

DYCONIX

Dynamic Control Systems



FLUE GAS ANALYSIS SERVICES & BOILER TUNE-UPS

ABSTRACT

Combustion system, if not used properly will consume more fuel leading to higher operating cost and emission of polluting gases like CO₂, CO, NO_x, SO_x. We help manufacturing units carry out Flue Gas Analysis to determine efficiency of their combustion systems and adherence to statutory norms. Regular checks of emitted flue gases make it easier for manufacturing units to detect inefficiencies early.

DYCONIX-Dynamic Control Systems Newsletter for Flue Gas Analysis/Boiler Tune-up Services

Combustion system, if not used properly will consume more fuel leading to higher operating cost and emission of polluting gases like CO₂, CO, NO_x, SO_x. **Dyconix** offers services in Performance evolution of Boilers. Feed air & Flue gas analysis, Optimization of excess combustion, Improving instrumentation for control, Improvement in operating practices, Incorporating heat recovery, Reduction of heat losses. **Dyconix** helps manufacturing units carry out Flue Gas Analysis to determine efficiency of their combustion systems and adherence to statutory norms. Regular checks of emitted flue gases make it easier for manufacturing units to detect inefficiencies early.

The Flue Gas Analysis is an effective way to gather reliable combustion data for analyzing and optimizing combustion efficiency of a system. Based on the result of the analysis, the combustion system's air-fuel ratio is reset to bring it close to stoichiometric combustion. It also helps measure and monitor manufacturing unit's adherence to the prescribed statutory pollution limits. By doing so, you save 1% - 2 % of fuel for every 10% reduction in excess air.

How does our Flue Gas Analysis work?

We make use of the Flue Gas Analyzer, Eurotron GreenLine 6000, which is a calibrated electronic instrument that measures the concentration of various gases emitted by the manufacturing units. Emitted gas samples are collected from the testing port opening of the chimney and processed through the Flue Gas Analyzer to measure the concentrations of Excess Air, Oxygen (O₂), Carbon Monoxide (CO), Carbon Dioxide (CO₂), Oxides of Sulphur (SO_x) and Nitrogen (NO_x), and flue gas temperature. The analyzer detects any deviations from the optimal range for a given combustion system and provides information to adjust the burners for optimum combustion.



Eurotron GreenLine 6000 Flue Gas Analyzer

Determined parameters:

- The chemical composition (O₂, CO₂, NO_x, CO, Sox.
- content of water vapor
- temperature
- flow rate, flow of volume and mass
- pressure/descent in flue pipe
- internal energy (latent and sensible heat)

We recommend that the Flue Gas Analysis test be undertaken once every Year to ensure effective and optimal functioning of the combustion system. Our trained service specialists will perform the test in the presence of your authorized personnel. There will be zero downtime during the analysis, and a report will be provided to you within 7 days.

Benefits of our FGA

- Higher Energy and Cost Savings – By optimizing combustion efficiency you save more on energy and costs
- Better Optimization – Based on the information, air fuel ratio is adjusted for optimal use
- Operational Excellence – Huge reduction in the production cost and increase in the quality of end-product
- Less Pollution – Regular monitoring reduces undesirable exhaust emissions
- More Safety – Analysis helps improve safety of your fuel burning equipment

One of the key benefits of Flue Gas Analysis is that it gauges your combustion system to run at its optimal efficiency leading to reduced energy bills and more savings. Simultaneously, you can also reduce your carbon footprint because of improved combustion. Regular monitoring of flue gas emissions help you monitor harmful gases such as carbon monoxide, and caution you to reset the system before it poses any threat.

ENERCON'S REPRESENTATIVE

Dyconix is Authorized Representative of ENERCON (Ministry of Environment, Govt. of Pakistan). We have audited and Improved Combustion Efficiency of more than 1000 Boilers in Pakistan up to optimum level. This saved money for the company and saves the Environment by eliminating the excess gases.



GOVERNMENT OF PAKISTAN
MINISTRY OF WATER AND POWER
NATIONAL ENERGY EFFICIENCY & CONSERVATION CENTRE
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Enercon.pakistan@gmail.com Ph:051-2272649 Fax: 051-2272182



TO WHOM IT MAY CONCERN

This is to certify that M/s **DYCONIX-DYNAMIC CONTROL SYSTEM** was enlisted with National Energy Efficiency and Conservation Centre (ENERCON) as an Energy service company. The company is providing services in the following areas/sectors;

- Boiler/ Burners/Steam Distribution Systems
- Auxiliary Electrical Utilities and Control Systems/
- Waste Heat Recovery System)
- Motors,
- VFDs,
- Pumping Systems,
- Electrical & Thermal Utilities Network.



Asad Mahmood
Manager Technical
Energy Conservation Fund-ENERCON


Please direct your Queries at the following contact information:

**Nasir Mahmood
(Chief Executive)
Dyconix-Dynamic Control Systems**

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0092-315-4152642

Email: dyconix@brain.net.pk
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dyconixdcs@yahoo.com

Address: 94-A, PCSIR-II, Johar Town, Lahore-54570, Punjab,
Pakistan

 DYCONIX Dynamic Control Systems	<h2 style="margin: 0;">Flue Gas Analysis/Boiler Tune-up Services Enquiry Form</h2>						
Applicants Information							
Full Name*:							
Company Name*:							
Business Type*:	Manufacturer <input type="checkbox"/>	Service Provider <input type="checkbox"/>	Distributer <input type="checkbox"/>				
Telephone/Cell No*:		Email*:					
Website:							
Mailing Address*:							
Site Address*:							
Services Requested							
Sr. No.	Item* (Please Specify E.g. Burner/Boiler/Genset/Machines etc.)	Capacity* TPH/Heating Surface/KW etc	QTY*	Location (Indoor/Outdoor etc.)	Scope of Services*		
					Analysis	Tuneup	Analysis Reports
1					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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9					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Terms & Conditions							
Confirmation:							
1- Reservation will be confirmed upon the receipt of Work/ Purchase Order. 2- A suitable time will be allotted with agreement from all the parties involved for the visit of our team members.							
Taxes:							
1- All taxes will be as per government policy.							
Boarding/Transportation:							
1- Boarding and Lodging (if applicable) will be the responsibility of client. 2- Transportation and visit charges may be included in the Price offered.							
Report:							
1- Report will be issued (via email/post) within 10 working days of the completion of analysis.							
Note:							
1- Items marked with (*) are necessary for us to give you an offer.							
I HEREBY AGREE TO ABIDE BY THE TERMS AND CONDITIONS FOR SERVICES FROM M/S DYCONIX.							
_____ APPLICANTS SIGNATURE				_____ DATE			
Mailing Address:	Please post your filled enquiry form to the following address: Nasir Mahmood (Chief Executive) Dyconix- Dynamic Control Systems. 94-A PCSIR-II, Johar Town, Lahore, 54570.			Or Email the scanned (soft copy) to the following Email Nasir Mahmood: nasir@dyconixeng.com Muhammad Zia: proposal@dyconixeng.com			