



Revolutionise your boiler efficiency with Optiburner

Reduce fuel costs and emissions with Optiburner's Dynamic Boiler Management Unit (DBMU). This intelligent boiler optimiser delivers guaranteed savings and rapid payback, cutting fuel bills and carbon footprint.



Optiburner optimises cooling cycles and burn times, cutting fuel use by 15–30%. It is BRE-certified and compatible with all boilers, delivering immediate carbon and cost savings. Experience smarter heating, lower bills, and extended system life—with payback in under two years.



Precision heating management powered by Optiburner



Smart boiler optimisation

Optiburner's Dynamic Burner Management Unit optimises boiler firing patterns, extending cooling curves to reduce fuel consumption and dry cycling significantly. BRE-certified (Certificate CFP348), this innovative technology delivers substantial gas/oil savings. Proven effective across diverse commercial premises for over a decade, it offers confidence in performance and efficiency.

Optiburner intelligently optimises boiler operation, reducing daily firings by 50-100 times. It maximises boiler downtime without compromising heating or hot water supply, extending system life and boosting efficiency. Expect 15%+ performance savings post-installation. Our Savings Report quantifies improvements, providing real-time data on reduced firings and energy consumption, ensuring substantial fuel savings.

- BRE-accredited for guaranteed performance.
- Cuts fuels consumption by 15-30%.
- Pays for itself within two years of installation.
- Reduces boiler firings by 50-100 times daily.
- Continuously adjusts to varying heat demands.
- Provides downloadable reports for easy monitoring.

Driving energy savings and sustainability with Optiburner

Optiburner's Dynamic Burner Management Unit enhances your boiler's efficiency without affecting building temperature. This simple retrofit upgrade delivers immediate carbon savings and reduces fuel bills, revolutionising your heating system's performance whilst maintaining comfort.

Major savings	Cut fuel consumption by 15-30%, significantly reducing your energy bills and operational costs.
Quick payback	Recoup your investment rapidly, with most systems paying for themselves in less than two years.
Reduce CO2	Significantly decrease carbon emissions, helping meet reduction targets and improve energy ratings.
Extended life	Increase the lifespan of your entire heating system, including boilers and pumps, through smarter operation.
Low maintenance	Reduce boiler wear and tear, leading to lower maintenance costs and fewer repair interventions.
Quick install	Non-disruptive installation in about an hour, with no modifications to your existing boiler system.
Real-time data	Access our savings report for real-time performance data, demonstrating actual energy reductions.
BRE certified	The only boiler optimiser certified by the Building Research Establishment, ensuring proven performance.

Tailored efficiency for every industry



Optiburner for Care Homes

Improve energy efficiency and reduce operational costs in care homes with Optiburner, ensuring a comfortable environment for residents while lowering your carbon footprint.



Optiburner for Education

Enhance energy savings in schools and universities with Optiburner, creating a more sustainable learning environment and reducing energy costs for your institution.



Optiburner for Hotels & Resorts

Optiburner optimises energy use in hotels and restaurants, delivering significant savings on fuel bills while maintaining comfort and service standards for your guests.



Optiburner for Leisure Centers

Maximise energy efficiency in leisure centres with Optiburner, cutting gas costs while ensuring optimal conditions for visitors and staff.



Optiburner for Health Care

Optiburner enhances energy efficiency in hospitals and clinics, reducing fuel costs and supporting a more sustainable environment for patients and staff.



Optiburner for Manufacturing

Optimise energy consumption in manufacturing plants with Optiburner, reducing operational costs and lowering carbon emissions while maintaining peak production efficiency.

Optiburner works with every boiler brand

Optiburner is fully compatible with every industrial boiler available in the UK market. From forced draught burner boilers up to 2MW to two-stage firing boilers, Optiburner enhances the efficiency of gas and oil-fired boilers from all major manufacturers. Our universal compatibility ensures you can enjoy reduced fuel consumption and lower carbon emissions, regardless of your current boiler brand or model.

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Easy retrofit

Optiburner fits effortlessly into your current setup, preserves existing warranties and enhances functionality without disruption.

Smarter heating

Optiburner's intelligent control enhances your entire heating system, ensuring it works more efficiently and effectively.

Lower costs

Optiburner reduces the need for frequent maintenance and repairs, significantly lowering your ongoing support costs.

Proven results

With 10,000+ installations across the UK, Optiburner has demonstrated its effectiveness in diverse industrial settings.

Maximise savings and minimise carbon footprint



Optiburner is an advanced energy-saving solution for industries like education, care homes, hospitality, and sports centres. Our technology optimises boiler efficiency to reduce energy bills and carbon footprint.

Financial savings

With fuel prices rising, enhancing your boiler's efficiency is an intelligent way to secure ongoing savings on your energy bills. The investment in intelligent boiler controls pays for itself within two years.

Carbon reduction

Whether you're subject to the Carbon Reduction Commitment, striving to improve your Display Energy Certificate, or committed to meeting CO2 targets, our boiler controls can lower your carbon footprint.

Setting the standard

Our intelligent boiler control technology is uniquely certified by the Building Research Establishment (BRE) with the Certification of Performance – CFP 348, setting a new standard in energy efficiency.



David Lloyd Leisure Clubs

David Lloyd Leisure, a leading chain of over 70 leisure complexes across the UK, partnered with Dynamic Energy Products to improve the energy efficiency of their facilities. This case study highlights the successful implementation of Dynamic Burner Management Units (DBMUs) and insulation upgrades across multiple sites, leading to significant cost savings and a substantial reduction in carbon emissions.

Project Background

David Lloyd Leisure centres, known for their extensive range of facilities, including indoor tennis courts and swimming pools, faced the challenge of high energy consumption. Heating and hot water were primarily supplied by Ener-g CHP units and Hoval Euro SR 900kW boilers, which operated extensively throughout the day. To address this, Dynamic Energy Products was commissioned to install DBMUs at the Gidea Park site and to evaluate the potential savings from upgrading insulation on un-lagged valves and fittings using ValveWrap flexible insulation.

Implementation of Energy-Saving Technologies

1. **Dynamic Burner Management Units (DBMUs)**- The DBMUs were installed to optimise the efficiency of the existing boiler systems. These units were able to take themselves in and out of the circuit automatically, providing real-time data on energy savings by comparing the cooling and firing times of the gas burners. This method demonstrated a 31% reduction in boiler firings over 24 hours, with minimal additional burn time required to maintain the desired temperature. The short-term Savings Report generated by the DBMUs validated these savings, consistent with the independent certification from the Building Research Establishment (CFP 348).
2. **ValveWrap Insulation** - In addition to the DBMUs, ValveWrap insulation was applied to 50-60 large fittings at each site. This flexible insulation material provided an additional 2-3% energy saving by reducing heat loss from un-lagged valves and fittings. The combination of DBMUs and ValveWrap insulation resulted in overall energy savings of approximately 17% across the sites where testing was feasible.

Financial Outcomes

The energy efficiency upgrades at David Lloyd Leisure Centres delivered significant financial and environmental benefits:

- Project Payback Period: Under 12 months.
- Total Utility Bill Savings: £305,000.
- CO2 Savings: Over 537 tonnes annually.

These results underscore the value of the energy-saving measures, with a rapid payback period and substantial ongoing savings in both costs and carbon emissions.

Conclusion

The collaboration between David Lloyd Leisure and Dynamic Energy Products resulted in a highly successful energy efficiency programme, with measurable improvements in energy consumption, cost savings, and environmental impact.

Case study



Newcastle Football Club's St. James' Park

Newcastle Football Club's St. James' Park, aiming to optimise energy consumption and improve overall efficiency, implemented Dynamic Burner Management Units (DBMUs) in its plant rooms to enhance boiler operations. This case study highlights the significant energy savings achieved through this innovative approach, with data directly measured and independently certified, demonstrating the effectiveness of DBMUs in practical applications.

Project Background

Newcastle Football Club relies on 19 gas boilers from Hamworthy to Hoval, collectively providing approximately 6,000 kW for heating and hot water across its facilities. Traditional methods for determining energy savings through metered consumption face challenges due to the need for constant conditions and lengthy observation periods. Dynamic Energy Products (DEP) introduced a more efficient "Short-Term Test" approach to overcome these issues. This method involved a dynamic testing cycle where the DBMUs were alternately switched "in" and "out" of the circuit every 50 boiler cycles. This allowed for quick observation of gas savings without needing extensive adjustments.

Implementation of the DBMUs

The DBMUs were installed on the most significant 11 boilers to regulate their operation, optimising firing patterns to reduce gas consumption while maintaining necessary heating levels. Over a short testing period, the DBMUs were intermittently activated and deactivated, with the systems measuring and comparing the gas burner's cooling and firing times. The downloaded data, provided to Newcastle FC one month post-installation, clearly showed reduced energy consumption when the DBMUs were operational.

Results and Analysis

Data from the test periods revealed that the DBMUs produced savings ranging from 12% to 30%, with higher savings recorded on water heater boilers, which generally have shorter cycles. On average, the project's first phase showed a 16% reduction in gas consumption, equivalent to 940,000 kWh saved, and a reduction of 180,000 kg in CO2 emissions. The effectiveness of the DBMUs were further corroborated by independent Building Research Establishment (BRE) certification, aligning with their certified savings performance.

Financial and Environmental Impact

Implementing the DBMUs at St. James' Park resulted in substantial gas and CO2 savings, translating to significant financial and environmental benefits. The 16% reduction in gas usage achieved a payback period of just five months, while the installation of ValveWrap flexible insulation on 340 unwrapped fittings contributed an additional 189,000 kWh and 82,000 kg of CO2 savings, with a payback period of 13 months.

Conclusion

Installing Dynamic Burner Management Units at Newcastle Football Club's St. James' Park proved a highly effective energy-saving measure. The clear and measurable reduction in gas consumption and emissions, achieved without compromising heating system performance, underlines the DBMUs' value as a practical and efficient energy optimisation tool. This case study illustrates how targeted energy-saving technologies can deliver significant financial and environmental benefits in large-scale facilities.



Thorngate Churcher Trust

Thorngate Care Home, seeking to reduce energy consumption and improve efficiency, implemented the Dynamic Burner Management Unit (DBMU) to optimise its boiler operations. This case study examines the significant gas savings achieved through this innovative approach, with data directly measured through the gas meter, highlighting the effectiveness of the DBMU in real-world conditions.

Project Background

Thorngate Care Home operates an Ideal Concord ESi gas boiler, which is essential for consistent heating and hot water. Traditional methods of identifying gas savings through meter consumption are often lengthy, requiring extensive data collection periods and adjustments for external variables. Dynamic Energy Products (DEP) introduced a more efficient “Day In, Day Out” method to overcome these challenges. This approach involved switching the DBMU in and out of the circuit over three weeks from 7th December to 28th December, allowing for immediate observation of gas savings without requiring complex adjustments.

Implementation of the DBMU

The DBMU was installed to regulate the boiler’s operation, optimising its firing patterns to reduce gas consumption while maintaining the required heating levels. The system was tested over several weeks, with the DBMU being alternately activated (“In” circuit) and deactivated (“Out” of the circuit). The resulting data demonstrated an apparent reduction in gas usage on days when the DBMU was operational.

Results and Analysis

The daily gas meter readings showed that the DBMU delivered an average gas saving of 8.9% during the test period despite external temperatures dropping to sub-zero levels in the final days. These savings closely aligned with the 10% reduction observed during the Building Research Establishment (BRE) certification at 0°C.

Further analysis revealed that the DBMU effectively reduced the number of boiler cycles, from 31 cycles without the DBMU to just 18 cycles with it engaged. This optimisation led to lower gas consumption without impacting the overall performance of the heating system. The consistent return temperatures, even with reduced boiler cycles, demonstrated that the heating system remained stable and practical, a key finding confirmed by the BRE.

Financial and Environmental Impact

Implementing the DBMU at Thorngate Care Home resulted in significant gas savings and reduced the home’s carbon footprint. While specific financial savings and CO2 reductions are not detailed, the 8.9% reduction in gas consumption represents a substantial ongoing saving in energy costs and environmental impact.

Conclusion

Installing the Dynamic Burner Management Unit at Thorngate Care Home proved a successful energy-saving initiative. The clear and measurable reduction in gas consumption, achieved without compromising the heating system’s effectiveness, underscores the DBMU’s value as a practical and efficient energy optimisation tool. This case study shows how targeted energy-saving technologies can benefit residential care settings financially and environmentally.



Ramada Coventry

Ramada Coventry, a leading hotel in Coventry, collaborated with B2B Energy Solutions Ltd and Get Solutions Ltd on an energy efficiency initiative to reduce energy consumption, cut costs, and enhance sustainability. This case study highlights these efforts' implementation measures, results, and financial impact.

Project Background

Ramada Coventry consumed much energy, particularly from its boiler systems and plant-room equipment. Led by Peter Corcoran, the hotel's management identified energy efficiency as a critical area for improvement. B2B Energy Solutions Ltd was brought in to conduct an energy health check and implement best-practice energy-saving technologies.

Implementation of Energy-Saving Technologies

1. **Burner Management Units (BMUs):** In August 2010, two BMUs were installed on the hotel's boilers to optimise energy efficiency by adjusting burner firing patterns to extend burn duration and reduce firing frequency. Certified by the Building Research Establishment, the BMUs provided credible energy savings reports without extensive 'through the meter' tests. Installation cost: £3,600 + VAT.
2. **Valve Wrap Insulation:** In September 2010, 28 valves in the plant room were insulated using Valve Wraps, a flexible and reusable material, reducing heat loss and improving energy efficiency by 20% to 25%. Cost: £1,046 + VAT.
3. **Energy Impact Software:** Energy Impact management software was installed to monitor energy usage, track consumption patterns, and set target profiles. It enabled real-time alerts for excessive consumption, resulting in an 11% reduction in energy usage.

Financial Outcomes

The energy-saving measures delivered substantial financial benefits:

Electricity Savings:

First-year costs were £1,700 (including the energy health check and software subscription), total savings of £12,521 in the first eight months and annualised savings of £14,521. The net first-year savings were £12,821, with a payback period of 6 weeks and ongoing annual net savings of £13,321, achieving a 1,100% ROI.

Gas Savings:

First-year costs were £4,646 (including BMUs and valve insulation), with savings of £9,677 in the first seven months and annualised savings of £16,589. Net first-year savings amounted to £5,031, with a payback period of 4 months and ongoing annual savings of £16,589, achieving a 357% ROI.

Overall, the total costs of these interventions were £6,346, with total annualised energy savings of £31,110. This resulted in net savings of £24,764 and a payback period of just three months.

Conclusion

The energy efficiency initiative at Ramada Coventry successfully delivered significant financial savings and reduced the hotel's carbon footprint. The swift payback periods and high returns on investment of the BMUs, Valve Wraps, and Energy Impact software showcase the effectiveness of targeted energy-saving strategies in the hospitality sector, setting a precedent for future projects.



Whitehall School

In collaboration with East Sussex County Council, Whitehall School embarked on an energy-saving initiative by integrating Dynamic Burner Management Units (DBMUs) into their heating system. This case study details the successful implementation of DBMUs on the school's Optima gas boilers, highlighting the significant energy savings achieved and the effectiveness of the technology in reducing fuel consumption.

Project Background

Whitehall School was introduced to the DBMU technology during a monthly meeting hosted by East Sussex County Council, where energy-saving approaches were discussed. The DBMU had already proven its effectiveness across the council's estate, with over 250 installations in various buildings, including town halls, day centres, and care homes. Impressed by the technology's track record and the potential for a 15% reduction in fuel consumption, the school decided to purchase and install four DBMUs on their newly installed Optima gas boilers.

Proving the Savings

A vital feature of the DBMU is its ability to generate a detailed Savings Report, which assesses the unit's performance and quantifies the energy savings achieved. At Whitehall School, these reports were generated within a month of installation, confirming the effectiveness of the DBMUs in reducing energy consumption.

In addition to the DBMU's Savings Reports, the council independently analysed the school's gas usage by comparing monthly meter readings taken before and after the DBMU installation. This analysis accounted for external factors, such as outside air temperature, using degree-day analysis to adjust for temperature variations.

Results and Analysis

The results, as shown in Table 1 of the report, indicate a consistent reduction in gas consumption across several months following the DBMU installation. For example, in January, there was a 28.1% reduction in energy usage compared to the previous year, highlighting the significant impact of the DBMUs.

However, there were some anomalies, such as in February, when gas savings were not observed due to the DBMU being switched off for maintenance and not being turned back on. Despite this, the overall average savings across the year were substantial, with the council's analysis confirming a typical savings rate of around 15.3%, consistent with the initial expectations.

Financial and Environmental Impact


Implementing DBMUs at Whitehall School resulted in notable energy savings, directly translating into cost reductions and a lower carbon footprint. Although specific financial figures are not provided in the case study, the percentage reductions in gas consumption demonstrate the significant economic benefits and environmental impact of the DBMU technology.


Conclusion


Integrating Dynamic Burner Management Units at Whitehall School reduced the school's energy consumption, proving an effective and reliable method for enhancing boiler efficiency. This case study highlights the importance of continuous monitoring and maintenance to maximise the benefits of energy-saving technologies. It reinforces the value of DBMUs as a tool for achieving significant long-term savings in educational settings.


Maximising efficiency and savings with Optiburner

Discover the powerful impact of the Optiburner system through real-world examples that showcase substantial investment savings and impressive returns on investment (ROI). Our clients have experienced significant improvements in operational efficiency and energy consumption, leading to reduced costs and a lower carbon footprint.

 Bedford Academy	Annual Savings	Energy	Carbon	Equivalent to
	£24,734.83	103,385 kWh	19,993 kgCO ₂ e	328 Trees over 10 years
	Total Investment	Payback Time	ROI (15 years)	
	£5,600.00	3 Months	£314,658.00	

 Cauldwell Primary School	Annual Savings	Energy	Carbon	Equivalent to
	£4,735.86	19,212 kWh	3,715 kgCO ₂ e	61 Trees over 10 years
	Total Investment	Payback Time	ROI (15 years)	
	£11,200.00	2.36 Years	£48,888.85	

 Shackleton Primary School	Annual Savings	Energy	Carbon	Equivalent to
	£8,160.78	33,033 kWh	6,388 kgCO ₂ e	105 Trees over 10 years
	Total Investment	Payback Time	ROI (15 years)	
	£11,200.00	1.37 Years	£91,660.04	

 Shortstown Primary School	Annual Savings	Energy	Carbon	Equivalent to
	£9,786.95	40,907 kWh	7,911 kgCO ₂ e	130 Trees over 10 years
	Total Investment	Payback Time	ROI (15 years)	
	£5,600.00	7 Months	£121,309.67	

Cutting energy costs and enhancing efficiency with Optiburner

Revolutionising Heating with Optiburner

The burner is essential in heating technologies for commercial settings. It is responsible for mixing fuel and air to produce the necessary warmth or process heat for comfort, productivity, and efficiency. However, traditional burner management systems often rely on static settings, which do not account for fluctuating heat demands or variations in fuel quality. As a result, such systems often lead to suboptimal performance, higher fuel consumption, and increased emissions of harmful pollutants, which threaten economic sustainability and environmental stewardship.

The Optiburner was developed to address these issues. It is an innovative solution designed to overcome the limitations of conventional systems. The Optiburner introduces a dynamic and responsive control mechanism that ushers in an era of intelligent heating. It leverages cutting-edge technology to optimise fuel consumption and minimise environmental impacts.

The Optiburner integrates sensors and employs sophisticated algorithms to monitor and adjust the burner's activity in real time. This allows the system to read the immediate heat demands and adapt the combustion process to align with the specific characteristics of the fuel in use. As a result, the Optiburner ensures that only the necessary amount of fuel is combusted, significantly improving fuel efficiency and reducing wastage.

Moreover, the Optiburner reduces greenhouse gas emissions and pollutants by fine-tuning the combustion process, contributing to a cleaner and more sustainable environment. This aligns with the global push towards greener, more sustainable energy solutions and aids in compliance with increasingly stringent environmental regulations.

How Optiburner's DBMU Work

Optiburner is the pinnacle of innovation in commercial heating technology. It embodies an advanced control system meticulously designed to optimise burner efficiency and adaptability in various heating applications. At its core, the Optiburner leverages an intricate network of sensors coupled with sophisticated algorithms to facilitate a real-time, dynamic adjustment of the burner's operational parameters.

Extending the boiler's cooling phase by 90% decreases its temperature by approximately 3 degrees, necessitating a longer burning period of about 10-20%. This adjustment means that what would typically be a 200-second cycle of heating and cooling is now extended to 320 seconds. Over 24 hours, this change does not affect the heating system's performance—thanks to Newton's Law of Cooling—but it does lead to a substantial reduction in gas consumption.

The Optiburner is a technology that optimises the operation of boilers in buildings by reducing the number of burns and increasing their duration. This results in a 25% decrease in operational time. The Optiburner is tailored to the specific requirements of the building, ensuring that it maintains the internal temperature despite the reduced fuel consumption.

The Optiburner has high-fidelity sensors that provide continuous feedback on critical operational parameters. This data is processed by the Optiburner's control unit, which employs advanced algorithms to make informed decisions on how best to adjust the burner's operation. By dynamically adjusting to the demand for heat and the characteristics of the fuel, Optiburner offers a significant advancement over traditional systems.

The anatomy of a DBMU: Key components explained

The Optiburner is a highly advanced integration of engineering and technology designed to optimise burner performance in various heating applications. This innovative system comprises three foundational components that work seamlessly to achieve unparalleled efficiency and precision. Each element plays a vital role in the Optiburner's operation, allowing it to dynamically adjust the burner function in real-time, leveraging precise measurements and intelligent algorithms.

Let's take a closer look at these critical components:

1 - Sensors: The Eyes and Ears of the Optiburner

Sensors are an essential component of the Optiburner's operational chain. They are strategically placed to monitor conditions that impact burner operation, such as temperature, pressure, and fuel flow. By collecting data on these parameters, sensors act as the Optiburner's eyes and ears, providing a comprehensive picture of the burner's environment and performance.

Temperature sensors ensure that the burner produces the right amount of heat to meet demand without excess. Pressure sensors monitor the pressure within the combustion chamber and fuel lines, which is critical for maintaining optimal combustion conditions and safety. Fuel flow sensors measure the rate at which fuel is delivered to the burner, which is crucial in achieving efficient fuel consumption and reducing emissions. Together, these sensors provide real-time data to the Optiburner, allowing it to make informed decisions about burner operation.

2 - Control Unit: The Brain Behind the Operation

The control unit is the intelligent brain of the DBMU system. It is a sophisticated processor responsible for analysing sensor data, interpreting this information using advanced algorithms and determining the best course of action to optimise burner performance. The control unit's algorithms are designed to balance the heat requirements with the need for efficiency and reduced emissions, adjusting the burner's operation to suit real-time conditions.

The control unit's decision-making process is based on a deep understanding of analysis principles, thermodynamics, and fluid mechanics. This knowledge allows it to optimise the fuel-to-air ratio, manage ignition timing, and regulate flame intensity. The control unit ensures that the burner operates at peak efficiency, minimising fuel consumption and emissions while meeting the specific heating requirements.

3 - Actuators: The Hands that Shape the Flame

Actuators are mechanical components that allow the Optiburner to control the burner physically. They adjust the burner's operation based on the commands given by the optimised unit. These components act as the hands of the Optiburner, manipulating valves to regulate fuel and airflow, adjusting dampers to control the mix of minimising gases, and modulating other mechanical devices to fine-tune the burner's operation.

Actuators, with their precise control, are the guardians of efficient combustion conditions identified by the control unit. By adjusting the fuel and air supply in real-time, actuators ensure that the burner responds quickly to changes in demand or fuel characteristics. This helps maintain efficient combustion and reduces the risk of inefficiency or unsafe conditions, providing a sense of security about the system's performance.

Advantages of the Optiburner: Elevating heating performance

Integrating Optiburners into commercial heating systems is a significant step towards enhancing energy efficiency, promoting environmental sustainability, and improving safety. These advanced control systems provide numerous benefits that tackle the critical challenges faced by traditional heating systems. Here, we explore the advantages of Optiburners in-depth, highlighting how they redefine the standards of heating system performance.

1 - Improved Efficiency: Optimising Fuel for Peak Performance

One of the most compelling benefits of Optiburner is its ability to drastically improve the efficiency of heating systems. By leveraging real-time data and intelligent algorithms, Optiburner dynamically adjusts the operation of burners to align perfectly with the actual demand for heat. This precise control minimises the wasteful overproduction of heat and optimises fuel consumption, significantly reducing energy costs. In an era where energy optimisation is paramount, the ability of Optiburner to minimise fuel usage without compromising performance is invaluable. This translates to lower operating costs and is critical in conserving finite energy resources, making heating systems more sustainable.

2 - Reduced Emissions: Minimising Environmental Impact

As the world grapples with the increasing environmental impact of heating systems, the role of Optiburners becomes more significant. These systems, by ensuring more efficient combustion and decreasing emissions, are a key player in the fight for a cleaner environment. By optimising the fuel-to-air ratio and continually adjusting burner operation, Optiburners can significantly reduce the output of harmful pollutants such as nitrogen oxides (NOx), carbon monoxide (CO), and sulphur oxides (SOx). This reduction in emissions not only contributes to a cleaner and healthier environment but also aligns heating practices with global efforts to combat air pollution and promote positive change.

3 - Enhanced Safety: Proactive Protection in Real-Time

Optiburners are designed with safety as a top priority. In heating systems, where the risks of gas leaks, overheating, or malfunctioning burners are ever-present, Optiburners provide a proactive safety net. Through continuous monitoring and real-time control, they can identify abnormal conditions and initiate corrective actions immediately, preventing potentially hazardous situations. This proactive safety management not only protects property but, more importantly, safeguards lives, providing peace of mind for users and operators.

Dynamic heating control made easy with **Optiburner**

Extending system life and reducing care needs

Optiburner offers more than just efficiency and safety; it also enhances longevity and reduces the maintenance needs of heating systems. By optimising burner operations, Optiburner minimises wear and tear on components, extending their lifespan and lowering the risk of breakdowns. This reduces maintenance costs and less downtime, making Optiburner a valuable solution for sustainable, cost-effective heating systems. Their ability to deliver consistent performance while requiring less frequent upkeep makes them a smart investment for any facility manager or building owner.

Elevating efficiency and comfort

Optiburner is essential for managing complex heating systems in large buildings like offices, schools, and hospitals. They adjust heating output to match the varying demands of different areas, ensuring comfort while reducing energy consumption and operational costs. This adaptive approach supports sustainable building management. Additionally, Optiburner includes advanced safety features, making them particularly valuable in environments where occupant safety and comfort are top priorities, such as healthcare and educational facilities.

Boosting performance and sustainability

In the industrial sector, Optiburner significantly improves the performance of furnaces and boilers by optimising combustion processes. They enhance operational efficiency, reduce fuel consumption, and minimise downtime, which is crucial for industries with high heating expenses. By improving combustion efficiency, Optiburner helps industries meet environmental regulations and contribute to sustainability efforts by reducing emissions, making them a strategic choice for energy-intensive sectors.

How can the Optiburner prove its savings?

The Optiburner verifies its fuel savings through a precise and reliable process. It measures operational efficiency over 50 cycles, recording cooling and burning times to calculate averages. The Optiburner then disengages to evaluate the extension in cooling times achieved. Savings are quantified by comparing burning times before and after Optiburner implementation. This method demonstrates the Optiburner's ability to extend cooling phases by 90%, slightly increase burning time by 10%, and reduce boiler temperature by about 3°C, enhancing efficiency without affecting hot water delivery. Although the related certification is outdated, it showed savings of 16% on typical winter days and around 10% in colder conditions, proving the Optiburner's effectiveness.

Optimising heating efficiency for greater savings with Optiburner

Advantages of the Optiburner: Elevating Heating Performance

The Optiburner is the pinnacle of innovation in commercial heating technology. It embodies an advanced control system meticulously designed to optimise burner efficiency and adaptability in various heating applications. At its core, the Optiburner leverages an intricate network of sensors coupled with sophisticated algorithms to facilitate real-time, dynamic adjustments of the burner's operational parameters.

Improved Efficiency: Optimising Fuel for Peak Performance

One of the most compelling benefits of the Optiburner is its ability to improve the efficiency of heating systems drastically. By leveraging real-time data and intelligent algorithms, the Optiburner dynamically adjusts the operation of burners to align perfectly with the actual demand for heat. This precise control minimises the wasteful overproduction of heat and optimises fuel consumption, significantly reducing energy costs. In an era where energy optimisation is paramount, the ability of the Optiburner to minimise fuel usage without compromising performance is invaluable. This translates to lower operating costs and is critical in conserving finite energy resources, making heating systems more sustainable.

Reduced Emissions: A Leap Towards Cleaner Air

Minimising the environmental impact of heating systems and significantly reducing harmful pollutants is a shared responsibility. The Optiburner plays a crucial role by ensuring more efficient combustion and decreasing emissions. By optimising the fuel-to-air ratio and continually adjusting burner operation, the Optiburner can significantly reduce the output of nitrogen oxides (NOx), carbon monoxide (CO), and sulphur oxides (SOx). These pollutants are major contributors to air quality degradation and have significant health and environmental impacts. By decreasing these emissions, the Optiburner helps create a cleaner and healthier environment, aligning heating practices with global efforts to combat air pollution and promote positive change.

Enhanced Safety: Proactive Protection in Real-Time

Safety is paramount in heating systems, where the risks of gas leaks, overheating, or malfunctioning burners are a constant concern. The Optiburner provides a sense of security by enhancing the safety of heating systems through continuous monitoring and real-time control. By identifying abnormal conditions such as unexpected temperature, pressure, or fuel flow changes, the Optiburner can initiate corrective actions immediately, preventing potentially hazardous situations. This proactive approach to safety management protects property and, more importantly, safeguards lives, providing peace of mind for users and operators alike.

Importance of Accredited Installation

The Optiburner must be installed by our accredited installer to ensure adherence to the UK's latest safety regulations and to secure its warranty. Accredited installers are specifically trained to handle Optiburner setups, reducing the risk of installation errors that could compromise safety and performance. An accredited installation also includes a mandatory safety certificate to affirm compliance and safety standards. Please note that installations by non-accredited personnel will void the warranty and may lead to increased maintenance costs and safety risks.

Ready to elevate your **combustion** efficiency?

The applications of the Optiburner across commercial and industrial settings underscore its versatility and transformative potential. By optimising heating efficiency, ensuring safety, and reducing environmental impact, the Optiburner addresses critical challenges faced by different sectors.

In commercial buildings, it ensures comfort and efficiency on a large scale, while in industrial processes, it enhances performance and sustainability. As the adoption of the Optiburner continues to grow, its impact is set to reshape the landscape of optimising systems, driving forward a future where energy efficiency and environmental responsibility go hand in hand with operational excellence.

At Optiburner, we specialise in energy efficiency for businesses. We use advanced Dynamic Burner Management Units and smart heating optimisation techniques to help reduce fuel consumption and harmful emissions. By integrating these systems into your heating infrastructure, you can achieve substantial savings and align with your sustainability goals. Optiburner's systems are designed to adapt to your business needs in real-time, ensuring optimal performance without compromising safety or comfort.

Whether you're looking to cut costs, reduce your carbon footprint, or improve the safety and longevity of your heating infrastructure, Optiburner has a tailored solution that leverages the latest in energy efficiency technology. Partnering with Optiburner means taking a significant step towards revolutionising your business's energy management practices. By doing so, you can achieve a more sustainable and cost-effective future.

By scheduling a complimentary consultation with us, you'll gain personalised insights and solutions tailored to optimise your operations, reduce emissions, and achieve significant savings. Take advantage of the opportunity to enhance your facility's performance and environmental compliance.

Contact us today and take the next step towards a more efficient, sustainable future.



Discover the **Optiburner** advantage



Scan the QR code to
explore our website
and learn more!

Optiburner is more than just a boiler optimiser—it's a transformative solution that redefines energy efficiency, cost savings, and environmental responsibility. Explore why Optiburner is the intelligent choice for industries seeking to maximise boiler performance and achieve long-term benefits.

Contact us for innovative heating solutions. Discover how Optiburner can reduce your energy costs and carbon footprint.