# The Advantages of Flue Gas Analysis and burner tuning

A flue gas analyzer is a device used to monitor the gases emitted from the pipes or ducts of a boiler, furnace or other unit. In turn, these devices help maximize efficiency and protect individuals from harmful gases. Due to the high-tech nature of a flue gas analyzer, installing one of these devices offers four distinct advantages.

#### Increased Efficiency

One of the key benefits is that a boiler can run at its optimal efficiency. As opposed to older mechanical tools, a flue gas analyzer can run continuously. This means that if there is an issue hindering the performance of a boiler, it can be quickly resolved. In the long run, this can save a substantial amount of energy. Consequently, **this can reduce energy bills and save money.** 

#### **Environmental Benefits**

A reduced impact on the environment is an added advantage of a flue gas analysis. Since the efficiency on units like boilers is improved, it also minimizes the pollution entering the atmosphere. In a time when global warming is a threat and conservation is of utmost importance, this is a key benefit. Industries can also start working on getting carbon credits by regularly performing the flue gas analysis.

#### <u>Safety</u>

Probably the biggest advantage of a flue gas analyzer is the **safety** it provides. Whether in a home or business, this device carefully monitors gas emissions. As a result, if a dangerous gas such as carbon monoxide is present, a flue gas analyzer will quickly pick up on this. Then the problem can be repaired before endangering the health of anyone. In some cases, this can be the difference between life and death.

## **Obtains Data Quickly**

Since a flue gas analyzer is an electrical device, it allows data to be quickly obtained. This means that reports can be transferred to a computer and can be easily printed out. That data can also be stored and viewed later on, which makes it possible to spot long-term patterns in the functioning of a boiler.

# **Combustion Gas Analyzer**

The combustion gas analyzer is also known as flue gas/stack gas analyzer. It is used to measure the flue gases of boilers, burners, and engines. This analyzer is designed to give accurate results using the latest sensor technology. This analyzer is used to measure all important parameters to adjust and optimize the combustion process.

The equipment can simultaneously measure oxygen (O2), Carbon monoxide (Co), carbon dioxide (CO2), Nitrogen oxides (NOx), Sulpher oxides (SO2) and flue gas temperature. It calculates the Combustion efficiency, losses, excess air, and carbon di oxide according to ASME Parameters. This equipment is capable to measure 7 different types of fuels having integrated self check programs and simultaneous display of eight parameters on the illuminated display.



## Application Form for PHMA Energy Services (Applicable to boiler flue Gas Analysis and Burner tuning)

Company Information					
Company Name					
Contact Person					
Address					
Telephone					
Association Membership					
Number					
Industrial Sector					
Energy Sources and Consumption [click-mark selection]					
Boiler Size [TPH]	1-2	3-5	5-8	8-12	12-18
Boiler fuel	Gas	Diesel	coal	other	

Name:\_\_\_\_\_

Designation:\_\_\_\_\_