

Product

Integrated Autoclave with Shredder

MWI Series



Integrated Autoclave with Shredder (MWI Series) applies to hospitals as well as commercial plants which require higher automation. The system is composed of the autoclave, built-in shredder, supporting platform, automatic bin dumper (except MWI-150), electrical and pneumatic control cabinet, vacuum pump and optional steam generator system.

Quickview:

- **Capacity:**
150 - 2,500L per cycle
- **Type:** sterilization after shredding
- **Sterilization Temperature:**
121-138°C/250-280°F*
- **Sterilization Pressure:**
0.2-0.34Mpa/14.5-49.3Psi*
- **Microbial Inactivation:**
8log10(99.9999%)
- **Waste Volume Reduction:**
80%

*according to local standard



Working Process:

Loading: hospital waste is loaded into the loading chamber through an automated dumper or by manual.



Shredding: waste is crushed into unrecognizable pieces which then fall into the sterilization chamber. The shredder can identify waste jamming and change rotating direction alternately to grind the waste thoroughly.



Sterilization: the saturated steam is injected to destroy all germs and pathogens.



Cooling: water is sprayed into the chamber to decrease its temperature.



Post-vacuum: remove the residual steam and moisture; thus the treated waste become dry and cold at the end of the cycle.



Unloading: open the bottom door, unload the treated waste to a container and dispose it safely.



Safe:

- Green process without hazardous emissions.
- Compliance with strict environmental standards worldwide.
- The sterilization and shredding processes are completed in one closed vessel.
- No touch with waste, totally safe for the operator.

Reliable and durable:

- Advanced automatic cleaning technique during each cycle reduces chloride ions corrosion of inner wall.
- Wear-resistant blades
- High standard configuration and low maintenance cost.
- At least 15-year lifespan.

MWI Series	Unit	MWI-150	MWI-300	MWI-500	MWI-750	MWI-1000	MWI-1500	MWI-2500
Dimension (L×W×H)	mm ft	3000×1850 × × 2200 10×6×7.3	3800×2700× × 5100 12.5×8.9×16.7	3400×2700 × × 5300 11.2×9×17.5	4000×3000 × × 6000 13.2×10×20	4400×3400 × × 6500 14.5×11.2×21.5	5000×3400 × × 7400 16.5×11.2×24.4	6800×5300 × × 8400 22.3×17.4×27.5
Net Weight	ton	2	3.5	3.8	4.2	5.7	6.2	11
Rated power	kW	8	11	14	14	16	17	40
Effective loading volume	L	150	300	500	750	1000	1500	2500
	gal	40	80	130	200	260	400	660
Cycle time	min	30	30	35	35	40	40	45
Disposal waste capacity*	kg/cycle	18	36	60	90	120	180	300
	lb/cycle	40	80	130	200	270	400	660
Daily disposal waste*	ton	0.5	1	1.5	2.5	3	4	6
Serving beds (for reference)	-	290	580	820	1230	1440	2160	3200
Suggested workshop size	m ft	5×5×5 17×17×17	10×8×6 33×26×20	10×8×6 33×26×20	10×8×7.5 33×26×25	22×10×8 73×33×26	22×10×8 73×33×26	30×15×10 100×50×33

* Medical waste density is calculated as 120kg/m³ (1 lb/gal), however it can vary according to the local actual condition.

* Based on 16 working hours.