### **EINSTALLER'S CHOICE**MAY 2015

NEW look,
NEW features,
NEW name...



### for the UK's best selling boiler, the Greenstar i Junior



## Introducing the new Greenstar i

The **Greenstar i boiler** builds on the popular features of the market-leading Greenstar i Junior and i System while introducing a host of **new features**.

For more information about the Greenstar i, visit worcester-bosch.co.uk/i

### Low cost weather compensation option

Further increased efficiency can be achieved with the installation of a simple optional weather sensor.



siphon removes the need for an external trace heating device or the need to insulate external condensate pipework.



### Higher hot water outputs

Available in outputs of 25kW and 30kW, giving higher hot water flow rates of 10.2 and 12.3 litres per minute.

### Low energy modulating pump

Ensures the Greenstar i complies with the ErP directive.

### User friendly control panel

Provides information on the boiler operation and allows flow and hot water temperature to be adjusted using simple up and down buttons.





### Welcome

from Steve Lister



Welcome to the April/May edition of Installer's Choice, which is a particularly special one for us as we announce the launch of the latest addition to our award-winning Greenstar boiler range.

Our cover story this month introduces our all-new Greenstar i gas-fired condensing boiler, which is arguably our most high-profile new product launch since its predecessor, the Greenstar i Junior, was brought to market a decade ago. One in every 10 boilers sold last year was a Greenstar i Junior, so we have extremely strong foundations upon which we believe we have created a product that you'll find simple to install and that your customers will find easy to use. Turn to pages 4 and 5 to read more.

Not only does this month mark 10 years since the launch of our best-selling Greenstar i Junior, but it also marks a decade since condensing boilers were made mandatory in the

UK. Many of you are sure to remember this ruling being introduced back in 2005, and thanks to your commitment, the industry has continued to evolve ever since. Martyn Bridges, our Director of Marketing and Technical Support offers his views on the last 10 years on pages 10 and 11.

Finally, in a month where we bring a hugely significant new product to market, there are sure to be many of you wondering what happens behind the scenes to ensure the boilers we develop and manufacture are amongst the best on the market. Turn to pages 20 and 21 to find out how our product development process leaves no stone unturned before a new product is made available for you to buy from your merchant.

We hope you enjoy the magazine.

Steve Lister Sales and Marketing Director

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### New distribution centre opens its doors

Local Conservative MP Robin Walker recently joined us to officially open the doors to our new £9 million Bosch Distribution Centre in Worcester.

The new 6.7 acre site, is able to hold more than 10,000 pallets at capacity and features a 3-tier mezzanine and additional racking to house the spare parts, pre-pack and despatch departments for greater efficiency. When fully operational it will allow for the despatch of 10,000 items per day.

Carl Arntzen, our Managing Director, said: "We are thrilled to be officially unveiling our purpose built Bosch



Distribution Centre. This new building will ensure our business continues to produce and distribute the quality and innovative products for which Worcester is known, as effectively as possible.

### Worcester launches series of videos for new range of **Comfort Controls**

We have uploaded three new videos to our popular YouTube channel for you and your customers to familiarise yourselves with our range of Greenstar Comfort Controls.

Launched in January, our Greenstar Comfort Controls offer users improved heating efficiency, ranging in sophistication to meet a variety of needs. The videos explain the intelligent controls' various features while illustrating how simple they are to use. On the launch of the new videos, Martyn Bridges, our Director of Marketing and Technical Support commented: "We recognise the important role we have as an educator to the industry's professionals, so it is fantastic to be able to bring our products to life through new media. We regularly upload videos to YouTube and, having received over 2 million views, see this as a key platform on which we can do so very effectively."

To stay up to date with our latest videos, subscribe to our YouTube channel at: www.youtube.com/ WorcesterBoschGroup.



### Domestic meets commercial with new **50kW boiler**

We've enhanced our range of marketleading range of gas-fired boilers with the launch of a 50kW GB162 boiler, which will perfectly bridge the gap between the domestic Greenstar range and our current range of light commercial GB162 boilers.

The introduction of the GB162 50kW boiler will allow you to benefit from a condensing wall-hung gas-fired appliance, which is just as suited to

large-scale domestic installations as it is in light commercial applications.

With net efficiencies of up to 110% and NOx emissions of less than 40mg/kWh, the GB162 range provides clean, low-carbon heating and hot water and can also be installed in a cascade arrangement up to 800kW with the ability to modulate down to as little as 2.5 per cent of the total output.

The 50kW model offers all the benefits of its light commercial 65kW, 80kW and 100kW equivalents, making our new addition an attractive option for those of you looking to expand your business into the light commercial market while taking up the Commercial ACS assessment in the process.

For more information on the new GB162 50kW boiler, visit www.worcester-bosch.co.uk.

### Local firm celebrates reaching milestone



March saw Bromsgrove based company, Redstone Plumbing Ltd, pop the champagne in celebration of 15 years of business and ten years of partnership with Worcester.

Commenting on the celebrations, owner Paul Bennetts said: "It has

been great to share this milestone with Worcester as we have worked so closely with them over the last 15 years. We have been installing and maintaining domestic heating systems for nearly two decades and we have built up a loyal customer base."

### Installer THE NEW NATIONAL 2015

Ricoh Arena, Coventry, 12-14 May

We will be exhibiting at Installer2015, a new three-day national exhibition that will take place at the Ricoh Arena, Coventry, from 12th to 14th May.

Installer2015 is an industry-backed initiative, with a 'back to basics approach' – focusing firmly on the core business interests of the UK's plumbing and heating professionals, and delivering the kind of hands-on experience installers are looking for, with key industry players already pledging their support. We look forward to seeing you there.

To find out more about Installer2015, visit www.installer2015.com.

### **INDUSTRY IN NUMBERS**

19,000

installations accredited under the RHI for major renewable technologies since April 2014. 700,00

The predicted number of connected home energy products in the UK by 2017, according to energy research specialist Delta-ee. 60%

emissions produced by boilers in UK gas heated homes.

1.66M

The number of gas boilers sold in the UK in 2014, a 0.8% increase on 2013.

£119

The possible annual saving when heating a three-bedroom home with oil, rather than gas, according to the Sutherland Tables.

### £850M

the Government's estimate for annual net savings by 2020 thanks to the incoming energy labels.



### Introducing the **NEW Greenstar i**

With our Greenstar i Junior installed in as many as one in every 20 UK homes, this month sees us launch its successor, the Greenstar i. Our Installer's Choice cover story this month gives you an insight into what you can expect from our brand new addition, and how we expect it to improve upon the nation's favourite boiler.

Developed following a record amount of feedback from you and your customers, the new Greenstar i gas-fired boiler addresses some of the present-day challenges facing the heating industry without deviating from our winning formula.

### Improved flow rates, choice of outputs

The Greenstar i follows the general customer requirement of higher hot water flow rates. With this in mind, the flow rates achieved at 35°C by the new Greenstar i combi are:

- 10.2 litres per minute for the 25kW model
- 12.2 litres per minute for the 30kW model.

Additionally, the range of outputs available on the i System boiler series has been extended to include models in the following outputs:

- 9kW
- 12kW
- 15kW
- 18kW
- 21kW
- 24kW

This will ultimately enable you to buy a boiler more precisely-suited to your customer's heating and hot water system.

#### ErP ready

The new boiler has also been designed with the ErP Directive in mind. As we know, from 1st August all boilers must meet certain additional criteria, one of which is that the circulating pump fitted within the boiler must be of a low energy modulating variety. The pump included within our new Greenstar i is modulating to achieve this low energy consumption.

Our new pump will offer the same high performance as the pump you'll be used to seeing in our Greenstar i Junior, but with the benefit of operating at lower level of energy consumption – creating huge potential for energy saving.

#### No more frozen condensate

Each new Greenstar i boiler will benefit from a large in-built condensate siphon as standard, guaranteeing that an externally-run, uninsulated condensate pipe no greater than 3 metres in length will not freeze even at sustained temperatures of -15°C over a 48-hour period – the likes of which have not been seen in the UK since accurate records began.

So now, whilst internal runs are always preferred, should an external route be necessary, you can be assured it won't freeze.

### **Easy access**

The new Greenstar i has been designed with your convenience in mind and certain internal components are easier to get to, should you need to perform a service or repair.

The expansion vessel is now located within the boiler cabinet, which means that checking the charge pressure or replacement is much simpler.

In addition, it is now the case that all condensing boiler manufacturers require you to replace the gasket once the heat exchanger seal has been opened or disturbed. We have adjusted the location of the fan for this reason, so that installers can access the fan without having to break or disturb the combustion chamber

We are confident that these changes in particular will help to make your job that bit easier.

### Improved simple digital controls

Finally, a whole new user interface has been developed to accompany the new product range, meaning you and your customers will no longer need to match symbols to a key in an instruction manual. Rather, the Greenstar i's scrolling text offers a more direct interaction with the

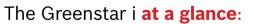
boiler, explaining what action the user is making and the boiler's function at that exact time. Crucially, this interface will also guide you through the requirements of the Benchmark checklist – ultimately making log book completion a great deal simpler.

An additional feature of this interface is that the display can be locked and settings secured – which could be useful for landlords looking for control over the heating system.

#### Interactive

The flap on the front of the Greenstar i conveniently features a data code which is unique to each and every boiler. When the data code is scanned on a smartphone using our Guarantee Registration App, either by you or your customer, it directs you straight to our guarantee registration page, making that all-important registration much simpler.

The close relationship we have with you enables us to put you front of mind when developing new products, and it's largely thanks to your feedback over the last ten years that we've been able to develop our new boiler. The success of its predecessor means that the Greenstar i has a very tough act to follow, but we're confident that it has everything required to make a smooth transition into UK homes.



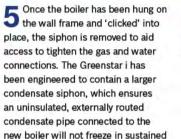
- Improved hot water performance
- ErP-compliant low energy circulating pump
- CondenseSure style siphon inside
- Enhanced access for servicing & maintenance
- Pre-assembled wall frame
- Brand new user interface, featuring scrolling text display

To find out more about the all-new Greenstar i, visit www.worcester-bosch.co.uk/i.

# Step-by-step guide to installing the **Greenstar** i









6 Commissioning mode is accessed via the Chimney Sweep button as seen on other Greenstar boilers and allows the gas inlet pressure and combustion to be accurately checked.



With the previous combi boiler removed from its position on the wall, adequate space is available to fit the Greenstar i.



Across all outputs, the
Greenstar i features the same
unpacking procedure as other models
within the Greenstar range. One of
the many features we introduced
10 years ago on the i Junior, which
is still very popular, is that the wall
mounting frame can be accessed
without unpacking the boiler, meaning
there is no need to leave the boiler
unpackaged before the time comes to

hang it on the wall.



Another feature that has proved popular with installers for many years is the wall mounting frame, which allows for pre piping of all seven connections prior to hanging the boiler and is particularly useful in confined spaces such as this installation. With the same dimensions as its predecessor, the Greenstar i Junior, replacements will be simple as the Greenstar i's footprint and fixing positions are identical.



The optional Keyless Filling Link is fitted for ease of operation by the homeowner. The filling link effectively removes the need for the user to temporarily join the water mains and the heating circuit together with a key or the more traditional braided hose pipe arrangement. This reduces one of the most common enquiries or callouts from those who have perhaps removed a radiator and need to top up the system with water.

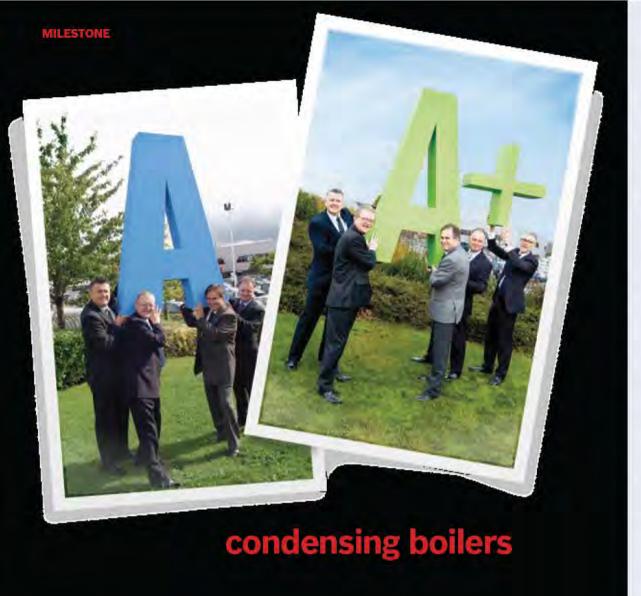


temperatures of -15°C for up to 48

The Greenstar i features a single front panel which provides easy access and an attractive finish. As always, it is advisable to accompany the installation with a Greenstar System Filter. The twin action Greenstar System Filter has been designed to capture both magnetic and non-magnetic system water contaminants, protecting the boiler and wider central heating system components.



The Greenstar i is fully compatible with Worcester's range of plug-in intelligent controls as well as the Wave smart thermostat. Fitting a compatible smart control with the Greenstar i will ensure it benefits from maximum energy efficiency, which is particularly beneficial given the added advantage of efficiency uplift under the ErP Directive from September onwards.



possible, before the industry turned its hand to developing the numerous solutions that exist today.

"The Government's boiler scrappage scheme may have come along at exactly the right time to alleviate this fairly testing period, working not only to incentivise boiler replacements but also encourage the industry to further improve the energy efficiency of its products.

"Further, non-mandatory developments have come about organically, all with the ultimate aim of obtaining even more heat and efficiency from these ever-evolving appliances. Take the installation of system filters, for example, which was unheard of ten years ago, yet will take place in around 800,000 properties this year.

"Similarly, flue gas heat recovery units are a relatively recent addition to manufacturers' offerings, built to perform the task of extracting that little bit more heat from the flue gases in order to make heating and hot water systems even more efficient.

"While it might be clear now that this decision represents one of the industry's most significant and successful milestones to date, when talks began two or years beforehand the prospect was understandably daunting and posed numerous challenges. Never before had we been given such a major ruling to adhere to when heating our properties, and changing the practises of over 100,000 domestic heating engineers was certainly not something that anybody took lightly.

"That such a fundamental change was embraced almost immediately has much to do with the wide-scale collaboration within the industry and is a real credit to all the professionals, from installers to manufacturers to merchants, who made it happen so smoothly."

### 10 things we've learned in ten years

The best decisions are not always the most obvious

Such a dramatic change to a fundamental aspect of the industry was a point of contention for some. Hindsight tells us that the decision was the right one, but nobody could be sure of that at the time.

The industry is adaptable...
It is to the great credit of the industry that such success was achieved despite these reservations, and shows that manufacturers, merchants and installers alike are constantly evolving to meet changing demands and conditions.

...when everybody pulls together
The success of the change can be largely attributed to the collaboration between installers, merchants and manufacturers, Government's decision makers, and the commitment of each group to making the legislation work.

Government legislation can be a help...
Condensing boilers, the scrappage scheme, ECO – there is always the opportunity for legislation to drive the industry forward in tricky times.

...or a hindrance
SEDBUK 2009 saw
boilers that had reached a
SEDBUK Band A (90% and above)
confusingly rebranded overnight at
around 88%. Changes to Part L of
the Building Regulations in 2010
saw the requirement for all new
homes, to have an upstairs and
downstairs temperature zone – only
to be repealed three years later.

You can't predict the weather

The extreme winter of 2010 took everybody by surprise, but again showed the industry's resolve to overcome the challenges thrown at it.

The industry is innovative
From condensate
attachments, to system
filters, to smart thermostats there seems to be no limit to the
ingenuity of the industry to come
up with solutions to problems and
squeeze ever-more efficiency from
its appliances.

Close relationships with installers are key
It is only through our close relationship with you that we've been able to respond to these challenges - there's nobody better to let us know if we're doing our job than those on the front line.

Technology is evolving
Boilers are continually
evolving to meet the
needs of installers and end users,
and manufacturers are expected
to use new technology to make
their products easier to use for
everybody.

Hybrid can offer the best of both worlds
Through complete system solutions, manufacturers and installers can offer even higher levels of efficiency by tapping into the best features of every new aspect of technology.

For more information on our range of award-winning Greenstar range of condensing boilers, visit www.worcester-bosch.co.uk.

INSTALLER'S CHOICE | MAY 2015





As this September's introduction of the Energy related Products (ErP) Directive draws ever closer, the coming months will see us introduce a number of resources and tools to make the ErP process as easy as possible for you. Here, Martyn Bridges answers a number of the questions put to us over recent weeks:

#### What is ErP?

"ErP stands for "Energy-related Products". The ErP Directive, which is a new regulation set by the European Union, is designed to drive improvements in the efficiency and performance of heating and hot water products. Its purpose is to ensure that end users are aware of the level of energy efficiency inherent within their appliances. As such, the Directive will help European Governments reduce carbon emissions and improve the overall efficiency of the housing stock, while helping homeowners to reduce their energy bills.

"The ErP regulations cover boilers, combination boilers, water heaters and other heating appliances up to 400kW.

### What is Energy Labelling?

"The Energy Labelling part of the ErP Directive involves placing a label with which we are already familiar on household appliances and technologies including washing machines and televisions.

"The new regulations introduce Europe-wide energy labelling requirements for boilers, combination boilers, water heaters and other heating products up to 70kW and hot water cylinders under 2,000 litres.

### How will it affect me and my business?

"These changes will have implications on how you communicate with both merchants and your customers. "The new Energy Label will be supplied with the heating appliance and it will be the your responsibility to ensure that customers receive the energy label at the point of sale. If you have a showroom, it will also be your responsibility to display an Energy Label whenever you display an ErP compliant product.

### How will this benefit me and my business?

"The Energy Label can provide you with a simple sales tool that you can use to illustrate to your customer how much more efficient their new boiler will be in comparison to an older boiler. It will also illustrate the benefits that controls and renewable technologies can have on the system's band rating and efficiency.

### How will the labelling scheme work?

"The new Energy Labelling Directive will introduce new efficiency classes from A++ to G on top of the existing SEDBUK rating for products in the domestic and light commercial sectors.

"Most high efficiency boilers will fall within the A band, which requires them to achieve more than 90 per cent seasonal efficiency, while renewable technologies such as heat pumps are likely to be in the A+ or A++ bands, depending on flow temperature.

"The Energy Label for each Worcester product must be shown in literature and be made available if advertising online, however there is no requirement for having the label visible on a product's packaging.

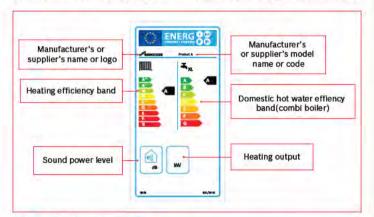
"For example, this could be the merchant's responsibility if they supply a complete package under one part number, or yours if you have chosen to buy items individually under separate part numbers.

"If it is your responsibility to calculate the overall package efficiency, you must record each product on a fiche in addition to the final system efficiency. In this circumstance, Worcester will provide a tool that makes calculating the overall package efficiency of a Worcester system effortless.

Crucially, you are responsible for providing the package label to your customer.

#### What about controls?

"The ErP Directive covers all products that consume energy, such as boilers,



### What about systems that contain different products?

"In these circumstances, there is a responsibility for providing a package label when combining a heating appliance with a temperature control and/or solar device, cylinder or a supplementary heating appliance — a two boiler cascade for example. The person who puts that package together will need to use a package document (data table), known as a fiche, to create a label that provides the combined energy efficiency rating, rather than ratings for each individual component.

heat pumps, solar thermal etc. It also includes controls, which are defined using 'classes'. These run from Class I (a simple on/off room thermostat) through to Class VIII (multi-sensor room control for use with modulating heating appliances).

"Each control class equates to a certain percentage uplift in system efficiency. For example, a class VI weather compensating control and room thermostat will add four per cent efficiency to the heating system.

### How will Worcester help?

#### Simple to use tools

Prior to its launch in September, we will have a number of tools in place to make the ErP process, as easy as possible for you.

- An online tool on our website will enable you to generate your own ErP product or system labels, simply by selecting the product(s) you are installing from a drop-down list. You will then be able to print, email or save labels to provide to your customers.
- Our dedicated ErP leaflet will be available for you to order either by calling our literature line on 0330 123 9119 and quoting part number 8716-117-6660, or by downloading it from our website.
- An ErP animation on our website and YouTube channel will give you a quick and simple explanation of the new requirements, which is perfect to show to your customers.

### Discussed in every training

On each of our training courses, we have a slot dedicated to ErP and we will also have a course as part of our Online Training Academy.

#### **Technical Support Team**

Our technical support team will be available on the phone, and our website will also contain all the information needed to ensure that the subject is simple to understand.

Should you have any questions on ErP, please call our dedicated ErP helpline on 0330 1233 641 or email erp-advice@uk.bosch.com.





Kevin Wellman, Chief Executive Officer of the Chartered Institute of Plumbing and Heating Engineering (CIPHE), gives an update on apprenticeship reforms for those of you who may be thinking of taking on an apprentice:

### THE FUTURE OF APPRENTICESHIPS

For some time now apprenticeships have been undergoing a revue by the government and has resulted in the development of Trailblazer Apprenticeships.

Back in June last year, the CIPHE and SummitSkills, supported by an Industry Stakeholder Group, launched a survey covering Apprenticeships and Professional Recognition. This was all part of a research project, funded by the Gatsby Foundation. Information was gathered over a 12-week period from focus groups and questionnaires. Around 800 individuals, employees and owner/directors of business across the plumbing and heating sector took part.

The outcome showed overwhelming support of professional recognition in the form of Engineering Council registration.

The data from the research led to the government sanctioning a new Trailblazer Apprenticeship for Plumbing and Domestic Heating Technicians. Employers took the lead in further research that was needed to develop a new standard and to bring about a complete redesign of the present scheme.

In March this year the new Level 3
Apprenticeship standard for Plumbing and Domestic Heating Technicians was launched. It has been designed to more effectively meet the needs of the industry and includes a number of

improvements that will benefit both the learner and their employer.

In addition to strengthening the Maths and English requirement, grading will be introduced to encourage apprentices to strive for excellence. A clear link to Engineering Technician status has also been incorporated to improve and encourage greater professional registration across the industry.

An assessment plan for the apprenticeship, along with underpinning qualifications, will now be developed with the employer group taking the lead again. It is hoped that apprentices will be able to enrol on the new scheme from September 2016.

#### **Professional Recognition**

The CIPHE will be working closely with colleges and training centres to promote membership of the Institute to apprentices. As a licensed professional body, the CIPHE can register suitably qualified members at Engineering Technician (EngTech) or Incorporated Engineer (IEng) levels – something that is going to be encouraged in the new Trailblazer standard. However, professional recognition is important at all levels and essential for career development.

Registration at these levels brings recognition of expertise, high self-esteem, greater influence within organisations and industry, higher earnings potential and access to lifelong learning.



### e-learning

The CIPHE has established an ePD learning portal – www.ciphepd.org. uk – which has been a great benefit to our members. The site is packed with learning modules (over 200), demonstration videos, literature and technical information. New material is added on a regular basis and the majority of modules are free of charge to Institute members.

Leading manufacturers, such as Worcester, Bosch Group have contributed modules, which cover a wide range of topics. Members in business who want to get to grips with IT can also access learning packages covering spread-sheets, word processing, presentations and Microsoft Windows.

#### Join us!

If you would like to be a member of the professional body for the plumbing and heating industry, we would like to hear from you.

For information on membership, please contact Alison Lovelock on 01708 463116 or email alisonl@ciphe.org.uk

For further information on the Trailblazer Apprenticeship for Plumbing and Domestic Heating Technicians, please contact Bryan Clark on 01708 463106 or email bryanc@ciphe.org.uk Richard Hows, a heating engineer based in Stratford, scooped the top prize in the Greenstore Groundsource heat pump installation category at our annual Environment 2020 Awards.







### Heat pump installation: Richard Hows

Amongst many deserving nominees, Richard, of Keogh & Hows Ltd., won the award for the successful installation of a heating system at a detached new build residential property in Evesham.

With the need for a new heating system stipulated by planning permission, Richard worked with the property's homeowners at the specification stage, utilising the SAP calculator for ground source heat pumps on our website before taking them to visit a similar installation so they could get a feel for how

the technology would benefit their property.

A large back garden gave adequate space to accommodate the underground collectors, meaning that the heating solution could be further fine-tuned. The installation was carried out over nine months and included rainwater harvesting, bathrooms and underfloor heating as well as the ground source heat pump.

On the installation, Richard commented: "With the property being a new build, my customers were encouraged to install a system that would future proof their home and meet their heating and hot water needs for years to come. They were also keen to install something that would keep the property warm throughout the day as one of their elderly relatives lives with them. Renewable heating was the obvious solution as it provides consistent warmth and as a Worcester Accredited Installer, I'm aware of the reliability of the Greenstore ground source heat pump which played a part in my decision to make this recommendation.

### INSTALLER'S CHOICE SPOTLIGHT

### **Dale Saunders, Bexhill-on-Sea**

Dale Saunders Plumbing and Heating Ltd.

When Dale Saunders moved into his new chalet bungalow in Bexhill-on-Sea, his first thought was not to change the carpets or paint the walls, but rather to completely overhaul the property's heating system.

With the boiler beginning to show its age, the Sussex-based installer considered this the perfect opportunity for an upgrade which would make his new home more efficient over the long term.

A thorough working knowledge of our products made Worcester the obvious choice for Dale, and he opted for a Greenstar 24i System gas-fired boiler.

Last year, our entire range of Greenstar gas-fired boilers was awarded Which? Best Buy for the fourth year running. With an A-rating for efficiency and a compact size, our Greenstar i System boilers are a great option for small-to-medium sized properties. Additionally, each model in the award-winning range is backed by a five-year guarantee to offer added peace of mind to customers.

Helped on by his extensive experience in fitting Worcester boilers, a smooth installation followed for Dale, with the work completed swiftly. On the installation, Dale, of Dale Saunders Plumbing and Heating Ltd., commented:

"There were no problems with the installation at all. As I'm so used to fitting Worcester products, it was all very straightforward - which is especially welcome when you're installing products in your own home.

"I was always going to choose a Worcester boiler because they're the best, but it was a huge bonus to have the cash-back promotion available. I'm not sure if there has been any reduction in my heating bills as I've only just moved in, but I'm fairly certain there will have been.

"It will definitely help my business to be able to say that I've got a Worcester boiler in my house as I'll be able to explain the benefits of the products as a homeowner as well as an installer.







#### Installer cash-back

Until 31st December, we're offering you up to £350 back when you install one of a variety of our products in your own home including:

- £250 for one of our four-time Which? Best Buy accredited range of Greenstar gas-fired boilers.
- £150 back when you install a Greenstore unvented cylinder. With a 25-year guarantee, our cylinders combine rapid re-heat times with high insulation to maximise efficiency and offer total comfort and cost savings properties with a stored hot water supply.
- Up to £350 when you opt for one of our Greenstore heat pumps.
- Additional £25 for new our Wave, Greenstar Comfort I RF and Comfort II RF controls.

#### How do I claim?

Making your claim couldn't be easier. Simply install your chosen Worcester products before 31st December 2015, then complete and return a claim form – to be found in our cash-back leaflet - to us before 5pm on 31st January 2016.

To see the full range of products included in the cash-back promotion, or to download our installer cash-back leaflet, visit www.worcester-bosch.co.uk/homeowner/cashforinstallers.



**Aaron Spears (AS),** Matrix Property Care, Walsall Wood

**Don Cross (DC),** Cross Project Solutions Ltd., Wokingham

**Reyadh Assad (RA),** RMA Gas Solutions, Halesowen

**Trevor Forbes (TF),** Wentworth Gas, Birmingham

**Kadeem James (KJ),** Absolute Gas and Heating, Birmingham

**Pashy Singh (PS),** Hoyland Gas, Nottingham

**Craig Moore (CM),** CM Plumbing and Heating, Wolverhampton





### Installer's Voice

This month sees us ask installers on one of our gas-fired training courses about the forthcoming ErP Directive, as well as their thoughts on the ten years since condensing boilers were made mandatory for new installations:

ErP labelling legislation will come into place on the 26th September. Are the requirements something you were already aware of before today's training course?

**DC:** I had heard that there was something coming in, but nothing more than that, really.

RA: I hadn't heard about it at all before today. It doesn't sound too bad, though. You'll get used to it once you've done one or two.

Do you think the new requirements are good news or bad news for the HVAC market?

KJ: I don't think it's either good or bad, necessarily. It's one of those situations where you'll just have to get used to it. I do think that it's going to push installers to get more guidance from manufacturers.

### Can you foresee any problems during the changeover period?

KJ: The only thing I wonder is what will happen if we don't make the labels. It's a sudden change, so how will it be regulated if people aren't doing it straight away?

**DC:** Hopefully, manufacturers will step up to the plate, and drive the message round to all the companies to make it an easy transition.

### Is there anything specific you'd like to see manufacturers do to help?

RA: Have the label already in place when the legislation comes in so that in each case, all we'll have to do is go on to the website, select which appliances we need and be able to print out a label straight away.

**KJ:** Having an online tool would make it a lot easier, at least if the products come from one manufacturer.

### On that note, do you tend to get your appliances from the same manufacturer?

**TF:** I just go on cost in all honesty, so it depends on what the merchants are offering.

**DC:** For me, it depends on what boiler I'm getting. There can be issues using different brands, with the wiring and so on, so this ErP might not be too much of a problem if you're already buying products from the same manufacturer.

Moving on, this year marks the ten-year anniversary of another piece of legislation which made condensing boilers mandatory for new installations. For those who were working in the industry at the time, what did you make of the change?

**TC:** I started in 2005, so for me, I've never known any different.

DC: I was in the industry at the time, and I remember the main problem being convincing the public that what we were doing was right; that we were going in the right direction. The consumer ultimately just wants a good product at the lowest price they can get. The fact that the boiler condensed meant people were getting figures of 90 per cent then, rather than figures in the late 80s, so it was just about convincing customers what the manufacturers were telling us was right and sell these products to them. It was very difficult.

It has been stated that 'the decision made in 2005 represents one of the industry's most significant

### milestones to date'. Would you agree with that, or have there been other initiatives that have made more of an impact since then?

DC: The problem that I see with other incentives such as scrappage schemes is that they're pretty much geared toward the bigger end of the market and it's very hard for us guys working on our own to compete. Even now, some companies have their own scrappage scheme going on, but when customers ask us about it, we can't offer this to them.

### How about other Governmentled schemes? Do they work? Has anybody got involved in the Green Deal or RHI, for example?

CM: I've been fitting under the Green Deal for the past 12 months. It's good, insofar as it's generated work – you install a boiler in one property and you get the neighbours asking if they can have a boiler and so on. I'm not sure whether it's because of the product, or just jumping on the bandwagon, but it's having a knock-on effect, for sure. I

think it's been a good thing, because it's generated a lot of work in my area – for people I work with and for other companies as well. I know a lot of people – one man bands too – who are doing really well from it.

Is there anything in the pipeline that you anticipate will be as significant for example, making annual servicing mandatory, as has been suggested by some manufacturers?

**DC:** The main thing I've noticed is that manufacturers are offering longer warranties at the moment, by specifying that boilers must be serviced every year.

**TF:** In the past, it might have only been a one-year warranty.

DC: The difference is that beforehand manufacturers would have covered the appliance without necessarily stipulating whether it needed to be serviced or not. I think as long as manufacturers do state that a boiler has to be serviced - or just has to undergo a check-up - it will help.



### Making a great even greater: the development of the **Greenstar** i

The launch of a new product at Worcester always follows an extensive research and development process, but what happens behind the scenes in the months and years that lead up to a new boiler launch? Crucially, at Worcester, our bespoke Greenstar i development process involved some of you, our respected installers, every step of the way.

While it might be a given that it takes years to develop a product as complex and as technical as a boiler, it is very rare that you read or hear the extent of the steps that were taken prior to that product being brought to market. As early as the end of 2012, we began exploring the ways we could make our Greenstar i Junior – which was also our best-seller – even better.

Even though the Greenstar i Junior had proven itself as the nation's most popular boiler over a period of over seven years, we were well aware that whilst the need for heating and hot water comfort doesn't change, the manner in which it can be delivered evolves in line with technological developments, legislation, and the preferences of you and your customers.

The Robert Bosch way
"It has always been an unbearable
thought to me that someone could
inspect my products and find them
inferior." – Robert Bosch

At Bosch, there is a very strong emphasis on product management and market requirements, whereby products are manufactured in response to market demand. To maintain this ethos, there is a team of people tasked with keeping an eye on the market drivers, looking at the way technology is developing, upcoming changes to legislation and installer and end-user habits. All of which combine to enable us to make an informed decision to develop a new product.

#### Over to you

As ever, one of our primary objectives when developing the Greenstar i was maintaining our position as the Installer's Choice. This meant that we needed to retain all of the features that made the Greenstar i Junior so successful, while adding a number of appealing new additions to make it even easier for you to install, service, and maintain the boiler. The inclusion of a larger condensate siphon resulted from the extremely cold winter of 2010, the low-energy pump from the forthcoming ErP Directive, and improved service features from growing installer preference.



Not only that, but for the first time, we conducted a full touch point analysis of a prototype Greenstar i. This process essentially gave numerous pairs of experienced installers the chance to install the boiler, during which we analysed their every touch, in order to assess exactly what we needed to do to optimise the install experience. This kind of process, which was a first for Worcester, led to the closest possible design analysis, which in turn allowed us to create a fully-optimised product.

It was important for us to recognise that while thousands of our boilers are installed by one-off installers, many more of our Greenstar i model will be fitted by engineers employed by social housing providers. Being aware of the slight difference in requirements from an installation and maintenance point of view meant we were able to use focus groups of social housing providers to shape the design and functionality in line with





their needs too. During one of these focus groups, it was observed that the new controls on the boiler fascia were no more complicated for an end-user to adjust than their television volume control. This comparison was then used as a benchmark whenever we tested the controls with other groups of installers or end-users.

#### **Greenstar on trial**

It is also our common practise to trial each new boiler through at least two (and quite often more) full winters. In the case of the Greenstar i, hundreds of the boilers were fitted in properties around the UK as we needed a strong volume of the products installed in order to thoroughly test the new design. At Worcester we employ a dedicated team, tasked with overseeing field trials, a large

number of which take place in our employees' properties. We have over 2,000 employees, many of whom are located all over the country and at any given time, we can have approximately 500 field trials of each product taking place. With this in mind, the team that oversees this area of our business is constantly monitoring performance and upgrading the product to improve its performance.

All-in-all, each of these processes feeds into our unique 'Time to Market' procedure, which ensures the respective research, development, and testing processes take place as efficiently as possible, without leaving any stone unturned.

For more information on our Greenstar i, visit worcester-bosch.co.uk/i

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#### TRAINING

# ErP takes centre stage



Following the launch of our new Greenstar i boiler, and with awareness of the ErP Directive beginning to grow, a busy next six months awaits for our various training programmes and resources. Jon Wheeler, our Training Manager, explains why you need look no further as you look to build on your own offering to customers:

"Despite the fact that a number of industry bodies are now beginning to address the challenges this September's ErP introduction will bring, we recognise that work needs to be done to ensure you feel completely confident in your own ability to comply with its requirements.

"Because of this, ErP will be given a share of the spotlight on every single one of our training courses. As ever, we're keen to ensure we leave no stone unturned in our bid to support you, and each of our experienced team of technical trainers are equipped with all the knowledge needed to make your transition to effective product labelling a smooth one.

### The icing on the cake

"It is only natural for us to support the launch of a major new product with an industry-leading training course to match and our Greenstar i launch is no different. From the week our new boiler becomes available through the usual industry channels, a free one day training course will become available for you to book your place on – regardless of which of our three dedicated Training Academies you wish to attend.

"Given the nature of our Greenstar i being fully compliant with the ErP Directive, the initiative will naturally be a focus. Recognising the differences between our new addition and its predecessor – the Greenstar i Junior – you can expect to benefit from a detailed overview of what we fully expect to be the nation's new favourite boiler.

### The Course will include:

#### Specification and Installation

- Features and benefits
- Review the specification of the boiler range
- Review the flueing and accessories
- Installation of the boiler
- Commissioning of the boiler in accordance with manufacturer's instructions

#### Servicing and Maintenance

- Dismantling the appliance
- Inspection and cleaning of components
- CO and CO, analysis of the flue gas products
- Cleaning of the heat exchanger
- Maintenance and cleaning of the condensate trap
- CO<sub>2</sub> adjustment of the burner
- Removal of compact hydraulic

#### **Fault Finding**

- Heatronic control system
- Service mode functions
- Operational history of the product
- Multimeter good practice
- Fault finding on "Live and Dead" appliances
- NTC thermistor sensor controls

To book your place on any one of our training programmes, including the new one day Greenstar i course, visit www.worcester-bosch.co.uk, call 0330 123 0166, or email training@uk.bosch.com.

INSTALLER'S CHOICE | MAY 2015 23

#### YOUR QUESTIONS ANSWERED



### **Technical Q&A**

Ewan Sutherland and the team of technical service engineers answer some of the most common questions that they receive from you at this time of the year.

Q. I am looking at fitting a Greenstar CDI Classic boiler in a cellar. The problem I have is the termination of the Pressure Relief Valve; I do not have access to an external wall. Is there anything I can do to get round this problem?

A. Worcester recently has introduced a remote Pressure Relief Valve (PRV) kit to tackle this very issue. As shown in Figure 1, the max permissible pipe length is 3 metres from the bottom of the boiler to the PRV outlet

The PRV kit is compatible with following appliances:

Worcester Greenstar 29CDi Classic

Worcester Greenstar 34CDi Classic

Worcester Greenstar 38CDi Classic

Worcester Greenstar 42CDi Classic

Worcester Greenstar 30CDi Classic System

Worcester Greenstar 35CDi Classic System

Worcester Greenstar 24 i Junior

Worcester Greenstar 28 i Junior

Worcester Greenstar 12i system

Worcester Greenstar 15i system

Worcester Greenstar 18i system

Worcester Greenstar 24i system

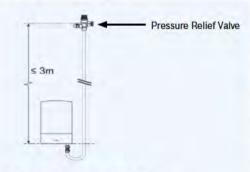


Fig. 1 Remote Pressure Relief Valve

The other alternative to this is to fit a Condense pump that will accept the water pressure and potential flow rate of water a PRV discharge will produce. The pipe runs permissible with this system is dependent on the condense pump manufacturer's instructions.

When fitting the condense pump the live supply to the boiler should be wired through the cut-out on the condense pump in case it is unable to deal with the demand.

Q. Pm installing a boiler in the middle of the house; I would like to combine the PRV discharge into the condensate disposal pipe, can I do this?

A. The PRV should not be discharged into the condensate pipework, but be only be discharged in copper pipe safely to an outside wall or drain.

PRV discharge is typically at a very high temperature which could be in excess of 90°C and high pressure, up to 3 bar. This is one reason we do not advise the PRV discharging into the plastic pipe used for condensate disposal because it is not designed for the high temperature and discharge volume. Also you should not discharge condensate into copper pipework. Condensate is acidic and contact with copper pipework will result in the pipework corroding which may cause further safety concerns.

Q. I am fitting a Worcester boiler and I have a question about the gas supply pipe. In the manual it states that the boiler requires a 22mm gas supply. The current supply pipe is 15mm. It is very hard for me to change, can I leave the pipe as it is?

A. The guidance provided by the manufacturer should be adhered to. Because of the likely number of bends associated with connecting the gas supply from the gas meter to the appliance it is very unlikely that you would achieve the allowed 2.5mbar maximum pressure drop between the gas meter and gas valve test points if the pipe work is less than 22mm. To ensure you do not exceed the maximum allowed pressure drop we would not agree to change the advice given in our installation manuals.

Further information in regard to this is available in our Technical Bulletin TB0040 which can be found on our website. Q. I only have a 0844 number to contact Worcester Bosch. This means that the charges to call you are very expensive when using my mobile. Is there an alternative number I can use?

A. We have introduced a telephone numbers that are mobile and landline friendly and will reduce the cost of calling Worcester Bosch.

Please see below a table of the previous numbers and there new 0330 numbers.

	Old Tel Number	<b>New Tel Numbe</b>
Technical		
Support	0844 892 3366	0330 123 3366
helpline		
Renewables		
Technical	0844 892 4010	0330 123 9229
helpline		
Commercial		
Technical	0844 693 3028	0330 123 0165
helpline		
Buderus		
Technical	0844 892 4224	0330 123 4224
helpline		
Service	****	design that design
Appointments	0844 892 3000	0330 123 9339
Registrations	0844 892 2552	0330 123
Literature	0844 892 9800	0330 123 9119
WAI (general enquires)	0844 892 2442	0330 123 2442

Q. I am currently replacing a customers boiler. Due to the location of the appliance, your normal facia mounted controls receive interference from another source. Is there a work around for this problem?

A. Worcester have just released a new range of wireless controllers. These are the Comfort 1 and 2. The difference between the New Comfort controllers and existing Worcester, controllers is the receiver for the new Comfort controls (traditionally mounted on the front of the boiler) can be remotely hard wired to the boiler.

Included in this range of controls is a standard twin channel digital programmer. This can also wire back to the boiler remotely.

When purchasing the Comfort controller, an additional wall mounting plate will need to be ordered. Part number is 7733600039.

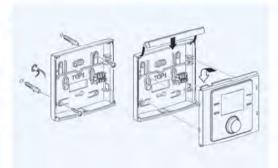


Fig 2 - Wall Mounting Plate (Part Number 7733600039)

0.5mm or 1.5mm cable will need to be wired back to the boiler dependant on the distance from the boiler. This cable will need to be wired into the EMS BUS connections on the boiler.

It is always advisable when fitting low voltage controls to ensure that the cable connecting to the boiler is wired separately to any 240v wires, this will prevent any electrical impedance and interference problems.

Q. I'm installing a boiler on a system with plastic pipe work for both heating and hot water; will this have any bearing on the performance of the boiler and will the customers warranty be affected?

A. Plastic pipe work is becoming increasingly popular in heating system installations. The use of plastic pipe work will not affect the performance of the appliance provided it is sized appropriately and installed correctly to the pipe work manufactures instructions. As a manufacturer we advise that there must be at minimum distance of copper pipe before plastic is connected, this applies to both primary heating and domestic hot water pipe work. The minimum copper pipe lengths are different between Gas and Oil appliances; Gas appliances require a minimum of 600mm and Oil appliances require a minimum of 1 metre. Any plastic pipe work must have a polymeric barrier.

Provided the pipe work and appliance has been installed correctly the warranty will be unaffected.

### WIN A GREENSTAR i

To celebrate the launch of our brand new boiler, we're offering you the chance to be among the first to get your hands on a Greenstar i.

Designed with feedback from you and your customers in mind, the Greenstar i has a number of innovative features which mark it out as an industry leader, including:

- Improved hot water performance
- ErP-compliant low energy circulating pump
- Larger condensate siphon for an end to frozen condensate
- Enhanced access for servicing & maintenance
- Pre-assembled wall frame
- Brand new user interface, featuring scrolling text display



To be in with a chance of winning one, all you need to do is answer the following question:

In which year were condensing boilers made mandatory in the UK?



# Business Name. Business Address Send your entry back to our editorial office: Installer's Choice May competition, WPR, 43 Calthorpe Road, Edgbaston, Birmingham, B15 1TS For terms and conditions please visit: www.worcester-bosch.co.uk/installer/literature/ worcesters-magazine-the-installers-choice All entries must be received before Friday 29th May 2015

### KEEP IN TOUCH

### **South West**

This month we're profiling our sales team for the South West. Here you'll find each member of the team's contact details, as well as the areas they cover.

#### Southern Sales Director



Mark Martin Contact Mark on: 07767 432563

### Regional Sales Manager



Dai Collins Contact Dai on: 07767 432571

### **Technical Sales Managers:**



Chris Hawkings Contact Chris on: 07767 432528 Areas covered: BS, NP



Craig Kelly Contact Craig on: 07919 320666 Areas covered: BA, SN, NP



Dai Wilcox Contact Dai on: 07812 548052 Areas covered: CF, SA



Dan Miarowski Contact Dan on: 07790 488632 Areas covered: PL, TQ, TR



Kevin Brown Contact Kevin on: 07790 489748 Areas covered: DT, EX, TA



Mike Mayers Contact Mike on: 07795 504429 Areas covered: HR, LD



Russell Hamper Contact Russell on: 07767 251528 Areas covered: BH, GY, JE, SO



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