Building Services News

Volume 23 | Issue 9 Article 1

9-1-1984

Irish H & V News

IRISH H&V NEWS

SEPTEMBER 1984 IRELAND'S BUILDING SERVICES MAGAZINE

UNIQUE CONFERENCE/ EXHIBITION COMBINATION

In view of the latest developments on the natural gas front, and especially considering the implications of the cancellation of the North/South pipeline link, the forthcoming Gas Ireland '84 exhibition at the Burlington Hotel, Dublin — 25/26 September — could not occur at a more opportune time.

Obviously, the main features of any such exhibition are the products on display and Gas Ireland — with 56 stands as we went to press — certainly won't be lacking in this respect. Exhibitors will be showing a vast variety of new products and unveiling a whole series of new concepts and developments.

These have been previewed in the official catalogue which is contained within this issue. However, to make sure you keep fully abreast of such matters, be sure to attend in person. Entry is open to all trade members, free of charge.

Nonetheless, trade exhibitions are not only about product hardware. An essential ingredient of such shows is the forum they provide for discussion and the interplay of ideas. Here again Gas Ireland provides the ideal atmosphere and surroundings.

In fact the organisers, in association with the Irish Gas Association, have arranged for the Association's Autumn Technical Meeting to be held in conjunction with the show at the same venue on Wednesday, 26 September.

The programme will begin with registration and coffee at 9 am sharp with the official opening a half hour later. At 10am there will be an audio visual, courtesy of Bord Gais Eireann entitled: "Safety Through Standards" which will be followed by a discussion on the standards and how they effect the Irish gas industry.

Speakers will include Liam O hAlmhain, Chairman, Gas Technical Standards Committee, John Sweeting, A O'Leary, J P Owens, T McMahon and J Slattery.

The next session will comprise a paper by Dr Gordon Culshaw, Head of the British delegation to the European Standards Committee for Gas Appliances and this will be followed by

● Continued on page 4

● Denis Shelly who has been appointed President of AEGPL — the European Liquefied Petroleum Gas Association.

GAS ROLE UNDER GOVERNMENT REVIEW

Following the cancellation of the gas deal with the North, the Government is now urgently reviewing the role natural gas has to play within the National Energy Plan.

The Tanaiste & Minister for Energy, Mr Dick Spring TD, whose Department was already discussing the whole distribution process for gas along the East Coast, has said that they will have to look at the position of Drogheda and Dundalk, the various industries in that region and the prospects for the glasshouse industry in Co. Dublin which had hoped to benefit from the pipeline.

However, he denied that the cancellation of the North/South deal automatically meant that the region would not now be supplied with gas from the Kinsale field.

According to Mr. Spring, Bord Gais Eireann is prepar-

● Continued on page 6

● Pictured at the launch of the new Co-Link interlink system at a special presentation earlier this month were George William, Heiton McFerran, joint distributor; Jim Coleshill, Hamilton Engineering; Bob Couchman, the designer; Jim Maher, CIS, the promoters; and Michael Harbourne, AHL, the other joint distributor. For full details see page 17.

H & V NEWS GETS CIRCULATION UPDATE

As and from last month the circulation of *Irish H & V News* has been totally re-vamped with the compilation of a whole new list covering all the members of the various representative associations including the CIBS; The Energy Management Association; The MEBSCA, plus their Heating & Plumbing Section; and the IDHE. In addition, *H & V News* circulates to all key executives in the heating, ventilating, air conditioning, refrigeration, sanitaryware, plumbing and environmental control industries. Architects, designers and environmental engineers throughout the 32 counties are also included. In all we now circulate 2,600 copies of the magazine every month which amounts to virtual saturation of all those directly involved in the industry.

https://arrow.tudublin.ie/bsn/vol23/iss9/1
DOI: 10.21427/D7T401

IN THIS ISSUE

NEWSDESK:
C&F Mystery Trip. . . Healthy Future for ICL. . . £68m Bord Gais Profit. . . Holfeld Engineering Do Well With Cochran. . . Value For Money Advice. . . Jotul Direct To Installer from Grantaid. . . Grundfos Are Moving Up. . . New Push By Holfeld Pumps. . . IIRS Approval For Draftseal. **Page 4**

H&V NEWS PROFILE:
Tirolia — Striving To Retain No. 1 Position. **Page 10**

BTU GOLF RESULTS:
Captain's Prize at Dun Laoghaire Golf Club. **Page 11**

EMA NEWS:
Potential for Energy Savings of £100 Million in Industrial Sector. **Page 12**

HENRY R AYTON:
Advertisement Feature **Page 13**

RECONAIR GROUP:
Natural Progression. . . Not Rapid Expansion. **Page 16**

INTERLINK SYTEMS:
A New Approach **Page 17**

ULSTER NEWS:
Town Gas Industry in Jeopardy. . . Du Pont's Hypalon Plant on Stream. . . Thirteen Safety Awards in a Row for Farrans. **Page 20**

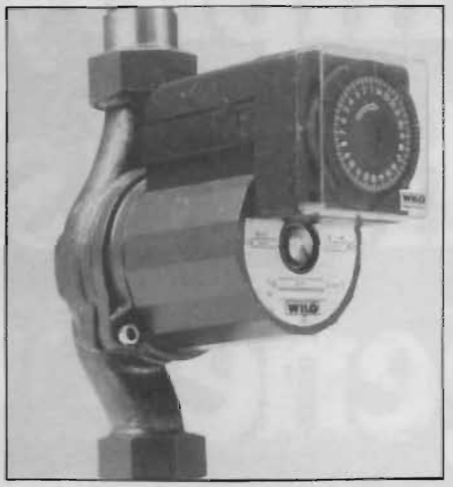
Insulation. . . . . page 32

OTHER SIDE OF. . .

Prince Carlo. . . Alias Jim McFadden **Page 22**

SHOWING THE WAY. . .
Gerry Cross, Jim Daly, Joe Noone and colleagues leading by example. **Page 23**

INSTRUMENTS & CONTROLS:



Are we Keeping Pace with Technological Developments **Page 25**

INSULATION:
It Pays to Do a Little Homework **Page 32**

PLUMBLINES:
Introducing a new column — an "inside back" section — are you mentioned? **Page 36**

IRISH H&V NEWS
IRELAND'S BUILDING SERVICES MAGAZINE

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Subscription Rates: One year £18
Printing by: Mercury Print Ltd, 5/7 Main St, Blackrock, Co Dublin.

Irish Heating & Ventilating News circulates to key executives in the heating, ventilating, air conditioning, refrigeration, sanitaryware, plumbing and environmental control industries. Its circulation also includes energy managers, architects, designers, sanitary engineers, and environmental engineers in the 32 counties of Ireland.

ABC

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The Walker philosophy has worked throughout Ireland for almost 20 years and now works in the U.K. and around the world. We supply the best air conditioning, refrigeration and heat pump hardware backed by the special style of Walker service.

As a result, all our clients can bank on real energy savings. 4000 Carlyle products, computer-matched for maximum energy efficiency, can be supplied throughout the 32 counties. Our mix of products and super-service has made us number one in Ireland and helps us to sell abroad.

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So by buying from Walker in either Dublin or Belfast, you're supporting a myriad of local Irish companies who supply us with a host of other products and services.

Ours is an Irish company with the hallmark of success, with Carlyle from Walker you can invest, in the most energy efficient products and systems on the market, in transatlantic technical innovation, and in Irish industry.

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BELFAST: 9a Cherryhill Road, Dundonald, Belfast, BT16 0JH. Tel: Dundonald 5234. Telex: 747681
GLASGOW: Washington Road, Unit 10B, Abbotsinch Industrial Estate, Paisley, PA3 4ET. Tel: 041 887 0551. Telex: 779406

A member of the Jefferson Smurfit Group

CARLYLE
leader in air conditioning and heating technology

GAS IRELAND

● Continued from cover

a panel discussion with all the morning's speakers participating.

There will be an adjournment for lunch at 1pm and the programme will resume with a paper by Alan Hargreaves, International Gas Apparatus, on gas metering and governors. Thereafter G K Little, Dublin Gas, will outline his company's construction programme for natural gas with Michael Wilcock, Managing Director Semperit (I) Ltd, following on with a paper on the benefits of changing over to natural gas.

In conclusion, Eugene Dunne of Keane Murphy Duff will present a paper entitled "Design With Natural Gas" before the final question and answer session of the afternoon's papers brings the programme to a close.

The conference fee is £15 per person for Irish Gas Association members and £20 for those not in the Association. This includes coffee and lunch.

£68m BORD GAIS PROFIT

The supply of 77,000 million standard cubic feet of natural gas — equivalent to 1.8 million tons of oil — supplied to customers by Bord Gais Eireann for the year ended 31 December, 1983, resulted in a net profit to the Board of £68 million.

Last year the ESB used 74% of the Kinsale offtake while 21% was used by NET. However, once the ESB's coal-fired Moneypoint station comes on stream in 1988 their usage will be reduced to 10%.

By the end of this year 25% of available natural gas from the Kinsale Head field will have been used which suggests that the Board's earlier prediction that the entire find will be used up by the year 2,000 is fairly accurate.

Value for Money Advice

The Society of Chartered Surveyors in the Republic of Ireland are participating in the 9th Building Exhibition, at the RDS from 2-6 October 1984, in order to provide potential building clients and investors with advice on how the appointment of a Chartered Quantity Surveyor will ensure value for money on construction projects.

Society members will be on hand to offer independent professional advice on building procurement, contractual arrangements, construction economics, financial planning and cost management — all of which form the key to the successful fulfilment of a client's requirements within the budget available.

Information will also be available on "life cycle costing" which is an economic tool whereby the real cost of building (initial capital cost plus the total cost of running the building throughout its useful life) is estimated at the earliest stage in the planning of a project.

Jotul Direct to Installers from Grantaid

● The prestigious range of Jotul solid fuel and gas-fired stoves is now being offered directly to installers who are showing a keen interest in the extensive range available. The subject of constant development the Jotul range covers all domestic applications with traditional and sophisticated designs as instanced by the model 201 which features advanced secondary burning. The range, including some very keenly priced models making way for new stock, is available from Grantaid Limited, Tyrellspass, Co. Westmeath. (Tel. 044 23114). Pictured left is the Jotul No 8 which is available in black or blue/black. Output is 12,000 btu/hr, glass lined. Fuel is turf, wood or solid-fuel hopper feed. A gas-fired model for natural gas is also available.

APPOINTMENTS

● Ken Wolahan has been appointed Managing Director of Liquid Draught Excluder (Dublin) Ltd, the Draftseal company.

● Mr Joe O'Rourke has been appointed Munster representative by Wavin Ireland Ltd — the country's largest manufacturer and distributor of PVC pipe systems.

Mystery Trip

John Duignan of C&F Ltd, Glow-worm's Irish distributors, told us last week that a number of installers look currently to be on target for their quota of 110 boilers which would make them eligible for the forthcoming Mystery Trip next April.

The period of the competition runs from 31 May, 1984 to 31 January, 1985.

As always, the destination is still secret but it will definitely be to a warm, exotic clime and destination.

● Legionnaire's Disease: Legionnaire's disease and the pressurisation of escape routes from buildings in case of fire are the subject of two new bibliographies from the BSRIA Information Centre. They list the literature references on these important topics published up to 1984. Both are obtainable from BSRIA price £2 sterling each.

https://arrow.tudublin.ie/bsn/vol23/iss9/1
DOI: 10.21427/D7T401

Healthy Future for ICL

The assets of Insulated Chimneys Ltd have recently been purchased by a substantial privately owned Irish Group with wide experience in precision engineering.

The new company trades as Insulated Chimneys (Trim) Ltd and the manufacturing plant remains at Summerhill Road, Trim, Co Meath. Telephone and telex numbers are as before: Telephone (046) 31595/31604 and telex 32669.

The full range of stainless steel and ceramic-lined chimneys is now available in galvanised, vinyl and stainless steel outer casings, the ceramic version being particularly suited for all open fire applications.

It is envisaged that a high percentage of sales will be to new and existing customers in the UK and Europe.

Already a number of the previous workforce have been employed and we hope to have further details in a future issue, including an interview with General Manager/Director, Michael J O'Shaughnessy.

● Air Techniques Ltd, manufacturers of air handling, heat recovery and ancillary equipment at Kilmallock Road Enterprise Centre in Limerick, will be one of six Mid-West Region companies to be featured in a special Mid-West Group stand being organised by Shannon Development at the forthcoming International Building Exhibition at the RDS in Dublin from 2-6 October. Picture shows Liam Keehan, a Director of the Limerick firm (left) discussing plans for the Dublin exhibition with Michael O'Flanagan, Marketing Services Officer with Shannon Development.

CIBS — Forthcoming Events

DATE	ACTIVITY	VENUE
4.10.84 Thursday	Aughinish Alumina Plant — Presentations on process and mechanical aspects	To be advised
25.10.84 Thursday (Note date change)	Galway Technical Meeting on: Heat Pumps: (i) Research by U.G.C.; (ii) Swimming pools by Galway Co. Co.; (iii) Industrial applications by ESB; (iv) Domestic applications by architect.	Salthill Hotel, Galway
9.11.84 Friday	Annual Dinner — Guest Speaker: P. J. Moriarity, Chief Executive, Electricity Supply Board	Law Society Building, Dublin

Holfeld Engineering Do Well with Cochran

Since their appointment by NEI International Combustion Ltd to represent the interests of their Cochran unit in the industrial boiler sector of the 26 Counties earlier this year, H R Holfeld (Engineering) Ltd have won a number of prestigious contracts. These include installations in Dublin at Glen Abbey and St Patrick's College; the McArdle Moore Brewery in Dundalk and the Mid Western Health Board's premises in Limerick.

The Cochran units are able to supply steam and hot water boilers for a wide range of industrial applications. However, the real strength of the Cochran line-up is that it includes boilers which are capable of coal, turf, oil or gas firing from 450 kg/h to approximately 15,876 kg/h for solid fuel or 31,752 kg/h for oil or gas.

All sales enquiries should be sent to John O'Reilly, Sales Manager, Industrial Division, H R Holfeld (Engineering) Ltd, 2-4 Merville Road, Stillorgan, Co Dublin while the service facilities continue to operate from the NEI International Combustion Ltd Cochran and Riley Services office at 42 Sundrive Road, Kimmage, Dublin 12.

The Service Manager will also be able to assist with the supply of routine spares parts held in Dublin stock. Major spare parts may be ordered either via the Dublin Service Office, or direct from the Main Spares Depot at the Annan Factory.

Gas Role Under Review

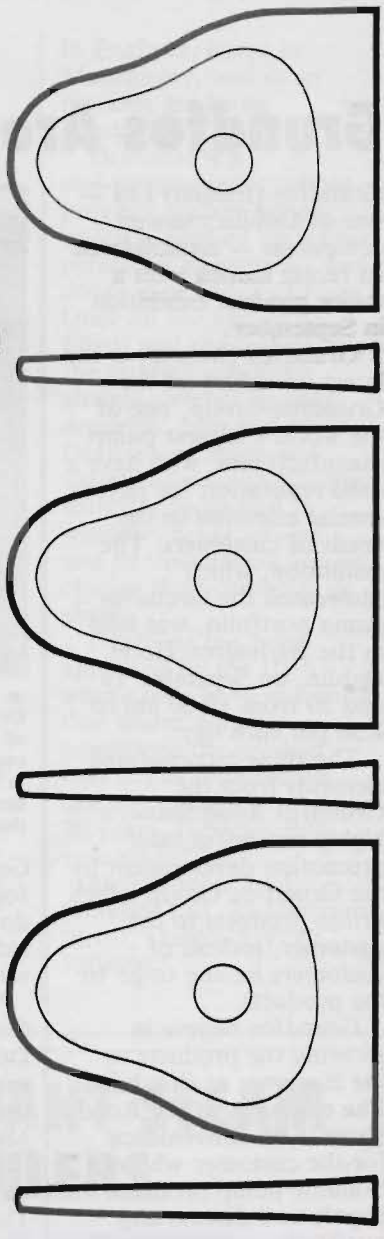
● Continued from cover

ing to play a major role in the gas utilities of the provincial towns which will be allocated a supply of natural gas. While the centres chosen will provide the best economic use for gas, they are also the areas of most financial risk in the commercial sense, he claimed.

The Government's intention is to devise a scheme whereby these risks might be shared between the State and private industry.

At the time of writing a decision on the supply to Limerick was imminent while the position in respect of Kilkenny and Waterford has not been fully resolved because of the technical difficulties involved.

Save them spending pounds where they should be spending pennies



Implementation of the new water bye-laws concerning urinals that are flushed automatically can reduce water wastage dramatically. And, where the supply is metered, installing the correct control valve saves a fortune on water bills too.

The bye-laws refer both to the frequency of flushing and to periods within which no flushing should occur.

So it's good to know that there's one outstandingly effective method of dealing with their requirements: Cistermiser, the only flush-control device awarded the certificate of the British Board of Agrément.

Cistermiser control valves do not merely conform to the stipulations laid down by the bye-laws. They exceed them. For, even within the defined limits, *they operate only in direct proportion to the actual usage of the facilities.* Money won't, literally, be pouring down the drain when the building is empty or being used by just a few people.

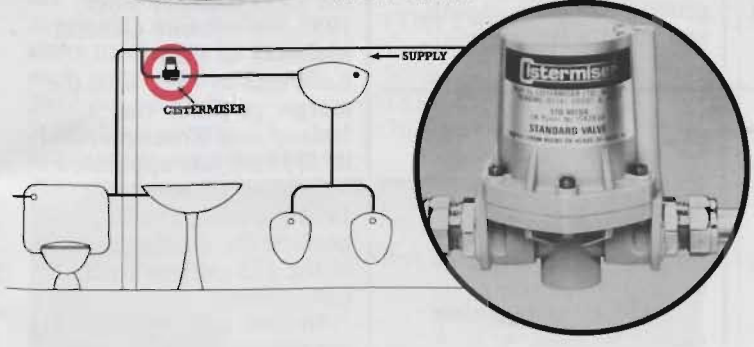
The result is correspondingly greater savings in the cost of metered water supplies. In fact, a single Cistermiser can save up to 100,000 gallons annually, so paying for itself over and over again. Which explains why one famous hotel group is reckoning on a startling £145,000 reduction per year in its metered water charges.

Cistermiser. The least costly yet most rewarding way of putting an end to that wasteful financial outflow.

Sanbra Fyffe

Sanbra Fyffe,
Santry Ave., Dublin 9.
Telephone: 379291.
Telex: 25325.

KJ Agency,
14 Rose-Park, Donaghadee,
Co. Down, N. Ireland.



BBA BRITISH BOARD OF AGRÉMENT
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Cistermiser is:
non-electric, so a plumber can install it in minutes.
Maintenance free. Approved by the former National Water Council and now recommended by Water Authorities.
The only flush-control device awarded the certificate of the British Board of Agrément.
Approved by the Dublin Corporation.

Cistermiser

Efficient flushing at a fraction of the cost

IHVN/9/84

Please send latest colour brochure on Cistermisers to:

NAME
POSITION
COMPANY
ADDRESS
TEL

Grundfos Are Moving Up

Grundfos (Ireland) Ltd — one of Dublin's newest companies — consolidated its recent launch with a major product exhibition in September.

Grundfos (Ireland) is the latest subsidiary of the Grundfos Group, one of the world's biggest pump manufacturers, who have a solid reputation for paying special attention to the needs of customers. The exhibition, which showcased the Grundfos pump portfolio, was held in the Burlington Hotel, Dublin, on Sepember 19 and 20 from 10.30 am to 4.30 pm each day.

The show incorporated elements from the Grundfos Road Show, a highly-successful sales promotion development by the Grundfos Group which brings products to the customer, instead of customers having to go to the products.

Grundfos believe in showing the products to the customer at first hand. The emphasis of the Road Show is on convenience for the customer who can examine pump products closely and discuss any application problems with experienced Grundfos staff, as well as the advantages that come from using Grundfos.

The Burlington displays also featured all ranges of Grundfos pumps suitable for applications in the domestic, commercial, industrial, agricultural and water supply sectors.

● A flashback to 1 May when Dermot Murphy, General Manager of Grundfos (Ireland) Ltd, (top) and Peter R Hooper, Deputy Chairman of the new Irish subsidiary of the Grundfos Group, nailed home the company's new sign in Dublin. Grundfos (Ireland) is now moving on in its aim to provide the best service for pump users in the Republic and held a private product exhibition at the Burlington Hotel, Dublin this month to help do just that.

General Manager of Grundfos (Ireland), Dermot Murphy, explained: "Since we opened for trading on 1 May, we have had many requests for information on all our pump products. The Road Show concept is ideal for providing a centralised display location for all interested parties. Another benefit is that the Road Show can be used to visit areas close to our important customers who may not get an opportunity to visit the infrequent major trade exhibitions".

He added: "Customers were able to come along to the Burlington at their convenience to enjoy our hospitality and view the Grundfos product range and find out why Grundfos pumps are so popular around the world. There was something for everyone — from domestic heating to commercial mechanical services, industrial boiler feed and general service pumping, and rural water supply".

World Standard for Time-Delay Switches

A world standard covering time delay switches used in household and other similar fixed-electrical installations has just been published by the International Electrotechnical Commission (IEC).

The standard, designated Publication 669-2-3, applies to time delay switches with a rated voltage not exceeding 440 V and a rated current not exceeding 63 A, operated by hand and or by remote control.

It covers switches with a mechanical, thermal, pneumatic, hydraulic or electrical operated time delay device, or with a device which combines any of these.

It does not cover time delay switches which include parts with electronic components in control or switching circuits. (These are within the scope of IEC Publication 669-2-1: Switches for household and similar fixed-electrical installations, Part 2: Particular requirements for electronic switches).

This new publication should be used in conjunction with IEC Publication 669-1 (First edition, 1981): Part 1: General Requirements, because it lists the changes necessary to convert that standard into the IEC standard: Particular Requirements for time delay switches (T.D.S.) for household and similar fixed electrical installations.

Shelly Appointed President of European Gas Association

Denis Shelly has been appointed President of AEGPL — the European Liquefied Petroleum Gas Association. Mr Shelly is Chairman and Managing Director of Calor Teoranta, the dominant company in the Irish LPG market.

This is the first time Ireland has been awarded the presidency of the 16-country Association since its formation in 1969. Mr Shelly will hold office for three years.

AEGPL, which is based in Paris, has as its central concern the promotion and well-being of the LPG industry in Europe. Apart from the development of LPG as a source of energy, its principle objectives are the promotion of the highest attainable safety standards, the development of energy efficient and safe LPG equipment and the provision of standards and guidelines for the industry, not alone in European but also in worldwide markets.

Mr Shelly has been in the LPG industry since 1955. He became General Manager of Calor Kosangas in 1971 with the merger of Calor Gas Ireland and Kosangas, and in 1975 he was appointed Managing Director. Since 1971 the company has become the dominant force in the £75 million Irish LPG market.

In 1983 he presided over the restructuring of the company into Calor Teoranta. The restructuring came about to reflect Calor's policy of extending its activities into a broader energy sphere which includes natural gas development and overseas consultancy work.

During Mr Shelly's presidency of the AEGPL Ireland will host two major conferences on LPG in 1985 and 1987.

Draftseal Approved by IIRS

Draftseal, a new Irish energy-saving invention for keeping out draughts, is set to make a major impact on the domestic and export markets. Its unique low-cost formula, approved by the IIRS, has already been successfully applied to doors and windows in a number of well known buildings.

The brainchild of Kevin Walker, an Irishman from Edenderry, Co Offaly, who has been involved in the building and insulation business for many years, Draftseal is being distributed here by Irish-owned company, Liquid Draft Excluder Ltd, based in Limerick.

Franchise holders have already been appointed in various parts of the country and Draftseal installations are expected to accelerate with the launch of a new company, LDE (Dublin) Ltd., to market the system in Dublin and the surrounding areas. Managing Director is Ken Wolahan, formerly of Cement-Roadstone.

A marketing operation has also been established in England, based in Manchester, and other markets are being considered.

Draftseal is a one-compartment rubber polymer sealant system which is applied by trained personnel to windows and doors in semi-liquid form. Once all the gaps are filled, and the sealant sets, the product acts as an airtight defence against draughts, rain and noise. Draftseal is made in a variety of colours blending with the doors and windows being treated, and its installation will not change their character or shape.

Draftseal has been approved by the IIRS, whose tests have indicated that under normal conditions the product may act as an effective draught excluder for up to 20 years. It comes fully guaranteed.

Details from LDE (Dublin) Ltd, 25 Harcourt Street, Dublin 2, (Tel: 780499).

New Push by Holfeld Pumps

This month saw a major development at H R Holfeld (Hydraulics) Ltd with the introduction of four excellent full-colour brochures which outline the full Holpak range now available from Holfeld Pumps.

Frank Nugent told *H&V News* that this is the first time they have produced literature of such high quality but already they are experiencing a very favourable response.

In addition to being highly-attractive, the brochures are also very informative incorporating as they do a very simple and direct style of presentation.

Copies are available by 'phoning Frank or Morris Dore at Dublin 887361.

New Features from Bahco

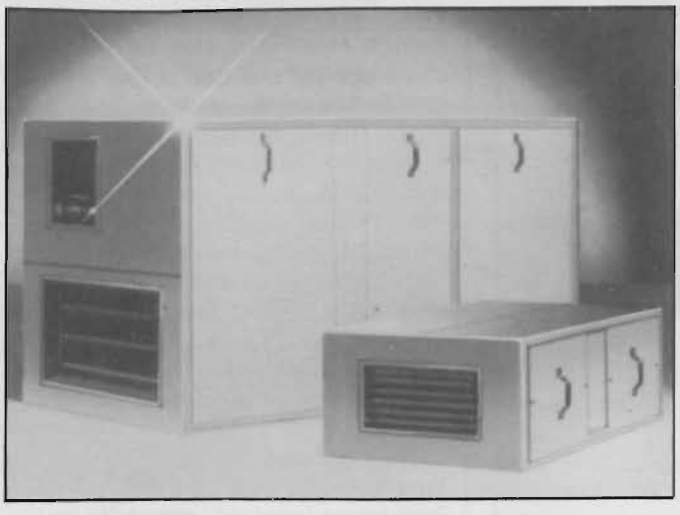
The compact "ABK" range of units, first introduced last year by Bahco Ventilation Ltd, offers several new features. Three finishes are now available — galvanised sheet metal, precoated plastic in various colours or aluzinc.

The 50mm double-skinned construction gives a tight, rigid unit, easily portable and fully airtight. There are 365 configurations available, with at least two units to choose from for each given airflow (up to 3M^3 per second).

High efficiency attenuators are available as a standard option, giving excellent silencing particularly in the low to mid-frequency wave bands.

Prices are very competitive; Bahco claim to offer price/performance equal to any other supplier, with the added advantage of a very straight forward installation.

Fully illustrated brochures are available from Climavent Ltd, 147 Griffith Avenue, Dublin 9, (Tel: 372008); and Cool-Heat Ltd, 16 Railway Street, Lisburn, BT28 IXG, (Tel: Lisburn — 76228).



● The compact Bahco "ABK" range of air handling units now has many new features. Details from Climavent and Cool-Heat.

IHVN PROFILE

Tirolia — Striving to Retain No. 1 Position

● Wilfried Riether

Because of the demise of the Michael Vaughan Group and the many associated problems which resulted, Tirolia of Austria took the bold step of establishing a fully-fledged Irish subsidiary under the leadership of one of their own directors, Wilfried Riether.

He is now installed as Managing Director of Tirolia-Werke (Ireland) Ltd and is currently overseeing the company's move into spacious new premises at Kylemore Park North, Dublin 10. This is Tirolia's first ever subsidiary outside of Austria and the intention is that Mr Riether will steer the company in the right direction over the first 12 months with a view to appointment of an Irish person to the key position as soon as is practical.

However, this thinking is already being put into practice in that the well-known Paddy Cunningham has been appointed Director, Sales & Marketing. Paddy needs no introduction to the trade, nor indeed to the Tirolia range, and it is perhaps this connection more than anything else which has helped retain the goodwill of merchants, and thereby customers, over the trying period of the last 12 months in particular.

There are currently 30,000 Tirolia cookers out in the marketplace but both Wilfried and Paddy anticipate adding substantially to this number in the coming year. To do this considerable stocks are now being held at Kylemore Road with requests for supplies being delivered within two days of receipt of order.

Distribution is strictly via the merchant trade with major appointed distributors serving as central outlets to regions in certain cases. The pricing structure in this instance is such to make this "selling-on" to the smaller merchant a satisfactory deal for all concerned. Other than that of course merchants are supplied direct from Dublin.

The main appointed distributors include Brooks Hanley in Sligo; Thomas McDonagh in Galway; Irish International Trading in Cork; Bailieborough Co-Op in Bailieborough and Cavan; and Tony Barrett of Barretts in Maynooth.

Northern Ireland distributors are Kildress Heating & Plumbing, Cookstown, Co Tyrone.

In all there are currently six people employed in the new operation — Wilfried and Paddy, a receptionist/secretary and a service manager plus two service engineers. As can be seen from this staff breakdown, service personnel account for half the employees, emphasising in no uncertain terms the importance Tirolia place on offering customers a good after-sales service facility.

Prior to the establishment of Tirolia-Werke (Ireland) there were some problems in this area but now, under Wilfried's direction, these have all been resolved. In fact, advertisements were placed in all the local papers throughout the country advising Tirolia cooker users that the new company had been established and that service difficulties had been resolved. The result was the satisfactory resolution of this problem and some very happy customers.

An added bonus was the first-time enquiries the ads generated, particularly because of the confidence they inspired.

However, having professionally competent service engineers is one thing but they also need the full backing of parts availability. Hence the large portion of the Kylemore Road premises devoted to a full complement of spare parts which represent a further investment of over £50,000.

Mind you, both Wilfried and Paddy are concerned about one element over which they have little or no control and that is the installation of the cookers. They would like to see the IIRS introduce a National Standard for the installation of solid fuel cookers which would stipulate under force of law the requirements the installing contractor should meet.

In the meantime though both are dedicating their time and efforts to consolidating the Tirolia position in the forefront of the cooker marketplace.

Having taken the initiative they have and also making the investment involved, especially in service, they deserve to succeed.

BTU GOLF SOCIETY

On 24 July, the BTU Captain, Garvin Evans, Prize Day was held at Dun Laoghaire Golf Club. Conditions were perfect, and the course was in excellent condition for the occasion.

BSS were the sponsors for the day (which has become traditional) and they were represented by Brendan Stack, Paddy Brennan of John Rowden.

The day was very well supported by Society members and their guests, and 67 people enjoyed the day's (and night's) proceedings.

With such strong support, and with such wonderful weather, the scoring was obviously going to be hot, and the Captain's Prize was eventually won by Paddy Costello with 44 points, playing off 16.

As in the previous year the competition was marked with a-hole-in-one, this time by John English. Dun Laoghaire Golf Club were represented by their Captain Brendan Doyle and their course committee member, Jim Glendon.

● Arthur Pollock with Garvin Evans and Gerry Walshe.

● Garvin Evans, Captain BTU, with Paddy Costello, winner. Assisting with the presentation is Eddie Egan.

The full winning roll for the day was as follows:

Class 1: Winner — Ted Bourke, 36 pts, h/cap 11; Second — Brian Farrell, 36 pts, h/cap 7; Third — Neville Thompson, 36 pts, h/cap 10.

Class 2: Winner — Michael O'Doherty, 42 pts, h/caps 15; Second — John Usher, 38 pts, h/cap 18; Third — Eddie Egan, 38 pts, h/cap 15.

Class 3 — Winner — Des O'Gorman, 43 pts, h/cap 19; Second — Sean Moran, 41 pts, h/cap 23; Third — Victor Madigan, 40 pts, h/cap 22.

Front 9: First — John Ennis, 22 pts; Second — John English, 21 pts.

Back 9: First — John White, 22 pts; Second — Tom Scott 19 pts.

Hole-in-one — John English.

Visitors: First — Fran O'Brien, 43 pts, h/cap 13; Second — J Murphy, 42 pts, h/cap 8; Third — T Owens, 40 pts, h/cap 11.

Captain's Prize at Dun Laoghaire Golf Club

● Matt Gallagher with Eddie Egan and Garvin Evans.

● Brendan Slack (BSS Ireland Ltd) and Tony Gillen: "Did we get your cheque Tony — your right!".

● Liam Stenson with Gordon McCabe and Michael Hannon.

EMA NEWS

Potential for Energy Savings of £100m in Industrial Sector

The recent Government White Paper on industrial policy revealed that Irish industry consumes energy at a cost of £750 million per annum. However, studies have revealed that this figure could be significantly reduced. In fact, there is said to be potential for a 15% saving on energy costs which would represent industrial sector savings of up to £100 million per annum.

The Energy Management Association (EMA) was established in late 1980 to promote an awareness of the need for energy saving and now comprises a body of dedicated professionals from all relevant professions who strive to do just that.

During the coming season the Association will be hosting 17 technical meetings in addition to seminars and workshops throughout the country dealing with all aspects of energy usage. The highlight of the year will be the 5th National Energy Management Conference which will take place in the Burlington Hotel, Dublin on 21 May, 1985.

The EMA is currently conducting a national membership drive and those interested can complete the form below and post to Harry Pattison, National Organiser, Energy Management Association, Institute for Industrial Research & Standards, Ballymun Road, Dublin 9.

Benefits of membership include free attendance at all EMA technical meetings; copies of technical papers read at meetings on request; participation in factory visits; copy of Technology Ireland every month; copy of EMA News every quarter; EMA Annual Report; and a discount of 10% on all IIRS energy seminars.

Energy Management Association

Application Form

Name of Company: .....

Address: .....

Members Names 1. ..... 2. .....

3. ..... 4. ..... 5. .....

No of Employees:	100 or more ☐	10-100 ☐	less than 10 ☐
Fee:	£75 ☐	£30 ☐	£15 ☐

Please register my Company and the above names as members of the Energy Management Association for the year 1984/85.

I enclose the appropriate fee for the account of the Energy Management Association ☐

Please invoice me upon receipt of this application form ☐

Signed: ..... Position: .....

Patron: Minister for Energy

DOI: 10.21427/D71401

B & E APPOINT HENRY R. AYTON

The Bracknell-based firm of B&E Boilers have recently appointed Henry R. Ayton Limited as their sole agents for the Republic of Ireland.

Henry R Ayton will now be responsible for the sales and service of the B&E range throughout Ireland, as they already represent the firm in N Ireland.

News of this latest development will consolidate the link Ayton's first developed with the firm more than fifteen years ago when they began representing it in Northern Ireland.

Understandably, Aytons are pleased with their closer association with B&E, a firm many people believe to be one of the best, if not the best, in its field. Certainly its somewhat 'bluechip' reputation will be no disadvantage in marketing the B&E range.

Ayton's Sales Engineer, Mr Sam Mitchell believes this reputation will be a crucial factor in sustaining and developing sales.

"There can be no doubt B&E have a first class reputation in the industry, one which they have managed to develop by paying attention to quality. They only manufacture boilers and equipment to the highest standard and which conform to the latest specifications."

Sam Mitchell is now 'actively pursuing' this new market that the extension of the agency affords and confidently expects such efforts will manifest themselves in increased sales.

This development marks the latest chapter in Ayton's considerable history, which began when professional engineer Henry R Ayton came to Ireland in 1913. He had a particular interest in fans and the efficient use of steam and began business as an engineering agent in Belfast, with an agent in Dublin. He was later able to open an office in that city too.

In 1980 it formed a subsidiary company — Henry R Ayton Engineering Services Limited — offering manufacturing and design.

Since then they have grown to meet the needs of a developing industry, both North and South and now have a team of more than fifty people working from establishments in Belfast and Dublin.

This has enabled the company to undertake the all-important turnkey projects, whereby they can design and install a system from an initial green field site to the eventual production of steam, using oil or gas fired burner equipment and solid fuel. These systems can be supplied with a compatible B&E boiler — the Coalmiser, the European or the

● *A twin chain grate coal-fired boiler (25000 lb/hr) being delivered to Canadian Technical Tapes in Bangor, Co Down, prior to installation.*

Windsor for example and each adapted to specific need.

Earlier this year Ayton's designed and supervised the installation of such a system at Canadian Tapes Company in Bangor. This, and a prestigious contract designed by Abbot & Partners for Altnagelvin Hospital, again involved the use of B&E boilers. In the hospital project an expensive oil-fired system was replaced by a coal-fired one, with additional coal and ash handling capacity.

While Aytons have been enjoying commercial expansion this year W G Allen, a Midlands based group of boiler manufacturers, bought B&E Boilers from the R.H.W. Group. B&E will continue to trade independently with Managing Director Mr K Tidd who joins the Allen Board and becomes Managing Director of Allens of Tipton Limited, the group's Wolverhampton based boiler making subsidiary.

The purchase of B&E Boilers has been widely seen in the industry as an attempt to rationalise the boiler making market, which has had a reduction of sales in the last ten years. An important part of this move will be B&E's impending relocation in Tipton, Wolverhampton, which will allow them an additional manufacturing space noticably lacking at their Berkshire site.

The purchase has also met with approval within the industry. Sam Mitchell believes it is an important step and a natural amalgamation between two boiler making companies which should benefit from each other's expertise.

The carefully planned move to the Midlands should not disrupt business, as B&E will gradually transfer their manufacturing process as additional capacity becomes available.

Mr Ian Finnigen, Ayton's Sales Director, believes the company's policy has not changed over the years — through competent sales and technical support to develop its representation of world class companies in the mechanical engineering field.

The extensions of Ayton's agency for B&E Boilers to the Republic of Ireland is seen as further commitment to that policy.

HOUSEMAN EXPAND WITH HENRY R. AYTON

Houseman (Burnham) Ltd, part of the Partals Water Treatment Group, have extended the activities of their Northern Ireland Agent, H R Ayton Ltd, of Belfast.

Ayton have, for the past 15 years, handled the Houseman range of chemicals, pretreatment plant and dosage control Equipment in Northern Ireland.

Their representation has now been extended to cover the Republic of Ireland. The products to be handled include the Houseman range of Permutit industrial water softners and the chemical range, including Biocide which has beeen proven to be effective in combating the bacteria which cause legionnaire's disease.

Natural Progression. . . Not Rapid Expansion

Following hot on the heels of recent announcements concerning the Reconair Group, H & V News paid a visit to Fred Cooney's headquarters in Coolock to study at first hand the developments which have taken place and especially the progress being made by the manufacturing venture.

Brendan Carroll, Chief Executive of Reconair Manufacturing, told us that the proposed time scale on the various manufacturing stages had to be brought forward, so successful has the response been to date. Orders covering at least three months full production are already in hand which will lead to the employment of 20 people in all by the year end.

However, while job creation is a very important and indeed praiseworthy element of the project, import substitution is another beneficial feature of the company's activities. Reconair Manufacturing is already making many products under licence in Coolock which were previously imported into the country.

Additionally, negotiations are currently in hand to develop this facility further with a number of important international names. Also offered is a service to manufacture components of certain products presently being imported and the exciting feature here is the fact that Reconair Manufacturing has made this service available to everybody.

There are many advantages offered to importing distributors by these facilities but two of the most important are the elimination of the payment and associated problems of VAT at entry and of course the much quicker, more flexible and better delivery schedules a local manufacturer can provide. Brendan Carroll, Chief Executive is happy to discuss mutually beneficial proposals with present importers. A telephone call to Dublin 470377 will suffice.

The 12,000 sq ft factory unit is broken down into stores and fabrication area; assembly and quality control facilities; research and development lab; and offices.

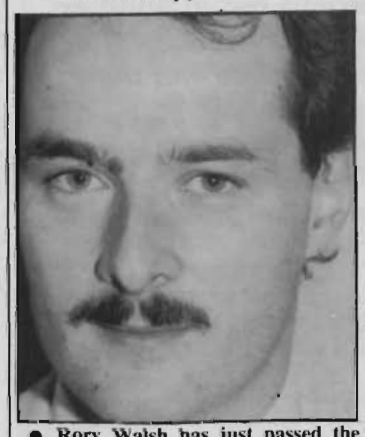
Bill Ahern, a protege of the Lister Group, has just joined as Production Manager and he is already bringing his wide ranging knowledge and experience to bear.

To date, over £0.5 million has been invested in the project and initial development will continue via engineering design workshop facilities finally culminating in volume production as expansion occurs. Export opportunities are also anticipated but these will be serviced only after all home market requirements have been satisfied.

On the Reconair Ltd front Tom Fleming has been appointed Managing Director as this company continues to capture even still bigger market shares in various fields. In fact, to cope with the inroads made in the instrumentation field and the taking on of the Sauter instrumentation control franchise a separate company — Reconair (Automatic Controls Sytems) Ltd — has been formed. Tom Rourke, formerly Managing Director of Dwell Controls Ltd, has been employed as Manager while Stephen Cooney will continue to supervise the existing team. Reconair ACS will operate as a separate trading company responsible to Reconair Ltd Managing Director Tom Fleming.

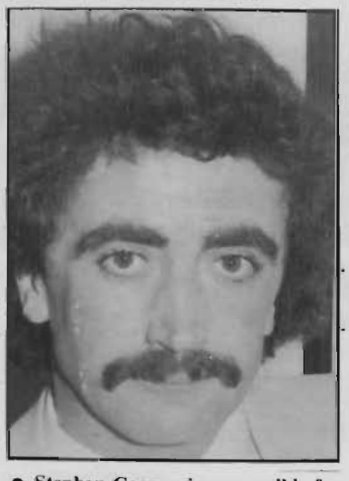
Taking in the other string to the Reconair Group, Lift Manufacturers Ireland Ltd and Lift Maintenance Ltd now command second place in the lift fabrication, installation and maintenance market throughout the 26 counties. A full order book and exciting enquiries re prestigious installations coming on stream guarantee continued growth over the next few years.

When H&V News put it to Group supremo Fred Cooney that the rate of expansion had been too quick over recent months he countered by saying that survival did not lay in remaining static but in being progressive and confident in the future. He emphasised however that he did not advocate growth simply for growth's sake. Far from it. In fact he summarised it very succinctly by describing developments within the Reconair Group as "natural progression. . . not rapid expansion".



● Rory Walsh has just passed the Corporate Membership Examination of the Chartered Institute of Building Services. Responsible for air conditioning sales at Reconair Ltd since 1982, Rory was previously employed by E G Pettit of Dublin and was educated at Colaiste Dhulaigh, Coolock.

● B M Ahern, Production Manager of Reconair Manufacturing Ltd, is responsible for output productivity and all factory operations. Prior to joining Reconair Manufacturing Ltd, Bill was Production Manager at Lister Company Ennis Machinery Systems Ltd (eight years with Lister Group)



● Stephen Cooney is responsible for CEM controls at Reconair (ACS) Ltd and has been with the Reconair Group since 1979. He was employed by Research and Production Ltd prior to joining Reconair Ltd.

● Tom Rourke is Manager of Reconair (Automatic Control Systems) Ltd recently formed to expand Reconair Ltd's market share of controls and building automated systems using Sauter systems and controls.

DOI: 10.21427/D7T401

INTERLINK SYSTEMS — a New Approach

By Bob Couchman

In April 1977, at the Biennial Conference of the IDHE, Hugh Maguire presented a paper entitled "High output back-boilers and existing heating systems". Hugh Maguire's professional qualifications and experience as a heating engineer are unequalled in this country and any publication of his was bound to arouse interest within the industry. His 1977 Conference Paper did much more than arouse interest however. It offered, for the first time, a safe and practical solution to the problem of using a solid fuel boiler as an auxiliary heat source in an existing heating system. This was of particular relevance in 1977, as gas and oil costs spiralled.

It is still relevant today, though many thousands of interlink systems based on Hugh Maguire's design principles have been installed during the intervening years. The strong support that these design principles have received from Coal Information Services Ltd and, in more recent years, from the IIRS and the IDHE, has helped to swell the numbers while doing a great deal to maintain the original standards.

Coal Information Services Ltd, who prompted this work, have continued to make copies of the original paper available and a short resumé of the principles involved is also to be found in the IIRS publication, "A guide to the safe installation of solid fuel central heating". Therefore, there is no need to repeat the essential features at any length here.

Hugh Maguire's work came to fruition just over seven years ago. The intervening years have seen thousands of excellent installations, with his principles precisely followed, and an increasing number of uninformed attempts to use two boilers in tandem with insufficient regard for safety or economy in use. As a rule, the installers concerned have been trying to cut costs and, in some cases, to render the system more convenient for the householder to use.

Their cost cutting efforts have shown up in attempts to connect the solid fuel boiler via a single flow and return pipe, with the inevitable result that the boiler performs as an extra radiator to heat the chimney. Efforts at improving the convenience factor, ie, reducing the opening and closing of valves, have led to a fairly widespread use of non-return valves which in turn has resulted in some quite expensive problems and rectification work.

Cases abound where unskilled installers have fitted valves on every circulating pipe in sight, in despairing attempts to make the system work, with consequent safety risks and inconvenience.

Through all of this, Coal Information Services, the two Institutes, Hugh Maguire and a number of concerned people have fought to maintain standards while the responsible majority of the installers have tried to compete with the lower standards and lower prices of the unskilled and the irresponsible.

In the autumn of 1983, Jim Maher, Managing Director of Coal Information Services Ltd. asked the writer, who also initiated the original interlink work, to re-examine the whole question of interlinking boilers in the light of known preferences and practices in the domestic heating industry. Hugh Maguire was consulted and kept informed of developments as they took place and the developments have his full support.

It was evident that the heating industry, with seven years of interlink experience to the good, wanted and needed certain additional features while yielding none of the merits of Hugh Maguire's work.

These additional features included "Idiot proof" safety although the previous work was accepted as foolproof; The ability to use a single pair of pipes from the solid fuel boiler. Preferably these should be from opposite sides of the boiler; The ability to dispense with at least one pair of valves — which really follows (2); The ability to use an automatically-fired boiler without a gravity circulation; Avoidance of the relatively expensive double-coil cylinder and associated pipework; The ability to function on a single pump, at least in some cases; and Really simple and inexpensive installation.

With these features established, fairly extensive theoretical studies were followed by a practical design exercise. The result was a small rectangular steel vessel, (patent pending), which is now known as the Co-Link. The first trial Co-Link installations were carried out in November 1983, the basic design has not been changed since that time.

Fitting the Co-Link is simply a matter of inserting it somewhere on the one-inch primary circulation between the solid fuel appliance and the cylinder at a point which is not less than half a meter above the top of the boiler and below the base of the cylinder. Then the forced circulation between the Co-Link and the rest of the heating system is arranged by simply connecting a pair of ⅞" pipes, with a pump on the return side, from tappings on the underside of the Co-Link to an appropriate point on the system.

The concept of a second vessel on a primary circulation is not by any means a new one. It has been used for many years where a need has arisen for additional hot water storage, often with a pumped or gravity secondary circulation. The Co-Link is, however, so designed internally that the boiler remains the neutral point with gentle assistance being given to the gravity circulation when a pump is running.

There still needs to be a valve on the return from the automatically fired boiler. This has been shown and it is recommended that, since the boiler is effectively started and stopped by an electrical impulse, whether it is fired by oil or gas, the valve should be motorised with a spring return to the closed position. The cold feed is connected between the boiler and the return-mounted valve. The flow is, of course, unimpeded.

Figure 1 may be used to describe the various modes of operation. If the solid fuel boiler only is in use, and being used only to provide hot water, then pump (A) is off. Pump (B) and the motorised valve beside it may conveniently be stopped and started with the burner so the pump will be off and the valve will be closed. Therefore, if hot water only is required, just light a small fire!

If the solid fuel boiler is required to also heat radiators then pump (A) needs to be turned on, either manually or automatically, depending on the control system. The internal construction of the Co-Link, while it contains no moving parts, is so arranged that the gravity circulation is accelerated

Published by ARROW@TU Dublin, 1984

when the pump (A) is running, although there is no short-circuiting.

With the fire out and pump (A) off, the automatic burner and pump (B) will serve the radiators and will also provide a hot water circulation via the Co-Link. Provision has been made for some degree of automatic acceleration of the gravity system — in the right direction — when pump (B) is running though the connecting pipework has been reversed. The solid fuel boiler will not be heated in these circumstances.

If it is intended to use the automatic boiler for hot water supply only on occasions then the Co-Link connections should be the nearest point to that boiler. Otherwise, simply treat the Co-Link as a radiator with ⅞" connections and take those connections to the nearest convenient point.

If both boilers are required in use at the same time this is perfectly in order, but pump (A) should be left off and the single pump (B) will serve both units.

So much for the design and application. In 90% or more of all interlink applications the installation will be as simple and foolproof as has been indicated in the short preceding paragraphs. There will be exceptional cases. Rather than obscure the essential simplicity of the system, it would be better to deal with the unique safety feature before returning to questions which need to be dealt with here, but which seldom arise in practice.

Leaving aside the welter of Codes, Standards and Bye-Laws relative to domestic heating — vital though they are — there is one essential safety problem that lurks in the background whenever water is heated in a boiler and there are two accepted methods of dealing with this problem. The safety problem is, of course, the fact that whenever water is heated its volume increases and this increase is of the order of 4% between room temperature and normal

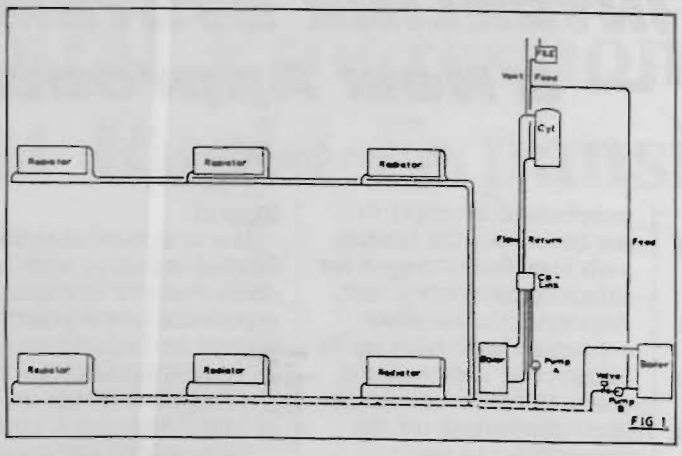


FIG 1

boiling point.

The same sort of thing happens, on a different scale, with air. The difference is that air may be compressed and water may not. Therefore, as every schoolboy knows, if water is heated in a closed vessel with no means of expansion relief then an explosion will almost certainly follow. That is the problem!

The solution, of course, is to provide a means of expansion relief. In solid fuel fired heating practise this involves the use of an open vent and an open cold feed pipe, sizes are laid down in various Standards as ⅞" for the vent and a ½" feed. A feed and expansion tank accommodates the increased water volume, which enters via the feed pipe, when the system is heated. This is an essentially safe system, proved by more than a century of heating practice.

Things can go wrong if valves are put in the wrong places and subsequently left closed while a fire has been lit. Things can go wrong also if a fire is lit when conditions are so cold that the vent pipe and feed pipe are blocked with ice. Such accidents are rare, and they are, of course, common to all heating fuels. But deaths have occurred more often than they should have, or need have, from both causes in recent years.

There is a second method whereby a controlled amount of expansion relief may be provided. This method, which formed part of a patent granted to Perkins in 1831, was subsequently used very widely, especially in churches, well into this century. It simply involves the incorporation of a vessel containing air or compressible gas which compresses to permit the necessary fluid expansion. The vessel must, of course, be big enough and it must be permanently airtight.

While vessels of this type in sealed systems are virtually standard practice for oil and gas fired installations in most Continental countries, and are widely used in these islands as well, sealed systems are not acceptable for solid fuel appliances because the fire can only partially respond to automatic control — even when such control is present. However, if a correctly-sized air vessel is incorporated within the standard open-vented solid fuel system then the safety factor is greatly increased since the inadvertent closure of the feed and vent pipes still leaves the system with a compressible air cushion to absorb the normal expansion of the water. Internal pressure will be increased, however, and this will have the beneficial effect of raising the boiling point.

The Co-Link unit contains such an expansion vessel; in fact that accounts for most of its size which is a fairly neat 12" x 12" x 15" including insulation. The actual air capacity is just over five litres, which is welcome enough to take up the expansion that occurs in the size of system discussed. It could be argued that this additional safety feature alone justifies the use of the Co-Link even for single-boiler systems. Taking into account the fact that only two boiler tappings need to be used, and cookers in particular are often provided with only two tappings, then the Co-Link would certainly seem to be justified on such systems. Where four tappings are provided, as is the case with back boilers, then the flow and return should be connected to opposite sides.

Returning to the exceptional cases, first there are instances where the Co-Link should not be used. It is a mistake, and a serious one, to try to interlink two boilers of a different size. The only way that a solid fuel boiler should be used in a much larger system is where a definite zone can be established via the control system. Incidentally, the user should beware of inflated output claims indulged in by some manufacturers. Both the IIRS and the British National Coal Board test appliances to the same standard and the same standardising burning rate, which is considered to be realistic.

On reference to the published list "Approved Domestic Solid Fuel Appliances", it may be seen that the highest output to water that is shown for a 16" unit is less than 20,000 Btu/h and about 22,000 Btu/h for an 18" equivalent. The newer generation of open fire boilers with rectangular grates are shown to have maximum outputs of 24,000 Btu/h for the 16" units and 26,000 Btu/h for the 18" units. While the largest appliances may be relied upon to serve possibly six average-sized radiators, it is pointless to connect them to many more.

For similar reasons it may be a mistake to try to connect more than two boilers to the same system. The question is raised on fairly rare occasions; three boilers can sometimes be interconnected but expert advice is essential in such cases. Another case where advice may be needed is where two solid fuel

appliances are to be interlinked.

Pending further field experience, a Co-Link unit should not be used with a high level return system. There would seem to be no reason why it should not work well, provided the thermal centre of the Co-Link is a couple of feet below that of the cylinder, but there is simply insufficient field experience.

The Co-Link can be used with a cylinder connected via an underfloor gravity return although it is essential that the base of the cylinder should be not less than 1'6" above the Co-Link to reduce the risk of reversed circulation. When a Co-Link is used in this way, the return tapping on the top, which would normally take the return from the cylinder, is plugged.

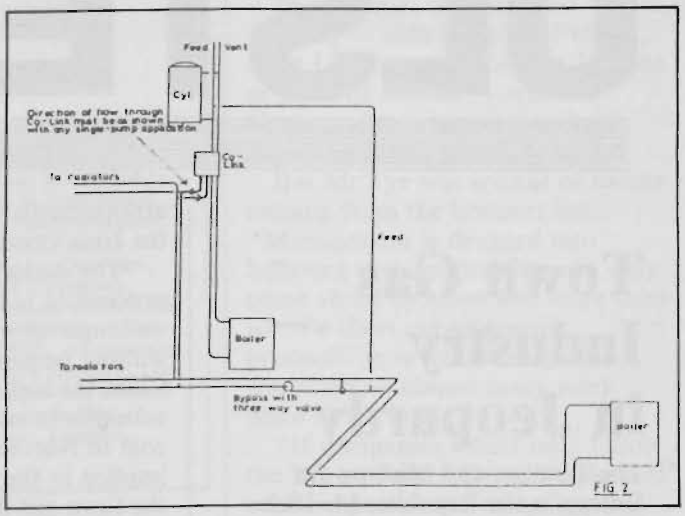
The flow and return from the boiler to the Co-Link and the flow from the Co-Link to the cylinder are connected in the normal manner, except of course that the flow may be taken to a vented point at high level before dropping to the cylinder. The return from the cylinder, which in common with the flow is laid and sized in accordance with standard accepted practice, is connected either to the lowest point of the return from the Co-Link to the boiler or, preferably, to a separate return tapping on the boiler.

During the course of research for this project it became evident that some demand existed for a system that could work at all times with a single pump. This is perfectly possible, provided that the pump is not situated at the end of a wastefully long pair of mains. A suitable arrangement is shown in **Figure 2.** A three-way valve, preferably motorised, directs flow through the automatically fired boiler or, alternatively, through a by-pass between the flow and return, isolating the boiler from the return pipework (though not the feed).

The cost of the valve and by-pass may equal or outweigh the relatively slight cost of the second pump but the choice is available.

The fairly small minority of one-pipe systems that are met with can be dealt with in a similar manner by providing a by-pass and a three-way valve. There is no need for a second pump in such cases. It is particularly important, in the case of a one-pipe system, to ensure that the load is not much in excess of the solid fuel boiler capacity. **See Figure 3.**

The lock-shield valve between the branches to the Co-Link ensures that a satisfactory circulation can take place through that unit. There will be no undesirable restriction to the radiator circulation since there is a parallel route, which is not severely restricted, via the Co-Link.

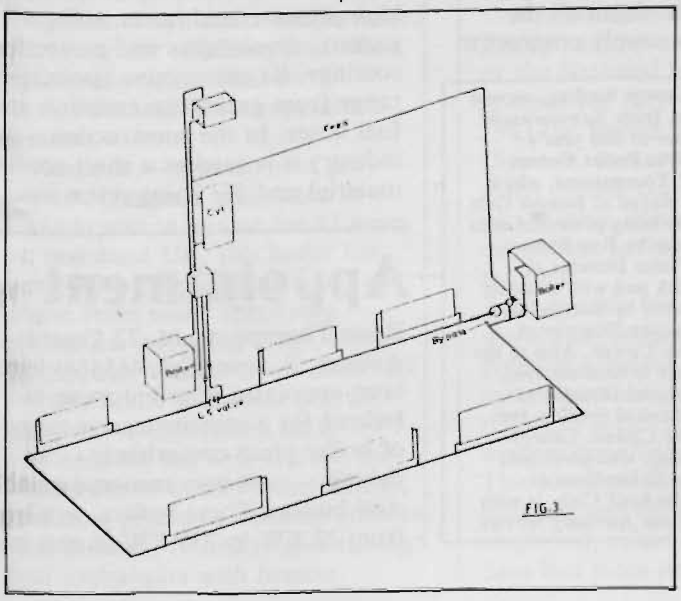


It will be noted that in the case illustrated in **Fig. 1** both pumps are on the return. It is occasionally argued that the flow circuit provides a better location for the pump.

On fairly rare occasions throughout the writer's quite long experience, problems with low-pressure boiling in heating pipework just below the water level have been solved by re-locating the pump on the flow. The Co-Link is not designed for a flow-mounted pump, in either pump position. Therefore, the rare instances of low pressure boiling must either be anticipated at the design stage or dealt with by raising the water level, or lowering the pipework.

There will inevitably be the occasional case where a little additional thought is still required. For example, where the existing boiler already serves an indirect cylinder, it is usually best to cut off these connections, possibly re-connect one of them for use as a cold feed, and re-use the same coil. Incidentally, experience with Hugh Maguire's system has shown that it is better and cheaper to join the two feeds well below the feed and expansion tank rather than take them separately from the tank. There will often be some slight degree of circulation through the two feeds but this is not important.

In conclusion it may be said that this work is offered as a further advance towards safety, economy and convenience in domestic heating practice. It was Hugh Maguire's work, and the enthusiasm and resources of Coal Information Services that made interlinking possible in the first place. It is to be hoped that this new development will make as great a contribution in future years as the original invention has already done.



ULSTER NEWS

Town Gas Industry in Jeopardy

The Tanaiste and Minister for Energy in the Republic, Mr Dick Spring, TD, has said that he regrets the announcement by Adam Butler that the UK Government has decided that the Northern Ireland gas project cannot go ahead and to withdraw financial suppoort from the town gas industry which will inevitably put the future of the industry and its substantial employment in jeopardy.

"The decision not to proceed" Mr Spring's statement continues, "has been taken on its own responsibility by the British Government as it has always been the position of the Irish Government that a supply would be provided on the terms agreed to by both parties in October, 1983, after full consideration of future prospects and taking account of risks and uncertainties. The agreement committed both parties to proceed expeditiously with the project and there was no provision for cancellation in the event of changes in energy markets or perspectives of the future.

"It is the view of the Irish Government that agreements entered into after due and careful consideration should be adhered to and this is the spirit in which these arrangements were approached by the Irish Government.

"The declared reason for not now proceeding is that the project could no longer be expected to be viable without ongoing public subsidy. Given the high level of ongoing subsidies in supplying electricity and coal to Northern Ireland and implicit in the imminent closure of the town gas industry, together with the other costs imposed on the community generally, it is far from certain that the total level of future public and private expenditure will be lower as a result of cancellation of the project.

"The press statement issued by the Northern Ireland Office is inaccurate insofar as it is alleged that the Irish Government sought a reconstruction of the pricing formula previously agreed in May, 1982. Unlike the October 1983 Agreement, this formula evolved as a result of verbal negotiations between Ministers, and subsequently two divergent views emerged as to how it should be implemented. After talks to resolve this problem had virtually broken down, the Irish Government put forward a compromise set of proposals which was the basis of the terms conclusively agreed in October 1983. It is this agreed formula which is now stated to be one of the main reasons for the decision to abandon the project.

"Mr Butler is also incorrect in describing the October 1983 Understanding as an agreement in principle. It went much further in that it specified in detail all the main terms for a supply contract to be entered into, and committed both Governments to implement the project expeditiously and in full."

● George Sterling, second right, from Newtownards winner of this year's Selkirk, Potter Cowan Golf Tournament, which was played at Bangor Golf Club, being presented with his cup by Ron Buttery, UK Sales Director of Selkirk and with a crystal decanter by Burton Allen, Managing Director of Potter Cowan. Also in the picture is Kenneth Jess, Divisional Director of Mechanical Services for Potter Cowan. George Sterling, who plays golf off a 12-handicap at Scrabo Golf Club, is with the Coal Advisory Service.

Du Pont's 'Hypalon' Plant on Stream

Du Pont (UK) Ltd's new manufacturing facility at its Maydown Works, near Derry in Northern Ireland, has begun production of "Hypalon" synthetic rubber. First deliveries from this European source were made earlier this year.

The Du Pont plant site in Northern Ireland has been in operation for 25 years and currently manufactures Neoprene synthetic rubber, "Lycra" elastane fibre as well as "Hypalon" chlorosulphonated polyethylene.

The new facility represents an investment of £40 million and employs some 200 persons out of a total workforce of 1100.

"Hypalon" has a wide range of end uses because of its resistance to heat, ozone, radiation, abrasion and weathering, as well as its unusually good colour stability. As a sheathing material it is used in covering offshore platform and nuclear power station cabling. In industry "Hypalon" is used in hydraulic and high pressure acid hoses, rolls, gaskets, diaphragms and protective coatings. Its automotive applications range from gaskets to emission and fuel hoses. In the construction industry it is used as a sheet roofing material and for lining reservoirs.

Appointment

Brian Thompson Ltd, 72 Central Avenue, Bangor (Tel: 465486) have been appointed distributors in N Ireland for a comprehensive range of boiler plant comprising: Ferroli — cast iron sectional and steel boilers: These boilers, available from 23 KW to 233 KW in cast iron

DOI: 10.21427/D7T401

● Receiving the prestigious British Safety Council 10 Year Award from Dr Douglas Latto, MB, ChB, DObst, MRCOG — Chairman, Board of Governors, British Safety Council, on behalf of Farrans is Bob Boyd, MBE, accompanied by his wife Florence. The presentation was made at the Grosvenor House, Park Lane, London.

and up to 4,792 KW in steel have proven to be very popular throughout Europe and on mainland UK. All boilers are available with either 'Nu-Way', 'Selectos' or 'Riello' oil or gas burners and the cast iron boilers are also available for atmospheric gas burning. The NLR unassembled boiler is particularly useful for locations where site assembly is necessary and the sections are light to carry, easily built and with good access for subsequent cleaning and maintenance.

CTC — steel multi-fuel and condensing boilers: This range of boilers is again well known and accepted throughout Europe, particularly in Scandinavia. They are available in the range 25KW to 4600KW and include models suited to burning oil, gas, peat, timber, coke etc. Of particular interest is the type 380 condensing boiler, at present a unique development with an operational efficiency around 99%! This is achieved by taking all useful heat from the flue gases, neutralising the resultant condensate and discharging safely to waste. The lower the return water temperature, the better the efficiency and this makes this boiler ideal for underfloor and low temperature systems.

Raypack — atmospheric gas boilers: Designed and tested in Canada and in service for 15 years on mainland UK, this boiler has achieved widespread approval and praise from many specifying authorities including DOE, PSA, DHSS, etc. Whilst the obvious fuel for this boiler is natural gas, an inexpensive conversion kit is available for use with L.P.G. the boilers are of quality construction, featuring precision titanium stainless steel burners, finned copper tubing, heat exchangers with bronze headers, a variety of automatic controls to suit each application and a fully insulated galvanised baked enamel casing. There is a range of 26 sizes from 29 KW to 880 KW and all at a competitive price.

Thirteen Safety Awards in a Row for Farrans

The Dunmurry-based firm of building and civil engineering contractors, Farrans (Construction) Ltd, have won a British Safety Council Award for 1983. This is the 14th consecutive year the company has won the Annual Award. This also qualifies the company to hold the prestigious 10 Year Award, which was introduced by the Council in 1980. This is an outstanding achievement. Farrans have now won an Award on 16 occasions since 1967.

At a banquet in London last Friday to honour the 1,049 winners of the National Industrial Safety Awards for their achievement in 1983 the British Safety Council Director, James Tye said "Too many British companies have Rip van Winkle Boards of Directors who cannot see savings staring them in the face."

To qualify for the award, famous worldwide as recognition of a planned accident prevention campaign, companies have to return recorded accidents lower than the average for their particular industry. This is based on a formula taking into account the number of workers employed, related to the number of days lost from personal accidents.

The banquet at Grosvenor House, London — with Baroness Phillips, Lord Lieutenant of Greater London as guest of honour — was the biggest safety banquet ever held anywhere in the world.

But Mr Tye was critical of names missing from the honours list. "Management is drugged into believing that profitability can only come about by more and more sales when a short cut to greater productivity is written in giant letters above almost every work place in the land.

"If companies would only follow the British Safety Council's planned accident prevention campaign they would slash accidents to both personnel and plant with a subsequent leap in productivity and therefore profits. It is high time for shareholders to wake up the sleeping Rip van Winkles on boards of directors and replace them by men and women with 20th century management techniques."

Briefly. . .

Greaves Air Distribution manufacturers of the Titus range of air distribution products have appointed Associate Eng Ltd of Belfast as their NI agents. Mr Bob Moore of Associate Eng can be contacted at Belfast 793579.

IES Industrial (Ireland) Ltd, 21 Station Street, Belfast, have been appointed all Ireland agents and distributors for the Talisman range of hot water and steam boilers. Full details will appear in next months news.

Interest continues in the possible choice of Belfast as one of the UK centres for a CHP scheme. The NI Economic Council through their research officer Mr P McDonagh have shown enthusiasm for the scheme and have been encouraging both the Government and private industry to become more active. A consortium has now been formed and guaranteed sufficient funds towards the cost of preparing a prospectus for the introduction of CHP to Belfast. The consortium comprises Belfast City Council, Fairclough (Scotland), Harland & Wolff, NEI, Preso Construction. Ulster Investment Bank, Utilicon, and NIES. The group is led by Professor Bernard Crossland of Queens University and the Economic Council.

ANOTHER SIDE OF...

JIM McFADDEN

What's the connection between Jim McFadden of Sermet Ltd and "Prince Carlo"? Well, for those of you who know something about musicals and light opera, the answer is obvious. Jim has an excellent light baritone voice that he has put to good use in the Lisnagarvey Operatic and Dramatic Society.

Jim's roots in the heating business go back to the days of Musgraves in Belfast and he has had associations with such names as Gamble Simms, Crane and Henry R Ayton. In October 1975 he set up Sermit Ltd with agencies for heating and ventilating equipment and also in steel supplies.

At present Sermet hold the key agencies of Biddle, Beeston, IMI Rycroft and Armstrong Pumps which are, without doubt, some of the top names in the industry today. Jim's musical roots, although not directly in opera, were there all the same, as his father played in a brass band — "a good background for good music", he says. Jim first began singing with the local Church where he especially enjoyed hymns and from there through to the Church Drama group and finally to opera and the Lisnagarvey Operatic and Dramatic Society.

Early shows that Jim remembers taking part in include Prince Carlo and the Quaker Girl. He was only a few years in the Society when he took lead parts like Curley in Oklahoma.

Although singing came naturally to Jim, he also realised that some training would not go astray and this training set the foundation for a long and successful career in operettas, musicals and musical comedies.

Apart from Lisnagarvey Jim has played with the New Lyric and the Ulster operatic societies and is well known in musical circles from Waterford to Bangor. Mentioning these latter two towns is important as they are the two main centres of light opera in Ireland and are internationally known for their yearly festivals. Jim has done best in Bangor where he has won a number of awards, including best comedian and runner up for best actor.

Up to recently Jim has played with Lisnagarvey and the New Lyric as their seasons' did not clash but changes recently took place which make the two groups stagings to come together. So Jim has taken a brief rest from singing to let things settle down again.

According to Jim support from local people is still great for the well-known musicals but if you try anything unknown it could be very difficult to fill the hall. So the big musicals still packs them in, even if they have seen it several times before.

As a reminder of all those shows Jim is currently putting together his collection of programmes, pictures, recordings and other mementos and we have published some of them with this article.

It is fair to say that while Jim is primarily not known in the heating industry for business reasons, most of his customers also know of Jim's great love for singing as on many occasions he has sold them tickets to his latest musical as well.

Getting back to the services industry for a moment, Jim and his partner have recently set up Advanced Water Treatment Ltd — a company which is actually manufacturing products for the water treatment market.

So, we can look forward to a "good performance" from Jim on and off the stage for years to come.

Showing the Way

At a time when many are content to sit back on their laurels and blame their problems on the recession and make other similar excuses for their difficulties, at least some companies are prepared to take a more positive approach. Hence the excellent attitude, and indeed example, of Joe Noone of Service Merchants and Gerry Cross of Gerkross who are responsible for co-ordinating a series of trade shows at various venues throughout the country. The first one kicked off with a formal opening by the Minister for the Environment, Liam Kavanagh, TD, at Embankment City, Tallaght, Co Dublin. Our photographer was also present and caught the following groups at the various stands.

● SERVICE MERCHANTS: Derek Prendergast with Anne Mullen, John Whelan and Joe Noone, all of Service Merchants.

● GERKROSS BOILERS: Tom Dunbar, Newcastle, Co Dublin with Charlie Flynn and Gerry Fearon, Dundalk; Gerry Cross and Jim Daly, Gerkross; and Michael O'Donnell, Dundalk.

● MYSON: Kieran McDermott, Myson, with George Glanville.

● COPPERCRAFT: Victor Madigan with Gerry Cross of Gerkross.

● WILO PUMPS: Martin Power and Bernie Cray, Dublin with Tony Cusack, Wilo.

● LAMARTINE: Dominic Spillane, F & T Buckley with Frank Martina; Bernard Doherty, T & T Buckley; and Tony Wright.

https://arrow.tudublin.ie/bsn/vol23/iss9/1
DOI: 10.21427/D7T401

Are We Keeping Pace with Technological Advancements

Without doubt the greatest advances made in the management of building services have come with the introduction of computers and electronic controls and instruments. The latter two subjects have been covered in previous articles, so for this special feature issue it is timely that we look at central control and monitoring and how it fits into the wider field of building automation.

The thinking behind such systems is to optimise the running of building services and increase their reliability, thus cutting down of maintenance and energy costs. By having a central control it is possible to have readings of all the functions of the system, making it far easier to see faults or even potential trouble spots.

With most of the new automated control systems it is possible to programme the system to take action to cut down on possible damage to equipment and even in some cases minimise on the changes which can occur in the environment of a building. Apart from the built-in safeguards, the very idea of having all information on the system at the operators fingertips, and thereby control, is a remarkable advantage over the older control systems where every fault had to be checked in situ.

Real savings with central control systems come from the self checking programmes which can even check on the operator. This is done by the controlling computer asking the questions and the operator answering.

Other major areas of saving include the checking of faults and warnings when maintenance should be undertaken. These two functions assist greatly in the planning of maintenance crews' routines and can even have maintenance warning signs on equipment that is not directly connected to the system.

From the operator's point of view one of the greatest advantages with computer controlled systems is that changes can be made to the programmes so that if changes occur in the design of the system, or even operational requirements, the operator can re-write the software to suit the revised conditions.

For the moment, most of the application areas for central control systems are in large buildings but it is not uncommon for home computer users to have their own programme for the central heating in their home. Where the home computer is left behind is the sheer number of monitoring points that can be connected to a large system.

Finally, with all this very important and useful equipment, it is vital that only trained operators can gain access. Various security systems can be used but the most common form is the ID card with codes to allow different operators access to different levels of control.

Overall then, it can be seen that instruments and controls have undergone dramatic changes in the past couple of years. The technology available to manufacturers has been fully taken advantage of.

However, the burning question that remains is — How well has the industry itself adapted to cope with these advancements? There is a very real danger that installers and other industry personnel have not kept abreast with the technology developments which have taken place. Manufacturers owe it to the industry to diseminate as much information as possible by way of seminars and talk-ins as and when they introduce major developments.

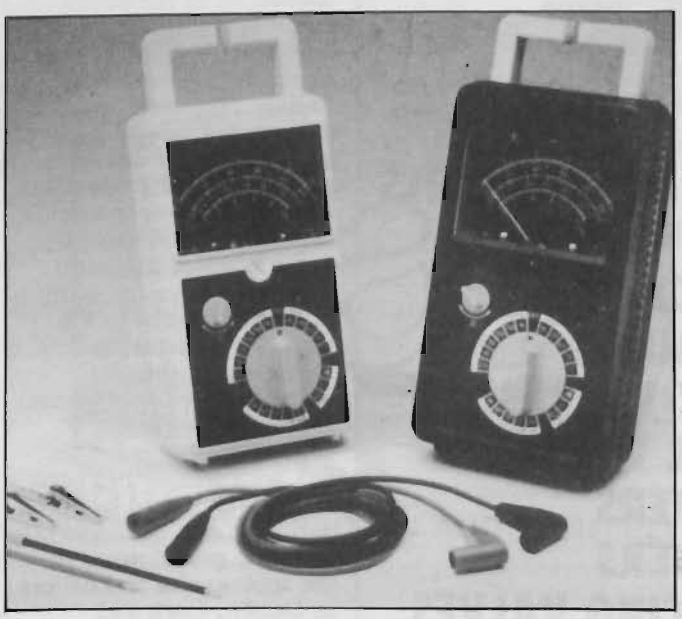
Alpha Offer Complete Package

Alpha Controls have been market leaders in the building services control industry for many years with involvement in a large number of projects of major significance in Northern Ireland. The services offered range from design, equipment selection, installation and commissioning as well as the manufacture of control panels and motor control centres to a very high standard.

All building services projects require some form of control, some very basic and others very complex systems involving temperature, humidity and pressure, all to be controlled within fine tolerances. Alpha Controls have considerable expertise in the problems with environmental control and can offer design and application advice and, most importantly, provide the right equipment to fulfill the project requirements.

More building services projects are being designed with energy conservation as a main objective and correct control is often the key to the success or otherwise of a scheme. Alpha Controls have very broad experience in the methods of control for energy conservation and can guide the way to equipment selection and application from the wide range at their disposal.

Control panels come in many forms and in this area Alpha Controls have developed a superior product generally accepted in the industry as the highest standard available. Approved by most public and private specifying authorities, Alpha Controls have continued to



● Industrial Instruments Ltd have a vast range of appliances and equipment covering every aspect of electrical test and measuring devices to meet every need of the professional engineer. Included are analogue and digital multimeters; transistor testers; vehicle test kits; clampmeters; AC/DC leakage breakdown testers; low cost multimeters; and lightmeters. Details from Eoin O'Riain, Industrial Instruments Ltd, 6 Herbert Place, Dublin 2, (Tel: 761953); Telex: 24789.

maintain the superior standard only by using good quality materials and components, high quality engineering and experienced labour. Reliability is a built-in feature and this is achieved with no premium to be paid by high maintenance costs.

Alpha Controls offer a complete controls package to the building services engineers including the efficient commissioning and hand-over of an operational system. The engineer and the client can be confident that the Alpha Controls package is right for the project and will continue to provide the best performance for years to come.

For further details contact agents for both Northern Ireland the Republic: Alpha Controls, 57 Fitzroy Avenue, Belfast BT7 1HT (Tel: Belfast 230233).

● Drayton Theta II Optimiser ES4, the intelligent temperature related timing and monitoring system for environmental heating. Details from CHS (Ireland) and IES Industrial (Ireland).

Drayton Theta II

A new addition joins the Theta II range of look-alike black box controllers — now seven in number — from the Drayton stable.

The newcomer is the Drayton Theta II Optimiser ES4, dubbed the "intelligent timer" because of its ability to vary boiler start-up (and shut-down) relative to sensed temperature.

Unlike some optimum start controllers, the Theta II Optimiser provides for separate programming on each day of the week. It is settable every hour and has 72 hours battery back-up for its quartz analogue clock.

Apart from the normal features expected of an optimum start controller, such as biased response for differing types of building structure and an 8-hour maximum pre-heat search period, the Theta II Optimiser offers the option of day economy override of a heating system's normal daytime temperature controls.

This utilises an outdoor detector in addition to the normal indoor detector, to determine if continued heating is likely to be needed. It is therefore able to anticipate the action of the normal daytime controls and switch the plant off earlier than would otherwise be the case.

The Drayton Theta II Optimiser also has built-in frost protection facilities, a remote switchable extension timer and a 'holiday switch' function which allows the controller to be reset to "off with frost protection" for works shut-down or holiday periods.

Details from CHS (Ireland) Ltd, Stillorgan Industrial Park, Stillorgan, Co Dublin and IES Industrial (Ireland) Ltd, 21 Station Street, Belfast BT3 9DA.

Jeavons — The Gas Regulator Specialists

Jeavons Engineering have specialised in the design and manufacture of gas regulators in the UK and world markets since the 1930's. They have by their designs and service achieved a position whereby they are now the largest UK manufacturer of domestic, commercial and industrial regulators.

Jeavons have for many years contributed to the Irish gas industry and today supply the equipment bringing natural gas to the people and industry of Ireland. This link with Ireland has been further reinforced by there partnership with Hevac Limited, providing an on the spot service and offices in Dublin, Cork and Belfast.

On conversion to natural gas, Jeavons specialises in the manufacture of the meter governors obtaining a large share of the conversion market with their type J88 and J77A units. Regarding commercial and industrial metering and the specialised requirements of commercial and industrial boilers the Jeavons J48 range of regulators is perhaps the most successful in the UK today.

Regarding gas distribution systems, Jeavons have been a major supplier of regulators and controls for this market for many years and in particular has built up today a reputation for quality and reliability with their J98 slam shut valve and J81 regulator and their specialised capability for fabrication of packaged governor modules.

The recently introduced J123 and J125 have kept Jeavons in the forefront of regulator technology. The J123 available in 50mm

https://arrow.tudublin.ie/bsn/vol23/iss9/1
DOI: 10.21427/D7T401

and 80mm sizes, is a single valve high capacity distribution regulator, of module construction for ease of maintenance suitable for inlet pressures up to 7 bar.

The J125 is a high pressure service regulator available with full bore relief, overpressure slam shut and underpressure slam shut, suitable for inlet pressures up to .9 bar. It has been designed to be particularly suitable as a domestic service regulator for international medium pressure distribution systems.

Jeavons have been based at Tipton for the past fifty years and have over time developed a very stable skilled workforce and staff that have proved their ability with the reliable production of good quality products and are well equipped to deal with technical enquiries from world markets.

For further information contact Hevac Ltd at telephone no: (01) 519411 and telex no. 30324.

Manotherm Can Meet Virtually Any Requirement

Manotherm Ltd, one of Ireland's oldest and probably best known suppliers of instrumentation, are agents and stockists for many well known test and process indicators, controllers and recorders. Best known is probably Platon, whose range of gapmeters, variable area flowmeters and flow controllers are market leaders in Europe particularly in the low flow ranges.

Manotherm are also Rustrak and West Agents in Co Dublin. Rustrak recorders are possibly the most popular small recorders in the world, being fitted as standard equipment in hospitals, energy monitoring and in all types of applications. They are used to record temperature, pressure, humidity events, AC, DC, KW, Volts, flow, PH, conductivity — virtually all parameters.

West temperature and process instruments are renowned as precise controllers for ovens, retort and general lab applications — the new Opus range of microprocessor controller is a world leader and a major advance in fine control.

Rueger precision thermometers of Switzerland manufacture a fine Bi-Metal thermometer'-Stem length of 60mm and diameters of 4mm are quite unique to Rueger, and with their new nitrogen filled linear scale thermometer, where with ranges of -270 and +800degC are possible, they can be used in the food and healthcare industry where very often mercury is unacceptable.

Environmental conditions in many industries in Ireland these days are strictly controlled. Dwyer Instruments of Michigan are manufacturers of high quality low pressure instruments used to indicate and control filter conditions, air velocity, air flow and air conditioning monitoring.

Penn Controls, a division of the giant Johnson Controls Company make thermostats, pressure, flow, level and humidity controls and are very highly regarded for their consistant quality and long life.

Details from Manotherm Ltd, 4 Walkinstown Road, Dublin 12, (Tel: 522355); Telex: 24467.

● Manotherm will also be showing on Stand 19 at the forthcoming Gas Ireland '84 Exhibition in the Burlington Hotel later this month.

Sauter Goes to Reconair

Heating and ventilation and airconditioning systems are prime targets for the energy efficient design in new buildings and reduction of energy use in existing premises. The key to efficient operation of HVAC systems lies with the automation temperature control sytems that determine how much energy is used to maintain desired conditions.

Because of the demand for energy conservation the traditional pneumatic and electronic technologies were no longer capable of meeting the exacting demands for efficient performance. Aided by the technological advances made in electronics, manufacturers have in the last few years begun to incorporate the new technologies in their controls.

Prior to this all that could be said about a controller was, is it a proportional (P) controller or proportional plus integral (P&I) controller. Nowadays the jargon is, does it use direct digital control (DDC)? is it compatible with building automation systems (BAS)? is it self-learning, self-adaptive? has it distributed intelegence? stand alone capabilities? etc.

Sauter Automation, one of Europe's leading controls manufacturers, have been to the forefront in using the latest electronic techniques producing such items as the Memotime electronic timeclock, ECOS 800 system, Micos DDC system, Flexotron 2000 system, M100 optimiser/compensator, and the EY2400 building automation system.

The Memotime is an hourly, daily and weekly time switch, accurate to the second with 24 memory addresses and allowing 168 switching points. Rechargable batteries give 48 hours running reserve in case of power failure. It comes currently as a single channel or 4 channel model and shortly a 2 channel model will be introduced.

The principle of plug in cards is widely used in electronics engineering. It can also be applied to building services controls as is demonstrated by the Flexotron 2000 series which can be used for temperature and humidity control on all types of installations. Even with the most complex of control system the wiring is very simple.

Why preheat a whole building according to the coldest part of it? But this is in fact what is done. Large schools have rooms preheated when they are not occupied. The ECOS 800 can prevent this by providing optimum time start control for each room in the school. Once the timetable has been arranged the system can be programmed and forgotten until the timetable changes. From a central location, say, the head master's office, temperatures can be checked and adjusted as required from one central unit.

Optimum start/stop control is one of the most common functions utilised in the HVAC industry. Controlled limiting of plant operation in line with ambient conditions, inside temperatures, plant capacity and building characteristics has proved a valuable energy saving facility and a natural application for micro-processors. The Sauter M100 is a microprocessor based fully self adaptive optimiser combined with a fully adaptive compensator for use in commercial and industrial premises. The M100 offers an accurate control of energy as well as giving visual indication of plant status.

A single Micos system controls a multiple number of control loops. Using the most advanced electronic technology it guarantees accurate control without overshooting of the controlled variable. The system offers many advantages. Simple input procedures mean only a knowledge of commissioning of conventional single controllers is necessary. Display of all control parameters such as actual valves, set valves, actuating variables and loop assignment. Push buttons are provided for control and display functions, no separate programming unit required.

A digital printer can be connected to the Micos by means of a standard TTY connection. Failures and limit alarms are recorded in the sequence of their occurances and this can be of great assistance when analysing any problems with the plant.

The most sophisticated level of control is, of course, the Building Management System (BMS) based on a computer. Such systems are typified by Sauter's EY 2400 system.

Some of the highlights of the Sauter EY2400 system are (a) colour graphic display with actual plant valves, (b) simple logical dialogue, easy operation (c) Unlimited clear text provides precise alarm to service instructions (d) Latest technology semi-conductor components, service free modular data memory. (e) Micro-processor controlled substations, decentralised intelligence. (f) Standard interface for heating, airconditioning, ventilation controllers and DDC. (g) Mathematical calculation package and historical data bank, provides simple solution of complicated tasks.

Further details from Tom Rourke, Manager, Reconair (ACS) Ltd, Automatic Control Systems, Unit 4a, Coolock Industrial Estate, Dublin 5, (Tel: 470611); Telex: 31356.

Honeywell Time Sundial Plan

The Honeywell Timed Sundial Plan product range includes a number of important units, not least of which is the ST699 microelectronic time controller.

The ST699 provides accurate timing and automatic switching of the on/off periods for the whole system which includes four optional extras — a radiator valve, automatic air vent, differential pressure dry-pass, and a frost thermostat.

Also incorporated within the Sundial Plan is a roomstat, a cylinder stat, a junction box and two motorised zone valves.

Details from C&F Ltd, Unit G7, Chapelizod Industrial Estate, Chapelizod, Dublin 20, (Tel: 264650).

BM — The Name in Automation and Safety

Campbell & Cooke Ltd are main stockists for BM automatic heating controls in the Republic of Ireland. Purposeful designs and highly developed techniques have made BM a world name within the automatic controls for heating purposes field. Through BM's quality products the idea of heating has been enriched with two essential advantages, ie automation and safety.

The main part of BM's production is exported, which proves the international stove manufacturers' confidence in BM's quality inspection and willingness to meet

individual demands in the various countries. Development at BM continues in the same manner which has characterised the production ever since the foundation of the company: Quality in every detail.

The BM oil control valve Type 30 is widely used throughout the country. This control provides a constant level of oil. The BM 30A can also be used in situations where there exists in excess of 3 metres head of oil at the oil control valve on the appliance so as to break the head pressure. The BM constant level valve has a highly sensitive float mechanism and a safety system so that if the level of oil rises in the valve the float operates the trip-out arm.

The BM oil lifter Type 346 and 347 is available with service tanks of approximately 3 and 12 litres respectively. The BM oil lifter automatically lifts oil from a storage tank. This enables oil fired appliances installed on the first and second floor to be served from the main tank without the need for a day storage tank. The rotary pump driven by an electric motor via the pump drive sucks the oil through a fine mesh filter and a non-return valve into the lifter body.

The rising oil lifts the floats which are attached to the float shaft. When the maximum oil level is reached in the lifter body, the floats operate the micro-switch in the switch-housing and cuts off the electrical supply to the motor. As the oil is used through the outlet, the oil level falls so that the floats operate the micro-switch which starts the motor again. Should the level drop very rapidly the motor will stop as the floats will then be in the low level safety position with the micro-switch in the off position.

As additional security the BM oil lifter has two separate switching systems. If the floats on the micro-switch fail to cut off the motor when the maximum oil level is reached within the lifter body, the safety float operates a second micro-switch in the switch-housing and interrupts the electrical supply to the motor. This safety mechanism must be manually re-set before the motor can start again.

The BM 90 multifunctional tank gauge is a unit incorporating a tank oil level indicator, an isolating valve, a fire safety device and an oil filter. The oil level indicator is a pliable sight tube supported and protected along its entire length and is available in different lengths. The isolating valve controls the oil flow from the tank to the heating appliance is spring loaded in the open position against a thermal fuse set to actuate at a temperature of 70°C. The oil filter element is suitable for use on kerosene and gas oil for flow rates of up to 5 gph and provides a 5-10 micron degree of filtration.

The BM80 and 81 fire safety valves have fusible hand wheels fitted which when in open positions are under spring tension. If the valve temperature reaches approximately 70°C, the fused part of the hand wheel melts and the unit closes.

Other BM controls are BM oil filters, BM pressure reducing valves and the Braun oil meter which measures oil consumption.

For further information please contact A J Cooke, Campbell & Cooke Ltd, 16 Rutland Place, off Parnell Square, Dublin 1, (Tel: 786099).

Meter from Kane-May Can Double Up as a Thermometer

Kane May Ltd introduce the KM8004 humidity/temperature meter. The KM8004 complements their range of humidity meters and thermometers providing both temperature readings. The KM8004 is self-contained, battery powered and pre-calibrated, and does away with the need for experienced interpretation of results.

Humidity response is virtually instant with the capacitive sensing element giving humidity readings within seconds. The thermocouple sensor also provides virtually instantaneous readings, and makes this instrument very versatile.

The KM8004 measures humidity from 0% to 97% and temperature from 0 degrees centigrade to 70 degrees centigrade with accuracy of plus or minus 2 per cent RH and plus or minus 1 degrees Centigrade. Battery life is up to 50 hours intermittent use, and a low battery warning sign is automatically displayed.

The KM8004 also has the facility to be used as a thermometer, and is compatible with Kane May's range of 40 standard thermocouple probes. When operating as a thermometer, its temperature range is minus 30 degree C to plus 450 decrees C.

Humidity and temperature measurement can be critical in many storage and industrial processes such as the cool chain for fruit and vegetable growers, mushroom growers, agricultural technical advisors, paper or grain storage, bakeries, pharmaceutical companies, metal finishing industries and architects, and the costs saved from correct storage are often substantial.

● Easier measurement of airflow velocity volume and temperature is the promise of the latest hand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Products

held electronic instrument from Kane May.

Called the KM4001, it's a digital airflow meter which incorporates a microprocessor. This enables it to store several hundred readings of airflow rates and then instantly, at the touch of a button, display the average value.

Obtaining a velocity reading consists of simply placing the probe in a duct and switching on. Flow rates from 0.3 to 20 metres per second are displayed automatically with a 0.5 second response, and plus or minus 4 per cent accuracy.

If rates are required in feet per minute, a change button is pressed, giving readings from 20 to 4000 feet per minute.

The standard probe supplied with the KM 4001 can also be used to measure temperature from minus 40 to plus 120 degrees C.

The Kane May KM 4001 airflow meter measures 70 x 100 x 120 mm, weighs 700 grams, and is supplied complete with probe and rechargeable Ni-Cad batteries, giving four hours continuous power. A mains battery charger is also supplied.

A low priced digital thermometer which can simultaneously measure two temperatures 12 feet apart then automatically display the difference between them has also been introduced by Kane May.

Alternatively, the new instrument can be used as an ordinary hand held the thermometer simply by unplugging one of its two probes.

New wrap-around sensors are also available.

Further details from Wyse & Ballentine Ltd, 17 Ulster Street, Dublin 7, (Tel: 307070).

DANFOSS — ELECTRIC ZONE VALVES

Danfoss produce a wide range of on/off electric zone valves in both two-port and three-port versions. These valves can be combined with time clock, cylinder thermostats or room thermostats, also from the Danfoss range, to meet most zone valve requirements in both domestic and commercial systems.

ABV-VMT — Two-port valve: The VMT is a low cost two-port seated valve based on the well proven RAV radiator thermostat valve body. Two versions of the valves are available, one for pumped systems, type VMT-/8, another for gravity systems type VMT-/2.

The ABV is a thermal-hydraulic actuator having spring return function which combined with VMT, 240v and 24v versions are available in both spring open or spring closed forms. Sizes available from 15 to 28mm, with copper compression connections.

ABV-VMV — Three-port valve: The ABV-VMV is a small gunmetal three-port mixing valve with thermal-hydraulic actuator. The valve can be used for on/off diverting application, the valve body being mounted on the return pipework. The ABV actuator is available in 240v and 24v versions, normally opening the valve bypass when power is removed from the actuator. Sizes available from ½" to 1½" BSP.

AMB 123 — HRE — Three-port valves: The AMB 123-HRE is a low cost three-port mixing valve with on/off reversing gear motor. The valve can be used for on/off diverting applications, the valve being mounted in the return pipework. The AMB 123 actuator is available in 240v and 24v versions. Sizes available from ¾" to 2" BSP.

For further technical details and up to date catalogues contact J J Sampson & Son Ltd, 71 Cherry Orchard Industrial Estate, Ballyfermot Road, Dublin 10 (Tel: 268111); Telex: 92219.

Product Review: INSULATION

It Pays to Do a Little Homework

With the ever increasing conciousness of insulation in buildings for both thermal and sound purposes, it is sometimes possible to forget that it is not only the building that should be insulated — the pipes, tanks and heat generators also require a high degree of insulation if they are to do their jobs properly.

Taking pipes as an example, within any given building energy can be saved with efficient pipe insulation, thus keeping running costs down but also making the heating system easier to control by maintaining water temperatures at the required levels.

Other considerations are protection from freezing and, in the case of steam pipes, heavy condensing is also reduced. While on the subject of steam, and indeed high temperature hot water, pipe insulation can keep the occupants and indeed the building itself safer, by reducing surface temperatures.

When we are looking for suitable pipe insulation materials there are a number of properties which are desirable in insulation. Firstly, the material should conform to fire safety regulations, especially in the area of smoke and noxious gases. The insulation should be moisture resistant, especially in areas that are prone to water penetration or condensation.

Insulating the pipes should be as simple as possible to cut down on fitting costs while in the case of high temperature liquids it is vital that the insulation material itself will withstand the working temperatures.

For value-for-money insulation the material chosen should be that insulant which shows the largest R-value per unit cost, that is the highest R value/£. The R value can be worked out once the k value and the thickness of the material is known.

Deciding the best type of insulation is only half the battle as the next step is to look at the economic thickness of the insulation much as you would look at roof insulation. If we look at the various thicknesses of insulation we are probably going to use, with the installation cost in £s per metre of installed insulation, together with the heat loss cost giving us a total cost in £s per metre, we should use the insulation giving us the minimum total cost.

In the case of storage tanks there are even greater reasons for insulating, especially if the tank is open, as evaporation can account for major losses from the system. So, wherever possible all open tanks should be covered by a lid, preferably an insulated one, or an alternative is the use of a layer of floating plastic balls which can handle a wide range of hot liquids.

While on the subject of materials it is worthwhile at this point to list the various materials used for insulation and their temperature limits.

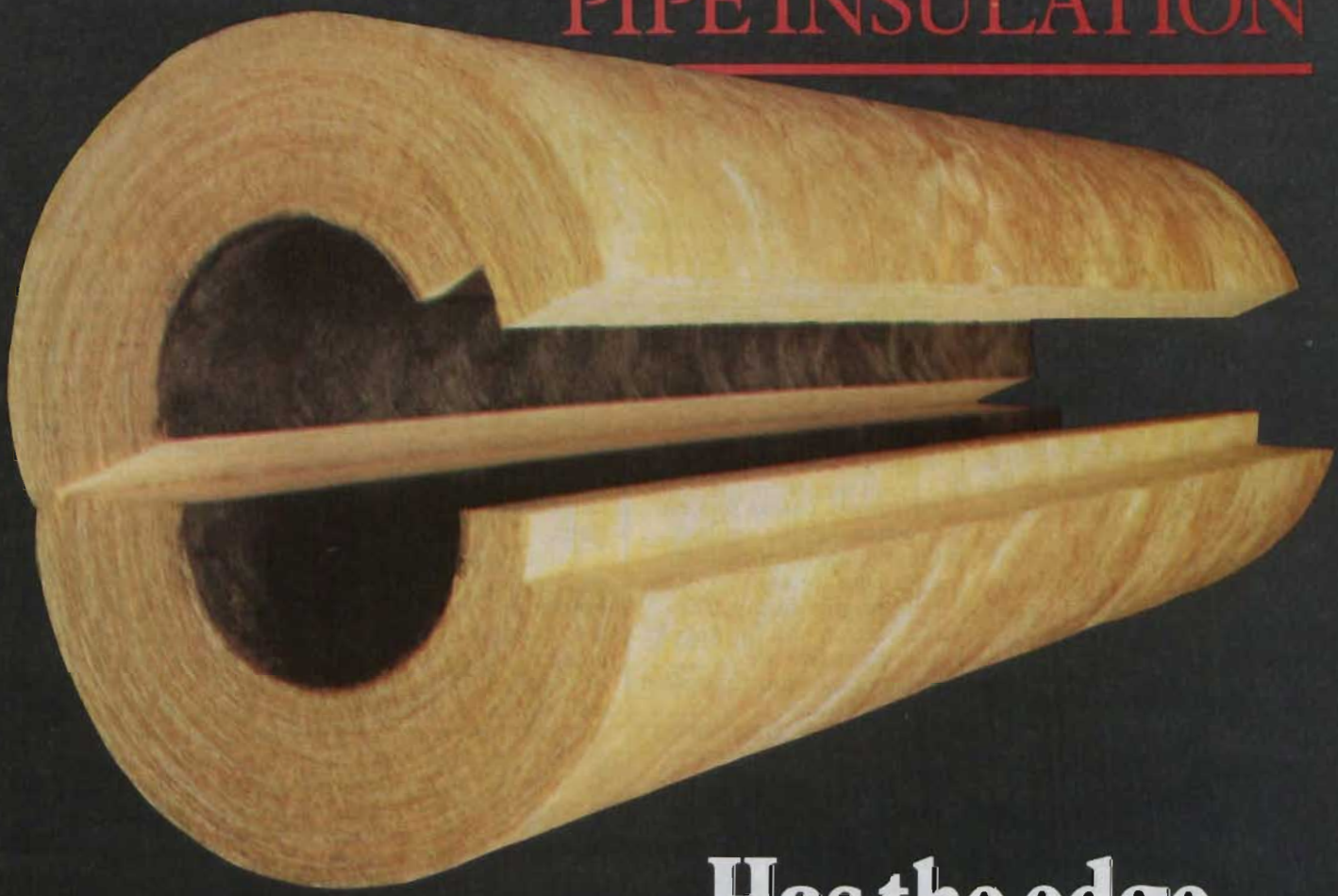
Below 95°C commonly used materials are: glass fibre, polystyrene; mineral wool; cellular glass; polyurethane; urea formaldehyde; polyethylene and vermiculite.

95° to 650°C: perlite; calcium silicate; cellular glass; magnesia compounds; vermiculite, mineral wool and aluminium foil.

As can be seen, the choice of insulating materials is quite extensive. Anyone can simply opt for the most obvious or convenient at the time and

DOI: 10.21427/D7T401

CROWN
PIPE INSULATION



Has the edge over all other lagging.

To appreciate our belief that the new Crown Pipe Insulation is superior to any other alternative, you'll need the latest Fibreglass brochure. You can then see the unique heat-conserving Z-lock joint on the opening edge of the thicker walls.

And examine full-colour photographs that show how long glass fibres are finely interwoven to combine a high tear strength with a density which resists compression.

And read about the hundreds of sizes available – each of which will comfortably insulate temperatures as high as 540°C.

The latest Fibreglass brochure, will give you the proof you need to share our belief that Crown Pipe Insulation is the most advanced pipe insulation ever produced.

Please send for it.

Or if you really want to be convinced, ask Maura Kirby at our Dublin office for a free sample.

Fibreglass

the best way to say insulation

Fibreglass Limited, 21 Merrion Square North, Dublin 2. Telephone: Dublin 767060 and 762395.

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simply leave it at that. However, with a little dedication and the proper consideration of each individual situation, the competent installer/specifier can make his own life a lot simpler and reduce the client's energy expenses at the same time.

● When a cavity wall is exposed to driving rain, it is not unknown for the inside surface to the external leaf to be running with rainwater. Using Wallmate CW extruded polystyrene foam insulation boards from Dow Chemical it is possible to ensure that this water does not reach the inner leaf. The rigidity and dimensional stability of Wallmate CW mean that it can be fixed to the inner leaf, leaving a clear air gap between the insulating layer and the outside wall. Together with the Wallmate board's high resistance to water pick-up (only 0.2% by volume after 28 days total immersion), this gap means that the inner leaf of the cavity is protected from the rain penetration. Wallmate CW is a member of the Styrofoam Plan which includes specifications for the complete range of Styrofoam extruded polystyrene foam products and recommends and justifies grades to be used in any application whether in roofs, walls, floors, or perimeter insulation. For further information on Wallmate CW and details on its proper use, installation, properties and fire characteristics, contact The Dow Chemical Company.

Insul-Tube has Unique Production

One of the fastest growing products in demand by the UK's thermal and acoustic industry is Insul-Tube, manufactured by Kenmore Refrigeration Equipment (UK) Ltd at the most modern plant of its type in the world.

Insul-Tube, a Class I closed cell PVC/Nitrile rubber insulation tube is ideal for keeping materials hot, cold or free from condensation. In addition to its UK popularity, it has a growing overseas market, particularly in Europe and the Middle East.

Available in wall thicknesses from 6-25mm, with inside diameters of 6-114mm and a temperature range of -75°C to 116°C, Insul-Tube is ideal for metric or standard copper and iron pipes. It is resistant to weathering, ozone, oil, grease, liquid fuels, alkalis and acids. Clean, flexible and easy to install, it can be slipped over the pipe before assembly or slit for retro-fitting.

Accessories include Insul-Tape, and 2m x 0.5m Insul-Sheet for tanks and large pipes.

As a result of a £1 million investment and 2,790 sq m factory extension in 1980, the insulant is now manufactured in Crook, Co Durham in the world's most modern plant of its kind. New product lines incorporate a unique microwave curing process which makes the insulant the only product with an even cure throughout. This process also ensures that the correct wall thicknesses and diameters are maintained within specified tolerance limits.

For further information contact Northern Ireland agents McGregor Manning Ltd, Connswater Industrial Estate, Belfast BT5 5AN (Tel: Belfast 731816) and agents for the Republic: CHS (Ireland) Ltd, Stillorgan Industrial Park, Stillorgan, Co. Dublin, (Tel: 952326).

Crown from Fibreglass

The Fibreglass range of pipe, ductwork and plant insulation products is long established, and has been proven in use in large and small installations over many years. Fibreglass Ltd is part of the Pilkington group, the world's leading glass manufacturer, and the heating and ventilating insulation products have been subject to searching tests at the Pilkington group research and development laboratories.

The range of factory engineered products includes Crown pipe insulation, flexible and rigid duct insulation, the popular sonic liner and the range of Fibreglass Crown slabs.

Crown pipe insulation is supplied in rigid, pre-formed sections which are available in all popular copper and steel sizes up to 610mm OD x 10mm wall thickness, and are designed for use at temperatures up to 540 deg C. Crown pipe insulation is available either plain or with two factory applied finishes, class "O" which is a strong, white lacquered, aluminium foil/kraft laminate, or with white cotton canvas. A unique advantage on the most commonsizes of Crown pipe insulation is the heat-saving Z-lock interlocking, longitudinal joint which has been shown through thermo-graphic photography to give considerable heat saving over a nominal butt joint.

Flexible duct insulation is available unfaced or faced with class "O" facing, or with grey PVC film, or with glass reinforced aluminium foil/kraft laminate. Class "O" has excellent fire performance, a clean and attractive surface and excellent vapour sealing properties.

Rigid duct insulation is for the thermal insulation rectangular air conditioning, warm air and extract ducts and in combination with usable cladding provides a very good basis for noise breakout treatment of ductwork. It is supplied unfaced or faced with class "O" or glass reinforced aluminium foil/kraft laminate.

Sonic liner is a matt of strong resilient glass fibres faced with an extremely tough, dimensionally stable, woven glass cloth which provides an attractive sound absorbing surface, free from fibre erosion. It is used for sound absorption in air handling equipment and duct systems, and also for the sound absorption treatment of walls, ceilings, enclosures etc.

The Fibreglass range of Crown slabs offers a unique combination of lightness and strength and is suitable for a wide range of thermal and acoustic applications. The range extends from relatively soft, resilient products at low densities, through to rough rigid slabs for use in the most arduous environments. Crown slabs are lightweight, strong, free from shot and coarse fibres and are easy to handle, cut and install. For applications between 230 deg C and 540 deg C there are three new 'HT slab' products for installation on boilers, ovens, tanks, vessels and flues.

The Fibreglass ranges of Crown pipe insulation,

DOI: 10.21427/D71401

flexible and rigid duct insulation, sonic liner and Crown and HT slabs are available from Morris Insulations Ltd, (Tel: Dublin 728404); and GB Insulations (Tel: Cork 42197).

'Tubolit' from Service Merchants

Armstrong World Industries is the world's largest manufacturer of flexible elastomeric closed cell pipe insulation. AF/Armaflex, with a Class 1 fire performance to BS 476: Part 7, is a brand leader. It is available in tube or sheet form in a wide range of sizes. AF/Armaflex is closely supported by class "O" Armaflex, a unique pipe insulation which combines the benefits of a flexible closed cell material with a class "O" fire performance.

● Part of the Armstrong range of insulation materials.

Armstrong now introduce Tubolit — a new high quality flexible polyethlene pipe insulation.

Tubolit has been specifically designed to meet the needs of the professional installer for heating and plumbing applications. It can be obtained to fit an unequalled range of pipe sizes, in four separate wall thicknesses. Supplied semi split, it is quickly snapped on to or sleeved over pipework.

Tubolit pipe insulation is a quality product at an economic price. Light grey in colour it is manufactured to a superior specification combining good insulation performance with the best physical properties. Efficient, good looking and cost effective, Tubolit is the logical choice when a polyethylene product is preferred.

For the DIY market Armstrong have launched Isolrapid Eco, a high-quality, flexible pipe insulation available to fit the three most commonly used domestic pipe sizes.

Armstrong World Industries Ltd is a company committed to the development of only the highest quality products and of providing the best possible service to the insulation industry.

Details from Service Merchants Ltd, Heatovent House, Mount Argus Road, Harolds Cross, Dublin 6, (Tel: 975562); Telex: 5672.

PLUMBING

Bon Voyage Tony Knott: I must begin this month by congratulating Tony Knott on his recent appointment as Manager of the broad area of information technology on the Esperit Programme within the EEC. Tony will be based in Brussels and as such will be a huge loss to the CIBS

● Tony Knott

Committee of which he was Vice-Chairman. Good luck in Europe Tony.

And what about that **MEBSCA** golf weekend at Westport at the end of August? Some of the stories reaching me are hilarious. I gather that poor old **Dave Sampson** and **Bobby Graham** were very disappointed in not being able to get a boat to go fishing; **Fred Cooney's** generously-sponsored champagne reception was used by **Garvin Evans** to introduce my colleague **Joe Warren** to "bucks fizzes"; while lucky prizewinners included Eddie Egan who got the colour TV and Michael Buckley who's off to London to see Frank Sinatra. As they say. . . have it and you get it! I'm only sorry I was unable to attend. You can be sure I'll be there next year. Incidentally, we'll have a full report in our next issue.

● Paddy Clonan

But one final word before I leave the matter. Didn't **Paddy Clonan** do well? On your excellent performance Paddy I'm told you'd not be out of place among the most esteemed auctioneers. . . or the funniest of stand-up comics. Well done.

I had the pleasure of meeting **Wilfried Riether,** Managing Director of Tirolia-Werke (Ireland) for the first time earlier this month and what a pleasure it turned out to be. So often I find with foreign executives that they don't quite fit in with the "Irish" way of doing things. Wilfried's sense of humour is ideally suited to our conditions. . . and so it needs to be. Director in charge of Sales & Marketing, **Paddy Cunningham,** told us of the service engineer who came back from a call to explain why a customer's cooker was not producing the required output. Apparently, the lady in question was dipping the turf she used as fuel in a bucket of water to make it last longer! Believe it. . . or not.

On a more serious note congratulations are in order for **Bob Couchman** on the development of the new Co-Link System which is a completely new interlinking technique for domestic radiator heating systems. One of the key elements is the simplicity of the set-up. See page 17 for full technical details.

Also doing the industry proud, this time on the international front, is **Denis Shelly.** His appointment as President of the European Liquified Petroleum Gas Association is totally Denis's honour but the rest of us can be forgiven for basking a little in the reflected glory. It's nice to know that we're as capable as the rest of them.

On a still more serious note I see that the unfortunate problem of pinholing, which has been plagueing them across the water in recent months, is now beginning to rear its head in our own marketplace. I've heard a number of very serious complaints, especially against a particular brand, so let's hope the situation is resolved before it becomes a major bone of contention.

And what about **Joe Noone** and **Jim Daly.** They are both instrumental in getting four other companies, in addition to their own respective firms, to participation in a series of one-day exhibitions throughout the country. The tour is currently in mid-stream and full details are on page 23. On a similar vein Jim's colleague **Gerry Cross** is also to be commended for the 32 TV slots he has run on RTE2. This is the type of positive attitude that deserves to succeed.

Finally, my commisserations to **John Lavelle.** On that famous. Westport weekend (sorry to mention it again) poor John fell victim of the new handicapping system. Not that **David Keane** didn't deserve his win. He did Portmarnock proud. . . or was it Royal Dublin? No one seemed quite sure.

● John Lavelle

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DOI: 10.21427/D7T401