SNA®
Waste Systems

Towards Sustainable Management of Medical Wastes

- *Risk Management*
- *Resource Recovery*
- *Waste Elimination*

www.snawastesystems.com

About Us

SNA Waste Systems is an epitome of quality in healthcare waste management. We follow the highest professional standards in manufacturing, marketing, sales and after-sales of medical waste management systems. SNA Waste Systems helps healthcare organizations in implementing sustainable medical waste management strategies through its innovative and state-of-the art systems and solutions.

SNA Waste Systems, in collaboration with its technology partner Sinotec Co., is pleased to introduce its revolutionary medical waste management system to clients worldwide. Our technology has tremendous potential to offset the damage caused to environment and public health by ever-increasing problem of healthcare waste in developing as well as developed countries.

SNA Waste Systems has the world's most advanced, environment-friendly and safest onsite real-time medical waste management technology, which conforms to World Health Organization (WHO) standards and latest trends in the developed world. Pulsation high-temperature and high-pressure sterilization technology makes SNA Waste System the most efficient and most economical medical waste treatment technology all over the world.

Current Methods of Medical Waste Treatment

Worldwide, the main treatment methods for medical waste are burning and landfilling, however there are serious public health and environmental concerns with the prevalent methods.

Burning Method

Burning produces a large amount of harmful substances: organic pollutants such as dioxins, furans; heavy metals such as lead, mercury and cadmium; fine dust particles such as hydrogen chloride, carbon monoxide and a lot of toxic dust, etc, which causes serious environmental pollution, poses grave threat to human health and results in global warming.

Landfilling

Landfilling of medical waste causes wastage of scarce land resources and pollution of soil, air and groundwater resources. The medical waste buried in the soil takes as much as 200 years for complete decomposition, which makes it a huge danger for human beings, wildlife and other ecosystems

Secondary Pollution

Medical waste contains bacteria, viruses and other harmful pathogens which can continue to spread its tentacles in the society in the form of secondary pollution. Susceptible populations are doctors, nurses, paramedical staff, patients, garbage collectors, cleaners as well as the general public. Improper management of healthcare wastes from hospitals, clinics and other facilities pose a grave risk to the society.

Uniqueness of SNA Waste Systems

SNA Medical Waste Management technology is cutting-edge, state-of-the art and eco-friendly, and will change our perception towards the hassles of medical wastes treatment.

Working Principle

The working principle of SNA machines is highly innovative, environment-friendly and technology-driven:

- Medical waste is powerfully shredded with patented technology tool bit, being stirred constantly during the sterilization process to ensure uniform sterilization without blind spots;
- The medical waste is sterilized in a pulsating vacuum under high-temperature and high-pressure steam condition. When the sterilization conditions reach LOG4 standard, it can achieve the indicators of pathogen disinfection and sterilization.
- SNA machine can reach LOG6 standard and above, and can completely kill the viruses and bacteria commonly present in the medical waste stream.

Working and Delivering **Worldwide!**

Onsite Real-Time, Sustainable and Safe Solution

- SNA machines can be installed in front of the hospital building or inside the hospital for real-time sterilization of medical waste, which transforms waste into harmless garbage as soon as it is generated.
- SNA machines effectively eliminate bacteria, viruses and other harmful microorganism present in healthcare waste, thereby minimizing the risk to public health.
- SNA machines eliminate the need for transporting dangerous medical waste through populated areas and natural habitats, thus removing all chances of secondary pollution...
- SNA machines do not release any harmful substances like wastewater, toxic gases, leachate etc. The treated waste is recycled.

Economical and Environment-friendly

- The onsite real-time treatment of waste generated in hospitals/clinics with SNA machine can save up to 1/3rd of the cost incurred in disposal of medical waste in healthcare establishments.
- The total processing cost of the medical waste treatment with SNA machines, including water, electricity, disinfectant and manpower is the most economical among all the known treatment methods.
- SNA method of medical waste treatment results in 70 – 80% reduction in volume of the waste, thus leading to significant decrease in packaging and transportation costs.

Recycling of Medical Waste

The treated medical waste can be recycled, saving nearly ten billion dollars of resources annually for the society, which meets the policy requirement of energy conservation and environmental sustainability.
The treated harmless garbage can be disposed as common household waste in a landfill. It can also be professionally recycled and separated for reuse by SNA Waste Systems.
The plastic recycled and separated by SNA Waste Systems can be used to make highway deceleration strip and plastic products, such as porous protected pipes for communications.

Safety and Reliability

- A fully enclosed operating system.
- Computerized control with touch screen displaying temperature and pressure values in the processing tank throughout the whole sterilization process.
- Remote system monitoring via internet or GSM networks, through the modern communications module.
- Automatic pressure release to ensure that the steam pressure is in the safe range.
- In order to ensure the safety of operating personnel, lid opening prevents the starting of the shredder tanks to a level 4 safety relay.
- Electrical components are separated from rest of the machine with an insulated and waterproof wall.

Operation and Traceability

- Fully automatic operation via the touch screen, network monitoring, easy to operate.
- Quick and easy to install. You only need a power connector, a water pipeline and a sewer interface.
- Closed course of action can completely eliminate bacteria and viruses from infectious waste, sharps, needles etc.
- An automatic control is managed by a programmable controller which stores important process parameters including temperature, pressure and time, which can be transmitted through a USB interface to the computer for instant review.

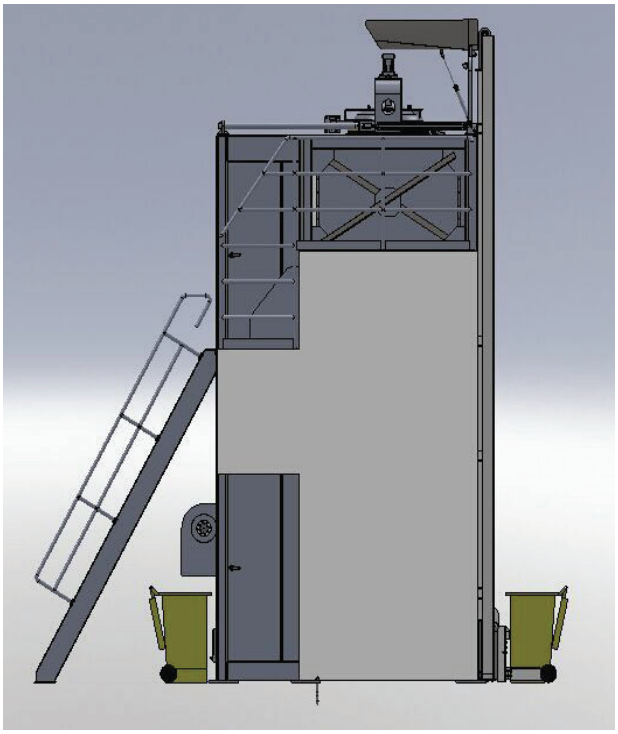
MWS80L

Design Parameters	MWS80L
Volume of treated waste per cycle	80L (Weight is around 8kg)
Water consumption per cycle	20 L
Electricity consumption per cycle	7 KWh
Diameter size of the feeding port opening	Φ500 mm
Total height	2.14 m
External size:Length X Width X Height	1.66 m X 0.89 m X 1.45 m
Weight	1100 kg
Power supply	380 V, 50 Hz/60 Hz, 30 A
Pressure and temperature of the steam generator	4Bars, 160°C/320°F
The average size of the treated waste	11.5 mm
Material of disinfection tank and steam generator	304 L stainless steel
Shell	304 L stainless steel
Water	Pressure: 4.5 Bars. In case of hard water, a softener is required
Diameter of drain outlet	Minimum Φ34 mm

MWS200L

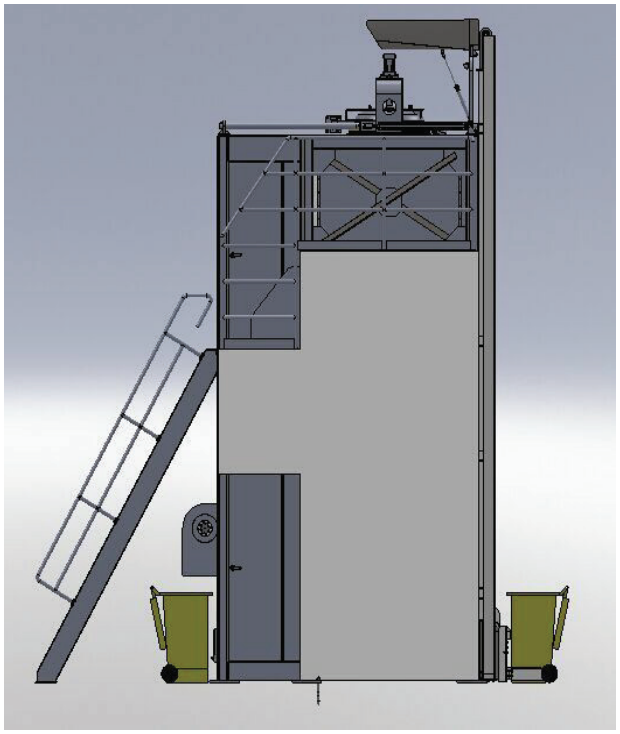
Design Parameters	MWS200L
Volume of treated waste per cycle	200L (Weight is around 20kg)
Water consumption per cycle	30 L
Electricity consumption per cycle	10 KWh
Diameter size of the feeding port opening	Φ480 mm
Total height	2.53 m
External size:Length X Width X Height	1.90 m X 1.10 m X 1.650 m
Weight	1500 kg
Power supply	380V, 50Hz/60Hz, 45A
Pressure and temperature of the steam generator	4Bars, 160°C/320°F
The average size of the treated waste	11.5 mm
Material of disinfection tank and steam generator	304 L stainless steel
Shell	304 L stainless steel
Water	Pressure: 4.5 Bars. In case of hard water, a softener is required
Diameter of drain outlet	Minimum Φ34 mm

MWS800L



Design Parameters	MWS800L
Volume of treated waste per cycle	800L (Weight is around 80kg)
Water consumption per cycle	50 L
Electricity consumption per cycle	36 KWh
Diameter size of the feeding port opening	Φ770 mm
External size:Length X Width X Height	3.40 m X 3.20 m X 5.50 m
Weight	10000 kg
Power supply	380V, 50Hz/60Hz, 150A
Pressure and temperature of the steam generator	6Bars, 160°C/320°F
The average size of the treated waste	11.5 mm
Material of disinfection tank and steam generator	304 L stainless steel
Shell	Carbon steel
Water	Pressure: 4.5 Bars. In case of hard water, a softener is required
Diameter of drain outlet	Minimum Φ60 mm

MWS2000L



Design Parameters	S2000L
Volume of treated waste per cycle	2000L (Weight is around 200kg)
Water consumption per cycle	120 L
Electricity consumption per cycle	50 KWh
Diameter size of the feeding port opening	Φ770 mm
External size:Length X Width X Height	3.60 m X 3.40 m X 6.85 m
Weight	15000 kg
Power supply	380V, 50Hz/60Hz, 250A
Pressure and temperature of the steam generator	6Bars, 160°C/320°F
The average size of the treated waste	11.5 mm
Material of disinfection tank and steam generator	304 L stainless steel
Shell	Carbon steel
Water	Pressure: 4.5 Bars. In case of hard water, a softener is required
Diameter of drain outlet	Minimum Φ60 mm

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