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Innovation in Pumping Technology

Wilo-MVi and MHi range

This range of Stainless Steel Vertical and Horizontal Multistage pumps are suitable for water supply and pressure boosting duties, sprinkling, irrigation, high pressure wash, fire protection and water treatment (de-mineralisation, filtering).

- Water Supply
- Boosting
- Sprinkling
- Irrigation
- High Pressure wash
- Fire Protection
- Water Treatment
- Boiler Feed

WILO ENGINEERING LTD
Enterprise Centre,
Childers Road
Limerick, Ireland

Tel: 061-410963
Fax: 061-414728
E-mail: sales@wilo.ie
Internet: www.wilo.com
Steady As She Goes!

It’s official ... the massive year-on-year growth enjoyed by the construction sector in recent years is reducing. A BSNews mini-survey across a broad cross-section of industry operatives — from architects through to consulting engineers, contractors and product suppliers — strongly indicated as much. Moreover, the CIF has confirmed that its growth forecast for the current year has been revised downwards from 7% to 2%.

However, the construction industry is not in decline. The reduction in activity must be viewed in the context of the unprecedented growth of recent years. The reality is that it simply could not be sustained.

That said, the reduced activity does have implications for the building services sector. With new build on the wane, the industry must once again look to refurbishment.

Indeed, there are those who suggest that the pace of services installation and the pressure to get things done quickly in recent years will result in problems and failure rates of a much higher frequency than hitherto. This, in itself, will create opportunities.

Additionally, legislative changes — especially in regard to air quality and energy-usage issues — will also mean business opportunities.

Use the brief hiatus (if there is one!) from the insane pace of recent years to take stock, re-appraise the overall situation, and devise new strategies to capitalise on the changed marketplace.

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**Pat Byrne On the Rocks!**

... Or is it Pat Byrne under the rocks? Thankfully, the answer is no. Pat Byrne is alive and kicking, constantly criss-crossing the world in his capacity as Strategic Global Accounts Manager for York International.

However, the temptation to reproduce the photograph (right) was too much to resist. It was taken in the famous (infamous?) Boot Hill Cemetery, Tombstone, Arizona, the resting place — perhaps — of some of Pat's ancestors. There are those who will tell you that Pat walks with the swagger of, and sometimes displays the temperament of, a gunslinger of old. If he asks to meet you at noon make sure to have the sun at your back!

---

**RAGS at Rathsallagh**

The results for the most recent RAGS outing to Rathsallagh were as follows:-

**Overall Winner:**
PJ Killigrew, 37pts;

**Second:**
B Carthy, 35pts;

**Class 1**
1st: Matt Butler, 33pts;
2nd: Paddy Smee, 33pts;

**Class 2**
1st: Ollie O'Neil, 32pts;
2nd: Billy Queally, 30pts

---

**Children of Lir Seen Nationwide**

Following the launch of the Western Bathroom Collection by Ancofer earlier this year, the range is now stocked by 95% of merchant outlets throughout the country. "We have had a tremendous response to the new collection", says Ancofer’s Tom Davy, “the Children of Lir theme attracting a great deal of attention from both the trade and public alike. It is very encouraging to see representative samples from the range stocked at something like 380 individual outlets nationwide”.

The entire collection — comprising baths, shower pods and whirlpools, along with an extensive range of bathroom aids and accessories — was designed in-house by Ancofer’s own designers and is manufactured at the company’s purpose-designed, 38,000 sq ft manufacturing plant in Tooraree, Ballyhaunis, Co Mayo.

There are over 50 individual items in the core range and qualified personnel are available to discuss non-standard units. The Western Collection echoes the enduring style, spirit, intrigue and quality of the Children of Lir classic. Hence the readily-identifiable logo.

A full-colour catalogue depicting the entire collection, along with all relevant sizes/dimensions, is available on request.

Contact: Tom Davy, Ancofer. Tel: 0907 30850/30860.

---

**Haughton & Young Move**

Haughton & Young Ltd, mechanical services contractors, have relocated to Unit 16, The Business Centre, Stadium Business Park, Ballycoolin, Dublin 11. Tel: 01 - 882 9662; Fax: 01 - 882 9661.
Design Air Puts Down A Marker!

At a time when many companies are taking stock in the face of the forecast reduction in growth across the construction sector for the coming year, Design Air is confidently looking to consolidation and further growth. Such is the company's buoyant trading levels at present that it has just taken possession of a purpose-designed 3000 sq ft office and warehouse complex from which it can better service the access to the country, while it also sits close to the M50, which means that serving the greater Dublin region is equally simple.

Design Air was established to provide a technical-based air conditioning service throughout Ireland and its success in this endeavour is clearly illustrated by the high-profile, market-leading companies for whom it has provided specific air conditioning solutions. These cover an expansive range of compromising underfloor air conditioning with complete functional utilisation of the access floor plenum. It simplifies the design and installation of healthy working environments by eliminating the limited flexibility of piping, fixed ductwork and false ceilings.

Design Air also has a dedicated flooring division. It specialises in air plenum floors, in addition to raised access floor systems for general office areas, computer rooms, etc. Recent projects include Chorus, City West Business Campus, Aer Rianta, PJ Walls, and Sisk.

Design Air specialises in underfloor air conditioning and raised access floors, the highly-advanced Flexible Space System from AET lying at the heart of the service provided by the company. This is an innovative concept end uses and include NTL, America On Line (AOL), Silver Springs Hotel, Inflow, Lucent Technologies, GTS, the City West Business Campus and Irish Ferries.

Increased demand. Indeed, such is the year-on-year growth at present that Design Air is shortly to open an office in Cork to better serve the southern half of the country. The new Dublin headquarters is immediately located at Unit B3, CentraPoint Business Park, Oak Road, Dublin 12. This is immediately adjacent to the the Naas Road, on the one hand, making for easy access to the country, while it also sits close to the M50, which means that serving the greater Dublin region is equally simple.

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From the outset of a project, Design Air's technical support engineers work closely with the system designers, helping to devise the most appropriate solution. Its highly-qualified, fully-trained team of engineers represent massive experience. They work extensively in autocad and undergo continuous training programmes to ensure that they remain totally au fait with all the latest technology and industry advances. Design Air continues to provide support long after installation. A dedicated team of highly-qualified engineers provides full after-sales service, along with planned maintenance and preventative maintenance programmes. Engineers are on call, 24 hours a day, seven days a week.

Fully computerised maintenance is provided from the company's new base with all diagnostics, analysis, preventative maintenance, etc being controlled and activated from there.

Design Air offers total solutions across all manner of applications. It will source the most appropriate product and equipment and work closely with the consultant on each project to ensure that the end-users' specific need are catered for in a dedicated manner. In this respect Design Air operates in partnership with leading air conditioning manufacturers.

Contact Donal Keane Design Air Ltd, Unit B3, CentraPark Business Park, Oak Road, Dublin 12.
Tel: 01 - 460 5555 Fax: 01 - 460 5556 email: davidkeane@design-air.com
Plate Mounted Axial Flow Fans

The S&P HDB-HDT range of flameproof, plate-mounted, axial fans comprises five nominal fan diameters of 315mm, 355mm, 400mm, 450mm and 560mm.

All models incorporate flameproof motors, type EEx d IIB T5. In addition, the 3-phase versions are available with type EEx d IIC T4 motors. Air volume performance ranges from 2,240 m³/hr up to 13,700 m³/hr.

The HDB-HDT range of fans is specifically designed for the ventilation/extraction of potentially-hazardous and explosive (type IIA and IIB) gases. The fans have been designed to extract gases classified under type IIA or IIB with an ignition point of 100°C or higher (motor type EEx d IIB T5), or of type IIC with an ignition point of 135°C or higher (motor type EEx d IIC T4).

Impellers are manufactured from one-piece, die-cast, aluminium with aerofoil profile fixed blades. All impellers are finished in a high-temperature paint coating (red colour). The whole assembly, including the impeller and mounting plate, forms a non-sparking system in accordance with EN50-014 and EN50-018.

Motors

Flameproof motors of type:
- EEx d IIB T5, for standard models;
- EEx D IIC T4, available as option;
- Three phases 230/400V 50Hz, available in 4, 6 and 8 poles;
- Single Phase 230V 50Hz, available in 4 and 6 poles;
- IP55 protection;
- Class F insulation systems;
- All motors incorporate Sealed-for-life ball bearings.

All motors are supplied with a wiring cable gland in accordance to the standards required for the type of motor used.

All models are constructed in accordance with EN50-014 and EN50-018 Standards.

Contact: Ventac Sales Office.
Tel: 01 - 667 1077.

Super-Silent Multistage from Wilo

Wilo pumps have available a range of super-silent operating multistage pumps. The MVIS pump range combines Wilo's vertical multistage MVI range with its extensive glandless motor technology. The result is a glandless vertical multistage pump suitable for high-pressure applications, but with super-silent operation in line with the glandless motor principle similar to that used on heating circulator pumps.

This makes the new range of pumps ideal for applications where very low operating noise is a critical design consideration. Already, Wilo Engineering has supplied a number of these pumps to projects for water boosting applications where booster sets were being located adjacent to areas where low noise levels were required.

The MVIS range has all stainless steel wetted parts which make it suitable for potable water and other food-compatible fluids, as well as it being suitable for other domestic water and water/glycol (up to 40%) applications. The fluid handling range is from -10 to +50°C and the casing is rated for a max working pressure of 16 Bar.

The motor type used is a glandless, self-venting design, with extended common motor/pump shaft. Currently the range is available for 7-phase, 400-volt electrical supply (IP44).

Contact: Wilo Engineering Ltd. Tel: 061 - 410963; email: sales@wilo.ie

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The Wilo MVIS super-silent multistage pump
**COOKER HOOD EXTRACT SYSTEMS**

**Cooker hood with remote in-line fan system**

**Applications**

A separate cooker hood and remote mounted in-line fan combination provides an ideal solution for kitchen range extraction when long duct runs are required or space is limited. By installing the fan remotely, it also significantly reduces the ambient noise associated with the surrounding kitchen environment. A cooker hood fitted with a remote mounted TD or CKB fan enables flexible operation and maintenance for single or multiple dwelling buildings. When selecting a fan for kitchen extract ventilation systems, please refer to the national and local standards and regulations for the country of installation (recommended rates of extraction may vary).

Fan model options:
- Mixed flow in-line fan, type TD-800/200N with an airflow performance of 800m³/hr. In this configuration the fan can be controlled (On/Off) from the cooker hood. The TD fans are designed to be installed within ducted systems and provide a powerful extraction facility.
- Centrifugal in-line fan, type CKB-800 with an airflow performance of 800m³/hr. In this configuration the fan can be controlled (On/Off) from the cooker hood. The CKB fans are designed to be installed into cupboards or confined spaces within the ducted system and provide a powerful extraction facility.

Optional cooker hood models (without motors):
- Cooker Hood models HS-600 and HS-900.
- Cooker Hood model GE/GET.

All models incorporate a fan control panel and professional metallic grease filters as standard.

Tel: 01 - 667 1077; Fax: 01 - 667 1055

email: info@ventac.com

Heatmerchants Establish Dedicated Industrial & Commercial Division

Heatmerchants Commercial is the newly-formed dedicated division of heating and plumbing supplies specialist Heatmerchants, which has a 16-branch nationwide network and is part of the multinational Wolseley plc Group.

Director Macartan McCague told BSNews as we went to press that the development of this separate division is a natural progression, evolving out of the addition of the spares division two years ago and the subsequent continuous inclusion of complementary product types to meet customer requests.

"This is a unique development for us", says Macartan, "but one which has been devised in direct response to customer demand and the changing patterns within the supply chain. It is a product-led, project-oriented service with a vast and varied mix of product types and brands, carefully selected to provide comprehensive coverage across the entire building services spectrum.

"There is a misconception about Heatmerchants that we only supply product for which we are the principal agent or distributor. This is not true. We have a vast portfolio of Irish-manufactured and imported product, the vast bulk of the latter being sourced from the Irish-based agents/distributors for those particular products. Obviously, complementing this is a selection of own-distributed brands.

"Viewed together, the greater percentage is sourced, one way or another, here in Ireland. Indeed, we are always anxious to talk to Irish-based agents and distributors with a view to developing a partnership arrangement. Typical examples from the present line-up include Rehau pipe, Wilo and Grundfos pumps, Powrmatic heating equipment, Kental Conserver energy systems "The introduction of the Heatmerchants Commercial Industrial concept and product/service offering will commence with the Dublin Fonthill Branch, with Waterford coming on stream almost simultaneously. Thereafter — once the personnel have been fully trained — the various other branches throughout the country will gradually come on board.

"This is an exciting development for Heatmerchants and one which our principal product suppliers are equally excited about. It also anticipates the future direction of product distribution, the emphasis being on making life easier for those involved in commercial and industrial schemes who want to deal with a single-source supplier capable of providing both project-oriented and trade counter services."

Contact:
Macartan McCague, Heatmerchants Commercial. Tel: 01 - 630 4306. email: macartan.mccague@heatmerchants.ie- Eamonn Kent, Heatmerchants Commercial. Tel: 051 – 877304. Email: eamonn.kent@heatmerchants.ie-
Flow Thinking™ Focuses Attention on the Bigger Picture

The optimal flow of liquids is dependent on a professional flow of information. Grundfos flow Thinking™ is about listening to customer needs, seeing and understanding a pumping system as a whole, and providing competent advice and sparring. The aim is to become the preferred pump supplier to the commercial building services market by becoming the most important source of knowledge, advice and support.

The Flow Thinking™ concept has been developed to draw wider attention to the extensive resources available to Grundfos customers. In practice, Grundfos not only helps to select the right pump for the job but can also contribute to the process of designing the entire system.

"A worthy pump manufacturer must also be a worthy partner," says Gordon Barry of Grundfos Ireland. "Consulting engineers in the building industry express this need very clearly. Their pump supplier must be qualified to enter into competent and constructive dialogue with a worthy consultant and representatives of the building user."

"Grundfos has never been in any doubt of this," drives the point. "Grundfos has a long history of successful cooperation with the best consulting engineers in Ireland. Grundfos has a commitment to providing reliable pumps with the best performance.

"The flow of information and advice, Grundfos has developed practical tools specifically for professionals in commercial building services. Grundfos commercial building services is defined as 'bigger than single-family homes', and the related systems are heating, air-conditioning, pressure boosting and wastewater systems — all of which are dependent on a reliable pump.

"A brand new version of online software for dimensioning and selecting pumps, WinCaps, is an invaluable technical tool including calculation modules and technical specifications. These can be imported directly into prospectuses and tender documents. The WinCaps upgrade is an illustration of how input from customers can be implemented to bring about real improvements."

The Grundfos System Guide is a reference guide describing commercial building systems with a particular focus on self-regulating pumps. The System Guide describes and evaluates alternatives and makes recommendations for different system contexts. The guide is continually updated and revised.

From June to September Flow Thinking™ is on the road with a mobile training and communication centre. The centre has been set up in a semi-articulated truck which will visit 16 countries throughout Europe, including Ireland. Irish dates and venue are: Plaza Hotel, Tallaght; Dublin 24 on Wednesday, 12 September; and Stillorgan Park Hotel, Stillorgan, Co Dublin on Thursday 13 September.

By far the majority of consulting engineers have the misconception that pump manufacturers know little or nothing of the systems in which their pumps are used. Flow Thinking™ seeks to redress this situation. It seeks to raise awareness of the resources Grundfos places at the disposal of the building industry and, most importantly, the competence and depth of these resources.

Contact: Gordon Barry, Grundfos Ireland. Tel: 01 - 295 4926; email: gbarry@grundfos.com
Install your plumbing and heating systems in record time. The new Wavin Tigris pex pipe with oxygen barrier will rise to the challenge every time. Perfected for peak performance, Wavin Tigris is capable of withstanding 8 bar pressure at 95°C. Strong yet very flexible Wavin Tigris takes every bend and angle in its stride. For speedy installation put your money on Wavin Tigris.
Digital Thermo-Anemometer for Hard-to-Reach Ducts

Making short work of a usually pesky, time-consuming job, the new Dwyer Model 471-3 Digital Thermo-Anemometer from Manotherm takes air velocity and temperature readings with a telescoping, flexible (you can bend it to shape) stainless steel tip. Fully extended, the probe reaches 33 in (83cm). This lightweight instrument (12oz/340g, including battery) was designed for ease of use in making multiple duct-traverse measurements. It has a comfortable “gun-handle” grip and a high-contrast LCD that shows readings in selectable ranges of feet per minute or meters per second, and in °F or °C.

In dim lighting conditions, readings may be illuminated by the unit’s convenient backlight which, to prolong battery life, automatically shuts off after two and a half minutes. Included with the instrument are a wrist-strap, custom-fitted carrying case, step drill for making duct holes from 3/16” to 1/2”, and 9-volt alkaline battery.

Accuracy is ±3% FS for ranges 0 - 500 FPM (0 - 3.0MPS) and 0 -1500 FPM (0 - 7.0 MPS), ±4% FS for range 0 - 5000 FPM (0 - 30 MPS), and ±5% FS for range 0 - 15000 (0 - 70 MPS). Specified accuracy temperature limits are 59 to 86°F (15 to 30°C). Flow temperature range is 32 to 200°F (0 - 100°C). Ambient temperature limits are 32 to 104°F (0 to 40°C).

Contact: Bob Gilbert/Brian Harris, Manotherm.
Tel: 01 - 452 2355; email: manotherm@eircom.net

S&P SL-2500 Hand Dryer

The SL-2500 hand dryer was specifically designed for installation in public washroom environments to offer a high degree of protection against acts of vandalism. The unit delivers a powerful air stream (280 m^3/hr) through an air guide that can be positioned to the hands or face of the user. The model is particularly suitable for installation within public occupied buildings including cafes, bars, hotels, hospitals, sports centres and many other environments.

The SL-2500 casing is manufactured from die-cast aluminium to provide a high degree of protection against acts of vandalism. It is finished in a tough, gloss white, epoxy powder-coated finish.

Designed to be mounted completely flush with a wall surface, the air inlet is located at the bottom of the appliance. This allows the air to be re-circulated, providing a fast and more efficient drying system.

The SL-2500 is activated by a front facia-mounted push button (ON) switch. Once activated the unit will continue to operate for a period of 50 seconds before automatically switching off.

Contact: Ventac Sales Office. Tel: 01 - 667 1077.

Ventac & Co Ltd, The Ventilation Centre, 11 Fitzwilliam Quay, Ringsend, Dublin 4, would like to advise that they have no connection with The Ventilation Centre Ltd, Dublin 22.

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web enable your buildings

With an all new controller and keypad range, the UNITRON 2000 system delivers fuss-free installation and low lifetime operating costs. And because you are moving with the times, UNITRON 2000 is TCP/IP ready. Serving information by intranet, extranet or the web direct from your building management systems. What could be easier? For further information contact John O'Driscoll today on 01 245 0500.
The World’s No1 Air Handling Unit Supplier

Trane Ireland Ltd
8 The Mall, Lucan, Co Dublin.
Tel: 01 628 2965 Fax: 01 628 2266
Quality Team with Quality Products and Services

Trane has had a presence in Ireland since the 1970's. Originally Trane was represented through a franchised operation, and at the start of last year established a direct company-owned operation based in Lucan, Dublin.

Trane's Aldan Flannery has established a clearly-defined set of goals to help establish Trane as a market leader in Ireland, a position it has achieved globally in the HVAC sector.

"A quality team, with quality products and services is the basis of this philosophy", says Karl Conlon of Trane. "We're proud of what we have achieved here in the last 18 months, and look forward with excitement to achieving our goals in the coming years".

To achieve this goal Trane has invested in people, more than doubling the human resources since the establishment of Trane Ireland Ltd in January 2000.

When dealing with Trane in Ireland, you can experience the benefits of dealing with part of an $8B.US Global Company, which thinks and acts locally.

The Trane product range is among the most extensive in the industry, with capacities ranging from 1 kW to 8 MW. This range includes chillers, air handling units, fan coil units, split systems, close control units, VAV equipment, and control systems.

Andy Green, who has extensive experience and knowledge of the industry, states: "Trane is uniquely positioned to provide the complete systems solution, one point of contact for the complete system being what appeals to today's decision-makers."

For packaged rooftop units, Trane's specialist dealer Air Conditioning Technology, along with Trane GNA (Global/National Accounts), has helped the company achieve a significant share of this growing market in Ireland.

With direct access to factory support, the wealth of resources that you would expect from a leading global manufacturer is available across the range of services provided by Trane Ireland Ltd.

Trane ServiceFirst now employs a team of nine staff, seven engineers and two administrators. Tom Ryan; Trane's Service Manager, says: "a lot has changed over the last 18 months; we have established a great team here. The previous desired goals for quick response times and quality service are now being exceeded".

Trane is known the world over for its industry-leading chillers, but not many people realise that Trane is the largest supplier of air handling units in the world today. Over the coming months, Trane will be featuring articles and adverts on its best-kept secret: Air Handling Units.

Trane can meet your AHU specification with a wide range of high quality, compliant units, supplied on time, at a competitive price.

Trane manufactures AHU's for every application, from offices to pharmaceutical plants, production facilities to swimming pools. With the option of factory-supplied, unit-mounted controls — and the ability to interface these with other items of plant — installation time and therefore cost can be greatly reduced.

For more information on Trane's product and services, contact our Dublin Office:

Trane Ireland Ltd.
3 The Mill
Lucan,
Co Dublin.
Tel: 01 628 3165
Fax: 01 671 2266
Carrier Inverter Technology for Small ac Systems

The new Carrier 38VYM is one of the first inverter-controlled small multi-split systems designed specifically for use with Puron, the Carrier brand R410A. For residential applications, small shops and offices, the demands of environmental legislation and controlled comfort, can both be met by this new system with greater energy efficiency than was previously achievable.

In automotive parlance, inverter technology allows the system to “take its foot off the gas” to meet cooling or heating demands, rather than stopping and starting. The result is fewer compressor start ups, a more comfortable environment, lower operating sound levels, and energy savings of as much as 40% over conventional systems, according to Austin McDermott of Core Air Conditioning.

This is achieved by DC hybrid inverter technology; when power is needed, for example at start up, then the control activates its Pulse Amplitude Modulation (PAM) to reach the desired comfort levels quickly and smoothly. When the need is for maintenance of the desired temperature and comfort levels, then Pulse Width Modulation (PWM) is activated to achieve high efficiency and energy savings while limiting temperature swings.

Heat pump technology offers heating as well as cooling from the same system up to 5.3kW nominal heating capacity (6.8kW maximum).

The system also uses DC twin rotary compressor technology which delivers very high reliability and long life. The latest metallurgical technology incorporated here uses highly-innovative compounds. The twin pole motor design contributes a dramatic vibration reduction compared to other compressor technologies and is particularly beneficial in the specified applications. The outdoor unit is 10% smaller and 20% lighter than many alternatives, and installation is very simple. The indoor units are light, and unobtrusive, with extra-quiet tangential fans to minimise operating sound levels. Twin swing louvres provide improved air distribution and state of the art filters ensure high indoor air quality standards.

Contact: Austin McDermott, Core Air Conditioning.
Tel: 01 - 294 3110;
email: info@coreac.com

Wavin Rings Twice for Swift

The Swift Agency has won a second ICAD Bell for its “allsorts” advertisement created for Wavin Ireland. The graphic used in the winning advertisement transformed Wavin products into sweets, to reflect Wavin’s all sorts of pipes for gas, sewer, watermain, ducting, drainage etc, theme. Pictured superimposed on the graphic from the “Allsorts” advertisement are: Donal Swift, Managing Director, The Swift Agency; Peter Price, Creative Director, The Swift Agency; and Patrick Atkinson, Marketing Manager, Wavin Ireland.
**Hassle Free Frequency Inverters?**

After the successful recent launch of the Yaskawa E7 series dedicated to HVAC applications, Chambers Ventilation now offers “hassle free installation” for Yaskawa frequency inverters. By meeting and anticipating customer’s demands, Chambers Ventilation is taking the mystique out of frequency inverters.

All Yaskawa inverters are now pre-commissioned before they leave the premises. They are matched to the specific fan or pump application and save time and money on expensive service engineers on site. There is also extensive technical back-up by ‘phone or on site, if required. “So far we are getting a great response and very few on-site problems”, says David Lindfield, Sales Manager, Chambers Ventilation. “People like simplicity; they want to install and forget it”.

The Yaskawa E7 series is user-friendly and boasts many benefits and features, including:

- **Speed search function** — the Varispeed E7 determines the speed and direction of rotation of a coating motor, then brings it to the required reference speed. This is carried out extremely smoothly in both directions;
- **Low noise generation** — Use of the latest generation of IGBT’s limits the voltage rise time. Together with the high switching frequency during pump fan operation and low noise constant torque operation, this reduces noise due to magnetic transients in the motor. The motor is quieter and its bearings and windings save wear and tear. This will also greatly reduce the risk of the resonant frequency being transmitted through ductwork;
- **High slip braking** — Yaskawa’s intelligent function allows up to three times faster braking without the use of a braking transistor or resistor;
- **Improved protective functions** — The high-speed overcurrent limiting function allows virtually uninterrupted operation (no overcurrent tripping, restart after brief power failure, motor stall prevention, attempted restart after malfunction, etc);
- **Global specification** — Conformity with global standards for worldwide use (UL/cUL and CE);

Worldwide service and availability; Operation with commonly-used voltages; Global fieldbus standards supported.

Contact: David Lindfield, Chambers Ventilation. Tel: 01 - 830 3222.

---

**American Standard Plumbing New to Ireland**

American Standard has unveiled its plans to become the leading supplier of sanitaryware to the Irish marketplace, as it unveils American Standard Plumbing, Ireland.

The new company will encompass all brands within the American Standard portfolio — Ideal Standard; Qualitas; Sultini; Trevi; Hydro; and Jado — and is set to improve the level of service to its customers.

Following the acquisition of Armitage Shanks and Qualitas in February 1999, American Standard has continued to trade all of the above brands independently with Ideal Standard and Trevi being sold through a dedicated sales team, with a similar team working on behalf of Armitage Shanks and Qualitas.

The new company offers a number of key benefits to its customers, the most important being the creation of a combined sales force operating over a dedicated geographical area selling all brands to all customers. This bringing together of the two teams means a greater concentration of expertise throughout Ireland.

In addition, all products sold in Ireland will now be stocked at the company’s distribution centre in Dublin, further improving the level of service to customers, in particular with regard to product availability and fulfillment.

Offering a much-improved customer package, American Standard Plumbing Ireland will also offer customers telephone technical and sales support via its Dublin office.

Brian Redmond, Managing Director of American Standard Plumbing Ireland said: “The newly-formed company has ambitious plans for the promotion and supply of sanitaryware products throughout Ireland. We are committed to developing new and innovative products suitable for a host of domestic and commercial applications and developing marketing initiatives with customer service, and ways to improve it being a number one priority”.

Contact: Brian Redmond, American Standard Plumbing, Ireland. Tel: 01 - 456 4525; email: redmondb@aseur.com
Wavin's Tigris Plumbing and Heating Pex Pipe

Wavin's Tigris plumbing and heating pex pipe is an innovative range of high-density cross-linked polyethylene pipes designed for central heating and tap water applications in Ireland. Manufactured to Irish dimensions, Tigris has Irish Agrement Approval and exceeds the European requirements for high-temperature plastic plumbing pipe. “Rigorously tested and perfected with the aid of Irish plumbing installers”, says Wavin’s Patrick Atkinson, “Tigris is the ultimate pex pipe system for hot and cold applications, offering a variety of general features and benefits”.

These include:-

- All Wavin Tigris pipes are manufactured with an oxygen barrier;
- Designed for all applications, plumbing, central and underfloor heating;
- Superior working pressure of 8-bar at 95°C;
- Independent certification by the Irish Agrement Board.

Irish Agrement Board Certificate No: 99/0102;
- Manufactured to, and exceeds, prEN 12318-Part 1 1996;
- IAB approved/full compliance with the European Directive for drinking water;
- Light, flexible and strong for ease of installation;
- Non-corrosive;
- Packaged in strong cardboard boxes for ease of transport and pipe protection during storage;
- Pipe marked at every metre for ease of measurement from the coil;
- Copper inserts available;
- Compatible with compression fittings to IS 239:1987;
- Ease of installation around, or through, obstacles.

Also available is Wavin’s Tigris pipe-in-pipe. This comprises black PE ribbed pipe outer sleeve for ease of installation and

To ensure successful jointing, Wavin's Tigris Pex pipe ends should be cut smoothly and squarely.

Wavin Tigris is lightweight and easily transported on site. It is available in a range of coil sizes from 25 metres to 100 metres in length to allow for short and long pipe runs, without the use of straight connectors. It comes packaged in cardboard boxes with access through the centre where it can be easily uncoiled.

The pipe has markings every metre for ease of measurement.

Wavin Tigris has been designed with greater rigidity than other plastic pipes to avoid unnecessary “kinking” on installation, while remaining a flexible pipe to allow for easy manoeuvrability on installation. It bends to very small angles, thus creating less effort and less waste. No bending tools and fewer elbow fittings are required in a typical installation.

Wavin Tigris can be cabled around obstructions and through joists etc, and can be installed in suspended ceilings, from below, before ceilings are fitted.

Wavin Tigris can be easily threaded through holes in joists, thus eliminating the need for notching which can weakens the joist.

Over the period of its life Wavin Tigris Pex pipe will not be damaged by freezing temperatures. The internal bore is smooth and is not liable to accumulation of scale in hard water areas.

Pipes will not corrode under the action of soft water. Thermal expansion is accommodated within the length of a pipe run, reducing movement and subsequent creaking noises on joists etc.

Low thermal conductivity values mean that hot pipes are cooler to touch and the incidence of condensation on cold pipe is reduced.

The Wavin Tigris oxygen barrier greatly reduces the ingress of air into the system, thus reducing the corrosion within a central heating system.

Wavin Tigris has a product guarantee of 25 years against defects in materials and manufacture, and has a life expectancy in excess of 50 years.

Wavin’s Tigris is suitable for use with brass compression fittings made to IS 239. Copper inserts are required as internal support at cut ends before insertion into a fitting.
Put Yourself in Safe Hands
... and Good Company
Innovation in Pumping Technology

Wilo TOP-E range

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

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

WILDI

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Enterprise Centre,
Childers Road
Limerick, Ireland

Tel: 061-410963
Fax: 061-414728
E-mail: sales@wilo.ie
Internet: www.wilo.com
Not content with arriving at the Silver Jubilee mark Jim King, Managing Director of Finheat Ltd, is already looking ahead to the next 25 years. “Acknowledging and even celebrating achievements to date is one thing”, says Jim, “but it is far more important to look to the future, to make sure that we can replicate, and build on, the success we currently enjoy”.

To that end Jim and fellow-director Pat Keane have marked the occasion of 25 years in business by unveiling a new development plan and management strategy aimed at securing Finheat’s market-leading standing and growing the business still further, especially by way of the integration of the expertise, products and support services it provides.

“Developments in technology, coupled with innovative design, have resulted in sophisticated, highly-advanced products coming on stream”, says Pat Keane. “This is particularly so with the principals we represent, all of whom are to the forefront in each of the product categories represented.

“However, to get the maximum value, performance and efficiencies out of these products, it is critical that the manner in which they interact with one another, and the functions they perform, are carefully taken into consideration. A typical example is where the fan coil units are provided and installed by one supplier, in total isolation to the provision of the grilles by another. To get maximum efficiencies and performance from both, it is essential that they are treated as inter-related from the earliest possible stage in the project, thereby designing out any potential problems.”

“This, essentially, forms the backbone of the product/service combination now being provided by Finheat”, says Jim. “We have the expertise, the knowledge and the complementary products within our portfolio. Additionally, we represent international, market-leading brands, all of whom we can tap in to for technical support and advice. It is one thing having the best products; equally important — especially in this age of sophisticated technology — is to ensure that these products are properly installed and deployed in applications they were designed for.

“This philosophy underscores everything Finheat does. Hence the very close working relationship we enjoy with system designers, especially consulting engineers. Apart from supplying products, we also endeavour to understand the application requirement, to identify the possible problem areas, and to work closely with the consultant in devising an appropriate solution.”

“This approach is something of an evolving process, a concept which arose in direct response to situations which transpired on site. Initially it was a reactive scenario, driven by the need to solve problems which had already arisen. Now we have refined it to the point where it is very much a proactive process, whereby we work closely with the consultant at system design stage, identifying and effectively designing out potential problem areas so that they never arise.

“At Finheat we look at every project as if we were the end-user. Rather than merely provide product, we look to the application, the ultimate requirement. Working closely with the consultant, we help devise the most appropriate, cost-efficient solution to meet that requirement”.

Typical examples of how this concept works in practice are detailed in the prestigious projects featured overleaf.
Using a new dimension in Air Distribution Technology Gilberts have developed an extensive range of High Induction Swirl Diffusers for floor, wall and ceiling applications. The full Series now includes:

**Series GFS** - Floor Swirl Diffuser

**Series GSF** - Ceiling Fixed Swirl

**Series GSJ** - Ceiling Adjustable Swirl Diffuser

**Series GSR** - Slotted Face Swirl Diffuser

**Series GZL** - High Induction Linear Diffuser

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- High Air Change Rates
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New for 2001 is the latest GSR Slot Face Swirl Design Swirl Diffuser, now part of Gilberts Air Distribution, Smoke and Fire Control Series of:

- GRILLES
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- EXTERNAL & ARCHITECTURAL LOUVRES
- SMOKE/FIRE DAMPERS
- V.A.V. TERMINALS

All details are available in our NEW 2001 Air Distribution Products Manual.

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Web: www.gilbertsblackpool.com
Typical Issues Dealt With

- The distribution of significant quantities of air from fan coil units into the occupied space.
- Avoid draught/discomfort problems associated with grilles over-blowing, air flows clashing, etc.
- Interaction between slot diffusers and 4-way diffusers when used in the same occupied area.
- Distribution over glazing to avoid hot/cold spots.
- Avoid noise problems associated with high velocities in ductwork, grilles, etc.
- Distribution of air from high ceilings.
- Selection of fan coil units for 'Dry' or 'Wet' coil conditions.
- Fan coil units with 'Airside' control.
- Wall mounted fan coil units behind architectural casings.
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Over 70 Models to Suit Every Need

- Cooling only or heat pump
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- 17kW to 216kW cooling capacity
- Heat pumps up to 144kW
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FINHEAT CELEBRATES SILVER JUBILEE

National Concert Hall

Architect: Office of Public Works
Consulting Engineer: Office of Public Works
Mechanical Contractor: McGrattan & Kenny

George's Quay

Architect: Keane Murphy Duff
Consulting Engineer: Project Management
Mechanical Contractor: Lynskey Engineering

Typical Issues Dealt With

- The distribution of significant quantities of air from fan coil units into the occupied space.
- Avoid draught/discomfort problems associated with grilles over-blowing, air flows clashing, etc.
- Interaction between slot diffusers and 4-way diffusers when used in the same occupied area.
- Distribution over glazing to avoid hot/cold spots.
- Avoid noise problems associated with high velocities in ductwork, grilles, etc.
- Distribution of air from high ceilings.
- Selection of fan coil units for 'Dry' or 'Wet' coil conditions.
- Fan coil units with 'Airside' control.
- Wall mounted fan coil units behind architectural casings.
Diffusion are renowned for Quality, design and versatility and have provided, discreet, bespoke product solutions for applications with fan coil units, fan convectors, air curtains, electric trench heating and ventilation products. Clients include: Brown Thomas, Irish Independent, Marks & Spencer, Merrion Hotel, Citibank, George’s Quay Office Development, Esat Headquarters, Baltimore Technologies, Goodbody Stockbrokers, and many more ...

For further information please contact
FINHEAT LTD
79 cherry Orchard Industrial Estate, Ballyfermot, Dublin 10.
Tel: 01 - 623 4222; Fax: 01 - 623 4226; email: sales@finheat.com
Delgany Results
Captain: Brendan Keavney
Prize Sponsors: ABB
Winner
Bob Daly (18), 41pts
Class 1 (0-12)
1st: Mick Kennedy (9), 39pts
2nd: Joe Warren (12), 36pts
3rd: Sean Smith (9), 34pts
class 2 (13-16)
1st: Brian Keavney (15), 38pts
2nd: Jim Smith (14), 37pts
3rd: Mick Wyse (14), 35pts
Class 3 (17-28)
1st: Niall Ryan (20), 36pts
2nd: Tom Scott (19), 35pts
3rd: Ray Byrne (18), 31pts
Visitors
1st: Tony Quinn (14), 37pts
2nd: Luke McKeever, 31pts

Sponsors Prize ABB
Winner: Michael Murphy (ABB), 30pts
Captains Prize to Sponsors
Winner: Brian Redmond (A/S), 30pts
Past Captain's Prize
Winner: Mick Wyse, 35pts
Front 9
Winner: Joe Hogan, 20pts
Back 9
Winner: Tony Gillan, 18pts

Castle Results
Overall Winner
Graham Fay (7), 36pts
Class 1
1st: Brendan Keavney (7), 33pts on B9
2nd: Pat Gormley (6), 33pts
Class 2
1st: Sean Farrell (13), 35pts
2nd: G Carlton (14), 34pts
3rd: B Costello (16), 33pts
Class 3
1st: Seamus Tully (20), 32pts
2nd: Mick Kennedy (9), 32pts
3rd: Terry Mahon (19), 30pts
4th: Martin McKeon (20), 23pts
Front Nine:
Des Prendergast, 18pts
Back Nine: Ger Hutchinson, 17
Visitors
Sponsor
Simon Bradshaw, 37pts
Don O'Rourke, 32pts

Next Outing
President's Prize
Time Sheet contact:
Caroline at Tel: 01 - 837 6076.

BTU Match Plan
Semi Final
B Redmond v M Melligan
M O'Doherty v B Daly
To be played by 21 September 2001.
Oil Pumps – the pressure is on

In spite of rising oil prices, there is still a great demand for oil burners and, thus oil pumps too. Therefore, where oil pumps from the Danfoss Burner Components Division are concerned, the pressure is on in more than one sense. Investments are being made in new production lines for pumps in the lower output range, the overall output range is being extended, and completely new types of large pumps are being marketed.

The new oil pump range includes an extended BFP series offering capacities up to 130 l/h [34.3 gal/h], the existing RSA/RSF pumps with a capacity range of 50 to 270 l/h [13.2 to 71.3 gal/h], the new RSB and RSF pump series with a capacity range of 200 to 600 l/h [52.8 to 158.5 gal/h], and the whole SAFAG pump range up to 6000 l/h [1585 gal/h].

The range of pumps now offered to OEMs and the replacement market is so comprehensive that Danfoss oil pumps have become the optimum choice when equipment for oil burners is to be purchased.

The BFP pump ranges are also being extended. These belong to the small pump category. One distinguishing feature of small and large pumps is that whereas the small pumps can be supplied with or without built-in solenoid valve, the large pumps are never fitted with a solenoid valve. They always operate with external solenoid valves which open and close the line supplying oil to the burner atomising unit.

The two "old" versions in the BFP range, with capacities of 24 and 45 l/h [6.3 and 11.9 gal/h], have been extended and there are now versions with capacities of 60, 80, 110 and 130 l/h [15.9, 21.1, 29.0, 34.3 gal/h].

The BFP range thus covers burners with capacities up to 700kW* [2.4 mio. Btu/h]. A normal domestic burner has an output of 15 to 25 kW* [54000 to 85000 Btu/h], therefore the BFP series has entered the area to medium-sized burners.

In addition to increased capacity, the new BFP pumps retain the same functions as the present ones and are available in the following versions:

- One-stage pump with or without solenoid valve, for use in burners with one nozzle. The burner has one capacity depending on the chosen pressure and nozzle size.
- Two-stage pump with two pressure stages in the pump and one, or two, solenoid valves. The burner has one nozzle that runs at two different pressures, i.e. the burner has two capacities using the same nozzle.
- One-stage pump with two nozzle ports and two shut-off solenoid valves.

The burner has two nozzles with different capacities. The solenoid valves determine which nozzle the burner is to use and which capacity it is to operate with.

The amount of oil that must flow through pump channels and solenoid valves has become greater, therefore it has been necessary to develop a new built-in solenoid valve. For the 80, 110 and 130 l/h, [21.1, 29.1 and 34.3 gal/h] versions, it has also been necessary to develop a new pump housing. An additional factor in this development was that the pump had to be suitable for the spare parts market.

Furthermore, the ports had to be positioned so that changing from one make of pump to another was possible without problems. The other features in the pumps are the gear set from types BFP and RSA, and the shaft seal used in all existing and newly-developed Danfoss oil pumps.

With this new total concept of both small and large pumps, Danfoss has achieved the aim of making things as easy as possible for customers. OEMs and service technicians are no longer so dependant on having the right make of pump on the shelf or in the service vehicle. Instead they just have to make sure that the right type is available.

The needs of customers and users are the primary consideration in all product development in the Danfoss Burner Components Division.

The entire Danfoss Burner Components Division product range can be seen at homepage:
http://www.danfoss.com/burner

Contact: Brian F. Maguire, Danfoss Ireland Ltd.
Tel: 01 - 626 8111;
Fax: 01 - 626 9334; 
E-mail: marketing@danfoss.ie
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email: joe@pressline.ie

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Series R300, R2700 & R3400

Euro Gas Ltd.
Unit 38B, Southern Cross Business Park, Boghall Road, Bray, Co Wicklow.
Tel: 01 - 286 8244; Fax: 01 - 286 1729; eMail: sales@eurogas.ie
Remeha Environmentally-Friendly Boilers

Euro Gas Ltd has introduced the new range of Remeha Gas 210 ECO floor-standing boilers with their clean, space-saving features. The new boilers comprise three models with outputs of 8kW to 80kW; 12kW to 120kW; and 16kW to 160kW.

The new boilers are equipped with intelligent advanced boiler controls and 100% pre-mix combustion. Supplied with fully-modulating burners, operating between 10% and 100% of output, they offer high economies at part, or full load, as well as ultra-low NOx and CO emissions. With their sectional cast aluminium heat exchanger and newly-developed IMS gas/air ratio control, they provide enhanced efficiencies.

As an addition, the instrument panel can be fitted with a Rematic controller to provide optimised control and fully-modulated weather compensation.

A particular feature of the new boilers lies in their compact design — only 1200 x 1300 x 450mm — yet can provide 160kW of output occupying only 0.5m² of floor space. They also benefit from low weights of only 130, 150 and 170kg respectively.

The new Gas 210 ECO boilers are supplied completely assembled and pre-set and suitable for conventional or concentric room-sealed flue systems.

In addition to the Gas 210ECO, Remeha also has a new range of commercial wall hung condensing boilers, called Quinta, which are expected to have a major impact on the European commercial boiler market.

Quinta comprises the Quinta 45 model with outputs from 8kW to 45kW; and the Quinta 65 model with outputs from 12kW up to 65kW.

The new models — with their clean, space-saving features — are equipped with an intelligent advanced boiler control and 100% pre-mix combustion. Both models are supplied with fully modulating burners, operating between 18% and 100% of output, offering high economies at part or full load, as well as ultra-low NOx and CO emissions. With their one-piece cast aluminium heat exchanger, they provide enhanced efficiencies.

The aluminium heat exchanger which forms a key integral part of Remeha’s Quinta 45/65 range of wall hung boilers has won the “European Aluminium Award for Industrial Design and Engineering 2000”.

The aluminium monobloc heat exchanger is a leading edge product in heat exchanger design, being small with excellent output to weight ratio resulting in extremely high efficiencies. The aluminium heat exchanger was selected for the Award from 29 nominations by an international panel.

As an addition, the instrument panel can be fitted with a Rematic controller to provide optimised control and fully modulated weather compensation, as well as the facility to step control for multiple boiler installations.

Further benefits of both boilers relates to their extremely compact design — only 500 x 900 x 350mm and weight only 57kg and 65kg respectively. They can be hung as individual units or installed as modular packages ..., wall hung in line or frame-mounted back-to-back with no upwards rating limits. More than 300kW of boilers of varying combinations occupies less than 3m of wall space. They can be supplied suitable for conventional or concentric room-sealed flue systems.

Remeha were the first boiler company in Europe to introduce a condensing boiler to the commercial market in 1979 and also the first to launch a 40kW and 60kW wall hung boiler in 1993.

Contact: Martin Garvey, Euro Gas Ltd. Tel: 01 - 286 8244; Fax: 01 - 286 1729; email: sales@eurogas.ie
As Ireland's foremost leader in the supply of boilers, burners, heaters and flues, we at Hevac clearly recognise the importance to you of tailor-made solutions for each and every application.

We believe success starts with a clear understanding of a customers wants and needs. To this end fostering a relationship with all of our clients from the outset is seen as paramount in achieving the best quality standards.

You can be confident that all the wealth of product knowledge and practical experience attained at Hevac is at your disposal. From initial consultation through product identification, installation and final commissioning. No one will work harder with you because we are proud of our reputation and continue to strive for standards in excellence. We know you expect no less.
C&F Quadrant offer Total Solutions

Riello burners are the number one producer of burners in Europe.

C&F Quadrant Ltd and Buderus boilers have been synonymous with heating systems for the last 50 years. Designs have changed dramatically since those early days and the main emphasis with Buderus today is the achievement of high efficiency.

The boilers have been completely re-designed using the patented "Thermostream" principle.

Thermal stresses have been eliminated from within the boiler, and as a result, return water temperature controls such as shunt pumps and diverting valves are unnecessary on cast iron boilers with outputs from 20 – 1,200 kW. The boilers have a high weight/kW ratio, a high level of insulation and have easy access for maintenance.

Buderus also manufacture their own range of digital modular controls that increase the seasonal efficiency of their boilers by providing load dependent boiler operation, weather compensation for heating circuits and DHW temperature control. Due to the design of these controls, the actual boiler temperature can modulate in relation to the outside temperature, again increasing the overall efficiency of the boiler plant. These controls can also interface with BMS systems.

Buderus are also producing wall hanging, fully modulating condensing boilers with outputs from 11 – 60kW. These boilers can be grouped for modular operation and can be supplied with interconnecting pipe kits and controls.

Riello burners are the number 1 producer of burners in Europe and are the market leader in Ireland. Riello burners are used extensively for domestic and commercial applications and are available for oil, gas and dual-fuel firing. The operation of the burners can be single-stage, two-stage and fully modulating depending on individual choice. Large commercial burners can be supplied up to 15 M'watt.

Buderus boilers have a high weight/kW ratio and a high level of insulation

ACV direct-fired water heater and boiler from C&F Quadrant

quantities of DHW can be produced over a short period of time due to the "tank-in-tank" principle. Any type of application can be catered for and a full range of accessories can also be supplied.

Coster Controls produce the most widely-used gas detection equipment. Their range covers gas detection panels, gas valves and interfaces with external alarm equipment.

Further information on the full range of products is available from C & F Quadrant. Contact: Michael Meligan, Kieran Cowman or Conor Quigley, C&F Quadrant.
Tel: 01 - 6305700;
Fax 01 - 6305706;
e-mail: sales@cfquadrant.ie

C&F Quadrant Ltd
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e-mail: sales@cfquadrant.ie
BEESTON BOILER RANGE

For further information on the range of Beeston Cast Iron Boilers please contact
Kevin Coakley at Tel: 086 - 254 7770; email: kcoakley@hjaircon.ie
Derek Duff at Tel: 086 - 814 6644; email: dduff@hjaircon.ie

Published by ARROW@TU Dublin, 2001
Chappee, Hamworthy, Sime, State & Benson from Hevac

When it comes to commercial boilers Hevac offers specifications and installers a formidable armoury of solutions, irrespective of the application or requirement. The composition of its product portfolio has been carefully structured to ensure that all needs are satisfied with high-quality, brand-leading boilers from some of the world's foremost manufacturers. These include Chappee, Hamworthy, Sime, State and Benson. Brief details of the product ranges of each are as follows:

Chappee — CICH of France manufactures the Chappee range of boilers which include sectional cast iron, steel commercial, and industrial hot water boilers.

The Arizona reverse-pass steel boiler with outputs ranging from 80kW to 2500kW, and the renowned NXR3 and NXR4 cast iron boilers with outputs ranging from 90kW to 800kW, ensure high efficiency, quality boilers for every commercial and industrial application.

Hamworthy — Hamworthy has been the UK's leading boiler manufacturer for more than 30 years, producing high-quality commercial boilers and associated equipment for customers in both the private and public sectors.

Hamworthy is BS EN ISO 9001 accredited and supplies European CE Certified boilers, offering a wide range of modular systems. Hamworthy also manufactures high-efficiency atmospheric condensing and pre-mix modular boilers in a variety of configurations.

Hamworthy gas-fired boilers are suitable for both natural gas and LPG, or alternatively there is the power flame series solutions using oil, gas or dual fuel.

Complementing the Hamworthy boiler portfolio is a range of supplementary products such as boiler sequence control systems, direct gas-fired water heaters, flue design options, etc.

Sime — Sime is the largest manufacturer of cast iron boilers in Italy, the production plant in Verona being one of the largest and most sophisticated in the world.

The Sime product range includes sectional boilers with outputs ranging from 17.5kW to 287kW for use in association with pressure-jet oil or gas burners.

Also available from Sime is a comprehensive range of cast iron atmospheric gas boilers for use with LPG and natural gas, with outputs ranging from 22kW to 287kW.

State Water Heaters — State Water Heaters is established for well over 50 years. State offers a comprehensive range of electric, gas and oil fired water heaters for supplying domestic hot water to commercial, industrial and domestic applications.

Using the latest technology in product design, State's commercial range of water heaters utilises the Turbo Force Ring, State's patented cold water inlet device, the only proven way to effectively reduce sediment build up in a water heater automatically.

With storage capacities of up to 376 litres and recovery rates of 2226 litres per hour (temperature rise of 44°C), an abundance of hot water is available to satisfy a variety of applications.

Benson Heating — Benson Heating represents quality, efficiency and economy in the air movement industry. Products are designed to meet the high standard required by today's environmental engineers. Their extensive range includes cabinet air heaters for oil and gas operation with nominal heat outputs of 29kW to 381kW. Benson's extensive range also includes gas and oil fired unit heaters including a range of room sealed unit heaters and de-stratification fans.

Full details on the entire range — plus copies of Hevac's comprehensive new full-colour brochure — are available from the company.

https://arrow.tudublin.ie/bsn/vol40/iss7/1
DOI: 10.21427/D7WM5C
I'm amazed you get so few callbacks! How?

Designed for reliability as well as fast and easy installation, Halstead boilers incorporate only quality, proven components, so you can be certain of long and trouble free operation.

Available from a network of independent merchants across the Republic of Ireland, you'll be assured of in stock availability and expert advice, locally. So, for tried, tested and trusted boilers - you'll be amazed at Halstead.

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AVAILABLE LOCALLY - NATIONWIDE
Beeston Cast Iron Boilers

As the sole distributors of Beeston Cast Iron Boilers in Ireland, HJ Aircon can provide a solution to all heating requirements. The extensive range of products includes boilers, pumps, water heaters and calorifiers. The strength of the product range, together with a comprehensive advisory service, means that the company can provide guidance on selecting a product best suited to particular needs, right through to installing and commissioning the appliance.

From initial contact each project is given individual attention to ensure the project moves smoothly, giving peace of mind to the client.

The range of boilers includes the following:-

Berkley: Output from 25kW to 140kW — This cast-iron atmospheric gas-fired boiler is available as standard, low NOx or high efficiency model. It is supplied with full instrument control panel and status indicator lamps. It can be delivered pre-assembled from the factory, or can be assembled on site.

Beverly: Output from 126kW to 475kW — This range of cast iron atmospheric gas fired boilers is available as a standard or low NOx model. It is supplied complete with a full instrument control panel and is suitable for on site assembly.

Bisley: Output from 45kW to 350kW — This range of sectional cast iron boilers is available for pressure fit firing or forced gas firing. It also comes with a choice of burners, which have been matched and tested, to the boiler.

Broxley: Output from 320kW to 860kW — This is a three-pass boiler with cast iron sections and comes matched with pressure-fit burners. It has a NOx working pressure of six bars, which makes it particularly suitable for taller buildings or for higher working temperature.

Berkley: Output from 50kW to 3000kW — This is a range of energy-efficient low NOx steel/tube hot water boilers. It can be fired with oil, gas or duel fuel burners.

All of these boilers are covered by the Beeston 10-year cast iron guarantee.

One of the latest arrivals to the Beeston range is the SHR modular wall hung condensing gas boiler which comes with outputs of 15kW to 60kW. This boiler features an ultra-low NOx level combined with 98% efficiency. It has various flue options, which allow the termination point to be 25m from the boiler. It can terminate vertically or horizontally.

HJ Aircon provides sales and technical support to customers in the Republic of Ireland from its offices in Blanchardstown.

Contact: Kevin Coakley/Derek Duff, HJ Aircon.
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Fax: 01 - 824 2094;
email: kcoonley@hjaircon.ie
duff@hjaircon.ie
Buderus Wall-Hung Gas Boilers: High Performance in a Small Space

Ideal for confined spaces and wherever there is no separate boiler room available: Buderus wall-hung boilers can also be installed in all living areas. You can choose between Logamax compact gas boilers and extremely economical Logamax plus condensing units. Condensing technology is recommended wherever there is high energy consumption. Then the savings potentials of this technology can be fully exploited and maximum energy conserved.

- Optimal energy utilisation thanks to economical condensing boiler technology.
- Capacities up to 60kW
- Modulating gas premix burners.
- Variable speed pumps on the Buderus GB112.
- Modular configuration for large capacity systems.

The Buderus GB112 wall-hung condensing boiler with modulating burners.

The Logamax plus GB112 offers top-of-the-line economy and efficiency. With modern condensing technology, it even uses the residual heat from the water vapour of the combustion gases and achieves season efficiencies of up to 109% (net c.v.). An economical and, at the same time, environmentally-friendly heating method.

<table>
<thead>
<tr>
<th>Nominal heat output (kW) Modulating</th>
<th>Overall dimensions (mm)</th>
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<tbody>
<tr>
<td></td>
<td>Width</td>
</tr>
<tr>
<td>Logamax plus GB112-43</td>
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<tr>
<td>Logamax plus GB112-60</td>
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Quadrant House, Chapelizod, Dublin 20.
Tel: +353 1 626 5711 / +353 1 626 4917
Fax: +353 1 626 7863 / +353 1 626 3251

Published by ARROW@TU Dublin, 2001
Rendamax R300, R2700, R3400 Series Boilers

Euro Gas Ltd has introduced the new Rendamax R300 range of high efficiency boilers to the Irish market. Since its beginning in 1968, Rendamax has built up a strong reputation in industrial and commercial applications throughout Europe for the development, production and marketing of gas-fired, high-efficiency boilers, and water heaters in the 60kW to 1200kW range.

Through their unique construction methods, these central heating boilers and water heaters are renowned for their:
- High thermal efficiency
- Environmental friendliness
- Light weight and small dimensions
- Durability
- Low noise production
- Large regulation range
- Available with many different options

Rendamax remains at the forefront of boiler and water heater technology. Hence the introduction of the R300 series boilers which is a direct development of the highly-successful R2700 and R3400 series. The R300 range has an output range from 70kW to 274kW and is ideal for the applications where modular as well as modulating concepts are required. With its small footprint it lends itself perfectly to the modular application and, as each boiler has a modulating range of 25% to 100%, it brings extra benefits to these installations. As with the R2700 and R3400 boilers, gross efficiencies of 94% are achievable combined with ultra low NOx.

The boilers come fully assembled and this, in conjunction with small flue sizes, offers large onsite cost savings. The R2700 series is available in an output range of 95kW to 597kW while its big brother, the R3400 series, is available from 67kW to 1189kW. They are environmentally-friendly modulating gas fired heating boilers that can modulate from 25% to 100% of their maximum capacity while having extremely low emissions of NOx (12/37 ppm) and Co (2/11 ppm), so that the boilers satisfy the most stringent European requirements. This combined with a gross efficiency of 94% (nett efficiency of 103.7%) mean that the boilers are at the forefront when it comes to specifying the very best equipment at competitive prices.

The high efficiency and low NOx is achieved by mixing air via a speed-controlled fan with the incoming gas in the correct proportions. This gas/air mixture is passed through a cooled pre-mix burner, which fires vertically downward over heat exchangers constructed from smooth and laser-welded finned stainless steel pipes, which form the heat exchangers. These exchangers are fitted with cast iron profiled water distribution headers, which guarantee optimum flow rate through the appliance. Standard features of these boilers include:-
- Boilers are fully assembled complete with casing fitted
- Gas filter fitted
- Boiler pump fitted
- 25%-100% modulation as standard

- Safety valve fitted
- Flow pressure switch fitted
- Anti vibration mountings
- Small flue diameters
- Small boiler footprint

These boilers are also available in a room-sealed option, which can replace awkward flue runs or fan dilution systems, cutting down in cost, noise and maintenance. Full boiler house controls and boiler sequencing are also available.

For even more environmentally-friendly and efficient options, these boilers can be offered in the R500, R2900 and R3600 series condensing boilers with efficiencies up to 97%.

Recent jobs completed include:-
- Guild Street Office Development
- Trinity College
- Tesco Ireland
- James Connolly Memorial Hospital
- The Law Library
- The Blood Transfusion Services Board
- Farm Leigh House
- Druids Glen Golf Resort
- Superquinn
- Central Park Leopardstown
- Dublin City University

Contact: Martin Garvey, Euro Gas Ltd.
Tel: 01 - 286 8244;
Fax: 01 - 286 1729;
email: sales@eurogas.ie
Vokera — Mynute System Boilers

Home heating specialist Vokera produces a range of boilers to meet the changing requirements of both installers and end-users. The Mynute range is comprised of four wall-hung boilers with an output range of 6kW to 28kW (20,500 Btu/h to 95,560 Btu/h). Boilers in the range can be linked to one or several other Vokera boilers, allowing the central heating output to be increased to suit larger domestic or small commercial installations.

The Mynute range incorporates a water-pressure switch to eliminate the central heating diaphragm, improve reliability and reduce service requirements. Electronic temperature sensing, with NTC sensor which is mounted on the primary flow, provides accurate control of flow temperature. The Mynute case is stylishly designed to be attractive to the end user.

Other features include a built-in anti-cycling devise, which eliminates rapid on/off operation of the burner, allowing a smoother and more gradual rise in temperature.

"Plug-in" time clocks are available for all models of Mynute.

Because the Mynute is a system boilers with all the components in the case, it is not necessary to install expansion tanks, separate pumps and all the associated pipework. The circulating pump, safety valve, by-pass air vent and expansion vessel are all built-in ... significantly reducing installation time.

Contact: Paddy Scriven, Vokera Ireland.
Heatequip Signs Exclusive Deal with Halstead

Halstead Boilers of Essex, England, has secured an exclusive boiler distribution deal in the Republic of Ireland with the Dublin-based Heatequip Ltd. "We are delighted to have signed an agreement with Halstead," explained Heatequip’s Managing Director, Noel Brannigan. "The Halstead range is ideal for the Irish market and we are confident that the partnership between us will flourish. Halstead already has a good name in Ireland with many installers across the country firmly committed to its products. "The combination of Halstead’s range of high performance quality boilers and the after sales service and spares support we provide throughout the Republic, adds up to a good deal for Heatequip customers,"

explained Mr Brannigan. Halstead Boilers, Joint Managing Director, Andrew Marshall said: "The arrangement with Heatequip is a notable development for us. Ireland is an important market and we were determined to appoint an established and respected building services company. Heatequip has a proven track, knows Halstead’s products well and has an excellent reputation in the plumbing and heating market."

Among the Halstead products already well accepted in the Republic, is the "Best" lightweight, cast iron wall mounted boiler. Having firmly established itself as the leading cast iron boiler among UK independent merchants, the Best has many attractive design features. Every Best boiler is supplied complete with a telescopic flue in the same package. The telescopic flue minimises cutting and greatly simplifies installation. The Best will work in both gravity hot water and fully-pumped systems. Furthermore, a robust cast iron heat exchanger and the use of only tried and tested, proven components from established, brand-leading parts manufacturers gives the Best outstanding performance and reliability.

For pressurised central heating systems, Halstead’s Best may be used with an add-on "pod", which includes pre-plumbed expansion vessel, pump and pressure gauge, all of which fit neatly within a matching casing beneath the Best boiler.

Also available through Heatequip are Halstead’s market leading combi boilers. The economical Ace, Finest and Finest Gold combis have heat outputs that range between 82,000–102,000 BTU/hr and are easily installed. The compact Ace is the most economical with a 9.8 litre per minute flow rate. The Finest Gold, with its “pre-plumbable” jig can deliver up to 13 litres of hot water per minute.

Heatequip Ltd is a wholly-owned subsidiary of the Eurohaul Group, one of Ireland’s leading national and international warehousing, distribution and transport groups. Heatequip is based on the Group’s four-acre site in the 55,000 sq ft head office at Greenhills Road in Dublin.

Contact: Noel Brannigan, Heatequip.
Tel: 01 - 451 9711;
Fax: 01 - 451 9064.
**Keston Condensing Gas Boilers**

Keston modular wall-mounted ultra-high efficiency condensing gas boilers are specifically designed for low-cost commercial and industrial heating, ranging from 38.1kW to 100kW. Because of their modular design Keston boilers lend themselves to almost any required heating output by way of multiple unit installations for larger commercial or industrial applications. The benefits over a single commercial boiler are immense. The Keston modular system is perfect for decentralisation programmes now happening in many commercial installations where one large commercial boiler is being replaced.

**Features & Benefits**

- Practically any heating output is possible with the modular system;
- All boilers are wall-mounted, though floor-standing installations can be accommodated using the optional floor standing frame;
- If space is a problem, the Keston 340 boiler is perfect with its output of 100kW and measuring just 1260mmH x 1080mmW x 350mmD;
- The commercial boilers are unique in design and have an exceptionally-high efficiency at 98%;
- The flue system is small diameter plastic pipe with lengths up to 39m (Keston 260 and 340) vertical or horizontal, and can save thousands of pounds in installation costs;
- Pipework header assemblies are available as an option to assist speedy installation;
- Shunt pumps are integral to the Keston 260 and 340 and will ensure each module receives the correct water flow when firing;
- Purpose-designed boiler plant rigs are available for easy installation and reduced site time;
- Simple and quick to install with all access from front and top;
- The unit is completely room-sealed and can be sited practically anywhere. There is no need for ventilation for combustion air to the room or compartment in which it is installed;
- The boilers are a perfect match for the Keston SPA hot water storage system which is available in high-efficiency commercial models up to 450 litres of storage;
- There are no complicated PCB's involved in installation of the boilers;
- High-quality stainless steel single pass heat exchanger provides long life (5 year guarantee on heat exchanger).

Contact: Frank Forde, Keston Heating Products. Tel: 01-462 1753; Fax: 01-451 7613; email: keston@focusireland.com

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**Remeha High Efficiency Low NOx Boilers**

Remeha Quinta 45/65 wall hung condensing boiler. **Outputs**

- Q45  7 — 40kW
- Q65  11 — 61kW

Remeha Gas 210 ECO floor standing condensing boiler. **Outputs**

- G210-3 — 8-80kW
- G210-4 — 12-120kW
- G210-5 — 16-160kW

**Remeha Gas 210 ECO floor standing condensing boiler. Outputs**

Remeha Quinta 45/65 wall hung condensing boiler. **Outputs**

- Q45  7 — 40kW
- Q65  11 — 61kW

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**Euro Gas Ltd.**

Unit 38B, Southern Cross Business Park, Boghall Road, Bray, Co Wicklow. Tel: 01-286 8244; Fax: 01-286 1729; eMail: sales@eurogas.ie
The "Ask the Expert — Training & Career Development" series is aimed at assisting those who want to upgrade their qualifications and knowledge but don’t know how to go about it. It is presented in conjunction with the DIT, Bolton Street, with Seamus Murran — DIT’s Head of Department of Construction Skills — providing the relevant information. If you have a query vis a vis training or career development, send a brief note to BSNews, Carraig Court, George’s Avenue, Blackrock, Co Dublin.

Ask the Expert

Seamus Murran, Head Department of Construction Skills, DIT Bolton Street

I have completed my apprenticeship and have gained the National Craft Certificate. I would like to obtain an additional third-level qualification which would enhance my career opportunities as a Supervisor or Clerk of Works. What should I do?

There are numerous courses on offer which would help you to advance your career opportunities. You need to seek information and advice before enrolling for a study programme.

To assist you with your deliberations, I suggest you consider one of the part-time evening programmes on offer from DIT, for example:-

A — Construction Technicians Course;
B — Craft Based Technicians Course in Building.

Students who take course B can also gain a qualification as a member of the British Clerk of Works Institute.

Contact: Department of Construction Skills, DIT, Bolton Street

I have a successful company in the painting and decorating industry. However, I would like to increase the range of services offered to industry by increasing my skills in signwriting?

Signwriting has always been part of the skills involved in the painting and decorating trade. In the past it tended to be exclusively a hand-operated procedure but computers now play an increasingly large role in the design and production of the signage. DIT offers an evening course which encompasses the hand skills of signwriting, including some of the more expensive techniques, eg gold plating. This course also covers computer-generated signwork.

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Contact: Construction Skills Department, DIT, Bolton Street

I have worked as a plasterer for many years. I see a niche market developing in the restoration of decorative plasterwork for older buildings. Can you help?

The market for developing skills in the restoration of decorative plasterwork is increasing and is very likely to become more popular in future years. Most people who work in this area tend to be from a plastering trade background, but not exclusively so.

DIT offers a practical evening programme in Decorative Plastering Skills, which you should inquire about.

Contact: Department of Construction Skills, DIT, Bolton Street

I have been involved in the construction industry for many years in a senior management position. I propose to retire shortly and I would like to gain some skills in the use of timber, something which I have an interest?

An area which you may find of interest is Wood Turning. The course is much sought after by a wide variety of people from various backgrounds. The course is offered for one night per week for 10 weeks, three times per year.

Contact: Department of Construction Skills, DIT, Bolton Street
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