

**Chemtrols established its Process Analytics Division in 1983 to provide solutions to Process / Stack / Ambient Analysis / Gas Detection System, as a totally integrated system and under a single point responsibility. We are one of the few companies in India, who have developed an in-house expertise in Analytics. This position has been earned through our emphasis on world class engineering, impeccable project execution and rendering quality services.**

## Process Analytics

Designed, engineered, supplied, installed, and commissioned 3,000+ Analyzer Systems globally as well as locally to various industries like refineries, petrochemical, chemical, fertilizer, power and cement and steel plants. Such projects involve, taking a turnkey responsibility for Application data review, Engineering, Construction, Integration and Installation in Analyzer House.

### Analysers House

Process analyzers are supplied as individual systems or integrated into Analyzer Houses as per the customer needs. Total solution right from sample probe to sample conditioning to sample return/ disposal is offered. The analyzers offered are ATEX or IECEx certified. The design basis of the analyzer system is done based on API-RP-555, EN60079 standards.

When supplied as part of Analyzer house, the total system is supplied integrated, prewired, pretubed and tested and inspected. The Analyzer houses are constructed and built based on IEC 61285, NFPA 496 standards complete with Heating Ventilation & Air Conditioning units(HVAC) with Air intake duct, Hazardous area certified electrical distribution system, Fire and smoke detection system and Safeguarding system to operate the Analyzer house. A detailed 'Cause and Effect' table logic is build. All electrical items are supplied IEC EX or ATEX certified for required area classification.

HVACs as well as Split / window type Exproof Air conditioning units are available for Zone 1 IIC T3, Zone 2 IIC, T3 using ATEX certified components. The HVACs are available from 3 Ton capacity to 20 Tons with option of heating, using steam or electricity.

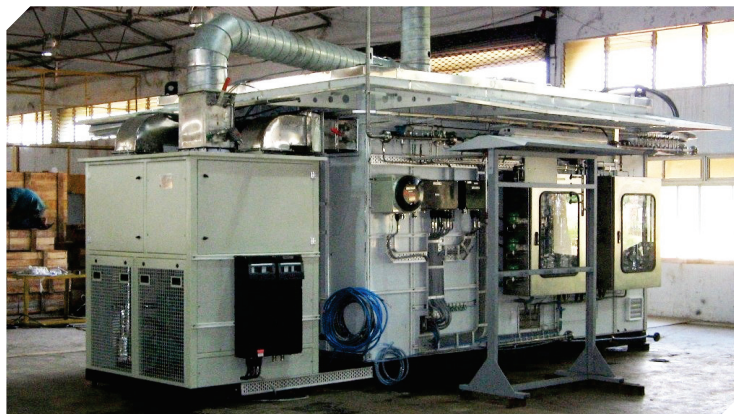
Custom made Analyzer Houses can be built of various sizes upto 22 meters x 6 meters built and supplied in single piece.

### Process Analytics Product Solutions

Process Analysers ● Stack & Heater Analyzers ● Physical Property Analyzers / Blending Packages ● Gas Chromatographs ● Custody Transfer Solutions ● Photometric Analyzers ● Mass Spectrophotometer ● Analyzer Management System ● Integrated Analyzer package system with Shelter ● Specialized Analytical solutions for FCCU, SRU, HDPE, CRACKER, VCM, MEG PP, Butadiene, DRI plants based on Licensors philosophy.

### Product Quality / Blending

Analyzer packages for Blending Automation of Motor fuels (MS/HSD), Tank Farm product quality are available including Near Infrared, Physical property, Sulfur and Density to provide accurate and repeatable measurements and correlating to respective ASTM standards of the laboratory instruments. These systems are supplied complete with validation system and Recovery system.



## Continuous Emission Monitoring Systems (CEMS)

Optimum solutions to the measurement and monitoring of various pollutants like SO<sub>2</sub>, NO<sub>x</sub>, CO, CO<sub>2</sub>, NH<sub>3</sub>, HCl, HF, THC, Mercury, etc. Based on the vast experience gained in such systems, Chemtrols today provides solutions on technology platforms on either Dilution, Extractive, Hot Extractive or In-situ measurement.

### Dilution System

Sample is extracted and diluted with zero air in the probe. Since, dilution takes place within the probe, there is no need for a heat-traced sample transportation line.

### Hot - Wet Extraction System

Sample is extracted from stack / duct through a heated filter. Blow back arrangement is provided for cases where there is high dust load. Extracted sample is transported using heat-traced line to the sampling system.

### In-Situ Instruments

An in-situ gas analyzer sits directly at the measurement point on the stack / duct. Both, cross duct and probe measurement techniques are available.



## Ambient Air Quality Monitoring (AAQMS)

Ambient Air Quality Monitoring Systems or AAQMS monitors the level of pollutants. From a single analyzer to complete turnkey systems (Both Mobile and Fixed) with shelters, hard wired or wireless data transfer to the pollution boards. Chemtrols provides a wide range of solutions to meet much of the Ambient Air Quality Monitoring demands.

Conventional Analyzers – SO<sub>2</sub>, H<sub>2</sub>S, NO<sub>x</sub>, NH<sub>3</sub>, CO, CO<sub>2</sub>, O<sub>3</sub>, and HC • BTX Analyzers – Benzene, Toluene, and Xylene • Particulate Monitoring – TSP, PM<sub>10</sub>, PM<sub>2.5</sub> • Sampling Systems • Calibration Systems • Meteorological Sensors • Data Acquisition and Management Systems • Analyzers designed according to US EPA regulations / equivalent regulations • Ethernet connectivity for efficient remote access • User-friendly interface with single button programming and large display screen • Well thought out of layout design for easy accessibility to components • Report generation on an hourly / daily / weekly / monthly / yearly basis.



## Flame & Gas Detection Systems

Flame and Gas Detection systems with/ without SIL certified controlling & PLC conforming to IEC 61508.

These systems are also supplied with wireless communication, using HART/ ISA 100/ GSM wireless.

- SIL 2 certified Hybrid Sensors
- SIL 3 certified Controllers
- Point IR Gas Detectors
- Open Path IR Gas Detectors
- Catalytic Detectors
- Electrochemical Detectors
- Metal Oxide Semiconductor Detectors
- Flame Detectors
- Photo Acoustic Detectors
- Ultrasonic Gas Leak Detectors

