

"Turn Waste into Energy with MT Makina Incineration Plants"

SolidWasteIncinerationPlant,Sustainable Waste Management;

A solid waste incineration plant is a sustainable and efficient solution for modern waste management. It provides energy recovery by reducing the volume of waste and minimizes environmental impacts. Solid waste incineration plants are facilities that dispose of various types of waste by burning them at high temperatures and generate energy in the process. Different types of waste such as household waste, medical waste, commercial waste and industrial waste are processed in these plants. Despite high installation costs, they offer energy efficiency and waste reduction advantages in the long term. Equipped with technological innovations and optional features, solid waste incineration plants will continue to play a critical role for a cleaner and more sustainable environment in the future.

Domestic, commercial, medical and industrial wastes are transported to the incineration plant through waste collection systems. When the wastes reach the facility, they are kept in temporary storage areas for a short period of time. The waste is loaded into the incinerator through hydraulically controlled lids. The waste is burned in the combustion chamber at high temperatures (usually 850-1200°C). In this process, the volume of waste is reduced and energy is released. The heat released in the combustion process can be used to generate electricity through steam turbines or directly as heat energy. The gases produced after combustion are treated with advanced emission control systems, preventing the release of harmful gases into the environment. Ash formed after combustion is removed from the furnace through ash covers and disposed of properly.

Solid Waste Incineration Plant Advantages;

The volume of waste is reduced by up to 90%, resulting in more efficient use of landfills. The heat released in the combustion process can be converted into electricity or heat energy through energy recovery. The release of harmful gases is minimized thanks to advanced emission control systems. Medical and hazardous waste is disposed of safely. Not all types of waste can be incinerated; some wastes may adversely affect the combustion process.



Versatility

The capacity to process different types of materials makes these machines suitable for various industries.

Emission Control

Gases produced after combustion are treated with emission control systems. These systems prevent the release of harmful gases and particles into the environment.

Low Maintenance Requirement

Long life thanks to its robust structure and durable blades.

Combustion Control System

Provides air supply and temperature control to optimize the combustion process. Primary and secondary air supply systems are available.

Safe Disposal

Complete incineration of waste at high temperatures ensures the destruction of harmful microorganisms and toxic substances.

Environmentally Friendly

With advanced gas cleaning systems, emissions are kept to a minimum and the environment is not harmed.

High Efficiency

The highly efficient incineration process ensures fast and efficient disposal of waste.

Amount of Waste Reduced

Leaves less end product than other methods. There is no possibility of contamination of the final product and no risk of viruses or bacteria in the flue gas.

Durability and Longevity

They are manufactured using materials that are resistant to high temperatures and have a long service life. This ensures reliable operation of the ovens for a long time.

Health and Environmental Safety

Safe disposal of hazardous waste minimizes environmental and health risks.

Technical Specifications

MODEL CAPACITY (KG/S) SHATTERER	
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Solid Waste Incineration Plant Performance and Efficiency;

Hazardous Waste Disposal

Medical and hazardous waste is disposed of safely.

Incineration

The waste is burned in the combustion chamber at high temperatures. Preheated combustion air and pulse ignition burners ensure complete combustion.

Ash Discharge

After combustion, the ash is removed from the furnace through ash covers. Our automatic ash discharge systems speed up this process and reduce the workload of the operators.

Waste Minimization

The volume of waste is significantly reduced, resulting in more efficient use of landfills.



Solid Waste Incineration Plant, Points to Consider;

Waste that is not suitable for the incinerator can adversely affect the combustion process and lead to harmful emissions. Therefore, the suitability of waste for the incinerator should be checked. Regular maintenance and monitoring of incinerators is necessary. This ensures efficient and safe operation of the systems. The correct functioning of emission control systems is critical to prevent the release of harmful gases into the environment.

OPTIONAL FEATURES

- Mobile Incineration Option
- Pre-shredding Machine

- Heat Recovery System
- Automatic Loading
- Automatic Ash Discharge
- Wet Chimney Flushing System
- Dry Chimney Washing System
- Semi-Dry Chimney Flushing System
- Gas Filtration System
- Emission Monitoring System
- Production in Different Capacities
- Different Brand Burners



FREQUENTLY ASKED QUESTIONS (FAQ)

WHAT IS A SOLID WASTE INCINERATION PLANT?

Solid waste incineration plants are facilities that dispose of domestic, commercial and industrial wastes by burning them at high temperatures and generate energy in the process. These facilities reduce the volume of waste and provide environmental and

economic benefits by converting the heat generated in the combustion process into energy.

HOW DOES A SOLID WASTE INCINERATION PLANT WORK?

Domestic, commercial, medical and industrial wastes are transported to the incineration plant through waste collection systems. When the wastes reach the facility, they are kept in temporary storage areas for a short period of time. The waste is loaded into the incinerator through hydraulically controlled lids. The waste is burned in the combustion chamber at high temperatures (usually 850-1200°C). In this process, the volume of waste is reduced and energy is released. The heat released in the combustion process can be used to generate electricity through steam turbines or directly as heat energy. The gases produced after combustion are treated with advanced emission control systems, preventing the release of harmful gases into the environment. Ash formed after combustion is removed from the furnace through ash covers and disposed of properly.

WHAT ARE THE ADVANTAGES OF SOLID WASTE INCINERATION PLANTS?

Reduces the volume of waste by up to 90%, resulting in more efficient use of landfill space. The heat released during the combustion process can be converted into electricity or heat energy through energy recovery. Advanced emission control systems minimize the release of harmful gases. Medical and hazardous waste is disposed of safely.

WHAT ARE THE DISADVANTAGES OF SOLID WASTE INCINERATION PLANTS?

Solid waste incineration plants are costly to install and operate. Harmful gases and particulates can be generated during the combustion process, so emission control is critical. Not all types of waste can be incinerated; some wastes can adversely affect the combustion process.

WHICH WASTES CAN BE INCINERATED IN A SOLID WASTE INCINERATION PLANT?

A solid waste incineration plant can incinerate a wide range of wastes such as household waste, commercial waste, industrial waste, medical waste and hazardous waste. However, the suitability of the waste types for the incineration plant should be checked.

HOW TO RECOVER ENERGY IN A SOLID WASTE INCINERATION PLANT?

The heat released in the combustion process is used to generate electricity through steam turbines or directly as heat energy. This energy can be used to meet the facility's own needs or sold to the national electricity grid.

HOW TO CONTROL EMISSION IN A SOLID WASTE INCINERATION PLANT?

Post-combustion gases are treated with advanced emission control technologies such as electrostatic filters, venturi scrubbers, neutralization, oxidation and absorption systems. These systems minimize the release of harmful gases and particles into the environment.

WHAT ARE THE ENVIRONMENTAL IMPACTS OF SOLID WASTE INCINERATION PLANTS?

When operated correctly, a solid waste incineration plant can minimize environmental impacts. Advanced emission control systems prevent the release of harmful gases and particulates into the environment. In addition, energy recovery reduces dependence on fossil fuels.

WHAT IS THE CAPACITY OF A SOLID WASTE INCINERATION PLANT?

The capacity of a solid waste incineration plant varies depending on the size and technology of the plant. For example, a plant may have the capacity to incinerate 5,400 kg of waste per hour.

HOW LONG DOES IT TAKE TO INSTALL A SOLID WASTE INCINERATION PLANT?

The installation of a solid waste incineration plant can typically take several months to several years, depending on the size and scope of the project. The installation process includes plant design, construction, equipment installation and testing.

WHAT IS THE COST OF A SOLID WASTE INCINERATION PLANT?

The cost of a solid waste incineration plant varies depending on the plant's capacity, technology, local regulations and other factors. Investment costs can be high, but offer energy recovery and waste management benefits in the long term.

IS A SOLID WASTE INCINERATOR SAFE?

Modern solid waste incineration plants are equipped with advanced safety and emission control technologies. These facilities comply with strict regulations and standards to protect the environment and public health.