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BSNews

January 1997

IRISH BUILDING SERVICES NEWS

Key Defection to Benefit Merriott

Oliver Sharkey, former Sales Director of RuntalRad, has joined Merriott Radiators, the design and specification radiator subsidiary of Barlo Group plc, as Commercial Radiator Sales Manager. The implications of this development are most significant and have led to much debate and speculation within the radiator sector as a whole.

With 25 years experience and a detailed knowledge of the complex British market, Oliver is looking forward to the new opportunities he sees for Merriott. He told *BSNews*: "I have watched and admired the progress Merriott has made in the market in recent years. With the investment made in product quality and especially the



Oliver Sharkey, Commercial Radiator Sales Manager, Merriott Radiators pictured with Managing Director, Ray Skelly and Sales Manager (Ireland) Frank Donohoe

Commenting on the appointment, Ray Skelly, Managing Director of Merriott, said: "Securing somebody with Oliver's high profile in the industry is a reflection of Merriott's progress to date. Our intention is to continue that development in 1997".

York Moves in Dublin and Opens in Cork

York ACR has moved to expansive new premises which are located at Unit 2004/3, City West Business Campus, off the Naas Road in Dublin. It includes office, workshop and warehouse facilities, all of which were specifically designed to further strengthen the quality of service provided. (For the moment, the telephone number remains as Tel: 01 - 456 9424).

In keeping with that objective, a separate office to serve the Munster region has been opened in Cork. It is located at 19 University Hall Industrial Park, Sarsfield Road, Wilton.

Contact is Service Supervisor Hugh O'Gorman.
Tel: 021 - 346580;
Fax: 021 - 346586.

MITSUBISHI APPOINTMENT

Tom Marren has been appointed Business Development Executive with the Air Conditioning Division of Mitsubishi Electric Europe in Ireland.

Tom is a highly-qualified engineer with a BScEng in Building Services Engineering from Bolton Street and an MBA from the Jefferson Smurfit School of Business in Carysfort Avenue, Dublin.

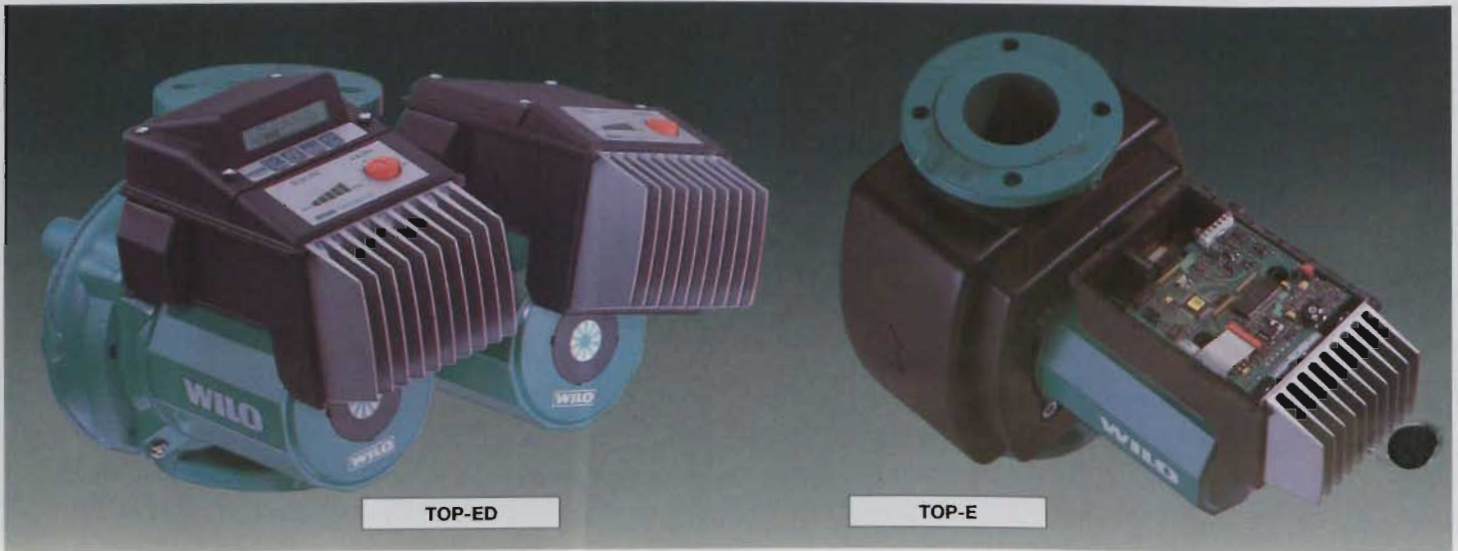
His experience within the industry is equally-impressive. He has worked extensively in contracting, manufacturing and consultancy, both at home and abroad. His international experience takes in Spain, America and the Middle East.



excellent powder-coated paint finish, I believe that Merriott is ideally placed to meet the increasing quality requirements of the customer. That is why I have joined!"

Welcoming Oliver on board, Frank J Donohoe, Sales Manager (Ireland) said: "Having worked together up until six years ago, I know Oliver's strengths and see his appointment as one of the final pieces of the jigsaw for Merriott. It will greatly contribute to our continuing growth and development".

Innovative Technology in Heating Circulators



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Irish Building Services News (formerly Irish H&V News) is Ireland's only Building Services magazine providing coverage of heating, ventilating, air conditioning, refrigeration, sanitaryware, plumbing, maintenance and environmental industries. It is the only publication catering exclusively for these industries and its circulation includes members of the following:-

- Chartered Institution of Building Services Engineers (CIBSE);
- The Mechanical Engineering & Building Services Contractors' Association (MEBSCA);
- The Association of Consulting Engineers of Ireland (ACEI);
- The Mechanical Engineering Contractors' Association;
- The Institute of Domestic Heating Engineers (IDHE);
- The Registered Heating Contractors Association;
- The Maintenance, Energy & Environmental Technology Association (MEETA) which incorporates energy managers and maintenance managers;
- The Energy Conservation & District Heating Association;
- The Institute of Plumbing;
- The Irish Home Builders Association (IHBA);
- Builders Merchants/Trade Supply Outlets.

In addition, Irish Building Services News circulates to independent building services contractors and key executives in industry, Government, Semi-State and local authority bodies. Essentially, our circulation is virtually saturation coverage of all those with an interest and/or involvement in the industry.

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From Wilo comes a new and extended range of electronically-controlled glandless circulators.

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An in-depth look at the air conditioning market. Included are product details from York ACR; Greene Air Systems; Aircon; Walkair; Season Control; Rink Air Conditioning; Reconair; J J Sampson & Son; J & E Hall; Harmon AC Services; Coolair; G T Phelan; Mitsubishi Electric Europe; ABB; Core Air Conditioning; D C Compute Air; Finheat.



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TRADE NEWS

Safewarm System Sets Environmental Standard; Advanced Practical AutoCAD; Cork supplier and trade assistant awards; Hot chorus line from Potterton Myson; Paris Interclima Show; Radiator turned towel Rail; Companies target NI; Season Control – 'Come On Ye Reds!'; Merriott Competition Winner; Water Treatment; Reducing electrical energy costs; IDHE Dinner; ISH – high growth rates predicted; Integrated engineering consultants; Liebert appoints Core.

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PLUMBLINES

Editor Pat Lehane looks behind the scenes for the real industry happenings.

Heiton Holdings Interim Results



Pictured at the announcement of Heiton Holdings Interim Results for the half year to 31 October 1996 are (l-r): Peter Byers, Group Finance Director, Heiton Holdings plc; Stephen O'Connor, Chairman, Heiton Holdings plc and Richard

Hewat, Group Managing Director, Heiton Holdings plc. The figures show group turnover for the period in question up 8% to £71.8 million with pre-tax profits up 22% to £4.7 million

NEW PRODUCTS AND LITERATURE

Rinnai 556 Powered Flue Gas Heater

The new Rinnai 556 powered flue gas heater from Drugasar is the very latest in Japanese technology, design and reliability. Suitable for both domestic and commercial use, the 556 has an output of 5.2kW and can be operated by remote or central control.

A feature is the "learning capacity" of the temperature controller, enabling it to preheat a room before occupation, taking into account the ambient temperature and previous heat up times.

The LED display incorporates a clock, dual timer, child-proof lock, dirty filter indicator and room temperature settings.

The heater has an economy mode which reduces gas consumption without affecting comfort, while the convection fan speed adjusts to the temperature of the room, reducing the effects of cold draughts.

Installation is simple with adjustable flues so that the heater can be fitted on walls up to 1 metre thick, and flue extension kits that allow the heater to be sited up to 4.5 metres from an outside wall.

Contact: Shay Kiernan, Heating Distributors. Tel: 01 - 837 5144; Fax: 01 - 837 0531.



The new Rinnai 556 powered flue gas heater from Heating Distributors

Genesis 96 Combi from Baxi

Baxi Heating has launched the new Genesis 96 combi, together with new accessories to further improve the versatility of the Genesis range.

The Genesis 96 is a high-output combi offering 28kW (95,555Btu/h). It has a lift weight of 35.7kg and, at 850mm x 440mm x 390mm, the dimensions are the same as the original Genesis 80.

New controllers and timers have been introduced for use with Baxi's combi boilers and the company has also launched a wide range of flueing accessories to enhance siting flexibility.

Contact: Donal Cummins, Heatmerchants. Tel: 01 - 623 1248; Fax: 01 - 623 1253.

High Accuracy Pressure Gauge

Manotherm Ltd has introduced the new Dwyer Instruments, Series 7116 Spirahelic® pressure indicating transmitter with ASME Grade 2A (1/2% F.S.) accuracy. This unique instrument combines the precision and legibility of a large 4-1/2" solid-front gauge with an integral 4-20 mA 2, 3 or 4 wire transmitter powered by 13-35 VDC or 18-26 VAC (4-wire only). The transmitter signal originates from a sensitive silicon strain gauge sensor permanently bonded to a straight section of the otherwise spiral/helical Inconel® Bourdon tube.

The resistance changes produced within the strain gauge as the tube flexes slightly are converted into a standard 4-20 mA output signal. A terminal strip and zero and span controls are easily accessible on the rear of the gauge case.

Dual 1/4" NPT female pressure connections are furnished to allow a choice of horizontal or vertical piping; 316 stainless steel connection block includes integral filter vent plug to protect Bourdon tube. A rear-blowout hole is included to minimise risk of injury. The impact-resistant, mineral-filled nylon case is sized to conform to ASME B41.1 so units will replace existing gauges with no changes in panel cutout or mounting holes.

Nearly three dozen standard models are offered ranging from 0-60 to 0-10,000 psig plus equivalents reading in kPa, mPa and bar. Maximum pressure for all models is 150% of full scale reading; temperature limits are -20 to 130°F (-29 to 53°C). A stainless steel 1/4" NPT pipe plug is included plus complete instructions and safety information.

Contact: Bob Gilbert/Brian Harris. Tel: 01 - 452 2355; Fax: 01 - 451 6919.



Dwyer Instruments Series 716 spirahelic pressure indicating transmitter from Manotherm.

Testing Boiler Performance

S W Carty & Son Ltd has introduced the KM701, a hand-held flue gas analyser which will be of interest to heating engineers who want to comply with IS813, the new Irish Standard for domestic gas installations.

The KM701 hand-held tester measures the performance of the burner and the efficiency of combustion; monitors gas levels in the boiler; and identifies if it is necessary to dismantle and clean the boiler.

Carbon monoxide and oxygen levels are measured and displayed simultaneously, along

with the calculated carbon dioxide. The CO/CO₂ ratio (The Poison Index) is the key to boiler performance. Typically, a ratio of under 0.004 is considered satisfactory for an efficient boiler.

The service of a boiler is only part of a test that aims to give assurance to customers that their appliance is safe to use. The KM701 will also detect traces of leaking flue gas around the boiler area, another key safety feature.

This instrument is supplied complete with a 2-year warranty, oxygen sensor, and a CO sensor with a 2/3-year lifespan. The tester also features a flue gas probe, protective rubber boot, water trap and particle filter.

Contact: John Duggan, S W Carty & Son Ltd. Tel: 01 - 450 8046; Fax: 01 - 450 3486. Email: stephen @ kompass.ie http://www.kompass.ie.



The Kane-May KM701 hand-held combustion performance tester from S W Carty & Son.

Wilo Top-E & ED - Single & Twin Head

From Wilo – the company who patented the first central heating pump back in 1929 and who, after 60 years continuous innovation, introduced the first electronically-controlled circulator to the market – comes an extended range of electronically-controlled headless circulators.

Many countries were signatories to the 1992 Rio Convention, whose major conclusion was the need to reduce CO2 emissions by the year 2000.

One of the greatest producers of CO2 is the central heating industry. Each kilowatt hour of electrical energy consumed produces 0.56kg of CO2 gas. The application of one of Wilo's electronically-controlled circulators, which matches its speed to the demand of the system, can reduce pollution, reduce energy usage and give increased comfort.

As central heating systems have become more sophisticated more and more people require

comfort, not only in their homes, but in schools, sheltered accommodation, intensive care areas, civic centres and in the office.

The incorporation of a Wilo electronically-controlled circulator in a system fitted with TRV's can meet this demand, while also protecting the environment.



Wilo TOP-E, ED & Star Wilo electronic circulators

The Star Wilo circulators, from 1" BSPF union to 50mm flanged, have been on the market in Ireland since 1990 and have given many trouble-free hours of comfortable control.

This basic technology has now been extended to a range of flanged circulators, the TOP-E & TOP-ED. These are equipped with a built-in micro-processor and micro-frequency converter.

The advanced micro-electronics in the circulator terminal box are

state-of-the-art.

The TOP-E & TOP-ED circulators vary their speed of operation to match the system load. Thus, when the installation is calling for heat, the circulator operates at a higher speed. As the temperature of the environment increases the TRV's close so the system's resistance rises.

This is sensed by the circulator which adjusts its speed to that dictated by the system itself.

This saves on electrical power consumption; enhances comfort; eliminates system noise due to valve "chatter" from TRV's; and

contributes to protecting the environment.

It must be remembered that the electronics are so small that they fit into the terminal box of the circulator. The only "give-away" is that on each electronic circulator there

is a heat sink to maximise heat dissipation and ensure the electronics are kept at constant temperature. This eliminates any control boxes on the wall and hence makes installation that much easier and cost effective.

**Contact: Tony Cusack
Tel: 061 - 410963**

**Derek Elton
Tel: 01 - 492 1080**

air conditioning

Enough Strategic Nonsense!

says Fred Cooney, Reconair.

The recent proliferation in IT technology has seen an enormous increase in the number of "comms rooms installations". The interesting thing from an air conditioning point of view is the continued policy of treating the air conditioning system as a very poor relation and installation the best "value-for-money" (meaning cheapest!) system.

It is obvious from several occurrences which I have witnessed that strategic planning, when it comes to the air conditioning for these rooms, is nonsense. There are several aspects of applying equipment to these areas which should be borne in mind.

These are as follows:-

- (1) The comms rooms is probably more vital than the computer room to an organisation which has invested considerable money in the comms equipment. The entire trading and data processing ceases to operate if the comms room is put out of action;
- (2) In the light of item one, it is obvious that the installation of a single air conditioning system for this type of critical application is not satisfactory and the minimum that should be considered would be two plants, each capable of 66% of maximum duty or, preferably, 100% standby air conditioning;
- (3) Air conditioning – This term has now come to span a wide spectrum of equipment, installation and application and, under no circumstances is it more incorrectly used than in the application of air conditioning to comms rooms.

Please reflect on the common practice with current installations with – a ceiling cassette unit with a cooling coil, water, ice and service access requirements is mounted directly above highly-sophisticated, complicated and expensive IT equipment. The use of commercial air conditioning equipment for these highly-sophisticated areas should be reconsidered. I believe that these areas should be served by the same equipment as used for computer rooms and that it should have 100% standby.

Please bear in mind the following when selecting equipment for these rooms:-

- (1) Ask the operators can your equipment function without air conditioning;
- (2) Ask the Project Manager how much he is spending on IT equipment;
- (3) Bear in mind that component failure is inevitable in an air conditioning system;
- (4) Remember that no matter how good equipment is that, at some stage, it may leak water;
- (5) Also remember that all equipment must be serviced and its location in relation to the IT equipment is critical.

I am aware that people will infer that this article – with its emphasis on 100% standby – is merely a sales ploy, but I am deeply involved in the service aspect of the industry and have been on the receiving end of air conditioning unit failures. Despite the very cold temperatures recently, there was great difficulty in keeping the two comms rooms in full operation in one particular installation.

Let's see some strategic planning in these rooms for a change, providing the customers with what we consider to be the best job and not what they consider to be the best "value-for-money"

York Expansion Continues Unabated

York's ever-expanding portfolio is now all-embracing, catering for virtually every requirement in the air conditioning and refrigeration sectors. In recent years in particular, its market penetration has grown considerably. It has now reached the point where staff levels and stockholding requirements necessitated a move to new, purpose-designed premises in Dublin, plus the opening of a dedicated Cork office (see cover of this issue).

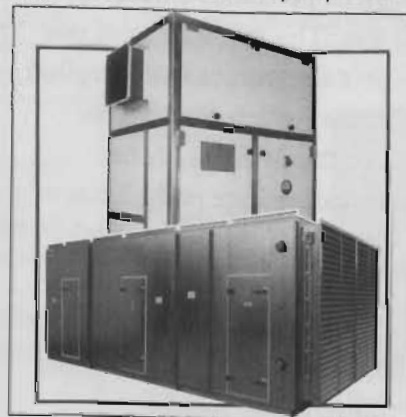
Such is the extent of the overall portfolio that what follows here is a brief breakdown of the primary sectors.

Air Cooled Screw Chillers (R22 and R134A, 360kw – 745kw) – The York YCAS range of air-cooled screw chillers is designed for water or water/glycol cooling. Twin-helical, semi-hermetic, screw compressors designed for industrial refrigeration and air conditioning applications are provided to ensure high operation efficiencies and reliable performance.

Features available on this range include all units manufactured to IS9001 EN 29001; multiple refrigerant circuits; minimum base area to give maximum capacity; high-efficiency, industrial-type, semi-hermetic twin-screw compressor; all units have full factory run test; full interface with building management systems.

Contact: Pat Byrne, Applied Systems Sales Manager, York ACR.
Tel: 01 - 456 9424.

Unitary products – York ACR continues to offer a comprehensive range of unitary products through its well-established dealer network. The York unitary residential range provides split systems from 2kw to 15kw. All units are available in heat pump and



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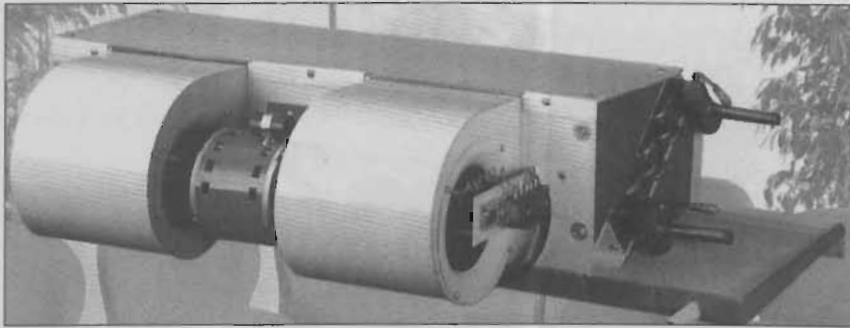
Mitsubishi Electric Europe
Environmental Control Systems Division
Westgate Business Park
Ballymount, Dublin 24
Telephone: (01) 450 5007.
Fax (01) 460 2069



-  P Series wall mounted unit
-  Fresh Master fresh air unit
-  City Multi floor standing unit
-  M Series ceiling ducted unit
-  P Series in-ceiling cassette
-  Lossnay heat exchanger
-  City Multi outdoor unit
-  M Series outdoor unit
-  P Series ceiling suspended unit



air conditioning



York mini-split in-ceiling compressor-type unit.

cooling only mode. The unitary residential range also covers portable air conditioning units from 2kw to 3.5kw.

The York unitary commercial range offers a diverse range of products including packaged roof-top units which are available in heat pump mode gas direct fired. The roof-top units are available from 8kw to 66kw with various options, including Enthalpy-based economiser control. Also included in the commercial range are the YCAM/YCAC range of air-cooled chillers from 8kw to 130kw. York also offers a full range of proven condensing units, OEMS and Contactors for DX application. These are fully versatile covering any requirement from 8kw to 160kw.

The EZ Zone VAV System has recently been launched by York ACR in response to the demand from consultants and end users requiring a non-CFC based effective air conditioning system.

Contact: Donal Keane, Unitary Sales Engineer, York ACR. Tel: 01 - 456 9424.

Air Handling Units – York offers a comprehensive range of air handling units to meet all HVAC needs. There are 83 standard unit sizes, ranging from 0.3m³/s and up to 2,500 pa TSP.

York's design is based on a three-dimensional module of 200mm incorporating both 25mm (YSM) and 50mm (YCC) models. These models can be manufactured to any configuration, indoor, outdoor, colour coat or stainless steel. Component sections for mixing, filtration, cooling/heating, humidifying/dehumidifying, heat recovery, sound attenuation and multiple fan options are available in single or stacked arrangements.

The 26mm unit is constructed from aluminium penta-post while the 50mm unit incorporates an external

framework design which creates a completely smooth internal surface without bolts and fixings ideally suited for clean room applications such as food processing, health care, pharmaceutical and electronics industries. Features include minimum wall deflection when subjected to high pressure (class 2 casing), M1 fire classification, clean concept, cold bridge option, and a low thermal transfer coefficient $k = 0.61 \text{ w/m}^2$. All units are CE marked and come from ISO9001 accredited factories.

Fan Coil Units – York model YFC room fan coil units reflect the most popular current ideas and objectives for the air conditioning of buildings – reliable performance, low noise operation, high capacity to unit size ratios, modern appearance and more factory-mounted accessories.

Sizes range from Size 10 unit only 60cm wide and delivering 215m³/h, to size 120 only 1.5m wide but delivery 1850m³/h. This broad range means that there are no oversized units, thus reducing costs.

Fan coil units can be supplied with full modulating control with wall- or unit-mounted thermostats/speed controls

with automatic summer/winter changeover. Outputs range from 0.968kw to 8.57kw. All units have the Eurovent Classification, CE mark and are produced in an ISO9001 accredited factory. Among the fan coil unit range is the ducted ceiling fan coil unit which is suitable for a ducted system of up to 200 pa ESP.

Contact: Any Greene, Airside Sales Engineer. Tel: 01 - 456 9424.

Refrigeration – York offers a wide range of refrigeration products, ranging from the small commercial hermetic compressors and condensing units to the large commercial and industrial semi-hermetic and open-type reciprocating and screw compressors and packaged units suitable for all refrigeration applications.

York also offers service, spare parts and technical support through its Technical Sales Department. Advice on selection, application, design, specification and installation is available at all times.

Contact: Finbar Keenahan, Refrigeration Sales Engineer. Tel: 01 - 456 9424.

After-Sales Service – York has also expanded its Service Department. Due to continued growth, a service department has been created in Cork to give a more effective and efficient service to existing and future customers in the Munster Area.

York ACR now employs nine fully-qualified service engineers, all of whom are factory trained on York and all other makes of refrigeration equipment.

Contact: Philip Masterson, Service Manager. Tel: 01 - 456 9424.

Greene Air Systems

From 1 June last, Greene Air Systems Ltd have been operating from new premises at Unit N, Marina Commercial Park, Centre Park Road, Cork. Located in the heart of Cork's business district, the premises comprise offices with adjacent stores and workshop for off-site repairs.

Greene Air Systems Ltd are appointed stockist/distributors for a comprehensive range of comfort and close control HVAC equipment including Argo, Airwell and Uniflair products, a large quantity of which are available ex-stock. Air and water cooled liquid chillers are available from the Airwell, Technibel and Uniflair product ranges. Specified equipment can be supplied on request.

The company enjoys a steadily-increasing customer base including service/planned maintenance contracts with a number of Munster's major chemical and pharmaceutical production plants. Also catered for are corporate main-frame computer suites and data centre installations.

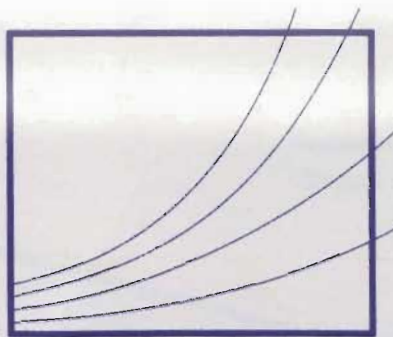
To provide the optimum package to contract customers, the company operates a 24-hour, 365-day, emergency service line, linked directly to the service engineers via mobile telephone.

Contact: Colm Doyle/Howard Neville, Greene Air Systems. Tel: 021 - 316465; Fax: 021 - 320274; Mobile: 088 - 510152.

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air conditioning

Aircon - Quality Portfolio With Personnel Excellence

Aircon Sales & Services Ltd is a wholly Irish-owned company whose engineers have over 20 years expertise in the air conditioning and refrigeration industry. Principal area of business concerns commercial/industrial air conditioning, ventilation, air treatment, energy recovery equipment, mechanical



Aircon - Sales Director Philip McEvitt with Service Manager Mark Morgan



Dalair type "SPMA" single package air handling units from Aircon

services and refrigeration. Aircon also offers service maintenance contracts which are tailored to each clients' requirements and offer a maximum 4-hour response time by fully-trained mobile service engineers, supported by a technical staff based at the head office in Dublin Industrial Estate. An additional strength is the fact that

Aircon is part of a much larger parent group with sister companies in other related sectors of the building services industries. Current Group turnover is believed to be approximately £25 million. Aircon's product portfolio includes Mitsubishi Heavy Industries split systems; Dalair air handling and rooftop packages; Qualitair close control

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air conditioning

and packaged equipment; Condair humidifiers; and Neslab process coolers.

Supporting and complementing the product portfolio is a team of experienced and high-qualified sales service engineers, all of whom are certified to C&G 2077 refrigerant handling. With the Montreal Protocol calling for the replacement of traditional refrigerants and environment-friendly gases such as R134A and R407C, Aircon offers free refrigerant audits. Quotations for carrying out the retrofitting of refrigerants are supplied if required.

The company also holds a Hazchem Certificate. Essentially, this verifies that the carriage, storage and general handling of gases is carried out according to set procedures, relevant regulatory obligations and safety requirements.

Where appropriate, Aircon will assist at the design stage with technical support and advice and is also on hand to help with installation and commissioning when required.

On the sales and general information side full details are available from Sales Director Philip McEvitt. Service Manager Mark Morgan handles all service and after-sales support queries. Both can be contacted at Tel: 01 - 830 7132; Fax: 01 - 860 0174.

Walkair Creating Panasonic Dealerships

As we go to press Walkair — authorised distributor for Panasonic Ireland Air Conditioning — is in the process of appointing a dealer network. The intention is to establish a strategically-located installer network to ensure comprehensive nationwide coverage by way of sales and after-sales service.

Since first established in August 1996, Walkair Managing Director Adrian Cooke and his colleagues have pulled together an impressive product portfolio incorporating some of the market-leading brands in various sectors of the mechanical building services industry.

A typical example is Panasonic. Instantly recognisable as a major Japanese manufacturer of quality and innovative products with a worldwide reputation for reliability, the Panasonic portfolio is extensive and caters for wide-ranging air conditioning applications. It can be divided into five primary product types with the respective capacities as follows:—

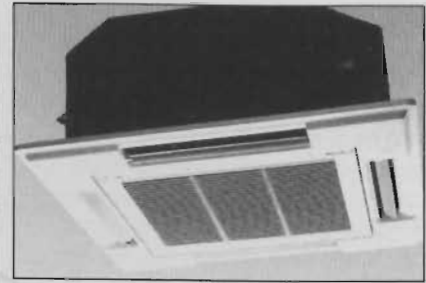
Cassettes — 3.6kW to 14.5kW;

Under Ceiling — 3.5kW to 14.5kW;

High Wall — 2.6kW to 6.35kW;

Console Units — 3.5kw to 6.35kW;

Hideaway — 6.5kW to 14.5kW.



Cassette type packaged split air conditioner from the Panasonic range as available from Walkair.

All are available in cooling only and heat pump options.

New products coming on stream shortly are heat pump multi-split systems; inverter-driven, high-wall units, mounted systems; and window units.

Impressive as it is, the product portfolio is only part of the Walkair package. Equally important is the manner in which this is brought to the customer. Hence the importance of the support facilities and mechanisms Walkair has in place, and especially the experience, technical know-how and knowledge of the personnel.

In this respect Walkair has an abundance of riches. From Managing Director Adrian Cooke through to Vincent Mahony, Tom McDonnell, Liam

Season Controls' Polar Entry

Further to our report in the October/November '96 issue of *BSNews*, the first phase in the expansionary development of Season Control is about to commence. Details have just been announced of a distribution agreement between the company and Polar Air, with product scheduled to come on stream on 1 March next.

As the global brand for Sonkor International, one of the largest producers of air conditioning in the Far East, Polar Air products are backed by some of the most extensive resources in the world. Equipped with the latest CAD/CAM computer aided design and manufacturing technology, the factories in Taiwan and Thailand produce over 250,000 conditioning units each year, all conforming to the highest international standards of quality and safety.

Every Polar Air product is manufactured to meet the stringent requirements of the internationally-recognised ISO 9001 standard for quality assurance in design, development and production.

Additionally, all Polar Air products conform to the Certificat Européen directives (Machinery Safety, Electromagnetic Compatibility and Low Voltage), as required throughout the European Community, to guarantee correct standards of safety.



Polar Air split ducted systems from Season Control

Polar also has Eurovent performance certification.

Eurovent certification provides the European air conditioning industry with a directory of manufacturers whose products have been independently tested for capacity performance and sound emission levels. Certification is only offered to companies whose information is verified, so specifiers and users can be sure that products listed in the directory offer guaranteed performance.

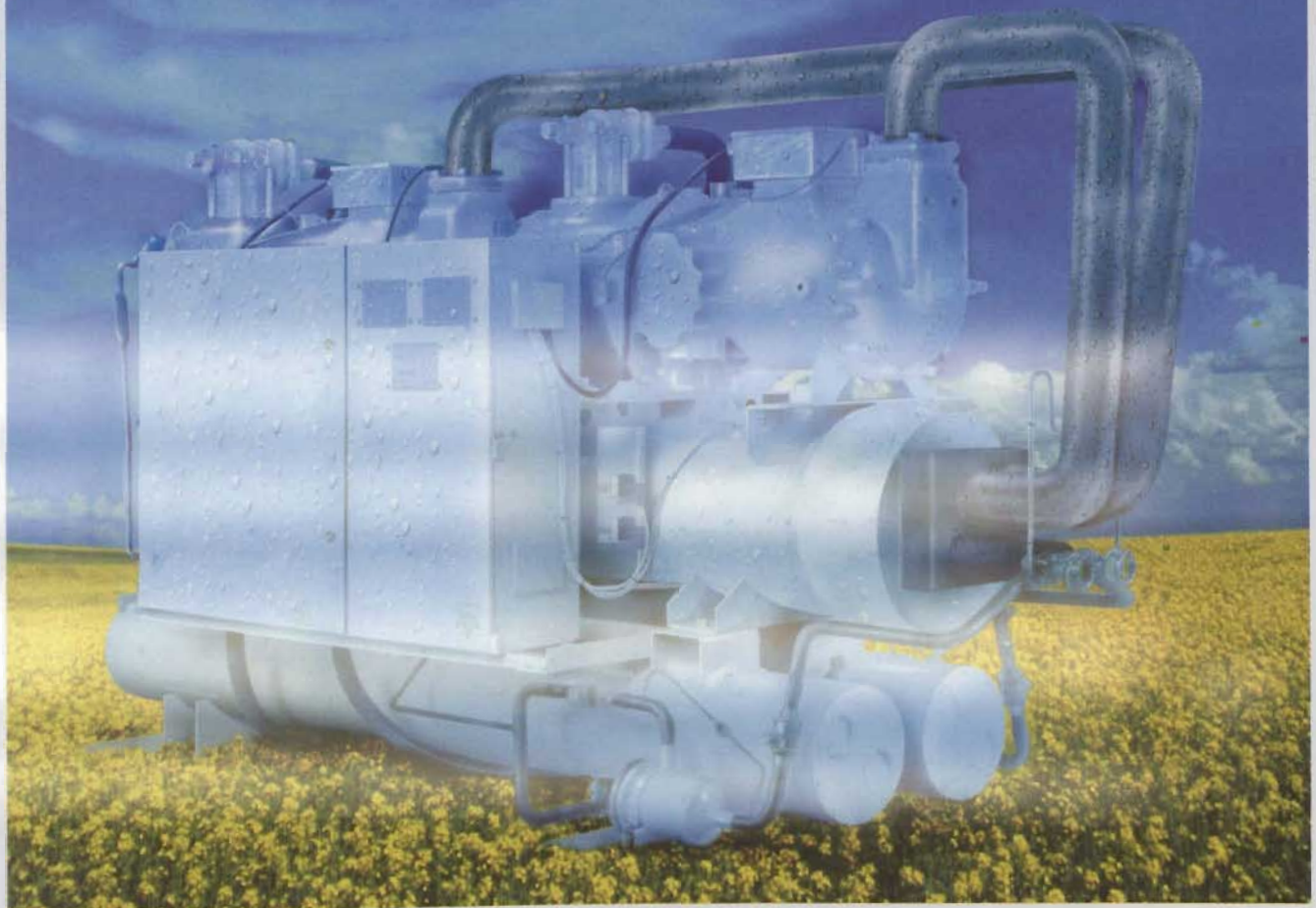
The range is extensive and includes ceiling cassette systems; ceiling-suspended/floor-mounted systems; SES high wall systems; SED high wall systems; multi-split high-wall systems; and split-ducted systems.

Forthcoming issues of *BSNews* will contain more precise details on each of the individual products ranges as they are introduced to the marketplace.

Contact: Season Control.
Tel: 01 - 453 2688; Fax: 01 - 453 7290.

DAIKIN OPTIMISED CHILLERS FOR USE WITH R-134a

We first chose
a refrigerant, and then built
a chiller around it.



Focus Advertising

Sounds logical, doesn't it ?

At Daikin, we design our products to the refrigerant we use. Chillers designed for R-134a should have the same capacities as their equivalent models using R22 as a refrigerant.

Daikin does not believe in drop-in chiller equipment. Therefore we redesigned the compressor, evaporator, condenser ... to offer the capacities we sell.

We would not offer you a 3 year warranty on all our products if we didn't

believe in them. If you are looking for a reliable supplier of chiller equipment, then only the manufacturer of both air conditioning and refrigerants can offer you the best.

For further information please contact :

coolair
AIR CONDITIONING/AIR DISTRIBUTION

25 Cookstown Industrial Estate, Tallaght, Dublin 24, Ireland.
Tel. (01) 4511244 • Tel. (01) 4511540 • Fax (01) 4517347
Internet : <http://www.daikin.com>



AIR CONDITIONING

Daikin optimised chillers:
no drop in = no drop out.



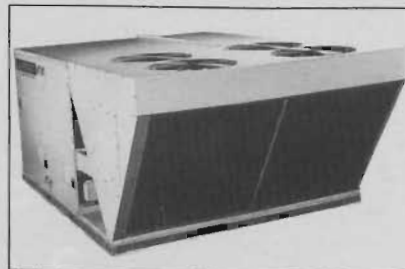
air conditioning

Corcoran, Antoinette Mitry and John Monaghan, Walkair has a team capable of dealing with all air conditioning service, maintenance and in-the-field problem-solving.

Supporting that strength will be the dealer network. While all but finalised, those wishing to be included in the final list of appointees should contact Vincent Mahony at Tel: 01 - 456 8070; Fax: 01 - 456 8098. Technical details, catalogues and brochures are also available.

Rink Air Conditioning: New Extensive Product Range for 1997

Lennox – The 1997 Lennox range of air conditioning products is set to be its largest and most effective to date. The recent joint venture between Lennox and HCF of France and the subsequent acquisition of Refac Air Conditioning of the Netherlands and Spain has given Lennox a strong



Lennox L Series packaged gas/electric, heat pump and cooling-only commercial equipment from Rink

presence in all European markets and, as a result, a new range of air and water-cooled chillers, air handling units, fan coil units and mini and multi-split systems will add new depth to the existing range of products.

Products within the Lennox 1997 range include:

- Split Air Conditioning systems: High-wall, ceiling-mounted, low-level wall units, cassettes;
- Single Rooftop Packaged Units: Cooling only: 27kW to 88.5kW; Heat Pump: 23kW to 57.7kW; Gas-Fired Heating: 27kW to 88kW;
- Air Handling Units: Airflow: 500-2500 m³/h to 28000-100000m³/h;
- Gas Warm Air Heaters: 10.5kW to 33kW
- Packaged Air Cooled Liquid Chillers: 10-50kW to 200-1400kW;
- Packaged Water Cooled Liquid Chillers: 10-80kW to 200-1000kW;
- Fan Coil Units: 1.5kW - 8.7kW.

Hitachi: CS-Net, Econofresh – Hitachi CS-NET is a Windows-based, computer-controlled network for Hitachi Set-Free variable refrigerant F flow (VRF) systems. CS-NET fills a gap in the market between stand-alone wall controllers and the complexity of a full building management system – meeting the needs of the building operator who requires central PC-based control of the air conditioning without the need for specialist staff to operate the system.

Another product update by Hitachi for 1997 is the introduction of the New European Econofresh. Manufactured in Europe with special features for the European market – such as 3-phase electrical supply, compatibility with current range of Utopia cassette systems, and CE Marking – Econofresh is a split system heat pump air conditioner which includes a free cooling facility to provide energy

Denco Unicool from Reconair

Unicool is an efficient, practical and flexible solution to the changing needs of the close control air conditioning market. This space-saving, free-standing system is configured as a multiple module unit, or as single autonomous units. A footprint of just 600mm x 600mm ensures that compact and unobtrusive environmental control is available when and where required.

Built to international close-control air conditioning standards, using proven Denco technology, each module provides 10kW of nett sensible cooling with minimal noise emission. Unicool has a high standard of filtration and optional electrode boiler humidification.

Unicool is quiet, efficient and unobtrusive and ideal for use in both manned workplaces and unmanned equipment rooms such as telecommunications hub rooms, computer rooms, data storage areas, laboratories and offices. It offers the additional advantage of being quiet enough for use in museums, art galleries, libraries and many other specialist locations.

Features and benefits include a small footprint which maximises available floorspace; modular configuration for maximum flexibility; optimised aerodynamic design which minimises fan power and reduces noise; parallel redundancy which gives continuous on-line availability and components which are specified for continuous year round operation; a high sensible heat ratio which eliminates excess dehumidification and reduces energy consumption;

The control system provides status monitoring alarms and diagnostics with full remote communications facility while all routinely-serviceable parts are accessible from the front of the unit for easy maintenance.

The other brand-leading name in the Reconair portfolio is Mitsubishi Electric. For product details see page 22.

Contact: Fred Cooney, Reconair.
Tel: 01 - 842 5200;
Fax: 01 - 842 5880.

Right: Denco Unicool from Reconair



EU2000

et al. BS News

Taking air handling into the next century

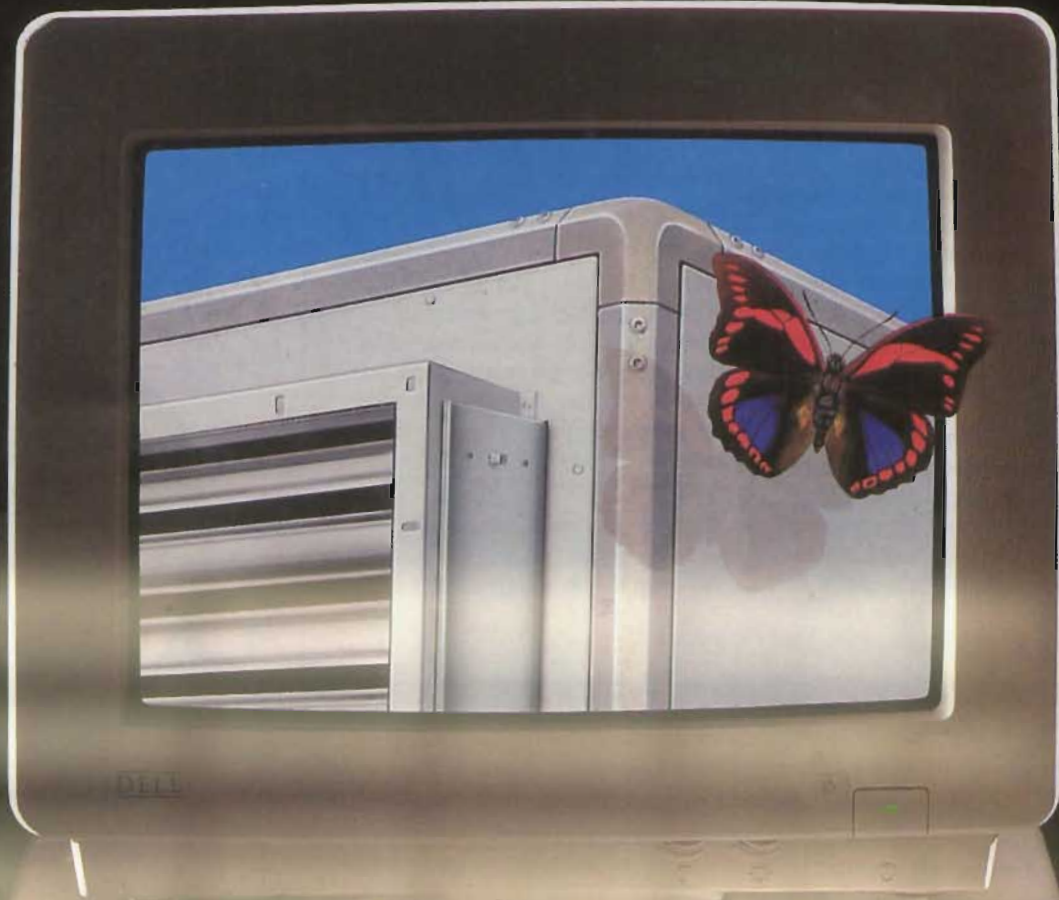


ABB Ventilation

Published by ARROW@TU Dublin, 1997

ABB, Belgard Road, Tallaght, Dublin 24. Tel: 01 - 405 7300; Fax: 01 - 405 7312

The ABB logo consists of the letters 'A', 'B', and 'B' in a bold, red, sans-serif font. Each letter is composed of a grid of smaller squares, giving it a digital or pixelated appearance.

air conditioning

savings of up to 37% compared to a conventional split system.

Dantherm – Dehumidification Equipment – Dantherm, the Danish-manufacturer of specialist dehumidification equipment, has recently appointed Rink Air Conditioning as distributor and service agent for their full range of industrial dehumidifiers, oil and gas-fired industrial heaters and specialised range of building driers. The dehumidifiers are available in both mobile and stationary versions. With the biggest range of different capacities on the market, it is always possible to choose the right model for a given application.

Sharp: Inverter Technology – Sharp's "Spring Collection" of inverter units reinforces Sharp's dedication to inverter technology and the company's leading position in providing users with the benefits of inverter control at the smaller capacity end of the market. These new units are the key to higher

efficiency, quieter operating and a more responsive performance.

Other product agencies held by Rink Air Conditioning include:

– Huntair USA: Airflow Management for semiconductor manufacturing; integral systems and isolation technology;

– Beutot (France): Heat pumps, liquid chillers, condensing units, computer room air conditioners;

Gunter: Dry coolers.

With a focus on customer service, Rink Air Conditioning can satisfy demands quickly and efficiently and give customers the quality of product and service they expect from a well-renowned company with over 10 years experience in the air conditioning market.

For further information on the above product ranges contact Rink Air Conditioning on Tel: 01 - 456 9469; Fax: 01 - 450 4314; Email: rink@iol.ie.

McQuay Show of Strength

Since the acquisition of J&E Hall by McQuay last year and the subsequent appointment of Thermo Systems as sole agent and distributor, the McQuay brand has made significant inroads into the air conditioning marketplace. This standing is now poised for further development following J&E Hall's move to new, purpose-designed premises which are located at Unit 8, Ashbourne Industrial Park, Ashbourne, Co Meath. Tel: 01 - 835 2530; Fax: 01 - 835 2535.



Carline Fagan who is responsible for the McQuay range of splits from J&E Hall

Danfoss-Randall HC75 Programmable Room Thermostats – Heating & Cooling

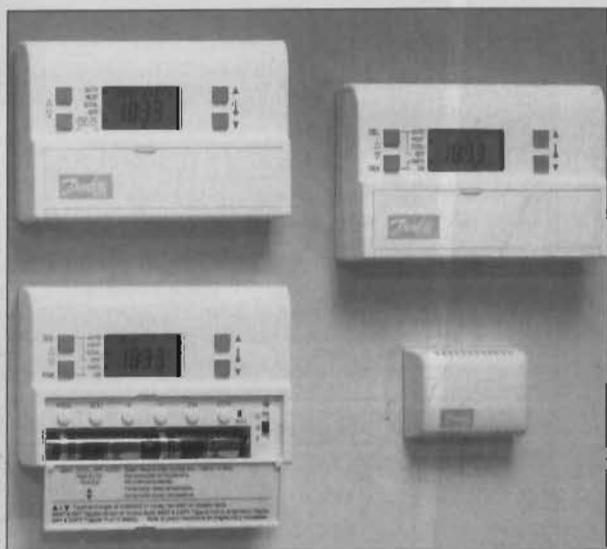
The Danfoss-Randall HC75 series programmable room thermostats are for the control of heating and cooling plant. All incorporate chronoproportional control logic to provide optimum comfort conditions with minimal fuel consumption.

They are designed for the following types of control:

- (a) Direct control of water-based fan coil units;
- (b) Direct control of water heating and direct-expansion cooling fan coil units;
- (c) Direct control of electric heating (via contractor) and direct expansion cooling fan coil units;
- (d) Direct control of heat pumps with reversing valve;
- (e) Direct control of split air conditioning units. HC75-3 has fan motor

connections for 3-speed fans. Other models are available on request;

Contact: David Sampson or Dave Killalea at J J Sampson & Son Ltd.
Tel: 01 - 626 8111.



Danfoss-Randall programmable air conditioning split systems control from J J Sampson & Son

Standing on just over 6000 sq ft and incorporating offices, warehouse and service workshop, this new building was specifically designed to accommodate and support the next phase in the expansionary programme. General Manager Noel May and his colleagues at J & E Hall have devised for the coming 12 months.

Indeed, such is the enthusiasm — and success — of the programme to date that, apart from being busy on numerous prestigious developments in Ireland, Noel and his team are currently in the final stages of preparing for a major project in Hong Kong.

This opportunity arose because of J&E Hall's proven record here in Ireland, and especially the success of a specific project where the company demonstrated its ability to work very closely with a particular contractor in providing the necessary level of professionalism and flexibility to ensure a trouble-free operation. That same "partnership" is now working on the Hong Kong project.

Back here in Ireland the move to new

air conditioning

premises coincides with the introduction of McQuay split air conditioning systems. Under the direction of J&E Hall's Caroline Fagan this new range will be gradually introduced to the marketplace.

To begin with, three new models have been unveiled — a ceiling unit; a concealed ceiling unit; and a wall-mounted unit. All are heat pump models and are manufactured in modern ISO 9002 quality assured

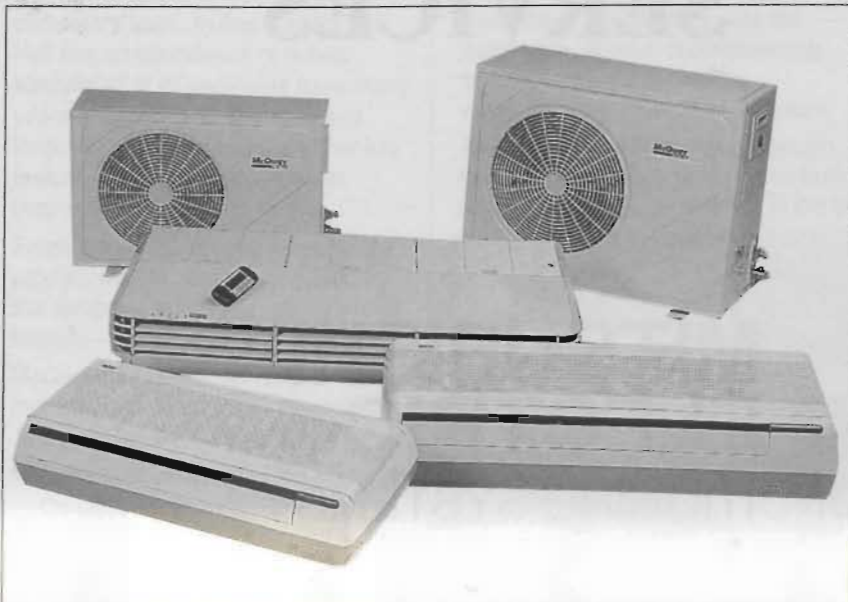
factories. They comply with all EU safety regulations and requirements and carry the EC mark. Additionally, all surface-mounted units are operated by multi-function, infra-red, remote control, with an LCD display.

On the commercial and industrial side Thermo Systems are responsible for application advice, design and sales of all McQuay air handling products and HVAC chilling requirements. With Aidan Lynch at the helm, the company has established a substantial market in this respect. Development and consolidation over the coming 12 months are well in sight.

Leading the commercial and industrial product line-up is the AAF range of air handling units.

McQuay commercial and industrial products are as follows:—

- ◆ Air and water cooled screw chillers;
- ◆ Centrifugal chillers;
- ◆ Air and water cooled reciprocating chillers;
- ◆ Fan coil units;
- ◆ Reverse-cycle heat pumps;
- ◆ Absorption chillers



The new range of McQuay split air conditioning systems is now available from J&E Hall

CAREL Programmable Controllers

pCO

for Air Conditioning and Refrigerations Units



- pCO monitors and controls compressor and condensor functions;
- pCO is easy to install and programme;
- Includes full alarms management package;
- Options for humidity and multiple compressor control available;
- Applications include: Stand-alone A/C units, chillers, cold rooms, heat pumps, supermarket packs etc.

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Perfect Air Conditioning – Designed for you

Commissioning and Maintenance Refrigeration,
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Chillers,
Heat Pumps

Contact:

Harmon Air Conditioning Services,

Unit No 4, Long Mile Business Park, Long Mile Road, Dublin 12.

Tel: 01 - 4564233; Fax: 01 - 4564236

air conditioning

After-sales service, maintenance and technical support is now more important than ever and being responsible for the after-sales of all McQuay products sold in Ireland requires a highly-qualified, knowledgeable and technically-competent team. In that respect J&E Hall has an abundance of riches. Virtually all of its engineers have many years of service with the company, longevity of service being another key feature — and strength — of the business.

Enquiries for the various facets of the product/service package provided by the company as detailed above are as follows:—

McQuay after-sales service/maintenance contracts — Noel May, J&E Hall. Tel: 01 - 835 2530;

McQuay split air conditioning systems — Caroline Fagan, J&E Hall. Tel: 01 - 835 2530;

McQuay Air handling/HVAC — Aidan Lynch, Thermo Systems. Tel: 01 - 492 5340.

Harmon AC Services ... Dedicated to Customer Care

When John Harmon originally established Harmon Air Conditioning Services 10 years ago, the core business of the company was the installation, service, commissioning and maintenance of heating, ventilation and air conditioning plant. As time went on the company began to specialise more and more and built up a reputation for excellence in the ac

market, particularly with regard to split heat pump systems, chillers and computer packages.

Year on year the company has expanded with new engineers coming on board to satisfy the needs of an ever-increasing client base. John himself is a fully-qualified building services engineer and his dedicated commitment to customer care and to devising tailor-made solutions for client's needs has become entrenched within the company at large.

This quality-driven ethos is obvious

right throughout the entire Harmon organisation. Moreover, it is also very evident in the company's approach to product supply and product.

Left: Typical installation using a Mitsubishi Electric PKH series heat pump unit as supplied by Harmon Air Conditioning.



Air Conditioning Systems

Retail Suppliers

Airwell

Argo

Portable

Uniflair



Installation ♦ Maintenance ♦ Repair ♦ 24-Hour Service

After-Sales Service/Maintenance Contracts

Greene Air Systems Ltd have a highly-experienced team of qualified engineers who are familiar with and fully capable of servicing, all the leading brands of air conditioning equipment. We are on call 24 hours a day to ensure speedy response to all after-sales and contract maintenance call-outs.

Greene Air Systems Ltd, Marina Commercial Park, Cork.

Tel: 021 - 316465; Fax: 021 - 320274; Mobile: 088 - 510152

air conditioning

selection. That Harmon Air Conditioning Services should engage in the provision of air conditioning equipment was a natural development. That it should seek out a quality, brand-leading supplier in this respect was equally to be expected. Hence, therefore, the company's appointment as a principal authorised dealer for Mitsubishi Electric air conditioning products.

Harmon Air Conditioning Services distributes the full Mitsubishi Electric ac product portfolio, including the latest additions to the range.

For details of the latest additions to the Mitsubishi Electric Europe range as supplied by Harmon Air Conditioning see page 22.

Harmon Air conditioning Services Ltd operates from a purpose-designed headquarters complex incorporating offices, warehouse facilities, workshops and training theatre at Unit 4, Long Mile Business Park, Long Mile Road, Dublin 12.

Contact: John Harmon,
Harmon Air Conditioning Services.
Tel: 01 - 456 4233.

Daikin — Specifically-designed Optimised 134a Chiller

Rather than take the "drop-in" route as many of the leading manufacturers have done in devising 134a solutions, Daikin has applied its wealth of experience and technical know-how in the production of refrigerants and chillers to design a tailor-made range of optimised 134a chillers which are totally environmental-friendly and result in zero ozone-depletion levels.

"This is a particularly important development within the marketplace", says Brendan Kilgallon of Coolair, Daikin's Irish distributor. "The drop-in approach is all very well but, in the end of the day, it's acknowledged that this invariably contributes to global warming. The optimised route taken by Daikin is more energy-efficient, is a 'green' approach and can be applied with far greater confidence as it represents a system conceived, designed and manufactured expressly to satisfy 134a. The fact that all units come with a full 3-year warranty is an added advantage".

This range of water-cooled water chillers is known as the Daikin EUWZ (*)-G series and is suitable for indoor installation and cooling and/or heating applications. It comprises four standard sizes with nominal cooling capacities ranging from 189.4 to 462.6 kW. Each size is available in two power supply versions: three-phase 230V/50Hz or three-phase 400V/50Hz.

The chillers are ideal for air conditioning offices, hotels, restaurants and hospitals etc when used in combination with Daikin fan coils or air handling units. They can also be used to supply chilled water for industrial applications.

Contact: Brendan Kilgallon, Coolair. Tel: 01 - 451 1244; Fax: 01 - 462 3434.

Dantherm From Ross Air Conditioning

Dantherm, the Danish manufacturer of specialist heat recovery and dehumidification equipment, has drawn on its vast reserves of technical knowledge and experience to develop the DanX, a product fully compatible with the ventilation requirements of the next millennium. The distributorship of this exciting new product range will be handled exclusively by Ross Air Conditioning, Dublin.

Fresh air, energy-efficiency, environmental welfare, employee health and happiness, are all increasingly important concerns for business and individuals alike. The DanX has been developed with all these concerns as its driving force, while ensuring that product quality is also Dantherm's banner into the next century.

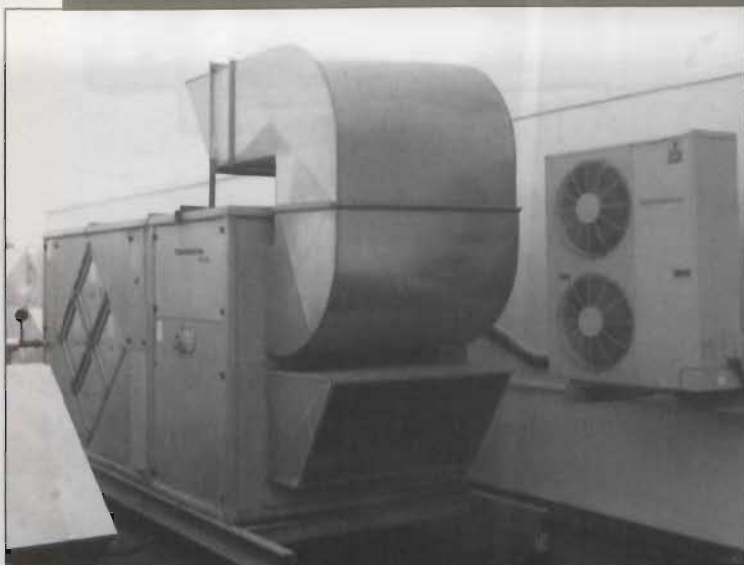
The DanX exhaust air heat pump is a fresh air ventilation system that recovers normally-wasted energy. It is a modular system that uses a range of standard options that allow a design to be as simple or as sophisticated as is required. The DanX series comprises six different sizes for air quantities from 2,000 to 32,000m³/hr.

The high volumes that the DanX is capable of handling make it ideally suited to the leisure centre and swimming pool marketplace. A single unit has the capacity to dehumidify leisure pools with a surface area of up to 700 sq m.

The DanX is also ideally suited to the commercial sector as a reverse-cycle geared heat pump. With an increased cooling capacity and a coefficient of performance in excess of 6:1, ie for every kW of electrical energy consumed, 6kW of useful heat energy is produced, the DanX geared heat pump is a cost-effective method of increasing ventilation rates.

Ross Air Conditioning has the full technical support of Dantherm and has access to their sizing and cost analysis computer systems for the DanX. Ross Air Conditioning will continue to exclusively handle the distributorship for the XVV range of heat recovery systems and the AF range of large industrial and commercial dehumidifiers.

Contact: Gerry Ross at Tel: 01 - 842 5522.



Above: Dantherm's DanX type XVV exhaust air heat pump from Ross Air Conditioning



Environmentally Friendly Technology



Global Chiller™ – Conserving Nature at No Extra Cost

USER BENEFITS

- ▲ Compact Design
- ▲ Total Reliability
- ▲ Greater Safety
- ▲ Better Energy Efficiency
- ▲ Revolutionary Screw Compressor
- ▲ Less Noise, More Harmony
- ▲ Minimum Footprint
- ▲ Increased Performance
- ▲ Reduced Commissioning Time
- ▲ Increased Capacity
- ▲ ISO 9001 Certification
- ▲ State-of-the-Art Technology



Global Chiller™: Model 30 GX, the air-cooled version



Global Chiller™ : Model 30 HX, the water-cooled version

For Further Information contact:



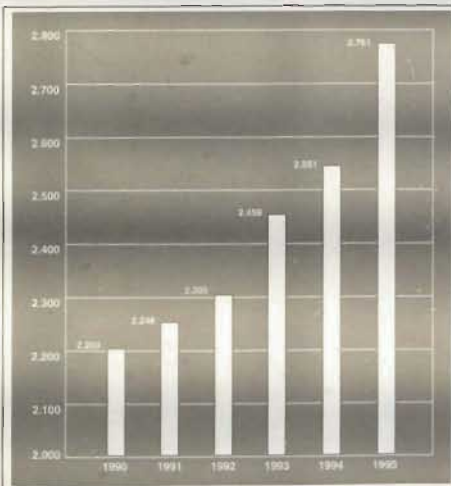
Unit C1, Three Rock Road, Sandyford Industrial Estate, Dublin 18.
Tel: 01 - 294 3110; Fax: 01 - 294 3115

RC GROUP — G T Phelan Ltd

RC Group is the commercial trademark of four Italian companies manufacturing air conditioning units and water chillers for comfort, hi-tech, civil and industrial applications. It has a long-established pedigree with a reputation for quality products and innovative solutions going back to 1963.

Against such a background it's hardly surprising that, when RC Group sought to enter the Irish market two years ago, it sought out a like-minded trading partner. Hence the successful trading relationship between RC Group and G T Phelan Ltd.

Excellent technology, high reliability, high quality and quick response to clients' needs are the main ingredients of the package provided.



Units produced for telecommunication

Quality Certification

From 1991 RC Group has been certified according to the ISO 9000 requirements, thereby guaranteeing quality in design, development and manufacture.

Microprocessor Control System

All units are equipped with advanced MP99 microprocessor control systems as a standard feature, all being designed and produced by RC Group for its own products.

Technology and Ecology

Traditional compressor copper discharge and suction pipes, together with the connecting copper capillaries, have been replaced by special plastic pipes uniquely conceived by the RC Group and DuPont de Nemours. This reduces noise levels, vibration and the common risk of fracture, which leads to discharge of refrigerant into the atmosphere.

Telecommunication, Exchange and Data Transmission Systems

Since 1964 RC Group has repeatedly and constantly delivered equipment for telephone and data transmission systems all over the world. This has led to valuable and irreplaceable know how that is made richer every day by the acquisition of new and significant experiences.

Air Conditioners

The air conditioner range includes units for indoor installation from 1kW to 137kW with upflow or downflow air delivery; and packaged rooftop units from 35 to 196kW. All units are available with remote air-cooled condenser, built-in water-cooled condenser or for chilled water feeding.

Two free-cooling systems and two re-heating systems are available for energy savings.

Water Chillers

The water chiller range includes air-cooled chillers with the cooling capacity from 6kW to 1560kW and water-cooled chillers having the cooling capacity from 6kW to 2630kW.

Air-cooled chillers are available in the heat pump version with the cooling capacity from 6kW to 800kW.

In all RC chillers it is possible to install a partial or total condensation heat recovery system. Moreover, a special range of free-cooling chillers is available with cooling capacities from 23kW to 800kW.

Low Noise Emissions

All RC air-cooled chillers are available in low noise and extremely low noise versions. This is a special feature of RC products, through complete re-designing of the whole system and its components. Proven results have been obtained by reducing noise at the source without external sound attenuation, which can be detrimental to the system efficiency and costly to install.

Refrigerants

All units are suitable for use with HFC refrigerants, ie R134a and R407c, as well as traditional HCFC refrigerant.

Semi-hermetic Compressors

RC Group produces semihermetic compressors with 4, 6 and 8 cylinders with the cooling capacity from 210kW to 420kW for its own wide-range water chillers. These compressors are named "Sinus".

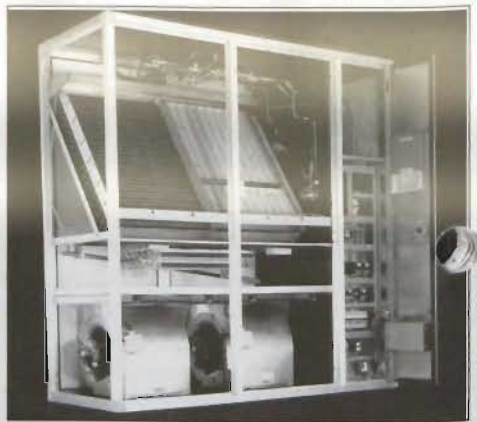
Sinus's are equipped with a reversible oil



pump and double oil filtering section with a pre-filter on suction and a filter on oil discharge.

The new valve system allows high performance with reduced energy consumption and the capacity control is realised by reducing the refrigerant flow in the cylinders.

Today, new big Sinus compressors with 10 cylinders and 530kW of cooling capacity are available.



Master under, downflow, close control unit (12Kw to 85Kw). Available in DX - water-cooled and chilled water versions

For full details of the RC Group portfolio, including technical literature and sales support data,
CONTACT

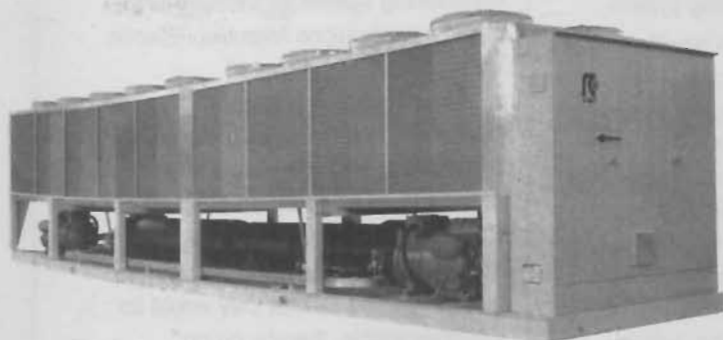
Gerry Phelan, G T Phelan Ltd,
59 Rock Road, Blackrock, Co Dublin.

Tel: 01 - 283 3347/283 2622;

Fax: 01 - 288 3821.

The reliable choice in water chillers...

www.rcgroup.it



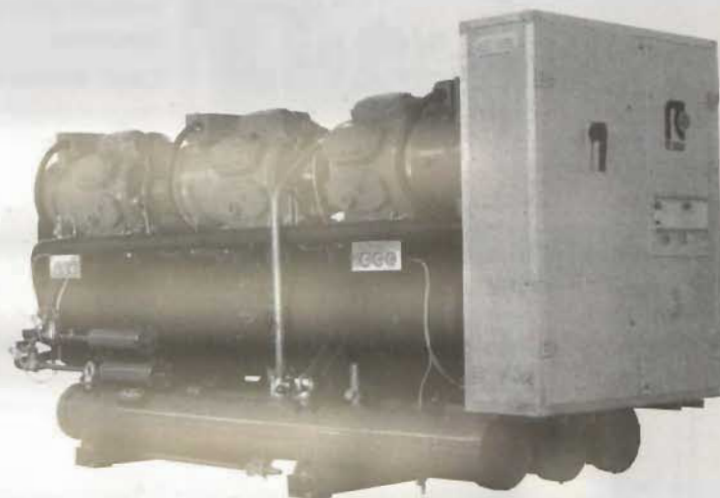
UNICO Industrial • mod. 1550.S4

AIR COOLED

Air cooled packaged chillers.
Cooling capacity from 6 to 1,560 kW
Three versions: Standard, Low noise, Extremely low noise.
Free Cooling solution.
Microprocessor control.

WATER COOLED

Water cooled packaged chillers.
Cooling capacity from 6 to 2,630 kW
100% condensing heat-reclaim system
Microprocessor control.



FRIGO Industrial • mod. 1280.S3

... with propietary reciprocating compressors.



SINUS

Reciprocating semihermetic compressors.
Models with 4, 6 and 8 cylinders.
Cooling capacity: 210, 315 and 420 kW.
Built-in lubrication oil pump with double filtering section.
Working with R22, R134a and R407c refrigerants.

**AND NOW THE NEW 10 CYLINDER SINUS
COMPRESSOR WITH 530 kW COOLING CAPACITY.**

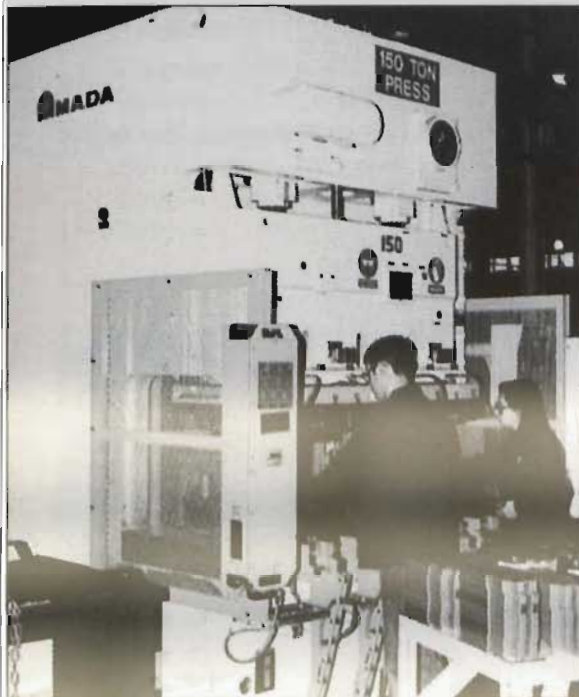
G. T. Phelan Ltd

59 Rock Road, Blackrock, Co Dublin. Tel: 01 - 283 2622; Fax: 01 - 288 3821

air conditioning

Mitsubishi Electric — Perfect Air Conditioning

Mitsubishi Electric is one of Europe's leading environmental control suppliers with an extensive product portfolio of individual split air



The production process underway at the Mitsubishi Electric Europe manufacturing plant in Livingston, Scotland.

conditioning systems suitable for all manner of applications, ranging from small to medium-sized offices; retail outlets; showrooms and reception areas, through to premises of up to 10,000 sq m and beyond which are served by the Mitsubishi Electric City-Multi system.

The majority of systems sold have the capability for cooling and heating, eliminating the need for conventional heating systems and providing energy-efficient, year-round, comfort. With low energy consumption and starting currents, Mitsubishi Electric's split systems are economical to run, both in cooling and heating mode, and can show substantial savings of up to 40% against conventional heating systems.

There is a wide choice of indoor unit configurations. These include:

- the PLH Series for suspended ceilings;

- the PCH & PEHD Series for solid ceilings with the option of a ducted unit for suspended ceilings;

- the PKH Series of wall-mounted units;

- the MFH floor-standing system.

All come with the user-friendly K Series Controller which is a slim, wall-mounted control panel for use with the PLH cassette unit. It enables automatic changeover from cooling to heating mode and maintains the selected preferred temperature as climatic conditions change. Other control functions include low or high fan speeds to control the airflow distribution. Some systems are also available with hand-held mobile controllers.

Latest addition to the split systems range is the Mr Slim PC/PCH Series of ceiling-suspended units. "This Series represents a landmark in air conditioning performance", says Mitsubishi Electric's Mike Sheehan. "Ultra-compact dimensions and extra-quiet operation allow the units to blend perfectly with any interior while the superior technology ensures ultimate comfort and performance yet economical operation. Installation and maintenance time is also greatly reduced."

Then there is City-Multi. This energy-efficient system has been used on many new projects in Ireland, including the new Jervis Street complex in Dublin. In developing its multi-air conditioning system for modern building applications Mitsubishi Electric focussed on the concept of "comfortable yet flexible air conditioning". In addition to exploiting advanced technologies such as inverter control, Mitsubishi Electric incorporated a high degree of flexibility into the piping system and designed the indoor units so that they would be interchangeable, thereby giving greater freedom in mixing units to create diversified systems. Up to 10 indoor units of different capacities/types per refrigerant circuit can be accommodated.

Further increasing the scope of application is the PRH Series of roof-top packaged air conditioners which, unlike other systems, uses a 2-pipe system, thereby dramatically reducing installation and running costs.

The design of the heat exchanger has been optimised and powerful Copeland reciprocating compressors have been used to increase the indoor air supply rate and to deliver a much-improved energy efficiency ratio. The



Typical retail application of a Mitsubishi Electric split air conditioning system

Air Conditioning

Reconair

Heating



Mechanical



Electrical



Sales – Maintenance – Service

Airconditioning and environmental equipment

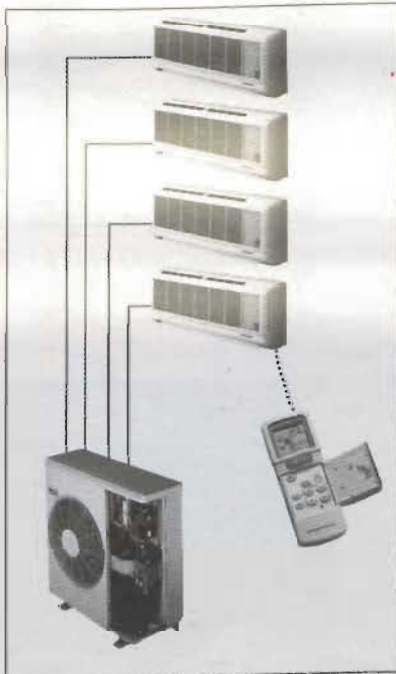
Suppliers of:-



**MITSUBISHI
ELECTRIC**

Environmental Control Systems

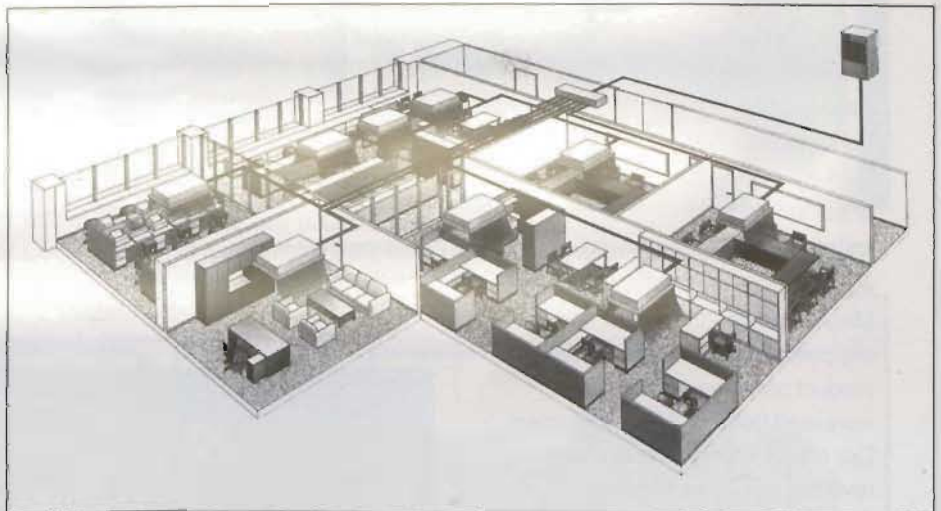
MITSUBISHI ELECTRIC EUROPE



MXZ Inverter Controlled Heat-Pump Multi-Split System

System Features:-

Up to 4 wall-mounted indoor units (MSH-0.9LV, MSH-12LV, or MSH-17LV) may be served by 1 MXZ-32AV outdoor unit



CITY MULTI

**VRV Systems
R2 & Y Series**

Denco

Comms room equipment



I.S. EN ISO 9002

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air conditioning

airflow rate and external static pressure can be tailored to specific needs by using different combinations of belts and pulleys, even after installation, while an extra fan is used as an outdoor fan to reduce noise levels.

Installation is simple thanks to the single-unit configuration with all refrigerant pipework eliminated. Once the power source, drain piping and ducting have been installed, the unit is ready for operation.

The entire product portfolio has been developed as a result of extensive research and testing and comes with the assurance of compliance with all relevant quality and safety standards.

The units are manufactured at Mitsubishi Electric's Livingston plant in Scotland which utilises state-of-the-art production equipment and practices to deliver environmental control systems designed to meet the specific needs of the market.

All product is channelled through Mitsubishi Electric Europe's Irish headquarters in Westgate Business Park in Dublin and put out into the marketplace via an appointed network of authorised dealers.

"Outstanding quality is the key element in all areas of activity", says Mike Sheehan. "In product design we are continually aiming to improve product performance to provide increased benefits to our customers. Our manufacturing process also revolves around total quality management incorporating all the modern techniques of JIT, MRP and ISO 9002 accreditation.

Finally, this quality philosophy is carried through to the market by our own personnel and those of our authorised dealers who are extremely well trained and organised when it comes to marketing, distribution and customer support systems.

Contact: Mike Sheehan/Tom Marren, Mitsubishi Electric Europe.

Tel 01 - 450 5007;

Fax: 01 - 460 2069.

ABB EU2000 - Air Handling For The Next Century

The introduction of a single market in Europe has opened new opportunities and imposed new demands in the field of ventilation engineering. The new EU2000 air handling unit from ABB has been conceived to meet these challenges. It conforms to all current regulations, development and manufacture meeting all quality assurance criteria specified in ISO 9001. A particular strength in this respect is that all internal components are manufactured by companies who are part of the ABB Group. As such, ABB is the only air conditioning manufacturer with this total turnkey production capability.

Developed as an integral part of the EU2000 design programme, the dedicated selection software allows fast, easy configuring of units to meet specific requirements. Presented in the familiar "Windows" format, the programme features clear dimensional drawings of all EU2000 components and will automatically calculate performance data including noise and power consumption, for a given configuration.

With the proven Flakt air handling unit as a basis, the designers' brief for the new EU2000 was to take whatever was good and make it better. The result is a unit which sets new standards for performance, reliability

and ease of servicing.

Simple maintenance is an integral part of the design principle of EU2000. Large inspection doors allow easy access and key components are mounted on rails, allowing withdrawal for inspection and service.

The new design of sections and corner joint pieces produces perfectly smooth internal walls, eliminating recesses or projections in which dirt or moisture could collect. This simplifies cleaning.

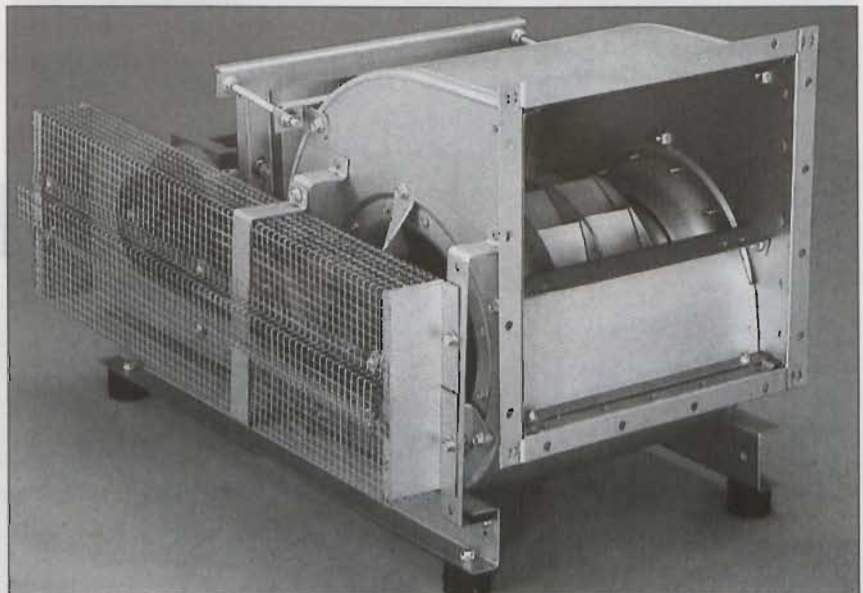
All EU2000 fans can be equipped with airflow measuring probes. Manometer tapings are provided as standard. Pressure gauges or digital displays enable the performance of the standard unit to be measured with an accuracy of $\pm 5\%$.

An extremely effective mixing section minimises temperature stratification between outdoor and recirculated airflows.

Odious substances and harmful gases are removed by activated charcoal filters, featuring special clamping devices to eliminate the risk of leakage of unfiltered air, which can be fitted as an optional extra.

Silencers give excellent sound attenuation with minimal pressure losses. These silencers are particularly effective in the sensitive low-frequency bands. However, sound attenuation performance may be matched to individual needs.

The EU2000 air handling unit offers the benefit of one or several unit



EU2000 - Rotary heat exchanger for air handling units. Details from ABB.



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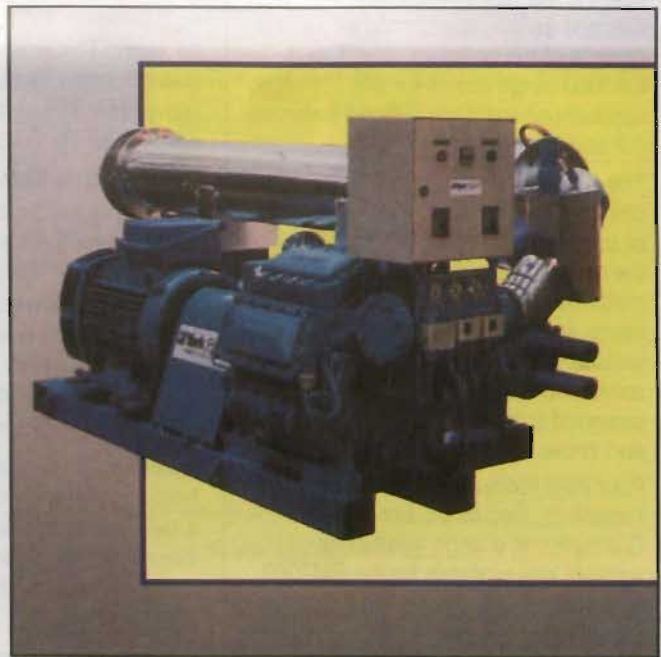
YSM - YCC Air Handling Units



YCAJ - YDAJ Gold Standard Intelligent Air Cooled Chiller



Low temperature Ammonia reciprocating and screw chiller



air conditioning

Carrier Global Chiller – Optimal Performance and Economy

As already reported (BSNews December '96), Core Air Conditioning Ltd is now the sole distributor throughout the Republic of Ireland for Carrier. Operating from its new headquarters in Sandyford Industrial Estate in Dublin, Managing Director Austin McDermott says that the objective is to offer a professional and comprehensive package to the marketplace.

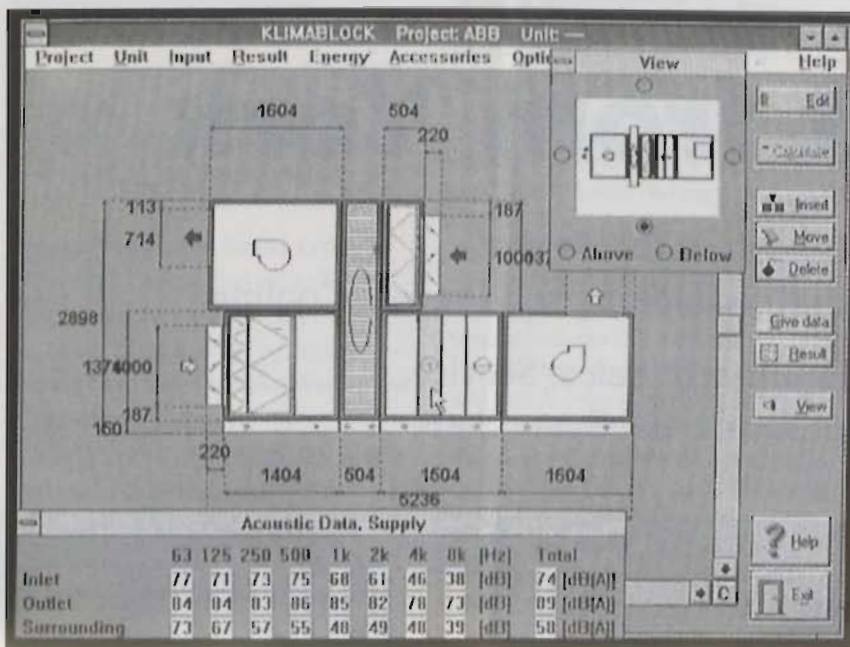
"We now have dedicated management structures and operational procedures in place which will inspire confidence in those specifying and installing Carrier products", says McDermott.

"Equally important is that we look after all service and technical support requests for Carrier equipment already in the field. Clients and end-users with such equipment in place can rest assured that, whatever their requirements, Core Air Conditioning will respond immediately and efficiently to any request for assistance or technical advice. Looking after the existing user base is as important as the pursuit of new sales. In fact, for me the two go hand in hand".

The service department is also up and running with Greg Devitt appointed as Service Manager. Greg's appointment is particularly significant as he joins the company directly from Carrier in the UK with whom he has worked for the last 10 years. He brings with him a thorough understanding of the Carrier ethos and will work closely with Austin in marrying that with the strengths of Core. The objective is to deliver a professional yet flexible and friendly service covering both product supply and after-sales support.

Completing the Core senior management triumvirate is Tracie Curley. Tracie is responsible for all administration, accounts and general support mechanisms within the company and for the smooth implementation and application of all management procedures.

Carrier has always been a market leader and once again it has set new industry standards with Global Chiller™. This is an entirely new concept, developed as a result of the collaboration between Carrier's



EU2000 selection software provides automatic calculation of the optimum size of unit to keep the flow related power demand as low as possible

sections being available as multi-section modules. These can be made up individually to meet customers' requirements, taking into account the conditions on-site and the available transport facilities.

EU2000 air handling units are manufactured in the widest range of sizes currently available for commercial applications. This means that sizes are closely spaced in terms of performance ... essential for keeping the flow-related power demand as low as possible with a unit or units of the optimum size. The EU2000 range caters for all applications requiring airflows between 0.2 and 38m³/s.

The EU2000 air handling unit is designed for installation either indoors or outdoors. For outdoor installation, the unit is externally sealed and mounted on a 150mm deep base frame. It is equipped with a weatherproof roof structure. Intake cowls and weatherproof grilles are designed to prevent the ingress of rain and snow.

Four heat recovery systems – Regoterm; Recuterm; Ecoterm and Duoterm – in a large number of variants are available for the EU2000 air handling unit. These are manufactured in-house. This ensures that appropriate consideration has been given to both efficiency and total energy consumption. Brief details of

each are as follows:—

Regoterm — The Regoterm is a rotary heat exchanger. In addition to using the temperature difference between the indoor and outdoor air, this heat exchanger can also put to use the difference in air humidity. It operates on the same principle in the summer, but in reverse. In both cases, its efficiency is up to 80%;

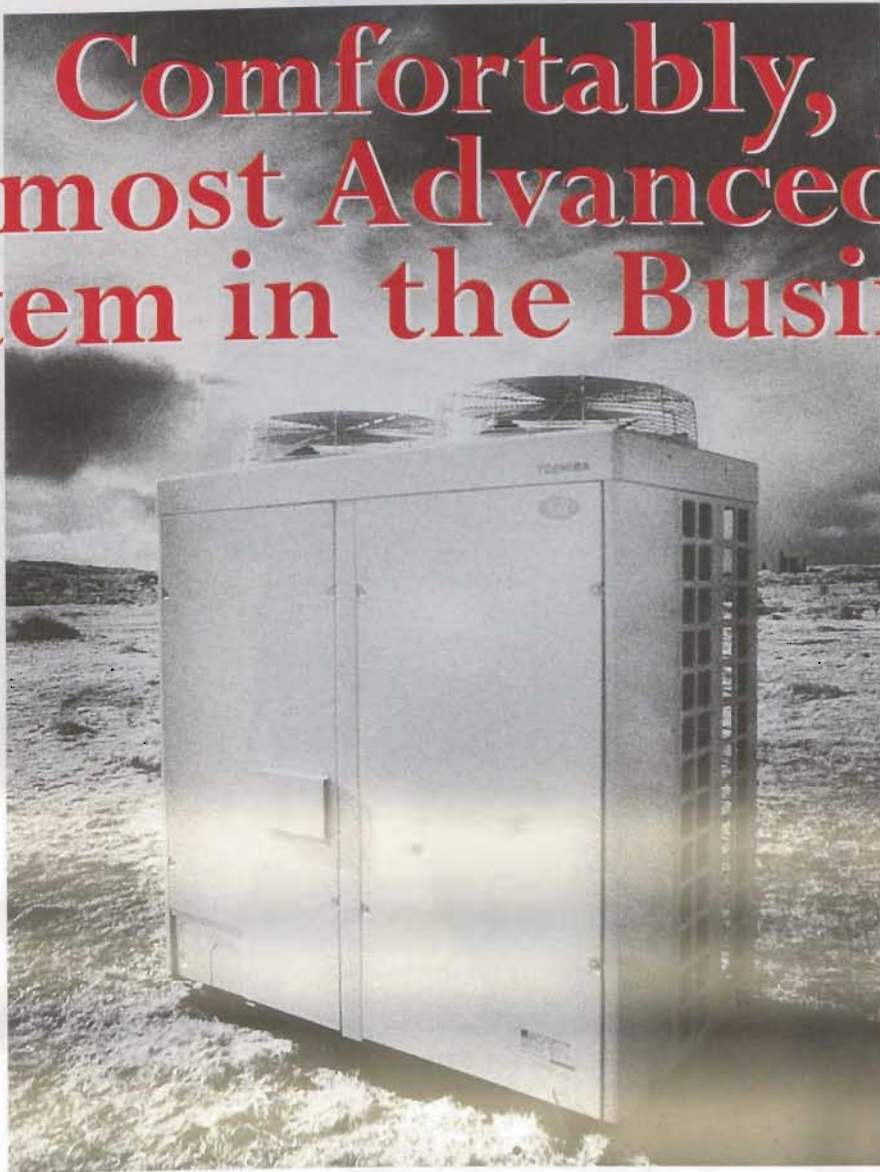
Recuterm – The Recuterm plate heat exchanger provides a virtually perfect seal between the exhaust and supply air sides. This means that any carry-over of smells can largely be eliminated. The system achieves efficiencies up to 65%;

Ecoterm– The Ecoterm system consists of two heat exchangers in a liquid-coupled system. The exhaust and supply air ducts can be run along entirely separate paths in the building since a liquid is used for transferring heat from one heat exchanger to the other. Up to 60% efficiency can be achieved with this system;

Duoterm – In the Duoterm system, two heat exchanger sections are linked by a two-phase medium. The system is largely self-regulating and has no moving parts. Its efficiency is around 50%.

Contact: Mark Grimes, ABB.
Tel: 01 - 405 7300;
Fax: 01 - 405 7312.

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Toshiba produces systems suitable for buildings of all shapes and sizes. These range from mobile units for small shops and restaurants to the amazing Super Multi system (pictured above); the most advanced form of air conditioning available today – ideal for the largest office block.

For further information, call G T Phelan on 01 - 283 2622 or fill out the coupon below and sent it to: G T Phelan Ltd, 59 Rock Road, Blackrock, Co Dublin.

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Please send me details of your product range

Please contact me to arrange an initial meeting

BSN/1/97

TOSHIBA

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Air Conditioning

air conditioning

European, Japanese and American research and engineering resources. Global Chiller™ incorporates "revolutionary" new chiller technology, and is claimed to be the first chiller developed with the preservation of the environment in mind.

Microprocessor Controls

The global Chiller uses the latest generation of Carrier microprocessor controllers, offering efficient and reliable chiller operation.

The system constantly monitors all chiller parameters and precisely manages the operation of compressors, and electronic expansion valves for improved energy efficiency. Fuzzy logic algorithms provide a prognostic capability which improves system performance and reliability.

Global Chiller™ is simple to use and the operator interface clearly and precisely displays messages and chiller operating parameters such as temperatures, pressures and operating times. It also includes history and test menus to facilitate maintenance and ensure rapid fault diagnosis.

Revolutionary screw compressor

Dramatically-increased performance is achieved with power3, a "revolutionary" screw compressor that provides three times the cooling capacity of an equivalent reciprocating compressor. Energy efficiency is assured by piston loaders which allow capacity control yet are wear resistant and have no internal losses. The correct operating temperature is



Carrier Global Chiller 30 HX from Core Air Conditioning.

guaranteed as the motor is cooled by an independent refrigerant supply.

The quiet operation of the Global Chiller™ is the result of several research initiatives, leading to reduced noise levels and improved sound quality. This improvement is achieved by a smooth sound emission spectrum in all frequency bands, the result of extensive acoustic and vibration analyses.

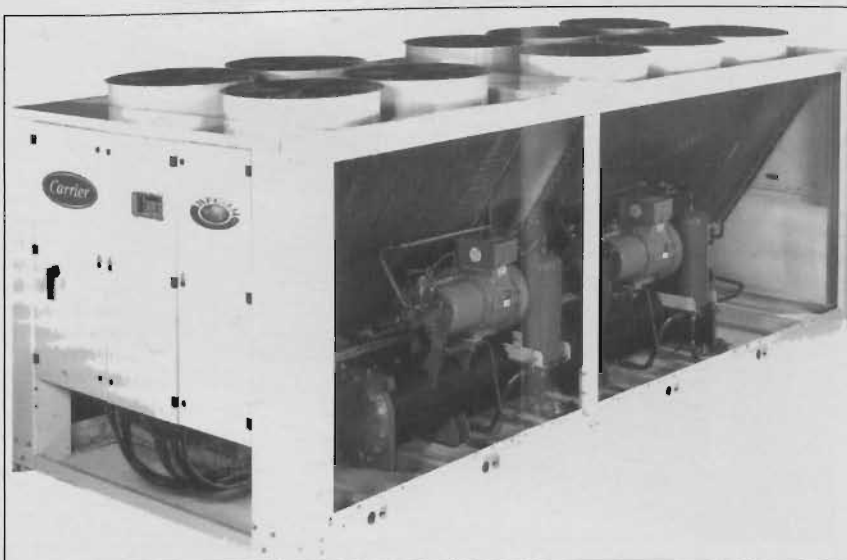
Rotary compression eliminates vibrations while primary discharge gas mufflers – integrated into the compressor body – and external secondary silencers using a new highly-absorbent material, also reduce noise levels.

On the 30 GX model the Carrier Flying Bird fan uses multi-blade technology and a rotating shroud. It is extremely quiet and does not create irritating low-frequency noise. With the 30 HX model the new passive-reactive external silencer attenuates noise in all audible frequencies, dissipating the sound energy into heat, without creating additional pressure losses.

The Carrier Global Chiller™ offers state-of-the-art technology which means a minimum footprint, yet maximum performance. With a width between 875mm and 950mm the Global Chiller™ meets all the constraints of new and refurbished buildings, with 10% less floor space required compared with other units. This also means reduced plant room size. This unique advantage is the result of the exclusive condenser design with its fully-integrated oil separator.

□ As we went to press another string was added to Core's bow with its appointment as sole distributor for the 32 counties of Ireland for the complete range of Liebert precision air conditioning products. Core is now responsible for Liebert sales, spare parts and service support. *BSNews* will have a full report in our next issue.

Contact: Austin McDermott,
Core Air Conditioning.
Tel: 294 3110;
Fax: 01 - 2943115.



Carrier Global Chiller 30 GX from Core Air Conditioning

air conditioning

D C Compute Air: "21 Years A Growing"

Capitalising on the expanding air conditioning sector, D C Compute Air Ltd has marked its 21st year in business by the acquisition of Greene Air Systems Ltd in Cork (see page 39).

Managing Director David Roome was bubbling with excitement when *BSNews* spoke with him at his office in Baldoye recently. "I find it hard to believe that it has been 21 years

Airwell, who appointed D C Compute Air as their sole distributor way back in 1987, covers a complete range of split systems, fan coils, chillers and ducted packages from 3.2 kw to 123 kw. Common across the entire range is design excellence and quality, coupled with energy-efficient performance.

Typical example is the Airwell range of air-cooled water chillers which are available in "cooling only" or "heat pump" versions.

These are intended to produce chilled or hot water for packaged air conditioners and terminal air treatment units.

For close control computer room air conditioning, Uniflair guarantees long and trouble-free operation by not compromising on reliability and value. It offers the same standard to its extensive range of water chillers and access flooring.

The other key element in the company's success is its dedication to customer service. As David explained: "The customer needs to be able to rely on us at every stage, from design and product selection through to installation and commissioning. D C Compute Air's 24-hour service is manned by a qualified and experienced repair team and emergency service is available 365 days a year to all contract customers".

These factors have played a major role in the success of recent projects such as various works carried out in the Blanchardstown and Jervis Shopping Centres.

David Roome had the last word when commenting on the new office in Cork: "Don't you always get the key of the door when you are 21".

Contact:
David Roome/Howard Neville,
D C Compute Air Ltd/Greene Air
Systems.
Tel: 01 - 839 2366;
Fax: 01 - 839 2343.



Argo split system room air conditioners from D C Compute Air

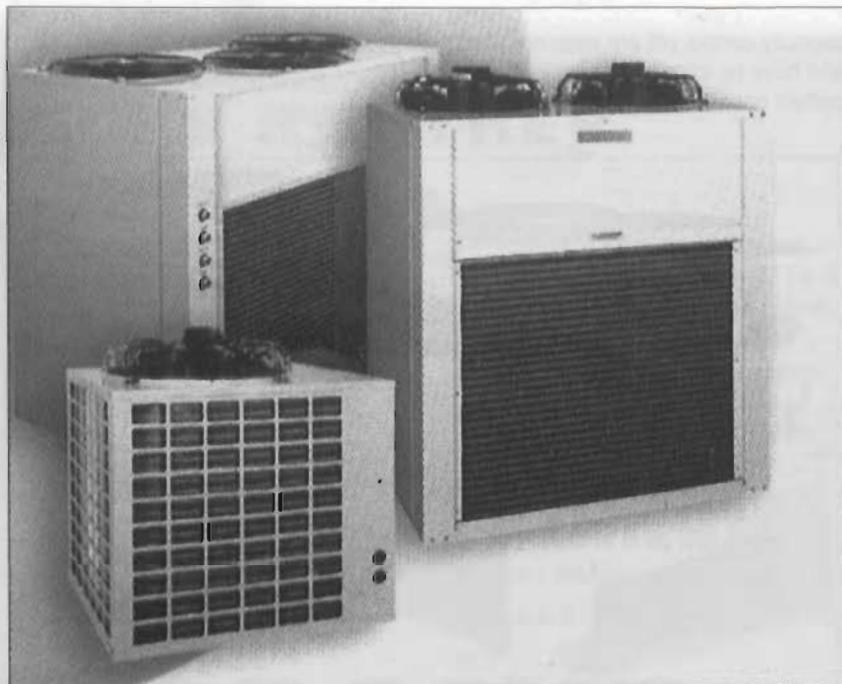
already, but I can look back with great satisfaction on the progress we have made during that time. We particularly treasure the strong relationship we have developed with many of our long-term customers".

David explained the logical step in establishing the facility in Cork as their operations extended nationwide with work being done from Donegal to Wexford and Dundalk to Kerry.

Greene Air Systems Ltd, based on Centre Park Road, Cork, who were a D C Compute Air dealer, was purchased by D C Compute Air within the last six months. Already Greene Air Ltd customer base is expanding with recent projects carried out for large multi-nationals in the area.

One of D C Compute Air's recipes for success is the comprehensive range of equipment for which it holds exclusive distribution rights. This includes the Argo comfort range which covers portable and split systems from 1.7 kw to 13.9 kw. Argo has recently launched an industrial range which covers water-cooled, multisplit, ducted and water chilled units, yet still retains Argo's unsurpassable aesthetic lines.

This range offers a solution for all constraints met during installation and use in residential, office and industrial premises.



Airwell air-cooled water chillers from D C Compute Air

Cassline comes of age!

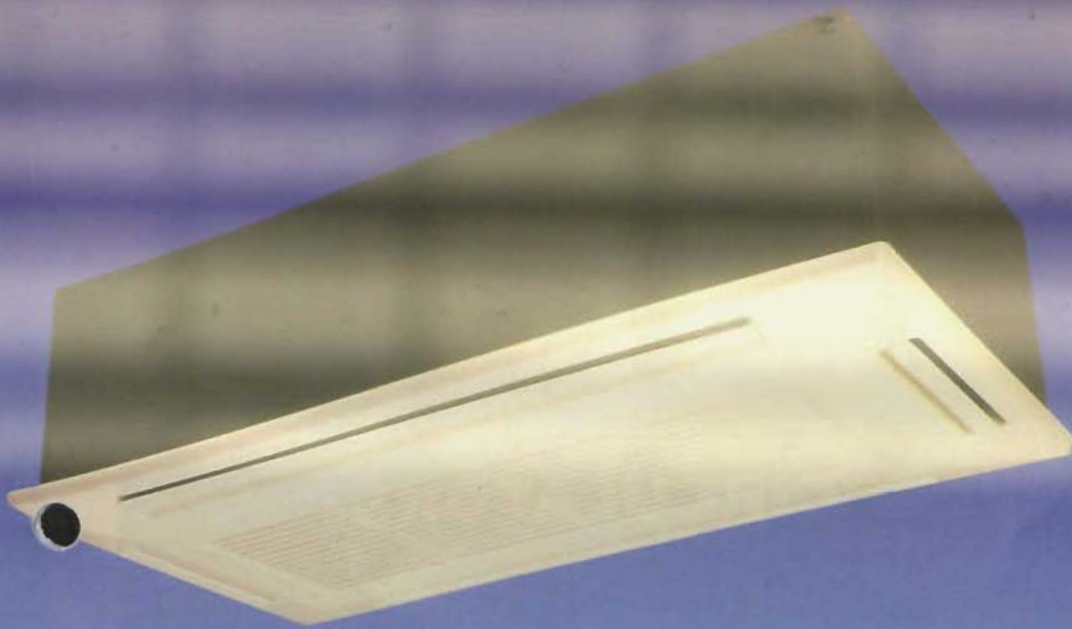
et al.: BS News

with

Kingfisher ... Air Conditioning Systems

The Only Expandable Choice

The new Kingfisher heat pump system: Integrating chilled water Cassline units into a unique new system



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air conditioning

Toshiba - 16 New Models

Toshiba Air Conditioning introduced 16 new comfort air conditioning products and systems at the last HVAC industry show, in the most prolific new product launch at any single show. Toshiba now has one of the most comprehensive ranges of comfort and applied air conditioning products in Ireland. These are available in Ireland from G T Phelan.

Specifiers, installers and end user customers now have the widest choice from Toshiba. The Toshiba range of comfort air conditioning products and systems will suit a wide variety of business premises ranging from a small boutique to a multi-floor tenant of a high rise tower block.

Toshiba is renowned for its unparalleled product quality and reliability, making its models the best choice for a wide variety of comfort air conditioning applications.

New comfort a/c systems include two models of a completely new 2-pipe heat pump Super Multi, two models of a new Jumbo G-Series, five new ceiling cassettes, cool-only and heat pump ceiling units, four new stylish RAS heat pump and cool-only indoor wall systems, and a new standard outdoor RAV unit.

The new heat pump 2-pipe Super Multi is the ideal choice for users who need heating and cooling from a single outdoor unit supplying up to eight indoor units. The new Jumbo G-Series system marks a step up in power from the current G-Series unit, and can now supply heating or cooling to up to three indoor units – or two heavier duty indoor units – of 13kW each.

Toshiba has also produced the Irish HVAC industry's first comprehensive product catalogue on an interactive CD-ROM disk for PCs. It also serves as a sales aid for a/c installers and specifiers with self-running presentation and guided "Tour" of the disk's contents. The main catalogue features products by type and application, while the user can search by type or product number. The CD-ROM also includes exploding product drawings and spare part details.

Toshiba's quality control standards are among the highest in the world. The chances of anything going wrong with Toshiba air conditioning are remote in the extreme – over the past six years 99.5% of Toshiba units required no repairs whatsoever.

The Toshiba Super Multi system from G T Phelan.

That said, it's reassuring to know that, in the unlikely event of a problem, every unit carries a special 3-year warranty covering parts and a labour allowance.

Contact: Gerry Phelan, G T Phelan. Tel: 01 - 283 2622; Fax: 01 - 288 3821.

PUMPS & CIRCULATORS

The impact of new technological advancements is being brought to bear with great effect on all sectors of the building services industry. However, the benefits of such innovative developments are perhaps most noticeable in pumps and circulators, where increased performance and improved energy efficiencies are delivering large-scale savings.

Next month the *BSNews* product focus is on pumps and circulators.

To participate in this feature – and to inform architects, consulting engineers, contractors and the trade at large of the extent, scope and application of your range – contact:

Joe Warren, BSNews.

Tel: 01 - 288 5001; Fax: 01 - 288 6966.

Split Air-Conditioning Systems



Invest in a better environment.

Can you afford not to?

Published by ARROW@TU Dublin, 1997

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Ashbourne Industrial Estate
Ashbourne, Co Meath
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Fax: 01 - 835 2535

Hall Distribution

Kingfisher From Finheat

The Kingfisher system is a basic 2-pipe, water-based, heating and cooling fan coil arrangement designed to serve "zones", with a packaged, air to water reverse cycle heat pump unit, sited outdoors, supplying the necessary heat input or rejection. It has integral electronic controls that can be linked to communicate between indoor and outdoor modules(s).

It embodies many added features suggested by customers and represents the ultimate solution for both small and large installations.

Kingfisher is the original patented system which intelligently and interactively links every component in the system. A networked water system provides high sensible capacity and major energy savings.

It is a sophisticated yet simple departure from convention which addresses many shortcomings of DX systems, and confers unrivalled simplicity and flexibility on the application.

Benefits include:- No CFC's in the building; it is expandable; has high sensible capacity; installation is simple; it is cost-effective; and incorporates intelligent controls.

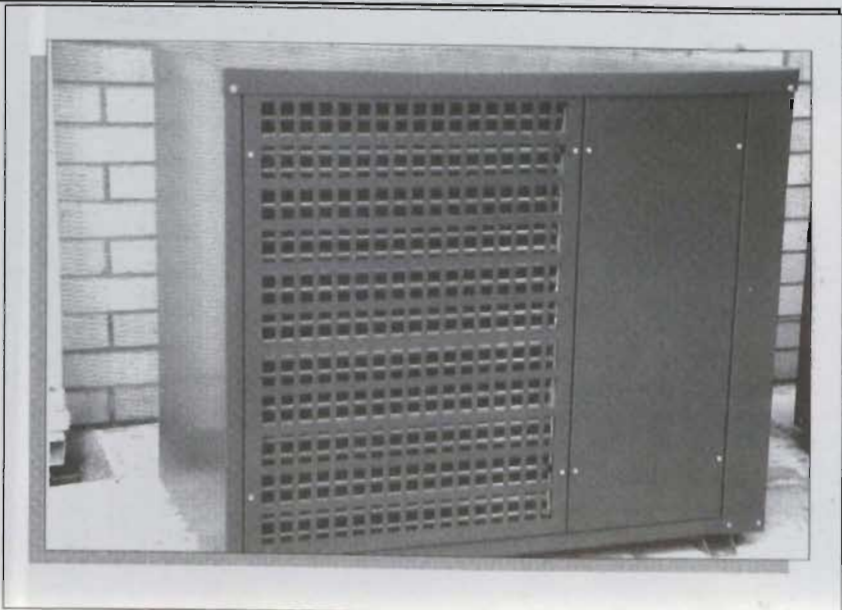
Today, commercial cooling loads are mostly 90-95% sensible. DX systems operate at average 0.60 SHR, therefore at least 30-40% of the energy input is wasted in useless latent cooling. Kingfisher offers much higher SHR operation (average 0.85) and thus represents major energy savings and allows a smaller system to be selected.

The Kingfisher system uses only water in occupied space, and typically uses 30% of the total CFC content of an equivalent DX system. This is all sealed in a small hermetic circuit located outside.

It offers better sensible heat performance than equivalent DX and thus saves energy. Using water, there is limitless opportunity to modify and expand without any complication. It can grow with the needs of the application requirement. There are none of the height and pipe run limitations imposed by DX systems.

As installation requires only plumbing skills, there is no need to use expensive refrigeration personnel on site. A single flow and return pipe run is the only requirement for each circuit with multiple cassettes or fan coils.

Application – Simply matching load to capacity – and applying normal diversity and pipe run vs diameter rules – is all that is required.



ABOVE: The Kingfisher system uses only water in occupied space, and typically uses 30% of the total CFC content of an equivalent DX system. This is all sealed in a small hermetic circuit located outside.

General features are:-

Outdoor capacities – 7, 9, 12, 24 Kw;

Cassette capacities – 3-7 Kw;

High-wall fan coils – 2-5 Kw;

Auto-head pressure control.

Additional Features

- Slave cassettes are standard option;
- High wall fan coils are available as standard;
- Thermal buffer in system ensures stable conditions are maintained;
- Electric supplementary heating may be specified in cassettes;
- Cassettes are fully accessed from hinged front grille for all maintenance;
- Outdoor units employ ultra energy defrost system;
- Different pump options are available on request;
- Scroll compressors;
- Integral pumps;
- Stainless steel exchangers;
- Microprocessor controls;
- Full auto defrost;
- Head pressure control;
- Zone programming;
- Diagnostics;
- Flow loss detection.

Contact: Jim King, Finheat.

Tel: 01 - 623 4222; Fax: 01 - 623 4226.

TRADE NEWS

Safewarm System Sets Environmental Standard

Roadstone, a company within the CRH Group, has developed a low energy home system, the SafeWarm Home, which the company claims will set the environmental standard for housing in Ireland in the future. Up to 85% of the heating and hot water energy costs and allied CO2 emissions from conventional housing are said to be eliminated by the use of the SafeWarm Home system.

Manor Park Home Builders – in conjunction with Roadstone and Energy Resources International – have already built a number of SafeWarm Homes at Elmfield in Dublin. This project was grant aided by an EU Thermie programme.

Under a further Urban Development Thermie Programme up to 500 new low energy homes will be built in Ireland. These homes will be in Dublin, Cork, Limerick, Galway, Waterford, Athlone, Sligo, Clonmel, Drogheda and Newbridge.

While up to 100 homes throughout Ireland use solar energy for heating and hot water, this is the first time that solar energy will be available in the typical suburban semi-detached home.

The SafeWarm Home system involves the use of a special insulated concrete block, the SafeWarm block, which is used for the construction of the external walls of the house. This block reduces the heat loss through the wall by half when compared to today's standard house. The block contains 100mm of extra high density Aeroboard.

The primary source of energy for this home heating system is Solar Energy which is collected by the use of air solar collecting panels which are built in as part of the south facing roof. Typically a four bedroom, semi-detached home would have four Kollektaire solar panels in the roof. The Kollektaire solar panels have been developed in Ireland by Energy Resources International and are designed to absorb solar energy in the Irish climate even in cloudy conditions.

Forbairt Environmental Guide



Chatting at the launch of a Forbairt Environmental Guide for industrialists were Mr Richard Bruton, TD, Minister for Employment & Enterprise, and Dr Emmet McMahon, Manager of the Forbairt Environment Programme. The guide summarises the steps required of companies to comply with all forms of industrial environmental legislation in Ireland and also explains the new voluntary schemes for modern environmental management systems in companies and eco-labelling of consumer products. Contact: Press & Publicity Office, Department of Enterprise & Employment. Tel: 01 - 661 4444; Fax: 01 - 662 0803.

Advanced Practical AutoCAD

Venue – The IEI Education Centre, 22 Clyde Road, Dublin 4

Dates – Six Wednesday evenings, 12 February to 19 March, 1997

Time – 6.30 to 9.00pm

The Course

Participants will gain practical experience and understanding which can be used to substantially improve their productivity from AutoCAD and enable them to carry out all the more common tasks which would otherwise require so-called "expert" attention.

In addition to installing and configuring AutoCAD for a range of hardware, participants will learn to customise it to suit their own needs as it should be used. Short realistic, complex exercises will be undertaken to introduce students to advanced AutoCAD techniques and practical problems faced in "real world" Cad-based design situations. Participants are encouraged to provide disk and paper copies of their drawings from their own work for this purpose.

The course concludes with a discussion and demonstration of various CAD hardware and software (including third party application packages) and specific client requirements. A recommended reading list and selection of texts will be available for consultation. The limitation on numbers (maximum 8).

Who should attend? The course is suitable for both draftspeople and managers. This course assumes participants have a sound basic knowledge of AutoCAD, say several months part-time use.

Contact: Patricia Higgins, IEI.

Tel: 01 - 668 4341;

Fax: 01 - 668 5508.

TRADE NEWS



The new Irish Standard IS 813 for domestic gas installation (see BSNews Oct/Nov 1996) was launched by the Minister for Commerce, Science and Technology, Mr Pat Rabbitte, TD, at a reception in The Shelbourne Hotel, Dublin recently.

Pictured at the launch were (from left):- Peter Dargan, Chairman, Consumers Association of Ireland; Tom Donlon, Chairman, National Standards Association of Ireland; Pat Rabbitte, TD; Phil Cronin, Chief Executive, Bord Gáis Éireann; Pat Fleming, Technical Secretary, GTSC, TC2; and Eddie Hobbs, Consumers Association of Ireland.

Hot Chorus Line from Potterton Myson

Always strong in the domestic market, Potterton Myson Ireland took the view some years ago that it also had much to offer by way of experience and product design expertise in the commercial sector.

Consequently, it developed a very strong package in pumps, valves, controls, radiators, boilers and gas fires to service this area.

However, as the company made more and more inroads into this sector, it identified the need for a new radiator design focussed on aesthetics and performance which would allow specifiers and contractors more flexibility

and choice. After significant investment in research and design — coupled with market analysis and feedback — the recently-introduced Chorus range has emerged as the solution to this need.

Combining technology and design, aesthetics and performance excellence, the new Chorus range of radiators from Potterton Myson Ireland gives the company an entrée into the higher-spec market segment. The entire range conforms with all relevant standards, meets installing requirements in most configurations, and comes with an 8-year warranty.

The Chorus range consists of four product types — the Vertical, the Horizontal, the Column and the Plinth. Apart from the stock range, Chorus radiators can be custom made, offering a wide choice of dimensions and colours. There are 39 shades, bright or pastel, in total, and an equally-varied range of connections.

Brief details of each product type are as follows:-

Column Range — With a choice of three different spacings between tubes, the Column range of radiators offers endless possibilities in height or width. These units may be installed to divide a room or be used as a protective element in premises frequented by the public.

The Column radiators take full advantage of the triangular header of the Chorus range. Thus, its specially-cut tubes can be integrated easily into the headers. The fluid circulation system, unique to the Column unit, ensures optimum performance and perfect venting and draining of the

Cork Supplier and Trade Assistant Awards

The Cork Plumbing and Heating Contractors Section of the CIF announced the recipients of its annual Supplier and Trade Assistant of the Year awards recently.

Irish International Trading Corporation Ltd of Rocksavage, Cork, is the 1996 Supplier of the Year, while the Trade Assistant of the Year award went to John O'Callaghan from the same company.

A capacity crowd attended the awards ceremony and Annual Dinner Dance of the Cork Plumbing and Heating Section/Alliance of Plumbing and Heating Contractors, including the Lord Mayor of Cork, Ald Jim Corr; Ministers of State Bernard Allen and Hugh Coveney; MEP Brian Crowley; and Chairman of the Cork Branch, Pat Casey.

Paris Interclima Show

The 15th Interclima®, the International Heating, Refrigeration and Air Conditioning Exhibition, will take place at the Paris-Nord Exhibition Centre from Monday 3 to Saturday 8 November 1997.

The complementary sectors of Batimat® — sanitary fittings, taps and fittings, tiling, electricity — will once again be grouped in the "Espace Confort", adjacent to Interclima® and lending coherence to the exhibition at the Paris-Nord site.

Interclima® brings together five main sectors:-

- Heating — boilers, burner, radiators, convectors, heat recovery systems, electric heating systems, new energy sources, pumps, fittings, tools, home automation systems, central control systems;
- The production of domestic hot water;
- Refrigeration — machinery and equipment for industrial refrigeration, compressors and exchangers, liquid condensing and cooling units;
- Air Conditioning — air conditioning and treatment equipment, exchangers, fans, filters, ducts, air diffusers.
- Regulation, measurement and control: energy management equipment and systems.

Radiator Turned Towel Rail

De Longhi has introduced a new clip-on radiator accessory designed to change their Ultimate radiators with side panels and a top grille, into heated towel rails.

Made exclusively to fit De Longhi Ultimate convector radiators fitted with side panels, the new towel rail clips firmly into place on the top grille, blending in as part of the overall design.

Produced in two lengths — 430mm to fit radiators from 480mm to 600mm long, and 650mm long to fit radiators from 720mm upwards — the new De Longhi Ultimate towel rails can be easily unclipped and moved to another Ultimate radiator in the home.

Contact: Alan Seery, Heatequip. Tel: 01 - 451 9711; Fax: 01 - 451 9064.

TRADE NEWS



An installation showing the Vertical type radiators from Potterton Myson's new Chorus range

radiator through a patented system;

Horizontal Range – These radiators are fitted horizontally and combine design and power to meet all tastes and requirements.

Chorus radiators are available as single or double units, with or without convection fins. This allows the Chorus to provide the necessary heat while requiring a minimum amount of space. Because of the triangular shape of the radiator headers, the double units remain streamlined;

Vertical Range – Available in various heights (50cm to 4m), the single or double radiators of the Vertical range adapt to the available space while remaining unobtrusive. Their longineal shape allows them to elegantly blend in with all interiors.

The Vertical units can be regulated through a thermostatic valve located in the lower part while water supply and return takes place through the upper part. Chorus units may be fitted optionally with a specially-designed towel holder;

Plinth Range – The Chorus Plinth units remain as small as required while providing maximum heat. They adapt to all premises ... offices, schools,

restaurants and homes.

They do not compromise on performance and are fitted with convection fins on each individual tube, from the first to the last, which optimises the power space requirement ratio. A locking device makes it possible, if need be, to install them in complete safety in public buildings.

Contact: Sean Hanratty,
Potterton Myson (Ireland).
Tel: 01 - 459 0870;
Fax: 01 - 459 0880.

Companies Target NI

Ten companies from the Republic of Ireland participated in Construct '96 recently, which took place in Kings Hall, Belfast.

In Ireland, North and South, construction is worth approximately £6 billion a year and employs in excess of 110,000 people North and South.

Among the companies participating on the group stand were ABS Pumps; Merriott Radiators; Sanbra Fyffe; and Ventilux.

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Contact: Kevin Wallace
Tel: 01 - 496 5022
Fax: 01 - 496 5992

TRADE NEWS

'Come On Ye Reds! ... Come On Ye Spurs!'

Yes, that was the dual chant of the party assembled by Chris Hutton and his colleagues of Season Control as they made their way to White Hart Lane in North London recently for the league clash between Man Utd and Spurs.

For those of you who don't follow English Premier League football the game had all the makings of a classic encounter, especially given that they had met only a week earlier in the Cup. On that occasion Man Utd had won, despite an excellent performance by a depleted Spurs side. With home advantage this time 'round revenge was definitely on the cards.

As predicted, the game lived up to all expectations, with Spurs doing more than enough to justify a share of the points. But, one exceptional piece of brilliance from David Beckham saw United take the spoils, much to the disappointment of Chris Hutton and the other (very few) Spurs supporters in the party.

Overall it proved an exceptional day. Right from when the party assembled at Dublin Airport we received the "red carpet" treatment. The agenda was planned and executed down to a T, with our hosts Chris,

Barry Hennessey, Dave Corri and Kieran Moss pampering with all manner of goodies.

We ate like kings, much of the day revolving around an itinerary designed to ensure that we were all well nourished and capable of sustaining the pace!

At the Spurs ground we shared an exclusive dining area with immediate access to a reserved block of VIP seats. Being just a small band grouped together in this self-contained private area meant that there was a mix of Man Utd and Spurs fans together. The ensuing banter and chanting made for great crack.

The charged atmosphere obviously got to Barry Hennessey though as, throughout the game, he could be heard cheering Spurs on one minute and Man Utd the next. Being Irish and knowing Barry we took this in our stride but it did draw quizzical looks from some of the English people present.

Meeting some of the players and getting autographs (just for the kids back home you understand) proved the icing on the cake. Not to be outdone, we too were sought out by autographs hunters. Well, one of us in that party that is. Eamon Campbell of The Dubliners was with us and, as we returned

from the players lounge with Eamon glowing because he had met David Beckham and Alex Ferguson, a lady stopped him and asked for his autograph!

The purpose of the trip — apart from having a good time that is — was the launch of the new range of Polar air conditioning equipment from Season Control (see page).

All in all it was an enjoyable, fun-filled trip which presented grown men with an excuse to behave like star-struck youngsters in the presence of their heroes.

May I take this opportunity to thank Chris, Barry, Dave and Kieran on behalf of all who participated.

MERRIOTT Competition Winner

The winner of the Merriott competition run in the October/November 1996 issue of *BSNews* was Simon Kileen, RN Murphy & Associates.

Water Treatment

Kieran Coleman has formed a new water treatment design and consultancy company called Aqua Chem Ltd to service the Irish market.

AquaChem Ltd offers an expanded personalised service for the water treatment industry covering such areas as:- Design of the most efficient systems currently available; Supply of a full range of environmentally-acceptable water treatment products; Supply of softeners plus PLC-controlled dosing and controlled systems; Legionella Risk Assessments to comply with Irish Safety, Health and Welfare at Work (Biological Agents) Regulations 1994; Chlorination and sterilisation services; Advice on minimising energy and water usage.

As we went to press Kieran told *BSNews*: "AquaChem will improve the services currently available on the Irish market by ensuring that we focus on a smaller number of projects so that we can provide a more rapid response to customers needs".

Contact: Kieran Coleman, AquaChem.
Tel: 01 - 825 2775; Fax: 01 - 825 2783



Standing — Tom O'Flynn, John O'Donovan & Associates; Pat Lehane, *BSNews*; Alan Lawless, Cleary Engineering; Barry Hennessey, Season Control; Eamon Campbell (The Dubliners, among other musical activities); Rory Allen, Spurs; Liam Maher, Trimair; Chris Hutton, Season Control; Tony Mullins, Leo Lynch & Co; Jim Weldon, Reefertech; and Paul Flynn, Dornan Engineering. Seated — Nigel Davies and his son, SIL Europe; Dave Corri, Season Control; Gary Mabbutt, Spurs; and Kieran

TRADE NEWS

Reducing Electrical Energy Costs

The Irish Energy Centre in cooperation with the ESB organised a workshop recently on Variable Speed Drives (VSD) for the industrial sector. The event was held in Forbairt, Glasnevin, Dublin 9.

Pat Duke of the Irish Energy Centre explained that motor-driven equipment accounts for over 80% of industrial electricity consumption. "The Irish Energy Centre has identified VSD as a priority technology in its drive to reduce the national energy bill. Studies have shown that the application of VSD technology can effect savings of at least 10%", he said.

"The purpose of this workshop is to illustrate the benefits of Variable Speed Drives in reducing electrical energy costs", said Duke. A small exhibition by the main VSD suppliers in Ireland was held in conjunction with the Workshop. Exhibitors included Siemens, Asea Brown Boveri, Mitsubishi Electric and Schneider Ltd.

Contact: Michael Keane, Irish Energy Centre.
Tel: 01 - 808 2087.

Liebert Appoints Core

As we went to press Liebert appointed Core Air Conditioning Ltd as sole distributor for its complete range of precision air conditioning products. The agreement covers the 32 counties with Core now responsible for all sales, spare parts and service support in relation to Liebert. More details in the next issue of BSNews. Contact: Austin McDermott, Core Air Conditioning.
Tel: 01 - 294 3110.



Eugene Connolly, Irish Energy Centre with Eddie Kelly, ABB Group.

IDHE Dinner Dance

The IDHE 1997 Annual Dinner Dance will take place on 7 February 1997 at the Doyle Tara Hotel, Dublin. Tickets cost £30 which includes a bar extension until 1.30am.

Tickets may be purchased by contacting any committee member or Maureen Collopy, Correspondance Secretary, at Tel: 01 - 836 1083; Ciara O'Hagan at Tel: 01 - 874 1151. Donations of spot prizes will be greatly appreciated.

ISH - High Growth Rates Predicted

The sanitation sector will be going all out at the ISH 1997. The demand for exhibition space has increased so much compared to the last event that the organisers have decided to erect a lightweight hall to provide room for additional exhibitors. Here, over 100 new companies will make their presentations in addition to the suppliers who used to be housed in Hall 7.

The focal points of the sanitation technology segment in the individual exhibition halls are as follows:-

- Hall 1.1 - Swimming pool, sauna and water technology;
- Hall 1.2 - Sanitary ceramics, bathroom furniture, bathroom equipment and fittings;
- Hall 2.0 - Sanitary ceramics, fittings, bathroom furniture, bath tubs;
- Hall 3.0 - Bath and shower tubs, shower cabins and facilities;
- Hall 3.1 - Bath and shower tubs, shower cabins and facilities;
- Hall 3A - Sanitary ceramics, bathroom furniture, bathroom equipment and fittings;
- Hall 4.0 - "Against the Wall": installations, prefabricated sanitary cells, fittings, sanitary ceramics, bathroom equipment
- Hall 4.1 - Fittings, bathroom equipment;
- Hall 4.2 - Sanitary ceramics, bathroom furniture, bathroom equipment and fittings.

Integrated Engineering Consultants

Integrated Engineering Consultants is a new service for public and private sector clients in Northern Ireland and the Border counties. It brings together the firms of:-

- C J Monaghan & Co, Belfast & Derry, (mechanical and electrical engineers);
- Concannon Healy Heffernan, Sligo, (civil and structural engineers);
- E G Pettit & Co, Dublin & Cork, (multi-disciplinary consultants, quantity surveyors and project managers).

The idea behind the concept is to provide an integrated engineering solution to meet all requirements, hence the name, Integrated Engineering Consultants (IEC).

Raymond Sexton, IEC Project Manager, said: "By launching this project in Derry we are also adding to the already many reasons for inward investment into Northern Ireland, especially in the Northwest. The launch was attended by directors/principals of all member firms along with representation from local authorities, business leaders, government and European officials. The presence of the Industrial Development Board added significantly to the event.

"Our project, which is part funded by the Business Links Programme of the European Fund for Peace and Reconciliation, is grateful for all the help and assistance received from Co-operation North who managed the Business Links Programme in conjunction with the Joint Business Council".

Contact: Raymond Sexton, IEC Project Manager.
Tel: 01 - 668 0111.

PLUMBLINES



Can I partner you for the **next dance please?** ... "I stepped out and he stepped in again, he stepped out and I stepped in again" and so on. The reason I mention this at all (and my apologies to Diarmuid O'Leary of the Bards for the slight alteration in the lyrics) is the movement of personnel within the air conditioning sector.

Within the space of less than 12 months it's been a case of **musical chairs**, with a major flurry of re-positioning taking place over the last few weeks of December. Apart from individuals moving from company to company, we have also seen the emergence of at least a half dozen new companies.

At the same time major brand distribution agreements have changed hands.

From the outside it has been an exciting scenario to behold but for those directly involved I know it to have been **quite traumatic**. Tempers have flared and relationships have been strained.

However, all appears settled now so, good luck to those concerned in the various new ventures they have undertaken.

■■■■

And just what are the **prospects for 1997?** On the face of it, the building services industry can look forward to yet another bonanza. In the three years 1993 to 1996 construction

output in Ireland increased by 40%, with a 12% volume increase in the period 1995 to 1996. The upward curve will continue this year, albeit at a reduced rate. Predictions are for a **5% growth rate** over last year. This is still significant and will mean plenty of profit opportunities for all industry sectors.

The problem of course is **realising that profit potential**. The business is undoubtedly there but so too is the suicidal pricing syndrome.

Some have tried to address this problem but, no matter what gloss is put on such arrangements, cartels are open to all manner of abuse (not to mention being illegal). The long-term future of the industry requires an open, **all-inclusive, solution**.

■■■■

Perhaps there is some **light at the end of the tunnel** in this respect. There is a growing awareness — within some industry sectors at least — for some code of practice/ethics and operational procedures to be imposed on the building services sector.

For instance, some of the leading energy management and control systems specialists have come together to form an association called the **Irish Controls Industry Association (ICIA)**. The initiative is still at a very early stage but, rather than pick flaws in it and knock it, all

would be well advised to offer support. Even criticism can be constructive if the intention is for the common good.

■■■■

Another excellent initiative still at the embryonic stages is being spearheaded by **Ciaran King** of Ventac. He has been working on the establishment of an all-inclusive **ventilation association** — to include suppliers, contractors, etc — which would recommend and operate to ventilation standards approved by the Environmental Health Officers Association.

Other objectives include the establishment of a **register** of *bona fide* ventilation manufacturers, distributors and contractors; and a system for issuing **commissioning certificates** which can be produced for inspection by the relevant authorities.

■■■■

My congratulations to **Mike Sheehan** of Mitsubishi Electric on the birth of his son just before Christmas. At this rate Mike you're most definitely in the market for a new, much larger, home!

■■■■

Congratulations also to **Kevin Finnerty** of Update Heating. Kevin was recently conferred with an honours degree in Hebrew, Biblical and Theological studies from Trinity College in Dublin.

Yes I know ... but don't ask me. Talk directly to Kevin. He'll explain the background though he has already assured me that it is *not* part of a **great plan** to establish a heating contracting business in Israel!

■■■■

On a final and **sad note** my sincerest sympathies to Noel May whose wife died recently, and also to John English on the death of his mother. I'm sure I speak for all your friends and colleagues in the industry when I say that our thoughts and good wishes are with you both and your respective families.



Kevin Finnerty of Update Heating pictured in the grounds of Trinity College with his brother Colm who runs his own heating business in Elphin, Co Roscommon.

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