

Boiling Point

Spring 2011



Heating *at work.*

The most versatile boiler ever

Hamworthy introduces its new Fleet range of condensing boilers – set to transform commercial boiler solutions

A confused marketplace

Boiling Point addresses the confusion in today's marketplace regards heating and hot water solutions

Best value

Hamworthy Heating's, Russ Walliss, explains how to get the best value from your boilers

To the point



I am pleased to welcome you to the spring edition of Boiling Point, Hamworthy Heating's magazine for people who specify, install, maintain or operate heating and hot water systems in commercial and public sector environments.

Bringing you fresh insight into the market, Boiling Point aims to stimulate comment, inform debate on the key issues affecting our industry and keep you abreast of developments at Hamworthy.

Firstly I am delighted with the government's commitment to the Renewable Heat Incentive (RHI), which aims "to revolutionise the way heat is generated and used in buildings and homes". At the time of writing, it is anticipated that the regulations required to underpin this policy will be approved by parliament in the coming summer.

Created to encourage the uptake of renewable heat generation, this will no doubt kick-start many renewable installations as attractive long-term financial incentives become available. Hamworthy looks forward to the opportunities to supply customers with solar thermal and biomass technologies, integrated into commercial heating systems. However it is critical that advanced low carbon systems are based on firm foundations; and we explore this area in some depth in this edition.

We are similarly excited by the prospects for our new Fleet range of wall hung and

floor standing condensing boilers, which we launched at Ecobuild in March. British designed and built at our factory in Poole, the Fleet is both technically innovative and, we believe, highly responsive to well defined market needs. Condensing boilers now account for nearly 80 per cent of all new commercial boilers sales in the UK, which recognises the fact that replacing old boilers with modern high efficiency models helps significantly in achieving the well publicised carbon reduction targets.

The Fleet range results from over four years of research and development. It brings to market a range of condensing boilers that benefits all stages of the heating system's life cycle in commercial buildings, from specification through installation, to long term operation and maintenance.

We are proud of our success in engineering this product up to a standard, not down to a price, while also achieving an attractive, more affordable price point, which is supported by Hamworthy's pre-sales and after-sales expertise. The result is a highly versatile product offering which we feature in this edition of Boiling Point.

Naturally, we are alert to the economic challenges of 2011; and we see many building owners repairing and maintaining plant which would be better replaced with highly efficient modern boilers because of uncertainty surrounding spending decisions. While this pattern can be

expected to continue for some time, increasing fuel prices are a serious consideration.

The lower operating costs of condensing boilers frequently point to the wisdom of an early replacement boiler programme, to be followed later by a more expensive but carbon-saving integrated project using conventional plus renewable technologies. At Hamworthy we are proud to offer solutions for every stage.

Fortunately for our sector, heating is essential in the British climate; and refurbishment is an important part of our business, so there is some cushion against cutbacks in new build. Nonetheless, construction did take an upturn in January which is a good reason for some optimism, in the face of today's challenges.

Finally, I would like to thank everyone who gave us so much excellent feedback on the autumn 2010 edition and those of you who kindly contributed this time around. I hope you will find this issue interesting and I look forward to your response to the Fleet range.

Yours sincerely,

A handwritten signature in blue ink that reads "Andy".

Andy Moore
Managing Director

Making sense of a confused marketplace

It won't come as a surprise to readers of Boiling Point, when we note that there is considerable confusion in today's marketplace for heating and hot water solutions.

We're talking about confusion in the sense of uncertainty and bewilderment as much as the alternative definition of turmoil or disorder. Nonetheless, just as ships sometimes have to pass through confused water caused by tricky combinations of tides, winds and currents, so our industry is on passage through a challenging period of uncertainty for the next two to three years. For us, however, the factors are economic, environmental and technology-led.

On the one hand, they result from the spending cutbacks necessary as the government tackles the massive national deficit, and the associated lack of confidence and reluctance or, in some cases outright inability, to spend money.

On the other, there is debate within the industry on the merits of renewables and condensing boilers in the context of environmental considerations and whole life costs, with cost the overriding factor. Faced with a plethora of technologies they don't necessarily understand, building operators often need a lot of guidance on what's best for their applications.

Discussions with several Hamworthy customers provided interesting insights into what is going on. These ranged from the advice that it's tough and there is not much work about, to the suggestion that many building owners are making do with equipment that should, by rights, be replaced because it is too old, inefficient and worn out. Owners who cannot approve the necessary capital expenditure are therefore faced with high fuel and maintenance costs.

As regards to turnkey projects, it has been suggested that customers are only interested in the price to complete the job, and are not concerned about running costs and benefits over the life of the product.

Contractors say that firms are pitching for work on very small margins in the face of cut-throat competition. The logic is that they would rather work for little more than cost than lose good people. It is felt that while the tendering process is not getting intrinsically harder, projects are being delayed as the same quality products are being sought at lower prices.

Concerns were expressed regarding the challenge of remaining current and how important it is for consulting engineers to be knowledgeable about product introductions and improvements.

Generally, good technical advice from manufacturers and technical support from people who know the business was valued. So, too, were reassurances on maintenance backup and availability of spares, especially if the supply chains are long.

Doubts and misunderstanding about newly applied technologies including ground source heat pumps, solar PVs and biomass boilers were in evidence. Condensing boilers seemed to be clear favourites in preference to renewable

technologies where interviewees had offered both alternatives; and cost issues were mentioned again and again.

Addressing all this, there is a strong message from the industry which was widely acknowledged at this year's Ecobuild event in London, and which Hamworthy supports. It is that the basics must be addressed first and in the right order:

- 1 Make sure buildings are properly insulated to reduce heat loss and therefore require less energy
- 2 Replace old inefficient boilers as soon as possible with modern high efficiency boilers
- 3 Ensure the right controls are in place to manage heating and hot water systems efficiently

Once these steps have been taken, resulting in huge carbon reductions in commercial buildings, it may be appropriate to introduce renewable energy solutions for further incremental improvements.

That said, we conclude that those who will do best through the current, highly challenging period will be the consultants and contractors who are technically strongest, pragmatic and responsive to clients' demands. As a manufacturer, Hamworthy Heating is very much alive to the need to keep a tight control on costs, tailor support to our customers' needs and supply the right products in a very turbulent marketplace. It only remains for us to thank the customers who so kindly contributed to this article.



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

Fleet

The most versatile boiler ever

Designed and built at our factory in Poole, the new Fleet brand comprises an exceptionally versatile range of modular boilers suitable for a multitude of commercial plant rooms.

We have taken an innovative approach to offer Fleet condensing boilers in wall hung and floor standing configurations, with outputs from 40kW to 1050kW. Using common components and exploiting our expertise in floor standing modular boiler design, we have produced ultra-compact modules for both horizontal and vertical boiler applications.

The new Fleet range reflects our commitment to advancing the technical excellence of our products in the best interests of our customers, and addresses market needs that have been carefully identified.

Introducing our innovative new heat exchanger

At the heart of the Fleet is our innovative sectional heat exchanger, which has been designed for use in all the wall hung and floor standing boilers. Each product can therefore be easily configured, allowing a total of 47 different models.



For more information on the most versatile boiler ever, please talk to us:

T: 0845 450 2865

E: sales@hamworthy-heating.com

Manufactured using robust aluminium alloy castings for highly efficient condensing performance, the Fleet range of boilers are suitable for up to 6 bar working pressure. Engineered to the Hamworthy pedigree, the Fleet boiler has been through a comprehensive testing and development programme, and the heat exchanger comes with a five year warranty, backed by our dedicated after-sales service.

Using multiple boilers, the Fleet range facilitates close load matching and requires fewer modules for high output commercial systems where it is necessary to satisfy large heat loads. This enables significant operational savings to be achieved over its lifetime.



Fleet W (Wall Hung)

There are eight wall hung models in the Fleet range, with outputs from 40kW to 150kW, greatly extending the normal capability of wall hung boilers.

All models within the range come with optional frame-sets and pipe kits below the boilers, plus room sealed flue with a choice of concentric or twin duct, or open flue header systems for multiple boilers.



Fleet H (Horizontal)

The Fleet floor standing horizontal range is perfect for replacing rows of old cast iron modular boilers. With a choice of 13 models, single boiler outputs range from 40kW to 350kW. The Fleet horizontal boilers up to 150kW are available with the same choice of options as the wall hung models; pipe kits mounted above the boilers and open or room sealed flues, including concentric arrangements.

The Merley

The latest generation boiler sequence controller

To help effectively manage multiple boiler modules, we have introduced the Merley. This latest generation boiler sequence controller is perfectly matched for use with our Fleet boiler range.

With the Merley, Fleet boilers can be controlled to share the load between multiple boiler modules in the most efficient manner possible.

Using proven, reliable, Siemens controls platform technology, the Merley provides efficient boiler cascade control for up to 16 modules, based on time and temperature requirements.

Benefits

- Energy saving functionality
- Reduces carbon emissions
- Even usage of boilers
- Intelligent self-learning control
- Automatically replaces boilers at fault
- Wireless remote sensors easy to install
- Versatile control strategies
- Heating zone and DHW management



Fleet V (Vertical)

Taking space saving seriously, the Fleet floor standing vertical range consists of 26 models, with modules arranged either two or three high, to provide outputs from 80kW to 1050kW; becoming the highest output, smallest footprint boiler on the market today. Taking less than 1 square metre floor space to generate 1050kW of power.



The Fleet range has been developed to deliver intelligent innovative solutions combined with ease of installation and maintenance in modern plant rooms thanks to the use of common components.

Through our innovative heat exchanger and a rigorous attention to detail, the Fleet range comes at a very competitive market price which will enable customers to purchase our quality engineered products at an affordable price.



Fleet on the road

During 2011 and 2012 the Fleet range will take to the road, as we travel up and down the country on a series of road shows.

Providing a platform on which to inform our customers about our products, this is an ideal opportunity for you to learn about, not just the Fleet range, but our extensive commercial heating and hot water systems.

FLEET

The most versatile boiler ever



Made in Britain 

Fleet on film

One brand multiple solutions

Illustrating the scale of choice offered by the Fleet range, please visit www.hamworthy-heating.com to view our animated video showcasing the most versatile boiler ever.

A conversation with Dave Callaghan

In this edition of Boiling Point we talk to Dave Callaghan, an associate in the Birmingham office of RPS* and chairman of CIBSE West Midlands. Dave gives us an insight into heating and hot water systems from both an economic and environmental standpoint.



It seems that customers are very keen to demonstrate their green credentials by requesting the use of renewable technologies for both new build and refurbishment projects. They then balk at the cost, which may be as much as 50 per cent up on conventional systems and buy condensing boilers, particularly if they are for schools or local authorities. "This has happened in the last six projects where renewables were requested and options provided," he said.

Cost considerations are linked to an understandable reluctance to "gamble on technologies that are not perceived to be tried and tested in the way that gas boilers are" as he puts it. At the same time, design teams often demonstrate a powerful bias towards cutting back on the mechanical and electrical services that make a building function effectively in order to retain costly, but undoubtedly attractive elements such as imposing foyers and finishes. The result is that the renewables go and gas boilers are used instead.

While this may be good news for boiler manufacturers in the short term, Hamworthy would recommend a more advanced approach whereby customers look towards the long term with planned migration from old inefficient boilers to high efficiency condensing boilers integrated with renewable energy.

If necessary this can be delivered in stages to manage the investment associated with renewable energy sources. We strongly agree with Dave Callaghan that it is important to consider whole life costs rather than to think purely in terms of the initial purchase and installation price up to the point where defects periods and warranties end.

The solution, he suggests, lies with a greater understanding of such incentives as the Feed-in Tariff (FIT) and the emerging Renewable Heat Incentive (RHI), which both reward investment in sustainable power or heat generation.

It's essential to have the right products; and customers must have confidence in them. It could take a depressingly long time for all this to happen, yet it's imperative to cut carbon emissions.

What Dave believes is necessary is for the government to show leadership through greater ownership of the situation and better communications. There are numerous initiatives such as the Carbon Reduction Commitment Energy Efficiency Scheme (CRCEES) and the incentives already mentioned, FIT and RHI. This is great but they are not managed well; there is little or no policing, and the incentives are not promoted widely enough.

The other side of the coin is that the wider construction sector, including architects, project managers and quantity surveyors must ensure that they are up to date. All these disciplines are highly influential in the selection of buildings services systems, yet they don't always quite grasp the whole life costs message associated with renewables and advanced heating systems.

Unfortunately, this does not add up to an easy situation. We would hope that the sector and government learns through the current challenging period and emerges with a clearer sense of direction.

**RPS is an international consultancy providing advice on the development of land, property and infrastructure; energy exploration and production and the use of other natural resources; environmental management; and health and safety matters. It is currently engaged in key regeneration projects in many of the UK's major cities.*

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

Get best value from your boilers

Russ Walliss is service manager for Hamworthy Heating. His job is to ensure that customers have every opportunity to maximise the fuel efficiency and performance of their boilers and minimise both lifetime costs and environmental impact, by providing a first class commissioning, servicing and after-sales support function.



His team is also responsible for managing product warranties, including the company's first ever five year heat exchanger warranty on the new Fleet range of condensing boilers. "This," he says, "reflects the excellent feedback we've had from field trials. It makes an important statement on the robustness of the product, and addresses today's need to contain costs in a difficult economy."

Hamworthy Heating normally provides a two year warranty on parts for boilers, water heaters and related equipment as standard, and for customers who choose to use Hamworthy's new commissioning service, labour is included as well as parts, giving complete piece of mind.

Where plant is not commissioned by Hamworthy, the two year parts warranty is still an asset. It is possible to transfer the warranty from the original purchaser to the end user, benefitting both parties.

Commissioning your new system

Some contractors feel strongly that having installed a boiler or hot water system, they are the right people to commission the plant. It's certainly true that the way the system is initially set up has a bearing on the longevity, performance and lifetime costs of heating and hot water installations.

"Our view is that there are many excellent contractors out there, and we are always pleased to be working with them," Russ continues. "However our specialist engineers are the ultimate experts in Hamworthy products because of their training and depth of experience with our equipment. They understand exactly how to set up each model for maximum efficiency,

effective performance and minimum environmental impact, which is good for fuel economy, but is also good for the durability of the boiler, to achieve a longer life."

All Hamworthy commissioning packages are available at attractive new rates and are fully tailored to the customer's requirements to include exhaustive commissioning procedures. They are topped and tailed with a full pre-commissioning report and a plant logbook to help in tracking ongoing maintenance.

Planned and unscheduled maintenance

There are many thousands of Hamworthy boilers and water heaters in service throughout the UK. Since they range from the latest condensing boilers with advanced controls to a few trusty older products still doing a reasonable job after

40 years or so, a sophisticated servicing organisation is needed.

Russ' team comprises both office based staff and engineers out on the road, to cover all eventualities. In the offices, service coordinators take calls and prioritise work as it comes, whilst in service administration, they monitor costs and planning of service contracts including warranty information. The service team work alongside the spares team, whose impressive technical knowledge enables them to identify components, even when the customer is unsure of which product model they have.

Hamworthy then employs field-based specialist engineers for servicing boilers, water heaters and other products across England and Wales; coverage is supported by a number of accredited HVAC engineering subcontractors who have been fully trained and approved to work on Hamworthy products. The company uses agents in Scotland and Ireland who have exceptional knowledge and experience of Hamworthy products through many years of association.

"Priority call-out will always be given to sites providing critical services, whether care homes or power plants; they will get a quicker response than someone with multiple boilers and shorter demand periods who can cope perfectly well with one unit down," Russ explains.

That said, the average response time is 48 hours. This short window of opportunity enables the service coordinators to review the information provided by the client and issue the appropriate spares to the attending engineer.



Service team: **0845 450 2866**
email: **service@hamworthy-heating.com**

Successful launch of new Hamworthy range at Ecobuild

Following substantial research and development, our new Fleet range of condensing boilers had its official launch at this year's Ecobuild, proving a resounding success.

Welcoming hundreds of visitors to our stand at the UK's largest construction event, the exceptionally versatile Fleet range of wall hung and floor standing condensing boilers took centre stage, attracting huge interest among delegates and members of the media.

Speaking for everyone at Hamworthy, managing director Andy Moore, said:

"The official launch of our new range represented the pinnacle of four years of hard work by every single member of the team at Hamworthy.

"We can confidently say the Fleet brand is something which we are all extremely proud of."



Looking ahead with Keith Thompson

When I joined Hamworthy as sales and marketing director in October 2010, it was a 'given' that the UK's heating and hot water industry faces a particularly challenging time for the next few years.

My strategy, therefore, is focused on our enhanced value approach. This means responding powerfully to market pressure for cost down initiatives so that our customers receive best value for money, especially where funds are limited. Fortunately, the Fleet range provides a superb opportunity for this. It gives entry to Hamworthy quality and our full customer support services at a significantly lower investment than has been the case in recent years, for all the reasons covered in this issue of Boiling Point.

It is important to us – as well as to you, our customers – to take full advantage of the Renewable Heat Incentive that is designed to help the UK shift away from fossil fuel, reduce carbon emissions, encourage innovation and support jobs.

This £860m government scheme is expected to increase green capital investment by £4.5 billion up to 2020, stimulating a new market in renewable heat, an area in which Hamworthy is already active. We certainly intend to make a sizeable contribution to the sevenfold increase in industrial, commercial and public sector renewable heat installations that is expected by 2020, supplying both gas fuelled high efficiency boiler and water heating systems and sustainable fuel technologies.

Underlying this, I believe that there is a major task to be done helping customers



to get the basics in place. Gas consumption and costs can be cut by a massive 20 – 25 per cent when out dated boilers are replaced with modulating systems plus the right controls. This means zone controls, optimum starting, weather compensation and even thermostatic radiator valves (TRVs) so that output is matched evenly to the needs of each building and energy is not wasted.

In summary, I am confident that this is a time of great opportunities as well as great challenges for all of us.

Next issue...

If you've enjoyed this issue of Boiling Point, look out for the next edition in autumn 2011, which will feature our exciting next generation of sustainable energy products for heating and hot water.

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