Dioxin Sampling Systems

GT90 Dioxin+



The GT90 Dioxin+ is designed specifically for long-term sampling of dioxin emissions. The automatic system represents the cutting-edge technology for dioxin sampling and fulfills all requirements of the dioxin measurement standard. Monitoring is done in conformity to the European standard EN 1948-1.

There are two versions available:

GT90 Dioxin+ Standard

- Two-probe version of GT90 Dioxin+
  - Especially designed for improving the sampling representativity of stacks with large diameters
- Options for fine dust and heavy metal sampling available (ParTrace®)
  - Fine dust option: For collecting and separating of PM10, PM2.5 and optionally PM1
  - Heavy metal option: For collecting heavy metals and dust by using an
  - additional separation step (the collection takes place at a lower temperature

GT90 Dioxin+ Compact



- Single probe version of GT90 Dioxin+
- Suitable for stacks with a smaller diameter
- Main power: 230 V 16 A, + neutral + ground
- Partrace option not available

High quality measurements can be achieved with both versions.

Both versions are also perfect for continuous isokinetic sampling of hazardous organic compounds in industrial and domestic waste incineration plants. In addition to dioxins, the system is capable of measuring furans and other persistent organic pollutants (POPs), such as polychlorinated biphenyls (PCBs) and polycyclic aromatic hydrocarbons (PAHs). GT90 Dioxin+ can also be equipped with the ParTrace option, enabling heavy metal and fine dust collection.

The GT90 Dioxin+ was designed to sample even the lowest dioxin and dioxin-like compound concentrations in harsh industrial environments. The system has been performance tested and validated, allowing measurements down to 0.0003 – 0.252 ng I-TEQ /m3. The system can withstand dust loads up to 150 mg/m3 and velocities up to 30 m/s without any effect to the performance.

Key benefits of GT90 Dioxin+:

- Long-term isokinetic sampling
- Conformity to EN 1948-1
- Sampling of dioxins, furans and other persistent organic pollutants (POPs)
- High sensitivity
- Availability of 100%

Gasmet Software

FTIR analyzers: Calcmet software

All Gasmet FTIR analyzers come with the Calcmet software. The software collects, stores and visualizes the FTIR spectra of the sample gas and analyzes the sample spectra for the gas concentrations.

The Calcmet software analyzes the sample spectrum using a sophisticated algorithm. It can simultaneously detect, identify and quantify up to 50 different gas components from a single sample. Cross-interference effects are compensated, and analysis accuracy is maintained even when analyzing complex gas mixtures where gases have overlapping absorption spectra.

Calcmet software comes with a user interface allowing simultaneous viewing of concentration results, sample and reference spectra and time trends for the analyzed gases.

Sample spectra can be easily re-analyzed, since the sample spectra are stored as separate files on an external computer.

Calcmet software can also identify previously unknown components – a feature that has often shown its value in process control.