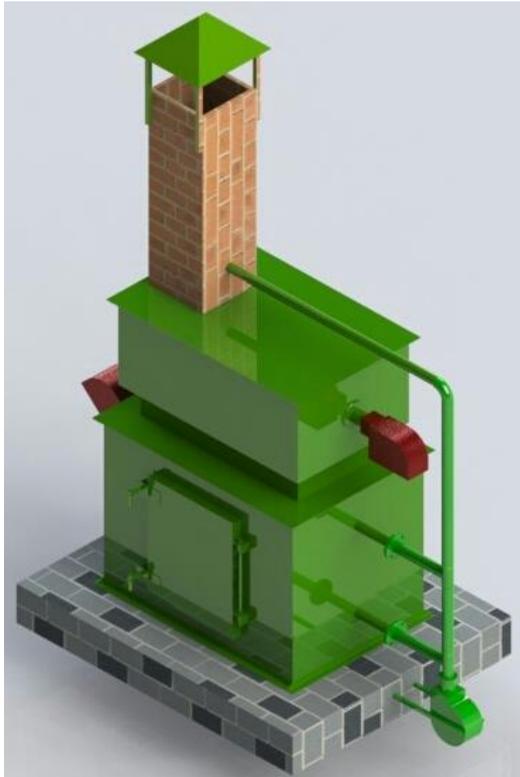




BIOMEDICAL SOLID WASTE INCINERATOR



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Introduction

Biomedical Solid Waste Incinerator is a special design machine for the reduction of refuse into inert gases and solids by controlled combustion. For over twenty years, TEMDO as R&D institution has developed this special machine to handle hospital wastes efficiently at the same time protecting the environment. This machine burns Biomedical Solid Wastes to highest recommended temperature and allows only harmless smoke to be released to the atmosphere. By designing this machine, TEMDO has substantially reduced the problem of importing the Biomedical Solid Wastes Incinerator from abroad which is a burden to our economy and most of our hospitals cannot manage due to their limited resources.

Working Principle

Incineration of Biomedical Solid Wastes involves two steps carried out inside two chambers of the incinerator. In the primary process, combustible biomedical solid wastes are burned, producing combustion gases and non-combustible residue and ash. This is followed by secondary process in which the product combustion gases, vapors, and particulates driven off during the primary process are further burned at much higher temperature before being vented directly to the atmosphere. The non-combustible ash residue is removed from the incinerator system and is disposed of in a landfill. Incineration provides the advantage of greatly reducing the mass and volume of the waste. This reduction substantially reduces transportation and disposal costs.

Biomedical Solid Waste Incinerator Features:

- 1. Primary Chamber:** The function of the primary combustion chamber is to receive the waste which is fed through the charging door, to initiate combustion with the aid of a burner, and to maintain the temperature.
- 2. Secondary Chamber:** The function of secondary combustion chamber is to re-burn the gas coming from the primary combustion chamber with excess-air to ensure complete combustion before allowing the combustion gas product to exit through the stack.
- 3. Burners:** TEMDO incinerator have two burners which uses diesel. The function of primary burner is to ignite the waste and to maintain a constant combustion temperature of 900°C in primary chamber. The secondary burner is used to burn the gas coming from the primary chamber and maintain the temperature to a constant level of 1100°C-1400°C.
- 4. Chimney:** This is a vertical pipe through which hot flue gases are exhausted to the atmosphere.
- 5. Control System:** The function of automatic control system of the incinerator is to control temperature. The temperature of each chamber of the incinerator is to be controlled to preset values.
- 6. Capacity:** This Biomedical Solid Waste incinerator has rated capacity of 50-80kg/hour
- 7. Overall Dimensions:** 5500mm x 1500mm x 1300mm (H x L x W)
- 8. Weight:** 3,500Kgs.

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