

Particulate- Iodine-Tritium Stack Monitor

Application

PIT Monitors are used to assess presence of particulate, iodine, and tritium in the exhaust ducting or plant exhaust stack.

Features

- Equates sample to stack flow
- Determines overall contamination in stack
- Measures duct air flow
- Extracts a measured sample of exhaust air
- Stack monitor for tritium
- duct monitoring for tritium
- Measures for particulate
- Measures for iodine

Description

Tyne has been mainly involved in the measurement of tritium in stack flow, but other contaminants may also be included, or in some cases the customer may wish to determine the nature of the contaminants. For example he may wish to know whether tritium discharged was elemental or HTO, or may wish to know if betas measured were in the form of tritium or carbon -14.

To determine stack flow Tyne has used Sierra flow measuring equipment. This comprises a stack insertion probe through which a representative air sample can be taken from the duct. This process considers the size and shape of the duct. The sample will be processed through custom made equipment designed to meet the purchaser's requirements, measured for tritium through conventional detection equipment, totalized, and then compared with the full flow through the duct to determine the total tritium or other components released to the stack.

Tritium stack monitors can be provided with computer controls, permanent computer read out, monthly or continuous collection of data etc to meet individual requirements of clients and regulatory authorities.



Stack monitor internals

Tyne's flow measurements are controlled via sensitive mass flow controllers and meters; Tyne will provide calibration curves, operating and maintenance manuals, and other documentation required by the purchaser.



Temporary Mobile Stack monitor

Tyne designs and builds to an ISO 9001:2000 Quality Management Program .



Stack analysis equipment

Because of the variety of stack monitors we have not attempted to provide any specifications. Please contact us to discuss your requirements.