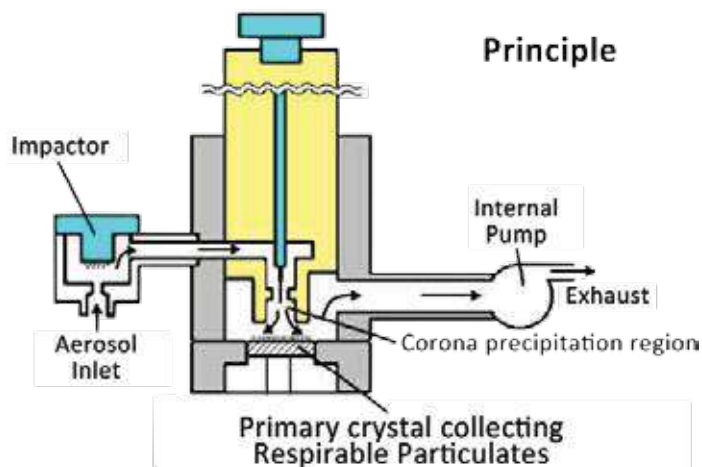


Dust Measuring Methods

■ **Piezobalance Method**

An air sample enters the system, it travels through the impactor, which captures and removes larger particulates away from the sample. Smaller particulates become electrically charged and deposited on the piezo-crystal. The total mass of the deposited particulates affects the piezo-crystal's frequency. Since the change in frequency is proportional to the mass of the particulates, the actual weight of the particulates is obtained. This method does not require a K-factor, so no gravimetric sampling is needed.

Since some particle matters such as oil mist absorb lasers, the Piezobalance dust monitor would be ideal (the light scattering method would not give correct measurements).



Monitoring Milling Operation

Applications:

- Monitoring milling operation
- Monitoring honing
- Monitoring boring operation

■ **Light Scattering Method**

When a laser hits particle matter, light scattering occurs. A dust monitor collects the amount of scattering light and calculates the mass concentration in proportion to the scattering light. Mass concentration is based on the density of particle matter, thus gravimetric sampling is required if the density is unknown.

Applications for light scattering dust monitor include Indoor air quality investigations, Point source monitoring, and Personal exposure monitoring.



Monitoring Welding Operation

About Kanomax USA, Inc.

Kanomax has delivered the best measurement solutions in its products and services that adapt precision measurement technology for fluids and particles. Kanomax product lines include anemometers, particle counters, dust monitors, and IAQ monitors. Kanomax is contributing to technological innovation and quality improvement for the processes of quality management, environment management, and technology development in the areas of environment, health, and energy, which are essential to sustain human well-being, as well as in other industrial areas including automobile, aerospace, semiconductor, electronics manufacture, heavy industry, steel, shipbuilding, pharmaceutical, biotechnology, food-processing, medical, construction, and civil engineering.

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