BSNews
MECHANICAL & ELECTRICAL BUILDING SERVICES

PROJECT PROFILE
St Finbarre’s Cathedral,
Cork

Energy Show 2002
Pumps & Circulators
Interview — Brian Homan
Pipework & Drainage
Electricity Deregulation
Innovation in Pumping Technology

Wilo TOP-E range

From the company who patented the first circulator back in 1929 and introduced the first electronic circulator in 1989 comes a heating circulator with completely in-built pump management:

- Micro processor controlled inverter drive
- Infinitely variable performance
- Energy savings of up to 50%
- LCD, giving operating parameters at the pump head
- Suitable for new or replacement applications
- Digital link to BMS
- DN32-DN80
- Potential free contacts for simple fault indication
- Integrated motor protection

WILO ENGINEERING LTD
Enterprise Centre,
Childers Road
Limerick, Ireland

Tel: 061-410963
Fax: 061-414729
E-mail: sales@wilo.ie
Internet: www.wilo.com

https://arrow.tudublin.ie/bsn/vol41/iss1/1
Opportunities Come To Pause...

...Grab Them While You Can!

The turning of a new year is traditionally a time for new intentions, new resolutions and new beginnings. This year should be no exception. Indeed, given the changing market scenario it is vital that companies re-appraise their position, that they identify new market opportunities, and that they focus on maximising the return from these.

There is no denying that trading activity in some sectors of the building services industry has declined. However, for every door that closes a new one opens up. A typical example is pumps. New regulations governing energy usage and the demand for more efficient, technologically-advanced units has led to a whole new market scenario.

The same can be said for air conditioning. The hospitality sector — pubs, restaurants, clubs, etc — is now under severe pressure to clean up its air quality control measures. The existing AC companies have the means to deliver all manner of tailored solutions to meet that brief.

However, these opportunities will not go unnoticed. Companies in complementary and related industry sectors are equally au fait with these developments and will undoubtedly seek to capitalise on them. If this happens then those already well-established and currently serving the building services sector will have no one to blame but themselves.

So, let's stop talking about the downturn and changing market situation. Let's just get on with it before it is too late. Remember, opportunities don't come to pass but merely to pause ... they may be gone before you know it!

IN THIS ISSUE

| News                                      | 2 |
| Pumps & Circulators                       | 6 |
| York Profile                              | 17 |
| BSNews Interview — Brian Homan, CIBSE Chairman | 21 |
| St Finbarre’s Cathedral, Cork — Energy Focus | 22 |
| Pipework, Drainage & Rainwater Systems    | 24 |
| CIBSE News                                | 32 |
| Electricity Deregulation                  | 35 |
Trane Now leaving Lucan Station

After more than 20 Years in the village of Lucan, Trane has relocated its operation to new offices at one of Dublin’s newest business parks just off the Nangor Road. The full postal address is Trane Ireland Ltd, F7 Centrepoint Business Park, Oak Road, Dublin 12.

Aidan Flannery; Trane’s Managing Director says: “This move is a milestone for Trane in Ireland and one that provides us with a platform for continued growth. I’m proud to say that within two years of Trane acquiring the previous franchised operation, we have tripled our turnover and our personnel.

“Our new offices reflect Trane’s position as a leading supplier of HVAC equipment and services in Ireland. We now have the facilities to play an even bigger part in the industry. The conference and training room at the new building will allow us to provide training seminars to our customers and the trade in general, meeting the needs for CPD with individuals and companies alike.”

Contact: Aidan Flannery, Trane Ireland Ltd. Tel: 01 - 460 6030; Fax: 01- 460 6039.

New Chairperson for SCS

Helen Murray (pictured) has been elected chairperson of the Society of chartered surveyors (SCS) Geomatics Division, the body representing chartered land surveyors throughout Ireland.

Ventac on the Move

From the beginning of April 2002, Ventac will occupy new premises located at Industrial Estate, Blessington, Co Wicklow.

Contact: Ciaron King/ Eamon King, Ventac. Tel: 01 - 667 1077. email: info@ventac.com

Successful PHEX Exhibition Returns to Belfast & Dublin

The success of the five previous PHEX Ireland exhibitions has confirmed the organisers belief that a dedicated domestic plumbing and heating exhibition for Ireland is both necessary and desirable.

The proven formula of offering installer's, stockist's and specifier's of domestic heating and plumbing products the opportunity of visiting Belfast and Dublin, to see first hand products and services available to them in their day-to-day work – and discuss directly with the manufacturers and distributors their individual requirements – fulfils an important link in the educational and information chain.

PHEX Belfast and Dublin venues have again been well supported by manufacturers and distributors and, as before, the organisers have arranged opening times to be as convenient as possible for visitors. A free buffet, together with the successful casino evening, is available to all visitors. PHEX brings the industry to the industry’s doorstep and should not be missed.

This year the PHEX exhibition will visit The Kings Hall Conference Centre in Belfast on Monday, 15 April 2002, at 6pm to 9.30pm and Tuesday, 16 April, at 11am to 3.30pm. The show will then move to the Red Cow Complex in Dublin on Wednesday, 17 April 2002, at 6pm to 9.30pm and Thursday, 18 April, at 11am to 3.30pm.

Contact: PHEX Hotline; Tel: 0044 208 680 4200; website: www.phexshow.co.uk.
€21.1 Million
Energy R & D Fund

The Irish housing sector has received a major boost with the announcement that €21.1 million (£16.6 million) has been assigned for Research Development and Demonstration projects (RD & D) into energy efficiency.

The aim of the new programme is to encourage the widespread uptake of sustainable energy planning, design and construction practices in the new home building and home improvements sector. House of Tomorrow is funded through the National Development Plan and will be administered by the Irish Energy Centre.

Applying "best energy practice" to a new house will make it 20% more energy efficient. If all houses were 20% more efficient, Ireland would save up to €230 million per year in energy costs and reduce carbon dioxide emissions by 2.2 million tonnes.

Future Potential of CHP

When the Government published its Green Paper on Sustainable Energy in September 1999, the Irish Energy Centre was given the role of producing a report for the Minister of State, Department of Public Enterprise and the Commission for Electricity Regulation, on the future potential of CHP in Ireland. Factors for consideration were to include market liberalisation, technology advances, fuel sources, extension of gas grid and financial incentives. The report was to comment on the economic and financial aspects of CHP as well as CO₂ abatement costs.

The Irish Energy Centre has now made this report available for public consultation and invites comments from interested parties.
Contact: Andrew Parish, Irish Energy Centre.
Tel: 01-8369080; email: andrew.parish@irish-energy.ie
website — www.irish-energy.ie
Energy Show 2002

Energy Show 2002 — the biennial national showcase for energy in Ireland — will be held in the Industries Hall, RDS, Dublin on 15 & 16 May 2002. This year’s show will follow the highly-popular combination of previous years, with a 2-day exhibition coupled with a comprehensive and varied workshop programme covering a number of technologies and sectors. The primary objective of the event is to demonstrate how greater efficiency can reduce the demand for energy, and how renewable energy can increase the overall sustainability of our energy supply in Ireland. It will bring together over 100 exhibitors across the industrial and commercial sectors, with a vast array of innovative products and services. The deregulated energy market has clearly presented great opportunities for those engaged in the process of procuring energy, and this is an area where investment is expected to grow rapidly over the coming years.

The Energy Show 2002 will showcase all energy options under one roof and will demonstrate that moving towards sustainable energy can represent real commercial opportunities, through the increased market for certain technologies on the one hand, and the reduced energy cost base for industry and commerce on the other. The Government’s Green Paper on Sustainable Energy and the National Climate Change Strategy signals the national strategies and sectoral targets to meet our Kyoto Protocol greenhouse gas abatement commitments. Energy efficiency and renewable sources of energy are essential partners in this objective – efficiency reduces our demand for energy; renewables increase the sustainability of our energy supply.

Contact: Margaret Andreucetti. Tel: 295 7418. email: energy2002@irish-energy.ie

Safety Watchdog Is Watching You!
The construction industry is one of four key sectors prioritised by the Health and Safety Authority in its Programme of Work for 2002 which was recently launched by Minister Tom Kitt, Minister for Labour, Trade and Consumer Affairs. The sector has been identified by the Authority as a high-risk sector, along with agriculture, mining and quarrying, and the manufacture and storage of chemicals. These four sectors last year accounted for more than 75% of all fatal work-related accidents. Eighteen deaths were recorded in the construction sector and this does not include a number of deaths in other sectors which occurred while construction-related activities were being carried out.

“Ultimately, compliance with the regulations is a matter for each builder and where the deadlines are not met, we will use the statutory powers available to us to ensure the highest possible standards of safety on each site”, said Jim Heffernan, Senior Inspector, Health and Safety Authority.

Contact: Ms Carmel Kearns, Health and Safety Authority. Tel: (01) 6147037; e-mail: carmel_kearns@hsa.ie
The Royal Institute of the Architects of Ireland (RIAI) and the Royal Society of Ulster Architects (RSUA) have formally agreed to co-operate in a range of areas relating to the advancement of architecture and the delivery of the highest standards of architectural practice. This follows many years of informal co-operation between these two representative bodies for architects on this island.

The agreement was signed by Arthur Hickey, outgoing President of the RIAI and Barrie Todd, Vice-President of the RSUA, at a ceremony just before Christmas. As part of the agreement, each body has appointed an observer to the other’s ruling council.

Heatmerchants Two New Branches

Heatmerchants’ expansion continues unabated with the recent opening of a further two branches, one in Dublin and the other in Ennis, Co Clare. Full details are as follows:—

Heatmerchants Ennis
Manager: Ivan Colleran,
Unit 2/3 Doorain Industrial Estate, Quinn Road, Ennis, Co Clare.
Tel: 065 - 684 4922;
Fax: 065 - 6845701

Heatmerchants Dublin 13
Manager: Donal Mannion,
Unit 131 Baldoyle Industrial Estate, Baldoyle, Dublin 13.
Tel: 01 - 839 9001;
Fax: 01 - 839 9020

PUBLIC HOUSES
The New Target Market

There’s no smoke without fire and the recent talk about improvements to be made in Ireland’s hospitality venues is certainly not just hot air. Smoking in public places is an inflammatory issue, with the government hot on the heels of licensees that don’t provide cleaner air for their staff and customers. Would you like to tap into this rapidly expanding market? The Vintners Federation of Ireland invite you to a FREE seminar on ‘PubAIR – Cleaner Air for Ireland’s Pubs’.

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<thead>
<tr>
<th>Date</th>
<th>Venue</th>
<th>Time</th>
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<tr>
<td>Tuesday 5th February</td>
<td>Jurys Hotel Cork, Western Rd, Cork</td>
<td>11am - 1pm</td>
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<tr>
<td>Wednesday 6th February</td>
<td>SAS Radisson Hotel, Lough Atalia Rd, Galway</td>
<td>11am - 1pm</td>
</tr>
<tr>
<td>Thursday 7th February</td>
<td>Jurys Custom House, Custom House Quay, Dublin</td>
<td>11am - 1pm</td>
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This is an opportunity to hear more about how you can become an improved installer of ventilation equipment and bring yourself up to a standard that the health boards and pub industry alike want to see.

A prize is also up for grabs for the best pub ventilation solution. Send in your submission today and you could be presented with a cheque for 500 (for the individual installer or the company). We are looking for examples that:

- At least meet the standard of 12 airchanges per hour
- Have overcome difficult problems with building structure
- Demonstrate how they consider staff welfare
- Are cost efficient
- Are easy to use by the venue owner
- Are well maintained/serviced

Complementary tea and coffee will be provided in the morning, with a light lunch after the seminar. This offer is open to the first 30 callers (per venue).

Contact Kay on 00 44 20 76543505 or email kaym@crconsulting.co.uk for more details.
Energy Efficiency and Performance Crucial

Traditionally, pumps would not have been considered a high energy user and, relatively speaking, perhaps they are not. However, with possibly as many as 100 million heating pumps in use throughout Europe, their combined energy use is a matter of concern. The same scenario applies on a multiplier basis for the rest of the world. Consequently, pump manufacturers have invested significantly in recent years to produce products that use far less energy while, at the same time, offering greater efficiencies and flexible operating modes. The fruits of that investment programme are now becoming apparent with a vast range of new, innovative products, which incorporate advanced electronic control mechanisms, coming to the marketplace. This month’s BSNews focus on pumps and circulators highlights these developments over the following pages.
Don't Replace A Traditional Pump ... Upgrade To An Automatic Model

Since its launch just over a year ago, the Grundfos Alpha has become one of the world’s best-selling automatic domestic circulators. With Grundfos Alpha, installing the domestic circulator has become more convenient and easier than ever before ... just “plug-and-pump”.

Also, being automatic, the pump itself applies the pressure and flow required by the system, regardless of the building or the time of year. There is also less noise from pipes and radiators, while the significantly lower power consumption also means energy savings.

With plug-in-pump, it is no longer necessary to open the terminal box to connect mains power. All that is required is to install the accompanying plug and then to attach it to the pump. When servicing the heating system, simply pulling out the plug cuts the power.

When the pump is turned on, a small indicator lamp shows that power is connected. This makes installation and fault-finding in the heating system much easier as there is no longer any need to open the terminal box to determine if the power is connected.

Another feature of Grundfos Alpha is “de-blocking”. Each time the pump starts up it runs through a special sequence during which it stops and starts several times. The small vibrations created in the pump housing will, in most cases, dislodge any particles or contaminants that may have jammed the pump.

Also, since Grundfos Alpha is self-adjusting, heating installers don’t need to make adjustments. The pump’s standard settings covers the needs of approximately 90% of all households. These settings can, of course, be readily changed to suit other requirements.

As a special offer for the heating season, Grundfos is offering some special gifts to installers for choosing to fit Grundfos Alpha. With every Alpha pump purchased between now and 30 April 2002, there is a sticker within the box.

For every six stickers installers will qualify for a free Grundfos fleece or, alternatively, a Grundfos waterproof jacket on presentation of 12 stickers.

Contact: Gordon Barry, Grundfos Ireland.
Tel: 01 - 295 4 926;
Fax: 01 - 295 4 739;
email: gbarry@grundfos.com
Website: www.grundfos.com
Wilo – A New Generation of Pumps for the 21st. Century

Wilo Engineering Ltd is now entering its 22nd year successfully serving the Irish building services pump market. 2001 saw several additional developments such as the further expansion of the Service Division; the launch of the web site, which is www.wilo.ie; and the introduction of the very successful variable speed water booster range. Globally, expansion of the Wilo Group continued with the announcement of a joint venture between Wilo-Salmson AG and LG Cable Ltd, a leading high technology group in Korea. This new venture, named Wilo LG Pumps Ltd. assumed the pump activity of LG Cable, with Wilo-Salmson AG owning an 80% share of the new company. Added to the existing sales of the group, this new Wilo subsidiary in Korea will position the Wilo-Salmson Group as the leader in this section of the Asian marketplace. In Ireland, the Limerick-based Wilo Engineering Ltd is the Irish sales and distribution subsidiary of the German-owned Wilo Salmson AG Group. One of the group’s six production facilities, Wilo Pumps Ltd is also, located in Limerick, and was established in 1979. The factory — recently ranked at 247 in Ireland’s top 500 manufacturing companies — employs over 100 people and is proud of the important role it plays in the overall success of the Wilo group worldwide, as well as contributing positively to the local and national economies.

Internationally, the group had a combined turnover in 2001 of over 1 Billion German D.Mark and employed in excess of 2700 people. Wilo-Salmson AG will continue to invest and expand into new market territories as well as new product launches utilising the emergence of new pump and motor technology. Investment in research and development has always been a top priority with Wilo and will remain top of the list, thus ensuring Wilo products remain at the forefront of building services pump technology development into 2002 and beyond.

New Pump Developments

Wilo, since its origin in 1872, has constantly set landmarks in pump and circulator design, such as the introduction of the first electronic variable speed pump for building services back in 1988. While promoting the benefits, Wilo has continued to develop and adapt this technology, and has now launched the fifth generation of variable speed pump. This new generation — the “Wilo-Stratos high efficiency pump” — utilises technology that is revolutionary for the heating sector. Up to now, glandless (wet can) pumps with asynchronous motors...
BSS (Ireland) Ltd

for all your pumping requirements
Circulators, Pumps, Boosters ...

... just add water!

DUBLIN
White Heather Industrial Estate, 301 South Circular Road, Dublin 8.
Tel: 01 - 416 5100; Fax: 01 - 416 5165
e-mail: 1930.sales@bssgroup.com

CORK
Unit 20, South Link Park, Ballycurreen Road, Grange, Cork.
Tel: 021 - 432 1588; Fax: 021 - 432 1595
e-mail: 1960.sales@bssgroup.com
were traditionally used in heating systems. These pumps are quiet in operation and require no maintenance, but their motor design means low efficiency levels. The new “Wilo-Stratos” pump is different. Here for the first time a highly-efficient EC motor is used which combines the advantages of glandless pumps with unbeatable efficiency. Electrical consumption can be reduced by up to 80% compared to standard pumps.

Energy consumption of a pump in relation to the procurement costs is, and always will be, a major factor. The Wilo-Stratos pump has a potential payback period of approximately two years, depending on its application, size and use. If you consider that in general there are normally several circulating pumps operating in any one building, this innovation gives building operators’ considerable potential for reduced running costs.

In view of the large number of heating pumps in operation, the new pump generation from Wilo can make an important contribution to reducing emissions of CO$_2$ gas. In this way, the company has made a quantum leap in the development of energy-saving heating technology.

**New Innovative Inline & End Suction Pumps**

Of all design criteria for pumps used in building services and industrial plant applications, one crucial factor is energy consumption. This is why efficiency is given focal attention in pump development at Wilo. Not surprisingly, optimum energy efficiency is the outstanding characteristic of the new inline and end suction pump series IL, DL, BL. Whether used for heating, refrigeration or cold water systems in buildings or in industry, this efficient mechanical seal pump will help keep operating costs right down.

These economic factors are not the only advantage of the new Wilo range, the carefully-developed hydraulic components minimise unpleasant flow noise too. The newly-designed pump lantern also brings added advantages for use in air conditioning and chilled water applications. It is designed so that condensation is directed off the pump, reducing potential staining of the surfaces. Standard off-the-shelf mechanical seals and IEC motors assist in ease of maintenance and availability.

Wilo IL and DL are inline mounted pumps. The twin pump DL, with duty and standby heads has the same compact length dimensions as the single IL pump, and also the same flange connection size. The Wilo BL pump is an end suction design for floor mounting and also comes with the same range of features.

Wilo IL and DL pumps are also available with electronic variable speed control as an option. These versions allow for additional energy savings, with fully variable adjustment of the pumping capacity to the demands of the system or customer. Another advantage of these models is the option to fit (or retro-fit) an IF Module communication interface. This makes it possible to connect the pumps to an automated building management control system.

With the benefit of 130 years of experience, Wilo will continue to develop, innovate and expand its product range, and incorporate the most advanced technology available, to the advantage of the building services industry.

Contact: Wilo Engineering.
Tel: 061 - 410 963;
Fax: 061 - 414 728;
email: sales@wilo.ie
Web: www.wilo.ie
Quality and Reliable Pumps from Potterton Myson

Potterton Myson’s pump range is extensive, offering all manner of pumping solutions across the entire building services spectrum. Brief details are as follows:-

The “Compact” range of domestic heating circulators offers the installer assured reliability, high performance, and ease of installation for all domestic heating systems.

Special features include:

- 3-speed pump with a static head range of 2–6 meters; Manual re-start knob; Large terminals with clearly-marked captive screws;
- Automatic vent on initial start-up; Motor head can be replaced or repositioned without moving the pump from the system; All pumps guaranteed for 30 months.

The “SE” pump range offers a comprehensive selection of pumps as cast iron light commercial circulators, or secondary hot water commercial circulators.

The “SE” pump range has a host of special features and is available in 1 1/4", 1 1/2", or 2" as cast iron, and from 1" up to 2" in bronze;

Using disc induction motor technology, these pumps deliver a high ratio torque for effortless low speed start-up.

The use of a single static “O” ring seal eliminates the need for time-consuming, routine seal maintenance.

Potterton Myson manufactures a range of high-performance shower pumps for boosted water pressure called Aquaboost.

With a specialist team of field and in-house technical engineers to take customer queries, Potterton Myson provides expert advice on specification and installation. Full after-sales service and spares are also available and these are complemented by the company’s unique training facility which is located at its headquarters on the Belgard Road, Dublin.

Contact: Potterton Myson (Irl) Ltd.
Tel: 01 - 459 0870; Fax: 01 - 459 0880.

POTTERTON

PUMPS FROM THE NO:1 NAME IN CENTRAL HEATING

Compact Range
Variable speed domestic heating circulator pumps

SE Range
Cost cast iron light commercial circulators
Bronze secondary hot water commercial circulators

Aquaboost Range
High performance shower pumps for boosted water pressure

Potterton Myson (Irl)
Belgard Road, Tallaght, Dublin 24.
Tel: 01 - 459 0870
Fax: 01 - 459 0880
INSTANTLY ADAPTABLE

NEW GRUNDFOS MAGNA – MAGNETIC POWER

Via a user friendly operating panel, the new Grundfos MAGNA’s intelligent power module controls the pump’s flow rate. This ensures maximum performance and minimal energy consumption which uses no unnecessary resources.

The new Grundfos MAGNA, with pre-set AUTO mode – simply fit it and relax.

Innovative magnetic motor, sophisticated electronics and all-round optimal performance. Welcome to the MAGNA revolution: self-regulating UPE circulator pumps for heating systems.

www.grundfos.com
Europak Customised Packaged Pumping Systems

Operating out of a purpose-built facility in Ballymount, West Dublin, Eurofluid Handling Systems offers total solutions on pumping applications to both the design engineer and the mechanical contractor.

With a combined total of over 50 years pumping experience, coupled with a flexible approach to the manufacturing process, Euro fluid can assist in plant selection through to final supply and commissioning.

The advances made in pump system design incorporating frequency invertors and plc controllers are included as standard on the packaged equipment manufactured by Euro Fluid under the “Europak” name.

This range includes:
- mains water packaged booster sets;
- fire hose reel booster sets;
- oil transfer pumpsets;
- condense recovery sets;
- pressurisation equipment;
- packaged hot water transfer sets;

The CHV and CHNN ranges are typical of the advanced-calibre pumping solutions from Grundfos. Available from Euro Fluid.

Grundfos Pumps (for whom Euro Fluid is a major distributor), Swep Heat Exchangers, ACV hot water generators, Armstrong Pressurisation — and continued investment in modern technology — Euro Fluid will consolidate its dominant position in the marketplace, and continue to supply quality equipment.

Contact: Bernard Costelloe, Euro Fluid Handling Systems.
Tel: 01 - 460 0352;
Fax: 01 - 450 7634;
email: eurofluid@eircom.net

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PUMPS & CIRCULATORS

EURO
Fluid Handling Systems Ltd
MAIN DISTRIBUTOR FOR

GRUNDFOS
Pumps

Hot Water Heaters

Armstrong
Pressurisation Equipment

Manufacturers of Europak

- Mains Water Packaged Booster Sets
- Fire Hose Reel Booster Sets
- Oil Transfer Pumpsets
- Condense Recovery Sets
- Pressurisation Equipment
- Packaged Hot Water Transfer Sets
- Packaged Steam/Water Transfer Sets

Unit 12, The Westway Centre, Ballymount Avenue, Dublin 12.
Tel: 01 - 450 3884/460 0352/460 0353; Fax: 01 - 450 7634

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Call Louise at  Tel: 288 5001
BOSS – Pumping Solutions for All Applications

Heating and chilled water systems traditionally use an open tank to accommodate expansion within the system in the event of a rise in temperature. This method has several disadvantages which include:
- water has to be stored at high level;
- air is allowed into the system causing corrosion;
- use of high-temperature systems is limited.

These limitations gave rise to the design of the “sealed system” where the expansion of water in the system is accommodated within a sealed vessel, eliminating the need for an expansion tank at high level and providing other benefits, including:
- Virtual elimination of corrosion as no air is allowed into the system under normal operating conditions;
- Higher design temperatures, allowing smaller pipework and radiators;
- Compact equipment size reduces space requirements;
- Quicker installation;
- Equipment can be sited in the boiler house for ease of maintenance;
- No problems with freezing pipe work and tanks in the roof space.

This equipment is designed for use on sealed systems with no draw-off points. If taps, showers, etc are included within the system, a pressure booster set should be used.

For light commercial central heating installations a full pressurisation set would be excessive. If a pressurised system is required, BSS recommends the compact, space-saving, wall-mountable BOSS MX Mini-Pressfill. This performs the same function as larger sets, but is more suited to light commercial applications.

BOSS offers a comprehensive range of portable pumps for the pumping of clean or dirty water. All models are of robust construction, quiet in operation, reliable and versatile, allowing confident use in fixed or portable applications with automatic float switch operation, if required. Details from BSS Ireland.

BOSS Pressfills are quality-engineered pressurisation units of a robust compact design. Models available include the basic Type AX, the fully-packaged cabinet-housed Type PFS, the microprocessor types PFM; and Mini Pressfill compact units. Details from BSS Ireland.

BOSS oil transfer pumping set from BSS Ireland.

Contact: John Brophy, BSS Ireland (Dublin). Tel: 01 - 416 5100; Fax: 01 - 416 5165; email: 1930.sales@bssgroup.com
Michael Quinlan, BSS Ireland (Cork). Tel: 021 - 432 1588; Fax: 021 - 432 1595; email: 1960.sales@bssgroup.com
York International is the world’s largest independent manufacturer of air conditioning and refrigeration systems with a network of dedicated, wholly-owned sales and service outlets in over 120 countries worldwide. York ACR Ltd in Ireland is a typical example with its unrivalled wealth of experience and skills across the total spectrum of the industry. It is at the forefront in providing pioneering and innovative engineered systems solutions to meet the exacting requirements of the commercial, industrial and specialist electronic, microchip, medical and pharmaceutical industries.

“Providing engineered solutions that stretch the boundaries of technology” is York ACR’s mission statement and that objective is realised by bringing the company’s vast wealth of accumulated knowledge, experience and skills — as represented by its employees — to bear on clients’ requirements. This, coupled with a diverse product portfolio and the ability to tap in to a massive bank of international expertise and know-how, is what sets the company apart from its competitors.

York International is at the forefront of the global drive towards technological innovation, the design and production of new plant for the non-CFC age, and the development of state-of-the-art cooling systems for applications of all sizes.

York ACR is the standard-bearer in Ireland in this respect. Substantial funds have been invested in the company’s purpose-built headquarters at the prestigious Citywest Business Campus in Dublin which houses offices, warehousing and workshops. Additionally, there is the company’s second satellite branch in Cork which serves the Munster region.

Somewhat uniquely, York ACR enjoys all the benefits of being part of a global, market-leading brand while, at the same time, being free to operate autonomously at local level. This is critical to the company’s success in Ireland ... bringing trans-national experience and expertise to bear in a tailored manner to suit the specific needs of the Irish marketplace.

The fruits of that endeavour have been realised in dramatic fashion in recent years with York’s share of the various markets served (see inside) growing in quantum leaps, not just in terms of sales volume but also in respect of the number of highly-prestigious projects won.

Equally important is the emphasis placed on After-sales service and preventative maintenance. While the Engineered Systems Group is responsible for all sales within the company, it works in close partnership with the Service Division to ensure that, whatever the client’s requirements are, a customised, cost-effective and energy-efficient solution is provided, from need identification right through the entire project management function to final hand-over.

York ACR ... delivering Total Engineered Systems Solutions.
FlexSys Underfloor Air System

York's FlexSys underfloor air system is the perfect air conditioning component for the building technology platform. Because the entire volume under the floor becomes a pressurised plenum, FlexSys MIT (modular integrated terminal) units can be installed anywhere within the raised floor grid. When the layout changes, so too can the location of any terminal. Control and power wiring are located under the floor so that they can be re-connected with the terminals via "plug-and-play" connectors. Terminals can also be added or removed to meet changing loads, while control zones can also be added or rearranged.

Standard Air Handling Units

The YMA family of air handling units consists of 31 models having air volumes ranging from 0.25m cu sec to 26m cu sec and total static pressures as high as 1600 pascals. Custom-designed units with larger capacities up to 50m cu sec are also available. All units are made from extruded aluminium profiles and have flush-fitting panels and doors to provide aesthetically-pleasing lines. All panels are completely removable while the thermally-insulated enclosure is fully-sealed and has a high acoustic performance. There are two types of units in the range — YSM which is of 25mm panel construction and YCC which is of 60mm panel construction. The fan coil units go from 0.5kw upwards and are Eurovent Programme certified. All units are CE-approved and factory-tested before despatch.

YorkMaxE With OptiView Control

York was the first to apply microprocessor-based, plain-language-display control centres to centrifugal chillers. Now, York MaxE centrifugal chillers feature the full-screen, full-colour, OptiView Control Centre. This is an advanced, microprocessor control centre that sets the standards by presenting more data in the friendliest way possible. It retains the code-free, plain-talk data of the original but now it is even easier to read thanks to a large, full-colour screen using advanced, active-matrix display technology.
Novenco Air Handling, Fans & Extractors

Novenco is a long-established and recognised quality brand name, renowned for its air handling units, axial-flow fans, jet fans, centrifugal fans, box fans, roof extractors, air heaters, cabin units and dampers. Such is the strength and market profile of the Novenco name that, when York International acquired it some time ago, it was decided to retain the profile. The decision has proved appropriate with Novenco sales through York growing at a phenomenal rate right across the entire product portfolio.

Chillers For Every Application

York is the leading manufacturer of chillers in the world with an extensive range which caters for all requirements. Incorporating innovative designs, advanced technology and the highest quality — all units are CE approved — there is a choice of air cooled, water cooled, reciprocating, screw, absorption and centrifugal models. York is the only company to provide a variable speed drive for chillers, controlling the speed of the motor and pre-rotation vanes in the compressor.

Brief details of the range are:

**Air Cooled Chillers**
- 11kw to 1500kw

**Water Cooled Chillers**
- 48kw to 30,000kw

**Refrigerants**
- R134a; R407c; R717; H20, etc.

**Compressors**
- Scroll
- Centrifugal
- Screw
- Reciprocating

Edpac Close Control

The Edpac Modular portfolio comprises a choice of models to suit varying requirements with capacities in the DX range going from 10kw to 80kw, and the chilled water range going from 10kw to 120kw. These modules form the basis of the entire Edpac Modular concept, and are available in upflow and downflow configurations with top, bottom, front and rear-return options.

‘Clean Concept’ Air Handling Units

York’s YCC unit is Eurovent Certified and achieves the highest standards of mechanical performance, air thermal efficiency and air tightness. It is an all-metal air handling unit manufactured from 52mm thick, self-supporting, sheet metal panels which are insulated with either high-density mineral wool or CFC-free PU foam.

In standard air handling units most of the air leakage occurs between the frame and the panel. Consequently, York’s YCC air handling units are frame-less and panel junctions are sealed, thereby eliminating air leakage. These units are fully-approved for the exacting requirements of cleanroom environments across a whole spectrum of critical manufacturing industry sectors such as pharmaceutical, electronic, microchip, medical, etc.
Service, commissioning, maintenance and retrofit is an essential ingredient in York ACR's armoury when delivering engineered systems solutions. Product knowledge, experience and continuous professional development are the prime requirements in this respect and all York ACR engineers undergo training upgrades, educational and practical hands-on courses on a regular basis.

The entire country is catered for from the Dublin and Cork offices with engineers available for call-out, 24 hours a day, 365 days of the year. A 2-hour response time is guaranteed in most regions, with a maximum of three hours for all other areas.

Extensive spares are held in stock with the more uncommon items available on an overnight DHL service which operates daily between York's UK centre and Dublin.

Full turn-key equipment installations can be provided to include system design, plant selection, installation and commissioning. Additionally, York ACR's integrated system network offers design, project management and engineering capability for chiller sequencing, energy management and process control.

Plant modernisation and retrofit has become increasingly important in recent years and York ACR's engineers are particularly well-versed in meeting the needs of this fast-growing sector. Advice is provided on all aspects of plant modernisation, from improving efficiency to reducing energy consumption and system running costs.

System updates may be required for a number of reasons, such as the need for new components, changed cooling requirements, the need for greater efficiency, etc. York ACR will present a clear, cost proposal in each specific case and provide for all necessary works, products, components — and project management of the task — before embarking on the job.

In essence, retrofit from York ACR results in a maximum return for the financial outlay and peak performance from the air handling and refrigeration system.
Electronic Dialogue and Information Transfer the Way Forward

With something like 600 members and a very active programme of technical seminars and social events, the Republic of Ireland Branch of the CIBSE is one of the most organised and professionally-run in Europe. Yet it is all done on a voluntary basis, there being no professional secretariat. Officers and committee members are drawn from all areas of the building services industry, driven by a common desire to see that the highest possible standards are realised in respect of performance, energy efficiencies, environmental protection and value-for-money.

Looking to the future, there is undoubtedly a noticeable slowdown in some sectors but, overall, the signs are still very positive

Nonetheless, there are obviously those firms whose representatives regularly feature more than others, a typical example being Homan & O'Brien. Current Chairman Brian Homan is the son of Seamus Homan, who himself was Chairman many years ago. As individuals they have both served the CIBSE in many other capacities, while also encouraging their colleagues to do likewise.

Now that Brian is coming to the end of his one-year tenure his sense of achievement is tinged somewhat in that there is so much more he would have like to have done. “Twelve months is really very little time in which to plan, execute and realise a programme of objectives. That said, it forces a discipline on the incumbent to focus on critical areas and to pursue those single-mindedly through to completion. “My predecessor Greg Traynor did that with the CIBSE website and I have continued the electronic theme by developing a very strong CIBSE email directory. This has resulted in much more immediate communication between the officers and general membership, while also facilitating and encouraging electronic dialogue among the members themselves.

“The short tenure also leads to the development and implementation of a more cohesive long-term strategy. All the officers work very closely together from year to year so that a smooth transition is ensured from one regime to the next. That we do this so successfully is a tribute to the dedication and determination of all involved in this process, not just the current committee, but also those who have gone before us down the years.

“My term of office coincided with what was perhaps the best ever trading period the Irish building services industry has experienced. This made for an exciting, if sometimes demanding, time with unprecedented skills shortages, demand for new and innovative materials, and extremely tight completion schedules placing a tremendous strain on established practices. Naturally, this led to the introduction of new methods of operation and it was a tremendous experience to witness — and be a part of — this evolving process, both individually within my own company, and in the broader industry context as Chairman of CIBSE.

“Coincidently, this process took place against a background of a changing of the old guard, so to speak. The last decade — and five years in particular — has seen the emergence of individuals of my age group into senior management positions, with the likes of Sean Mulcahy, Paddy Clonan, Michael McDonagh, Eoin Kenny, etc. moving to another stage in their lives. I’d go so far as to say that it was opportune and beneficial for the industry at large that both trends coincided.

“Looking to the future, there is undoubtedly a noticeable slowdown in some sectors but, overall, the signs are still very positive. We may not be as frenetic as we have been of late, but we will certainly be busy. We will also see the introduction of more onerous regulations and legislation in the context of sustainable materials, energy usage, climate control and environmental issues. However, we should embrace these and promote and encourage their widespread adoption, further demonstrating our commitment to good and responsible practice.

“Yes there are challenges ahead for the building services sector but, we have the experience, expertise, enthusiasm and technology to turn them into business opportunities”.

Published by ARROW@TU Dublin, 2002

PAGE 21 BSNEWS JANUARY 2002
St Finbarre’s Cathedral

St Finbarre’s Cathedral is an outstanding building which has preservation orders not just on the external facades of the building, but also on the internal fabric and layout. The original heating system — which was installed 130 years ago — consisted of a solid fuel boiler in an underground chamber which circulated water using gravity circulation through banks of six inch diameter cast iron pipes.

The heating system was arranged in two zones, with zone one covering the Sanctuary, the Choir Stalls and the West Wing. Zone two covered the Main Aisle in the Nave of the Cathedral. Zone one had three banks of four pipes, while zone two had 24 pipes arranged in a bank four wide by six deep. All of these pipes were located in underground ducts and heat was circulated through floor grilles which were strategically placed around the Cathedral.

This system had, at some time in the past, been converted to oil and was being operated only one day per week. During festive seasons such as Easter and Christmas the operating hours would be extended to 24 to 26 hours for the week.

In March 2000 a serious leak developed which was threatening the integrity of the Mosaic Flooring and a decision was made to replace the heating system. Arup Consulting were given the very difficult brief of replacing the heating while respecting the preservation orders on the building.

The new system has retained the cast iron pipes in the Chancel only. Discreet and well concealed radiators have been used in the Choir Stalls and the duct under the Main Aisle has been lined with reflective insulating panels and banks of radiators have been installed. Underfloor heating has been installed under the timber flooring in one of the Transept areas. All in all eight heating zones have been created (three underfloor heating zones and five radiator zones) each of which has been fitted with temperature probes or sensors as appropriate.

The overall system is controlled by an intelligent outstation which monitors temperatures in the various zones. The system has full weather compensation control and it can be remotely monitored via a modem link to the outstation. It is fired by a modular boiler system burning natural gas with two condensing boilers and one conventional boiler, each of...
which is rated at 96 kW. All feed into a common header. One of the condensing boilers is used specifically to feed the underfloor heating circuits. The other two boilers feed the radiator circuits with the condensing boiler acting as the lead unit.

Temperatures are controlled in the individual zones using temperature control valves which are actuated by the local sensors. The boilers exhaust is expelled via the existing chimney which had to be lined.

This project has been described as being like fitting a heating system in a submarine. The new system is fully metered and monitored. The system is now being operated to control relative humidity in the building and this, naturally, means much longer running hours. The comfort in the building has been increased considerably, and if compared on a like-for-like basis, the energy use by the new system would reflect a 70% decrease in energy input. In view of the increased operating hours demanded of the system to preserve the building, the consultants are continuing to monitor the system to get the optimum heating cycle to minimise heating costs.

This project captured the imagination of the Boiler Awards judges for its complexity and the high level of extra constraints that had to be considered. The overall outcome is a state-of-the-art system which is highly energy-efficient and environmentally friendly.
Wavin — Increased Production Capacity & New Products

Wavin's reputation for constant improvement, innovation and focus on customer service is amply demonstrated as we enter the new year. The Balbriggan based market leader has announced a major new e3.2 million extension to its extrusion capacity and a number of new products to its extensive above and below ground range of products.

Surface Drainage

A unique formulation of polymer concrete is the basic ingredient of the new Wavin PolyChannel surface drainage systems launched this month.

The Wavin PolyChannel range caters for a diverse variety of environments from domestic footpaths and driveways to industrial areas of high-imposed loading and airport runways.

Waving PolyChannel offers enhanced flow characteristics plus exceptional strength combined with lightweight and is easy to install. The life expectancy of the product far exceeds traditional concrete channels and it is resistant to most chemicals within pH range 3-9.

What sets Wavin PolyChannel apart is the fact that it is manufactured from Polydyn bonded with high grade polyester resins to produce polymer concrete. As a result the Wavin PolyChannel range is frost-proof, easy to machine, cut or drill and, as it is a totally inert material, it is environmentally friendly.

The two main systems in the Wavin PolyChannel range are the SK and SKS systems. The SK is a general-purpose drainage channel with a protective galvanised steel edge, while the SKS is for heavy-duty channels and has a boltless locking device. It provides surface drainage for all load classifications without any road or pavement construction. Its armoured coated grating, secured at four fixing points per half metre using the boltless PolyLock system, provides exceptional durability and the strength to withstand the heaviest traffic.

Also available are the high capacities Wavin PolyChannel ST and the motorway crossover channel, the PQ.

Sewage Treatment

A new range of robust, high-quality and technically-advanced sewage treatment products has also been launched by Wavin. The complete range offers a variety of alternatives for many different site situations and requirements. All the products in the range offer a high level of efficiency and economic benefits.

Top of the range is Wavin SBR (Sequential Batch Reactor) Sewage Treatment Plant. Available in two sizes, the Wavin SBR provides extremely high effluent quality through an efficient oxygen transfer method and the aeration and settlement can be varied to suit particular site conditions. The Wavin SBR is suitable for both commercial and domestic applications.

There is no plastic media to become clogged or require replacement and there is enhanced safety through the absence of mechanical or electrical components within the tanks.

In addition, powered aeration ventilates the tanks and reduces odours while untreated or partially-treated effluent cannot be flushed through during peak surge conditions.

Also launched as part of the new Wavin range is the Wavin CAP (Continuous Aeration Plant). Available in two sizes 1-6 and 7-12 population served, this sewage plant has an impact-resistant body moulded in one-piece polyethylene.

Completing the Wavin range is the standard duty Wavin Septic Tanks. Four variations of this robust two-chamber settlement system are available. All are designed to BS6297 and carry full BBA approval.

Complementing the Wavin sewage treatment plants are the Wavin Sampling Chamber, Safety Grill, Manhole Cover and Frame.

Contact: Wavin Ireland.
Tel: 01 - 841 5000;
Fax: 01 - 841 5664;
email: ie-info@wavin.com
Website: www.wavin.ie
Developed and manufactured right here in Ireland, MFP Drainage Systems are the obvious choice for professionals. As one of the most cost-effective, professional systems around, quality and value are guaranteed when you choose MFP.

The comprehensive range of products from MFP conforms to national and international standards.
Cast Iron Guarantee from Hargreaves

Hargreaves Foundry has been in the cast iron business for over 100 years. Manufacturing castings for the machine tool industry during this time has provided a legacy of knowledge, experience and skills that equips the company to meet the exacting and varied requirements of its customer base of today.

All its traditional cast iron and rainwater products are manufactured in grey iron and conform to BS460 for rainwater goods and BS416 for soil goods.

The same experience and skills extend to its own pattern shop where, in addition to standard products, Hargreaves Foundry can also meet exceptional needs for new or bespoke designs, and to conserve or replace original pieces.

Cast iron will withstand the rigours of on-site handling, mechanical de-blocking and even vandalism. It also provides design capabilities that meet the needs of restoration, refurbishment and conservation work, equally as well as new, bespoke and unique designs. Moreover, it is 100% recyclable and can be returned to the foundry for re-use.

Other benefits include:— great strength and durability; long life; low maintenance; cost-effective; low noise operation; and fire resistance.

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Tel: 01 - 457 3900;
Fax: 01 - 457 3863;
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Hargreaves Foundry

A complete range of above-ground standard rainwater and conventional soil drainage products. All standard pipes, gutters, fittings and extensive range of rainwater heads, are available in a wide variety of styles.

One-off and bespoke designs also available to order.

All the benefits of cast iron, coupled with availability, and competitive prices.

Benefits of Cast Iron

- Long Life
- Low Maintenance
- Cost Effective
- Low Noise Operation
- Fire Resistance
- Strength & Durability

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Looking good is easy when you choose Wavin Amazon. Match this quality look with quality performance and you're a winner. Tough and attractive, this durable maintenance-free system comes in three high-gloss colours to enhance any house. No high-capacity system ever looked so good. Improve your profile with Wavin Amazon Gutter and Downpipe.

Wavin

The Best All Round Performer

www.wavin.ie
Ensign – a Cast Iron Choice from PVF

The Ensign cast iron system from Saint-Gobain Pipelines, provides the complete solution for all above and below ground drainage applications, transporting soil and rainwater waste from buildings and retaining all the traditional advantages associated with cast iron — strength, rigidity, durability and long life.

Ensign’s resistance to chemicals and its fire-retardant properties ensure there is no need for additional safety requirements such as fire collars or expensive cladding. Its excellent sound-deadening properties make it the perfect choice for hospitals, hotels, offices, airports and shopping centres.

Designed to be low maintenance and cost-effective, Ensign provides the most competitive prices within the marketplace. Unlike other materials such as plastics and vitreous clay, cast iron has no hidden or additional costs or expected maintenance requirements, and is 100% recyclable.

Its endurance and robustness means that it has the ability to resist impact damage, ground disturbance, accidental damage, and acts of vandalism. Unlike alternative plastic materials, cast iron is not subject to sunlight degradation, which means that it lasts the lifetime of the building.

In business environments or public buildings, access to such systems for repair and maintenance would inevitably lead to serious disruption to the use of the building, often with significant commercial consequences. However, cast iron’s reputation for endurance means that it is sufficient to withstand the harshest of environments.

Thanks to its low coefficient expansion, there is no need to add expansion joints or sleeves through walls ...

transforms the modern Ensign system into a traditional system ideal for heritage/conservation buildings.

Ensign is tested and approved by the British Board of Agreement (Certificate No:95/3125), is manufactured under a BSENISO9002 registered scheme of quality assurance, and has been designed in accordance with the new European standard EN877.

Ensign is the first cast iron system to attain the highest third-party accreditation, the coveted British Standard Kitemark approval (KM 51733), to the product standard BS EN 877.

The Ensign system is available through Dublin based PVF (Pipes Valves & Fittings) Ltd and has been used in a wide range of prestigious buildings throughout the world, including the much publicised Celtic Manor Resort in Wales. It has also been used extensively in Ireland, including the Intel factory; the George’s Dock office development; the Great Southern Hotel in Dublin; the University Hospital in Galway; the Dunlaoghaire DART Station; the Pavillion Apartments in Dunlaoghaire; Wyeth Pharmaceutical Factory; Swords Shopping Centre; and Croke Park.

Contact: PVF Ltd.
Tel: 01 - 457 3900
Fax: 01 - 457 2863;
email:sales@pvf.ie
Vulcathene Chemical Waste System from BSS

The Vulcathene® Mechanical system is a complete corrosion-resistant plumbing system which embraces laboratory bench items such as wastes, drip cups and sinks; an impressive range of pipe fittings from 38mm up to 102mm; catchpots; expansion joints; and many other useful items.

The Vulcathene® mechanical plumbing system has been designed for the safe conveyance of low-pressure chemical effluents, which makes it an ideal choice for school, hospital and industrial laboratory installations. Vulcathene fittings are moulded and not fabricated, ensuring integrity and conformity to specifications. Joints can be made in 30 seconds, and can be undone and remade many times without affecting the joints’ efficiency, allowing system changes to be made.

Vulcathene mechanical and enfusion pipe and fittings are compatible where both demountable and welded joints are required. Anti-siphon traps are designed to retain their seals under the most demanding conditions, while borosilicate glass base traps can be utilised where large amounts of organic solvents are to be used, and where the identification and recovery of valuable solids is required.

Non-standard fittings can be fabricated to specification.

The products manufactured for the Vulcathene system are covered by Agreement Certificates. Additionally, all pipes are manufactured in an environment operating a quality system which has been successfully assessed to BS EN ISO 9001.

The Vulcathene CAD Database is also available for design engineers.

Contact: John Brophy, BSS Ireland. Tel: 01 - 416 5100; Fax: 01 - 416 5165; email: 1930.sales@bssgroup.com

Across the globe, the world is turning to the benefits of new cast iron

Epoxy coated, lightweight, chemical resistant, fire resistant and sound absorbent, with lower material and labour costs but with a full building lifespan, the latest generation cast iron drainage systems from Saint Gobain Pipelines can’t be beaten for installation, lower maintenance, fit-and-forget costs.

That’s why architects, specifiers and installers are choosing the retro route when it comes to designing the most modern buildings around the globe. So, before you look at lesser materials, consider the new tradition of cast iron drainage. Low maintenance, 100% recyclable, it’s the first choice for extreme conditions – wherever you need to be confident and cost effective.

Contact us now for a fully illustrated Ensign catalogue. Telephone: 01-457 3900
Fax: 01-457 3865 Email: sales@pvf.ie
PVF Ltd, Burden House, Cloverhill Industrial Estate, Clondalkin, Dublin 22

Ensign
Light in weight  Light in cost  High in quality
Recent Projects: Intel  Croke Park  The Pavilion Apartments/Dun Laoghaire  Swords Shopping Centre  Wyeth Pharmaceutical Plant

Published by ARROW@T U Dublin, 2002
MFP — PVC-u Underground & Overground Pipework & Drainage Systems

MFP’s comprehensive range of rainwater, soil and waste and underground drainage systems — all conforming to the relevant national standards — provide drainage suitable for all types of buildings. Domestic, industrial, commercial, public ... MFP can meet all the drainage demands of modern construction. With years of experience in the design, development and manufacture of PVC-u drainage systems, MFP can justifiably claim to be a leading supplier of quality piping products to the construction industry. Quantum technology is the optimum plastic material for use in underground drainage systems. Strong, efficient and light to work with, it is marketed in Ireland by MFP. PVC-u twin-wall manufacturing process, combined with a corrugated outer wall with a smooth inner bore, gives Quantum strength, hydraulic efficiency and lighter weight than comparable products. Thoroughly tried and tested, Quantum has been awarded the BBA Certification, as well the Water Industry Product Assessment Mark of Approval, and the BS EN 29002 qualification. Two versions of Quantum are available — one for highway drainage and one for adoptable sewers. Multikwik push-fit adaptor
The Multikwik rainwater adaptor connects square and round (65mm, 68mm) downpipes to standard 100mm pipes. No solvent weld is required, just a simple push fit. Additionally, tests have shown that the joint has withstood over 0.5m head of water, far in excess of the requirements of the application. The Multikwik Rainwater Adaptor (MKRAB) follows closely on the heels of the Universal Adaptor which has seen great success in Ireland since its launch. Contact: MFP Sales. Tel: 01 - 630 2500; Fax: 01 - 628 1119; email: sales@mfp.ie Website: www.mfp.ie
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Senior Mature Candidate Route

The Chartered Institution of Building Services Engineers has introduced a new Senior Mature Candidate Route (SMCR) to CIBSE Fellow Membership and Chartered Engineer Registration. CIBSE has been licensed to offer this route for a limited period of time.

The Senior Mature Candidate Route (SMCR) is for those who are unable to meet the formal academic requirements for Fellow.

Applicants must meet the competence and industrial experience requirements for Fellowship of CIBSE and must be sponsored by CEng registered Fellows (other Institution Fellows may be accepted as sponsors) and interviewed by CIBSE Fellows.

You will be eligible to apply under the Senior Mature Candidate Route (SMCR) if you:
- Are at least 45 years old
- Have had at least 20 years of experience in building services engineering;
- Have held a senior position for a minimum of seven years, or can demonstrate equivalent competence and senior responsibility.

Contact: Greg Traynor. Tel: 01 - 281 5500; email: info@traynorandpartners.com.
Or visit the website: www.cibse.org

CIBSE Annual Ball

This year the CIBSE is holding a ball in place of its annual dinner. The CIBSE Ball — which is for members, their guests and friends — will take place in the Fitzwilliam Hall, Burlington Hotel, Dublin. Dress for the occasion will be formal and dinner will be served at 8pm sharp.

Members are invited to book individual tables to entertain their guests. Tables can accommodate 10 to 12 people and therefore it will be necessary for parties of less than 10 to share a table.

The cost per person is €64. Cheques made out to CIBSE Social Account should accompany each request for tickets and be returned to Brian Sterling, c/o L Lynch & Co Ltd, 16 Fonthill Industrial Park, Fonthill Road North, Clondalkin, Dublin 22.

Printed invitations are being prepared and will be forwarded on receipt of a cheque for the appropriate amount on a first-come-first-served basis.

Contact: Margaret Dolan. email: mdolan@tramway.ie or Brian Sterling. email: bsterling@llynch.com

Celebrity Lunch

As always, the CIBSE Celebratory Lunch held just prior to Christmas proved exceptionally popular with members and guests alike. Over the years the guest speakers have invariably been CIBSE and/or industry figureheads, the choice of our very own

Brian Homan, CIBSE Republic of Ireland Branch Chairman with Eoin Kenny

Eoin Kenny for the most recent event confirming that the two often go hand in hand. Eoin Kenny has served both the CIBSE and the building services industry at large admirably for, perhaps, more years than he would care to remember. His contribution to built environment issues in Ireland has been exemplary and it was fitting that he was invited to make the presentation as the continued on page 34
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CIBSE — Routes to membership

Lynn Beattie, CIBSE Director of Education & Development (pictured), oversees the formulation of the Institution’s education, training and membership policy at Head Office. Prior to Christmas she came to Dublin to present a paper and give advice on the routes and procedures for the various grades of membership. Those who missed her presentation and want to avail of membership benefits should contact the CIBSE immediately.

principal speaker at the December Celebratory Lunch. Our photographer was also present and he captured the celebratory mood of the occasion as the accompanying photographs testify.

Industry stalwarts Eoin Kenny and Seamus Homan sharing a lighthearted moment

Eamon O’Brien with Paul Condron.

Michael McDonagh with Dave Egan

Alex Foran and John Cuthbert appear to be unimpressed at whatever has caught the attention of Greg Traynor (centre).

Matt Johnson with Peter O’Dowd, Brian McPhillips, David Roome, John Doherty, Bob Daly, Eric Hayward, Barry Steele and Kieran Butler.

Donal Killane with Karl Reid.
Deregulating the Electricity Industry

Like the telecommunications industry, the electricity supply industry is presently undergoing a phased process of deregulation. Does this mean that our city streets are soon to suffer endless destruction wrought by a multitude of electricity service providers or that electricity costs will come tumbling downwards? The answer to the former is a definite no and to the latter perhaps electricity costs may not rise at the same rate as they would have without a competitive marketplace. So writes David Jacobs, Building Engineering Services manager, Irish Estates (Management) Ltd.

But how does one deregulate an electricity supply system that is so deeply embedded in the physical and social fabric of our society? To understand this it is necessary to have a basic understanding of the process that moves electricity through its various stages from generator to end user. This process can be broken down into a number of stages including generation, transmission, distribution, meter reading and supply and billing. A single body, Electricity Supply Board, has traditionally carried out all of these stages. ESB is now being split into a number of separate bodies, each of which will carry out one of the above functions.

The first and last of these functions, namely generation and supply and billing, will be open to competition. The remaining functions, that is, transmission, distribution and meter reading, will be carried out by the Transmission System Operator (TSO), to be known as Eirgrid, the Distribution System Operator (DSO), and the Meter Registration System Operator (MRSO) respectively. These latter functions will each remain the responsibility of a single body, ESB or a derivative.

The market is regulated by a Regulator and the Commission for Electricity Regulation (CER). This body was set up under the Electricity Regulation Act 1999 and operates under the auspices of the Department of Public Enterprise.

The entire deregulation process is being set up by the CER with the aid of the latest technology available. Discussion documents, decisions and other communications are disseminated via the Internet and are available to interested parties on the CER's website www.cer.ie.

The first phase of deregulation took place in February 2000. Under Phase 1 approximately 28% of the market, by capacity, was deregulated. In this phase of the process approximately 380 of the largest consumers in the country became Eligible Consumers. Thus, although 28% of electricity consumption was deregulated, this accounted for less than one in every 4,000 consumers. Eligible Consumers were defined as those using in excess of 4.0 gigaWatt hours per annum.

To put this into context a consumer of this magnitude would typically be a large manufacturing facility such as pharmaceuticals, chemicals or construction materials, a fully serviced and air-conditioned office building catering for in excess of 1,500 people, or a very large shopping centre. Anything smaller than any of the above would consume less than 4.0 gigaWatt hours of electricity annually and would, therefore, not be eligible.
The next stage of deregulation is due to take place in February 2002. This will open up about 40% of the market to something like 1,600 consumers. By numbers of consumers this equates to slightly less than one in every 1,000. The threshold for annual consumption will be 1.0 gigaWatt hour per annum. Putting this into context the type of consumer about to become eligible would amount to a substantial medium-sized manufacturing facility, an air-conditioned and fully serviced office block accommodating of the order of 500 people, or a medium to large-sized air-conditioned shopping centre.

Further opening up of the market to include most, if not all, commercial consumers is planned for 2003. Full opening of the market, including domestic consumers, to all 1.63 million ESB customers is planned for 2005.

The exception to the eligibility rules is the so-called Green Energy market. This relates to electricity produced, largely by wind-power by new, independently owned windfarms. Strictly speaking Green Energy is electricity produced by renewable or sustainable resources or by Combined Heat and Power (CHP). The entire market is open to green energy producers.

Eligible consumers are probably wondering about the practical implications of switching suppliers. Would there be any change in quality or reliability of supply? Will cost savings be achieved? What other implications are involved? It is important to know that the connection to the Distribution System will always remain the same. All consumers requiring supply capacity greater than 100 kVA will require a Connection Agreement with the Distribution System Operator. These Connection Agreements are entirely separate from any supply agreement and they are all being set up at present.

In the event of changing supplier there will not, and can not, be any change whatsoever in either quality or reliability of supply. In the event of technical difficulties, power shortages and the like there is no means of differentiating an ESB customer from an Independent Producer customer and there are no plans for implementing such a means.

The levels of savings that can be achieved are quite variable. Approximately 40% of the cost of a unit of electricity is made up of the so-called Use of System (UoS) charges. This covers the transmission, distribution, meter reading and Trading and Settlement costs. This leaves the remaining 60% to cover the cost of generating and managing that unit of electricity. Independent Power Producers (IPPs) producing electricity using modern Combined Cycle Gas Turbine generating stations can produce electricity at lower cost than ESB (PES) (Public Electricity Supplier) who have to factor in the cost of older technology and other legacy issues.

Savings to date have generally been of the order of 5% – 10%. The recently-introduced tariff realignments have resulted in price increases of the order of 13% for most users about to become eligible. This allows greater margins for IPPs. Unlike the retail telecommunications market UoS costs are incorporated into the IPP costs and the consumer receives only one bill in each billing period.

IPPs are concentrating solely on the production and sale of electricity. Other ancillary services are taking a back seat, initially in any event, and this may or may not be of importance to the consumer. Experience in the UK — where deregulation is several years ahead of Ireland — has shown that when the market has opened to large numbers of consumers, the new suppliers in many cases do not have the capability of managing a large customer base. This has resulted in extreme billing difficulties with some customers not being billed for up to six or even 12 months. This has been fine at the time but has caused serious difficulties for consumers who have not managed their liability well against the day when the bills eventually were presented.

In the final analysis, the object of the exercise is to provide the consumer with choice. It is up to each eligible consumer to make that choice.
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