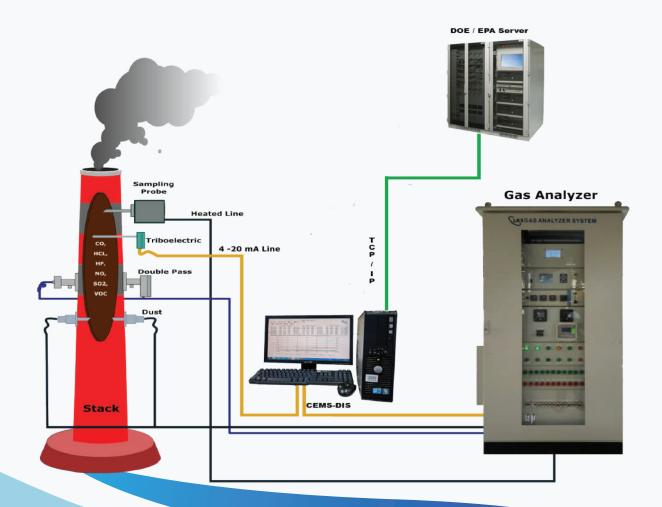
CEMS - Oil & Gas Refinery

Source Capacity

- Catalytic Cracking
- Calcination

Type of CEMS Analyzer

- Extractive Gas Analyzers
- Insitu Gas Analyzer
- Particulate In-Situ Analyzer









Emission Limit Value for some of the source sector required CEMS

Source Activity	Source / Capacity / Fuel Type	Pollutants	Limit Value (mg/m³)
Oil & Gas Industries: Refineries (All sizes); Natural gas processing and storage; storage and handling of petroleum products	Catalytic Cracking	SO ₂ Total PM	1200 40
	Calcination	Total PM	40

DOE / EPA Requirements

- Listed appointed and approve company in DOE / EPA website
- TUV / MCERT Certificate
- Data Acquisition System (DAS)
- Data Interface System (DIS)

Gas & Dust Analyzer Working Principle

Parameter	Principle	Sampling Type	
Culabur Dismida (CO.)	NDIR, NDUV, GFC, FTIR, PAS, Fluorescence	Extractive	
Sulphur Dioxide (SO ₂)	DOAS, GFC, FTIR	Insitu	
Total PM / Dust	Light Scatter, Beta Absorption	Extractive	
Total FM / Dust	Transmissionmetry / Triboelectric Double Pass, Single Pass	Insitu	