

Mk8 DTI

# Remote Monitoring



Remote monitoring provides the opportunity for engineers to extend their services even if they are out of hours or not physically on-site.

Understanding the operational parameters are vital, as they provide data to create not only a streamlined servicing process, but also provide an increase in overall efficiency.



## Avoid Costly Downtime

Being armed with data from the plant room, engineers can pre-empt issues before they cause potential downtime to the plant, by arriving on-site with required parts for maintenance/repairs.



## Fully Integrated to Existing BMS

While the DTI remote monitoring package is a complete system, it can also be easily integrated to enhance the existing BMS via Modbus interface.



## Increased Lifespan of Equipment

Efficient combustion and effective maintenance reduces the strain on the burner, boiler and other elements of the plant. Therefore, increasing lifespan of equipment and thus reducing the requirement for repairs.



## Remote Maintenance

24-hours a day, seven days a week, if an adjustment needs to be made on-site, I/O modules can be programmed to perform the control functions without attendance to site.



## Alerts to Your Inbox

Digital inputs via an I/O module trigger alarms, automatically emailing information/alarm conditions to up to 10 contacts.



## Reduce Fuel Consumption & Emissions

Reporting identifies areas to increase efficiency of combustion, thus ensuring optimum performance of the boiler plant.

# Reporting

The Mk8 DTI collects information from:

- Mk8 MM controllers and Mini Mk8 MM controllers
- Gas and air pressure sensors
- Input/output modules
- Mk8 EGA Evo

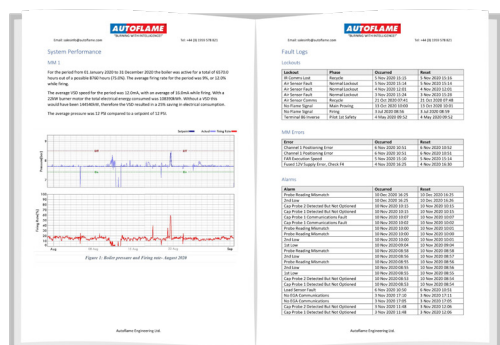


Using all this information generates regular reports which help identify critical areas and inefficiencies within the boiler plant, so an engineer can establish what actions need to be taken in order to increase efficiency. Furthermore, looking at trends in reports helps identify the areas where preventative maintenance can improve efficiency.

Using information from an attached Mk8 EGA Evo, a combustion emissions report can be generated. This can be used to ensure efficient combustion is occurring and meeting environmental regulations, such as Medium Combustion Plant Directive (MCPD) to reduce the carbon footprint of a boiler plant.

## What's Reported?

1. Carbon Footprint (via Exhaust Gas Analysis)
2. Total Greenhouse Gas Emissions
3. System Performance
4. Fault Log
5. Total Dissolved Solids
6. Fuel Pressure & Fuel Supply
7. Feedwater Temperature
8. External Sensors (UV, Air & Fuel)
9. Burner Maintenance
10. Preventative Maintenance Recommendations



## Benefits of 4G Modem

The 4G modem feature of the Mk8 DTI panel provides the opportunity for engineers to be connected to the boiler plant 24 hours a day, 7 days a week. The challenges or issues arising out of hours or when an engineer is not physically on-site in front of a boiler have been overcome.

With the implementation of data-driven modems, previous cyber-security concerns associated with Building Management Systems (BMS) being connected via the client's server have been resolved.



## Installation & Service

Installation of a Mk8 DTI is typically completed in 1 day, with minimal downtime for the boiler plant. Mk8 DTIs can be retrofitted to an existing panel, or our team can fit a new Mk8 DTI panel on-site to meet requirements of existing equipment.

### Remote Connection

Mk8 DTI offers the benefit of Remote Connection of the boiler house to an external PC or to Building Management system (BMS) via Modbus.

### Shuffle Sequencing

Mk8 DTI can be used to efficiently manage the entire boiler house's lead/lag running order by using shuffle sequencing.

### Automatic Rotation

Automatic rotation of lead boiler on a user-defined schedule (hour, days or weeks apart).

### Alarms

Alarm setup option for the pressure sensor's low/high limits.

### Multi-Touch Screen

12.1" capacitive multi-touch screen display showing the boiler room: MMs, EGAs, Pressure Sensors, I/O Units.

## DTI Package Benefits

- Mk8 DTI included within a 3-year service contract
- Mk8 DTI included with all new burner & boiler installations
- Includes in-depth & hands-on training at the BK Labtech training facility to maximise the full potential of the DTI package
- Monthly preventative maintenance reports highlighting energy-saving recommendations