

A proud and outward looking heritage



Hamworthy Heating is based at Poole in Dorset, where we have our administrative, manufacturing, research and customer service functions.

We are proud to be a leading British manufacturer and supplier of commercial heating and hot water solutions. As a company we are both outward-looking and forward-looking, and this approach has continued since we joined Groupe Atlantic.

Our heritage is reflected in our product names. Wessex, Dorchester and Purewell, to name three of our highly successful ranges, are also local or regional place names. The Hamworthy Wessex ModuMax boilers have attracted considerable interest since they entered the group's range in 2008; and they have proved particularly popular with manufacturers of package plant rooms.

Feedback from Belgium is that the Wessex ModuMax is popular because of its high power output, compact design and small footprint. This is crucial in new buildings since the space available for boiler equipment is increasingly limited.

The range has been particularly successful in the somewhat conservative Italian market, where previously there has been little enthusiasm for condensing boilers. The fact that condensing or non-condensing models are available has helped overcome that resistance. It has a bright future in Spain, where coal-fired boilers will be banned from 2012 and condensing boilers are subsidised, giving the group an excellent competitive advantage.

The Wessex ModuMax range of compact floor-standing boilers comprises 8 module sizes from 100kW to 250kW and boiler models up to 750kW. The design allows for a high degree of power modulation and ensures continuity of performance. Boilers are delivered fully assembled and have a working pressure of 10 bar.

Climate change survey winner congratulations

Hamworthy would like to congratulate Neil Whiley of JCA Engineering Ltd, who has been named the lucky winner of our draw to win a three day all expenses paid trip to the original Ice Hotel in Sweden.

Neil was one of thousands that entered our competition to win the luxury prize, after completing the 2010 Hamworthy Heating Climate Change Survey.

Launched at Ecobuild 2010, the study was created to gather facts and opinions on renewable energy and establish from the industry itself what is working and what is not in terms of sustainable solutions.

Findings from the survey revealed that while there is a desire within the sector to cut the impact of building services on climate change, two thirds of the respondents felt not enough is currently being done to respond to environmental concerns, due to financial constraints.



An overwhelming majority of respondents agreed that it was important to specify sustainable energy sources. Complying with regulations including local planning requirements was the main reason why over a third of respondents felt it necessary to consider renewables.

Next issue...

If you've enjoyed this issue of Boiling Point, look out for the next edition in spring 2011, which will feature our exciting new range of commercial boilers.

You can request the next edition of Boiling Point, leave feedback on this edition or request to be part of future editions by visiting our website www.hamworthy-heating.com

Boiling Point

Autumn 2010



Hamworthy

Heating *at work.*

Cost v. value

Is cost or value steering today's purchase decisions? Boiling Point debates which factor is in the driving seat for contractors and specifiers.

Dorchester's new addition

Hamworthy introduces the latest addition to its Dorchester series - the DR-FC Evo range of condensing water heaters.

Improving hot water

How do you improve hot water generation at work? Hamworthy highlights its contribution to developing Domestic Hot Water systems.



Heating *at work.*

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A Groupe Atlantic company

To the point



Hamworthy Heating has long been a credible voice in the heating and hot water industry and a natural first stop for customers seeking reliable advice, as well as good service and high quality products. I am therefore delighted that we are re-launching Boiling Point.

can only be short lived without informed product choice and proper consideration of the overall cost of ownership.

Replacing old boilers with modern high performance condensing boilers, rather than like for like, will achieve lower running costs as well as improved efficiency and reduced carbon emissions. The continuing integration of renewable energy products further increases the opportunity to reduce carbon emissions. Our approach at Hamworthy is to take a balanced technical and commercial view to deliver the optimum solution, and through investment in our sales structure, we are committed to supporting customers with experience based advice.

A spate of mergers and acquisitions has taken place within our sector in Europe in recent years, and I would anticipate further consolidation given current market conditions. We certainly benefited from joining Groupe Atlantic in 2008 as it gave us the stability we needed to capitalise on our strong brand and realise the potential of a period of rapid change in the industry.

Our priority is to maintain momentum in developing new products for home and export markets and I am proud to remind you that Hamworthy is an innovative world class manufacturer and a net exporter of boilers. Our Wessex ModuMax range is doing well across Europe and the UK,

and we are looking forward to the launch of some exciting new products, including new boiler ranges, at Ecobuild in March 2011.

As you will appreciate, we also provide an excellent range of hot water products as a long standing and growing part of our portfolio. By integrating solar thermal technology with conventional gas powered systems and taking full advantage of condensing technology, we are pushing the envelope in terms of improved efficiency and contributing to real and significant carbon reductions.

It only remains for me to commend this issue of Boiling Point to you knowing that it contains a wealth of information about how we work, our products and how we can support you in your building services needs, as building operators, specifiers and contractors. I hope that – like me – you will enjoy this and future issues.

Yours sincerely,

Andy Moore
Managing Director

The cost v. value challenge

Whether you are specifying heating products, installing them as a contractor or are responsible for a building as owner, occupier or facilities manager, the world is not a comfortable place right now. The reasons for this are complex, as feedback from contractors and specifiers tells us.

At one extreme we hear that purchase decisions are totally driven by short term cost considerations. This is occurring in hard pressed sectors such as hospitality, where difficult trading conditions and concerns about the effects of government spending cuts are fuelling uncertainty and knocking business confidence.

At the other extreme, major developments are at risk of being stopped in their tracks unless they meet strict environmental criteria laid down by the planners. The choice of heating system, incorporating biomass or CHP, plus solar water heating or heat pumps along with modern gas condensing boilers, offers a highly deliverable solution. In these instances, it's not cost, but the planning system that is in the driving seat.

In yet another scenario, property owners who are looking to refurbish a building, and not just replace old water heaters, are more open to the idea of upgrading the hot water system. Not being experts themselves, they are reliant on their consultants and contractors, and advisors like our Business Development Managers to understand the technology options now available.

Our view is that modern hot water systems should be designed to reduce the cost of generating hot water, and ensure safe and reliable operation. More efficient hot water production will then automatically reduce the carbon emissions and associated environmental impact.

In practice atmospheric water heaters often are replaced on a like for like basis. This minimises the immediate replacement cost, especially with good like for like products such as our Dorchester DR-L water heaters, but the cost of ownership including the environmental cost across a typical ten year service life could be better.



The alternative – replacement with a far more efficient modern condensing equivalent like the Dorchester DR-FC-Evo – is likely to achieve energy savings far greater than the savings made at installation. Products that utilise renewables such as our DR-TC Solar range take this to the next level.

Of course this raises the question: should replacements be capex purchases or come out of maintenance budgets? Since energy costs are an operating expense, further financial analysis is required, adding another layer to the decision making process. If this is missed, the chances of making a really good decision diminish.

Naturally, specifiers and contractors have to consider what their markets can bear. If they know the customer is committed to the lowest possible capex, they may also know that they can expect to lose the business if they push for a different, albeit better, solution.

One specifier even suggested to us that energy targets should be enforced

through substantial fines to discourage short term thinking centred on the purchaser's immediate profit margin. In practice he aims to propose the best solution for each customer, taking into account space available along with environmental and cost factors and their concerns for their businesses.

As a manufacturer, we regard support and customer information for specifiers, contractors and end users as an important part of our role. In that our products fit the like for like, improved performance and renewables categories, we have no axe to grind and can be impartial.

We would very much like to hear from you if you would like to share your views on the cost v. value challenge and your observations on the water heating marketplace. It is our intention to publish feedback in the spring 2011 issue.

Please visit our website, www.hamworthy-heating.com to send us your comments.

Improving hot water generation at work

By Kevin Potter, Business Development Manager, Hamworthy Heating

Domestic Hot Water (DHW), also called Sanitary Hot Water (SHW), means any hot water used for normal hygiene uses.

It's a big mistake to think of DHW in terms of existing technology, when systems are undergoing continuous improvement and investment by the industry.

Traditional direct fired water heaters using atmospheric combustion are giving way to modulating burners with condensing heat exchangers. Better insulation and modern construction methods, required by the Building Regulations, mean less energy is needed for space heating. Since the energy demands of DHW are likely to outstrip those of the space heating system, it is vital to make the right choices when replacing DHW systems.

Modern hot water systems

Hot water installations should be designed to reduce the cost of water heating and ensure safe and reliable operation. More efficient hot water production reduces carbon emissions and environmental impact.

It is still common practice, however, to replace atmospheric water heaters like for like. While this minimises the replacement cost, the efficiency of such units falls below their modern condensing equivalents, meaning initial savings are overtaken by years of higher energy costs.

This raises the issue of whether replacement costs should come from capital or maintenance budgets. Energy costs come from operating budgets; and so good decision making can fall by the wayside. However these factors will become difficult to ignore given the need to reduce emissions and rising energy costs.

Traditional atmospheric water heaters operate at 77 per cent gross combustion efficiency. Modern condensing gas fired storage water heaters with modulating burner control, such as our Dorchester DR-FC Evo range, operate at over 96 per cent gross efficiency.

By upgrading, annual fuel savings could drop by 30 per cent so the higher cost of a condensing storage water heater will soon be recovered. Ongoing savings with lower emissions and a smaller environmental impact will be realised over the life of the product.

Reducing risk of legionella

Water temperature is significant as regards legionella infections, as optimum conditions for bacterial growth occur between 20°C and 45°C. Bacteria are eliminated above 46°C with survival time just minutes at 60°C. A good way to reduce the risk is to maintain delivery temperatures at 60°C or above with protection against scalding at all outlets.

Integrated controls

Our Dorchester DR-FC Evo range incorporates an anti-legionella function, which can run regular purge cycles by operating at over 60°C for one hour, usually during the night.

Where hot water temperature is the primary control measure, re-circulating circuits should allow for a return temperature of 50°C or above, in normal operation.

In operating a condensing storage water heater, it may be desirable to allow stratification, delivering set-point temperature from the top of the cylinder, whilst the cold water supply is introduced at the bottom. During the anti-legionella cycle, it is important to mix the contents of the cylinder evenly to ensure 60°C is achieved.

Waste less and comply

Wastage of both energy and water can be reduced by using re-circulating systems and avoiding long dead legs. Mandatory regulations insist on insulated pipework where runs exceed specified lengths. It is important to minimise draw off times, so that little water cools in the spur pipes that connect sinks, basins or showers to the hot water ring main.

The distribution pipe work design should enable the hot water to reach all outlets at 50°C within one minute of turning on the tap. Thermostatic mixing valves should be used to comply with regulations and manage the risk of scalding.

Choose equipment wisely

Our contribution to improving DHW systems is centred on our Dorchester DR-FC Evo range, the high performance Powerstock storage calorifiers and storage tanks, and increasing use of solar thermal energy. Our approach is to support specifiers, contractors and end users, providing technical information and advice with continuous improvement of our products.



CASE STUDY

Cheaper water heating for a cornish leisure centre

Located between Camborne and Redruth, Carn Brea is the largest community based leisure centre in Cornwall. It is now benefitting from its new Hamworthy Dorchester gas fired condensing water heaters and Wessex ModuMax condensing modular boiler, with the gas bill down 30 per cent and reduced carbon emissions.

The Hamworthy products were installed as part of a major refurbishment programme. The Dorchester 95kW condensing fast recovery water heaters have a continuous output of 1836 litres/hour and a 44°C temperature rise. Their combined storage capacity is 920 litres of domestic hot water, which is used for showers and general hygiene purposes.

In addition, old, inefficient 2000kW gas fired boilers at the centre were replaced with a Wessex ModuMax 250/500c modular condensing boiler. The installation was completed with a factory

assembled and tested Hamworthy manifold kit, a boiler sequencing cascade controller and a Chesil FTE floor standing twin pump pressurisation unit.

The boiler heating system is separated from the DHW, providing many seasonal efficiency benefits, and heats the main and learner swimming pools, the central heating and air handling units.

Hamworthy equipment was chosen on the strength of our excellent track record in leisure. The technical advisor was GPJ Consulting of Redruth and installation was by Kier Facilities Services.



New addition to the renowned Dorchester range

The DR-FC Evo range of condensing water heaters is the latest addition to our Dorchester series. This progression from DR-FC condensing water heaters provides even higher outputs, exceptionally low noise and high seasonal efficiency performance.

There are seven models in this new range with outputs of 596 to 2,333 litres/hour. Storage capacities vary from 227 to 504 litres; and two or more DR-FC Evo models can be installed together to deliver larger loads.

The Dorchester DR-FC Evo range is ideal for applications where it is better to separate hot water from the heating plant, and achieves excellent efficiencies of up to 107 per cent net in such circumstances.

Key features

- Extensive controls including time clock and anti-legionella function
- A down firing low NOx pre-mix modulating burner reduces the risk of scale build up in the heat exchanger
- Can operate with an open flue or as a room sealed appliance
- Suitable for applications where the heater must be close to the point of use with noise levels below 45dBA
- Twin duct flue systems can extend to 100m and concentric flues can be up to 40m long, so heaters can be installed almost anywhere in the building.



Coming soon

We are proud to announce that early next year we will be launching a new solar water heater building on the considerable strengths of the Dorchester DR-FC Evo range. This exciting new product retains all the condensing benefits of the DR-FC Evo, as well as incorporating a fully prioritised and integrated solar control package with integral solar heat exchanger.

A conversation with Sharn Harris

Boiling Point is keen to engage with contractors, specifiers and end-users of Hamworthy Heating's products, and review some of the issues currently exercising the heating sector.



We were very pleased when Sharn Harris, Service and Small Works Manager of Delron Services Limited (DSL), and an active member of HVCA, kindly agreed to talk with us. He shared some valuable insights into the contractor's view of warranties and other forms of support from the boiler manufacturers.

DSL has been in business in Maidstone, Kent, for over 24 years. In this context its most relevant services are boiler house installations, commercial plumbing, commercial and industrial heating, ventilation and mechanical services.

Warranty benefits

We began by asking Sharn whether warranties should be for one year or two. The conundrum is that Hamworthy, along with some other manufacturers, offers a two year warranty, but we often hear that contractors are only interested in a single year's support. So do heating contractors see any advantage in the longer warranty and is there any gain from passing this on to their clients?

Sharn says, "it all depends on the type of client; and the bigger the project, the less important it is to have the longer warranty. When DSL replaces a boiler like for like on a £20,000 contract at a residential care

home for instance, the two year warranty is a very real benefit. It gives the owners peace of mind, knowing that they won't have to worry about the boiler for the next two years.

"With a £200,000 heating system in a school extension or a major new build development, the main contractor is the customer. As he is obliged to resolve any faults in the building within a year he has no interest in passing on a warranty that remains under his ownership, as this could cost time and money later and he simply does not want to know. It is better, as with the Hamworthy warranty, where it is associated directly with the installed appliance, rendering it of use to the end user."

Where that is not the case, it is a lost benefit for both the building owner and the heating contractor. It is also disappointing for Hamworthy in that we prefer to support our customers and where possible help them to differentiate themselves from their competitors. However what we learn from this is that support needs to be flexible and an extended warranty still has its place along with product quality and service.

Service and quality

Sharn was equally forthright over the point that since all boiler manufacturers source certain components from a relatively small number of suppliers and because cost minimisation is critical, teething problems are inevitable with boiler installations. "The supplier that is good to deal with, and provides us with friendly, efficient service gets our business," he says.

DSL's success was built on high levels of service and by ensuring that projects are completed on spec, on time and on budget. "Naturally we expect the same from our suppliers," Sharn continues. His tip for manufacturers is that quality is king. "Be sure to do the test firings and inspections to the best of your ability; and recognise that electronic components are made to a price like everything else and are not always as reliable as popular wisdom suggests."

Sharn definitely likes suppliers that think for themselves and are willing to advise rather than hide behind the regulations for fear of trouble later with the lawyers. He believes that boiler manufacturers should be prepared to commit and advise. "After all, nobody is better qualified to assist the installer in correctly interpreting how their product conforms to the regulations than the manufacturer", he reminds us.

Finally, Sharn likes the idea of introducing online technical support. It could make all the difference between getting on with the work and having technicians kicking their heels for hours while someone, somewhere looks something up.

In conclusion, Sharn sees plenty of opportunities for boiler manufacturers to support contractors. Service, quality and flexibility head his list; but what we also hear is that good communications underline everything.

To feature in future editions of Boiling Point, visit www.hamworthy-heating.com

How we do it

Heating and hot water services in commercial buildings are undergoing radical change which affects the entire supply chain for new build and refurbishments. Specifiers, architects, developers, contractors and building operators face an increasing number of regulatory requirements to reduce energy consumption and manage carbon emissions within the budget.

Buildings account for 46 per cent of the UK's carbon emissions: Refurbishing the existing stock will go a long way towards the Government's carbon reduction commitment.

Although refurbishment creates more challenges than new buildings, both need an integrated approach. Previously, services decisions were usually the responsibility of M&E specialists. Today the integration of renewable energy sources involves others in the supply chain, which impacts significantly on the budget.



With more suppliers than ever to consider, Hamworthy has chosen a simple, holistic approach when supporting customers. Renowned for our support and service, Hamworthy has appointed three Business Development Managers (BDMs) to work with customers at the earliest stages of the project.

Each BDM has specialist knowledge and experience and will deliver the same high level of customer support alongside Hamworthy's sales team. The BDMs explore key criteria against which each project will be evaluated, providing advice and insight into the choices available for heating and hot water solutions.

BDM Simon Mitchell says specifiers are keen to know much more: "They have a real thirst for knowledge because of the rapidly changing demands on use of energy in buildings. Similarly, building operators need to understand the ramifications of renewable energy technologies."

Regarding hot water, Hamworthy's knowledge of system sizing and design to protect against legionella, plus our range of direct fired water heaters, and indirect calorifiers with solar capability, provides the foundation for delivering optimum solutions.

BDM Kevin Potter works closely with the hotel, pub trade, leisure and healthcare sectors and is well aware of trends in reliable hot water services: "Often it's the initial layout that determines product selection, especially when the product is replaced like-for-like – so the building operator doesn't benefit from lower running costs over the life time of a more advanced product. We'll help them to realise those savings."

Hamworthy is a commercial heating specialist, but can offer specific support and advice on housing district schemes and centralised plant rooms too. BDM Neville Radford says systems can be provided for public and private sector community housing: "Our compact modular boilers are perfect for minimising the space required in the plant room, and integrate well with renewable technologies."

Why not put Hamworthy's BDMs to the test on your next project and see how we can meet your heating and hot water needs?

CASE STUDY

New school is eco-friendly

The new Durham Johnston School in County Durham was the first school in the county to benefit from the previous government's £500 million Building Schools for the Future programme.

At the heart of the new build lies an environmentally friendly strategy delivered through the sustainable use of energy using a Hamworthy biomass heating solution, supported by Wessex ModuMax condensing boilers, Powerstock calorifier and pressurisation equipment, all supplied by Hamworthy Heating.

The biomass solution is designed for a wood pellet fuel supply and uses a 500kW boiler with integrated control

system, complete with fuel a storage silo, and automated fuel feed system into the boiler intermediate hopper.

The boiler feed system has a three-stage burn-back safety system and automatic ignition. To maximise seasonal efficiency the boiler modulates at part load and has an extinguish function to switch off the boiler when there is no load, and unlike many biomass boilers, does not need trickle heat or kindling to maintain the combustion process.

