

Dust - Pollution and Worker Health

- According to NEERI dust particles account 30% in Mumbai pollution.



Problem Definition:

- HSE estimate that more than 500 construction workers a year are believed to die from exposure to silica dust.
- Dust builds up in the lungs and while the effects may not immediately be obvious, over a prolonged period of time causing harm to respiratory

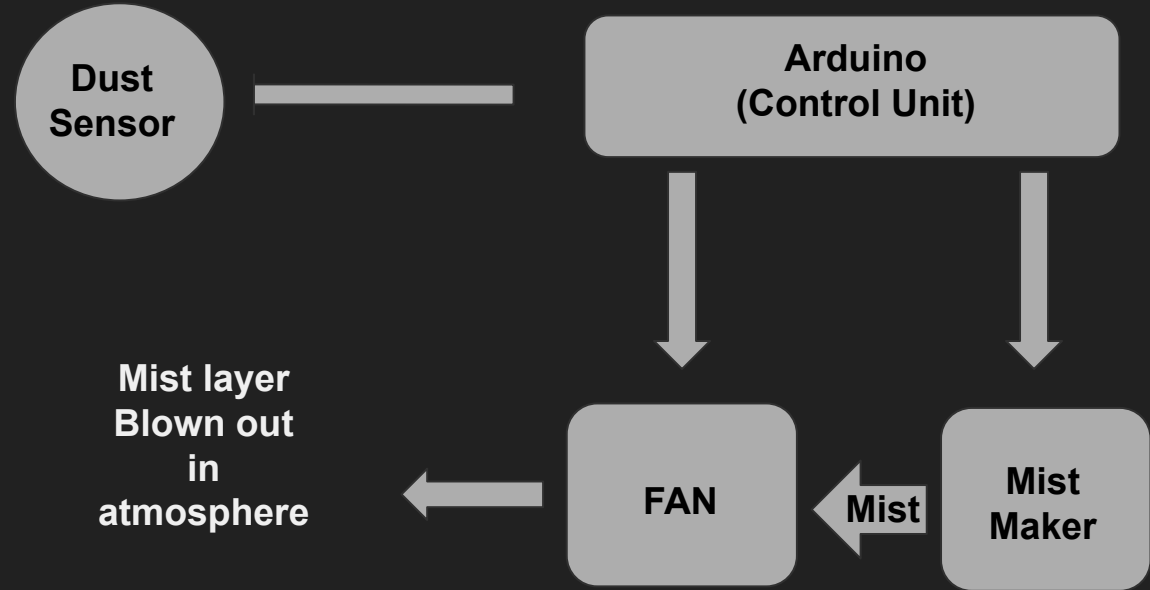


Common Dust-related diseases :

1. Lung cancer.
2. Silicosis.
3. Chronic obstructive pulmonary disease (COPD).
4. Asthma.

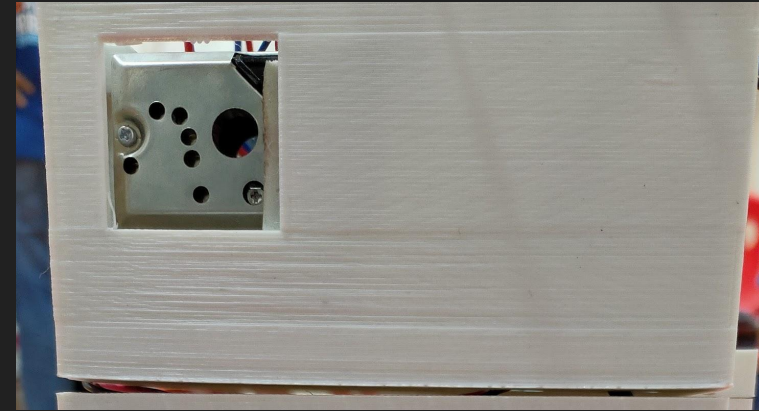
Automatic Dust Precipitator detects the presence of dust particles in the air and when it goes above a certain limit, It sprays very thin mist of water particles in the surrounding air.

Automatic Dust Precipitator



ADP is a small portable device which can be fitted in any location or on any device like Big Broomstick, Sweeping Machine, construction machines, Cranes etc.

It is made up of 3 units

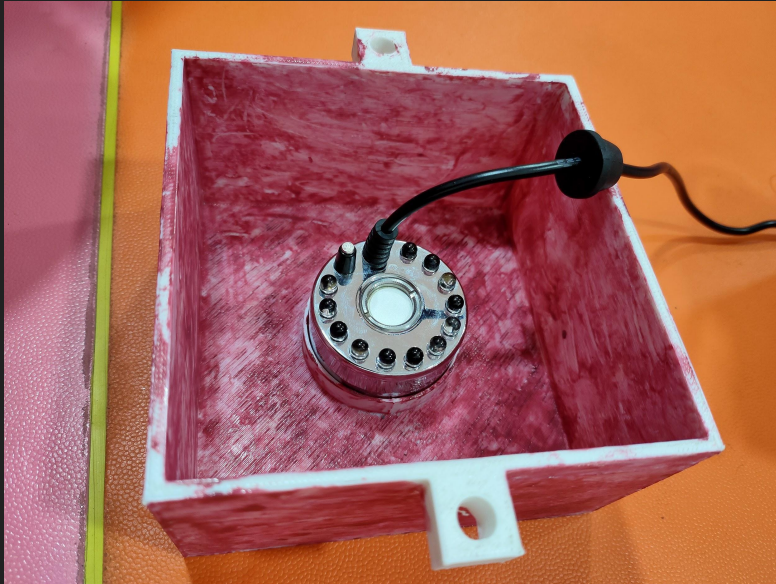


Unit 1: Dust Sensor and control Unit

- Dust Sensor continuously monitor dust density .
- Dust density exceeds certain limit it send signal to control unit.

Unit 2: Mist Maker

- Control unit Send signal to mist maker and it start making thin mist.



Unit 3: Blower

- Blower consist of a fan which spread out a layer of mist in atmosphere and settle down the dust.