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H & V News

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IRISH H&V NEWS

OCTOBER 1983

IRELAND'S BUILDING SERVICES MAGAZINE

Figures Reveal That We are Using Energy more Efficiently as . . .

OIL USE FALLS 30% SINCE 1979

According to the latest "energy use" figures from the Department of Industry & Energy, there has been a steady annual decline in primary energy use from a peak of 8.6 million tonnes of oil equivalent in 1979 to 8 million tonnes in 1982. This fall, which represents a little over 6%, was revealed by Eddie Collins, Minister of State at the Department, when he addressed this month's IIRS conference on "New Energy-Saving Technologies" at the Burlington Hotel, Dublin.

However, the figures are even more revealing when broken down into types of fuel. It is especially noticeable that the use of imported oil has dropped by 30% over the period in question with natural gas filling the bulk of the gap this created. However, coal, and to a lesser extent turf, have also made some headway.

The large inroads being made by natural gas are particularly surprising and will be the subject of a further



● Pictured at the recent conference on "New Energy Saving Technologies" organised by the Institute for Industrial Research and Standards were L to R: David Taylor, Energy Services, IIRS; Kevin Gavin, Bord na Mona, Derinlough; Colm O'Gogain, Bord na Mona, Lullymore; and Dr Tom McManus, Project Co-ordinator, Department of Industry & Energy.

Injunction Plea Rejected

An application by Finstyle for an injunction against the Manufacturers' Association of Radiators & Convector in the UK to prevent publication of certain radiator output figures was rejected by Mr Justice Hawser at the High Court in London earlier this month.

The application was supported by affidavits signed by William Thomas Blandford, Managing Director and principal shareholder in Finstyle.

The court also heard affidavit evidence presented on behalf of MARC — Myson, Stelrad, Thermal Radiators and Thorn-EMI Heating — by Rodney Haynes, Chief Executive of Stelrad.

article in a forthcoming issue.

However, from an overall point of view the figures are very encouraging and reveal a certain amount of progress in the nation's effort to achieve a significant reduction in energy use. Admittedly, part of the reduction can be attributed to the poor economic conditions but, in the main, improvements in our energy use are the direct result of the successful implementation of energy-saving methods.

It is calculated that the National Boiler Testing Service had the affect of reducing energy bills for industry and commerce by a total of about £25 million in the three years 1980 to 1982. The savings should continue at an annual rate of about £6 million.

The Department has also

● Continued on page 4

One Pint Per Week Heats 10,000 Sq Ft

How do you heat 10,000 sq ft on one pint of oil per week? Improbable as it may sound, John Byrne does just that and gets rid of his factory waste at the same time.

His company, Euro Engineering Ltd, Baldoye Industrial Estate, Dublin 13, design and manufacture the Fuelmaster range of multi-fuel burners. One such unit heats their 10,000 sq ft of factory space and provides unlimited hot water on a single pint of oil per week.

That's what it takes to start the Fuelmaster burner every Monday morning.

● continued on page 4



● At last month's Heatair '83 exhibition in Belfast on the Heating Controls and Devices stand we pictured (l to r) Bob Johnston, HCD with Ray Gray, Eric Beckett, Abbott & Partners and Eric Beck, NIHE. A full picture report begins on page 12



RAM KITCHENS

- Kitchen showing Ram raffia kitchen with Ram upstand worktops and upstand sink.



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ULSTER REVIEW:

This month's Ulster News is something special. Stretching over five pages, it comprises a 30-picture review of the Heatair '83 Exhibition at Balmoral, Belfast. Additionally, there's a report on the IDHE Captain's Outing at Knock and the final CIBS outing of the season at Lisburn. The IDHE Calendar of Events for '83/84 is also included. **Pages 11/15**



ANOTHER SIDE OF ...

This month we spoke to Nat Higgins, Manager in Ireland for Worthington-Simpson. In addition to motor cycle racing and go-karting, Nat developed an interest in flying. The latter won out over the others and he now concentrates all his efforts on perfecting his flying skills. **Pages 16/17**



CIBS BULLETIN:

Race night at St Marys ... Technical meeting in Cork ... Forthcoming events. **Page 18/19**

NEW PRODUCTS:

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Terrain dark brown rainwater system
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BTU GOLF NEWS:

Sanbra Fyffe goes west ... BTU fit Runtalrad in at Hermitage ... Caption competition. **Pages 22/23**

DUCTING & VENTILATING

Continuing Ian Sweeney's analysis of the ducting and ventilating industry. This month he deals with actually producing the products and discusses them under eight category headings. **Pages 24/27**



DOMESTIC BOILERS:

This month's product review is on domestic boilers with an introduction by Technical Consultant, Ray Loughran, who concludes that natural gas is set to dominate this sector. **Pages 28/44**

IRISH H&V NEWS

IRELAND'S BUILDING SERVICES MAGAZINE

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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.



**Which Irish
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employment for
the Irish while
generating foreign
currency earnings?**

Walker Air Conditioning
Distributor for Carlyle air conditioning and heating products

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.



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Our mix of products and super-service has made us number one in Ireland and helps us to sell abroad.

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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.

DUBLIN: Dublin Industrial Estate, Finglas Road, Dublin 11. Tel: Dublin 300844. Telex: 24862
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



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One Pint Per Week Heats 10,000 Sq Ft!

● continued from cover

The fuel needed for the rest of the week is provided by any combustible waste material which is generated by Euro Engineering and the other companies on the industrial estate.

The Fuelmaster is designed to burn any combustible material and, at the same time, can be easily switched to gas or oil supply systems in minutes and is ideal for practically every operation which has a waste problem.

John Byrne is proud of the level of Irish content which they have managed to achieve in the manufacture of the Fuelmaster unit and equally proud of the countrywide network which he has established to ensure a full and prompt service to their customers.



● John Byrne, Managing Director, Euro Engineering.

APPOINTMENTS



● Sam Gilbert has recently joined Walker Air Conditioning (UK) Ltd as Branch Manager of their Belfast operation. Sam, who is responsible to Managing Director George Whillock, has a wealth of experience in technical sales of air conditioning and refrigeration equipment and joins Walker from J Norman Fulton where he has been a director for the past four years.



● Tedcastle McCormick & Co Ltd have appointed John Reihill Jnr as Director and General Manager, Tedcastles Oil Products Ltd. Prior to his appointment Mr Reihill spent three years with Mobil Oil Company Ltd in the UK where he was involved in marketing and industrial relations, and previously he was with the sales and marketing section of the Laminating & Coating Corporation of Illinois, a division of Crompton Industries Inc.
DOI 10.21427/D7WB0Q

Chloride Shires/ Showerlux — New Deal for 26 Counties

Two of the best and most respected names in the bathroom business, Showerlux and Chloride Shires, joined forces in Ireland on 1 October in an agreement expected to substantially increase the penetration of Showerlux within the 26 counties enclosure market.

Until recently, the company's share of the Irish market has been, said Showerlux General Manager Robert Bowler, "growing at a rate below that recorded throughout the UK."

"For several months, Showerlux has been investigating the possibility of realigning its strategy in Ireland and logistically, the appointment of a substantial company, with established builder's merchant distribution, was our obvious, most economical and effective route."

Chloride Shires, with offices and showrooms at Tallaght, Dublin, has been operational in Ireland for almost 30 years and has its own sales force and vehicle fleet covering all 26 counties.

Initially, Chloride Shires Ireland will be concentrating on the Showerlux Holydoor — a stylish, compact, "fold-away" shower screen for baths, in addition to the unique Showerlux "2001 — LSO" a new collection of shower and bath enclosures. In Showerlux technology, LSO means simply "Lift, swing, OK". Some of these designs incorporate "Belaton" panels which are in fact, manufactured in Cork.

30% FALL IN OIL USE

● Continued from cover grant-aided a number of projects. The construction industry will benefit greatly from a low-energy housing project being carried out in Clonmel which will indicate the reduction in energy use

which can be made in housing through new design. In particular, it will quantify the savings to be achieved by the use of high levels of insulation and by designing to make maximum use of passive solar techniques.

Chimflex Flue Liner from C&F

A new chimney liner has been introduced for domestic, commercial and industrial applications by Rite-Vent Ltd, the international manufacturer of chimneys, flues, liners and related accessories. Called Chimflex SF, this chimney liner has been introduced here by the Rite-Vent Irish distributors — C & F Ltd in Dublin and Ferguson Factors in Newtown Abbey, Co Antrim.

Chimflex is particularly suited to burning solid fuels and turf, wood, anthracite and coal can be burned without causing any risk to this new chimney liner. In fact, Chimflex is the first such liner available in either the UK or Europe, which has been specifically made to burn all these solid fuels.

As a result of the trend towards the wider use of solid fuels in cookers, heaters and open fires, the frequency of chimney fires

● continued on next page

DEARBORN SEMINAR

Dearborn Chemicals Ltd have organised a seminar and exhibition entitled "New Developments in Water & Energy Management for the 80's" for 7 December 1983 at Hotel Blarney, Blarney, Co Cork.

The seminar will cover such topics as Pre-treatment plant; Steam generation; Methods to improve combustion; Water and energy usage; Cooling water treatment; Control and monitoring of treatment programmes; and Operator training and follow-up service.

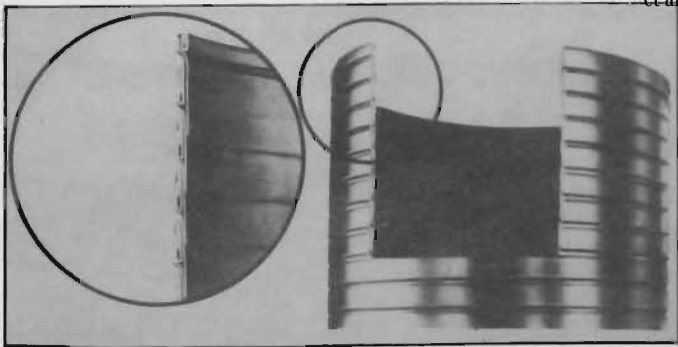
Minister Visits Waterford Foundry Stand

The Minister for Agriculture, Mr Austin Deasy TD, visited the Waterford Foundry stand at the National Ploughing Championships in Waterford earlier this month. He congratulated the directors, Frank Cruess-Callaghan and Owen Conway, on having

150 workers back in the foundry within six months of re-opening.

The Stanley Kabmobile made its debut at this show. Under an awning to the front of the Kabmobile were on display a range of cookers, the Waterford 106 stove and the new Stanley Fire-Front.

As a result of extensive national advertising, hundreds of coupons for more information on the Stanley Fire-Front are pouring into the Foundry every day and dealers all around the country have commented on the renewed interest in this product.



● Rite-Vent's Chimflex SF chimney liner which is available from C&F in Chapelizod and Ferguson Factors in Newtown Abbey.

● continued from previous page has dramatically increased. This has resulted in substantial numbers of chimneys being damaged. Previously, the only solution was to rebuild the chimney — an expensive procedure. Now the Chimflex flexible flue liner is the simpler and far less expensive solution to this problem. The Chimflex liner can be installed in an existing chimney in less than two days, thus restoring the chimney to a satisfactory working condition, to use solid fuel appliances.

Rite-Vent's Chimflex is manufactured from finest quality stainless steel profiled strip, which is rolled and seamed in a continuous process. This liner of type 316 stainless steel, ensures high resistance to corrosion. The outer casing of the liner, together with its durable, weather-proofed construction, means that Chimflex will withstand rough treatment on building sites, while giving long life usage.

The new liner is now available in 6", 7" and 8" diameter sizes and a spokesman for C & F told us that there is a 10-year warranty with Chimflex. In addition, Rite-Vent provide the necessary range of clamps and fittings required to install the liner.

Further details are available from C & F Ltd, Unit G7, Chapelizod Industrial Estate, Chapelizod, Dublin 20 and Ferguson Factors Ltd, 7 Trench Road, Mallusk, Newtown Abbey, Co Antrim.

● Seen in front of the Stanley Kabmobile at the National Ploughing Championships in Waterford were Seamus Keane, Quality Control Manager; Frank Cruess-Callaghan, Managing Director; Austin Deasy TD, Minister for Agriculture; Owen Conway, Production Director; Sean Dower and Miss Ann Butler.



Energy Management in Buildings

Energy management is now an established term for the systematic investigation, analysis, optimisation and control of the use of energy. This conference will define the major parameters involved and examine their application in a variety of building types. Case studies and analysis of special techniques, problems and solutions will be presented. The event will provide a succinct review of the "state of the art" and give data and information which will be of direct use.

A manufacturers' and suppliers' exhibition will be held throughout the conference.

The organisers are Construction Industry Conference Centre Ltd in conjunction with the Chartered Institution of Building Services, the Institute of Energy, the Royal Institution of Chartered Surveyors, the Department of the Environment and the Department of Energy.

The venue is University of Nottingham on Thursday 22nd and Friday

23rd March 1984.

Fees and accommodation are St£162.00 which includes the preprints, the conference dinner and coffee, lunch and tea on both days; St£33.00 for a single room on the nights of 21st and 22nd March and including

dinner on Wednesday evening. All fees include VAT. There is a St£20 reduction for bookings before January 1st 1984.

Enquiries and cheques (payable to CICC Ltd) to the Conference Secretary, Mrs Diana Bell, CICC Ltd, PO Box 2, West PDO, Nottingham NG8 2TZ. (Tel: 030602-282257).



● The Parker Bath, winner of the UK "Industrial Innovation and Production Award 1981-82" is designed to bring the pleasure of a dignified, safe and enjoyable bath with maximum independence to those with bathing difficulties. The bath is proving of considerable advantage in reducing the physical effort and back strain experienced by staff where bathing assistance is given. The problem experienced by the elderly, disabled or hospital patients of actually getting into and out of a bath has been resolved by providing side entry to the seat of the bath through a hinged door. In addition, since the seat height of the bath is adjustable by means of a foot operated pedal, wheelchair users are able to use the sliding transfer method are also able to achieve independent entry and exit. Nurses benefit from easy hand-to-toe access to wash the patient at a comfortable working height. The Parker bath is now available in Ireland from MGD Ltd, 199 Lower Kimmage Road, Dublin 6, (Tel: 965046).

Design Competition

Students and recent graduates of architecture, engineering, construction technology and industrial design have been invited to design a new rooflight system by Williaam Cox Ireland Ltd. The prize fund is £5,000 and registration must be received by 1st January, 1984.

Full time students normally domiciled in the 32 counties of Ireland (including those studying overseas) or graduates of no more than two years standing who are currently practicing in Ireland, and

who are under 24 years of age, are eligible.

First prize is IR£2,500, second prize IR£1,500 and third prize IR£1,000. A 1,000-word maximum submission incorporating sketches on A4 paper must be submitted by 30th April, 1984, and final submissions on A1 cards by 1st August, 1984.

Full details from Design Competition Administrator, Williaam Cox Ireland Ltd, Robinhood Industrial Estate, Clondalkin, Co. Dublin. (Tel: 500300, Telex: 30487).



● Williaam Cox Ireland Ltd., Deputy Managing Director, Michael Nelson and General Sales Manager, Fred Carroll at the launch of the "Williaam Cox Product Design Competition 1984".

BVC INDUSTRIAL CLEANERS

BVC, "the company that invented the vacuum cleaner", recently launched its two new industrial vacuum cleaners on the Irish market.

They are the T500 heavy industrial cleaner, which the company claims is the most powerful cleaner for its size, and the T400/600 light industrial model.

Both cleaners have special "operator-friendly" designs for easy dust bucket removal.

"BVC considers that both models are genuine advances in vacuum cleaner design," Managing Director, Alan Gilson told a Dublin press conference. "The principles of vacuum cleaning are the same as in 1903 when our founder H C Booth set up the company to manufacture his invention.

"But now BVC had made the removal of the dust, asbestos, flux, metal swarf and water collected

by these powerful machines an easy affair which does not threaten the backs of workers.

Also announced at the BVC press conference was a new chain of distributors in Dublin, Cork, Galway and Drogheda and the company's range of professional cleaning products aimed at contract cleaners and institutional maintenance services.

Another new product displayed by BVC was the

TH71 Pump Unit which has two motors able to take in and discharge water concurrently. The Pump Unit has been modified from the popular TH71 cleaner and has excited considerable interest from fire services and plant hire companies in the UK.

BUYERS GUIDE

A new Technical Note from BSRIA provides a concise but wide ranging guide to methods of heat recovery in buildings, including air to air heat recovery, heat pumps and heat recovery, refrigeration plant heat recovery, destratifying fans, hot waste gas heat recovery and liquid to liquid heat recovery.

The publication notes factors which affect the viability of heat recovery and technical and economic obstacles to its progress. Areas where further progress will promote the wider acceptance and use of heat recovery techniques are identified. A directory of suppliers which tabulates trade names and the original manufacturer is included.

"Heat recovery and heat pumps in buildings" by Gavin Hamilton and John Kew is BSRIA Technical Note TN4/83 at St£9.00.



● The T500 heavy industrial model from BVC.

Company Registrations and Business Names

The Minister for Trade, Commerce and Tourism has made an Order under the Companies Act, 1963 entitled the Companies (Fees) Order, 1983, prescribing increased fees. The existing fees were last settled in 1980.

The fee for registration of companies has been increased from £75 to £110. The difference, if any, between £110 and the amount already paid will be the fee for the registration of an increase in share capital of any company and for registration of an increase in the membership of a company limited by guarantee or an unlimited company.

The fee for change of company name has been increased from £75 to £110 except where the change of name is pursuant to a

direction by the Minister under Section 23(2) of the Act.

Certain other fees for the registration and recording of documents and charges required under the Companies Act, 1963 have also been increased.

The order came into effect on 5th September 1983.

The Minister has also made Regulations entitled the Business Names Regulations, 1983. The fees in respect of documents furnished under Section 4 of the Business Names Act, 1963 have been increased from £5 to £7.50 and those for documents furnished under Section 7 of the Act have been increased from £2 to £3. The operative date of the Regulations will also be 5th September 1983.

Warm Air Brochure from Thorn EMI

An 8-page colour brochure entitled "Warmth and Comfort by Design with Gas Warm Air", has been published by Thorn EMI Heating Ltd.

The full range of the company's gas warm air heaters, incorporating

water heaters and auxiliary equipment, are featured in the publication, which is available from their marketing department at Eastern Avenue, Team Valley Trading Estate, Gateshead, Tyne & Wear NE11 OPG, England.



● Thorn EMI Heating's "Warmth & Comfort by Design with Gas Warm Air" brochure.

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Position: _____

Company: _____

Address: _____

Manotherm LTD 4 Walkinstown Road, Dublin 12, Tel. 522355, 522018, 5222229. Telex: 24467

Is it a Space Shuttle or an Insulated Chimney?

The same type of ceramic material that is used on the US space shuttle is used in the manufacture of chimney flues made in a Trim factory, a factory officially opened on 30 September.

The chimney is the only ceramic-lined flue being made anywhere in the world. It was developed and patented by ICL (Insulated Chimneys Ltd) which also manufactures an automatic solid coal stoker that needs fuelling

only once a week.

ICL, which is part of the Michael Vaughan Group, the agents in this country for Tirolia, Baxi and Dantrim, has a projected turnover of £2.5 million this year.

Already the ceramic-lined chimney flue is being exported to five European countries. About 90% of ICL's production goes for export, with the plant employing nearly 50 people.

MIXED GRILLES FROM DUBLIN

A range of aluminium grilles, registers and louvres are now being manufactured in Dublin by Aergrilles Ltd. Products include single and double deflection grilles and dampers, non-vision door transfer grilles, eggcrate grilles and dampers, weatherproof external louvres and pressure relief flaps.

All material meets BS Specification and a satin anodised finish is used mainly throughout the range. However, alternative bronze anodising as well as

painted finish to a choice of colours can be supplied to suit architectural requirements.

The company is now in production and its main purpose is to successfully compete for a share of the Irish market which at present uses a substantial amount of imported grilles.

A comprehensive catalogue and any further details are readily available from Tony McNamara, Aergrilles Ltd, 59 Brunswick Street, Dublin 7, (Tel: 770772).

20 YEARS AGO

This is flameless heat — "Catalytic Heating" — What It Means And How It Works. When liquid propane or butane meet a pre-heated platinised "catalyst" they are oxydised into carbon dioxide and steam; heat is generated in the process, and the (patent) "Catalor"

heater gives off this heat as 46% radiation and 54% convection.

"The heating element does not ignite or glow; it simply pours out penetrating heat which is healthy, clean and safe. Even a naked flame held near the Catalor element is extinguished.

"The larger models need only a few minutes of electric pre-heating; then an automatic cut-out switches off the current as the element grows hotter."

The Irish Heating & Plumbing Contractor, October 1963.

Developing Small Scale Hydro-Schemes

A new manual on the development of small scale hydro-electric schemes has been prepared by An Foras Forbartha in collaboration with the ESB, under the auspices of the Department of Industry and Energy. It provides detailed guidance on the various steps necessary to develop a scheme and information on the legal and financial considerations. It lists sources of help, in the form of professional advice and suppliers of equipment, and gives information on a number of existing installations. The manual is the second part of a two-part set. Part 1 was published in June 1983.

Up to 50 years ago the

generation of power from water wheels and turbines was an important source of energy for Irish industry, agriculture, and domestic purposes. At one time there were over 1,800 mill installations in Ireland. The availability of cheap energy in the 1950s and 1960s led to many of these installations being abandoned, but the energy cost increases since 1973 caused a renewal of interest in "free" energy sources. The number of enquiries received by the Department of Industry and Energy and other agencies, from persons seeking advice, has led to the alternative energy committee of the Department requesting the

preparation of these manuals. Any person who thinks that he could instal a small hydro scheme on his land, is recommended to read Part 1 of this set. This will assist him to establish, without major cash outlay, the potential of his site. If this initial investigation shows encouraging results, then Part 2 will provide guidance through the further stages.

Both manuals are available from the Information and Training Centre, An Foras Forbartha, St. Martin's House, Waterloo Road, Dublin 4. Part 1 costs £1.00, Part 2 costs £5.00, both post free.



● David Reynolds, appointed Product Manager, Gas, by Wavin Pipes.

IEI Award Presented

On Wednesday 14 September Michael O'Neill, IIRS energy consultant in the mid-western region, was presented in Limerick with an award by the Institution of Engineers of Ireland for his thesis on incineration.

Tom Quinn, Assistant Director-General, IIRS, said that incineration as a source of energy has been neglected. "Incineration with heat recovery", he said "has a potential energy saving value of £15 million annually in the industrial sector for an initial capital outlay of £30 million. The employment this investment would create in the operation and manufacture of incinerators would amount to some 400 jobs".

Mr. Quinn pointed out that energy conservation throughout the economy is achieving savings of approximately £100 million annually. "The Energy Management Association", he said "has made a significant contribution to this effort". The EMA, which was previously funded by the Department of Industry and Energy, is now funded by membership subscription and sponsorship. The operation of the EMA in Ireland has been the subject of studies carried out by a number of countries and associations have now been established in Denmark, New Zealand and Turkey.

Heating Distributors Training Course

● Right: Shay Kiernan, Managing Director Heating Distributors Ltd, Geoffrey Marshall and Seamus Morgan at the Heating Distributors Ltd reception in the Engineers Club, Clyde Road, Dublin.



● Below: Part of the large group of contractors and merchants who attended the Heating Distributors Ltd product training course in the Engineers Club in Clyde Road, Dublin. The course was one of the most successful of its kind with speakers from Trianco, Saunier Duval, Faral Tropical and of course Heating Distributors Ltd.



NBST Energy Report

A report analysing technological developments in the energy field for the period 1980-2010 has been published by the National Board for Science and Technology. The report, "Energy Technologies After the '80's", is a revision of a 1980 NBST study.

The report is an evaluation of the best energy options for the future, based on current prices, fuel availability and security considerations. It is not a forecast of future energy supply. The analytical approach used by NBST assesses the various energy sources and technologies and the manner in which they impact on each other.

Copies are available (both in summary and complete report form) from John Brady, National Board for Science and Technology, Shelbourne House, Shelbourne Road, Dublin 4, (Tel: 683311), price £5.00 incl postage.

NU-WAY COMPANIES HAVE COMBINED

The coming together of Nu-Way Heating Plants Ltd and Nu-Way Energy Ltd from 1st August 1983 made available from one source an extensive range of combustion equipment. The new company, Nu-Way Ltd, can now offer an extensive range of gas, oil and dual fuel burners and combustion systems to meet the needs of the domestic, commercial and industrial energy users for environmental heating applications, water heating and steam raising, and for industrial furnace applications, heat treatment, kilns, dryers, make-up heat systems and most forms of specialised heat input requirements.

For industrial production and process needs there are many standard burner units available, while for special applications and systems, facilities are available for consultation, design and manufacture to specific requirements. Energy saving products are

available for high and low temperature processes.

The Multiplex range of industrial nozzle gas burners employ low air (and gas) pressures so conserving electrical power or combustion air blowers and fans and yet provide heat release rates per unit volume of combustion space with low, medium or high velocity firing capabilities. These features are complemented by a high turndown of up to 30 to 1 and integral ignition and flame failure such that no separate pilot is required. Using the Multiplex burner concept, recuperative burner systems have been successfully developed which offer energy savings of up to 50 per cent on high temperature processes.

The Multiplex Recuperative System is available as a self recuperative burner (MPSR) and also as a separate recuperator (MPR) supplying one or more Multiplex hot air

burners (MP-HA) which gives wide application facilities to furnace designers and also means existing gas flow patterns on burner retrofit furnace projects can be maintained.

In the field of environmental heating a full range of fully automatic combustion equipment for single stage, two stage and modulating control is offered while the "NG" series gas burners introduced at Expo-Clima '82 are now fully in production. These have become first-choice gas burners with many of the UK appliance manufacturers and are increasingly specified for gas conversion programmes and replacement burner units in energy saving modernisation schemes.

A comprehensive range of ancillary equipment for all burner types is also available, along with gas pressure booster sets air inlet silencers.

C & F/ Glow-Worm Presentation

● Deep in conversation during the C & F/Glow-Worm presentation of several new back boilers and fires staged in the Metropole Hotel Cork, which was held in close co-operation with Cork Gas Co, we caught, Tom Murfin, Glow-Worm Special Projects Manager; Michael Boyle, Chief Executive, An Bord Gais, and Stan O'Brien, Sales Manager, Cork Gas Co.



ULSTER NEWS

The final outing of the '83 season for the CIBS golfing society was held at Lisburn Golf Club on Thursday, 1 September in glorious sunshine.

Environmental Supply Co Ltd, in conjunction with Fläkt Ltd and Climate Equipment Ltd, provided generous sponsorship for CIBS members including a new perpetual trophy, the Fläkt Cup, as premier award.

Prizewinners were: 1st Gordon Strain; 2nd Harry Flanigan; 3rd John McMitten, with 41, 40 and 39 points respectively.

The visitors category had matching generosity of sponsorship from McCaig, Collin & Co Ltd with 1st Prize — and the Royair Cup — being won by Ivan Hill, a five handicapper who toured the course in level par for 41 points. Runner-up in

CIBS/IDHE — NORTHERN IRELAND



● IDHE Golf: Is that a good follow through?



● CIBS Golf (L-R): J McMillan (DoE) with Gordon Strain, winner of the Fläkt Cup; T Cummings, Environmental Supply Co; Harry Flanigan, Beattie Flanigan; and T Martin, Fläkt.

this section also with 41 points was Ray Nicolas. Third prize went to Ted Martin of Fläkt who pipped Ray Harpur on the better second nine both having scored 39 points.

Thanks are due to all

our sponsors, both at this outing and at Holywood, Carnalea and Knock earlier in the season. The 1984 programme is presently being planned and details will be available later this year.



● IDHE Golf: Two top winners — Lesley Robinson and Victor McMullan — being congratulated by Peter McWhinnie MPI and Morris McKinley, Captain.

Captains Day at Knock

Captains Day at Knock (Northern Ireland); this day, like the last four years, had plenty of rain but nothing would stop these keen players. Besides, what better way to tee off than in a good downpour, as our pictures show.



● IDHE Golf: The shelter being put to good use at Knock.

Back in the clubhouse a good tea (the other sort of tea) was had by all including a few who we shall not name that didn't play.

The winner of the day, who received the Captain's Prize, was Victor McMullan; 2nd was Ian

Morrison with Bob Dillan receiving third prize.

The winner of the MPI Cup — for the best three out of five cards over the season was Lesley Robinson.

PS: Jim Brown deserves special mention for only losing one ball.

IDHE Calendar '83/84

Wednesday, 9 November, 1983: Woodlands Hotel, Lisburn, Co Antrim. 7 pm for 7.30 pm.

A fresh look at Insulated Chimneys. A Janelid, Managing Director, Keady Chimneys Ltd.

Wednesday, 25 January, 1984: Chimney Corner Hotel, Antrim Road, Glengormley, Co Antrim. 7 pm for 7.30 pm.

An Up-Date on the Electric Wet Heating System. Sam Patterson, Technical Officer, N.I.E.S.

Wednesday, 22 February, 1984: Chimney Corner Hotel, Antrim Road, Glengormley, Co Antrim. 7 pm for 7.30 pm.

Comparative Costs of Fuels. Billy McMichael.

Heat & Power Exhibition Review

ULSTER NEWS

Last month's Heat & Power Exhibition at the Alexander Hall, Balmoral, Belfast, proved extremely beneficial with the majority of exhibitors reporting an upturn in business transactions. Visitor numbers were not quite as high as with previous shows but the quality of those who did attend more than compensated for this fact. For the first time ever *Irish H&V News* had a stand and we were pleasantly surprised at the number of people who came to see us. Many thanks to those of you who entered our competition and congratulations to the winner, David Higgins of the NIHE, Ballymena. *Irish H&V News* also hosted a very successful reception during the show while the following photographs were taken over the four-day event.



● H&V NEWS RECEPTION: Brian Page, IDHE (NI) Chairman with Gerry Murphy, Managing Director, ITTP Ltd.



● H&V NEWS RECEPTION: George Hughes, General Manager, Ferguson Factors with Philip Fox, Bik Distributors and Kieran Licky, Ferguson (Ireland).



● FLOW CONTROL: Michael Lawson, Sales Director with Dave Roberts, Senior Engineer.



● H&V NEWS RECEPTION: Philip Johnston, Area Manager, Thorn EMI Heating; with Harry Dickson and Jenny Adair.



● HEATING CONTROLS & DEVICES: Bob Johnston, HCD with Ray Gray, Eric Beckett, Abbott & Partners and Eric Beck, NIHE.



● JOHN KELLY GROUP: Ian Robinson, Managing Director, IES Industrial Ireland with Glen Barwood, Managing Director, State Boilers.

Heat & Power Exhibition Review

ULSTER NEWS



● H&V NEWS RECEPTION: Pat Codyre, Sales & Marketing Director, ITTP Ltd with Les and Maureen Bunting, Veba; and David McGinsey, Veba.



● SATCHWELL CONTROL SYSTEMS: Angela Woodman with Eddie McClemahan, both of Satchwell.



● MODERN HEAT PUMPS: John Nickels, Chief Designer, "Modheat", with Jim McBurney and Jack Shields, Bartol.



● H&V NEWS RECEPTION: Bill Emerson, Schoffield & Sons with Liz Finlay, H&V News; Brian Schoffield and Harry Lockhard.



● H&V NEWS RECEPTION: Dave Roberts, Michael Rice and Michael Lawson, Flow Control/Energy Conservation, with David Lynon.



● POTTER COWAN: Jim Legge, Sales Manager with Lila Hamilton, Secretary and Ken Jess, Director.



● STELRAD: Tony Mann, Alan Gaffney and Tom Wright, all of Stelrad, with Mervyn Rolls, Calor Gas.



● TRIANCO: Bob Moore with Eleanor Robinson, Julie Moore and Terry Lawrence.

Heat & Power Exhibition Review

ULSTER NEWS



● H&V NEWS RECEPTION: Nancy Robinson with Fred Ridout, Parkray; Francis Caughey and Margaret Richardson.



● ULTRAD: Eric Hewitt with Hugh Cullen, Kevin McKenna and Arthur McNally.



● LISTER TUBES: G W Simpson, Sales Manager, Allen Ygnis Boilers, with Ursula McGennis, Technical Sales Assistant and Gary Stern, Sales Manager.



● TURKINGTON ENG: Exhibition organiser Bill Caughey, Ian Turkington and Emmiline and Robert Johnston.



● TI PARKRAY: Fred Ridout, Sales Director, with the Parkray 29 open fire back-boiler.



● VEHA: Paul Johnston, Funray Boilers with Les Bunting, Vaha.



● NIBCO: Bill Linford, NIBCO, and Stephen N Wood, NIBCO, with Jimmy Allen, Allen & Graham, and Mervyn Irwin, Belfast Educational & Library Board.



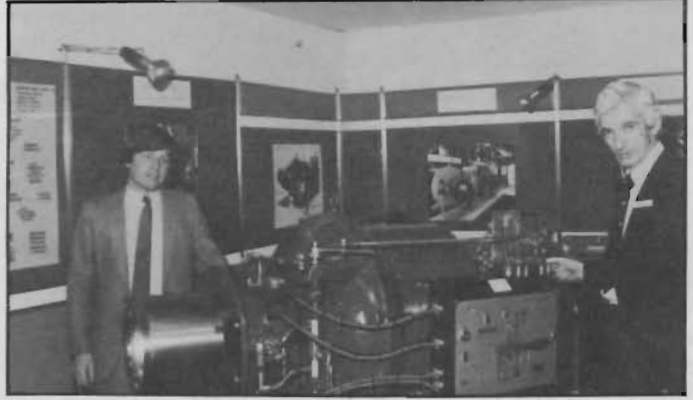
● JOHN HINO: Hugh Walker, Clyde Fuel Systems with Stanley McBroom, Belfast Educational & Library Board and Mervyn Irwin, Sales Director.

Heat & Power Exhibition Review

ULSTER NEWS



● WARMFLOW ENG: Philip Cousins with Pat Kennedy, Sales Executive.



● GUARANTEE BOILER SERVICES: Jim Harvey, Managing Director, GBS with Michael Dunphy, Commercial Director, Dunphy Oil & Gas Burners.



● HEATWAY PRODUCTS: Ian Cairns, Heatway, with his company's high-output back-boiler, Model MX4.



● BRIAN THOMPSON: Brian Thompson with Denis Seaton, Holmes Valves; Frank Spalding, Ledu; and David Maxwell, also of Ledu.



● H&V NEWS RECEPTION: Bob Armstrong, H&V News with Jim McBirney, Jeanette Jamison and John Nickels, Modhead Marketing.



● P & D MACFARLANE: Dugald MacFarlane beside the Combat 300,000 Btu/hr oil-fired air heater, Reznor maximiser heat recovery units.



● ALLENWOOD BOILER SERVICES: John Alexander with the Firemaster portable valve actuator, Model FX 550.



● H&V NEWS RECEPTION: Ian Kerhohan, Director, Glynwed Appliances Ltd with Victor Stonex, also a Director and Bob Armstrong, H&V News.

ANOTHER SIDE OF... ...ANOTHER SIDE OF...

NAT HIGGINS

One thing you could **not** say about Nat Higgins is that his ideas are up in the air, but that is a place you may some times find him. The explanation is that Nat, who is Manager for Ireland for Worthington-Simpson the pump company, holds a private pilot's licence. His interest in flying started in the early 1950's when he was in the Air Corp and although he moved into general engineering later, he maintained an interest in flying, but did not satisfy that interest for almost 20 years.

So, what happened in between? Well, after spending some time in general engineering he came into the pumping and air compressor industry where he can still be found today in charge of the Irish branch office of one of the world's most progressive pump companies. "Changes have occurred" says Nat "over the last few years totally changing the image of the company which was that of a steady and conservative manufacturer to that of a progressive and forward looking company with a keen eye to the export market with a competent and professional service to its local customers". As proof of that, Nat showed me their catalogue on fire pump sets which conform to the various American and European fire rules, NFPA, FM and FOC. There are sets now in the range that cater for marine and off-shore services, portable sets, and fire main pressurisation equipment, much of this being recently designed specially for the market. Another recently introduced product is the Creyssenac air compressor in the 1.5 to 7.5kW range.

As can be seen, Nat is very much committed to work and indeed Worthington-Simpson but such an involvement with work needs some relaxation to act as a counterbalance. Before he took up flying Nat had another great love and that was motor cycle racing. In the early 1960's he was to be seen at all the local events, the Skerries 100, the Leinster 200 and the Curragh. The bikes of the time were the Triumph 500, the 350 Manz

Norton and the 350 TRAJs — names now passed into the history books. His first club was the Dublin and District Motor Cycle Club but he later joined the Fingal MCC where he was president of the club for eight years. When he wasn't racing himself he was organising and running races to raise funds for the club. One interesting event he won in the 1960's was the Scooter Championship of Ireland with his wife Eva as navigator.

For a short time after leaving motor cycling he became involved in go kart racing but eventually his dream of flying was to come true when one day he decided to go out to the Irish Aero Club at Dublin Airport where he met for the first time Pierce Cahill who runs the Club. Pierce introduced Nat to Alan Dagg who holds a commercial

pilot's licence and gives instruction to would-be pilots. This, in Nat's estimation, was one of the best bits of luck he had as he rates Alan as one of the best instructors one could possibly have the privilege to learn from.

What he was aiming for was to get a private pilots licence which entitles a pilot to fly a single engine plane with a limit of 12,000 lbs weight under visual conditions. According to Nat you can also add on for night flying, dual engines and also get an instruments licence. These licences are valid all over the world and renewed either annually or at six months intervals depending on age and the type of licence you hold.

To actually get the licence means passing a very stiff test which is set up by the Department of Transport



INSTITUTE OF PLUMBING NEWS

The Educational Sub-Committee of the Irish District Council of the Institute of Plumbing have been concerned for some time that no course exists here at present to enable associate members of the Institute to gain full membership.

This situation arises because the City and Guilds of London Institute's Plumbing Technicians Course 631, which was the course of study available in the College of Technology, Bolton Street, Dublin — which qualified associate members to become full members (MIP's) — no longer exists due to the fact that the City and Guilds of London Institute have withdrawn from technician training. The body which has taken over, The Technical Education Council, does not hold its examinations in this country.

However, the members of the educational sub-committee are very pleased to be able to announce that a new three-year, part-time, craft technician course in "Plumbing Technology" is at present being developed by the College of Technology, Bolton Street, Dublin 1, for advanced-level plumbing students with a craft background.

The course subjects will include: Mathematics; Hot and cold water supplies; Gas and oil installations; Drainage and sanitation; Drawing and design; Science; Mechanics of fluids; Heating technology; Welding technology; Principles of administration and site procedures; and a project.

It is hoped that the course will be ready to start in the near future and at the present time there are on-going discussions with the Institute of Plumbing and the Engineering Council with regard to seeking full membership for suitably qualified candidates.



and a pilot must have at least 40 hours flying experience behind him. Like many other groups, pilots have their own traditions and one is that after your first solo flight your tie gets cut off and is put up behind the bar in the club and Nat tells of the very strange looks he got from people when all that could be seen of his tie was the knot.

Nat attended night courses to study for the examination and the classes comprised four subjects — Metrology, Theory of Flight, Navigation and Air Law. His first solo flight was after 11 hours and he got his licence after 42 hours flying time, both quite fast times in Ireland. For Nat flying is a lot safer than driving provided you use common sense and avoid difficult weather conditions even if it means landing at the nearest airport and staying until the conditions have passed. The plane Nat has used for most of his flying is a French built American Cessna 172 which is a four seater single engine plane and is the top selling plane in the world ever. Production has outstripped even that of famous World War II planes like the Spitfire (as seen in our photograph in Battle of Britain colours).

The Royal Aeronautical Society has a Dublin branch and Nat is a committee member with a special interest in the annual Students Competition, the purpose of which is to encourage young people to develop an interest in matters aeronautical and to compete for the C Kelly-Rogers Memorial Trophy which is awarded to the best oral presentation of a technical paper connected with aeronautics.

But competitions and the cutting of ties apart, the joy of flying a plane on your own over the country on a clear day is totally absorbing and is a tonic to the soul unmatched by most human experiences according to Nat. This experience is all too often a rare one at the moment due to the pressures of business. It could be said for Nat that flying is a Catch 22 situation where it is the thing that relaxes him the most from the normal everyday tensions but he also enjoys being busy and so it leaves little spare time and so on. . .

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CIBS BULLETIN



The Chartered Institution
of Building Services



● Standing from left: Trevor Kenny, Stephenson Associates; with Eamon Walsh, Climate; Rory O'Byrne, Stephenson's; Liam McGarry, Stephenson's; and Dermot Crumley. Seated are Mrs L McGarry and Mrs R O'Byrne at the CIBS race night at St Marys RFC.

to enjoy themselves. The proceeds went to the benevolent fund. CIBS would like to convey a special word of thanks to the sponsors listed below and also to all the horse owners. Without the assistance of sponsorship, the evening could not have proven successful.

Sponsors: ACEC (Ire) Ltd; Combex Engineering Ltd; Redbro Ltd; Thorn EMI Lighting; Quadrant Engineers Ltd; BSS (Ire) Ltd; Lighting World; Coolair Ltd; P J Matthews Ltd; and Walker Air Conditioning.

Race Night at St. Mary's

The CIBS annual programme got off to an excellent start with a very

well attended ladies race evening at St Mary's Rugby Club, Dublin, on

Wednesday, 21 September last. As the photographs indicate, everybody seemed



● Gerry Baker and Frank Brophy, Redbro.

● Mr and Mrs J Dowling with Mr and Mrs N Memory.

● Gordon McCabe and Angela Moloney with Paddy Clonan in the background.



● Mrs John Lavelle.

Technical Meeting In Cork

"Conversion of Cork Gas": A panel of engineering executives from Cork Gas — Peter Michaels, David Burke and John Sweeting — answered questions from an attendance of 50 people following their showing of a film dealing with the

advantages of utilising natural gas. Questions, which lasted for one full hour, covered all aspects of the conversion.

This was a most successful inaugural meeting and further CIBS technical activities are now planned for Cork and other venues.

Following the technical evening the group was met the next morning at Liebert International Cork, by Frank Fitzgibbon, Personnel Manager, for a conducted tour of their factory. Great interest was shown in the air conditioning units for computer rooms manufactured and also in the modern factory and administration block. It was particularly noteworthy that while the parent company is American all but two of the 75 workforce are Irish.

CIBS would like to thank Mr Barry Leach, Cork Regional College, for organising this meeting.

Forthcoming Events

Subject: An evening with George Whitehead, FCIBS.

Venue: Engineers Club, Clyde Road, Dublin.

Date: Friday, 4 November 1983.

Time: 6 pm for 6.30 pm.

George Whitehead will speak on common sense in building services. He will draw from his local and international experience over his many years in the industry.

George Whitehead is ex Matthews Hall and Haydens and a retired Director of Carrier Hayden UK. He is well qualified to speak on building services and is looking forward to meeting all his good friends in the heating industry in Ireland at his presentation.

Subject: Beaumont Hospital — presentation on services.

Venue: Engineers Club, Clyde Road, Dublin.

Time: 6 pm for 6.30 pm.

Date: Thursday 10 November.

This technical evening will deal with the design and installation of the mechanical, lighting and electrical services by the design engineers and the contractors involved.

A panel consisting of these and other members of the design team will be available following the main presentations to answer discussion points.

A complementary site visit will take place to Beaumont Hospital on the following Saturday morning.



● David Burke and Peter Michaels, Cork Gas with Barry Leach, Cork Regional College, Michael Moloney, Tony Knott and Shay Diggin, CIBS; and John Sweeting, Cork Gas at the CIBS Cork technical evening.



● Above: Brian Carlile, ESB, Cork with Peter Kelly, also from the ESB Cork office. Above right: John Sweeting, Cork Gas with Larry Sheerin, Limerick Gas and Peter Michaels, Cork Gas. Right: Barry Leach inspecting the air-conditioning unit at Liebert International.



● Left: Lighting Evening: Group of delegates enjoying the refreshments following the presentation by Jan Cunen, Philips Eindhoven, at the Engineers Club on 29 September.

new products

Equitherm M100 — Optimiser/Compensator

The M100 is a new generation controller from Sauter Automation combining for the first time a sophisticated optimiser with optimum on and off and an advanced compensator offering new energy saving features.

The M100 is a micro processor based fully self adaptive optimiser combined with a fully self adaptive compensator. For use in commercial and industrial premises, the M100 offers accurate control of energy as well as giving visual indication of plant status. There are three models in the range to cover all applications. Features of the unit include: easy to programme, programming through two separate time channels, automatic frost monitoring, ambient temperature dependant switch off of heating, summer protection of the pump, remote control and compatible with building automation systems, can be used in optimisation or compensation mode only, and automatic or manually self adaptive.

The unit offers substantially lower installation costs, as the complete control system is now housed in a single unit. The unit uses only one outside detector, one flue detector and one



● Jack Ferguson and Patrick Nolan of Nolan Ferguson Architects, Waterford; Henry Perrot of Unidare Terrain; Nicholas Fewer, of Fewer McGinley & Tritschler, Waterford at the Unidare Terrain seminar in Waterford.

optional room detector.

Details from Dwell Controls Ltd, 36 Cookstown Industrial Estate, Belgard Road, Tallaght, Co Dublin, (Tel: 511144, Telex: 24486).

Unidare Terrain Dark Brown Rainwater Systems

Unidare Terrain recently held a series of seminars and lectures in Waterford, Cork and Limerick for specifiers, local authorities, merchants and end users, at which they announced their new dark brown colour half round and square section rainwater systems.

These complement their existing range of black, grey and white. Manufactured with light stabilised pigment,

the brown colouring has been chosen to complement stained timber fascias. A matching 4" soil pipe weathering apron and vent cowl is also now available.

For further details contact Unidare Terrain, Finglas, Dublin 11. (Tel: 771801).

Laboratory Furniture System Launched

One of the most modern laboratory furniture systems in Europe will be launched on to the Irish market this month by Laboratory Furniture Systems Ltd. The extensive range is based on a 550 module and can be used throughout the commercial, research and development, educational and medical/pharmaceutical fields. Coupled with a specialist design, supply and installation service, the company can offer a vast range of accessories. One of the advantages of using this efficient system is that the inherent logic allows for easy expansion and modification of the laboratory area at a later date.

For details contact Laboratory Furniture Systems Ltd, 108 Pearse Street, Dublin 2. (Tel: 770880, Telex: 24391).

Saldeban Distributors for Metlex

Saldeban Distributors Ltd, has recently taken on the

agency and distribution of Metlex products.

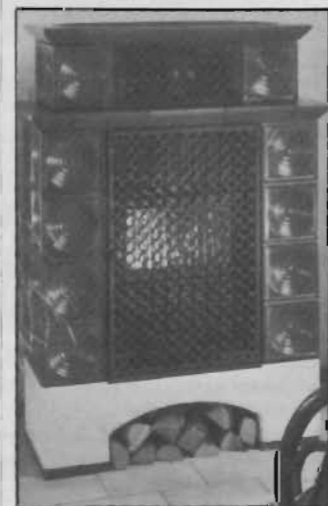
Metlex have for many years been the foremost manufacturers of chrome and gold bathroom fittings, including the "O" range of chromium plated accessories, the 24 carat gold range and the Valba contract fittings.

Recent additions include "Contour" plastic accessories in white, smokey grey/brown, and beige; "Medallion" brass finished range coated with polyurethane, and "Natural Choice" pine accessories.

Catalogues, brochures and price lists are available from Saldeban Distributors Ltd, Eden House, Eden Quay, Dublin 1. (Tel: 787159, Telex: 31273).



● The new generation Equitherm M100 optimiser/compensator from Dwell Controls.



● A Haas & Sohn "Jupiter" coal/wood burning heater with heat storing tiles, from Passat Heating.

new products

Ram Kitchens

Ram Kitchens' products for the 80's have set new standards in the massive self-assembly market for home improvements.

Majoring on kitchens initially, each of the models featured has been designed and introduced after exhaustive market research to determine consumer preference for style, colour and price.

Two unique features to Ram Kitchens are — a beige universal carcass of advanced design which gives added competitiveness through strength, durability and ease of assembly; and Ram Supertops, an exclusive system with a watersafe edge and integral post-formed upstand.

The ranges currently comprise four models:

Classic Gold — a high-successful budget-priced kitchen representing outstanding value for money;

Classic Wood — a kitchen introduced to meet the growing demand for real wood trim.

Supreme — another best selling Ram kitchen incorporating many design and practical refinements;

Vermont — a newly-introduced solid wood kitchen with elegant traditional features that will bring outstanding kitchen luxury to a much wider market.

All Ram kitchens are designed by in-house specialists and are constructed from the finest, keenly-purchased raw materials by craftsmen using the most up-to-date production technology.

Ram Kitchens are available from their Irish distributors, Ferguson Factors at either of their locations: 45 Broomhill Close, Airton Road, Tallaght, Co Dublin, (Tel: 521533) where the General Sales Manager is Pat Black, or from 7 Trench Road, Mallusk, Newtownabbey, Co



● Classic wood raffia with chestnut brown Supertop from Ram Kitchens.

Antrim (Glengormley 48331) where George Hughes is the General Manager.

Cirrus Flameproof Overhead Heaters by S & P Coil Products

A range of flameproof fan-assisted overhead heaters, designed for connection to steam or hot water heating systems in hazardous areas, has been developed by S & P Coil Products. Typical applications include space heating of chemical storage areas, fuel depots, warehouses and factory production lines processing materials with flammable vapours.

Called the Cirrus FLP Series, these industrial duty unit heaters consist of one or several heat exchange coils mounted within a stove enamelled steel casing. A guarded flameproof motor, rated for Group II gases, is fitted on the rear of the casing which drives a fan forcing an air stream across the hot water or steam-fed coils. Outputs range up to 120kW (400,000 Btu/h).

Three different

roof-suspended casing styles can be specified to discharge heated air horizontally or vertically. Louvres are fitted to the discharge grille giving control over direction and spread of heated air.

Depending on heating needs, up to three copper coil heat exchangers can be fitted for operation on low, medium or high temperature hot water or steam heating media at up to 150psi. All models are usually supplied for recirculated air heating, but spigots for connections to fresh air inlet ducts can be specified.

Finheat Ltd, 17 Usher Island, Dublin 8, (Tel: 728288).

Wavin Launch SuperLine Rainwater System

This month Wavin Pipes have launched a brand new quality rainwater system — the Wavin 5" SuperLine.

SuperLine is a highly sophisticated system and Wavin claims that it looks better, performs better and can be fitted easier than traditional systems.

Wavin SuperLine is a

kitemarked 5" uPVC rainwater system with an improved gutter flow capacity. The SuperLine outlet is especially designed to drain rainwater more quickly. Its throat is sloped towards the spigot creating a funnel shape which accelerates the flow of water into the downpipe.

Independent testing shows that water runs away at least 40 litres per minute faster with the SuperLine outlet than with traditional outlet designs.

Because the funnel-shaped outlet drains water faster, the flow capacity of the gutter is increased. SuperLine gutter has a flow capacity up to 70% greater than 11mm/4.5in nominal half round gutters. But as it is the shape of the outlet which determines how quickly water runs away, the gutter can still be drained by 68mm downpipes.

SuperLine's improved flow capacity means that a roof area of up to 75 sq metres can be drained with the gutter laid level and only one end outlet. With a single centre outlet, this roof area can be increased to 151 sq metres. As a result the gutter can be positioned just below the tile line, preventing water which is running off the roof from being blown under the roofing felt and on to the fascia board.

In addition, SuperLine's wider 125mm/5in gutter collects rainwater more efficiently. The extra width reduces the risk of water turning off the roof and overshooting the gutter — particularly where the roofs are steep or have bold-rolled or profiled tiles.

SuperLine, which is available in either brown or black, will help to improve the appearance of a building by allowing gutters to be laid level and by the need for fewer downpipes. And since fewer downpipes are needed there are corresponding savings in time and labour.

Sanbra Fyffe Goes West

Yes that's right! With great courage and fingers and toes crossed BTU Captain Eamon McGrattan and John — Sanbra Fyffe — Darcy led the charge west for the traditional "away" event of the year. Eighteen golfers and their ladies travelled the magnificent road west to Westport Ryan Hotel and Westport Championship Golf Club. With due respect to Lord Sligo, it was a lordly occasion.

What a golf course, great golf, wonderful memorable holes with mushrooms and blackberries in wild abundance. In the evenings entertainment of a very high standard was provided. Paddy Clonan at his vintage best as he paraded along the longest radiator in the world (14.6 metres) to arrive at centre stage to declare he had "something inside" that had to come out. After 45 minutes we were still not sure what it was that was trying to escape from within.

Gerry Baker in full drag could have put Danny Le Rue to shame, followed by Michael O'Doherty with some renderings rarely heard on Hill 16. Prior to his imminent tour on the Orient Express, the master of pantomime Victor Madigan won many more fans and admirers with his personal repertoire.

The ladies refused to be outdone, Kay Gillen and Rita Byrne hushed the revelry with beautiful romantic songs. Tony and Kay Gillen had double anniversaries to celebrate,



● Westport Weekend: Checking the latest scores are Ray Byrne, Gerry Baker, John White, Tony Gillen, Vinnie Byrne, Rita Byrne and John Lavelle.



● Westport Ryan Hotel: Eddie Egan with Peter Johnston, John Lavelle, Terry Johnston, Maeve Clonan, Marie Lavelle, Pat Egan, Ray Byrne and John Doherty.



● Westport Weekend: Victor Madigan performing with Mary Byrne enjoying the cabaret.



● Westport Weekend: "Geraldine" Baker with Marie Lavelle, Lilian Baker and John Lavelle.

their silver wedding anniversary and the 25th anniversary of Tony's 1958 All Ireland Football winners medal. Needless to say, the mayhem was always under the control of our master of ceremonies, Eddie Egan.

Champagne flowed and the ladies were showered with prize orchids courtesy of John — Sanbra Fyffe — Darcy who also sponsored the golf prizes.

Results: Men 18 Hole Stableford — Eddie Egan, 40 pts; Victor Madigan, 39 pts; Vinnie Byrne, 38 pts. Front Nine: Michael McDonagh; Back Nine: John B Doherty.

Ladies 14-holes Stableford — Lilian Baker, Winner; Etna O'Doherty, Second; Rita Byrne, Third.

Mixed Foursomes, 9 Holes — "Geraldine" Baker & Michael O'Doherty; Lilian Baker & Eddie Egan; Pat Egan & Michael McDonagh; Kay Gillen & Eamon McGrattan.

Caption Competition

Since last month's captions to accompanying photographs provoked such a widespread comment, we are now giving readers the opportunity to display their wit with this caption competition. The winning entry for each caption shall receive 12 golf balls. Entry open to all readers of the *H&V News*. Closing date for entries 21 November, 1983.



Caption 1:

BTU Fit Runtalrad in at Hermitage

The BTU October outing was held at Hermitage Golf Club. Normally this outing is the final competition of the year which decides the winner of the coveted title "Golfer of the Year". Due to competitions being rained off at the beginning of our golfing calendar, the final decisive outing will be held in Castle Golf Club. The winners fancy Des O'Gorman or Eddie Egan to win but a late charge from Tony Gillen could scatter the field.

The outing was a single pipe competition using the pressure drop method for regulating the scores of this year's previous winners. The winning scores were determined by the principal factors of resistance as detailed in the Runtalrad catalogue. When the temperature adjustments were made Des O'Gorman's full



● BTU Hermitage: Paddy Clonan, Oliver Goldsmith and Denis Browne.

handicap score would not fit in the space allowed and it was Liam Stenson's good mean temperature and cool return that won the day.

The best visitor return was a computer-assisted score by Tom "The Blonde" Walsh, MD, Runtalrad, who "emitted" a tailor-made print-out of 40 points.

Winner — Liam Stenson, 40 pts; Class One — Tony Delane, 36 pts; Mick Devoy, 35 pts.

Class Two — John Lavelle, 39 pts; John Hunter, 37 pts.

Class Three — Des O'Gorman, 38 pts; Liam Dillon, 36 pts.

Front Nine — Peter Johnston, 20 pts; Back Nine — Des O'Sullivan, 19 pts.

Visitors — Tom Walsh, 40 pts; Charlie Goudie, 38 pts.



● BTU Hermitage: Frank Somers, Tony Kane, Roger Hoffler, Vinny Byrne and Tony Gillen.



● BTU Hermitage: Cathal Connolly, Kevin Hicks, Bill Penrice, Paddy Costello and Des O'Sullivan.



Caption 2:

Name:

Address:

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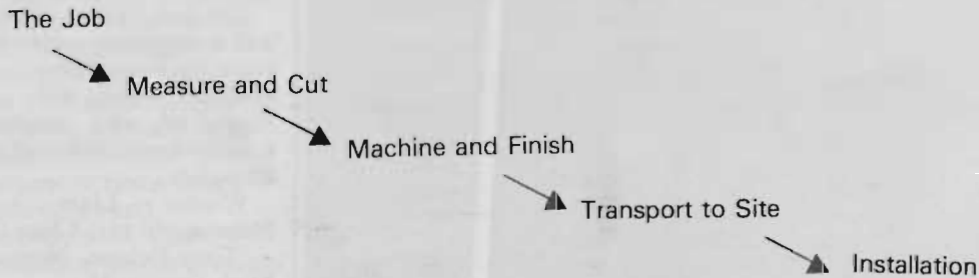
Send entries to: BTU Golfing Society, 6 Pembroke Lane, Ballsbridge, Dublin 4.

Analysis of the Ducting and Ventilating Industry — Part 3

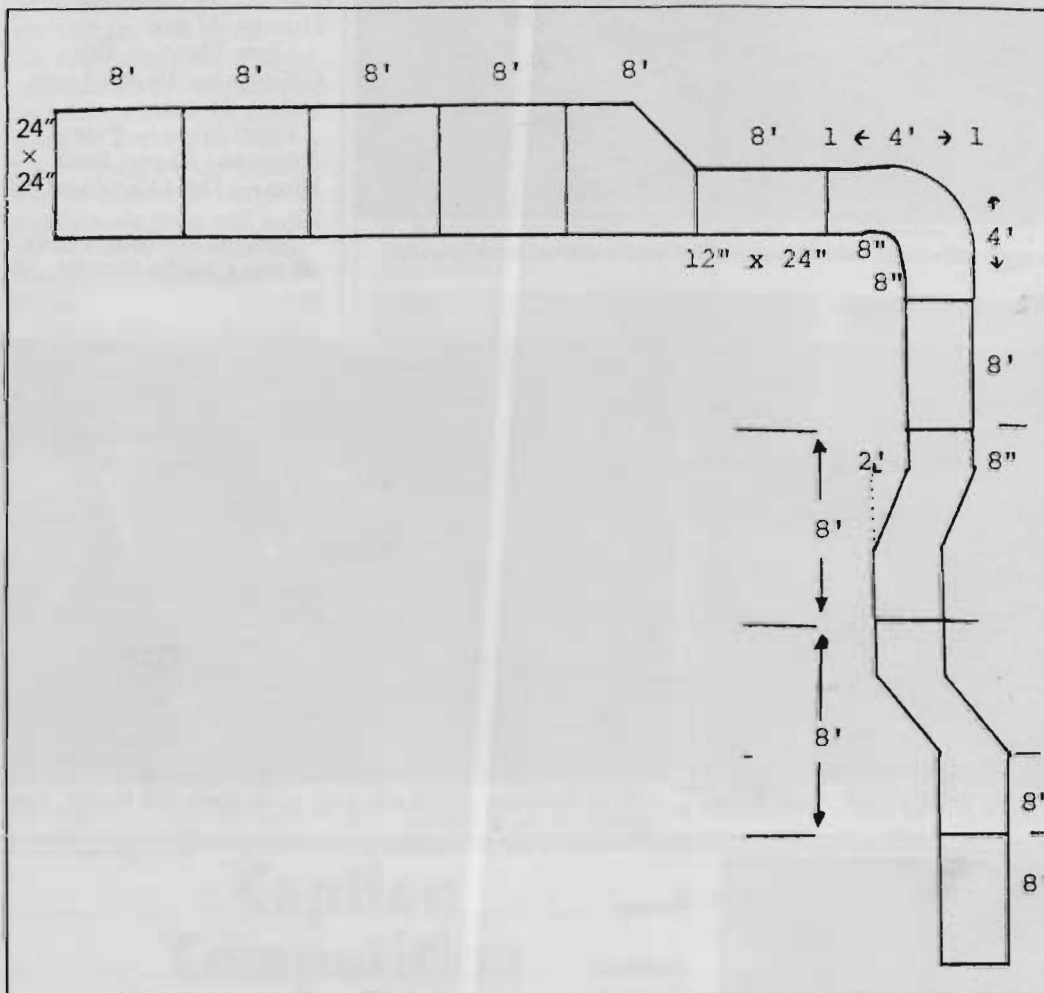
PRODUCING THE PRODUCTS

This month Ian Sweeney deals with the subject of actually producing the products and discusses them under eight category headings.

Diagram of the basic production process



The best way to show and explain this process is by example.



The job: The architect's drawing of the heating and ventilation system layout is used as a basis for all duct production, from this drawing requirements for raw materials are made and ordered. The job is

done in sections. The engineer extracts a section from the drawing, like the example, and gives it to the shop foreman for manufacture. From this drawing the foreman makes up a list of what

has to be done.

For example: 4 of 8' @ 24" x 24"; 3 of 8' @ 12" x 24".

1 change piece 8' long @ 24" x 24" into 12" x 24".

1 Bend 4' @ 12" x 24"

with an 8" throat.

1 offset 8' long @ 12" x 24" with a 2' offset and 13" of straight at each end.

8 mezz flanges @ 24" x 24"; 10 mezz flanges @ 12" x 24".

Also, there will be a list of brackets for hanging the duct on. Their sizes are dependent on how close the wall is or else how far overhead the girder is.

The foreman will then give this list to one of the men. At any one time there may be several of these lists being manufactured.

Measure and cut: From the list, the man on the job will cut sheets to size from the straight lengths of duct and then he will notch the corners for machining purposes. The offset, change piece and bend will have to be marked out and cut by hand. There is also a different notching procedure as these pieces are run through different lockforming machines. These pieces are more time consuming and the speed and quality of the finished product is totally dependent on the skill of the tradesmen. He must then measure and cut the mezz and angle iron for flanges and brackets respectively.

Machine and finish: The metal is next put through lockforming machines. There are several different types of machines depending on whether it is straight duct or bends, etc. After this the metal is put into the benders and bent into rectangular form and the lockforms are hammered together. Bends, offsets, and change pieces have to be made up in 4 plates, with lockforms

on each plate, and then hammered together. The mezz flanges must be put together, using corner pieces to join them, and then the flanges must be bolted or pop riveted on to the ductwork. The pieces of angle iron must be welded into brackets and holes are drilled for bolting it to the duct on site.

Transport to site: The finished duct is then loaded on to the truck. This must be done carefully to avoid marking and dinting the metal, as the consulting engineer can send back ductwork which is marked. Careful loading is also important for maximum utilisation of space. The duct is then brought out to site.

Installation: The first job to be done here is to put up the brackets. The first length of duct is then bolted up and the joints are sealed with a sealing compound. The next piece is bolted on to the first piece and then into the bracket. This is done all the way down the line. It is important that the run of duct is totally sealed. The ends on the run are either joined to another section, sealed up with a blank end, or linked up to a fan (this job is done by the mechanical contractor's electrician). The next job to be done is the installation of grilles for supply or extraction as the case may be. Holes are cut in the duct to fit the grilles which are then screwed or pop riveted up. These grilles are usually self-sealing, but if not, a layer of strip foam

is put around the hole to seal them. In some cases, the duct must have special features:

(a) Fire dampers! these close off and seal the duct if there is fire to stop it from spreading. Fire dampers are usually bought made-up, but can be made in the workshop;

(b) Louvres: These are used as a method of diverting the air flow from one section to another. Louvres are usually bought as this is cheaper than manufacturing them yourself;

(c) Attenuator: These stop vibrations in the duct if there is a need for low noise levels. Attenuators are also nearly always bought in made-up.

The production process for pipe ductwork follows the same procedure except a different lockforming machine is used; the duct is rolled, not bent; and mezz flanging is not used. The pipe is made with a big and small end and each length slides into the next and is pop riveted.

Major items of machinery and/or equipment used: All of the heavy machinery is supplied by foreign firms, mainly from the United Kingdom and Germany. The largest and indeed one of the cheapest manufacturers of sheet metal equipment is W.G. Hegbourne and Sons Ltd from London. They manufacture practically all machinery used in the production process. The only machinery which is not imported is light

equipment such as hand drills and small manual rollers and benders. Most of the machinery is specially manufactured to deal with 8 ft x 4 ft sheets with thickness of between 16 and 26 gauge metal. The major items of machinery used are:

Storage racks and hoist: Size and position of these racks are important for efficiency. They should be placed close to the guillotine to save on labour time. A hoist is also important for labour saving. Two tons of metal can be unloaded in five minutes as opposed to one hour by hand.

Guillotine: This is one of the most expensive items of machinery and arguably the most important. A second hand machine can be purchased for approximately £4,000 — a new one costs £13,000. A small manual guillotine is also very useful to avoid bottlenecks and also as a back up in case of power failures. The dependability of the guillotine is vital. If it breaks down there can be no production.

Work benches: All of the marking out is done by the men on these benches. They are fairly cheap, but important. After sheets are cut on the guillotine, they must be notched out on these benches before being run through the lock-forming machine. Difficult pieces, such as bends, offsets, change pieces and square to round ducting must all be marked off by tradesmen on these benches.

Brake press: Second hand these machines cost approximately £5,000 and new they cost £14,000. They bend the metal into duct form. They are automatic and bend to any angle specified. However, in Ireland they are not very popular as manual benders can do the same job at nowhere near the same expense.

Benders and rollers: These form rectangular and round piped duct respectively. In Ireland they are usually manually operated although automatic ones can be obtained. They can be bought second hand for approximately £2,000 and new for £6,000.

Lock-forming machines: These can be acquired new for between £900 and £1,200 depending on which machine you require and second hand they usually cost approximately £500. Their dependability is very important to the completion of the finished product. These machines make it possible to seal the pipe or rectangular duct which is vital to the overall ventilation system working.

Mezz and angle iron saw: New these machines cost approximately £1,200 and £600 second hand. Mezz or angle flanging join the lengths of duct together. Mezz saws are specially made to cut through the mezz without crushing or damaging it in any way. The saw can also cut angle iron which is usually used for brackets for hanging up the duct. The angle is

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cut to size and then arc welded.

Cleat machine: This is an alternative to mezz flanging. The machine is fairly light and can be bought for about £100. It is only used on small ducts.

Power drill: A new power drill costs about £800 and a second hand one costs between £200 and £400. It's used mostly for drilling holes in the mezz flanging and the angle iron brackets, but has many other uses too numerous to mention.

Welding plant: It is very difficult to obtain a second hand arc welding system. A firm is better off buying a new one for reasons of dependability. All heavy welding of angle iron, plate steel, bars and any other heavy metal is done with this machine. Depending on how powerful the machine is to be, it may cost anything from £800 — £1,500.

Oxy/acetylene bottles: These are used for welding lighter gauges (ie 18-26 gauge). They should be mobile as they may be needed anywhere in the workshop or even on the site. These are also used for braising and with a different nozzle they can be used to cut heavy plate steel which cannot be cut on the guillotine. The plant and nozzles cost approximately £200 and the gas bottles are rented and there is a cost for refilling.

Spot welder: This machine costs approximately £1,500 new and £500 second hand. This is used where the weld does not have to be all the way along the metal. It is very quick and therefore labour saving. It does the same job as pop riveting, but better and quicker.

Transport: Nearly all Irish firms have a medium sized truck for transporting the duct work to the site and for bringing in the raw materials. Dependability of the truck is very important. A new truck

costs approximately £20,000. Good second hand trucks are very difficult to find and it must be remembered that delays can cost money.

(All prices quoted are from W.G. Ledgburn's price list for April 1982).

Level of technology employed in the sector

To examine the level of technology employed it is best to divide the sector into two distinct processes.

Manufacture: This side of the job is labour intensive mainly due to the fact that each job must be custom built. There is a set level of technology used, and this is common to all shops in Ireland, with the exception of two firms.

Installation: This side of the job is totally labour intensive. There is little or no machinery used (baring small hand drills) and this situation is unlikely to change in the foreseeable future.

Overall, this industry is highly labour intensive. This can be shown clearly by the following figures from one of the firms in the sector.

Total output for the year 1981 — £296,000.

Total labour costs for the year 1981 — £174,000.

This figure for labour represents about 60% of total output and this type of percentage is common to most firms in the sector. It clearly indicates how labour intensive the sector is.

Wide ranging changes in technology employed

Again, it is useful in examining this area to split the sector into two processes.

Manufacture: The level of technology has not changed radically over the past twenty years. The main reasons for this are:

(a) All systems must be custom built; (b) In Ireland the market is not large enough to warrant large investment in new machinery etc; (c) Irish standards are high and new innovations take a

long time to be accepted.

There have only been technological advances here in two main areas.

(i) **Flanging:** Nowadays, ductwork is joined by mezz flanging as opposed to the old method of angle iron flanging. This has increased productivity, as there is no welding necessary.

(ii) **Spiral duct:** Spiral ducting is a fairly new innovation (ie the last ten years). A machine can now produce round duct to any specification up to a certain diameter (approximately two feet). However, bends square to rounds etc must still be hand made. It is not widely used in Ireland, in fact, only two firms now use this machine. They are: T J Brown and Truflo.

Installation: There has been very little change in the job of installation, but architects and engineers have played a large part in increasing production by way of better layouts. There has also been a new innovation of flexible duct which can be bought. This type of ducting is very handy when in a tight spot with no room to manoeuvre. However, it only has limited uses.

Building requirements

Certain aspects of the building are particularly important to this sector.

Location: It is important that the workshop is not in a built-up area as parts of the production process can be very noisy and local residents can complain (as has happened to one small firm who were forced to change premises).

The building should be located at a central position to a good road system and also close to suppliers of raw materials. This is one of the main reasons why all of the larger firms in the sector are located in the Dublin area.

Size: Land in the Dublin area is very expensive. Therefore, the shop should be large enough to facilitate all the machinery;

approximately 40 metres by 30 metres is a normal size. However, if the firm does a lot of large jobs in the country, it should also have some storage space for duct awaiting transport to site.

Other requirements: The building should be well lit and ventilated to accommodate the employees. These features are particularly important as some of the work and machinery involved can be quite dangerous, eg welding, cutting on guillotine and drilling. The building should also be very well sealed as water can spoil the sheets of metal.

Raw materials, suppliers and their sources

There are two types of raw materials which are used by this sector.

Raw materials which are used for production: These include: Sheet metal; angle iron and flat iron; stainless steel sheet; aluminium sheet; mezz flanging; fibreglass roll; nuts, bolts, pop rivets, etc; and sealing compounds and sealing foam.

Sheet metal is by far the most widely used raw material. The main suppliers of angle iron, flat bar, sheet metal, aluminium and stainless sheeting are: Dublin steel stockholders; Heiton McFerran; Ferrum Trading; Sherling's; McArthur's; Eirden Steel's.

These firms supply over 80% of the market. All of the metal is imported mainly from the British Steel Corporation, but there is also some French and Belgian steel imported. Surprisingly, in the last few years there has also been some Japanese sheet metal imported, but this was of low quality and has not been very popular. The only other major supplier of sheeting is The Steel Co of Ireland, who are the biggest stainless steel dealers but fairly small in the other raw materials.

The only manufacturer of any of these materials in Ireland is in a Cork based firm and they

manufacture angle irons, flat bars and heavy plates. They are Irish Steel Holdings Ltd. They have been heavily backed by the Government but are not doing well. The main suppliers of mezz are: Woodside Engineering — who are also a firm in the sector. Wholesale Hardware — who have just started and are based in Kilkenny. I don't know where they import from, but their mezz has become very popular and they have succeeded in capturing a large segment of the market. Unimack — who have been suppliers for many years.

The main suppliers of fibreglass to this sector are: Bilcah Products — who also supply smaller items such as sealing tape and small flexible duct joints.

The main supplier of all sealing compounds is: Evostick.

Finally, the main supplier of nuts, bolts, pop rivets, self tappers, etc is: Tucks Hardware.

Raw materials manufactured outside the sector

These products are bought as finished goods and installed by the firms in the sector as part of the overall heating and ventilation system.

These include: Fans; louvres; grilles; filters.

The main suppliers are: GEC — who import directly from their British factory. They only supply fans;

Ventac — who import from the United Kingdom and Germany. They supply fans and grilles;

Dan Chambers Ltd. — who deals mainly with fans imported from the United Kingdom, but also some Swedish fans. He also supplies grilles and louvres;

Redbro — these supply mainly grilles, but also some louvres;

Finheat — these supply mainly grilles, but also some louvres;

Longford Ventilators — this is one of the few companies in Ireland who actually manufacture grilles and

louvres. They are fairly competitive and get a lot of support from consulting engineers;

Glotherm — this company acts as the agent for Longford ventilators;

Clondalkin agencies — this company is the main supplier of filters. They manufacture some themselves, but mainly import from the United Kingdom.

Critical areas of scheduling

The overall job can be divided into two sections:

Manufacture: Critical areas of scheduling on the manufacturing side are to a large extent dependent on Communication and organisation.

Communication: The boss and/or engineer must be able to communicate well with the foreman. Such things as priority of job and method of manufacture must be made known to the shop foreman in order to avoid holdups and waste. The foreman must then distribute the work to be done to the men in the shop. He should know the capabilities of each man.

Organisation: It is important that there is a recognised chain of command, otherwise you can end up with two men doing the same job (which has happened as some stage in all shops). The organisation of the shop and its layout are vital. If these are not done correctly, there will be bottlenecks which leads to waste of labour time and delays in getting the duct to site, which in turn means that the men on site are left standing around with nothing to do.

There is no substitute for experience here. Most established firms have set procedures which they have learnt over the years.

Installation: The critical area here is timing. Each subcontractor receives a bar chart with a schedule. This schedule must be followed. There is a site meeting every week between the main contractor and the subcontractors at which any problems which have arisen are discussed. If a subcontractor falls behind

it can cause holdups for all the others. The main contractor is usually tied by his contract to a certain finishing date, which, if it is not met, will result in penalties. If the subcontractor does not finish on time, he is in danger of losing any future work from the main contractor. Also, if stated in the contract, he may be liable to penalties. However, this penalty clause has never really been tested in court and many lawyers are of the opinion that it is illegal and cannot be enforced unless there is also a bonus scheme for early finishing. The main incentive to the main and subcontractors to finish on time is for future work.

The actual installation of ductwork follows set procedures and is usually straight forward enough, again there is no substitute for experience. If this side of the job falls behind for any reason the onus is on the firm to employ men or use overtime to complete the job on time. There

must be harmony between all firms involved.

If the plasterers are holding up the installation of the ductwork, the main contractor will only be told as a last resort. Most of the subcontractors have worked together in the past and will again in the future so there is no point in stepping on toes when it can be avoided. There is a lot of interdependence between trades and good relations are very important.

There is one other aspect of the business which must be scheduled properly, namely transport. At any one time there may be work going on on several sites all over the country. It is important for maximum efficiency that the truck and driver are left idle as seldom as possible. The main objective is to keep site workers supplied, however, deliveries should be scheduled for efficiency (eg make two deliveries in one journey and pick up raw materials on the return journey).

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PRODUCT REVIEW: DOMESTIC BOILERS

Natural Gas to Dominate

Just at a moment in heating history when everyone had accepted that it was wise not to put all your eggs in one basket, fuel wise that is, New Dublin Gas comes up with the sliding scale for fuel charges. Now I know that this is not the end of the world especially for New Dublin Gas but it does force customers to use gas and gas only thus eliminating the recent practise of fitting a back up or interlink system with the main boiler.

There are a lot of pluses to be fair to natural gas and all the publicity surrounding the arrival of natural gas has already generated business on a scale which it is hoped will make the industry viable again. There are a number of domestic heating contractors now doing an average of nine or ten jobs a week which is good going even before the full blast of advertising has started. So what of the future of domestic heating boilers?

The country has yet again to be divided in two but not this time politically. The cause of the split is the availability of natural gas or not and with the economics of distributing gas to large towns and cities the old town and country split appears again. The same rule will apply both north and south of the border since the deal has been signed to supply gas to Northern Ireland from the Kinsale gas field.

In the cities and towns while solid fuel, oil and LPG will continue to be sold for domestic central heating the market will shrink over the next few years and gas will gain a major share of the market.

This market will differ somewhat in the type of product being sold in the

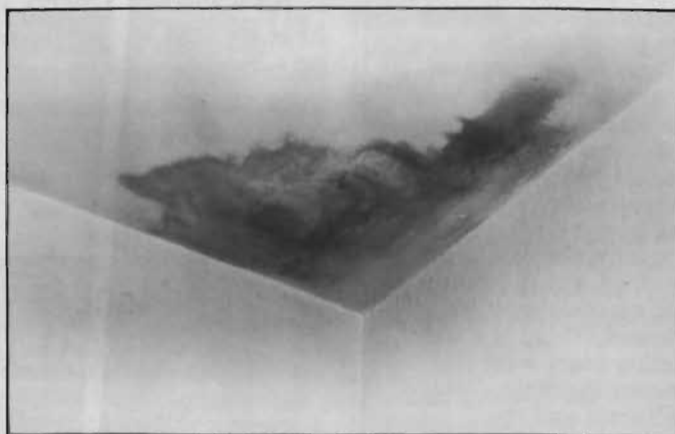
sixties with wall hung balanced flue low water content boiler now taking the major share of the gas boiler market; this type of unit was almost unheard

of in the swinging sixties. Although I know that it has been discussed gas fired warm air is unlikely to make a come back with the memory of badly

undersized units still fresh in peoples' minds so wet systems will dominate. Although not having any appreciable share of the market in Ireland the combination unit which combines water heating and central heating in the one unit shows remarkable savings in running costs and undoubtedly will have a growing share of the market. So what of the rural areas who will not be receiving natural gas? For these areas oil has made a small come back but still takes second place to solid fuel which continues to have a strong grip everywhere. From a development point of view solid fuel is still coming up with new ideas to burn fuel, the latest of these being the multi fuel closed stove central heating units which are now coming available from a number of manufacturers. Another idea for solid fuel closed stoves is the increase of the convection output from the unit itself thus doing away with the need of a radiator in the room where the unit is installed.

Development for LPG boilers goes hand in hand with natural gas boiler development but LPG will hold only a relatively small share of the central heating market.

As a final word on trends in the domestic heating market I enclose some pictures taken only in the last month of an installation which had originally a solid fuel cooker attached to the flue and against the advice of the contractor on the basis of costs the client chose not to fit a flexible flue liner with their new gas boiler. The pictures speak for themselves and it is worth noting that the installation was only in for one heating season and the flue is situated in the



● An indication of the problems that could arise with conversion to gas from solid fuel without the fitting of a flexible flue liner.

PRODUCT REVIEW: DOMESTIC BOILERS

centre of the building. If this is an indication of the problems that could arise with conversion to gas from solid fuel a firm stand should be taken by the Gas Co on flues such as this one.

The following notes are based on material submitted by the companies concerned.

Aga-Rayburn

Aga-Rayburn have introduced a high-output back boiler version of the company's best selling open fire. Called the Rayburn Rembrandt C, the new fire, the first to meet the new BS and DSEAAS testing standards for solid fuel appliances, is designed to run on house coal and most types of smokeless fuel. When burning house coal, the Rembrandt C has a total maximum output of 32,500



● The Rayburn Rembrandt C from Campbell & Cooke.

Btu/h (9.5 kw).

To prevent wasteful heat loss up the chimney, the canopy of the Rembrandt C conceals an adjustable plate to restrict the size of the chimney so saving on fuel and reducing draughts in the room.

To increase the capacity of the fire box when the fire is left to burn at the lower rate for longer periods unattended, a depending bar can be fitted to the front of the fire to take the extra fuel. Two bars are supplied for use with different types of fuel. The Rembrandt C burns house coal (Doubles or Trebles), Welsh Dry steam coal (Large nuts) and smokeless fuels such as Coalite, Rexco, Homefire and Royal.

The Rembrandt C is designed for installation in a recess of not less than 18" (458mm) deep x 32" (830mm) wide x 38" (965mm) high.

Rayburn recommend the Rembrandt C be plumbed

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A boiler version which will provide plentiful hot water and heating for 7-8 radiators is available as well as a dry version for space heating of up to 7,500 cu. ft.

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PRODUCT REVIEW: DOMESTIC BOILERS

into an indirect hot water cylinder of the double vent type: 245 litres (54 gallons) capacity for hot water only and 140 litres (30 gallons) for hot water and central heating.

The canopy, fire front and sides of Rembrandt C are elegantly finished in matt black ribbed cast iron. Two brass finials on either side of the fire complete the picture.

Further details are available from Campbell & Cooke Ltd, 16 Rutland Place, Dublin 1, (Tel: 786099).

Craigavon Heat Exchangers

The Miser oil fired boiler is claimed to be the most efficient boiler on the market because of its built-in heat exchanger. Industrial Science Division shows the Miser to be 86% efficient while a number of other controlled tests also resulted in similar results.

The heat exchanger preheats the water by the flue gases ensuring the burner has less work to



● The stylish Glow-Worm Majorca 240/6, gas-fired back-boiler unit is ideally suited to smaller houses while the Majorca 246 is more suited to the larger 3/4 bedroom homes. The 240 back-boiler gives outputs of 30-40,000 Btu/hr and the Majorca, Model 246, provides outputs of 46,000 Btu/hr. Glow-Worm back-boilers and gas fires are distributed by C & F Ltd.

do. ISD tests also showed that the Miser raised the water temperature over 30% faster than conventional boilers.

Even the burner switches off, the inherent heat continues to rise up into the heat exchanger from the boiler, which keeps the burner off longer and therefore saves fuel.

You can prove to yourself that the heat exchanger must work by feeling the heat from the flue when the boiler is firing. This heat, which would otherwise be escaping into the atmosphere, is used by the heat exchanger to pre-heat the water before it returns to the boiler.

Further details are available from Craigavon Heat Exchangers Ltd, 46 Seago Industrial Estate, Portadown, BT63 5QE, (Tel: Portadown 330630).

Glow-Worm

With a growing "swing" towards the use of natural gas for heating, it is significant that T I Glow-Worm Ltd, the largest manufacturer of gas-fired central heating products in Europe, have launched five new boilers on the domestic heating market.

"Gas is more efficient" . . . natural gas is now cheaper, and the use of gas-fired heating appliances is on the increase. With the ready availability of new natural gas piped direct from Kinsale to Cork, Dublin and throughout the country, a further increase in the utilisation of domestic heating products using natural gas is inevitable.

Speaking on this trend recently, John Duignan, Managing Director, C & F Ltd, stated: "The advantage of cheap natural gas in Cork and Dublin will very quickly make gas the major fuel for domestic central heating in this country. Gas is currently taking about 4% of the central heating market. This could rise to between 60% and 70% by 1989."

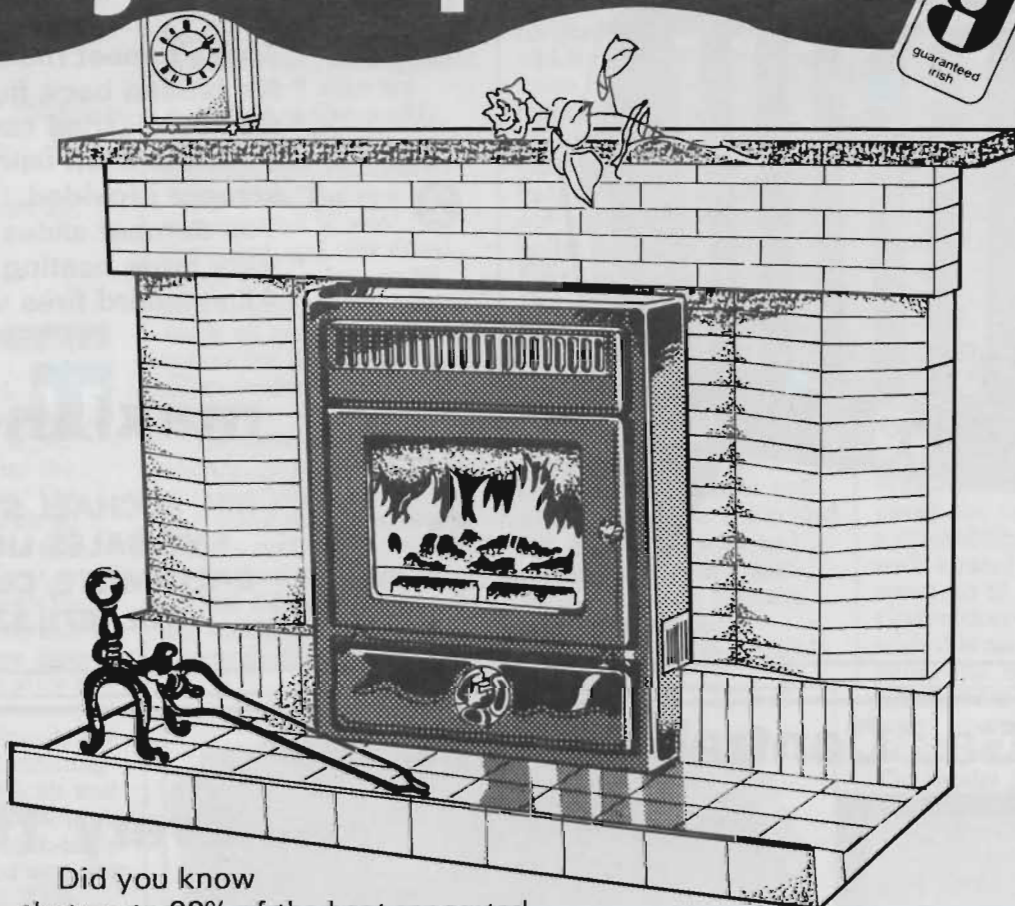
Arthur Waddington of T I Glow-Worm also said recently that "Conversion certainly means gas at more competitive prices; it also means the availability of a far wider range of more exciting products for home heating and water heating."

The five new Glow-Worm gas fired boilers introduced on to the Irish domestic heating market are — the Space Saver Mark II available on natural gas, towns gas and LPG comprising three models, plus a balanced flue version; the Royale, a coal effect back-boiler and



https://arrow.tudublin.ie/bsn/vol22/Iss10/1 models from Craigavon Heat Exchangers Ltd.
DOI: 10.21427/D7WB0Q

Get five times more heat from your open fire.



Did you know that up to 90% of the heat generated by your open fire goes right on up the chimney? That's right—the heat-efficiency of an open fire is only upwards of 10%. But now, by installing the new Stanley Fire-Front, you can enjoy 65% heat-efficiency—five times as much heat from the same fire—and economise on fuel at the same time. Moreover, if you have a back boiler the Fire-Front will increase your hot water output by at least 30%.

To find out more about the money-saving, hearth-warming, easy to install Stanley Fire-Front simply post this coupon today for our FREE, full-colour brochure.

STANLEY FIRE-FRONT

To: Waterford Foundry Ltd., Bilberry, Waterford. h+v

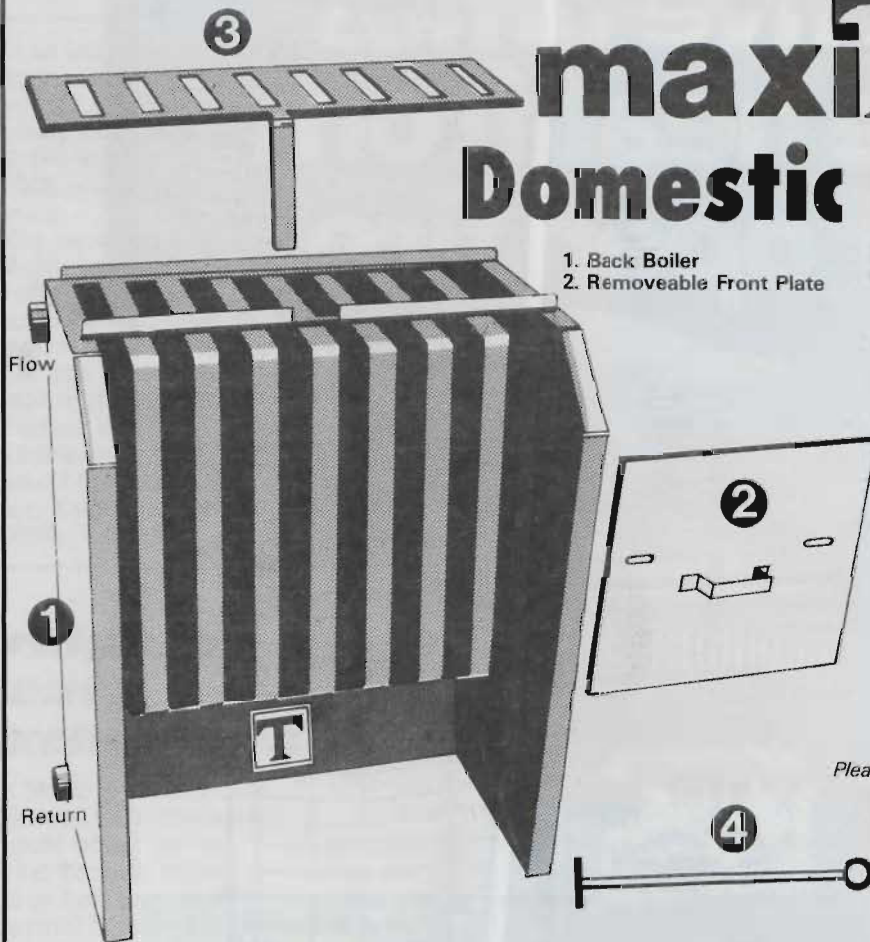
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- 1. Back Boiler
- 2. Removeable Front Plate

- 3. Removeable Top Slide Damper
- 4. Scraper

- * Today's most modern boiler.
- * No hidden back flues.
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CHAPELIZOD, DUBLIN 20. PHONE: 264917/264898/265831

PRODUCT REVIEW: DOMESTIC BOILERS

fire, which is available on natural gas only; the Camelot, a back-boiler and fire styled in a most attractive glass crystal effect available on natural gas only; and the two Majorca — models 246 and 346 — both available on natural gas and towns gas featuring recessed lighting.

Further details are available from C&F Ltd, Unit G7, Chapelizod Industrial Estate, Chapelizod, Dublin 20, (Tel: 264917).

Maxitherm

Most high-output back-boilers have single, double and even triple flues positioned up the back of the boiler. The major problem with all back-flue boilers is the deposits which form on all steel in contact with the fire. Unless this surface is kept clean, a large drop in efficiency occurs after a few months.

With hidden flues at the back, this job of cleaning becomes very difficult and in fact often impossible. The Maxitherm back-boiler has been designed with this problem in mind. This unique design provides fins which project out over the fire and hence are easily cleaned from the front.

The main features are (a) a lot more surface heating area; (b) Easily cleaned even when the fire is on; (c) Thinner water-ways for faster heating from cold; (d) Damper — the Maxitherm is fitted with a top slide damper and a removable front plate; (e) Manufactured to BS 3377 (f) All steel to fire is 6mm and 4mm elsewhere; (g) Standard sizes; (h) Special model for underfloor draught fires.

The Maxitherm is manufactured by Turkington Engineering Ltd of Sandholes, Cookstown, Northern Ireland and distributed by Michael Sweeney, SME Sales Ltd, Ballymote, Co Sligo, (Tel: Sligo 83026).

Waterford Foundry

After an unhappy closure for six months, the long-established foundry at Waterford re-opened last Easter under new management. Management and workers alike are dedicated to the quality which for nearly 50 years has been the tradition of Waterford. The new management is also conscious and concerned about after sales service and can now supply from stock all accessories and spares for the Stanley and Waterford ranges of products.

The now famous Stanley cooker burns any solid fuel continuously and provides hot water requirements as well as central heating with a rated output of up to 45,000 BTUs depending on the model chosen. Luxuriously styled and

finished in vitreous enamel, it provides economy, reliability, durability and versatility in one compact unit. The cast-iron strength of the Stanley makes it a lifetime cooker!

A recent addition to the Stanley range is the revolutionary Fire-Front which converts five times more heat to useful energy from an open fire and utilises any solid fuel. Used in conjunction with a back boiler an increase of not less than 30% in back boiler output is assured. Easy to install, the Stanley Fire-Front fits most standard fireplace openings 22" high by either 16" or 18" wide.

The Waterford range of stoves is very well established in many countries overseas as well as at home. The Waterford 106 gives convected and radiant heat with a spin valve to control primary and secondary air combustion. It is available

with a boiler for domestic hot water and central heating purposes with a rated output of up to 39,000 Btus. Top and back flues provide for a variety of installations and the Waterford 106 will burn continuously at a low firing rate for 8-10 hours. It is 27½" high by 25" wide and built of quality cast-iron.

The Waterford 100, 102, 103 and 104 are other models of the famous cast-iron Waterford Stove range. The 100 delivers up to 50,000 Btus and can burn unattended for up to 16 hours. It incorporates a hot-plate which is useful for boiling, simmering and frying. The 102 delivers up to 76,000 Btus and some cooking can be done on its large top too. The Waterford 103 has glass doors and is available with a central heating boiler with a rated output of water up to 35,000 Btus. Convection/radiant heat with this model is 63,000 Btus. The Waterford 104 maintains a fire up to 12 hours unattended and delivers up to 37,000 Btus. The model 101 is a DIY version of the 104.

All the Waterford products are available in a wide range of vitreous enamel colours or a matt black Senotherm.

Further details are available from Waterford Foundry Ltd, Bilberry, Waterford, (Tel: 051-75911; Telex 80763).

Hevac

Hevac Ltd have been marketing the RMS atmospheric gas boiler for over a year now and are pleased to announce the successful penetration it has achieved in such a short time.

This boiler is available in three models:

The RMG 8 output 262,000 Btu/hr. The RMG 9 output 302,000 Btu/hr and the RMG 10 output 342,000 Btu/hr.

The Sime RMG is a range of three sectional boiler, each approved by



● The Maxitherm domestic back-boiler from Turkington Engineering.

PRODUCT REVIEW: DOMESTIC BOILERS

DIN-DVGW for natural gas and LPG. The range of outputs is suitable for small and medium sized commercial premises.

The RMB boilers are suitable for central heating systems and indirect hot water supply at working heads up to 42 metres (4 bar gauge — 138 feet) and working temperatures up to 110°C (230°F) with standard equipment. The boilers must not be used for direct hot water supply and are only suitable for use with fully pumped systems.

Control is by a softlite-opening combination gas control incorporating a thermocouple type flame failure device and a mains voltage gas valve. The electrical box includes a terminal strip with connections for the mains inlet, circulating pump and a mains voltage room thermostat if required and also incorporates the mains voltage thermostat.

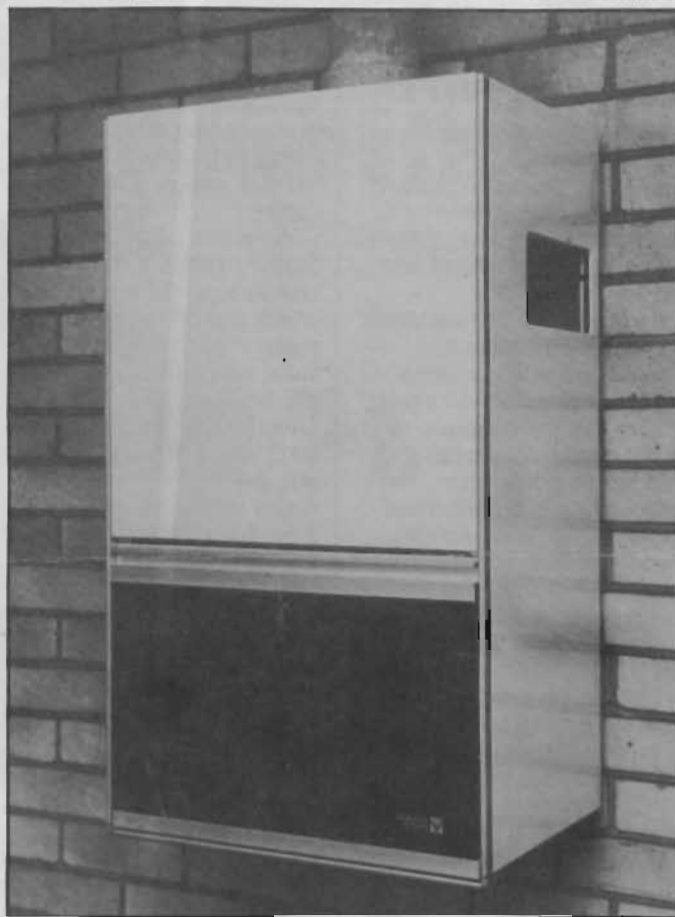
A boiler limit stat is operating in the thermocouple circuit. Electricity supply failure will shut down the main burner; it will automatically resume operation when the supply is restored.

The strong boiler body comprises cast iron sections assembled with push nipples and tie-rods.

It is equipped with atmospheric stainless steel burners. The burner bars are easily lifted out of the boiler for servicing. The combustion chamber, fully watercooled, avoids radiation losses, ensures a high efficiency and a reduction of the gas consumption, and obviates the need for a refractory foundation.

The external draught diverter is of sheet aluminium and the easily assembled casing is of steel stove enamelled and blue. A drain cock with the necessary pipe fittings is fitted on a 3/4" tapped plug.

Safety of operation in all circumstances and the notably smooth and quiet



● The Corvec 2.24 dual purpose boiler from Taney Distributors.

specially designed control system.

The boiler body, complete with burner, gas controls and casing is supplied assembled in a wood crate for transit. The draught-diverter is supplied in a separate room.

Further information is available from Hevac Ltd, Lister Complex, Ballymount Road, Clondalkin, Co Dublin, (Tel: 519411).

Taney Distributors

The Corvec 2.24 dual purpose boiler is a development of the appliance that has been marketed successfully in Europe for many years. It is essentially a combination of the traditional multipoint water heater and central heating boiler, and therefore eliminates the need to supply ancillary equipment such as the expansion tank,

cylinder, pump, diverter valves, automatic air separator and any associated pipework.

The installation of a Corvec dual purpose boiler therefore provides tremendous savings in time and materials. Savings that mean lower costs for both the installer and the consumer. The Corvec 2.24 dual purpose boiler is an open flue appliance available for sealed systems only for use with either natural or LP Gas.

The Corvec 2.24 has been designed in such a way that the space heating output can be reduced to 33% of the total boiler output, ie 32,000 Btu/h without dramatically reducing the overall efficiency. When domestic hot water supplies are required for baths, showers, washing up, etc. the boiler's maximum output is automatically available giving a hot water capability of 1.71 G.P.M. raised 50°C (90°F) or 2.93 GPM raised 30°C (54°F).

Details from Taney Distributors, Unit 4, Riversdale Industrial Estate, Bluebell Avenue, Dublin 12, (Tel: 508120, Telex: 24147).

Coal Information Services

Coal Information Services, an alliance of coal merchants throughout Ireland, was created to provide a unified and high standard of service to customers and potential customers for coal.

Among the many free services provided by CIS are a telephone information and advisory service to the public; sales and technical advisers; a home economy service to give talks and demonstrations to women's organisations and give practical advice on operating appliances in the home; a technical service to local authorities, builders and architects; training courses for coal merchants and installers.

The Coal Mobile Showroom is now a familiar sight. On the road virtually every week of the year, the Coal Mobile is bringing the latest developments in coal heating to every town in Ireland. Well equipped with appliances and literature, the Coal Mobile Showroom is there to answer all questions on coal heating.

To meet anticipated inevitable movement to coal in industry CIS has accumulated wide knowledge of boiler plant and ancillary equipment as well as capital and running cost comparisons.

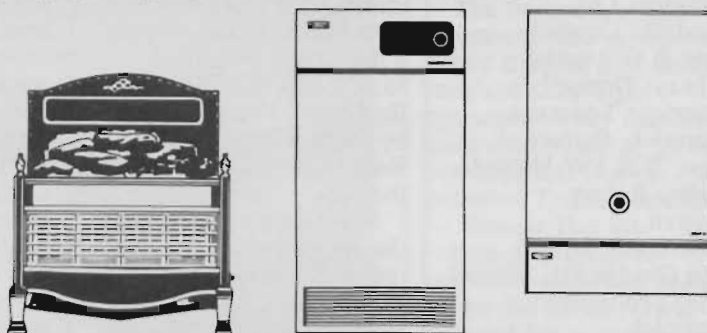
Latest developments in world solid fuel industrial technology (ref International Energy Agency) form part of the free consultancy service available to Irish industry.

Coal Information Services, with its head office in 18 D'Olier St, Dublin and a branch office



We'd like you to meet the family

Bring a cosy glow to your living room with Ideal Cavalcade.
 An attractive range of on-the-hearth gas central heating units.
 Ideal Mexico is a simply more efficient floor-standing boiler.
 It's designed to go neatly under standard kitchen unit worktops.
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 It'll save space and running costs too!
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CORVEC

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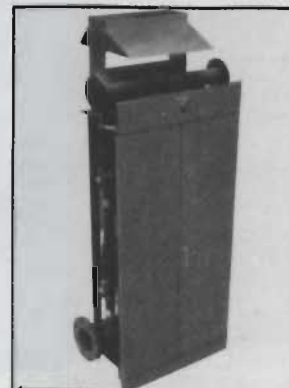
"Convert to Natural Gas in 5 minutes"



Corvec 28

Corvec 28	28,000 Btu/h
Corvec 45	45,000 Btu/h
Corvec Maxiflame	60,000 Btu/h
Corvec 140	140,000 Btu/h
Corvec Flexiflame 70	280,000 Btu/h
Corvec Flexiflame 105	420,000 Btu/h

Variable outputs up to 5,000,000 Btu/h



Flexiflame 70

Contact:

TANEY DISTRIBUTORS LTD.

Unit 4, Riversdale Ind. Est. Bluebell Ave., Dublin 12.
 Phone: 508120/520436 Telex 24147



CORVEC
 from Chaffoteaux

PRODUCT REVIEW: DOMESTIC BOILERS

at Eagle House, Lr Glanmire Road, Cork, represents the following Irish coal importers around Ireland:

- Cork: Sheehan & Sullivan, Suttons, Tedcastle McCormick.
- Dublin: Coal Distributors Ltd.
- Dundalk: Connick Cooper & O'Rourke.
- Galway: Donnelly's.
- Limerick: Tedcastle McCormick, Suttons.
- Sligo: R & LW Hunter.
- Tralee: Robert McCowen.
- Waterford: Samuel Morris (Bridge St), Samuel Morris, Tedcastle McCormick.
- Wexford & New Ross: Staffords.

Spa Stoves

Spa Stoves are the agents in all Ireland for Yeoman multi fuel stoves and inset fires. These stoves have been manufactured for over 14 years and have

been proved to be highly successful. Having the ability to burn all classes of fuel from turf to smokeless coal they are ideal for rural and urban use.

The inset fires are available as a convector model with a 14kw output on a boiler model — with a maximum output of 55,000 Btu/hr. These figures are being verified by the National Coal Board on completion of their test model.

Spa Stoves, who are also the all Ireland agents for the new Charnwood and Logfire multifuel stoves, as well as Vermont Castings, Medioduo and Cottagewood stoves, have just obtained the agency for Franco Belge cookers in Northern Ireland.

The company is managed by Desmond and Denise Fitzsimons, who have 11 years experience in the heating trade and can be contacted at Fitzsimons Heating, "The Anvil", 42

Ballymaglave Road, Spa, Ballynahinch, Co Down, (Tel: Ballynahinch 563025).

SME Sales

SME Sales Ltd have announced their appointment as Irish agents for the Maxitherm domestic back boiler, manufactured by Turkington Engineering, Cookstown, Northern Ireland.

SME Sales was formed 3½ years ago by Michael Sweeney. Michael, no stronger to the trade, has been selling to hardware and plumbers' merchants for the past 14 years.

From their Dublin warehouse at Artane, the company distribute a wide range of bathroom accessories from Materials Plastics, Portugal, high quality toilet seats from Bemis, USA, and shower enclosures from

Bronwood, UK. "Personal customer contact and service are the keys to our success," says Michael Sweeney, Managing Director, SME Sales.

Already customers have shown great interest in the unique features of the Maxitherm boiler and SME Sales believe that it will quickly secure a significant share of the back boiler market.

For further information contact Michael Sweeney, SME Sales Ltd, Ballymote, Co Sligo, (Tel: 071-83026, Telex: 40302).

Trianco

Whether your customer wishes to heat by solid fuel, oil or wood, Trianco claims to have a heating appliance to suit. The company has a vast range of products too numerous to describe in detail within this feature, but a selection of recently-introduced and most popular appliances is

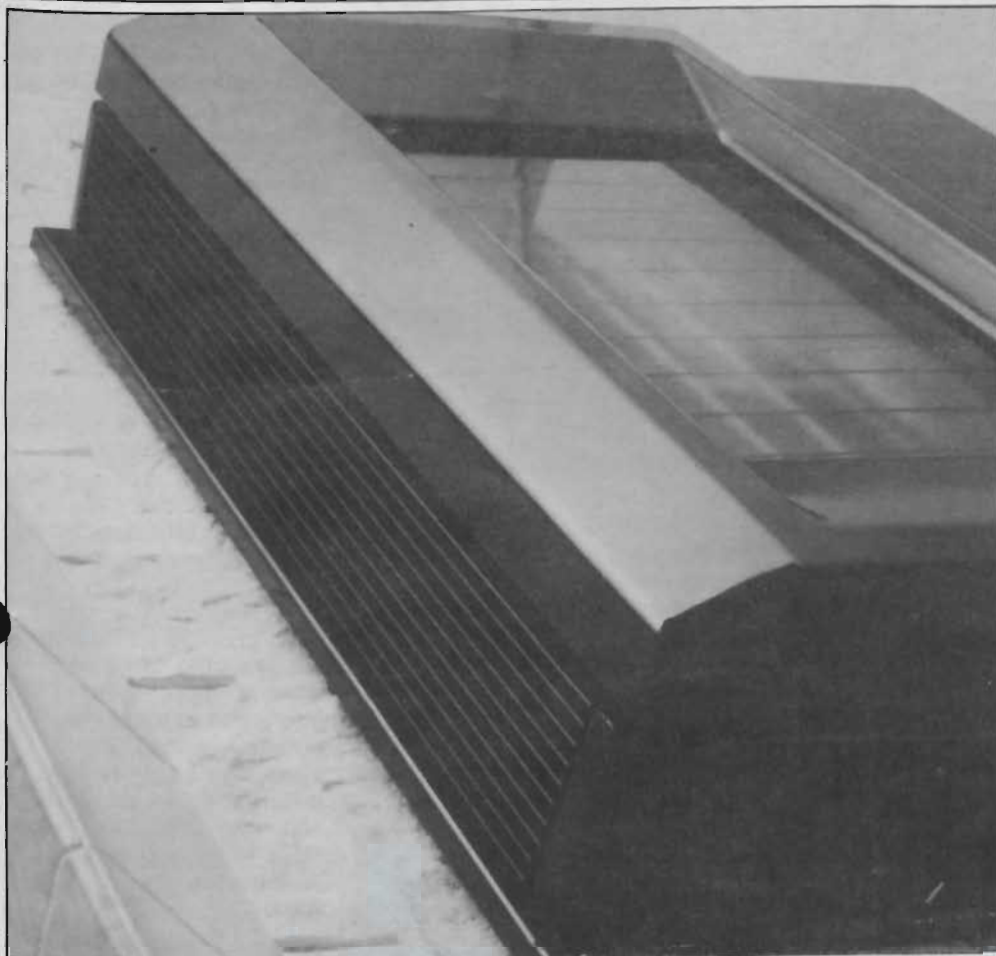
BAXI GAS HEATING



Baxi Gas Heating — Get the full story on Baxi from:

BROOKS THOMAS

Naas Road, Bluebell, Dublin 12. Tel: 783422 Contact: Eddie Wheeler, ext. 209

PRODUCT REVIEW: DOMESTIC BOILERS

● TRM convector 40 from Trianco Redfyre (NI) and Heating Distributors (26 counties).

as follows:

TRH solid fuel roomheaters from Trianco have been developed to provide central heating and domestic hot water in homes without space for a free-standing boiler, and where a radiant form of heating in the living room is desired.

There are three models — the TRH 25, TRH 33 and TRH 45 with a total central heating and hot water output of 24,500, 33,000 and 45,000 Btu/h respectively.

Newly-available, and fully-approved by DSFAAS, is the TRH Convector 40 which supplements radiant heat with convected warm air from a top-mounted grill, thus obviating in many cases, the need for a radiator within the living room. Although multi-fuel stoves offer the household the opportunity to use a wide variety of cheap and readily-available fuels, most makes on today's market are not designed to operate efficiently at all times.

Many are designed to burn wood with coal as a back-up, which means that you may not always be heating your home in the most economical way. Furthermore, the changeover from wood to coal burning and vice versa can be a tedious and messy business, since it entails altering the physical arrangement of the firebed.

Now available from Trianco is a stove called the International which solves both these problems. It has been designed to burn coal or wood with equal efficiency — and is the first appliance of its kind to be fitted with a simple device which allows you to change from one fuel to another at the turn of a lever.

One of Trianco's best-selling solid fuel appliances is the G range of gravity feed boilers.

There are two types available — the standard white cased models for kitchen or utility room

installation, and the uncased black 'boilerhouse' models for outhouse installation. They are suitable for use with pumped or gravity systems.

Six sizes are available (45, 60, 80, 100, 125 and 150,000 Btu/h) to suit most domestic central heating requirements. Control thermostat, fan unit and clinker ejection handle are all immediately accessible at the front where refuelling is also undertaken.

Trianco offers a range of domestic/commercial oil-fired boilers which offers 80% thermal efficiency.

Six models of the TRO Mk 2 pressure jet boiler are immediately available to suit every domestic and small commercial requirement. The domestic range, rated from 41 to 155,000 Btu/h, is supplied with an elegant enamelled casing for kitchen installation. Space has been allowed for the installation of a water

circulating pump and the facility to plug in a sophisticated programme for domestic hot water and central heating circuits. The programmer itself is an optional choice; this may be easily connected during or after installation.

The boilers are fully automatic and incorporate heavy thermal and acoustic insulation for quiet operation. They may be used with either a conventional flue or patented Trianco terminal — silencer flue kit.

Last year Trianco launched a kitchen boiler called the KB30. Trade demand for a small independent solid fuel boiler led to the development of the KB30 which has an output of 27,000 Btu/h, sufficient to supply domestic hot water and partial central heating. Conveniently flued, the Trianco KB30 is suitable for small-bore, microbore and gravity central heating systems.

The inclusion of a thermostatically-controlled damper automatically controls operating temperature to the present requirement, while allowing the system to be controlled by a room thermostat and/or time clock if necessary. The KB30 is front loading via a one piece door and will burn almost all available natural and manufactured smokeless fuels.

Dimensions of the boiler are: width, 572mm; depth 515mm; and height 572mm.

The Studio stove from Trianco is ideal for homeowners who require an attractive focal point fire providing localised heating. A back boiler is also available with the fire to provide hot water and partial central heating. Studio stoves are anthracite-burning, hopper-fed appliances featuring close burning damper control to achieve 75 to 80% efficiency compared with the normal 25% efficiency of a conventional open fire. The stoves are easy to run and maintain, normally

PRODUCT REVIEW: DOMESTIC BOILERS

only requiring topping up twice a day.

Further details are available from Trianco Redfyre Ltd, 46 Grace Hill, Bangor, Co Down (Tel: Bangor 51292); and Heating Distributors Ltd, Richmond Road, Dublin 3, (Tel: 375144).

Ouzledale Foundry

Ouzledale Foundry Co Ltd's range of solid domestic appliances are marketed under the name of Firemaster. Much of Firemaster business is with local authorities, builders' providers and fireplace installers up and down the country.

It was to provide a most responsive service to seasonal and sudden demands of this market that this year they have installed a Matchblowmatic machine in the foundry which will be the third machine to be installed in the last three years.

Alongside the regular solid fuel appliances, Ouzledale also manufacture and sell a very successful up market range of dog grates, and a full range of canopy dog grates. A newcomer to the Firemaster stable is the Regal 1550 Canopy Dog Fire which is manufactured in all cast iron with a cast iron canopy. It can be supplied with or without a boiler and this unit is ideal for linking up with an oil or gas boiler. The 1550 is approved by the Domestic Solid Fuel Appliances Approval Scheme for the UK National Coal Board.

Firemaster have also introduced the new Coalburn 31, a combined 16" boiler and fire. This appliance is designed to burn bituminous coal with greater efficiency than a conventional open fire and high output boiler. This increase in efficiency is obtained in the damper open condition, by burning



● Trianco TRO Mk 2 oil boiler in kitchen setting from Trianco Redfyre (N.I.) and Heating Distributors (26 counties).

volatiles produced in the specially shaped boiler flueway. Smoke reduction is obtained in this way, but it is not sufficient to allow the appliance to be used in smoke control areas, but will reduce by about 20% the smoke output when the boiler is burning down draught. In the damper closed condition the combination is similar to a conventional open fire and high output boiler combination.

A fireback is located at the back of the boiler which will increase the flue gas temperature entering the specially shaped boiler flueway and will help to reduce the smoke emission, whilst also keeping the flueway clean when burning bituminous coal.

The total output of the Coalburn 31 is 31,000 Btu/hr (9.3kw). Under test conditions the Coalburn will give the following (damper open): water

25,500 Btu/hr (7.4kw), direct room heating 5,500 Btu/hr (1.6kw).

The Coalburn is also approved to burn smokeless fuels and is available with a choice of six interchangeable fire fronts. The fire is fixed directly to the boiler so no fire fixing is needed. The boiler and fire fits any standard 16" fire opening.

This appliance has taken over three years in design, development and testing to bring to the market, and is specially designed to burn coal with high efficiency.

Firemaster specialise in the solid fuel market right to the top end and they succeed. They are almost the only foundry in the field doing the whole operation right through design, manufacture, marketing and distribution — beginning with getting the scrap.

Further details from Paramount Distributors

Ltd, 26 Montpelier Hill, Dublin 7, (Tel: 777474) or Ouzledale Foundry Co Ltd, Long Ing, Barnoldswick, Colne, Lancs BB8 6BN, England, (Tel: 03028-281 3235).

Unidare

Unidare Ltd. has been successfully manufacturing oil fired boilers for many years. The current models incorporate the latest development in design and controls necessary to obtain the ultimate thermal efficiency and reliability of operation.

Two range rated oil fired pressure jet models are available. Both of these are suitable for interior or exterior (ie boilerhouse use). For kitchen or utility room installation, an attractive acoustically insulated white stove enamelled casing with hinged door is easily fitted.

The Jetmatic UJG model which covers the range 19-26kw (65,000-90,000 Btu/hr) is fitted with the well known Riello Mectron Type 3BM burner giving a short wide flame with high CO₂ readings over a wide range of shutter openings.

The larger Jetmatic UJC model which has a maximum output of 52kw (175,000 Btu/hr) is fired by the Selectos type D42 burner.

Both the Riello and the Selectos burners are suitable for use with kerosene or gas oil. Each are fitted with pre purge control and solenoid valve as standard. The oil pump on the burners is set for a positive pressure supply, by gravity or ring main, not exceeding 5 metres head. By a simple modification it may be adopted to a two pipe system and it will then operate on a low level supply with a maximum lift of 3.5 metres.

Dual boiler thermostats are fitted to ensure that the boiler is protected from overheating. Should the upper limit thermostat

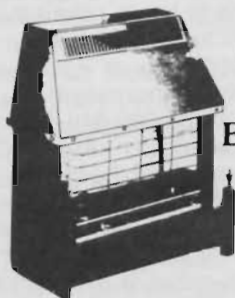
ASHTOWN HEATING(Supplies)LTD.

BAXI HEATING LTD.

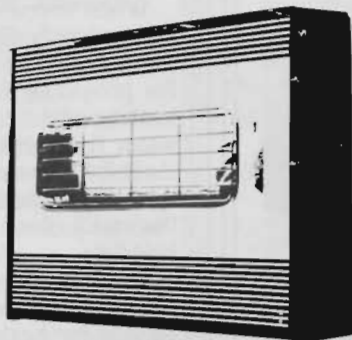


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with the most comprehensive range of boilers available. Now ex-stock Dublin.



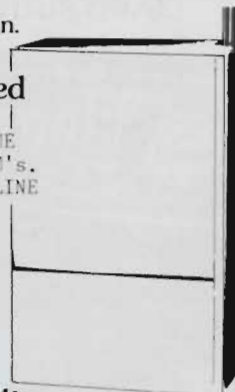
Baxi Belmont Gas Fire



Baxi Bermuda Gas Central Heating Back Boiler and Fire

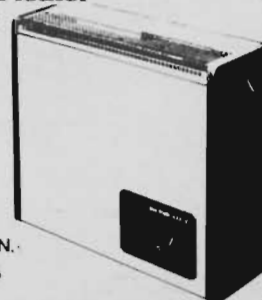
Baxi Wall Mounted Gas Boiler

BALANCED OR OPEN FLUE
34,000 TO 50,000 BTU's.
AVAILABLE WITH SLIMLINE
OR STANDARD CASING.



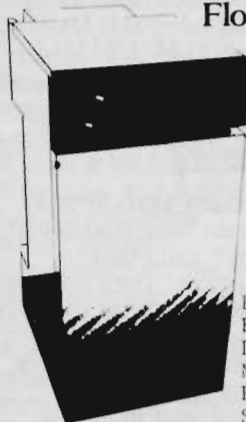
Baxi Brazilia Convector Heater

BALANCED FLUE
8,000 BTU's.



Baxi Floor-Standing Boiler

BALANCED OR
OPEN FLUE
40,000 TO
80,000 BTU's.
AVAILABLE WITH
OR WITHOUT A
PROGRAMMER.



BAXI BOILERS NOW AVAILABLE
FOR TOWNS GAS EX-STOCK
DUBLIN AND SUPPLIED WITH
NATURAL GAS CONVERSION KITS.
FULL BACK UP AND AFTER
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PHOENIX INDUSTRIAL ESTATE, ASHTOWN, CO. DUBLIN.
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1 Roomheater

Whole house heating from a living fire behind a glass door.

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Heat 5 rooms and all the hot water you need from one open coal fire.

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Elegant coal burners for whole house heating that need minimum attention. Choice of other independent boilers.

4 Cookers

Many of today's solid fuel cookers heat radiators as well.

or Interlinking

The traditional coal fire can now be Interlinked with other hot water radiator systems reducing your heating costs substantially.

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COAL is the answer

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SPA STOVES

MULTI-FUEL STOVES,
FIRES AND COOKERS.



Yeoman Multi-fuel Stoves and Inset Fires

● TOTAL OUTPUT 64,000 BTU'S

**AGENTS REQUIRED
IN ALL AREAS**

CONTACT:-

Spa Stoves

**"The Anvil" 42 Ballymaglave
Road, Spa, Ballynahinch,
Co. Down.**

Tel: Ballynahinch 563025

<https://arrow.tudublin.ie/bsn/vol22/iss10/1>

DOI: 10.21427/D7WB00
40 IHVN, October 1983

PRODUCT REVIEW: DOMESTIC BOILERS

cut out the reason for doing so should be discovered and the problem rectified prior to being manually reset.

There are two 1 1/4" BSP female flow and return on each side of the boilers to facilitate plumbing.

When correctly installed and properly operated these boilers are suitable for providing full central heating and domestic hot water for either the small three bedroomed house or the larger dwelling or even the small commercial building.

Unidare offers a free of charge commissioning service for both the Jetmatic boilers and also offers a nationwide after sales service.

efficiency (82%), coupled with the fact that the consumer will only pay for the domestic hot water that is actually used, there is no wasteful storage. The result is lower running costs and a satisfied customer.

Maximum output is 25kW (85,000 Btu/hr) automatically adjusted to a minimum of 7.5kW (25,590 Btu/hr). The efficiency is 83% at max and 79.5% at min.

Distributed by Heating Distributors Ltd., 145-147 Richmond Road, Dublin 3, (Tel: 375144/370531).

Baxi

For many years Brooks Thomas have distributed "Baxi" solid fuel appliances. They are now pleased to advise the trade of the arrival of "Baxi" gas fired central heating boilers and heaters.

Most wall mounted boilers look pretty much the same. They all cost roughly the same price. They all put out much the same amount of heat. They're all about the same size.

So how can you choose the best boiler for your home?

One answer is to look inside the casing — at the very heart of the boiler.

There, you'll find a component called a heat exchanger, which takes the heat from the burning gas and conducts it to the water. It is on the design and construction of this unit that the efficiency and reliability of the boiler depends.

The Baxi heat exchanger is made of cast iron in one of the most modern factories in Europe.

Baxi wall-mounted boilers are available with a choice of outputs to match your heating needs. 15,000 Btu/hr is enough for a small, one-bedroomed flat. 55,000 Btu/hr can heat most 3-4 bedroomed houses with 10 radiators, a towel rail in the bathroom and all your hot water as well. And we can suit any

Saunier Duval

Saunier Duval's 625m power room sealed microvent combination boiler offers many advantages over conventional heating and hot water systems. Its small size for power ratio combined with the 100mm OD rear or either side flue outlet, offers great flexibility in siting. It will be shortly available in Ireland for natural gas and LPG.

Its unique fixing jig offers easy installation and the opportunity to water test the heating system before the boiler is brought on site. Within the panels of the boiler, are concealed the circulating pump and expansion vessel — for sealed system use — no expansion tanks to site — no need to visit the attic. The boiler comes complete with safety valve — overheat device — thermocouple and fan failure detector. The entire control system is controlled by a microprocessor.

By combining in one unit a central heating boiler and an instantaneous water heater, valuable space is saved and because of the unit's high

PRODUCT REVIEW: DOMESTIC BOILERS

individual requirements in between.

Baxi Brazilia gas wall heaters are one of the most efficient ways of heating by gas that's yet been invented because so little heat is wasted.

And, with Baxi Brazilia you also have the right heat output for almost any application.

The 5000 model for instance has a continuous heat output of up to 5100 Btu/hr (1.5 kW), which is ideal for all average size rooms. In fact, over a 24 hour period, it gives 30% more heat than the largest normal domestic block storage heater (although it's only a quarter the size and costs a lot less to buy and to run), and it covers the range of central heating radiators recommended for the average bedroom, dining area, kitchen and hall.

And for the larger than average room or hall there's the 8000S model with a continuous heat output of up to 8000 Btu/hr (2.35 kW).

For a long time, central heating has meant finding room for the central heating boiler — usually in the kitchen, where every inch of space is valuable.

But now, the Baxi Bermuda has done away with all that. This high efficiency central heating boiler is hidden away in your fireplace behind one of our beautiful firefronts, giving your family a warm, cosy glow to gather round.

Another good point about the Baxi Bermuda boiler is that it comes in two sizes to suit any size of home exactly.

Model 401 is range rated from 15,000 to 40,000 Btu/hr and Model 552 from 34,000 to 55,000 Btu/hr. Having the right size of boiler means that you save money because there is no wasted heat.

What's more, the boiler and the 12,000 Btu/hr gas fire are completely independent, so you can use the fire without the boiler and vice versa, depending on the time of the year and the time of day.

Full details on Baxi appliances can be had from Brooks Thomas Ltd, Bluebell, Naas Road, Dublin 12, (Tel: 502566/783422).

Thorn EMI Heating

Apollo gas-fired, wall-mounted boiler — Thorn's lightweight, low-water content Apollo boiler is one of the most popular gas boilers on the market today.

Designed specifically for the modern day kitchen, the compact energy-saving Apollo is ultra-efficient. It is available in either balanced or conventional flue versions and in four different sizes — 15,000 Btu/hr/30,000 Btu/hr (4.4kW - 8.8kW); 30,000 Btu/hr/50,000 Btu/hr (8.8kW - 14.7kW); 50,000 Btu/hr/65,000 Btu/hr (14.7kW - 19kW) and 65,000 Btu/hr/80,000 Btu/hr (19kW - 23.4kW).

The Apollo has a low thermal capacity with an efficiency at full rate of 80% for the balanced flue version and approximately 78% for the conventional flue model. A quick warm-up process, combined with a low rate pilot makes for fuel and money-savings. Dimensions of the 15/30 version are 13 inches across, less than 22 inches high with a projection of less than one foot. LPG versions of the entire range are available, and Se-Duct models are offered in the 15/30 and 30/50 sizes.

Olympic Range of wall-hunt gas-fired boilers — These are available in two sizes. The 20-30 C/F and B/F rates at 10.25kW (35,000 Btu/hr) and the 38-50 C/F and B/F rated at 14.65kW (50,000 Btu/hr). The range has recently been extended with the introduction of the Olympic 'F', a fan-assisted version which range rates from 5.8kW to 14.6kW (20,000 Btu/hr to 50,000 Btu/hr).

Marathon Range of free-standing, gas-fired

Craigavon Heat Exchangers Ltd.**The way to save fuel.****DOMESTIC AND INDUSTRIAL****THE MIZER OIL-FIRED BOILER**

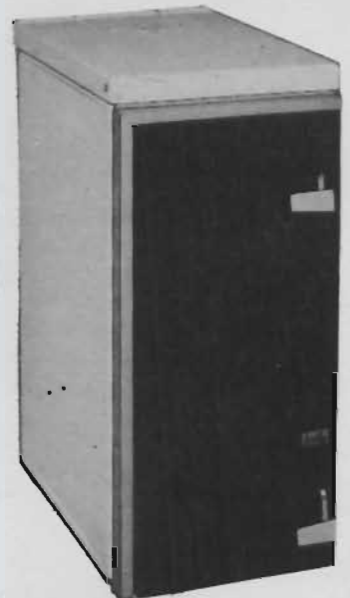
This Boiler is the most efficient in the market because of its built-in heat exchanger. N.I. Government tests have shown 86% efficient.

Example:

Conventional Boiler on six litres of oil —
Running time 3 hrs. 22 mins.
Mizer Boiler — 10 hours.

THE HEAT EXCHANGER

One of these units, fitted to Doyntzpass Primary School heating system for the Education Authority showed over 50% fuel saving.

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Building Services News Vol. 22, Iss. 10 (1983), Art. 1

“Twelve options in I’ll believe it when



one oil boiler range? I see it."



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THORN EMI Heating's Panda range.

Probably the finest selection of fully automatic pressure jet oil boilers in the country. There are twelve options available across three boiler sizes: 55,000–65,000 Btu/h, 70,000–90,000 Btu/h, and 95,000–120,000 Btu/h. Each boiler is available fully cased or uncased to operate with conventional flue or a 'through-the-wall' low level flue kit.

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thermostat; once-a-year maintenance; optional programmer; and lashings of hot water and central heating for even the toughest customer.

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Telephone (0632) 872211. Telex Thnr.H.Q. Gateshead 53265.

Tough on the competition.

PRODUCT REVIEW: DOMESTIC BOILERS

boilers — Known until recently as the 'M' range, Thorn's Marathon boilers are some of the most unobtrusive and versatile on the market today. With outputs from 8.79kW (42,000 Btu/hr) to 43.93kW (150,000 Btu/hr) these boilers are designed to blend perfectly with existing work surfaces in the kitchen. Marathon boilers are suitable in a cupboard or utility room installation in either cased or uncased versions. The M30/42B and M44/54 are available for under work surface application to fit under existing worktops.

Housewarmer II gas-fired back boilers — Thorn's Housewarmer II back boiler — fronted by attractive gas convector fires — provides full central heating and domestic hot water for the average 3/4 bedroom house.

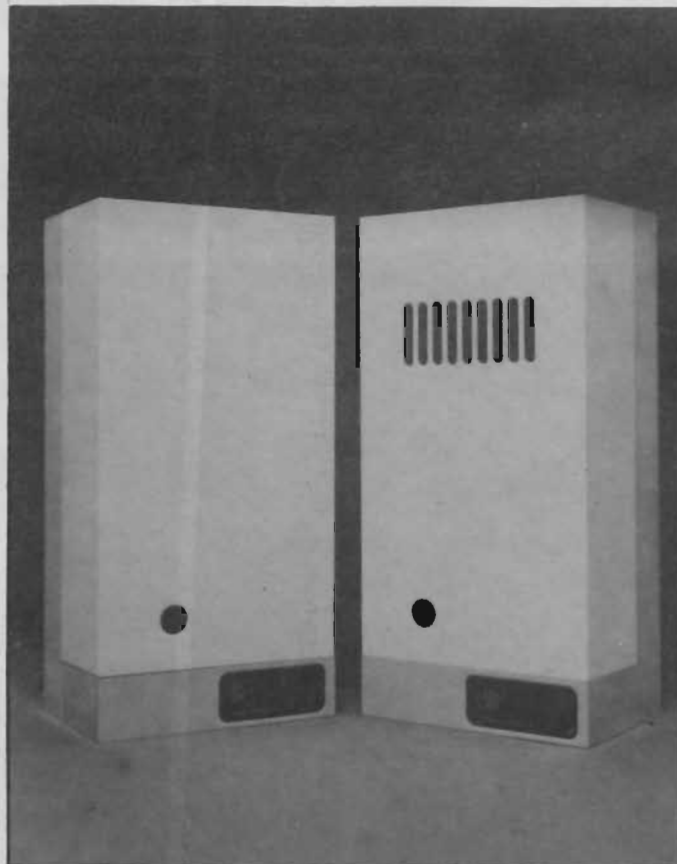
Range-rated from 8.8kW to 13.2kW (30,000 Btu/hr to 45,000 Btu/hr) this model is designed for installation in a standard fireplace with or without fitted surround. Features include a compact gas valve, low consumption pilot and a built-in boiler thermostat.

There are five models of the specially designed housewarmer gas convector fire — E Plus, E, S, Super and De-Luxe — and these are controlled independently of the boiler.

Panda oil-fired boiler — The Panda range, consisting of twelve different oil-fired boilers (including cased, uncased and through the wall models), offers the widest variety on the market today.

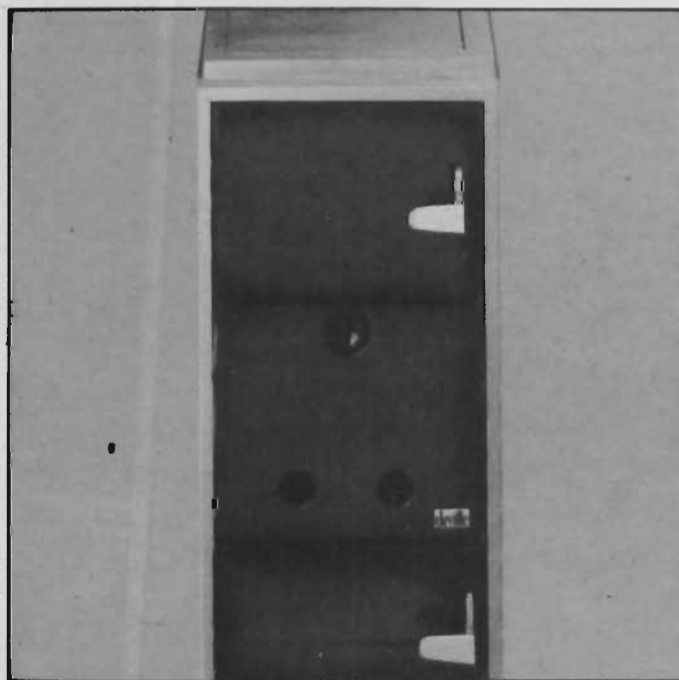
There are three outputs ranging from 16kW (55,000 Btu/hr) through to 35.2kW (120,000 Btu/hr) and these fully automatic boilers, which burn either kerosene or gas oil, offer high efficiency with maximum fuel economy.

Six inches slimmer than most other boilers of the same output, the Panda has a white stove



● Two examples from Thorn's Olympic range of wall-hung, gas-fired boilers from Thorn EMI Heating.

Deville Model C50



● Deville Model C50: 15¾ inch boiler output 72,000 Btu/hr up to 14 radiators with domestic hot water. Thermostat, insulated lit (optional). Two-tone brown enamel. Hotplate cooking facility only. Details from McKenna Heating Ltd, Commercial Warehousing, Robinhood Industrial Estate, Dublin 12, (Tel: 516674).

enamelled finish and is designed to fit in with standard size kitchen units.

Janitor A45 and A65 fuel boilers — Janitor solid fuel boilers are available in two different sizes — A45 and A65 (numbers signify Btu/hr output in thousands) and easy is designed to burn anthracite grains, beans and sunbrite singles, all recommended for use in smokeless zones. Of particular interest is the special shut-off control incorporated into the Janitor design which comes into operation in the event of a blocked flue pipe, thus eliminating the risk of toxic fumes leaking back into the home.

Radiators — Thorn EMI Heating is one of only four companies to recently receive the British Standards Kitemark for its radiators.

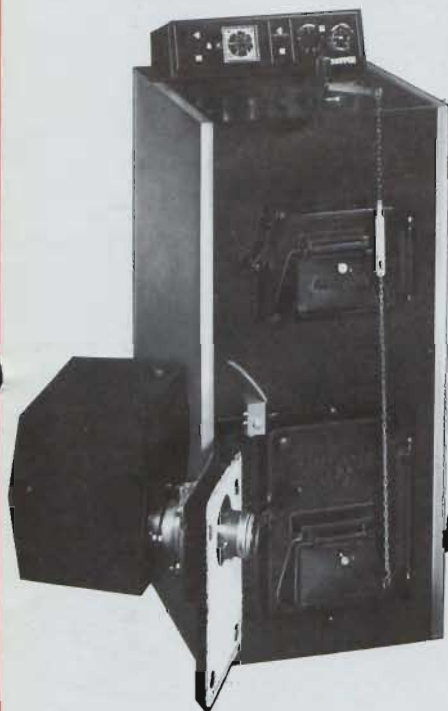
The company manufacturers convector and panel radiators, both of which have been designed to combine efficiency with good looks. The convector radiators, however, provide more heat from same space or same heat from less space when compared to conventional panel radiators. They are available in three heights, 15 inches, 21 inches and 27 inches and in lengths from 21 inches to 117 inches.

Radiators too have undergone a change. Thorn's new convector models feature fins to improve the transfer of heat. Not only do these radiators look good and save space but they also produce a higher heat output when compared with conventional radiators. All Thorn radiators were recently awarded the British Standards Kitemark.

Further details are available from Thorn EMI Heating Ltd, Chapelizod Industrial Estate, Chapelizod, Dublin 20, (Tel: 264001).

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RM Series

OUTPUTS FROM
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**THE SIME RMG
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OUTPUTS FROM
20 KW to 40 KW

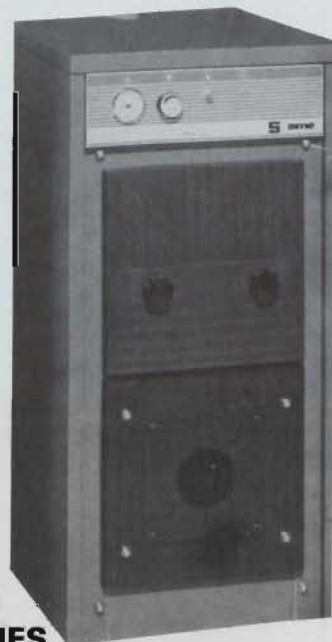


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OUTPUTS FROM
26 KW to 88 KW



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