



Encompassing:



HVAC Asia 2010 & Refrigeration Asia 2010 Technical Seminars

Date : 1 st September 2010, Wednesday		
Time	Description	
1300hrs - 1330hrs	Title:	FLUKE ENERGY ANSWERS
	Conduct By:	Mr Joseph Ong, Senior Product Consultant, Fluke South East Asia Pte Ltd
	Synopsis:	Even lean organizations are finding they can reduce waste and energy expenditures by up to 30 % with an energy audit program. In just one audit each, using Fluke kits, three companies identified over \$2,700,000 in savings. The Fluke energy program gives actionable answers that will help you save money now, and in the future. This multi-step program is designed to identify, change and sustain costs savings by correcting energy issues you might not even know you have. Findings and results from actual audits will be presented to reveal common areas where huge saving potentials had been identified and realized.
1500hrs - 1530hrs	Title:	ENVIRONMENTAL FRIENDLY AND TECHNOLOGICAL ADVANTAGE OF OHNIT JAPANESE OZONE GENERATOR
	Conduct By:	Mr. Edmund Lau, Managing Director, Royal Edmundson International Enterprise
	Synopsis:	Royal Edmundson International Enterprise (www.edmundson.com.sg) was founded in July 2004 and is now actively looking for local and international distributors to market a range of world renowned innovative and environmentally friendly products from Japan, USA and Italy. OHNIT Japanese patented low temperature plasma technology can be used to remove and prevent odour / bacteria / moulding. It cleanses the surrounding air and eliminates secondary smoking contamination, benzene in newly furnished Homes, Offices, Hotels and in-Vehicles. The technology can produce ozone in a stable state of below 0.1ppm around the clock with human presence. Products have service life of more than 10 years without changing equipment operational parts to save costs and protect environment. OHNIT can achieve energy efficiency by operating as low as 2 watt, 4 watt and 6 watt of electric power to purify and disinfect the room coverage area of 10m2, 40m2 and 120m2 accordingly. For a standard hotel room, OHNIT technology can recover the odour contaminated room to ideal air freshness within 15 minutes! Please attend my seminar to exploit the business opportunity and explore the technological advantage of OHNIT Japanese Ozone Generators. Let's protect the environment by adopting a cost effective, energy efficient and productive way!
1600hrs - 1630hrs	Title:	A NEW INDOOR AIR QUALITY SOLUTION TO INSULATING HVAC DUCTS
	Conduct By:	Mr Kartik A Patel, Global Marketing Manager HVAC Segment, Armacell
	Synopsis:	Duct insulation represents over 80% of the surface area in HVAC applications. The choice of duct insulation is critical for the well being of building occupants. Armacell products offer a closed cell insulation that is fiber free, non dusting, meeting stringent fire requirements, FM Approved, and anti microbial additive, MICROBAN, to inhibit mold and mildew. The insulation choice is clear when healing, learning and productivity are the measure of success for indoor air quality and long term performance.
Date : 2nd September 2010, Thursday		
Time	Description	
1100hrs - 1130hrs	Title:	HVAC MICROCHANNEL
	Conduct By:	Mr Roy Williamson, General Manager Machine Sales and Tooling, The FIN Machine Co Ltd
	Synopsis:	This will include company information and a history of our success. We will then go on to discuss the benefits of a partnership with FMC. We will cover the opportunities for microchannel across a range of HVAC product areas, as well as our experience in this area. There will be a section highlighting the benefits of microchannel technology which includes potential savings over coil technology and weight savings. We will discuss what you need to build an HVAC microchannel product and will also be looking at a range of equipment including core builders, tube mills and many more.



Encompassing:



HVAC Asia 2010 & Refrigeration Asia 2010 Technical Seminars

1200hrs - 1230hrs	Title:	ENERGY SAVINGS THROUGH THE SMARTER SYSTEMS : CONTROLCITY-NX AND GREENBLUE
	Conduct By:	Mr. Oh Hyuk Kwon, Senior Engineer, Samsung SDS Co., Ltd
	Synopsis:	The ControlCity-NX is equipped with the functionality toward increasing comfort at reduced operating cost. It helps manage the building to be in comfort state while consuming less energy. Integrating building systems such as HVAC, lighting, electricity, access control and security can be easily achieved using standard methods. The ControlCity-NX has chosen web based technology and BACnet based technology as standard methods. With this integration, secure, safe and smart services are provided. Real time energy consumption can be monitored and analyzed, so the energy waste can be minimized. The GreenBlue earned its name because green and blue are major colors of light with red. Reportedly, up to 20% of a building's electricity bill can be attributed to lighting. The GreenBlue provides some methods to reduce the bill. The first one is that it uses dimming control. With the sensor measuring the brightness of increasing daylight, luminaries installed near the windows are dimmed to minimum level or turned off. With dimming switches on the wall, the brightness of luminaries can be adjusted at any time to current working condition. The second one is that using presence detector it ensures that the lights are on only when they need to be. Finally the third one is that the dimming module mounted on each luminary receives dimming command through wireless network. The growing need for flexibility of zoning in office lighting can be satisfied, especially in response to changing layouts. Furthermore individual luminaries can be turned on or turn off so that only necessary luminaries can be on.
1300hrs - 1330hrs	Title:	BELIMO – ELECTRONIC PRESSURE INDEPENDENT VALVE
	Conduct By:	Belimo Actuators Limited Singapore Branch
	Synopsis:	Electronic Pressure Independent Valve or EPIV offers the same basic functionality as Pressure Independent Characterised Control Valve or PICCV. EPIV combines the use of sensor, control valve and actuation to optimize operation excellence in a HVAC system. The beauty of EPIV is it allocates the required flow into the heat exchanger even at the smallest flow, regardless of pressure variations. Other advantages found in EPIV compare to conventional control valve as follow - With conventional control valve, engineering calculation must be done and considered prior to valve selection. Whereas in EPIV, no calculation is required, selection is direct by simply understanding the flow requirement of the heat exchanger. In buildings where EPIV is used, water balancing is not necessary. Plus, in the event of any addition or subtraction of FCU and AHU in the later years, not only is water balancing not required, the building continues to be dynamically balance by itself. EPIV performs and provides more than a conventional control valve. It is at the same time simple to use, easy to install, peace of mind for engineers and building owners.
1400hrs - 1430hrs	Title:	CALIBRATION OF THERMISTORS USED TO ACCURATELY READ AND MONITOR THE COOLING TOWERS AND CHILLERS IN 'GREEN BUILDINGS'
	Conduct By:	Dr Leigh Tipping, Vice President, Isotech (Asia) Representative Office, Singapore
	Synopsis:	This presentation will show the importance of calibrating thermistors to a high level of uncertainty. Differences between the condensed water supply temperature to the chillers, and the chilled water supply temperature to the room from the same header should be within $\pm 0.05^{\circ}\text{C}$ in order for the chiller plant efficiency to reach 0.6kW/RT, which is the bench mark for a 'Green Building'. In order for thermistors to measure such differences, the thermistors need to be calibrated in fixed-point cells, which are traceable to ITS-90. The instruments required to carry out the calibration are also discussed, and the results reported.
1500hrs - 1530hrs	Title:	RADIANT COOLING, A WAY FOR GREEN BUILDINGS WITH HIGHER COMFORT
	Conduct By:	Mr Volker Ruele, Master Engineer, Uponor GmbH
	Synopsis:	<ul style="list-style-type: none"> • different solutions for radiant cooling • advantages and disadvantages • higher comfort and cost savings • Reference projects
1600hrs - 1630hrs	Title:	NATURAL GAS COOLING SYSTEM
	Conduct By:	Mr Chew Soon Jin, Director, NRS Process (Singapore) Pte Ltd
	Synopsis:	Cooling systems using natural refrigerants such as ammonia, is certainly a viable and an economic option today. As ammonia, being a natural refrigerant, does not contribute to Ozone Depletion or Global Warming, it has a long history being used as a refrigerant of choice particularly for large food and chemical plants. Today, with new and emerging technologies, we show how natural refrigerants, like ammonia is now becoming a natural choice for discerning customers to cool offices and buildings. This paper presents an actual case study of office air-conditioning using ammonia equipment.



Encompassing:



HVAC Asia 2010 & Refrigeration Asia 2010 Technical Seminars

Date : 3rd September 2010, Friday		
Time	Description	
1100hrs - 1130hrs	Title:	GELAIR: A NEW TECHNOLOGY FOR IMPROVING INDOOR AIR QUALITY
	Conduct By:	Mr David Mackerness, General Manager, The LGM Group Pte Ltd
	Synopsis:	HVAC systems have transformed our lives by giving us comfortable conditions in all parts of the world throughout all seasons. Unfortunately with this increased comfort (temperature and humidity) we often lose quality in the air we are breathing. HVAC systems provide idilic environments for mold, bacteria and viruses to grow, and because we can't see them, we happily run buildings that have higher bacteria counts than stated guidelines. With the introduction of green programs and accreditation, we are gathering more data on bacteria and mold counts in buildings and often need to treat specific areas. In the past we have used filters, UV technology and even silver ions. Now we have a new standard of treatment with Gelair. Gelair is a mobile treatment option that kills mold, bacteria and viruses throughout an entire HVAC system. It covers the major problem areas (AHU cooling coil and condensate tray) as well as the ducting, the diffusers and most importantly the occupant zone. This talk covers the science behind this novel product, and explains how it can be used to reduce mold and bacteria counts in buildings to give safer environments and to treat specific areas that have failed green accreditation standards.
1200hrs - 1230hrs	Title:	INVERTER PERMANENT MAGNET (IPM) MOTORS TECHNOLOGY
	Conduct By:	Mr Leong Wai Mun, Assistant Sales Manager, Mitsubishi Electric Asia Pte Ltd
	Synopsis:	Benefits of using IPM. Electric motors are such an important part of the automation world that we live in and it is not surprising that continuous daily effort is carried out to improve their performance and energy efficiency of the motor is more important than ever. Driven by the need to conserve energy as a key priority, Mitsubishi Electric has developed a new type of IPM (internal permanent motor) motor that has a much improved torque characteristics, capable of faster response to demands for speed and load change, higher efficiency with no secondary copper winding losses and hence result in higher energy savings and also substantially smaller in size as compared to conventional AC induction motors. These energy savings are further enhanced with the IPM motor being integrated with Mitsubishi Electric's "FREQROL-FP Series" inverters that are used in high torque applications such as cranes, hoists, lifts, elevators, continuous duty pumps, fans, compressors, etc.
1300hrs - 1330hrs	Title:	ENERGY SAVINGS THROUGH THE SMARTER SYSTEMS : CONTROLCITY-NX AND GREENBLUE
	Conduct By:	Mr. Oh Hyuk Kwon, Senior Engineer, Samsung SDS Co., Ltd
	Synopsis:	The ControlCity-NX is equipped with the functionality toward increasing comfort at reduced operating cost. It helps manage the building to be in comfort state while consuming less energy. Integrating building systems such as HVAC, lighting, electricity, access control and security can be easily achieved using standard methods. The ControlCity-NX has chosen web based technology and BACnet based technology as standard methods. With this integration, secure, safe and smart services are provided. Real time energy consumption can be monitored and analyzed, so the energy waste can be minimized.
1400hrs - 1430hrs	Title:	KIRLOSKAR INDUSTRIAL REFRIGERATION COMPRESSORS - THE HEART WITH LOWEST COST OF OWNERSHIP
	Conduct By:	Mr Sanjay Grover, General Manager Corp Marketing, Kirloskar Pneumatic Co Ltd
	Synopsis:	Kirloskar Industrial Refrigeration, open type piston compressors and their features and performance which helps keep his Total cost of ownership at Lowest and thus helping Customers reduce their cost and be competitive. The talk will be basically on Company activities, Activities in Southeast Asia, Compressor features and details Reference installation and Capability.
1500hrs - 1530hrs	Title:	CLOSED CELL ELASTOMERIC INSULATION & THEIR APPLICATION
	Conduct By:	Mr Chumnan Vitoorapakorn, Deputy Managing Director, Eastern Polymer Industry Co.,Ltd
	Synopsis:	Why use Closed cell Insulation? * Area of application * Benefit of EPDM based synthetic rubber * Effective way to prevent condensation and energy saving



Encompassing:



HVAC Asia 2010 & Refrigeration Asia 2010 Technical Seminars

1600hrs - 1630hrs	Title:	COOLING TOWER SYSTEM & OPTIMIZING ITS PERFORMANCES
	Conduct By:	Mr Ng Kah Choong, Sales Director, Truwater Cooling Towers Sdn Bhd
	Synopsis:	A cooling tower is a heat rejection device, which extracts waste heat to the atmosphere through the cooling of a water stream to a lower temperature. Common applications for cooling towers are providing cooled water for air-conditioning, District Cooling plants manufacturing and electric power generation plants. This technical presentation will be mainly explain on the fundamental of open type cooling tower and the optimization of cooling tower performance to achieve energy saving.