



EXHIBITORS' TECHNICAL SEMINARS

1st September 2010, Wednesday	
TIME	Technical Presentation Area
1300hrs - 1330hrs	<p>FLUKE ENERGY ANSWERS <i>by</i> Mr Joseph Ong, Senior Product Consultant, Fluke South East Asia Pte Ltd About the talk :- 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 realised.</p>
1400hrs - 1430hrs	<p>PRESENTATION <i>by</i> ACTech Products & Equipment (S) Pte Ltd About the talk :- To Be Advised</p>
1500hrs - 1530hrs	<p>PRESENTATION <i>by</i> Airverclean Pte Ltd About the talk :- To Be Advised</p>
1600hrs - 1630hrs	<p>PRESENTATION <i>by</i> North East Refrigeration Parts Pte Ltd About the talk :- To Be Advised</p>
2nd September 2010, Thursday	
TIME	Technical Presentation Area
1100hrs - 1130hrs	<p>HVAC MICROCHANNEL <i>by</i> Mr Roy Williamson, General Manager Machine Sales and Tooling, The FIN Machine Co Ltd About the talk :- 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.</p>
1200hrs - 1230hrs	<p>ENERGY SAVINGS THROUGH THE SMARTER SYSTEMS : CONTROLCITY-NX AND GREENBLUE <i>by</i> Mr. Oh Hyuk Kwon, Senior Engineer, Samsung SDS Co., Ltd</p>

	<p>About the talk :- 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. Realtime energy consumption can be monitored and analyzed, so the energy waste can be minimized.</p> <p>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.</p>
<p>1300hrs - 1330hrs</p>	<p>BELIMO – ELECTRONIC PRESSURE INDEPENDENT VALVE by Belimo Actuators Limited Singapore Branch</p> <p>About the talk :- 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.</p> <p>The beauty of EPIV is it allocates the required flow into the heat exchanger even at the smallest flow, regardless of pressure variations</p> <p>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.</p> <p>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.</p>
<p>1400hrs - 1430hrs</p>	<p>CALIBRATION OF THERMISTORS USED TO ACCURATELY READ AND MONITOR THE COOLING TOWERS AND CHILLERS IN 'GREEN BUILDINGS' by Dr Leigh Tipping, Vice President, Isotech (Asia) Representative Office, Singapore</p> <p>About the talk :- 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'.</p> <p>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.</p>
<p>1500hrs - 1530hrs</p>	<p>RADIANT COOLING, A WAY FOR GREEN BUILDINGS WITH HIGHER COMFORT by Mr Volker Ruehle, Master Engineer, Uponor GmbH</p> <p>About the talk :- • different solutions for radiant cooling</p> <ul style="list-style-type: none"> • advantages and disadvantages • higher comfort and cost savings • Reference projects
<p>1600hrs - 1630hrs</p>	<p>NATURAL GAS COOLING SYSTEM by Mr Chew Soon Jin, Director, NRS Process (Singapore) Pte Ltd</p>

About the talk :- 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 airconditioning using ammonia equipment.

3rd September 2010, Friday

TIME	Technical Presentation Area
1100hrs - 1130hrs	<p>GELAIR: A NEW TECHNOLOGY FOR IMPROVING INDOOR AIR QUALITY by Mr David Mackerness, General Manager, The LGM Group Pte Ltd About the talk :- 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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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</p>
1200hrs - 1230hrs	<p>INVERTER PERMANENT MAGNET (IPM) MOTORS TECHNOLOGY by MITSUBISHI ELECTRIC ASIA About the talk :- Benefits of using IPM</p>
1300hrs - 1330hrs	<p>ENERGY SAVINGS THROUGH THE SMARTER SYSTEMS : CONTROLCITY-NX AND GREENBLUE by Mr. Oh Hyuk Kwon, Senior Engineer, Samsung SDS Co., Ltd About the talk :- 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. Realtime energy consumption can be monitored and analyzed, so the energy waste can be minimized.</p> <p>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.</p>
1400hrs - 1430hrs	<p>KIRLOSKAR INDUSTRIAL REFRIGERATION COMPRESSORS - THE HEART WITH LOWEST COST OF OWNERSHIP by Mr Sanjay Grover, General Manager Corp Marketing, Kirloskar Pneumatic Co Ltd About the talk :- 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.</p>

1500hrs - 1530hrs	CLOSED CELL ELASTOMERIC INSULATION & THEIR APPLICATION <i>by</i> Mr Chumnun Vitoorapakorn, Deputy Managing Director, Eastern Polymer Industry Co.,Ltd About the talk :- Why use Closed cell Insulation? * Area of application * Benefit of EPDM based synthetic rubber * Effective way to prevent condensation and energy saving
1600hrs - 1630hrs	PRESENTATION <i>by</i> Truwater Singapore Pte Ltd About the talk :- To Be Advised