

# ELECTRO STATIC OIL MIST COLLECTOR

## OIL MIST / OIL FUMES / OIL SMOKE COLLECTION SYSTEMS

### Product Introduction:-

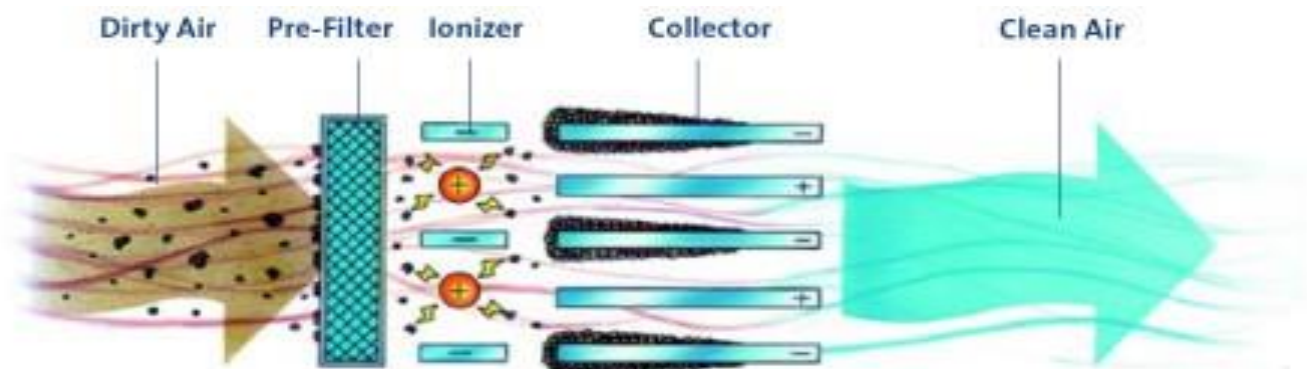
CLEAIR offers wide range of **oil mist collection systems** – both individual as well as centralized higher capacity systems. These systems collect the **oil mist, fumes, oil smoke & metal particles** released in the machining process efficiently. The installation of these systems results in Clean & Healthy machine shop environment, recovery of coolant oil, avoiding loss of conditioned air in case of AC shops, avoid machine shutdowns on account of fumes deposition on the machine controls etc.

### How it Works

Polluted air is drawn into the unit by the direct driven blower after passing through a pre-filter, the particles in the CLAIR works on the principle of Electrostatic Precipitation. Air is drawn by the motor/blower through a washable metal mesh pre-filter which traps large dust particles. The remaining particles, some as small as 0.01 microns, pass into a strong electrical field (ionizing section) where the particulate receives an electrical charge. The charged particles then pass into a collector plate section made up of a series of equally spaced parallel plates. Each alternate plate is charged with the same polarity as the particles, which repel, while the interleaving plates are grounded, which attract and collect. The pollutants are held in these plates until they are washed away.

As compared to any type of filter having equivalent filtration efficiency, ESP offers very low pressure drop. Relatively it is low power consumption.

AS per the construction of plate electrodes, it never requires any replacement over the lifetime (10-15 years). It only requires periodic cleaning. So, no replacement costs at all.



## Features Of CLAIR:-

- Clair electrostatic technology, purify efficiency of PM 2.5 is more than.
- Extremely small filtration resistance, easy to reconstruction the ventilation system.
- Modular design and easy to assemble at site.
- Humanization design on the testing door, the maintenance can be finished alone.
- Automatically alarming function while the pre-filter is dirty and choked.
- The filter can be installed into the original control system.
- Flexibility of layout
- Designed for minimum space requirement Effective capture of welding fumes from individual weld stations
- Avoids spreading of the fumes all over the shop
- Efficient filtration of the fumes
- Cleaner, safer & thus more productive working environment
- Better compliance for pollution control & ISO14000 requirements
- Lower operating cost because of lower blower HP
- Avoid huge duct work
- Zero replacement cost
- Financial benefit of 100% depreciation in first year



## CLAIR for clean air:-

1. Inlet Port
2. Stainless Steel Pre Filter
3. Ionizer cell
4. Collection cell
5. Stainless steel mesh After Filter

## APPLICATIONS

- Gear cutting, Gear grinding
- Hobbling, Center less grinders
- 5-Axis grinding
- Tool & cutter grinding machines

- Screw machines
- Induction hardening
- Induction heating
- Oil quenching in heat treatment
- EDMs
- Thread grinding machines