

# Mini Portable Fogging Machine

Samit lanjewar<sup>1</sup>, Vansh Wagh<sup>2</sup>, Piyush Tadose<sup>3</sup>, Krishna Rai<sup>4</sup>, Sahil Godbole<sup>5</sup>, Prof.Mr. PrashantRahate<sup>6</sup>  
<sup>12345</sup> Students, Department of Mechanical Engineering, NIT Polytechnic, Nagpur  
<sup>6</sup>Faculty, Department of Mechanical Engineering, NIT Polytechnic, Nagpur  
<sup>7</sup>Head of Department of Mechanical Engineering, NIT Polytechnic, Nagpur

**Abstract - A fogging machine uses heat to Convert liquid Pesticide into a fog or gas. Fogging Machine is very favoured equipment used for mosquitoes control operation. These foggers are helpful in conserve disease free environment. The Machine is the best for healthful living. plant protection, industries etc. These fogging machines are modernistic designed with super excellence high performance and efficiency. A Portable Fogging Machine have its name so because it is a device that uses heat emission a fog without demeaning the active additive. A fogger produces droplet of changed sizes including a multitude of very small droplets.**

**Index Terms - Hotels, Canteens, Restaurants and in Private House & Gardens.**

## I.INTRODUCTION

Mini Foggers are powered by acalibrepropane or butane gas cassette. The water or oil dilutant is warmed up and then the chemical is added at the last moment to create a fog or mist. The Mini fogger is categorical for fogging biopesticide and disinfectants in locations with no access to electric current including patios, parks, chicken coops and greenhouses.

1. Tank Capacity 2.8 Litres
2. Type Butane / Propane Cartridge
3. Droplet Size 5 – 30 microns
4. Net Weight 1.7 kg
5. Dimensions 61 x 17.5 x 40 cm

This is a thermal Fogging that can be used for different of applications starting from controlling pests.to spaying antiseptic.



Fig. 1.1 Mini portable Thermal Fogging machine solutions. Fog is a portable fogging and works with propane or butane gas, so no electric wires are needed to power the Fogging. As this is a thermal fogger it generates a thick white cloud of fog that carry a large count of tiny particles. The fog generated by a thermal fogger can penetrate the miniature both indoors and outdoors and are very effective in control pest applications. For example, the fog developed by this mosquito fogger can reach inside thick shrub and tree herbage outdoors and small gaps and cracks in floor or walls indoors.

## II. LITERATURE SURVEY

The fogger is made from a hard-wearing plastic and stainless-steel material. The bodywork of the fogger is made from polymers, but the heat coil is made from stainless steel. On top of the fogger there is a convenient handle for transfer the fogger around. The fogger can be capability by a propane or butane gas by insertion a cassette in the back of the fogger. the fogger does not come with a fuel cassette so you will need to sell it separately. Users will need an expendable camping stove style butane or propane canister. These are available at major crucial stores and most greengrocery. A canister will last many solicitations as only a small amount of gas is gobbled to run the burner fogger is provided with a 400ml alchemical solution tank and a 2.8 liters courier solution tank. The tank is also made from a hard-wearing polymers material. You can fill the carrier solution tank with both oil and water-based explanation. Inside the quick fix tank there is a pump, which is used to pump the fogging liquid from the tank to the passion coil where it gets heated to a high warmth and vaporizes when released from a nozzle. Under the handle there is a fogging activate. On the left side of the fogging is an auto catch fire switch that lights a particle to the heat coil when

pressed. The heat gathering part of the fogger comprise of multiple parts such as a burner, coil, safety basket, solution supply tube and a nozzle.

### CORONAVIRUS AND THERMAL FOGGING

Fogging shows to be effective at decontaminate external for other pathogens. It may be able to deodorize against the covid-19, as well. Because the covid-19 shares some peculiarity with other viruses, regular sanitize methods may be effectual, too. Sanitize high traffic. That why companies use thermal fogging to try to combat the covid-19. It could be one of the approaches that abolish the viruses in public and personal places. Fogging turns cleaning mixture into warmed up fog that can get in between crevices. The disinfecting fog permeates the whole structure. It cleans the air and surfaces. When done right, thermal fogging eliminates many of the pathogens found in area. This is far beyond what can be done by regular janitorial staff, that is a job performed by a professional protective equipment.

### III.OPERATION OF COMPONENTS

Fogging with this implement is pretty simple and the fogger is frailer than most ULV fogger. The scapular strap makes it easier to transfer around. Although this is an immense and more influential fogger than most lesser propane foggers, you need to use round about. the same amount of fogger solution.



#### 1) Container

To use the fogging first take of the conveyor solution tank and fill it with your fascination conveyor, water for water-based fogging or diesel/mixture of hydrocarbon molecules for oil-based fogging. Then pervade the chemical solution tank with the thinned fogging.



#### 2) Coppr or Stel Arrangement

synthesized. We recommend the use of Py-Bo Natural Tanacetumcoccineum Concentrate when using for mosquito control. The fogger is potentiality by a propane or butane gas cassette. To light the fogger, appropriate the gas capsule to the back of the fogger and make sure it is properly inflexible to the fogger. Then open the gas constricted by turning the valve next to the barrel anti clockwise. After that press, the auto flares up button on the body of the fogger and wait for about firm a minute until the burner has stormy up. When the fogger has heated up to a proper warmth and altitude synthesized you can start to fog by depressing the fogging stimulate located under the handle of the fogger. To turn the fogger off close the synthetical supply valve and turn off the gas supply by closing the gas supply valve dextrorotary. Clean the fogger from left over carrier solution and fogging chemicals before depository.

Mosquito fogger has got many improvements for dissimilar control implementation such as movability, effective particle size for flying insect control, large sprayer distance of approx. 9 meters and ability to sprayer oil and water based not only for insect and pest control but also explication to spray other solutions such as antiseptic. The fogger can be used in lesser areas such as homes, courtyard, patios and comparable as well as larger outdoor and indoor areas.

### IV.METHODOLOGY

The method we followed to Complete the project is as follows:

1. Collecting research Paper: Collecting research paper from the internet on the prefabricated machines.
2. Project proposal: Making a project proposal for the selection of project and experiencing our ideas with project Guide and getting suggestion and submitting the project proposal to the project guide.
3. Selecting area of work: After project finalization we have to decide and area of work for fabrication of Fogging Machine. Making CAD model and animation of machine: making and CAD model of machine for explain all the concepts related to the machine.
4. Finding resources: Resources should be fined for machines it requires some parts which are readily available in market also the other parts. works and fabrication works done from various workshops finding the materials and materials for fabricating parts.
5. Collecting different components: after fabrication and purchase components should be collected at various location of workplace.

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#### V.WORKING

Thermal fog is better for reaching into lesser spaces than wet fog generates by better part of ULV foggers. propane fogger can be used in home, backyard, garden, powerful sites, greenhouse, and many other places. Although this is a bit larger and more influential fogger than most respective use thermal foggers, it still packs the same useful features as a systematic thermal fogger such as adjustability, that allows to use it to fog outdoor areas.

#### VI.CONCLUSION

The technology is to add to the safety of the operator by operating the fogging machine at safe distance. This increases the efficiency of the output because human error due to poor visibility can be minimized. The system is designed and developed productively, for the display purpose prototype model (mini reproduction) is constructed.

#### REFERENCE