

Advanced Boiler Control

Reduce your gas consumption by 10%



Implement Energy Reduction Strategies from TREND advance

WHAT IS IT?

Advanced Boiler Control is a strategy module which can be written into your existing Trend controller to reduce gas consumption by eliminating inefficiencies caused by so called "dry cycling" i.e. the boiler producing heat when the building it serves does not require it.

WHAT ARE THE BENEFITS?

- Reduction in energy bills
- Better utilisation of existing BMS infrastructure
- No additional, stand alone controls required
 - No chance of systems fighting for control
 - Lower maintenance costs
 - No disruption to building occupants
- Remote monitoring to verify operation

* "Taking the weather into account, our trials of Trend's Advanced Boiler Control strategy have demonstrated energy savings of over 10% per cent on the gas consumption in the first 8 months of use."

Tim Pugh, West Midlands Police.

WHY DO IT?

Typically many systems are controlled by 'timeclocks' or 'optimisers' which are time based systems with minimal influence from the temperature conditions within the building. These systems result in the boiler system being unnecessarily operated for the majority of the occupied time and indeed heating up time, irrespective of the demand from the occupied space or the need for additional heat. There may therefore be heat flowing to all parts of a building which is up to temperature and has no immediate need for additional heat.

This leads to inefficiencies in thermal losses, resulting from the hot water being needlessly circulated around pipework systems plus boiler efficiency losses associated with being switched on and off needlessly to maintain a desired flow temperature without a true demand for heating.

Anti dry-cycling devices enable reduced boiler flow temperatures by increasing time delays between firing cycles. The devices can be introduced by re-programming the functionality of the existing BEMS.

FEATURES

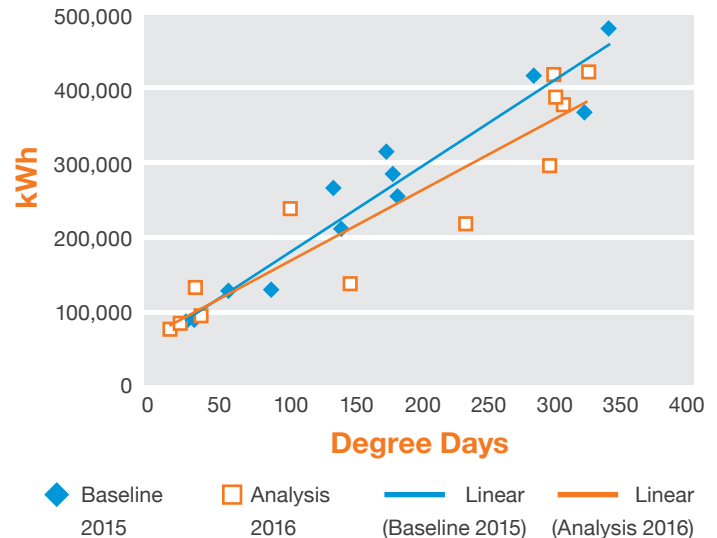
- For single or multiple boilers
- Can be used alongside other boiler control strategies, or as an independent boiler control strategy
- If used with other boiler control strategies it could be set up to be switched in or out as required e.g. disabled during the OSS warm up period
- Capable of working with either flow or return temperature
- Self learning, manually resettable, maximum rate of temperature fall calculator

* "The way that a traditional boiler firing sequence is controlled is based on flow temperature and time criteria. This often involves firing up multiple boilers, which isn't always necessary to reach a set temperature. I felt that systems should be demand led i.e. designed to recognise system load and prevent boilers operating needlessly and inefficiently, thereby reducing gas consumption and limiting wear and tear on the plant."

Tim Pugh, West Midlands Police.

* Full case study available

Advanced Boiler Control Savings Analysis 2015 vs 2016



Actual data from a commercial office building with ABC software installed.

* "The most important thing was that any new strategy should utilise the current controls infrastructure without causing any downtime during its implementation.

Police Headquarters is operational around the clock and therefore additional mechanical and electrical works to the boilers would have been highly disruptive.

We also wanted to avoid a fragmented approach that would necessitate the purchase and configuration of additional hardware."

Tim Pugh, West Midlands Police.

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