

### **Building Services News**

Volume 46 Issue 6 *BS News* 

Article 1

6-1-2007

### **BS News**

Follow this and additional works at: https://arrow.tudublin.ie/bsn

Part of the Civil Engineering Commons, Construction Engineering Commons, and the Construction Engineering and Management Commons

### **Recommended Citation**

information, please contact

(2007) "BS News," *Building Services News*: Vol. 46: Iss. 6, Article 1. Available at: https://arrow.tudublin.ie/bsn/vol46/iss6/1

This Article is brought to you for free and open access by the Journals at ARROW@TU Dublin. It has been accepted for inclusion in Building Services News by an authorized administrator of ARROW@TU Dublin. For more

yvonne.desmond@tudublin.ie, arrow.admin@tudublin.ie, brian.widdis@tudublin.ie.



This work is licensed under a Creative Commons Attribution-Noncommercial-Share Alike 3.0 License



et al.: BS News

**JUNE 2007** 

# building services news

Face to Face — John Purcell, Varming

Refrigeration Conference Report

Commissioning & Commissioning Management



# The Grundfos portfolio now includes a range of performance shower pumps





WATERMIL

GRUNDFOS X COMPANY

# bs news

ISSN 0791-0878

Published by: Pressline Ltd, Carraig Court, George's Avenue, Blackrock, Co Dublin.

Tel: 01 - 288 5001/2/3 Fax: 01 - 288 6966

ISDN: 01 - 211 2338/9
email: bsnews@pressline.ie
web: www.buildingservicesnews.com
www.bsnewsbuyerguide.com
www.pressline.ie

Editor: Pat Lehane

Advertisement Director: Joe Warren General Manager: Louise Byrne

Origination and Design: Pressline Ltd. Tel: 01 - 288 5001

Su ption: One Year —€70

Printed by: dck/ebrook.

© All editorial contents and all advertisements prepared by the publishers, Pressline Ltd.

### IN THIS ISSUE



| Trade News & Product Information                   | 2  |
|--|----|
| J Orner  | 21 |
| Designing Building Services                        | 24 |
| Mahony Appointed Sanyo Ireland General Manager     | 28 |
| Refrigeration Skillnet Conference & Trade Exhibit  | 30 |
| Sustainable Ventilation Buzz Word at MTD Solutions | 36 |
| Another Side off Colm Byrne, Axis Engineering      | 38 |
| Heatrae Sadia Invests in the 'Perfect Cylinder'    | 39 |
| RACGS Goes South with Success                      | 40 |
| York Responds to Rebirth of Absorption Chillers    | 41 |
| Face to Face — John Purcell, Varming               | 42 |
| Plumb Lines  | 44 |

opinion

# Do You Know Your BER From Your DEAP to Your EPBD?

Despite the best efforts of CIBSE and bodies such as SEI, there is still a great deal of confusion and ignorance surrounding the Energy Performance of Buildings Directive (EPBD). Very few within the industry seem to be aware of the precise timescale, and likely impact, of its implementation.

Moreover, terms such as BER and DEAP are now being dropped into conversation when it is patently obvious that those using them do not fully understand what they stand for.

For the record, BER stands for Building Energy Rating and DEAP for Dwelling Energy Assessment Procedure. A special DEAP software package is available and this is used to produce the BER.

All relate to the requirements of the EPBD for which the exact timescale of implementation is now clearly set out. These requirements have serious implications for the entire building services sector.

Against this background **bs news** has asked Dr Ken Beattie of the DIT — one of the foremost authorities on the subject in Ireland — to explain all for our readers. His article will appear in the July/August issue of the journal but it is being flagged now in advance because of its importance.

Miss it at your peril!



### energy saving trv from oventrop

Given that a 1°C reduction in room temperature can lead to an energy saving of 5/6%, Oventrop's new DynaTemp 100/16 individual room temperature controller has the potential for considerable energy savings.

The use of intelligent, but easy-to-use electronic or computer-controlled individual room temperature controls is extremely beneficial and this new unit is ideal when deployed for radiator control and controlled window airing.

Installation is comparable with that of DSL routers and the integrated software administrates and controls all entries regarding heating and temperature setback.

Contact: Donny Bourke, Oventrop Area Sales Manager, Ireland. Tel: 087 - 239 7078: email: donnybourke@oventrop.co.uk

### 'machine safety' expert team formed

Against the backdrop of the "Health, Safety & Welfare Act, 2005", Schneider Electric Ireland has expanded its capabilities to offer a "one-stop-shop" team for those requiring a machine safety solution.

"In response to market demands", says Sean Slevin, Schneider Electric Ireland's machine safety product manager, "the application expertise, local industrial knowledge and ability to provide solutions are critical to provide exceptional service in this developing market."

The new integration team includes Industrial Solutions of Dunshaughlin, Co Meath and Vantage Control Systems of Clonmel.

On the distribution side, Demesne Engineering Sales (Dublin, Cork & Dungannon) are the first specialist distributor appointment. Fully trained, they hold stock for most of this award-winning range and can advise the customer on compliance.



Contact: Sean Slevin, Schneider Electric Ireland. Tel: 01 - 601 2200; e-mail: sean\_slevin@ie.schneider-electric.com



After a 5000 hour salt mist/ ammonium sulphate test the image above shows a traditional coil whilst the image below shows a MCHX coil



### aluminium micro-channel heat exchanger

Already widely-utilised in the automobile and aeronautical industries, the new micro-channel heat exchanger MCHX used in Carrier's Aquaforce range delivers unmatched performance.

Unlike conventional coils, the MCHX heat exchanger is made entirely of aluminium — this one-metal concept eliminates galvanic currents that are generated when different metals touch in conventional coils.

Many comparative tests, including the salt mist and ammonium sulphate test, provide proof of the increased corrosion-resistance of the MCHX. Effectively, MCHX offers three and a half times higher corrosion-resistance than copper/aluminium coils.

The micro-channels of the MCHX also make for improved refrigerant circulation, permit a 30% reduction in refrigerant charge, and deliver increased performance.

Contact: Austin McDermott, Core Air Conditioning. Tel: 01 - 409 8912; email:info@coreac.com



### A world without restrictions. The GHP VRF system.

The SANYO 3 Way ECO G Gas Heat Pump uses natural gas or LPG as the main source of power providing 56.0kW of cooling, 67.0kW of heating and no restrictions on power supply.

As well as being the only GHP VRF system to simultaneously provide heating and cooling, it also helps to reduce greenhouse gas emissions by an average of 5 tonnes per operational year. It's no wonder the SANYO 3 Way ECO G Gas Heat Pump is the natural choice.

www.sanyoaircon.com

SANYO Air Conditioners. The natural choice.

Think GAIA

### GAS DRIVEN VRF

ELECTRIC VRF
COMMERCIAL SPLIT SYSTEMS
ROOM AIR CONDITIONERS





### series ugb gauge for hvac applications

The Dwyer Series UGB gauges from Manotherm are ideal for air and chilled water usage typically found in refrigeration and HVAC applications.

They are enclosed in a plastic case that will not corrode or rust, contain brass wetted parts, and have dual english/metric scales with plus or minus 2.5% accuracy between 10 to 90% of span.

A wide variety of ranges is available, from full vacuum, compound to 15,000 psi. Pressure limits — full scale range; temperature limits — ambient: -20°C to 60°C; process: maximum 120°C.

Contact: Bob Gilbert, Robert Gilbert or Noel Walsh, Manotherm.

Tel: 01 - 452 2355; email: info@manotherm.ie



# THE Original University THE Original University Accept No. S. Auditorial Accept No. S. Audito



### new unistrut website

As part of Unistrut Ireland's development and investment programme, it has just unveiled a new website, www.unistrut.ie. As well as providing information about the company and its services, this site will enable customers to view and download details of all products in the Unistrut electrical and mechanical and sprinkler support systems range, including technical specifications and loading charts. This is just phase one of the website project. In phase two, which will be rolled out over the next six months, customers will be able to place orders 24 hours per day through the website for next day delivery.

There are many exciting changes happening in Unistrut Ireland this year. In addition to the new website, Unistrut will be moving to a new 20,000 sq ft premises over the next four months which will double the size of the existing warehouse. This will provide customers with a greater range of quality mechanical and electrical support systems, as well as a new range of services which will benefit and add value to their businesses.

Contact: www.unistrut.ie

### lokring appoint rsl in ireland (only heatless pipe jointing system)

Lokring has appointed RSL as distributor throughout Ireland for its heatless pipejointing system. The Lokring union joint consists of two Lokrings and one tubular joint for the acceptance of the two tube ends.

During assembly the tubes which are to be connected have to be pushed into the fitting right to the centre stop, and after that the Lokrings are pushed over the fitting. Due to the special inner profile of the Lokring the diameter of the connection is reduced until it is in absolute close contact with the outer surface of the tube which is to be connected.

Section "A" of the Lokring makes the pre-assembly onto the connection easier. The cylindrical section "B" reduces the outer diameter of the tube to be connected by at least 0.2%. This ensures a high flexible strength and a sufficient resistance against foreign forces which could act against the connection. The main sealing section "C" reduces the outer diameter of the tube by at least 2%.

The radial forces of the tube and the connection are directed outwardly, while the radial forces of the Lokrings are directed inward. This causes a state of equilibrium which is maintained for the life of the Lokring connection, in a state of elastic prestress.

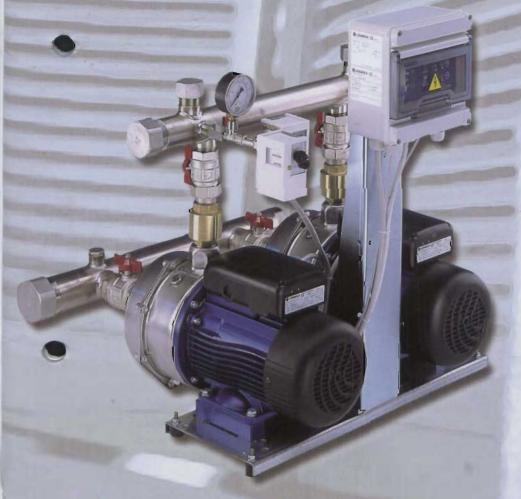
Contact: RSL (Ireland). Dublin: Tel: 01 - 450 8011; Cork: 021 - 431 7221; Galway: 091 - 757 818

et al · RS News

# Lowara residential pump systems. Domestic comfort.

Lowara contributes to domestic comfort with a complete line of pumps and technologies designed to supply water in the most efficient way. Constant water pressure is maintained even when consumption varies, and the hot and cold water mix is more stable. Excellence in water technology.

www.lowara.com





ITT

Engineered for life



( LOWARA





### reduce water wastage

Honeywell's Alwa-Kombi-4 throttle valve is a low-cost means to ensure immediate hot water and reduce water wastage in buildings with many outlets such as hospitals, hotels, office blocks and leisure/sports centres.

It is installed in the secondary returns of constant hot water systems to balance the system and can be fitted with an optional thermostatic control attachment to ensure constant circulation temperature.

Alwa-Kombi-4 is small and can be easily fitted using DN15 – DN40 (0.5 inch to 1.5 inch) internal or external threads. It features a visible, digital pre-setting dial with a concealed presetting handwheel. An optional drainage adaptor provides convenient system drainage.

Alwa-Kombi-4 is ideal for all potable water applications and is WRAS approved — the housing and all parts with flow-contact are made of corrosion-resistant red bronze. It features a cavity-free cartridge with maintenance-free spindle sealing while the spindle thread is isolated from the flow.

Contact: Honeywell Water Controls. Tel: 0044 800 7833 824; email: water.control@honeywell.co

### cif complains about the government to eu

The CIF is to make a complaint to the European Commission that the Irish Government's new public sector procurement contracts are contrary to the principles of EU procurement law. It maintains they will have an exclusionary effect on small and medium sized contractors as they transfer disproportionate risk to contractors.

Some of these risk are, by definition, unforeseeable and cannot be priced. This means that many SMEs will not be able to undertake public jobs under these contracts. Risks that are unforeseeable and cannot be priced should be shared between the employer and the contractor.

CIF says Governments elsewhere in Europe have moved away from the model of excessive risk transfer in favour of partnering contracts. This is the format it wants the new contracts to adopt.

Contact: Don O'Sullivan, Director Main Contracting, CIF. Tel: 01- 406 6000.

### swegon gold with new functions

Swegon has introduced an improved version of its Gold air handling unit with new innovative functions which emphasise its "plug & play" capabilities. Features include directly-driven supply and extraction air fans, integrated frequency converters, supply and extraction air filters and built-in Gold IQnomic control system.



The unique ReCO2 function ensures both air quality and temperature in the building without consuming unnecessary ventilator energy. This makes for additional energy savings.

The Xzone is a further development of the Gold IQnomic control system. With this function multiple-zone temperature control is now possible as standard.

Contact: Comfort Cooling. Tel: 021 - 484 7100; email: sales@comfortcooling.ie; Crystal Air. Tel: 045 - 893228; email: info@crystalair.ie

# Professional LED & Architectural Lighting Solutions

With lighting accounting for an incredible 20% of national electricity use, more and more specifers and clients are turning to Enlighten to solve their lighting requirements. Enlighten takes a holistic view of every application and devises the most appropriate, costeffective, bespoke solutions.

In addition to light performance functions, Enlighten considers analyses critical issues such as:—

Energy usage

Regulation compliance

Environmental impact

Life-cycle costs

Heat gain

Health and safety

Enlighten provides engineering-led, professional LED and architectural lighting solutions across all industry sectors, including:—

In-store retail display

Exterior signage

Safety lighting

Promotional/advertising displays

Fountain displays

Art gallery displays

Showcase lighting of corporate premises, public buildings, and national monuments

As engineering-based service providers Enlighten provides site surveys, problem analyses, system design and installation guidance.

It carries a comprehensive range of specialist LED fittings and fixtures from leading international suppliers, but also provides customised fittings and fixtures which it designs specifically — and manufactures — to suit each particular application.

### enlighten

Mulcahy Keane Estate, Greenhills Road, Walkinstown, Dublin 12. t: 01 - 460 1052

f: 01 - 460 1054

e: sales@enlighten.ie

w: www.enlighten.ie



Professional LED & Architectural Lighting Solutions

Published by ARROW@TU Dublin, 2007

### wireless...



You hardly have to lift a finger, let alone a floorboard to fit CM Zone. With no effort, upheaval, plumbing, cabling, drilling or fuss, CM Zone provides precise, room by room temperature control...

### Honeywell

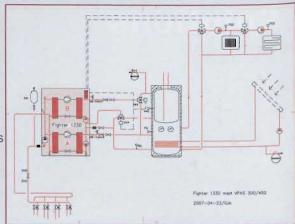
WITH THE NEW CM ZONE ...

# trade news + product information

### unipipe appoints thermomax

Unipipe is pleased to announce the appointment of Thermomax as key supplier to its new solar range of products. Thermomax, based in Bangor

Northern Ireland, is



Ground source heat pump connected to NIBE's new VPAS cylinder for "heating support"

the original inventor and producer of evacuated tube panels. It mainly produces systems for rebranding and export to companies such as Wiesmann in Germany and many other leading companies.

For "heating support" the larger quantity of solar tubes — typically an array of 60 tubes or 6 sqm — is utilised to not only heat the domestic hot water, but on sunny winter days it also cuts down on the heating load for the heat pump.

Contact: Paul O'Donnell, Unipipe.
Tel: 01 - 286 4888; email: info@unipipe.ie

### o'brien appointed ipfma chairman



David O'Brien, Managing Director of Acuman Facilities Management Ltd, Dublin, has been elected Chairman of the Irish Property & Facility Management Association (IPFMA) for 2007/2008.

Having worked in facilities management since the early 1980s, David has wide-ranging experience in many aspects of this diverse profession. He has held the positions of facilities engineer, facilities

manager and property portfolio manager throughout his career and has also served on various committees and industry bodies on behalf of the Association.

Contact: David O'Brien, Chairman of the IPFMA. Tel: 01 241 2200; Mobile: 086 618 2607.

### new calpeda submersible series

Calpeda has introduced a new series of submersible pumps with high efficiency hydraulics designed to mover slurry, sewage and industrial process fluids.

The range covers a broad spectrum of applications with head up to 40m and flows up to 300 m3/h. A maximum solid passage of up to 100mm keeps the risk of blockage to a minimum



All units are dimensionally designed for heavy demand, even on critical applications, while an explosion-proof version is also available on request. Impeller options include vortex, single-channel, closed multi-channel and multi-blade suction with grinder.

Contact: Stephen McDowell, Patrick Rigney or Graham

Fay, Calpeda Pumps Ireland. Tel: 01 - 861 0055; email: sales@calpedaireland.com

### srk split & scm multi systems from 3d

Mitsubishi Heavy Industries' SRK range of high-wall mounted split systems offers capacities ranging from 2.5kW to 7.1kW nominal cooling with models suitable for residential or light commercial applications.

All products operate with high levels of energy efficiency providing COPs from 3.61 on the SRK-HD non-inverter range up to 5.41 on the SRK-ZFX super inverter range.

The SRK-ZFX range offers one of the highest levels of energy efficiency on the market and incorporates MHI's own high-performance DC inverter compressors and unique heat exchanger technology.

The SCM range of inverter multi systems from MHI enables connection of up to four indoor units to a single outdoor unit, with free connection of high-wall models or new compact cassettes or ducted indoor units.

Contact: Michael Clancy or Darren Lowdnes, 3D Air Sales. Tel: 01 - 463 8604; email: micclan1@eircom.net

### ...effortless



... And CM Zone doesn't just save the installer energy. By heating rooms selectively and taking advantage of "external" heat sources, CM Zone offers significant energy savings very quickly paying for itself.

### Honeywell

...YOU HARDLY HAVE TO LIFT A FINGER FOR EFFORTLESS, WIRELESS CONTROL



### gt phelan leads portable charge

Even as we go to press the unseasonally-warm weather is already creating a demand for instant, portable air conditioning. Hitherto, this has been regarded as a niche market segment with only a handful of the main ac suppliers serving it.

However, GT Phelan has been providing portable air conditioning units for decades and has gained a very strong foothold in the marketplace. It has now used this experience to source its own new range of portable ac units.

Capacities range from 2.9kW to 6.1kW for the standard portables and 2.9kW to 4.5kW for the self-evaporating (no drain) units. All are extremely quiet in operation, are suitable for small offices and computer rooms, and are available ex-stock.

Contact: Rodney Phelan, GT Phelan. Tel: 01 - 286 4377; email: rodney@gtphelan.ie

### mtd-mvs 10

The MTD's new MVS 10 achieves an average energy saving of over 50% on standard AC systems, thereby making an important contribution to the reduction of carbon dioxide emissions. It uses proprietary electronically-commutated (EC) technology motors which provide higher efficiency with reduced energy consumption.

Key features of the MTD-MVS 10 are:-

- -- Low noise levels
- New "3-core" EC motors
- Energy Saving
- Performance of 250m /h @ 180Pa
- Eleven speed steps to closely control airflow
- Integrated motor and electronics.

Contact: Ciaron King, MTD Solutions. Tel: 045 - 900590; email: info@mtd-solutions.com





### the future of hand dryers from astrotek

Astrotek has introduced a new range of Veltia hand dryers which are fast, effective and hygienic. Unlike conventional hand dryers, Veltia uses high-speed jets of cold air to dry hands thoroughly in 10-15 seconds, thus saving energy. Generating less heat also makes it difficult for bacteria to thrive and multiply.

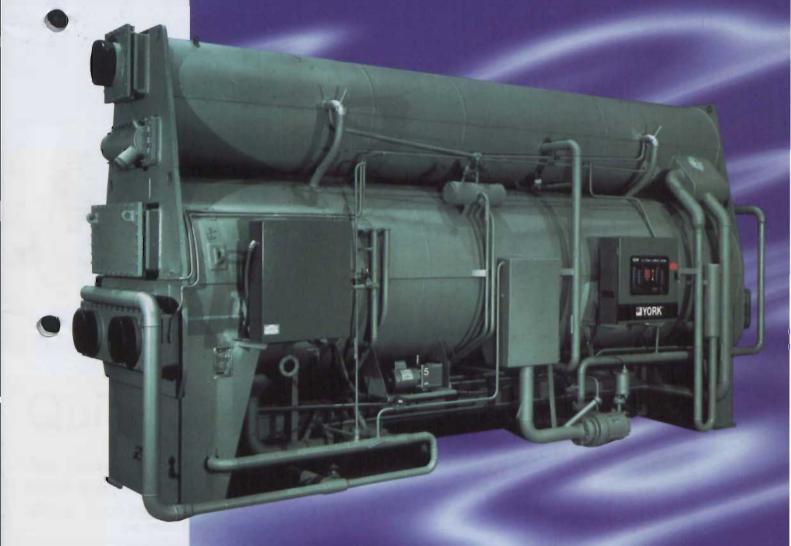
In addition to being hygienic and energy efficient, Veltia is also very stylish. It comes in nine standard colours as well as bespoke corporate colours. A vandal-proof cover is also available.

Contact: Sales Team, Astrotek. Tel: 01- 456 8009; email: info@astrotek.ie



# YORK Millennium<sup>TM</sup> YIA





**York**®

Vork ACR, Citywest Business Campus, Naas Road, Dublin 24 Tel: 01 - 466 0177 Fax: 01 - 466 0198

York ACR,

Unit 19, University Hall Industrial Park, Sarsfield Road, Wilton, Cork Tel: 021 - 434 6580 Fax: 021 - 434 6586

Website: www.york.com



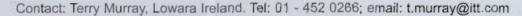
### lowara sv series vertical multistage pumps

Lowara's SV range of vertical multistage centrifugal pumps has been extended to provide for additional applications and to deliver optimised performance.

The SV series is characterised by a hydraulic and mechanical design that minimises the effect of the axial thrusts typical of the multistage vertical design. This means standard motors can be mounted without the need for intermediate devices.

The motors used on the SV Series, like all electrical surface motors supplied by Lowara, have efficiency values that fall within the parameters normally referred to as Efficiency Class 2. Models with Efficiency Class 1 motors can be provided on request.

The SV Series is also available in the SVH version, i.e., coupled to a hydrovar, the microprocessor-based control unit designed by Lowara to manage the performance of the pump based on the conditions and requirements of the system. This transforms the SV unit into a complete pumping system suitable for use with variable speed pressure boosting, water filtration and treatment and air conditioning and heating.



### sas chilled ceiling solution

SAS CoolCeil chilled ceilings have been specified throughout the six floors of a prestigious new development in the heart of Dublin's central business district. Formerly known as Colmstock House, 75 St Stephen's Green has benefited from extensive refurbishment and extension work, and the building now boasts nearly 10,000m of state-of-the-art office accommodation.

Burke Kennedy Doyle & Associates specified SAS while Homan O'Brien Associates were the M&E Consultants for the project.

The existing building had a low floor to ceiling height compared with modern buildings and the developers wanted to maximise the feeling of height within the space. An innovative cooling solution was required to allow a finished floor to ceiling height of 2700mm with only an 85mm zone available below the coffered slab.

"We worked with SAS to design the first chilled ceiling system to be installed within an 85mm zone and offer an energy-efficient solution when compared to more traditional air-conditioning systems", commented Simon O'Brien, Joint Managing Director, Homan O'Brien Associates.



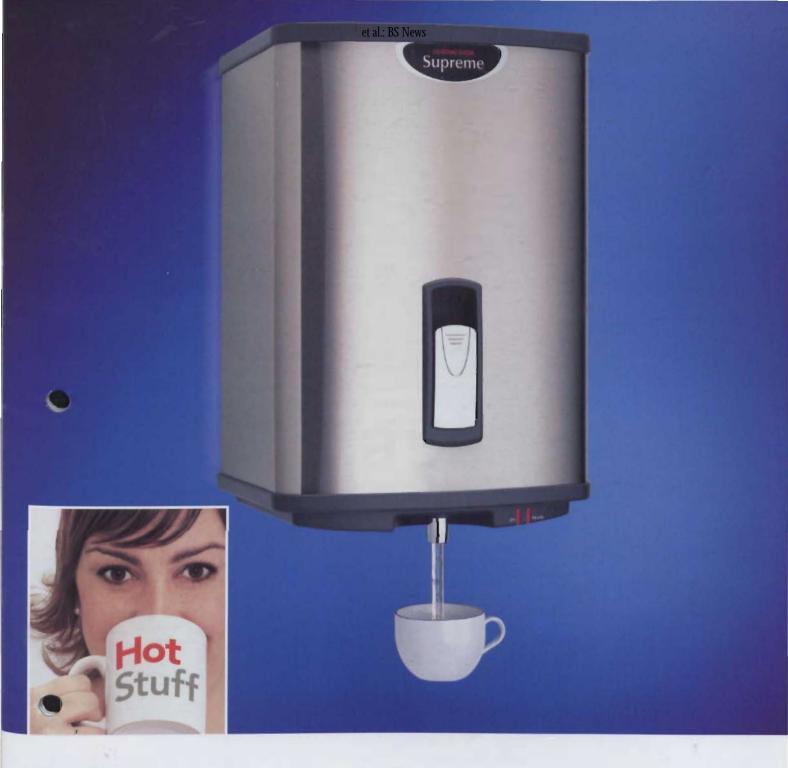


### Ig artcool gallery series

Apart from advanced technology which ensures high-performance, energy-efficient, indoor environment control, ArtCool from LG features units with front panels which can be used as picture frames.

Clients no longer have to accept units that clash with the ambiance and interior decor of the location. With Articool Photo Changeable, the look of the air conditioners can be changed at will to feature whatever image the client chooses.

Contact: Asistin McDermott, Core Air Conditioning. Tel: 01 - 409 8912; email: info@coreac.com



# Quick, easy and low maintenance.

New Supreme SS is a low maintenance instant boiling water dispenser which is quick and easy to install. Safe, efficient and cost effective Supreme SS allows you to make an unlimited choice of hot drinks, soups and snacks when you want them - the ultimate solution in instant boiling water.

Constant supply of boiling water on demand Available in seven sizes to suit all applications Permanently plumbed and easy to install Intelliboil™Plus to efficiently manage the boiling cycle

Attractive fingerprint resistant stainless steel casing
High resistance to scaling and corrosion
BEAB and kiwa approved
2 year on-site parts and labour guarantee

For further details: Potterton Myson (Irl) Ltd, Belgard Road, Tallaght, Dublin 24 Tel: 01 - 459 0870 Fax: 01 - 459 0880 email: post@potterton-myson.ie

HEATRAE SADIA
Published by ARROW@TU Dublin, 2007
The quality name in water heating

www.heatraesadia.com

If a job's worth doing...

### systemair acquires spanish ventilation company

Systemair's acquisition programme continues unabated with the news that it has just purchased the Spanish company Koolclima from the Koolair group.

Koolclima is based just outside Madrid and employs 50 people, half of whom are involved in manufacturing. The product range includes ventilation units, fans and fan convectors.

Koolclima will join with existing group company Systemair Spain SLU to form a new company Koolclima-Systemair, with the production and workforce remaining as it was before the acquisition.

Contact: Niall Horgan or Mark Russell, Systemair. Tel: 01 - 862 4544; email: sales@systemair.ie

### building energy rating service

Home Energy Rating (HER) is a specialist company formed to provide Energy Rating Certificates to owners of domestic and commercial buildings. Principals are Vincent Fogarty, Engineering Cost Management Ltd; Seamus O'Doherty, Quantity Surveyor; Ann Sheehy, Property Marketing Specialist; and Dr Ken Beattie of DIT's Faculty of Engineering.

HER's team of surveyors and engineers have recently completed training and are now officially qualified as BER assessors.

Strong demand is expected from builders and developers who will be keen to have their new homes rated from plans. All new homes, for which planning permission is applied for on or after 1 January 2007, must have a Building Energy Rating (BER) Certificate before they can be offered for sale or for rent.

Moreover, the legislation will apply to non-domestic buildings for which planning permission is applied from July 2008 while from January 2009 it will apply to all buildings, new or otherwise, when offered for sale or for letting.

Contact Ann Sheehy, Marketing Director, HER. Tel: 086 - 389 3547; www.her.ie



Vincent Fogarty, HER Managing Director pictured with Seamus O'Doherty, Operations Director, Ann Sheehy, Marketing Director and Michalina Bargiel, Office Manager

### legionnaires disease - avoid prosecution!

The official report into the seven deaths and 180 people who suffered ill health following a legionella outbreak in Barrow-in-Furness in the UK in 2002 has now been published. Apart from the suffering of the victims, the manager of the Design Services Group of the local Council was tried twice for manslaughter.

One of the key failures identified in the report is the inadequate training of those appointed to carry out legionella control measures and strategies. It is against this background that the latest Legionnaires' Disease Training Courses by Knight Consultancy are set.

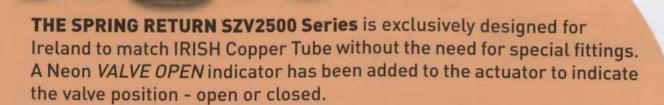
Course content will include a history of the disease; case studies; legislation in the UK and Ireland; route of infection; risk assessment; management and control requirements; hot and cold water systems; cooling towers; and cleaning and disinfection.

Contact: Mike Knight, Knight Consultancy. Tel: 0044 7966 196383; email: mikehknight@blueyonder.co.uk

et al.: BS News

# When you see our new SZV2500 Series you'll have a fit...





IRELAND AND THE SUNVIC SZV2500 - MADE FOR EACH OTHER

### RISH ACTUATOR VALVE SZV2500

- Stylish Design
- Replaceable without draining system.
- LED Status Indicator
- Self Cleaning Shoe Action
- Complete Valve or Separate Body
- Available with 3/4" or 1" Copper Fittings

# SUNUIC comfort in control

SUNVIC CONTROLS LIMITED

Bellshift Road : Uddingston : Glasgow G71 6NP Tel: 01698 308 302 : enquiries@sunvic.com : www.sunvic.com

### mitsubishi electric appoints ryan ford

Mitsubishi Electric has appointed Ryan Ford as Technical Sales Executive within the Industrial Automation Division. Ryan has a wealth of experience in the automation market. He will specialise in the sale and support of Mitsubishi's motion products group which includes servo, robotics and high powered inverters.

Contact: Ryan Ford, Mitsubishi Electric Ireland.
Tel: 01 - 419 8800; email: ryan.ford@meir.mee.com



### concept apart-hotel chooses toshiba

The new Clarion concept apart-hotel in Liffey Valley incorporates a solution devised by GT Phelan, Arup consulting engineers and Marren Engineering. It comprises Toshiba VRF equipment which delivers 420kW of cooling and 470kW of heat via slim-ducted units which are only 210mm high.



The system employs 15 outdoor units serving 77 indoor units, all of which are controlled using Toshiba's Interactive Intelligence controls platform. This allows staff at reception to select the most appropriate mode and temperature for each room and also calculates the individual power consumption of each indoor unit. Tariffs can be set and itemised bills printed and presented to clients when checking out.

"The Interactive package allows remote access via the internet to control the operation of up to 1024 indoor units" says Derek Phelan of GT Phelan. "The system can control the mode and temperature of any indoor unit and night set-back can be incorporated if required".

Contact: Derek Phelan, GT Phelan. Tel: 01 - 286 4377; email: derek@gtphelan.ie

### mark mhr heat recovery series

Mike O'Donoghue of Mark Eire says that, when it comes to heat recovery, it is absurd to recover thermal watts while electrical watts are being wasted. Consequently, Mark has equipped its new MHR Series with high-efficiency TAC fans which result in considerably-higher total efficiencies.

They are also equipped with aluminium counter-flow plate heat exchangers, reaching nominal thermal efficiency of more than 90%. This means that no post-heating is necessary.

The MHR Series is delivered as complete "plug-and-play" unit and is available in two versions — outdoor or indoor. Type MHR offers automatic free cooling in summer and has a bypass damper with servomotor. Type MHR-eco does not have free-cooling.

Key features and benefits include exceptional thermal efficiency; low weight; low noise levels; and low electrical consumption.

Contact: Mike O'Donoghue or Mairead Twomey, Mark Eire. Tel: 026 - 45334; email: sales@markeire.com

JNISTR THE ORIGINAL METAL FRAMING SYSTEM



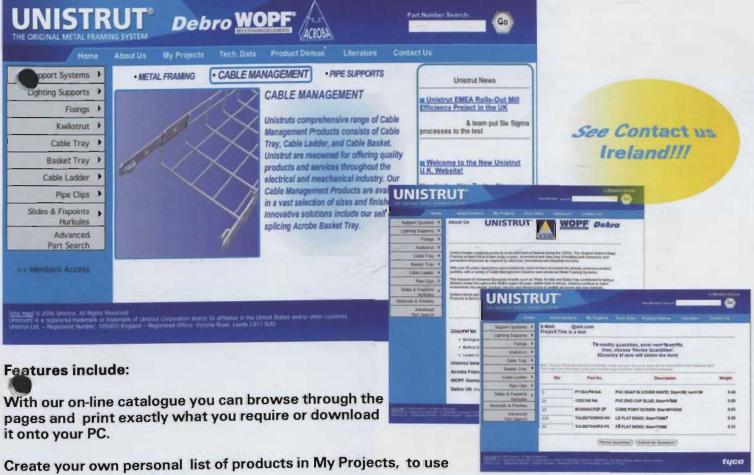




The Original Unistrut
Accept No Substitutes!

New Unistrut Website!

Unistrut are proud to present Our New Website. There are many features on the site that will greatly assist Unistrut customers and will add an invaluable and easy resource for all. The site contains extensive information on all our products and services, giving the knowledge you need in an instant. So take a look for yourself!



within your own databases.

Download personalised submittal sheets, to help you create your own specification documents.

Our 3D animated product demonstrations will show you some of our innovative Self Splicing Basket Tray and Kwikstrut products.

www.unistrut.ie

### specially-designed sunvic controls for irish market

As a part of its 80th birthday celebrations this year, Sunvic Controls has introduced the new "SZV 2500" series spring-return range of two-port motorised valves. Specifically designed for the Irish heating market, they incorporate correct compression fittings to give a leak-free connection to standard Irish copper tube. Supplied boxed as a complete valve and actuator, it is also available as separate parts.

When re-tooling for these valves Sunvic modified the SZ actuator with a "valve open" neon indicator which illuminates only when the valve reaches the fully-open position. The actuator is compatible with all Sunvic 2-port valve bodies, and is available as a direct service replacement for the Sunvic SZ2301which does not have this feature.

Other new products and systems recently introduced by Sunvic include the "volt-free" wireless (RF) programmable room thermostat suitable for heating and cooling applications, and the time-saving mains voltage "plug-it" control system. This is pre-wired with connection plugs for valve actuator, the cylinder thermostat, and come with/without a 5-metre head pump.

Plug-it kits can be supplied with either a pre-wired 3-port, mid-position valve; a 2-port valve; a room thermostat; and a 1- or 2-channel programmer in the pack. Packs can be tailor-made in any combination to suit each system specification.

Sunvic distributor for Ireland is Chronotherm Controls. It carries extensive stocks of the entire Sunvic range and provides system and project quotations/specifications.

Contact: Tom Noone, Chronotherm Controls. Tel: 01 - 410 5756/7/8; email: sales@chronotherm.ie

### cylon - harnessing the power of web-based solutions

Technological advances in Building Energy Management Systems occur rapidly and Cylon continuously offers solutions to meet these advances. One such advancement is in webbased solutions, widespread among all technology sectors but making a dramatic impact on the BEMS industry. Cylon has enhanced the use of web-based technologies by introducing Embedded Weblink as part of the UC32.netK/WEB product.

The advanced Embedded Weblink provides a web server inside a communications controller, thereby eliminating the need for a separate PC server. Increased monitoring capabilities have proven Embedded Weblink as a superior



20

solution for geographically distributed sites, such as leisure centres and schools.

Just recently TR Controls completed an installation across a network of Jackie Skelly Fitness centres. User-friendly graphics meant that staff quickly became familiar with the system and can now adjust the temperature of the gym, pool and all open areas with ease.

Proven as a superior solution for smaller sites, web-based solutions also scale to the most demanding of large installations.

Contact: Stiofán O Flannabhra, Cylon Controls. Tel: 01- 245 0500, email: stiofan.oflannabhra@cylon.com



Unipipe Controls



Nibe: New Air-to-Water Heat Pumps



Unipipe Floor Heating



Ecoflex Pre-insluated Piping

40 Southern Cross Business Park, Boghall Road, Bray, County Wicklow T: O1 2864888 F: 01 2864764 E: info@unipipe.ie W: www.unipipe.ie



## **Pressed For Time?** Joints in 3 Seconds!

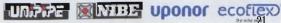


# UniPiPE

- Unipipe (by Uponor) multi-layer pipe offers a proven alternative to steel, copper and plastics for mechanical services.
- · Available in straight lengths (all sizes 12 to 110mm) and coils (to 32mm).
- Corrosion proof, faster, cleaner. No welding screwing or painting. Longer lasting and lower installed costs
- One pipe...no waste...offcuts from one application can be used elsewhere on the job
- From Sweden NIBE offer ground-source, Air-to-Water and exhaust air heat pumps. NIBE are Europe's largest producer of heat pumps.

Distributors for:









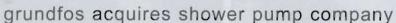
### vaillant ecotec plus 937 combination boiler

Vaillant has extended its ecoTEC plus range with the introduction of the ecoTEC plus 937. Suitable for larger properties, the ecoTEC plus 937 incorporates a 15-litre "actoSTOR" which provides 200 litres of water every 10 minutes.

Featuring dimensions of 720mm in height, flue lengths up to 5.5m horizontally and no compartment ventilation, the ecoTEC offers flexible siting. It has a central heating output of 12kW to 28kW and a domestic hot water output of 37kW.

The boiler has a two-year warranty as standard and a five-year anti-scale warranty on the domestic hot water heat exchanger and "actoSTOR". It is also compatible with the company's range of 'intelligent' controls.

Contact: Shaun Quatan, Vaillant. Tel: 0044 1634 292 304; email: info@vaillant.co.uk; www.vaillant.co.uk.



Earlier this year Grundfos Pumps signed an agreement to acquire the UK shower pump company Watermill Products Ltd. Grundfos sees this acquisition as part of its increased effort in the home water pressure boosting market, where it is essential to be able to offer a wide range of system solutions.

Watermill is a well-established brand in the UK and Irish markets and its integration with Grundfos will considerably enhance the Grundfos shower pump portfolio. It will also complement the wide range of pressure-boosting pumps Grundfos currently markets.

Designed and manufactured to the highest standards, Watermill's heavy-duty brass pumps are the "rolls royce" of the range. With brass impellers and machined brass castings, these pumps are suitable for domestic, commercial or light industrial use. All are supplied with stainless steel flexible hoses and are covered by a comprehensive two-year guarantee.

Where the water level in the cold storage tank is below the level of the shower outlet, a "negative head" situation exists. Watermill has specialist automatic negative head pumps to overcome this problem.

Contact: Sales Office, Grundfos. Tel: 01 - 408 9800; email: info-ie@grundfos.com





### bss cork appoints sean french

BSS Ireland in Cork has appointed Sean French as Branch Manager in succession to Paddy Byrne who retired earlier this month after 38 years with the company.

Sean joins from Suttons Oil where he was Operations Manager since 1998. His outside interests are rugby and underage coaching.

Contact: Michael Quinlan, BSS Area Director. Tel: 021 - 432 1588; email: 1960sales@bssgroup.com

# Jobs Corner Jobs Corner

### York ACR

Part of the Johnson Control Group has the following vacancies:—

Contracts Engineer (Dublin Based)

The role will entail the management of projects within the area of equipment sales. The successful candidate will have full responsibility for the day-to-day financial and operational aspects of each project under his/her control. The candidate should have experience in the planning and implementation of site-based operations, preferably have an engineering background, and have the ability to work under own initiative;

Sales Engineer

While this position is based at York ACR's Dublin office, the successful candidate will be expected to promote the company's commercial product range throughout the country. This position would suit a highly-motivated individual who can work on his/her own initiative. The successful candidate will be expected to call on existing customers and to expand this base nationally.

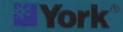
Renumeration

Attractive salary (negotiable); bonus; and company car.

How to apply

Send CVs to David Dorney, Systems Branch Manager, York ACR, Unit 19 University Hall Industrial Estate, Sarsfield Road, Wilton, Cork. Email: dave.dorney@jci.com

Please state the position being applied for and make reference to bs news.



### **RVR Energy Technology**



Sales Professional

If you are a successful sales professional already working in the Irish building services sector then RVR may have an opportunity for you. It wants to recruit a high achiever to help build sales of renewable and conventional heating equipment in both commercial and residential market sectors.

This is a senior sales appointment. The ideal candidate will have several years experience selling high-value products to the building services sector and will have a good range of contacts among the specifier and installer community.

The remuneration package offered will reflect the importance of the position. RVR can offer excellent remuneration commensurate with sales performance; membership of a dynamic and effective sales organisation; and work with leading-edge products and technologies. Location is not important.

RVR is a modern, dynamic distributor of heating equipment with a long and successful track record in the HVAC industry and is experiencing rapid growth.

How to apply

Send CVs by email or post to RVR Energy Technology Limited, Kenmare, Co. Kerry. Tel: 064 41344. Email: recruit@rvr.ie Web: www.rvr.ie

Please make reference to bs news.



# HOW CAN YOU **DROP**HOT WATER COSTS AND CO2 EMISSIONS?

**Easy...** Mitsubishi Electric's revolutionary Mr Slim Heat Pump Boiler provides substantial reductions in running costs and carbon emissions.

Our unique Heat Pump Boiler provides domestic hot water and heating, with incredible design flexibility and excellent use of energy.

Heat pumps are much more efficient than a conventional gas or electric boiler and by utilising heat energy from natural sources such as air, earth or water; they reduce carbon emissions by up to 45%.

### Available from summer 2007

Call (01) 419 8800 today to Drop your running costs and carbon emissions.









Telephone: (01) 419 8800

email: sales@meirmee.com web: www.mitsubishielectric.ie



Derek Mowlds
e: derek.mowlds@pmg.le

# designing BUILDING SERVICES

### commissioning & commissioning management

Commissioning: The activity that's more often than not compressed at the end of a typical construction project, where all available "float" has been consumed during the project due to delays.

In the first of a series of technical articles relating to building services design, we look at some of the key issues and success factors associated with the implementation of various approaches and strategies in relation to commissioning and commissioning management.

System commissioning is the time when, after months of construction activity, site meetings, technical clarifications and site visits, static systems are put into dynamic mode and the design is truly tested for performance – a nervous time for the M&E engineer!

It for this very reason that commissioning needs to be a structured, well-planned activity in order to succeed. The ISPE (International Society of Pharmaceutical Engineers) defines Commissioning as:—

"...a well-planned, documented and managed engineering approach to the start-up and turnover of facilities, systems and equipment to the end user that results in a safe and functional environment that meets established design requirements and stakeholder expectations..."

While commissioning activities may begin at any stage of the project, experience has shown that early involvement provides maximum benefit due to the fact that the sooner the problems and possible enhancements are identified, the less costly they are to correct and implement.

The requirement for a dedicated Commissioning Team is often a function of the type of project in terms of complexity, cost, schedule etc ... many smaller and uncomplicated projects may be commissioned by the M&E sub-contractors.

#### **Procuring Options**

Some typical contractual arrangements are as follows:

Type A: Commissioning
Management employed by the
Project Management Company
This option allows the
commissioning management
team report directly to the
Project Manager and the client,
giving them the ability to instruct
the installation contractors

based on direct and accurate feedback;

Type B: Commissioning
Management employed by the
Main or Managing Contractor
Reporting directly to the main
contractor, this option can also
be an effective means of
introducing an independent
team to oversee commissioning.
However, working under the
main contractor may reduce
the influence of the
commissioning management
team on the schedule should
there be delays in construction
etc;

Type C: Commissioning
Management employed by the
Client

This option allows the early appointment of the commissioning team and can have benefits through influencing the design, the installation program and commissioning programs. The commissioning manager can be given the authority to push contractors during the construction stage;

Type D: Commissioning
Management employed directly
by the M&E Contractor
A common arrangement in
many commercial type projects.
It keeps the overall responsibility

### commissioning & commissioning management

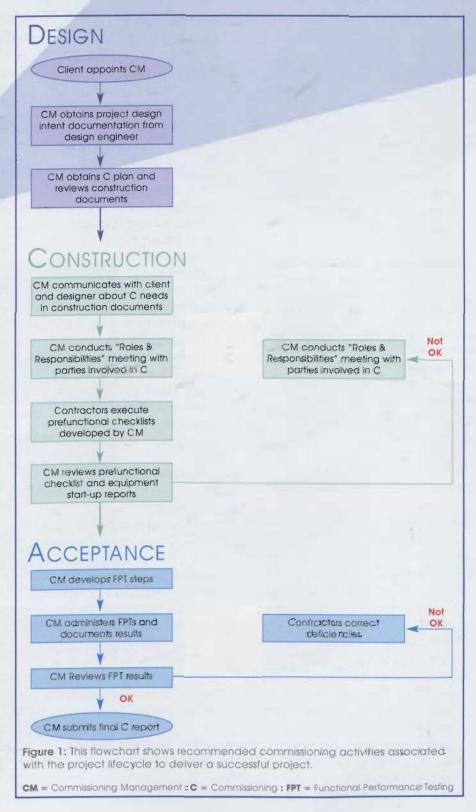
of delivering fully-functional systems with the M&E contractor, thus saving time and costs associated with managing commissioning separately. However, the commissioning contractor is never truly independent and may har difficulties in highlighting roblems with the inst

In determining ... most suitable arrangement for a particular project, an early assessment of the commissioning activities should be made at the concept stage. At this stage, the project should be analysed to identify the scope of commissioning and, more importantly, the criticality of both the systems to be commissioned and the quality of documentation associated with each system. In many projects carried out in pharmaceutical facilities for example, the quality of commissioning documentation is equally as important as the quality of the installation and functionality of the systems.

#### **Key Considerations**

Some key attributes to consider when appraising a project at concept stage are:

- Project baseline schedule and required handover date;
- Client and project managers organisational structure in terms of suitability to engage the services of a Commissioning Management Organisation directly;
- Proposed procurement strategy for equipment and trade packages;



### commissioning & commissioning management

- The number of mechanical, process and electrical systems;
- Contractual arrangements applied on previous projects of a similar nature;
- Analysis of lessons learned from previous projects;
- Approach to qualification and validation if applicable; will commissioning tests be "leveraged" into qualification?

**Commissioning Team Activities** 

The flowchart (Figure 1) shows recommended commissioning activities associated with the project lifecycle to deliver a successful project. As you can see, early formation of the commissioning feam is key to ensure that commissioning is planned and executed effectively.

Typical activities throughout the key stages are as follows:-

#### Design Stage

- Carrying out commissionability studies on the various systems to identify improvements in design to allow safer and more effective commissioning;
- Ensuring that the design information is accurate and complete;
- Reducing installation costs by involvement in 'value engineering" to reduce nonessential components for commissioning (dampers, valves etc);
- To develop an early

commissioning schedule/plan.

### **Construction Stage**

- Interface with designers, client and construction team to define needs in construction documents;
- Defining roles and responsibilities for commissioning;
- Develop pre-commissioning functional tests/system "shakedowns";
- Review vendor documentation and ensure pre-commissioning activities take place;
- Perform ongoing field checks to ensure systems are being installed comply with the design intent and are capable of being commissioned safely;
- Managing the commissioning schedule.

### Commissioning / handover

- Managing the commissioning schedule;
- Develop and agree format and content of handover packs to the client;
- Administer formal testing of the systems and equipment;
- Reviews test results and identify deficiencies;
- Liaising with client and/or qualification team to ensure smooth handover;
- Submit final report and close out project.

### Common Problems During Commissioning

Projects that adopt a "wait and see" approach to

commissioning may experience some or all of the following problems, the list is not exhaustive, but merely highlights the risks of not having a Commissioning plan or procedure.

- Utility systems not complete and in a steady state before HVAC system steady state testing;
- Equipment not commissioned in time for room balancing (fume hoods etc);
- VCDs and commissioning valves not accessible during test and balance;
- Room air volumes and room pressures not achieved due to incorrectly sized and installed components (eg: VAVs. CV boxes etc):
- BMS PID loop parameters not set up correctly:
- Poor locations of instrumentation leading to poor control;
- Incomplete handover documentation from equipment vendors.

Commissioning should be treated as a dynamic effort involving the designers, installers and end users; it requires a high level of project management and planning to be successful.

#### References

ISPE Baseline Pharmaceutical Engineering, Guide, Volume 5 -Commissioning and Qualification.

BSRAII and CIBSE Commissioning Application Guides and Codes.

# MLCP Press Fittings Product Development

# uponor

Uponor are pleased to announce the launch of the improved MLC Press Fittings. Now featuring a stop ring which is colour coded to indicate the fitting size, and fall away to indicate a joint has been successfully completed.







Positioning: the jaws are fitted up to the stop ring



Pressing: the stop ring falls away once the fitting is pressed



Completion: the slim design fitting is completed



Existing Uponor jaws and inserts can be used with the new fitting range, and prices & product codes do not change.

### **Uponor Housing Solutions**

T: 01 895 7430

E: sales@uponorhousingsolutions.ie

# Building Services News, Vol. 46, Iss. 6 [2007], Art. 1 Manony Appointed Sanyo Ireland General Manager

Following the departure of Barry
Hennessy to take up a position
outside of the industry, Vincent
Mahony — who has been acting
as Sales Manager in recent months
— has now been appointed
General Manager, Sanyo
Airconditioners Ireland.

Vincent is widely known and respected throughout the building services sector — and air conditioning in particular — for over 25 years. His career path dates back to when the AC sector was in its infancy in Ireland and his experience, knowledge and technical know-how is considerable.

Over the last 12 months he has concentrated on increasing and reinforcing Sanyo brand-awareness throughout the industry, providing support to consultants and the company's dealer network by way of CPD presentations, product updates and technical design assistance.

Throughout that time he has worked very closely with Barry Hennessy and, in recent months, assumed more and more management responsibility for Ireland as Barry's expanded UK role took up more of his time.

"Barry is undoubtedly a hard act to follow", says Vincent, "bearing in mind that he has been associated with the Sanyo brand for nearly 10 years and actually set up the company's dedicated Irish office in 2002. However, the management structures and operational procedures he put in place are excellent and my role now is to develop them further to reinforce and strengthen the service we provide.

"An added advantage is the strength of the team here at Sanyo Airconditioners Ireland. We are a very strong, cohesive set-up with dedicated personnel who actively engage with our ever-

expanding customer base. The quality of the Sanyo product range is taken as read but, what is equally important is the quality of service we provide. It is the combination of the two which has underpinned our success to date and no doubt will be responsible for continued growth into the future".

Looking ahead, all at Sanyo Airconditioners Ireland are very excited about the new products and systems coming on stream. Many are genuinely innovative and pioneer new concepts which the company believes will become commonplace. These include:—

- Solar-power-assisted split systems which increase energy efficiency and reduce CO<sub>2</sub> emissions and running costs;
- Virus washer purifying system which de-activates more than 99% of air borne viruses/bacteria;
- CO<sub>2</sub> hot water heater, with global warming potential of 1 (in comparison to other refrigerants which have a GWP in excess of 1600). This system recovers heat from ambient and, with a COP of 3.75, can heat domestic water at a much lower running cost than say a gas boiler.
- The GHP range will also be extended to include an inbuil generator capable of producing up to 4kW of electric power to supply all indoor units on a system. This will increase unit COP's and further help decrease both running costs and CO<sub>2</sub> emissions.

"As the foregoing clearly illustrates", says Vincent, "the momentum built up at Sanyo Airconditioners Ireland under the direction of Barry Hennessy was strategically structured to ensure continuity as time went on. On behalf of all at Sanyo I wish to acknowledge Barry's contribution to the success achieved to date and to wish him equal success in his new role outside of the industry."



MTD has just launched its new CERV series 9000 range of units. There is an indoor unit which has been developed for balanced ventilation systems in non-residential buildings or multi-storey dwellings. There is also an outdoor unit (suitable for roof mounting). Both versions are available with airflows ranging from 800 to 4,400m³h.

### www.mtd-solutions.com



### Main features on both units are:-

- Balanced ventilation with heat recovery;
- Controlled air supply and exhaust;
- Heat recovery yield of 90%:
- DC motors with constant volume;
- 100% exchanger bypass including automatic drive;
- Plug and Play:
- Also available with hot water reheater and cooler.

### **Applications**

These units are ideal for small commercial applications where energy conservation is a priority and a high level of indoor air quality is required. MTD uses its EU F8 pollen filters in all the MTD Series 9000 CERV units.

In addition, the CERV 9000 Series is ideally suited to district heat recovery ventilation schemes in apartment blocks, nursing homes and schools.



MTD SOLUTIONS LTD

8 Burgage House

Blessington

Published by ARROW@TU Dublin, 2007

Tel: 045 900 590

Fax: 045 900 623

email: info@mtd-solutions.com

web: www.mtd-solutions.com



AGENTS NATIONWIDE

### Refrigeration Conference & Trade Exhibit Attracts 250 Delegates

Refrigeration Skillnet hosted a very successful conference and trade exhibit for the refrigeration and air conditioning sector in the Sheldon Park Hotel, Dublin 12, last month. Over 250 delegates attended the event which was organised and hosted in association with the Institute of Refrigeration Ireland.

Both organisations were delighted with the turnout. "It is hugely encouraging to see so many people from across our industry attending a day-long event like this", said Séamus Kerr, Network Chairman, Refrigeration Skillnet. "It reflects an everincreasing awareness of the value of training and networking within our sector and is also an opportunity to gain critical feedback from our member companies."

Tribute must be paid to the speakers who gave freely of their time in preparing and delivering detailed presentations to the industry. "We were very fortunate to have had a strong selection of speakers from Ireland and the UK presenting on important, topical issues", said Enda Hogan, Network Manager, Refrigeration Skillnet. "It allowed us to pack the programme with a good variety of presentations which were short, focused, practical and relevant to our industry."

Running in tandem with the conference was a mini-trade exhibit which was a great added attraction for delegates. It was open all day and delegates wasted no time in visiting each of the stands to see what gimmicks and goodies they could pick up to take home with them. It also helped to fund the

event so thanks are due to each of the trade exhibitors on the day — Coolair, Dean and Wood, European Industrial Chillers, Fridge Spares, Gasco, John White Refrigeration Sales, Mitsubishi Electric Europe, RDL and RSL Ireland.

The Institute of Refrigeration Ireland also had a stand at the event and used the opportunity to meet with existing members and recruit new members. Due to the issues that were raised and the changes that are forthcoming in the RAC industry, the stand was very busy and membership numbers are set to swell. The Institute was delighted to be a partner in the overall event and acknowledged the support of Refrigeration Skillnet in organising and funding the day.

### Conference Summary

The main conference programme was divided into three sessions, each with a particular theme. The first session focused on energy optimisation. Declan Fitzmaurice, FTG Refrigeration Consultants, addressed the topic of energy in supermarkets. He presented a cost comparison between a typical retail refrigeration system, a high-efficiency system and a cheap system. He had two simple messages for the industry. Firstly, high-efficiency systems are a real and practical option for all refrigeration applications. Secondly, high-efficiency, welldesigned systems are always cheaper and better in the long

Andy Campbell, Engineering Manager, Tesco UK, presented on the use of CO<sub>2</sub> refrigeration in Tesco UK. Andy is championing



Declan Fitzmaurice, FTG Refrigeration Consultants, addressed the topic of energy in supermarkets.



Andy Campbell, Engineering Manager, Tesco UK, presented on the use of CO. refrigeration in Tesco UK.



John Ellis, Ellis Training, presented on installation and commissioning tips for modern systems



Lorcan Maher, Murco, gave an overview



# Portable Air Conditioning





- Selection of portables ranging from 2.9kW to 6.1kW.
- Self-Evaporating (No drain) 2.9-4.5kW Units
- Quiet Operation.
- Attractive Design.
- Ideal for Small Offices and Computer Rooms.
- Large Stocks Available.

www.gtphelan.ie

24-25 Southern Cross Business Park, Bray, Co Wicklow

Ph: 01 286 4377

Fax: 01 286 4310

mandie@gtphelan.ie

the use of CO2 in the sector and was able to report on encouraging findings from Tesco's trial sites in the UK. He challenged the industry, in particular the manufacturers, to deliver further innovation and technical support to end-users of refrigeration. This will be essential to meet client requirements and to allow a wider uptake of CO. refrigeration in the retail sector. Andy also stressed the need for a recognised training scheme for designers, installers and service mechanics who are dealing with CO<sub>2</sub> systems.

Des Murphy, Kovara, continued the theme of energy optimisation with a presentation on the implementation of Article 9 of the Energy Performance in Buildings Directive. This deals with the mandatory inspection of air conditioning systems. Des has been working closely with Sustainable Energy Ireland on this part of the Directive. The Irish enabling legislation has already been introduced but much of the work now is focusing on the development of an inspection manual that will set out the details surrounding the inspection regime, It is envisaged that the manual will set out the exact nature of the inspections and their frequency.

The inspection regime comes into effect on 1 January 2008 so we can expect further details



John O'Reilly with Michael Miskell



John Sampson with Mick Hannaway and Geoff Long

later this year. It should have a very positive impact on the industry as it will place significant responsibilities on the shoulders of the owners of air conditioning systems to make sure that the AC systems under their ownership are both appropriate and regularly inspected.

Setting high standards for the RAC industry was the theme of the second morning session. Lorcan Maher, Murco, kicked off by giving an overview of EN378 a published European Standard on Refrigerating Systems and Heat Pumps – that acts as an invaluable reference tool for the industry. Not only does the standard reflect a consensus on best practice, it is also generally regarded as "meeting a duty of care" or complying with a regulation or directive. EN378 is available from NSAI and should be in the possession of every company in the sector.

John Ellis, Ellis Training, presented on installation and commissioning tips for modern systems. He had one simple message that he drove home repeatedly — it pays to get it right first time. Too many companies take short cuts or fail to meet the basic standards that should be set and met when installing and commissioning systems. They waste time, they waste nitrogen and they waste energy. "We owe it to ourselves as an industry to set consistentlyhigh standards and to meet them again and again", he

concluded. Paul Tingle, FTG Refrigeration Consultants, reinforced the message by illustrating both good and bad practice installations in the retail sector. RAC contractors should provide a premium product and thus command a premium price. There are huge potential benefits to both the client and the contractor to having consistent, high-quality, workmanship.

Glen Greenbank closed the session with a timely reminder of the health and safety implications of the legislation that impacts on the sector. Topics included driver responsibilities when transportin hazardous gases; risk assessments on-site; wearing of PPE; minimum standards of competence; and duty of care to customers. Employers and employees face an onerous task keeping up-todate with all of the relevant legislation but ignorance is not an excuse. In summary, everyone should have the relevant documentation, complete the necessary records, do the required tests, think safe and work safe.

The third and final session in the main conference room addressed the theme of "F-Gases and ODS - the next steps". Both pieces of legislation have been addressed before at Refrigeration Skillnet and IRI conferences and seminars but it was important that the industry gained an up-to-date insight into how implementation is being



Caitriona Collins with Jean Clarke and Deirdre Flood

# LUMINIUM et al. BS News Carrie 11CRO-CHANNEL HEAT XCHANGER - MCHX

# ATRUE INNOVATION

Already utilised in the automobile and aeronautical industries, the new microel heat exchanger. MCHX used in the Aquaforce has proven its technology under the most difficult conditions. In the Aquaforce it is used for the first time in a liquid chiller. and it delivers unmatched performance.



## SECURE HEAT SEALING

The automated welding technology of the MCHX heat exchanger offers additional reliability. It is automatically heat-sealed in a controlled atmosphere in an oven to ensure perfect uniform welds on the manifold. The risk of leaks is minimised. The coils are all individually tested and pressurised with pure helium in a casing with a deep vacuum.

A vacuum pump and a helium detector connected to the casing find the smallest leaks.

These tests are more precise than traditional methods, and combined with a careful visual inspection to ensure total reliability. And as proof Carrier does not hesitate to guarantee this new heat exchanger for three years.

# OPTIMISED HEAT EXCHANGE

For an identical surface the MCHX hear exchanger is 10% more efficient than a conventional copper/aluminium coil. Its lov thickness reduces air pressure losses by 50° and makes it less susceptible to fouling. Th means that it can operate at full efficiency



Unit A6, Centre Point Business Park, Oak Road, Clondalkin, Du email: info@coreac.com

## Refrigeration Conference & Trade Exhibit Attracts 250 Delegates



Seamus Flynn with Peter McMahon



Terence O'Dwyer with Dan Myers and Chris McFadden

managed in Ireland. Martyn Cooper, Ineous, reminded delegates of the key dates contained in the ODS Regulations which came into force in 2000, including the ban on virgin HCFCs from 2010. He also outlined the main provisions of the F-Gases Regulations and how they will impact across Europe.

Jean Clarke, Department of Environment, Heritage and Local Government, presented on the consultation process currently underway at European level in order to arrive at agreement on the detailed implementation of the F-Gases Regulations, in particular in relation to labelling, reporting, leak detection and minimum qualifications. While the regulations came into force

in July 2006, most provisions only come into force in July 2007. The DoEHLG has given an undertaking that it will consult with the RAC industry through the Institute of Refrigeration Ireland, both in respect of finalising some of the details at European level, and preparing enacting legislation in Ireland.

Catriona Collins, EPA, offered an up-date on implementation of the ODS Regulations in Ireland. There is an obligation on all operators and users to comply with the regulations, including emission control, record keeping, reporting to EPA, minimum qualifications, leak-minimisation and testing. The EPA will actively enforce these provisions, including verification of data submitted by site inspections.

Reference was also made to the waste legislation that is having such a negative impact on the RAC industry at present. The EPA is still waiting on changes to the waste legislation that have been promised for well over a year now but, in the meantime, the status quo will prevail. Enda Hogan, speaking on behalf of the Institute of Refrigeration Ireland, communicated the ongoing frustration within the sector at the length of time it has taken for the promised changes to be implemented.

#### **Skills Seminars**

While the main conference continued, two parallel skills sessions were on offer in separate rooms, aimed primarily at apprentices and service engineers. Glen Moore, Field Service Manager, Danfoss UK addressed the topic of "caring for your compressors"; Garrett

Keenaghan and George Condell, both lecturers at DIT, presented on "Refrigerant Mishandling" and "Nitrogen Pressure Testing" respectively; Declan Fitzmaurice, FTG consultants, explained "The Refrigeration Cycle" with the aid of a pressure cooker, a bicycle pump and some gauges; Graham Smyth, Frigotech, explained some of the "on-site essentials for electronic controls"; while David Roome rounded off the proceedings with a presentation on geothermal heat pumps. The skills sessions were a great way to widen the audience appeal and they were very well supported.

Contact: www.refrigerationskillnet.ie www.instituteofrefrigeration ireland.ie



Lorcan Maher with Ian Dunlop and Paddy Gilcreest



Bill Murphy and Neil Bilton

## Irish Fan Distributors







Unit 626 Northern Extension.
I.D.A. Industrial Estate.
Waterford.

Tel 051-852404 Fax 051-873440

Web: www.irishfandist.com Email: sales@irishfandist.com

N° 1 Stop shop for:

Ventilation ■ Fans ■ Ducts ■ Air conditioning ■ Heat recovery

10.000+ ATC products under one roof!











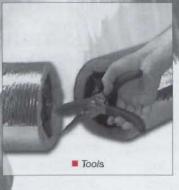
























## Sustainable Ventilation Buzz Word at MTD



"We believe that there are many more possibilities for sustainable ventilation than we are currently aware of", says Ciaran King, Managing Director, MTD Solutions. "The basic principle of ventilation is simple — displacing air using a fan driven by an electro motor which can be driven by carbon-neutral power sources such as wind or solar. The essence of developing sustainable ventilation lies in the application of as many non-fossil forms of energy as possible.

"At MTD we are 'manupackers'. We do not have a manufacturing plant in Ireland. However, we use some of the top European manufacturers to produce products for us. This allows us to modify standard products to suit the Irish market exactly and, more importantly, to develop new products. We looked very closely at manufacturing our own heat recovery unit in Ireland but we felt that for production viability reasons our product would not receive the necessary ongoing research and development.

"We now work with two of Europe's leading manufacturers of heat recovery ventilation, one of which has a superb research and development facility with the budget to match and a willingness to pioneer products for markets which do not utilise heat recovery as a source of energy. We are currently involved in a very interesting joint venture development with this manufacturer for a revolutionary new type of heat recovery unit, details of which should be unveiled mid 2008.

"By working this way we believe that we are able to provide the Irish market with the most up-to-date and technologically-advanced products in heat recovery ventilation and it is one step towards our goal of providing sustainable ventilation.

"In the meantime we are concentrating on creating awareness for some of the immediate ventilation solutions available, which can help dramatically reduce the carbon footprint of certain types of commercial buildings. Ventilation systems using DC motors and with high levels of heat recovery are currently one of the most efficient ways to ventilate a building."

As we go to press MTD has just launched its new CERV series



9000 range of units. There is an indoor unit which has been developed for balanced ventilation systems in non-residential buildings or multistorey dwellings. There is also an outdoor unit (suitable for roof mounting). Both versions are available with airflows ranging from 800 to 4,400m³h.

Main features on both units are:

- Balanced ventilation with heat recovery;
- Controlled air supply and exhaust;
- Heat recovery yield of 90%:
- DC motors with constant volume;
- 100% exchanger bypass including automatic drive;
- Plug and Play.

The units are also available with hot water reheater and cooler. These units are ideal for small commercial applications where energy conservation is a priority and a high level of indoor air quality is required. MTD uses its EU F8 pollen filters in all the MTD Series 9000 CERV units.

In addition, the CERV 9000 Series is ideally suited to district heat recovery ventilation schemes in apartment blocks, nursing homes and schools.

Contact: Ciaran King, MTD Solutions.
Tel: 045 - 900 590;

email: info@mtd-solutions.com www.mtd-solutions.com





## Up to 70% Energy Saving: The Future of Hand Dryers

- ▼ Faster: Dries hands in 10-15 seconds
- ▼ Energy efficient: No heating element, less electricity consumed (up to 2/3 less), helps lower your carbon footprint
- Hygienic: Less heat generated, difficult for bacteria to thrive creating a more hygeinic washroom environment
- Design: Available in 9 standard colours, bespoke corporate colours and vandal proof cover
- Applications: Hotels, Office Blocks, Public Buildings, Kitchens, Laboratories and the Health Service
- ▼ Noise: Low noise level-72db @ 1 meter



#### For more information go to www.astrotek.ie or contact us at 01 4568009

astrotek Ireland Ltd. 3a avonbeg industrial estate long mile road dublin 12 ireland tel: +353 1 4568009 fax: +353 1 4504882 email: info@astrotek.ie

#### www.astrotek.ie

## Another Side Of ...



Colm only took up the sport in 2005. He played competitive football all his life and was at a stage where he felt he should do something less demanding and different. How triathlons are less demanding than football is something only Colm can explain!

Having made the decision he quickly realised that his swimming ability was the same as it was when he was 10 years old, and he had hardly been on a bike since he left school at 17.

The swimming was the most pressing issue. Colm went back to basics, studying technique and getting his breathing right. Additional professional coaching got him to a stage where he was competent enough to get down to serious practice.

The cycling was not so difficult as this essentially entails getting in the saddle and putting in the mileage. Running was the easy bit.

Living in Bray Colm joined his local club, the Wicklow Triathlon Club. He spent €1100 on a triathlon starter pack — a bike, wetsuit, cycling/running kit, etc — and then got down to the serious business of training and races.

Colm says there is no real competition within triathlons, that everyone competes more

against themselves, to better their previous times. Somehow that is hard to believe.

He is in the gym five mornings a week where he swims a couple of kilometres, does weights, and then a spinning class. He also runs on Tuesday and Thursday evenings, and on Sundays. He rests on Saturdays.

Colm has already achieved a considerable measure of success in the sport.
Competitors are seeded in their respective "World Age Group" classifications (his is 35 to 40) and last year he qualified to represent Ireland at an international meet later this year. Unfortunately, family commitments mean he cannot participate but his short-term objective is to qualify again and to represent Ireland in Vancouver next year.

However, his main focus now is on doing an Iron Man. This has the same three elements of a triathlon — swimming, cycling and running — but the distances are longer, some might say insanely so, Iron Man involves a 3.8km swim; a 180km cycle; and then a full 42.2km marathon.

It seems downright irresponsible to encourage anyone to undertake such a challenge but, as Colm is actually looking forward to it, all we can do is say Go For It!

# Colm Byrne

Most people think triathlons comprise a short swim, immediately followed by a kilometre or two cycle, and a similar-length run. However, the reality is quite different—the swim covers a distance of 1.5km, the cycle 40km and the final run 10km. Is it any wonder Colm Byrne of Axis Engineering looks so lean and fit?

https://arrow.tudublin.ie/bsn/vol46/iss6/1

## Heatrae Sadia Invests in the 'Perfect Cylinder'

As one of Europe's leading water heating companies, Heatrae Sadia has completed a e8 million, two year investment programme to create what the company believes is "the perfect cylinder". As part of the investment, a unique e3 million state-of-the-art piece of automated plant has been commissioned at the company's factory in Norwich, Utilising owned German nnology, the equipment has the ability to create what the company believes is the "perfect cylinder" for its Megaflo HE and PremierPlus unvented water storage systems with flawless welding, an extremely precise cylindrical shape and exact, smooth-cut edges.

An unvented storage water heater is fed directly from the cold water mains, ensuring a powerful, consistent flow of water at high pressure all taps and showers, ithout a significant loss of performance if more than one tap is used simultaneously.

Large unvented systems are proving the ideal solution for domestic and commercial premises where a number of sinks and/or showers are in use simultaneously. In fact, research by the WMA (Water Heating Manufacturers Association) and MODUS (Manufacturers of Domestic Unvented Systems) suggests that the demand for this type

of system increased by 30% during 2003 and this growth is continuing year on year since. As unvented systems are fed with mains pressure water, it is vital that the storage cylinder is extremely strong, durable and corrosion resistant.

Heatrae Sadia manufactures its Megaflo HE and PremierPlus cylinders from high-grade stainless steel, having pioneered the use of this material over a decade ago. Since then the market has recognised stainless steels benefits — namely excellent corrosion resistance, tolerance of high flow rates, strength, relatively lightweight, ease of fabrication and excellent durability and it has become the preferred material for unvented cylinders.

The materials' excellent resistance to corrosion eliminates the need for a sacrificial anode. Inferior grades of

stainless and glass-lined steel require an anode to achieve a degree of corrosion resistance. Anodes need to be inspected annually to check if they are still providing corrosion protection or need replacing.

Megaflo HE is the UK's market leading unvented storage water heating system, and its cylinder is manufactured from Duplex stainless steel. Its structure has a very high resistance to stress corrosion cracking and increased resistance to fatigue, erosion and chloride ion attack, which are enhanced qualities over normal grade stainless steel. Heatrae Sadia has always been synonymous with high quality, durable,

premium products and brands. Heatrae Sadia's ability to closely monitor and control production has also been significantly enhanced. For longer life, Megaflo He's Duplex stainless steel cylinder also undergoes comprehensive postweld treatments. Enhancements to this post-weld facility formed part of the investment programme and Heatrae Sadia believes no other manufacturer can match that technology.

Heatrae Sadia has developed the large unvented market through a combination of innovation, the use of quality stainless steel and in-depth customer support. The company's investment in a "perfect cylinder" for its Megaflo HE and PremierPlus large unvented systems will help to ensure the Heatrae Sadia and Santon brands continue to be seen as the first choice for commercial water heating — leading through innovation, performance, reliability and energy efficiency.

Potterton Myson Ireland are proud to be associated with such quality as it reflects its own company ethos.

Watch out for the for the Premier Plus Solar range of unvented cylinders available from your local merchant stockist today. Any details on stockists are available from our sales office.

Contact: Sales Office, Potterton Myson (Ireland). Tel: 01 - 459 0870; email: post@potterton-myson.ie



### sponsor Refrigeration Distributors Ltd (RDL)

# racgs goes south with success

The large turnout for the RACGS first outing to the southern half of the country last month proved beyond any shadow of a doubt that this was a very welcome initiative on the part of the Society. Fota Island Golf Club proved an inspired choice of venue and, despite windy but sunny playing conditions, it was an excellent occasion.

The outing was sponsored by RDL and Pat Cummins was on hand to present the wonderful array of prizes later on in the evening. Given the large turnout and the enjoyable atmosphere, an outing to the southern region of the country could now become a permanent annual fixture on the RACGS programme.



Sponsor

Founder of RACGS, Eamon Murphy with Maric Kiely

Prizewinners on the day were as follows:-

#### Overall Winner

Winner - Matt Butler (38 pts).

Class I

Winner - Vincent Barrett (37 pts);

Second — Michael Clancy (34 pts).

Class 2

Winner - Stephen Mulvaney (34 pts);

Second — Dave Killalea (33 pts).

**Visitors** 

Winner - Jack Elsteed (33 pts);

Second — Paul O'Sullivan (32 pts).

Nearest the Pin

lan Hanrahan.

Nearest the Pin

Matt Butler.

Front 9

Winner - Matt Noonan.

Back 9

Winner - Pat Conway.



Ger Darcy, Captain with Dave Killalea, Second, Class 1 and Pat. Cummins, RDL,



Ger Darcy, Captain with Michael Clancy,

Second, Class I and Pat Cummins, RDL.

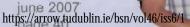
Ger Barcy, Captain with Matt Butler, Overall Winner and Pat: Cummins, ROL, Sportsor

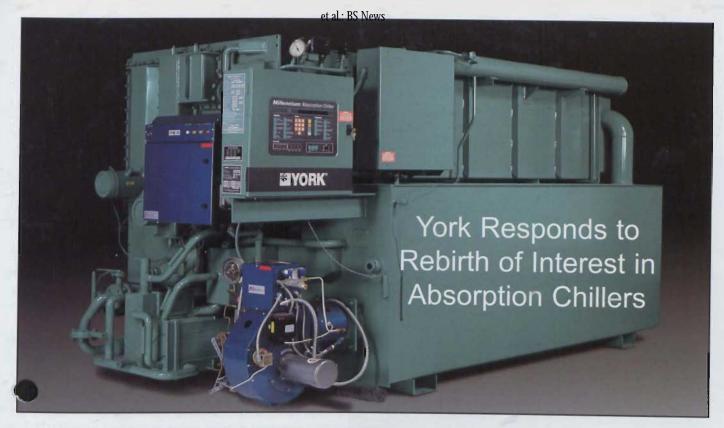


Vincent Barrett, Winner; Class I and Pat Cummins, RDL, Sponsor

Sephen Mulvaney, Winner, Class 2 and Pat Cummins, RDL, Sponsor







With the ever-increasing focus on the green environment, York has seen a significant growth in enquiries for alternative solutions to provide chilled water for commercial and industrial projects. According to Senior Sales Engineer Andrew McEvitt, this desire to utilise waste heat has seen a rebirth of interest in absorption chillers.

For those unaware of absorption chilling, essentially, a chemical process is used to create a cooling effect to produce chilled water at C - 14°C. Unlike vapour compression machines, heat, instead of electric motive power, is the driving force behind the cooling cycle. This heat is known as regeneration heat.

The basic principle of the absorption cycle is actually as old as the vapour compression cycle used in standard electric chillers. The technology is well proven in countries such as the United States and Japan. Due to their low electric power consumption, these units found favour in the 1950s, 1960s and 1970s

During this period, cities like Las

Vegas and economies like Japan were expanding rapidly. Often the availability of power was a limiting factor but developers found that a gas-fired absorption chiller could provide the essential cooling required for creating the built environment in these locations.

In more recent times, the regenerating heat source is often low to medium pressure hot water. or steam from a combined heat and power (CHP) unit. The advantage is that such heat is free waste heat from the CHP which, during low heating season, would be rejected to atmosphere via a tower or dry cooler. An absorption chiller can utilise such heat to create chilled water to assist or replace a standard electric chiller. Co-generation projects can now become Trigeneration projects whereby the CHP and chiller plant provides electric power, heating and cooling.

In addition to their low energy consumption in correct applications, these machines also offer:

- Low noise levels as there are no large motors or compressors.
- Low maintenance due to relatively small number of

- moving parts.
- Low electric power consumption, even the largest machine requires 15 kW or less (excluding heat rejection equipment).
- Zero ODP and Zero GWP as the refrigerant is pure water and lithium bromide.

York ACR Ltd (a Johnson Controls company) offers York and Yazaki chillers with hot water single effect machines ranging from 35kW to 4850 kW; steam single and dual effect from 420kW to 4000 kW; and gas-fired from 100kW to 2373 kW.

"As a manufacturer with great experience in this area", says Andrew McEvitt, "York ACR has invested in training of personnel to sell, commission and maintain these units. With dedicated offices in Dublin and Cork clients are assured that from initial enquiry to daily operation, they have local support. Therefore, the step towards an alternative solution can be taken with confidence."

Contact: Andrew McEvitt, York ACR. Tel: 01 - 466 0177; email: andrew.mcevitt@jci.com

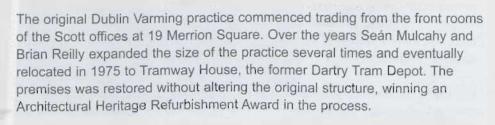
# face t Building Services News, Vol. 46, Iss. 6 [2007], Art. 1

JOHN PURCELL



espite celebrating the 60th anniversary of the founding of the Dublin office last September, Varming Consulting Engineers is still one of Ireland's foremost and most dynamic building services companies. It embodies the pioneering spirit of company founder Jörgen Varming and yet is very much at the forefront in delivering cutting-edge solutions across all industry sectors, both public and private.

Jörgen Varming came to Ireland in 1946 at the invitation of Irish architect Michael Scott to work on the designs of a series of buildings, most notably Bus Árus. He was a highly-gifted engineer, whose vision of life and unique application of engineering to buildings is expressed in numerous prestigious building projects, not just in Ireland but throughout the world, the best known being the Sydney Opera House. His legacy in Ireland is reflected in the design contribution of successive generations of Varming engineers down through the years in a wide range of well-known and diverse buildings.





There has always been a strong tradition of continuity at Varmings and it is no surprise that the present Chairman and Chief Executive John Purcell has been with the company since 1970. Longevity of services is commonplace but has been tempered by the infusion of new blood in the form of young, highly-qualified graduates. Given its standing and reputation Varming tends to attract the cream of the crop. Today the company management team is a strong mixture of youth and experience with the appointment as directors in recent years of Gerry Darmody, Joe Greene, Jim Rogers, Joe Byrne, Cormac Cox and James Kavanagh.

For what has now become a very large and ultra-professional organisation, there is still a very strong family ethos at Varming. In-house social activities take on all manner of guises, from paint-balling and footballing through to canoeing. Staff members also have a strong tradition of supporting charitable events through fund-raising exercises.

"Since commencing practice in Ireland 60 years ago", says John, "Varming engineers have been at the forefront in the pursuit of excellence and innovation in the design of mechanical and electrical building services. We enjoy new challenges and are proud of our association with many iconic

# face to face

JOHN PURCELL

"We can now influence the architectural concept of buildings in terms of shape and façade design due to the growing emphasis on sustainability and low energy solutions."

John Purcell with An Taoiseach, Mr Bertie Ahern, TD at the opening of Varming's new Cork office earlier this year

buildings in Ireland, several of which have been recognised with design and construction excellence awards.

"We now have a very strong presence throughout the entire country with dedicated offices in Dublin, Cork and Roscommon. We have adopted as our mission the evement of outstanding results for all our clients by providing sound engineering advice, supported by our tradition of excellence and spirit of innovation.

"While we always considered ourselves to be a wellmanaged organisation, in recognition of the benefits of an objective review, we recently underwent a process of selfanalysis to identify how best to meet the demands of this objective.

"The systems and procedures now in place have resulted in a new streamlined management and operational structure which is already delivering benefits, not just to us as a company but also — and more importantly — to our clients.

"As a consequence we can now influence the architectural concept of buildings in terms of shape and façade design,

due to the growing emphasis on sustainability and low energy solutions.

"We have developed this role by employing computer modelling simulation of building performance, particularly dynamic thermal modelling, and by undertaking value engineering studies as an integral part of our project execution procedures which include consideration of the benefits of the incorporation of sustainable design elements and energy efficient solutions.

"We have long recognised the benefits of life-long learning and are committed to the continuous development of all staff members through sponsorship of their further education in engineering and continuing professional development. We are an accredited CPD company by Engineers Ireland and have held Quality Assurance Certification to ISO 9001 since 1991.

"As a direct consequence of laying these foundations, the nature and quality of the design service now being provided by Varming is being rewarded with commissions to undertake many new and demanding challenges. These are especially exciting times for us as a company and we are enjoying our role in being part of a whole new era in building services engineering design."

Building Services News, Vol. 46, Iss. 6 [2007], Art. 1

## Plumb Lines

## heard it on the grapevine.



# SAYS FAREWELL



The industry was stunned earlier this month to hear of Barry Hennessy's departure from Sanyo Airconditioners Ireland. Barry has been synonymous with the Sanyo brand in Ireland for almost a decade, first as part of a distribution setup and, since 2002, as head of the company's dedicated Irish operation.

Barry's entre into the business back in 1990 (he started with Glowtherm) was like a breath of fresh air, his genuine enthusiasm and infectious sense of humour endearing him to all ... eventually! However, his sense of fun and apparent devil-may-care demeanour masked a very determined and ambitious personality which gradually became apparent in the enormous success he achieved for Sanyo in Ireland.

Indeed, such was the measure of this success that the Japanese giant last year appointed him General Manager for the UK, in addition to Ireland.

Just recently Barry was presented with a business proposition outside of the industry which he simply could not pass up. He has always had an interest in the property sector and has now changed career entirely, taking up a directorship and shareholding position with a well known Irish-owned international property investment developer based in Dublin.

Barry explains: "Sometimes in life you get a chance to make a serious move or shift onto another career path, and it may or may not sit right with you, and you exercise caution and you stay at what you know, but this opportunity just intrigued me from the very first minute. It's a great chance for me and my future, but more importantly the right move for me and my precious family.

"I would like to take this opportunity to thank everyone I have ever known in this industry who has given me a chance, created opportunities for me, and put their faith in me. It has been a fantastic learning curve, and invaluable experience, some for the right reasons, and some not, but precious nonetheless.

"I am extremely sad to depart Sanyo, who have been so good to me throughout, and I wish everyone the very best for the future, thank you all".

While the industry has lost a very experienced and serious market player in Barry Hennessy, it has also lost a mischievous and fun-driven personality. On behalf of the entire industry I wish Barry the same measure of success in his new career path as he enjoyed with Sanyo and the building services industry.

#### LOOK NO WIRES!!!

Could power cables and plugs could become obsolete? WiTricity, a concept devised by a US scientist can already power a light bulb over a distance of two metres. He believes that within three to five years the system will be able to charge other electronic devices.

WiTricity is based on the concept of resonance which allows the efficient transmission of energy between objects that resonate at the same frequency consists of two copper coils, one sending power, the other receiving it. The receiver is designed to resonate at the same frequency as the magnetic field generated by the transmitter.

Wireless transmission of electric power is not a new idea ... Nikola Tesla developed a prototype 100 years ago. Back then the idea was scuppered as there was no way to prevent people availing of free electricity. That would not be an issue today but health and environment lobbyists are already on the bandwagon saying everyone will get cancer and it will destroy the world

#### MIND THAT DOG

How is it that the simple matter of walking the dog can cause havoc with your golf handicap? I'm not too sure myself but Brendan Keaveney knows all about it.

Some months back while out walking his dog the animal got excited, pulled hard on the leash and caused Brendan to trip over, breaking his collarbone in the process. Thankfully, he is now well on the mend and looking forward to a return to the fairways.

As for the dog ... story is that he is still in the doghouse.

# High performance cooling/heating multi systems for retail & leisure

- Mitsubishi Heavy Industries high performance cooling/heating systems are designed for a variety of retail and leisure applications
- Simple, low cost installation
- Connect up to 4 indoor units to a single outdoor unit. Indoor units connected by branch piping, just two pipes connected to the outdoor unit
- Up to 28kW cooling or heating with an outdoor unit footprint of just 0.36sq m



New compact, high performance outdoor units with INVERTER technology



ecolution:high performance solution





3D Air Sales (Ireland) Ltd,

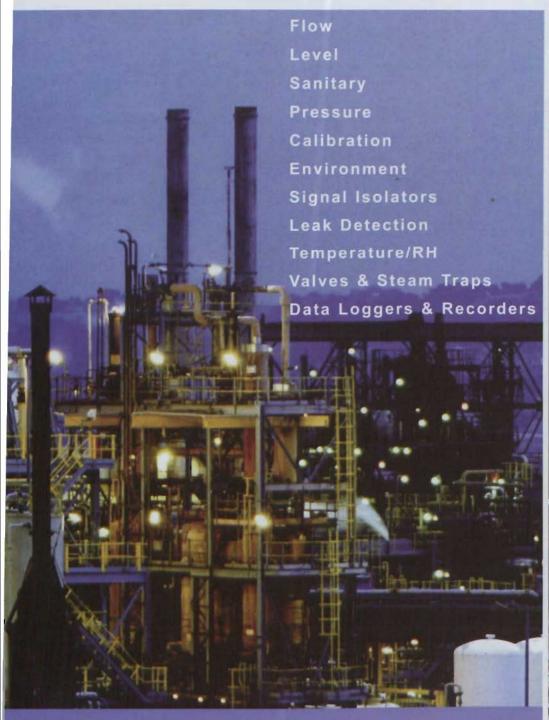
Tel: 01 - 463 8604

Fax: 01 - 463 8606

# Fit & Fuitting represent 46, Iss. 6 [2007], Art. 1

# Instruments & Controls

Manotherm Ltd provides a broad range of precision instruments for measuring, transmitting and controlling pressure, temperature, level and flow. In addition to providing quality precision instruments, Manotherm is committed to exceptional customer service, including knowledgeable, courteous technical support that generates and maintains long-term relations.







The Controls Centre,
4 Walkinstown Road, Dublin 12.
Tel: 01 - 452 2355/452 2229

Fax: 01 - 451 6919

https://arrow.tudublin.ie/bsn/vol46/iss6/io@manotherm.ie

web: www.manotherm.ie