# DIARYDATES

### **Exhibitions**

Over the next few months, you can visit the Worcester stand at any one of the following exhibitions, where a selection of our latest 'A' rated gas and oil-fired boilers and renewable technologies will be on display.

For further information, visit www.worcester-bosch.co.uk and click on the events page.

### **February**

### **Self Build**

Stand A11 Kings Hall

Lisburn Road, Belfast 15/02/08 - 17/02/08

#### **Ecobuild**

Stand E66
Earls Court,
Warwick Road, London

26/02/08 - 28/02/08

#### March

### Heating and Plumbing Event 2008 (KBB)

Stand PH28, NEC, Birmingham 02/03/08 - 05/03/08

### **South East CIH**

Hilton, Brighton Metropole 4/03/2008 – 6/03/2008

### **Scottish CIH Annual**

Conference 10/03/2008 -13/03/2008

### **Ideal Home Show**

Excel, London 14/03/2008

### PHEX

Leicester City FC 18/03/2008

### April

### National Homebuilding and Renovating Show

Stand G105, NEC, Birmingham 10/04/08 – 13/04/08

### National Homebuilding and Renovating Show -Green Village

Stand J141 & K140, NEC, Birmingham 10/04/08 – 13/04/08

### Corgi Road show:

Hull - 1/04/2008 Stoke-on-Trent - 2/04/2008 Birmingham - 3/04/2008 Great Yarmouth - 8/04/2008 Peterborough - 9/04/2008 Watford - 10/04/2008 Brighton - 15/04/1008 Kingston-Upon-Thames -16/04/2008

**South West London** – 17/04/2008 **Swansea** – 22/04/2008

**Gloucester** – 23/04/2008

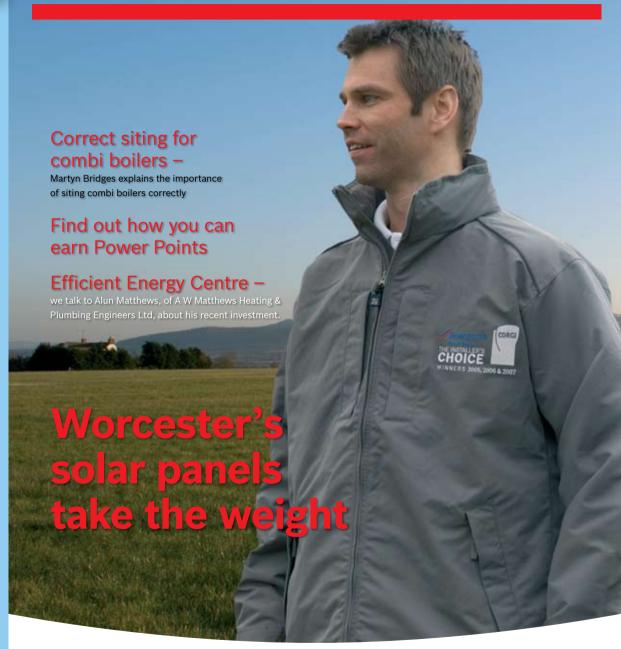
**Slough** - 29/04/2008 **Hornchurch/Basildon** - 30/04/2008

May dates will be detailed in the March 2008 issue

FEBRUARY 2008

### THE

## INSTALLER'S CHOICE





# CORGI CORGI Awards 2007 Spansared by Mercedes Benz The sky's **Energy Efficient Product of the Year** Greenskies Solar range





Greenskies solar water heating series -CORGI Energy Efficient Product of the Year 2007

When it came to choosing the 2007 CORGI Energy Efficient Product of the Year one name was at the forefront - Worcester Greenskies.

Greenskies offers a choice of landscape and portrait solar panels designed for in- or on-roof installation on flat or sloping roofs, or even wall-mounting, and is complemented by a range of mains pressure twin-coil hot water cylinders with capacities of up to 300 litres.

To find out more call 08705 266241 or visit www.worcester-bosch.co.uk



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### **Welcome to February's Installer's Choice**

This month's Installer's Choice is somewhat of a star studded issue with David Cameron and the Secretary of State for the Department of Innovation, Universities and Skills, Rt. Hon John Denham MP, featuring on our news pages.

At Worcester, we're proud of what we do, and to have well known names recognise what we are trying to achieve is a real accomplishment for everyone involved. So when Mr Cameron talked about our involvement in the fight to reduce the country's carbon footprint in a recent speech and MP John Denham came along to our energy atrium, you can imagine our delight.

On the subject of recognising achievements, in this issue we take a closer look at some of the positive work being carried out by installer's. Doug Miles, who was the monthly winner of the Environment 2010 competition in November 2007, is featured on page 10 and we have also paid a visit to Alun Matthews' new Efficient Energy Centre in

Herefordshire, which looks set to spread the word on renewable technologies in 2008.

For our cover story we put the strength of our Greenskies solar panels to the test, to show just how robust the product is. We also have three promotions within this issue, including your chance to earn Power Points on all off-mains gas products and receive cash-back when purchasing Greenskies solar systems, Greenstore ground source heat pumps and Greenstar condensing boilers for your own home.

Page 4 details more ways in which Worcester will be supporting installers in 2008. The introduction of information technology courses is just one way in which we're aiming to help installers make even greater success of their businesses in 2008.

Enjoy the magazine

Richard Soper **Managing Director** 

## Worcester in Cameron speech

It was great to hear that Conservative Party leader, David Cameron was aware of Worcester's large scale involvement in the fight against climate change recently when he addressed guests at the last Greenpeace conference in December.

Cameron's speech 'Power to the people - the decentralised energy revolution' outlined the Conservatives' views on the current environmental issues surrounding the UK and the World and how we need to become more responsible for our actions if we wish to stand a chance of reaching future carbon reduction targets.

He raised the value of encouraging consumers to monitor their own energy consumption and talked about smart meters being an excellent way of doing this. Cameron then highlighted Worcester as the manufacturer that was making waves to make MCHP\* boilers which have their own smart meters to help the whole process along.



Neil Schofield, Worcester's head of sustainable development, said: "At Worcester we are continually looking at more ways to contribute to the climate change battle and the company has for many years put the environment on its top priorities list, so to have recognition from one of the most high profile political figureheads in the country is very special. Mr. Cameron made some very valuable points in his speech and it's just good to hear that more solutions are being thought about."

## Money saving benefits for Installers

At Worcester, we firmly believe that personal experience goes a long way in promoting products to consumers. So, if you're looking to replace your old heating system, look no further than Worcester's Greenstar, Greenskies and Greenstore products. As well as the benefits of reduced fuel bills and an increase in the value on your property, you could receive a fantastic cash-back offer from Worcester!

For more information on Installers Choice cash-back promotions visit www.worcester-bosch.co.uk/cashforinstallers or call 0845 201 0522.

## **Innovation** is the way forward for Worcester

Rt. Hon John Denham MP, the Secretary of State for the Department of Innovation, Universities & Skills, made a recent visit to Worcester, Bosch Group's head quarters to see for himself the investment being made in the development of new and renewable heating technologies and the training facilities installers are using to take these innovations to market.

On arrival, Mr. Denham was greeted by Worcester's managing director, Richard Soper, and his team before being invited to attend a brief presentation about Worcester's progress in the field of condensing and renewable technologies.

Discussion centered on new product development and plans for Worcester to become a centre of excellence within the Bosch Group for the development of Micro Combined Heat and Power technology in 2008. Mr Denham particularly praised Worcester's investment in research and development.

Talks were followed by a tour of Worcester's factory site, where the award winning Greenstar series is produced. The party then moved on to visit Worcester's bespoke training academy, during which time Mr. Denham had the opportunity to speak to installers attending Worcester's accredited solar and ground source heat pump training courses to perfect their installation skills. He particularly stressed how vital today's heating installer is when it comes to encouraging UK homeowners to install renewable technologies and thus



contribute to the overall reduction of domestic carbon emissions.

Ahead of his visit to Worcester, Mr. Denham had earlier given a presentation to a packed lecture hall at the University of Worcester. During his speech, 'Harnessing Knowledge', he acknowledged that the UK is the sixth largest manufacturing nation in the world and as such, manufacturing remains an 'indispensable part of the broader economy and the innovation agenda' with the capacity to drive invention and change.

Echoing Mr. Denham's comments, managing director, Richard Soper said: "We were delighted that the Secretary of State was able to join us to experience first hand the seriousness with which we take the business of innovation and continued learning in the workplace. In line with his presentation at the University of Worcester, we are already ticking lots of boxes when it comes to driving

change within the heating industry to meet the Government's brave targets for renewable energy.

"Most importantly, whilst it is our job to develop technologies capable of delivering heating and hot water in an environmentally friendly way, we also recognise that installers are central to the whole process of taking new products to market and educating consumers about the options available to them.

"Providing accredited courses for installers who want to continue to develop their own skills in the workplace is something we are passionate about and having trained around 14,000 people in 2007, we are looking forward to extending the reach of our training courses in 2008. Beyond this, Worcester also works closely with over 130 colleges and universities around the country, supporting lecturers and students on vocational courses, all of whom represent the very future of our industry."

## **Investing** in information technology

Worcester, Bosch Group is expanding its training programme for 2008 with the addition of information technology courses to support heating installers who are keen to improve their basic Word and Excel skills.

Developed in partnership with the Chamber of Commerce, the new one day course from Worcester is designed to cover a number of areas - from book keeping to invoicing - with a view to helping installers provide a professional service for customers from the start to the finish of every job.

Just one of the new training initiatives planned for the year ahead, the IT course will soon be joined by other non-product related courses that are



designed to offer installers a one-stopshop for all their training needs.

Phil Bunce, training manager for Worcester, said:

"More installers than ever are setting up their own businesses, thanks to the comprehensive courses now available. By broadening Worcester's training offer our aim is to help support installers in as many areas of their business as we possibly can. Throughout 2008, we are planning to add additional complimentary classes to the schedule, such as health and safety and financial management, which we hope will support our customers even further."

The new information technology courses are available from January 2008 and will be taking place at Worcester's head office site, which is home to its dedicated training village.

For more information, please contact the training team on 01905 752526 or visit the training section of the website: www.worcester-bosch.co.uk Don't miss out - Get your entry into Worcester's Installer's Choice calendar competition and you could be in with the chance of winning a fantastic holiday to Boston, USA for two people, as well as being featured in the 2009 calendar. For more information visit the Worcester website www.worcester-bosch.co.uk and download an entry form before it's too late!

\*The carbon footprint of this prize will be offset through Climate care

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## Worcester's Greenskies FKC and FKT solar panels take the weight

Worcester, Bosch Group put the strength and quality of its Greenskies FKC and FKT solar panels to the test recently with the help of a service van, five people and a collection of boilers!

The solar panels were put through their paces as the Worcester team loaded a total of 223.3kg, in the form of the Greenstar Highflow, CDi, i Junior, Ri and Si condensing boiler models, onto a Greenskies solar panel, to demonstrate just how robust they are. And to prove it wasn't a fluke, a group of five people were positioned on the product, followed by a Worcester service van, and the panel more than held its own!

Specifically tailored to meet the needs of the UK market and developed in line with helping to meet the Government's target of reducing CO<sub>2</sub> emissions by 60% by 2050, Worcester's Greenskies FKC and FKT solar panels have been designed using simple connections and light weight materials that, not only aid installation, but will stand the test of time in even the most extreme circumstances.

Martyn Bridges, director of marketing and technical support, comments:
"At Worcester we pride our self on developing products that incorporate the latest in technological advances, but we also know the importance of providing quality, robust products that withstand installation and the elements once in place. Our Greenskies solar panels are built to allow easy installation for the installer as well as maximising savings for the consumer.

"Our tests have proven the Greenskies panels to be extremely durable under pressure. They are able to withstand even the most extreme weather conditions and we are also proud to offer a two year guarantee on them to give customers even greater peace of mind."

This innovative design has proved so popular that the Greenskies solar

system was awarded the coveted 'Energy Efficient Product of the Year' title at the 2007 CORGI Awards ceremony.

Following the initial success of the original Greenskies solar system, which was launched in 2005, the range was superseded in 2007 with the FKC and FKT series, both types featuring landscape and portrait options with the FKT series being particularly efficient with just a 3% emission rate.

For more information about renewable technologies available from Worcester, plus its extensive range of high efficiency gas and oil-fired boilers, call 08705 266241 or visit www.worcester-bosch.co.uk.

### **BE OUR GUEST**



With condensing boilers now accounting for over 90 per cent of the gas boiler market Keith Marsh, Head of Trade Development at the Energy Saving Trust, considers the future direction of energy efficient heating systems.

### **RAISING THE BAR**





Space and water heating accounts for approximately 80 per cent of the energy used in our homes.
Condensing boilers, improved heating controls and tightening of building regulations have prompted an improvement in how homes are now heated, yet there is still some way to go.

The domestic heating industry responded excellently to alterations to Part L in 2005. However, now is not the time to sit back and breathe a sigh of relief; with energy efficiency riding higher than ever on the political agenda and the proposed target of zero-carbon new homes by 2016 in England, set by Communities and Local Government, many industry players understand the need to regroup and prepare for the next ten years.

The Energy Saving Trust is an independent, not-for-profit organisation with a unique position acting as a bridge between Government, industry and consumers. At the Energy Saving Trust we have repeatedly raised the bar on energy efficient products, facilitated by the Energy Saving Recommended certification scheme, accrediting the most energy efficient products in the market place.

When considering the future of Natural Gas and LPG boilers, the

accreditation criteria will soon be
tightened to encourage the next
generation of energy efficient
products. To qualify for ESR a boiler
will need to achieve the following
performance criteria: (1) SEDBUK
band A; (2) standby electric power
consumption ≤ 10W; (3) any keep-hot
facility must be timed. Furthermore,
for combination boilers, the water
heating efficiency value will need to be
declared.

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It is hoped that these new criteria will set the bench mark for the future direction of energy efficient conventional boilers and deliver carbon savings to each home in which they are installed. As well as stressing the importance of conventional heating systems, the Energy Saving Trust also supports microgeneration and energy efficiency technologies and the role some have to play in the heating of our homes.

Microgeneration technologies are already gaining recognition within the industry and, more importantly, with consumers, as a possible future alternative to conventional heating systems. The best known three are:

Solar water heating is currently
the most cost-effective, affordable
renewable technology for housing.
It's suitable for urban and rural
environments. Used and sized correctly
for the household, it can provide most

of the hot water needs in summer months and about a third year round.

- Ground source heat pumps take heat from under the ground using liquid (water and antifreeze) circulating in underground pipes. The heat extracted is generally used to warm water for space heating, and is particularly suited to underfloor heating.
- Biomass is organic matter of recent origin. It doesn't include fossil fuels, which have taken millions of years to evolve. The CO<sub>2</sub> released when energy is generated from biomass is balanced by that absorbed during the fuel's production.

Integrated traditional and new technology heating systems offer great scope for reducing the carbon dioxide emissions that are a product of heating our homes. The industry needs to continue to take a proactive approach in embracing the rapidly developing requirements of Government and its customers. It is a challenge that the industry has demonstrated it can rise to in the face of regulation changes; the task now is to maintain momentum to continue implementing the changes required for the future.

For further information on the Energy Saving Trust visit www.energysavingtrust.org.uk

### COMMENT



Martyn Bridges, director of marketing and technical support at Worcester, Bosch Group, explains why thinking carefully about siting requirements are essential for delivering the best possible performance from a SEDBUK A rated combi boiler.

## **Correct siting** is essential for Combi's

Over the past forty years, the combi concept has continued to grow in the UK and today, home owners recognise the benefits of having their hot water supplied on demand. The combination boiler has also proved somewhat of an ingenious space saving idea too, effectively eliminating the need to store hot water in the home and acting both as a high-efficiency water heater and central heating boiler in one compact unit.

Now, sales of combination boilers account for over 70% of new domestic boilers installed in the UK every year.

With the advent of condensing technology, and as a result of legislative changes, there has been a swift increase in sales of condensing boilers in the UK. Condensing now account for almost 90% of total boiler sales every month.

When it comes to the bottom line, a high-efficiency condensing combi boiler can help make significant savings on heating bills for home owners. Thanks to condensing technology, the boiler is capable of extracting more heat from its fuel supply and hot water is of course supplied on demand. However, to achieve the best possible performance from a combi boiler (condensing or non-condensing) it is vitally important the appliance is correctly sized for the property it is to supply.

In my experience, customer dissatisfaction relating to combi

performance can often be quite quickly traced back to a boiler not being correctly sized for household requirements to begin with. This is especially true if the complainant happens to live in a four bed house and a smaller combi, more appropriate to an apartment, has been installed.

Now, sales of combination boilers account for over 70% of new domestic boilers installed in the UK every year.

As well as getting sizing right, it's also important to consider SEDBUK ratings, siting requirements and controls when specifying. Selecting a SEDBUK A rated condensing combi boiler is a great start. Tied-in with the Building Regulations, SEDBUK ratings were introduced to make it easier for everyone to identify the most efficient domestic condensing boilers available on the market.

Our research suggests that up to 60% of all boilers installed are sited in either the kitchen or utility area of a home.

Whilst it is perfectly legal and acceptable to install a SEDBUK A or B rated boiler, an A rated condensing combi boiler – such as a Worcester Greenstar CDi - will consistently deliver over 90% average seasonal efficiency. This offers around 20% more efficiency than a boiler of over 15 years of age, which will typically

have an average efficiency of less than 70%.

For these reasons, fitting an A rated condensing combi boiler can offer improved efficiency from day one but performance can be further enhanced by specifying the right controls too. Choosing good quality heating controls not only help maximise the efficiency of a total system by ensuring temperatures are kept to a comfortable level throughout the home, they can also have a vital role to play in adjusting a boilers firing rate (input) to meet the heating demand (output) of the system. By modulating input correctly, less fuel is burned and wasted and emissions are reduced in the process.

Our research suggests that up to 60% of all boilers installed are sited in either the kitchen or utility area of a home. The remaining 40% are installed in areas like the garage, loft or cellar space which can mean limited access for the home owner. In these instances, it doesn't make sense to fit an appliance with fixed timer controls on the fascia front. Instead, there are a range of optional controls available from Worcester, which installers can select from to ensure the final installation meets the customer's needs more exactly.

For more information about control specification, Worcester's Greenstar condensing combi boilers or training courses and wider services, call 08705 266241 or visit www.worcester-bosch.co.uk

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### **GREEN PAGE**



Welcome to our regular 'green' page designed to take a look at environmental issues affecting the UK today, as well as following the progress of Worcester's Environment 2010 Awards across the year.









### This month we spoke to Doug Miles of DJR Miles Bathroom, Plumbing and Heating Engineers Ltd about his November 2007 Environment 2010 award win.

The project took place at Flexneys house in Oxfordshire, a 14th Century Grade 2 listed property built of Cotswold stone, with thick stone walls and a Stonesfield slate roof, dating back to the 1800's. The manor house is being restored by its current owner, Mrs Mairi Eastwood, who enlisted the help of Doug and his team when it came to replacing the decrepit old boiler.

Doug said: "The existing boiler at Flexneys House was an old oil-fired system, which wasn't very efficient. Mrs Eastwood, who has been redeveloping the property since she bought it in the 1970's, wanted a more energy efficient heating and water system. She contacted us after researching several companies that supplied ground source heat

pumps and solar panels, and we recommended Worcester, Bosch Group as the brand of choice.

"We have worked with Worcester for many years and recently attended both the Greenstore ground source heat pump and Greenskies solar training courses. We know we can rely on the products and with our in-depth knowledge of installing them – thanks to the training – we were confident the customer would be pleased with the finished result.

"The job involved installing the new high performance, flat plate collector panels into the roof. We deliberately specified Greenskies due to the fact the panels can be flush fitted for a less intrusive finish. "I am absolutely delighted and feel privileged to be one of the monthly winners as a result of the work we have carried out."

Doug won a £500 voucher for a National Trust cottage holiday and a one year family membership to the National Trust for his entry into November's Environment 2010 monthly award.

For more information about
Worcester's Environment 2010
awards, call 01905 752709 or to
download an entry form, visit
the website: www.worcester-bosch.

**PROMOTIONS** 

## **POWER UP**

with Power Points from Worcester

Worcester is now offering Power Points with Greenstar oil-fired and LPG-fired condensing boilers, Greenskies solar systems AND Greenstore ground source heat pumps purchased between 1 January and 31 December 2008\*, for you to spend on Bosch Professional Power Tools!

To get your hands on a superb selection of Bosch professional power tools absolutely free simply register for your Power Points by calling 0845 313 0058 or by registering on line at www.worcester-bosch.co.uk/powerpoints.

\*Terms and conditions apply.





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# INSTALLER'S CHOICE

## **Spotlight**

# A W Matthews Heating & Plumbing Engineers Ltd

With rising fuel costs in the news and consumer interest in alternative heating technologies on the increase, now is a good time for installers to be widening their remit and positioning themselves as 'experts' in energy saving.

For this issue of Installer's Choice, we paid a visit to Alun Matthews of A W Matthews Heating & Plumbing Engineers Ltd, who has recently invested in a new 'Efficient Energy' showroom designed to showcase the latest developments in heating technology and engage the general public.

With over 20 years experience of running his own heating and plumbing installation business, the idea of opening a showroom to display some of the latest products available for modern home heating was something Alun Matthews had been thinking of for some time. In 2007, he decided to take the plunge and set about converting an empty unit in a business park near Hereford town centre into a consumerfriendly showroom dedicated to displaying a whole range of energy efficient products.

Alun explains: "Since becoming a limited company around six years ago and employing a team of five installers to support the business, I started to find that I was spending more and more time at my desk rather than being on site carrying out the installation work myself. Because of this, I

suddenly had a little more time to start thinking about where the business was heading. With my desk based time on the increase, the idea of setting up an office seemed a natural progression. However, we needed something else to justify the expense.

"A combined showroom and office seemed to be the answer, as with my days increasingly being spent working on quotations and tender documents I could happily sit at my desk and be on hand to talk to any visitors to the premises. At the time, we were just starting to install renewable technologies, like Worcester's Greenskies solar panels, and having invested in the team attending the relevant training courses, we could see the future potential for all energy efficient heating products with renewables being an important part of the mix.

"Finding the right place to set up took a while but the unit we found was close to the town centre for easy access and provided a blank canvas to work with. Getting the showroom right was time consuming to begin with. I undertook all the conversion work myself, putting in walls and

ceilings to divide up the space and create a warm and welcoming environment.

"The look and feel of the space was something we considered really important, as we wanted it to be both inviting and aspirational. For example, as well as displaying Worcester's Greenstore, Greenskies and Greenstar product ranges, we also introduced a wood burning stove that has a comfy leather sofa positioned right in front of it, which was a real hit with visitors this winter. The working Greenskies panels we have installed on the roof of the showroom are also a talking point for visitors, as we can demonstrate exactly what's in the hot water cylinder and how easy they are to control at

"When we opened the showroom in July 2007, we decided to name it the 'Efficient Energy Centre' due to the fact that we are keen to promote a wide variety of sustainable technologies. We deliberately used the term 'efficient energy' because there are a lot of people in the market who can't afford to invest in solar heating or ground source heat pumps for their properties. In this area, we still need to focus on



installing 'A' rated gas and oil-fired condensing boilers. Although interest in green technologies is growing, we don't want to be known just as 'renewable experts'. Our aim is to market ourselves as an information and installation service, where the public



can come and feel at ease, knowing they're going to get a professional service."

Since opening just over 6 months ago, Alun has been concentrating on marketing his Efficient Energy Centre



as effectively as possible, with help from Worcester. He continues: "It was much easier to get the showroom off the ground with the help of some of the manufacturers we have been working closely with over the years. We chose to align ourselves with Worcester as in my mind they are the top brand. The company has been a great help in providing marketing support and all the training courses we have attended have been excellent. I'm now looking forward to moving the business forward and am anticipating a busy year ahead."

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### With businesses producing almost half of the UK's carbon emissions, their impact upon the environment is huge.

Offsetting carbon emissions is therefore a key concern for the heating industry, but rather than simply offsetting alone, Worcester is firmly focused on reducing its carbon emissions - and there is a big difference.

Put simply, paying to offset carbon emissions alone is not an ideal solution are distributed. for any business aiming for a carbon neutral footprint these days. Offsetting is actually about taking measures to 'balance' emissions that have already been released into the environment rather than taking action to eradicate CO<sub>a</sub> production in the first place. By the time emissions have been offset, it's almost too late.

As part of the Bosch Group, Worcester has a clear environmental policy in place that is firmly focused on doing everything possible to lower

the output of carbon emissions throughout the entire production cycle – from the way raw materials are a low carbon economy. handled right through to the recycling of products at the end of their life span. This approach takes every aspect of manufacturing into account including the way in which materials are transported and finished products

By working with suppliers, employees and the local community in the location of its factory sites, Worcester's preventative approach to reducing CO. production forms part of its dedicated plan to improve the environment for future generations, as well as helping to influence others about future fuel and material uses. An element of offsetting is also included in the plan, for any air travel incurred for business

The processes and policy in place at

Worcester are independently audited by the Carbon Trust, which is a private company set up by the Government in a response to the threat of climate change, to accelerate the UK's move to

### In 2008, Worcester plans to:

- Increase the recovery rate of materials by de-manufacture expertise. This can save on the CO, needed to extract new base raw material
- Reduce the amount of waste to landfill by identifying more re-use opportunities
- Understand how to take its product specifications forward, specifying materials that can be recycled into raw material but at a lower carbon footprint than to produce new and to a production
- Introduce a product-based recycling pilot scheme on the Greenstar 28i Junior condensing combi

### **ASK THE EXPERTS**



Martyn Bridges, director of marketing and technical support at Worcester, answers some of the most common installation gueries asked by installers attending Worcester's range of training courses for gas, oil and LPG boilers, not to mention renewable technologies.

### Your questions **answered**...

I know that Worcester's range of Greenstar boilers Provides high efficiency domestic heating and hot water but isn't this partly dependant on the correct sizing of the gas pipework to supply the boiler?

Martyn says: It is possible for undersized gas pipework not to be noticed if a home has a conventional or system boiler that heats water in a storage cylinder. However, it will be noticed if it is replaced with a combi boiler to heat water 'on demand', resulting in a reduced hot water temperature.

A drop of only 3 mbar in gas pressure from a required dynamic pressure 20 mbar will reduce the boiler output by around 5kW. This will cause a significant drop in water temperature of about 8°c. Even if the boiler has the correct working gas pressure, when operating alone the use of other gas appliances at the same time may cause a pressure drop if the gas flow rate cannot be achieved for all the gas appliances because of undersized pipework.

The gas meter and supply pipes must be capable of supplying the maximum working gas rate to the boiler and all other connected gas appliances. The gas supply pipe should generally not be less than that of the appliance inlet connection, which is usually 22mm in diameter.

### Calculating the correct pipe sizing

The gas supply for all other gas appliances in the property, gas fires, gas fridges etc. must be considered when sizing the boiler's pipework. Find the maximum gas rate of each appliance from the manufacturer's data plate of instructions and check the total does not exceed the capability of the gas meter - normally 6m<sup>3</sup>/h in a domestic property.

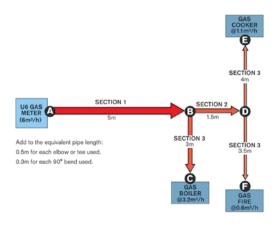
The example opposite has three pipe sections - A to B, B to D with the third section to each appliance (C, E and F), therefore, the equivalent length (adding 0.3m) for each 90° bend and 0.5m for each elbow and tee) MUST be multiplied by 3 to ensure the gas rate is available to each appliance for the given pressure loss.

As the example is based on a 1 mbar pressure loss, this is divided by the 3 sections to give 0.33 mbar. Although the boiler installation is primarily concerned with the gas pipe sizes A to B and B to C, if the remaining gas pipe sizes are incorrect this will also affect the gas supply from the boiler.

Before using the gas supply, installers should remember to check the boiler is suitable for the gas type, this should be done by referring to the boiler data plate. It is also important to ensure the pipework is in good condition and is correctly earthed. Also be sure to purge the gas supply to remove any debris or contaminants.

GAS SUPPLY PIPE SIZE CALCULATION UP TO O28mm:

PIPE SECTION	GAS RATE (m³/h)	ACTUAL LENGTH	PIPE FITTINGS (m) TYPE	ALLOWANCE FACTOR (m)	EQUIVALENT LENGTH (m)	SECTIONS X 3	PIPE SIZE (mm)
A to B	4.9m³	5m	5 elbows + 1 tee	3m	8m	24m	28mm
B to C	3.2m <sup>3</sup>	3m	2 elbows	1m	4m	12m	22mm
B to D	1.7m <sup>3</sup>	1.5m	2 elbows + 1 tee	1.5m	3m	9m	22mm
D to E	1.1 m <sup>3</sup>	4m	2 elbows	1m	5m	15m	15mm
D to F	0.6m <sup>3</sup>	3.5m	3 elbows	1.5m	5m	15m	12mm



If you have a question for Martyn, please do get in touch. You can email your question to marketing@uk.bosch.com or alternatively write to the Installer's Choice Magazine, 43 Calthorpe Road, Edgbaston, Birmingham, B15 1TS.

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## MEET MARK MARTIN

REGIONAL SALES DIRECTOR, SOUTHERN ENGLAND

### Q. How long have you worked in the industry and how did you get into your current position?

A: After spending four years at Swindon Heating as an apprentice, I joined British Gas in 1988 where I spent eight years, first as a sales surveyor and then an area sales manager within the LPG department. I joined Worcester, Bosch Group on 2 January 1997 as area sales manager and I'm now regional sales director for the South of England.

Worcester, Bosch Group have recently invested significantly into the sales department with 15 new technical sales managers, which has created three separate regions within the UK, Central, Southern and Northern. The new structure enables us to provide the level of service our customers require; we're able to work smarter, with less time being spent in the car, giving us more time to build meaningful relationships with our customers.

### Q. How has the industry changed?

A: When I was an apprentice there seemed to be many more large companies employing lots of plumbing and heating engineers, those engineers could find themselves installing central heating, bathrooms, fixing the guttering or undertaking lead work on a roof. People now are much more willing to set up their own businesses and they tend to specialise more in one or two areas of the industry. A lot of this is due to the training now available not only from college courses but also from industry experts such as CORGI, OFFTEC and Worcester, Bosch Group.

### Q. What is it that distinguishes Worcester from its competition and why did you decide to move to the company?

My Dad spent almost 30 years of his working life at Worcester, so I grew up knowing all about the industry and specifically about Worcester's ethos. I was lucky enough to work with him for eight years when I first started, which has been a real highlight for me. The company culture is very family orientated and everyone gives such commitment to their job. Whatever their role, everyone wants the company to succeed so there's real team spirit – plus it's great to work for a market leader!

The difference about Worcester is, everyone, from the top of the chain to the bottom, truly care about all of our customers and we work hard to ensure they get the best deal and most reliable products possible. Having a supportive parent company like Bosch, that continues to invest in us and new technologies, helps us to continue to deliver the most up to date systems and products on the market and allows us to answer our customers needs and requirements. We listen to our customers and have a process that continues to drive us forward, keeping us at the forefront of the industry. It's also great to know we work for a charitable foundation and that a significant amount of money goes to charitable causes around the world.

### Q. What is your greatest career success to date?

when my team are hitting key performance goals, so it is always my goal to maintain a successful position within the company for our team. It's a real kick to see members of my team making a success out of their job and I enjoy helping team members develop and progress within our company.



## Winwith Worcester

To be in with the chance of winning £250 worth of Bosch professional power tools, all you have to do is answer the questions below – go on have a go it's really easy, the answers are in the magazine!

DIY will be made so much easier with £250 worth of Bosch power tools. Pick from power drills to hammer drills to dust

collectors – you'll be spoilt for choice from Bosch's top of the range selection.

To enter, simply fill in the entry form below and send it back to our editorial office: The Installer's Choice Competition, WPR 43 Calthorpe Road, Edgbaston, Birmingham, B15 1TS.



21) How many years has Alun Matthews owned his own heating and plumbing business?



How many boilers did the Greenskies solar panel take the weight of?



) What new course is Worcester offering to support heating installers?



4) What is the name of the MP who visited Worcester recently?



What did Doug Miles fit to the Grade 2 listed manor house that led to him winning the November Environment 2010 award?

Name	Answers	
Business Address:	A1.	
Daytime Telephone Number:	A2.	
	АЗ.	
Tick box as appropriate:		
I would like to receive further information from Worcester, Bosch Group.	A4.	
Please do not contact me with further information.		
	A5.	
	Terms and Conditions  1. No cash alternative  2. The decision of Woccester, Bosch Group is final  3. One winner will be notified by the 19th March 2008	
	3. One winner will be notified by the 19th March 2008	

### **December's Winner**

Congratulations to lan Stringfellow from Ramsbottom for winning December's Christmas quiz. Look out in next month's issue for January's winner!

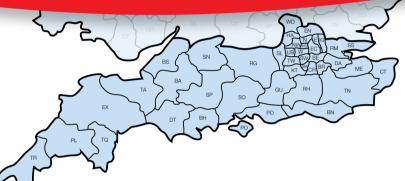
### Keep in touch

No matter where you are based around the country, Worcester has a team of local representatives available to help with your specific requirements.

We spoke to Mark Martin, regional director for Southern England, in this months 'Behind the Scenes' and here's how you can contact Mark and his Southern team: Regional Sales Director for Southern England



Mark Martin - Regional Sales Director
Contact Mark on: 07767 432 563



Steve Drummond Regional Sales Manager
Contact Steve on: 07790 489 966
Areas covered: AL, BR, CR, DA, E, EC,
EN, HA, IG, KT, N, NW, RM, SE, SM,
SS, SW, TW, UB, W, WC, WD

Paul Dewis - TSM Gas, Oil, Solar, Contact Paul on: 07767 432 556 Areas covered: BR, CR, DA, SE

Daniella Fidock - TSM Gas, Oil, Solar, Contact Daniella on: 07790 489 503 Areas covered: KT, SM, SW, TW

John Fry - TSM Gas, Oil, Solar, Contact John on: 07790 489 525 Areas covered: E, EC, EN, IG, RM, SS

Darren Hunt - TSM Gas, Oil, Solar, Contact Darren on: 07790 489 508 Areas covered: AL, HA, N, NW, UB, W, WC, WD

Steve Robinson - TSM Renewables Contact Steve on: 07790 489 811 Areas covered: AL, BN, BR, CR, CT, DA, E, EC, EN, GU, HA, IG, KT, ME, N, NW, PO, RG, RH, RM, SE, SL, SM, SS, SW, TN, TW, UB, W, WC, WD Darren Milkins -Regional Sales Manager Contact Darren on: 07767 432 540 Areas covered: BA, BH, BS, DT, EX, SN, SO, SP, TA, TQ, TR

Richard Blackmore - TSM Renewables Contact Richard on: 07790 489 748 Areas covered: BA, BH, BS, DT, EX, PL, SN, SO, SP, TA, TQ, TR

Malcolm Cox - TSM Gas Contact Malcolm on: 07767 432 529 Areas covered: EX, PL, TQ, TR

Tony Oldfield - TSM Gas Contact Tony on: 07767 432 528 Areas covered: BA, BS, SN, TA

Graham Taylor - TSM Oil Contact Graham on: 07919 320 666 Areas covered: BA, BS, SN, TA

John Walker - TSM Oil Contact John on: 07767 251 528 Areas covered: BH, DT, SO, SP

Tony Willday - TSM Oil Contact Tony on: 07790 488 632 Areas covered: EX, PL, TQ, TR Jonathan Wheeler -Regional Sales Manager Contact Jonathan on: 07790 489 967 Areas covered: BN, CT, GU, GY, JE, ME, PO, RG, RH, SL, TN

Martin Hatton - TSM Gas, Oil, Solar, Contact Martin on: 07767 432 553 Areas covered: CT, ME, TN

Mick McKeown - TSM Gas, Oil, Solar, Contact Mick on: 07790 489 965 Areas covered: BN, GY, JE, PO, RH

Phil Sussex - TSM Gas, Oil, Solar Contact Phil on: 07767 432 577 Areas covered: GU, RG, SL