. Ltd. 勁技有限公司

Unit 12, 6/F, Wang Cheung Industrial Building, 168 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong

Tel.: 2116 9021 Fax.: 2884 9862 E-mail: dsl@dsuccess.com.hk Website : www.dsuccess.net

Believe It or Not

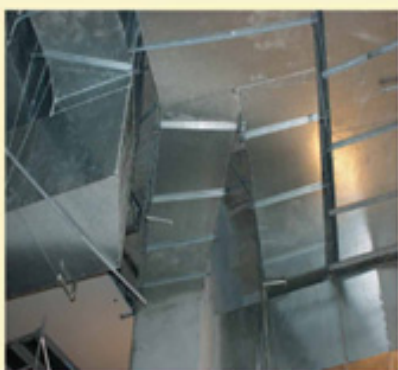


Durasteel Single Skin Duct Comprising Durasteel **Bare** Board Can Satisfy the Air Leakage Standard to DW 143 up to **2500Pa** *

** according to the air leakage test results from Furgo Technical Services Limited*

Test Results

Pressure (Pa)	Air Velocity (m/s)	Air Flow (L/s)	Leakage Rate (L/s/m ²)	Maximum Air Leakage Rate to DW143 (L/s/m ²)	Maximum Air Leakage Rate to DW144 (L/s/m ²)
500	0.1	0.503	0.035	0.51 (Class B)	0.51 (Class B)
1000	0.1	0.503	0.035	0.27 (Class C)	0.27 (Class C)
1500	0.1	0.503	0.035	0.12 (Class D)	0.35 (Class C)
2000	0.2	1.005	0.071	0.14 (Class D)	0.142 (Class C)
2500	0.3	1.508	0.106	0.16 (Class D)	NA



What's More?

Durasteel Single Skin Duct Comprising Durasteel **Bare** Board Can Satisfy BS 476 : Part 24 : 1987 up to **75 minutes Insulation #**

for type A Duct only. Please refer to the following table for more information about our partially insulated duct systems.

Durasteel Duct Offers **Full Insulation** As Well

Basic Construction of Durasteel Duct (from inside)			BS 476 : Part 24 : 1987			
1st layer	2nd layer	3rd layer	Stability	Integrity	Insulation - Type A	Insulation - Type B
9.5mm Durasteel	140kg/m.cu. 80mm-thick mineral wool	Nil	240 mins	240 mins	240 mins	120 mins
9.5mm Durasteel	140kg/m.cu. 120mm-thick mineral wool	Nil	240 mins	240 mins	240 mins	240 mins
G.I. sheet liner	6mm Durasteel	140kg/m.cu 120mm-thick mineral wool	240 mins	240 mins	240 mins	240 mins
G.I. duct	6mm Durasteel	140kg/m.cu 120mm-thick mineral wool	240 mins	240 mins	240 mins	240mins
# 9.5mm Durasteel	Nil	Nil	240 mins	240 mins	75 mins	45 mins
# G.I. sheet liner	6mm Durasteel	Nil	240 mins	240 mins	30 mins	30 mins
# G.I. duct	6mm Durasteel	Nil	240 mins	240 mins	30 mins	30mins

GELEC (HK) Limited

31/F One Kowloon, 1 Wang Yuen Street, Kowloon Bay, Hong Kong.

Tel.: 852-2919 8383 Fax: 852-2591 0548 E-mail: cd@gelec.com.hk website: www.gelec.com.hk

Over 15 Years Service in MTR Stations



全部香港製造
Local Fabrication
In Hong Kong

預製保溫喉管 Lucky - PIP® Pre-insulated Pipe

最優秀的保溫物料 A Perfect Thermal Insulation System

一站式服務 ...

◎靈活調度 ◎配合任何規格及尺寸 ◎交貨快

ONE STOP FOR ALL ...

◎Flexible ◎Make to Order ◎Quick Delivery



Link The Best Company Limited

Sales Office: Flat 12, 11/F, Block A, Merit Ind. Centre,
94 Tokwawan Road, Kowloon, Hong Kong

Factory: 188 Tai Po Tin, Fanling, NT
Tel: (852) 2568 4092 Fax: (852) 2423 7829

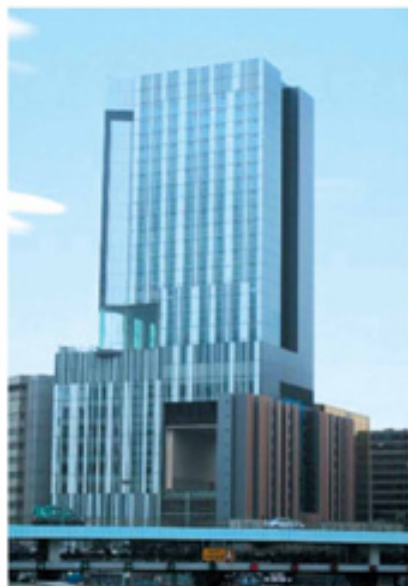
E-mail: sales@linkthebest.com.hk

Website: www.linkthebest.com.hk



ISO 9001 : 2008
Certificate No : Q040

MVAC Installations in PolyU Redevelopment of Pak Siu Yuen Project



Redevelopment of the former staff quarter-Pak Siu Yuen is one of PolyU recent capital projects. Situated in Tsimshatsui East by the Cross Harbour Tunnel and adjacent to PolyU Campus, the 30-storey complex building houses a teaching and research hotel, conference facilities, classrooms, offices and staff quarters with total area of approximately

36,000m². This project commenced in middle of 2008.

To reduce power consumption, green HVAC equipment such as inverter type split air conditioners for staff quarters and high COP water cooled chillers for main building are installed. Total 2400 T.R. water cooled chilled water system comprising three 700T.R. centrifugal chillers and a 300 T.R. heat pump provides chilled water for comfort cooling via decoupling water circulation system in summer and space heating in winter respectively. Frequency inverters are equipped to pumps in secondary chilled water circuit to deliver variable water flow according to actual cooling load demand which eliminates excessive water recirculation through differential by-pass valve. Condensing water pumps' speed is preset by frequency inverters in steps based on their different combination of operations. It renders good energy saving in compare with traditional head pressure control for constant speed pumps. Payback for frequency inverters for the water plants can be as short as 3 years. Filtration equipment such as dirt separators, side stream filtration unit and pressure step deaerators are installed in water side circuits to protect the system from premature fouling of heat exchangers and cooling towers. For air side energy conservation, thermal wheels and heat pipe in large PAU/AHUs shall reclaim dumping thermal energy. In winter, heat pump unit will provide hot water supply for space heating and cold water from the evaporator side to central chilled water plant for energy conversation.

To overcome limitation of site area and building height restriction, making use of underground space for accommodation is applied. The building consists of 4 levels of basement for carpark, plant rooms, back of house areas and teaching facilities. Smoke extraction and staircase pressurization systems are installed to meet code of practice

and fire safety requirement. Owing to complexity of layout and with several fire compartments on a floor, multi-zone smoke extraction systems with motorized smoke

dampers are used to extract and control spread of smoke from a fire compartment. Programmable AFA control panels are working with FSI AFA system to control and monitor status of fans and dampers operation as well as providing manual override control for fireman to deal with fire situation at scene. Both these systems are equally important as other fire service installations in protection of life and safe evacuation of occupants.



Like other intelligent buildings, Building Management System is a basic installation for effective energy management and efficient operation of E&M installations. The system adopts servers for central processing of command and monitoring signals which enhances system tractability. BACnet/IP listed DDC equipment are used to facilitate greater flexibility of further expansion and maintenance.



This project has been completed in September 2010 and the teaching hotel portion will be open in early 2011. It will definitely become an iconic landmark in the district. ◊

Project Summary

Project Site	: Tsimshatsui East
Client	: Hong Kong Polytechnic University
Architect	: Rocco Design Architects Ltd.
M&E Consultant	: J. Roger Preston Limited
HVAC Contractor	: Lucky Engineering Co. Ltd.
Completion Date	: September 2010

首屆「海峽兩岸四地制冷空調工程節能減排新技術研討會」



由中國制冷空調工業協會和台灣區冷凍空調工程工業同業公會主辦，為期3天的首屆「海峽兩岸四地制冷空調工程節能減排新技術研討會」於2010年10月13日在珠海市德翰大酒店（國際會議中心）隆重舉行。香港空調及冷凍商會派出4名代表出席了今次研討會，包括主席余達志先生，理事梁栢泉先生及羅滿棠先生及前會長陳家龍先生。余主席並代表港方在大會開幕時發言，更接受慧聰暖通空調制冷網的訪問。

兩岸是指中國和台灣，四地是包括香港和澳門。四個地區都有不同的背景和技術，大家借用這個機會，把區內最新的制冷空調工程節能新技術與大家分享，使到碳排放可有望加速減少。

研討會第一天是集中在主題報告，包括廣州東亞運動城可再生能源利用、香港鐵路空調系統設計、澳門威尼斯度假娛樂中心空調機房設計與安裝及台灣便利商店節能改善技術等等。第一天晚上大會安排了開幕招待酒會，加強大家的交流和認識。

第二天是專題報告，四個專題包括“制冷空調工程節能技術應用”、“地源熱泵空調工程技術”、“潔淨空氣節能工程技術”和“蓄冷蓄熱空調技術應用”。是晚，中國制冷空調工業協會邀請台港澳代表出席招待晚宴，感謝大家出席和支持是次研討會。

至於第三天則是節能工程實地參觀學習交流。通過三天的交流，每個地區的代表都對其他地區的節能新技術加深了解和認識。

如果各會員對是次研討會的主題及專題感興趣，可以到商會辦事處借閱有關論文集作深入研究。下一屆的研討會將移施到台灣舉行，有興趣參加的會員，請密切留意明年有關這研討會的通告。



Professional's Choice

PHENOTHERM™

聚溫® 環保泡酚

CFCs & HCFCs Free Phenolic Foam Insulation (Zero ODP)



Rigid Phenolic Foam Insulation is the Best Selection for Pipework in HVAC System

- ★ Pipe insulation wall thickness in single layer from 15~150mm-Easy Job!
- ★ Perfect harmony with pipe support in same materials
- ★ No air-gap after proper installation, insulation ID cut to top-fit pipe OD.



- ★ Rigid insulation ensure the final performance, no compromise on wall thickness as other flexible elastomeric materials

PAL®

Complete Accessories Leads to a PERFECT SYSTEM!

TC 98

**Class '0'
Butyl Sealant Tape**

★ BS476 : Parts 6, 7.

IA 911WB

**Class '0' Water Based
Low VOC Insulation Adhesive**

★ BS476 : Parts 6, 7. ★ USEPA Method 24

IS 918

**Class '0' Low VOC
Industrial Sealant**

★ BS476 : Parts 6, 7. ★ USEPA Method 24



Complied with
HKEDP VOC Standard
Latest Regulation



PAL® IS 918 Sausage Pack,
nozzle and caulking gun.

AT-38, 38W & 38B Class '0' Aluminium Foil Tape

- ★ To meet the General Specification of A. S. D.
- ★ BS476 : Parts 6, 7. • 38 micron thickness without release paper in width of 75mm (3")



SOLE AGENT :

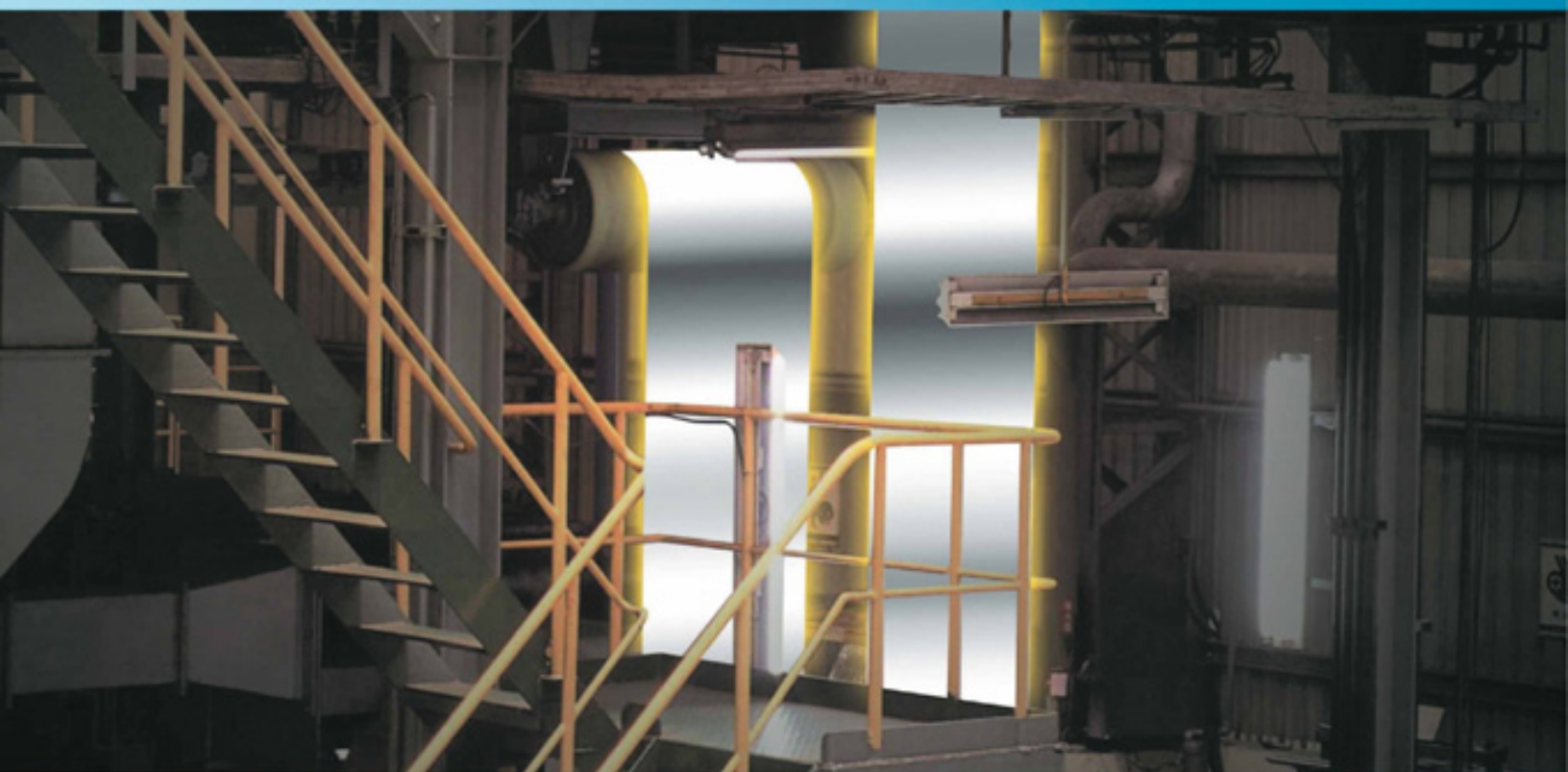


**福隆(香港)有限公司
Fook Loong (HK) Ltd.**
香港九龍旺角塘尾道18號嘉禧大廈19字樓
19/F, Skyline Tower, 18 Tong Mi Road, Kln., HONG KONG.
Email : flhk@flhk.com.hk ☎ 2393-7773
www.flhk.com.hk FAX : (852) 2390-6377

Distributor

賢安建材

YIN ON TRADING LIMITED



Hot-Dip Galvanized Steel Sheet Metal **BSEN10327-DX51D+Z275, Regular Spangle**



燁輝企業
YIEH PHUI

Country of Origin: Taiwan



新研發塗層有效
阻止退伍軍人症



Yieh Phui Kaohsiung Factory

香港灣仔皇后大道東228號中華大廈17樓A室
Unit 17A, Jonsim Place, 228 Queen's Road East, Wanchai, Hong Kong
Tel: 2572 7110 Fax: 2572 7780 E-mail: sunny@yinon.com.hk

Contact Person: Sunny Tsang

取之社會 用之社會



開心社區服務

香港冷凍商會不經不覺已成立近半個世紀。在過去數十年，我們的會員及業內精英一直為促進空調和冷凍行業的發展投入不少時間和心血。而時至今日，這行業無論在經營環境、業界標準、操守、人才培訓等等已不斷得到改善，不少同業更已發展成頂尖企業。但所謂「取之社會 用之社會」，在大家成功的同時，我們希望能結集會員們的關愛力量，好好回饋社會。所以本會最近亦申請了『商介展關懷』，這也是本會在未來發展方針上其中一個重點。

明年本會將邁進 50 週年，除了舉行慶祝活動之外，我們亦會積極參與更多公益活動，關心社會上有需要的社群。就好像今年 7 月 3 日，本會就曾聯同「開心社區服務」舉辦《送涼行動》。

啟田浸信會屬下的開心社區服務於2000年成立，並註冊為一間非牟利社會服務機構。開心社區服務沒有接受政府資助，主要經費來自教會捐助及籌款活動。「凝聚家庭扶老弱，開心互助建社區」是開心社區服務的口號，希望透過有創意及多元化的社區服務，促進社區人士互助互愛的精神，傳遞正面及積極的價值觀，支援區內家庭以建立和諧開心的社區。



活動大合照

在香港這個充滿了經濟機會的城市，貧富差距卻日益嚴重，而低收入家庭的數目也越來越多。所以當日本會代表捐出 100 台電風扇，由20位會員聯同25位開心社區服務義工探訪了30 個低收入家庭和獨居長者，並將電風扇贈與他們，希望這些家庭可在炎炎夏日裡享受多點涼意及感受到社會各界的關心。

在此再次多謝各會員的捐贈和身體力行參與這次《送涼行動》。我們將於未來的日子舉辦更多公益活動，而在今年12月亦會為100名長者安排了一次『冬至耆英晚宴』活動，盼望他們能有一個歡樂共享的冬至。除了本會會員之外，亦期待業界各位能多多支持！。



出席活動的會員代表

KEMBLA (HK) LIMITED
金特霸(香港)有限公司
Member of Metal Manufactures Group

Kembla (HK) Limited is a member of the Metal Manufactures (MM) Group, which is Australasia's largest and most highly regarded supplier of copper tube and fittings. Copper tube and fittings are stringently manufactured under the famous **Kembla** name to various international standards for more than 90 years.

Kembla (HK) is a specialist distributor of pipes, valves and fittings delivering to a broad cross-section of markets such as plumbing and drainage, HVAC and fire services. Warehousing facilities reduces delivery times and retail shop offers additional delivery options. Products are sourced from a number of top manufacturers. **Kembla** (HK) is moving forward by growing the business with new products and value added services.



KEMBLA	Kembla	: Copper Tubes and Fittings - BS EN 12735. Suitable for high pressure refrigerants such as R410A
SeAH STEEL PIPE	SeAH	: Black Carbon and Galvanized Steel Pipes - BS 1387 / BS 3601 / BS 4360 / BS EN 10255 / BS EN 10217 / API / ASTM A53
SEAF STEEL FITTINGS	SEAF	: Black Steel Fittings - BS 1965 / BS EN 10253
TM	TM	: Galvanized Steel Fittings - BS 143 & 1256 / BS EN 10242
Grinnell MECHANICAL PRODUCTS	Grinnell	: Grooved Couplings and Fittings - WRAS Certification, with FM / LPC / UL approvals
K-TOP	K-Top	: Ductile Iron Pipes & Fittings - BS EN 545 / BS EN 598. K9, K12 up to 1200mm DN Nominal size
Vinidex	Vinidex	: uPVC Pressure Pipes & Fittings - BS 3505 / BS 4346
SUPERLON INSULATION	Superlon	: Insulation Tubing / Sheets / Rolls / Foam Tape - BS 476-6 & 7 / ASTM D 635 / UL94 / JIS K6911

Think About **Ventilation**
Think **Panasonic...**

Ceiling Mount Type



Air Volume (CMH) : 100 - 400
Noise Level (dB) : 26 - 38

Low-Noise Type Cabinet Fans

NEW

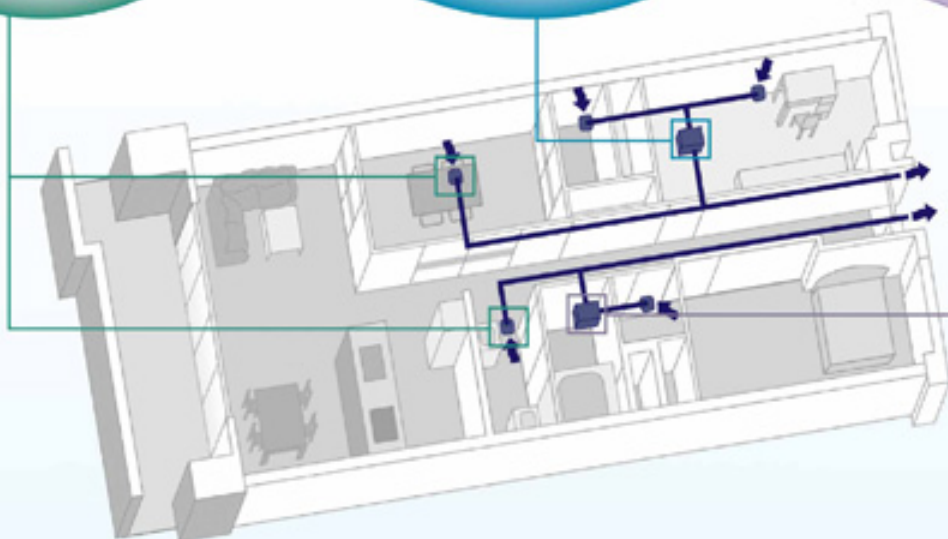


Air Volume (CMH) : 145 - 1,900
Noise Level (dB) : 17 - 43

Mini Sirocco Fans



Air Volume (CMH) : 150 - 1,550



Features :

- COMPACT SIZE
- LONG LIFE MOTOR
- LOW NOISE
- EASY INSTALLATION
- SAFE AND RELIABLE DESIGN : FSD & IEC COMPLIANCE

Remarkable Job References :

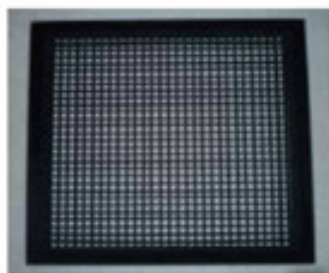
- Palazzo • Peak One • Langham Hotel
- Vision City • Cityplaza Hotel
- CITE 33 • Tak House • LAKE Silver
- Tai Wai Maintenance Centre Phase 1 & 2

• Exhaust polluted air • Intake fresh air • Exhaust indoor humidity • Prevention of pollen & dusts from coming in
Contact us to learn more about our ventilating products

DDS “無滴汗” 風咀 沒有倒汗水的風咀



圓型散流器



雙層百葉風咀

感謝各大用戶支持

六福珠寶，大快活，必勝客，九龍維景酒店，喜來登酒店，君悅酒店，九龍香格里拉酒店，火炭體育學院，VTC 中華廚藝學院，葛亮洪醫院，APM，新世紀廣場，中華遊樂會，新鴻基物管，康業物管，MTR...等等

日本先進技術 - 在風咀表面用靜電植上纖維尼龍毛 66。可防止結露水滴，防霉及不助燃功能。已通過 BS:476 Part 6、Part 7 測試，擁有香港、澳門及中國消防證書。

"無滴汗風咀" 特別為商舖、食肆及出入口冷氣位而設，完全防止因"滴水"而產生的不便與問題。基本顏色：黑、白及灰。

DDS VAV 電發熱線系列

專為 VAV 而特別設計的電發熱線系列。



預先裝配所需設備，例如發熱線，Contactor，SSR，SCR 或 'DDS' AI Thermal Control 等。

安裝方便及節省時間

DDS Delta Duct Systems Ltd 佳得風管系統有限公司

九龍觀塘道 350 號麥士威工業大廈 4 字樓

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

Web: www.dds.hk

e-mail : rickysun@dpx.hk / heidichan@dpx.hk / calvinwong@dpx.hk



恩索環保科技有限公司
Eaxon Environmental Technology Co., Ltd.

Shanghai • Hong Kong • Beijing • Guangzhou

DEVICE IMPROVING AIR QUALITY



The New Standard in
Air Purification Technology



*Improving the health and
well-being of people wherever
they live, work or play*



Air Filtration Products



*Your partner for managing IAQ
improvement Commercial, Industrial
& Hospital applications*

UV
Resources



*Commonly specified into new
buildings to reduce infectious agents,
occupant absenteeism and
mechanical system maintenance.*

TRION
air purification systems



*Ideal for the removal of
smoke, fumes, and oil/coolant
smoke and mist*

香港辦事處 Hong Kong Office

香港九龍觀塘開源道48號威利廣場808室

Unit 8, 8/F, Westley Square,

48 Hoi Yuen Road, Kwun Tong, Kowloon.

電話 Tel: (852) 3590 4656 傳真 Fax: (852) 2566 1321

Website: www.eaxon-group.com

E-mail: info@eaxon-group.com

Horse Racing Night

19 May 2010

We thank you very much to our Immediate Past President, Mr. Daniel Chong from Winston A/C Engineering (HK) Co., Ltd. for his generosity to sponsor us the Horse Racing Night on 19 May 2010. All participants enjoyed and had good fun.



2010 賽馬夜團體合照

ACRA/ASHRAE Technical Workshop in Air System Design & Application

May to Jun 2010

Training plays an important part in our Association. In order to cope with the rapid changes community and to meet the legislative requirements, ACRA always care about the needs of our members. ACRA has co-organized a series of seminars and workshops with ASHRAE Hong Kong Chapter and The Hong Kong Registered Ventilation Contractors Association between May to June 2010 respectively.



Fan Donation

3 Jul 2010



Individual team started to visit the families



Beneficiaries received fans from our President, Mr. KY Ip

The Annual Basketball Tournament

29 Jun 2010

We had 9 teams competed against each other for the Championship.



The Champion - Jardine Eng. Corp



1st Runner - Up - Raising Eng. Ltd.



2nd Runner - Up - ATAL Eng. Ltd.

香港註冊通風系統承建商註冊講座

Jun 2010



Golf Day - Trane Cup

27 Aug 2010

This year we are glad to have members sponsored two Golf Competitions. The first one was held in April and the second one Trane Cup (sponsored by Trane Hong Kong) was held on 27 August 2010 at CITIC Chang Ping Golf Club. There were 56 participants joined this great day.



Champion	Victor Law	Longest Drive	
1st Runner - up	Jackie Wong	Hole 9	Kelvin Tang
2nd Runner - up	Ricky Chan	Hole 18	Ben Lau
Best Front 9	Kelvin Tang	Nearest to the Pin	
Best Back 9	Paul Cheung	Hole 3	K B Wong
		Hole 16	Benjamin Chan

ACRA Wine Tasting Night

By: Kenneth Tsang

13 Aug 2010

For ACRA, we always love to explore different style of social activities to build a stronger bond and improve the team spirit of our members. On August 13, 2010, we held our 1st wine tasting course night with Wine Association of Hong Kong. Since many of us drink wine in various occasions, we thought it would be interesting to learn more about wine appreciation. We had over 20 participants for this event and had a fantastic night out learning about the basics of wine in a relaxing atmosphere.

To begin with, our instructor of the night, Luis showed us a video demonstrating the health benefit of drinking wine. We've learned that red wine contains one of the highest levels of antioxidants in all type of food or beverages, which is excellent for prevention of heart disease and cancer. For those of us who enjoy drinking wine regularly, it was a decent surprise to learn that even drinking up to half a bottle of red wine every night is still good for your health!



CHEERS TO ACRA !!!!!!!
CHEERS TO ACRA !!!!!!!
CHEERS TO ACRA !!!!!!!



We also learned how to read the wine labels along with some basic wine classifications. Wines are classified into two main regions: Old World and New World. Old World consists of the traditional wine producing countries like: France, Italy, Spain, Portugal and Germany. Out of all, French Wine has the most sophisticated class system which uses to distinguish its quality (AOC - Appellation Control Statement, Premier Grand Cru to Cru Bourgeois, First Growth vs Second Growth etc). Like the certifications we recognize for building materials, this should come in handy when we need a simple way to figure out the quality of the wine next time.

Overall, it was a great Friday night out which we did not only learn about wine tasting, but also had many good laughs and interesting conversations. As Benjamin Franklin once said, "Wine is constant proof that God loves us and loves to see us happy."

See those beautiful smiles from the picture? We highly recommend you to join us when the next one comes along!

The 61st Anniversary PRC Celebration Dinner at United Centre Queensway

27 Sept 2010



Minor Works

Minor Works control system will be implemented upon commencement of the Buildings Ordinance 2008. ACRA has tailor-made a "Minor work top-up course" with Vocational Training Council for our members in Sep 2010. A total of 40 participants joined this course and they found it useful and helpful.

Class for "Minor work top-up course" with Vocational Training Council started in mid Sept 2010 at Billion Plaza Cheung Sha Wan.



Sept 2010

Golf Competition ACRA Cup at Kau Sai Chau Golf Course



Group Photo



ACRA Table Tennis



1st Runner-up – Kembla (HK) Ltd.



2nd Runner-up – Gotop Eng. (HK) Ltd.



Champion – Air Trade Centre Ltd.



Group Photo

Nov 2010

COMPANY NAME	CONTACT NO.	TRADE	
ATAL Engineering Ltd.	安樂工程有限公司	2565 3392	E&M Contracting
Carrier Hong Kong Ltd.	開利(香港)有限公司	2694 5618	Air-Conditioning Equipment Supplier
Krueger Engineering (Asia) Ltd.	高維德電機工程有限公司	2860 7333	Air-Conditioning, Electrical, Fire Services, Plumbing & Drainage Installation
Newand Engineering Ltd.	新隆工程有限公司	2967 8620	Registered Contractor in ACMV & Electrical Installation
REC Engineering Co., Ltd.	聚電工程有限公司	2619 8082	E&M Contracting
Shinryo (Hong Kong) Ltd.	新隆工程香港有限公司	2237 8624	Building Services, E&M Contractor
Shun Hing Engineering Contracting Co., Ltd.	信興電機工程有限公司	2419 8282	Contracting
The Jardine Engineering Corporation Ltd.	怡和機器有限公司	2807 4511	Contracting / Supplier / Building Automation / Energy Service
Trane Hong Kong	特靈香港	3128 4764	Air-Conditioning Equipment Supplier
Winstan Air Conditioning & Engineering (HK) Co., Ltd.	永通冷氣工程(香港)有限公司	2764 1200	Contracting
York International (Northern Asia) Ltd.	約克國際(北亞)有限公司	2331 9286	Manufacture of Air-Conditioning Equipment
Young's Engineering Co., Ltd.	景福工程有限公司	2235 0900	Design, Supply & Installation of Electrical & Mechanical Services, Routine Maintenance Work
Fellow Members			
Alliance Contracting Co., Ltd.	聯和承造有限公司	2891 9083	Contracting
Analogue Technical Agencies Ltd.	安樂科技有限公司	2565 3339	Air-Conditioning Equipment Supplier "Hitachi", "Evaporator", etc.
Chevalier (HK) Ltd.- A/C Division	其士(香港)有限公司-冷氣部	2111 4811	Contracting
China State Mechanical & Electrical Engineering Ltd.	中國建築電機工程有限公司	2823 7888	Contracting
Chun Wo E & M Engineering Ltd.	俊和電機工程有限公司	3758 8007	Contracting
Dalton Airconditioning (Hong Kong) Ltd.	大金冷氣(香港)有限公司	2570 2786	Air-Conditioning Equipment Supplier
Elstar Engineering Co., Ltd.	怡輝冷凍工程有限公司	2606 6922	Manufacturer of HVAC Equipment
Honeywell Ltd.	霍尼韋爾(香港)有限公司	2331 9133	Building Automation Contracting
Hong Kong Thermo Industries Ltd.	香港冷凍器材有限公司	2674 6876	Manufacturer of HVAC Equipment
Hsin Chong Aster Building Services Ltd.	新昌亞仕達屋宇設備有限公司	2579 8238	E&M Contracting
Johnson Controls Hong Kong Ltd.	江森自控香港有限公司	2590 0012	Supply, Install & Maintenance of HVAC, Fire Services, E&M, Security & Extra Low Voltage System
Kevin Engineering Co., Ltd.	榮信工程有限公司	2422 3110	HVAC Contracting E & M Engineering
K-Thorn Engineering Co., Ltd.	拔鋒工程有限公司	2481 2918	Air-Conditioning & Electrical Installation
Lucky Engineering Co., Ltd.	運通冷氣電業有限公司	2780 5285	E&M Contractor
McQuay Air-Conditioning Ltd.	麥克維爾空調有限公司	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.	德寶工程有限公司	2891 8722	Engineering Contractor
Quad-Tech Engineering (HK) Co., Ltd.	高得工程有限公司	2573 1832	Contracting
Ryowo (Holding) Ltd.	菱和(集團)有限公司	2319 8381	Manufacturer for Water Cooling Towers, Water Tanks & Pumps, etc.
Siemens Ltd.	西門子有限公司	2107 6506	Building Automation AFA, Security, CCTV & ELV System
Skyforce Engineering Ltd.	天科工程有限公司	2885 1620	Building Services Installation
Southa Co., Ltd.	南隆有限公司	2963 7175	Supplier of A/C Equipment
Standard Refrigeration & Engineering Co., Ltd.	立德工程有限公司	2781 0871	Design, Supply, Installation and Maintenance of HVAC System
Takasago Thermal Engineering (HK) Co., Ltd.	高砂熱學工業(香港)有限公司	2520 2403	Contracting / Energy Service
Technicon Engineering Ltd.	得力達工程有限公司	3193 1300	Building Services Design, Installation and Maintenance
We come Oncho Denki Ltd.	偉基溫調電機有限公司	2806 8316	Trading of HVAC Equipment
Westco Air Conditioning Ltd.	威高冷氣工程有限公司	2426 3123	Contracting
Corporate Members			
A&R Engineering Co., Ltd.	奇樂工程有限公司	2408 2960	Contracting
Air Master International Ltd.	亞士(國際)空調有限公司	2764 0307	Manufacturing of Air Conditioning Equipment & Component
Air Trade Centre Ltd.	裕風先達有限公司	2887 7000	Contracting & Supplier of Air Conditioning product
Alison M & E Engineering Ltd.	雅新機電工程有限公司	2595 1199	Contractor
Alpha Appliances Ltd.	第一電業有限公司	2529 7555	Authorized distributor of "Genera" air-conditioner
Aistem Technologies (HK) Ltd.	奧思(香港)有限公司	2647 8163	Contracting
Anway Engineering Co., Ltd.	正佳工程有限公司	2598 4228	Supplier
Armacon Asia Ltd.	阿樂斯亞洲有限公司	2574 8376	"Armaflex" insulation manufacturer
Arnold & Co., Ltd.	安利有限公司	2807 9400	To Market and Distribute A/C and Engineering Equipment for Building Construction Industry of HK & China Market
A Shing Engineering Co., Ltd.	亞成冷氣工程有限公司	2537 1818	Contracting, Supplier
Boca International Limited	寶加國際有限公司	3176 6028	PCM-TES Energy Service
Brightwell Air-Conditioning Ltd.	冠昇空調有限公司	2331 8559	Trading of HVAC Equipment
Brisky Limited	穿樓科技有限公司	2511 3161	Supply of 4 main themes: commercial split, central air conditioning, ventilating fan & fire rated board
Bun Kee (International) Ltd.	彬記(國際)有限公司	2748 9319	Wholesale
Chivas Corporation Ltd.	施洋洋行有限公司	2521 9768	Supplier
C.J. Wishing International Ltd.	惠生電業有限公司	2799 9797	Supplier of air-conditioning products - Daikin-Japan, Kimukoh-Japan, Inaba-Japan, Taco-USA, etc.
Cydeman Engineering Ltd.	佳電工程有限公司	2332 3591	E & M Contracting
Crownin Limited	冠殿有限公司	8202 0830	Contracting / Supplier / Building Automation
Dah Chong Hong (Engineering) Ltd.	大昌貿易行工程有限公司	2768 3595	HVAC Installation, E&M Packaged Installation
Delta Pyramax Co., Ltd.	佳澤科技有限公司	2511 2118	Trading
Dextra Pacific Limited	德士達太平洋有限公司	2511 8236	Supplier
Dynamic Success Co., Ltd.	勁技有限公司	2116 9021	Supplier (water treatment)
Eaton International Co., Ltd.	恩索有限公司	3590 4656	Supply of HVAC equipment
Associate Members			

COMPANY NAME

CONTACT NO.

TRADE

Associate Members

Electrodrive Engineering Ltd.	高宜工程設備有限公司	2573 7211	Supplier
Enviro-Tech Engineering Co., Ltd.	廣達工程有限公司	2827 0688	Trading
Ever Cool Refrigerating & Air-Conditioning Co., Ltd.	嘉銳冷凍空調設備有限公司	2356 8598	Supplier, Manufacturing
Extensive Trading Co., Ltd.	精基貿易有限公司	2889 1681	Trading - Mechanical Equipment, Building Materials, Environmental Products
Far East Engineering Services Ltd.	遠東工程服務有限公司	2898 7331	Contracting
Fook Loong (HK) Ltd.	福隆 (香港) 有限公司	2393 7773	Insulation Material Supplier
Fungs E & M Engineering Co., Ltd.	馮氏機電工程有限公司	2682 7200	E & M Contracting
GTECH Services (Hong Kong) Ltd.	英國通用工程(香港)有限公司	2123 0888	Contracting
GELEC (HK) Ltd.	香港通用電器有限公司	2919 8383	Supplier
Gether Force Air-Conditioning Engineering Co., Ltd.	群力冷氣工程有限公司	2890 2622	Contracting
Getwick Engineers Limited	佳域工程有限公司	2893 3600	Contracting
Goodways International Ltd.	怡達國際有限公司	2575 8770	Manufacturer's Representative
Gotop Engineering (HK) Ltd.	高隆工程(香港)有限公司	2459 3038	Electrical & Mechanical; MVAC Engineering
Greatop Power Ltd.	高力姆有限公司	2741 8682	Contracting, Supplier, Manufacturing & Energy Service
Great Top Engineering Ltd.	宏鋒工程有限公司	2345 2219	Contracting
Hanson System Engineering Ltd.	豪信系統工程有限公司	2884 9001	Building Automation
Honest Air Conditioning Ltd.	明發冷氣有限公司	2396 8108	Contracting & Supplier
H.W. International Air-Conditioning Ltd.	豪華國際空調有限公司	2796 8888	Manufacturer of Air-Conditioning Equipment
IES (Hong Kong) Limited	恒豐工程(香港)有限公司	2992 0830	Supply & install Central Hot Water Plant and Seawater Plant, Supply of Equipment.
Kambia (HK) Ltd.	金特豐(香港)有限公司	2528 0999	Supplier
Kin Wo A/C Engineering Ltd.	健和冷氣工程有限公司	2398 0157	Contracting
Kinden Corporation		2368 6136	Building Services - E & M Works
Kinetics Noise Control (Asia) Ltd.	建力聲震控制(亞洲)有限公司	2191 2488	Supply of Acoustic materials, vibration isolators, floating floor & barrier materials
Kings View Airconditioning Engineering Co. Ltd.	景匯空調工程維修有限公司	2796 2417	HVAC Contracting & Maintenance
Lee Tack Engineering Co., Ltd.	李德工程有限公司	2305 3111	Registered Ventilation Contractor
Life Air IQ Ltd.	活力空氣品質科技有限公司	3527 0106	Supplier / Manufacturing
Link The Best Company Ltd.	必發(香港)有限公司	2568 4092	Supply Pre-Insulated Pipe, Air Filter, Butterfly Valve, Electrostatic Precipitator, UV Sterilizer & Other Building Material
Man Po Environment Technologies Co., Ltd.	文寶環保科技有限公司	2429 0088	Supplier
Mega Power Engineering Co., Ltd.	猛力工程有限公司	2474 9832	Contracting, Supplier of A/C Equipment
Mesan Fiberglass Engineering (Int'l) Ltd.	明新玻璃纖維工程(國際)有限公司	2787 5717	Manufacturer of "MESAN" cooling tower (CTI certified); Sole Distributor for GRP Sectional Water Tank - SUNG IL, from Korea; Distributor of Air-Conditioning Equipments - Daikin from Japan
Midea Electric (HK) Ltd.	美的電器(香港)有限公司	3669 4888	Supplier & Manufacturer of "MD" product
NAP Acoustics (Far East) Ltd.	NAP 聲學工程(遠東)有限公司	2866 2886	Design, Supply & Installation of Acoustic Treatment and Vibration Control Products
New Way Engineering Co., Ltd.	新法機械有限公司	2325 6892	Supply the Pump (Aurora, Ebara), Auto Self-Cleansing Filter(Fitemox), Spring Isolator(NSV), Motor and other E & M Equipments.
Oxprime (International) Ltd.	鑫輝(國際)有限公司	2590 8088	BAC Cooling Towers; Thermal Insulations-Fiberglass, Rockwool, Cased Cell Elastomeric; PU Pipe Supports; Solid/Liquid Separation System; Non-chemical Water Treatment System; VAV & Fan Powered Terminals; Water Pumps
Peterson Engineering Ltd.	必德信工程有限公司	2365 0372	Contracting
Practical Engineering (HK) Co., Ltd.	百利美工程(香港)有限公司	2402 2772	Contracting/Supplier
Raising Engineering Ltd.	威信工程有限公司	2395 6081	Authorized Distributor of Toshiba & Carrier product; Registered Contractor
Richmax Air-Conditioning Co., Ltd.	萬聯空調有限公司	2573 4219	Distributor of HVAC products
Sanby Trading Co., Ltd.	聖德貿易有限公司	2573 4219	Specializing in trading Construction Insulation Materials, such as Phenolic Foam, Fibreglass
Savil's Engineering Ltd.	第一太平戴維斯設備工程有限公司	2534 1688	Contracting /Energy Service
Shun Hing Ref. A/C Engineering Ltd.	順興雪櫃冷氣工程有限公司	2387 2882	Design, Supply & Installation of Air-Conditioning
Sing Kin Ltd.	程達有限公司	2333 1518	Contracting
Stars (H.K.) A/C & R Co., Ltd.	恒星(香港)冷熱設備有限公司	6116 7832	Manufacturing
Souha Engineering Limited	南黎工程有限公司	2963 7241	Air-Conditioning & Refrigeration Installation
Super Mark (H.K.) Engineering Co., Ltd.	高捷(香港)工程有限公司	2595 1122	Supplier / Distributor for Electrostatic Precipitator, MVAC System & Electrical Installation
Teembase Development Ltd.	天基發展有限公司	2554 6263	Supplier / Distributor for Electrostatic Precipitator, MVAC System & Electrical Installation
Thermtech Building Products Ltd.	泛達建築材料有限公司	2756 3837	Contracting / Supplier for Weatherproof / Fire Resistant Materials to E & M Services
Tom's Equipment Co., Ltd.	義隆設備有限公司	2757 5539	Insulation Material Supplier
Tyco Water Hong Kong	泰科水務香港	2919 1900	Supplier
United Regent International	友基國際有限公司	2527 8003	Supplier / Manufacturing
Union Manor Ltd.	聯明有限公司	2797 2168	Contracting
Viewco Building Services & Eng. Co., Ltd.	偉保工程有限公司	2543 0610	Contracting
Vital Engineering Co., Ltd.	威園工程有限公司	2571 5382	Contracting
Wai Luen Air Conditioning Ltd.	偉聯空調設備有限公司	2890 9321	Contracting
Wardson Engineering Ltd.	華順工程有限公司	2329 8268	Contracting
Wolter Asia Ltd.	華德亞洲有限公司	2456 0198	Supply & Manufacturing of full range of Ventilation Fans
Wyseman Co., Ltd.	威士文有限公司	2614 2213	Trading & Manufacturing Air Conditioning Accessories
Yin On Trading Limited	寶安隆材貿易有限公司	2572 7110	Supplier
Yordland Engineering Ltd.	日島工程有限公司	2362 2186	Design, Supply, Installation and Maintenance of HVAC, Electrical and Fire Services System