



# STERILWAVE

## INNOVATIVE SOLUTION FOR BIOMEDICAL WASTE MANAGEMENT



# BIOMEDICAL WASTE: A WORLDWIDE ISSUE FOR PUBLIC HEALTH & ENVIRONMENT

Health care activities protect and save lives. But what about the waste and by-products that they generate? Biomedical waste management process can be expensive and difficult to set up for health care centers. An unsafe management can cause major issues:

## Health risks



Biomedical waste contains potentially harmful microorganisms which could infect people

## Sharps-related



The World Health Organization (WHO) estimates that 40% of hepatitis cases and 2,5% of HIV cases worldwide are caused by occupational exposure\*

## Environmental Impact



Treatment and disposal of healthcare waste may release pathogens and toxic pollutants

According to WHO's directives\*, infectious waste should be processed as close as possible to its generation place.

\*Sources: Health-care waste report, WHO 2002



**Sterilwave® is the alternative on-site solution** to reduce the risk of contamination in comparison with incineration and landfills.

# STERILWAVE® EQUIPMENT & OFFER

## Compact solutions for on-site waste management:

3 different capacities to convert any biohazardous waste into municipal waste.



\*with a waste density of 1L=0.1kg

## A comprehensive offer of services:



Support for **installation** and waste management process optimization



Operators and maintenance **training** by certified experts



**Maintenance and technical support:** spare parts and consumables available / technical tutorials / after sales services

# EFFICIENT MICROWAVE TECHNOLOGY



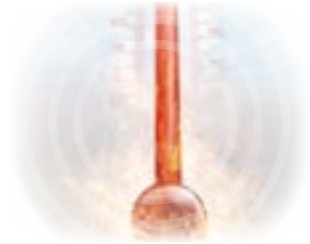
**8log10 microbial inactivation**



**No pressure** during the process  
No irradiation risk



No water consumption  
No steam generator  
**No liquid effluent**



Efficient heating rise up to 110°C for 20' to obtain a **full decontamination**



Adapted to any type of medical waste (sharps, glass, solid, liquid...)  
**No segregation**



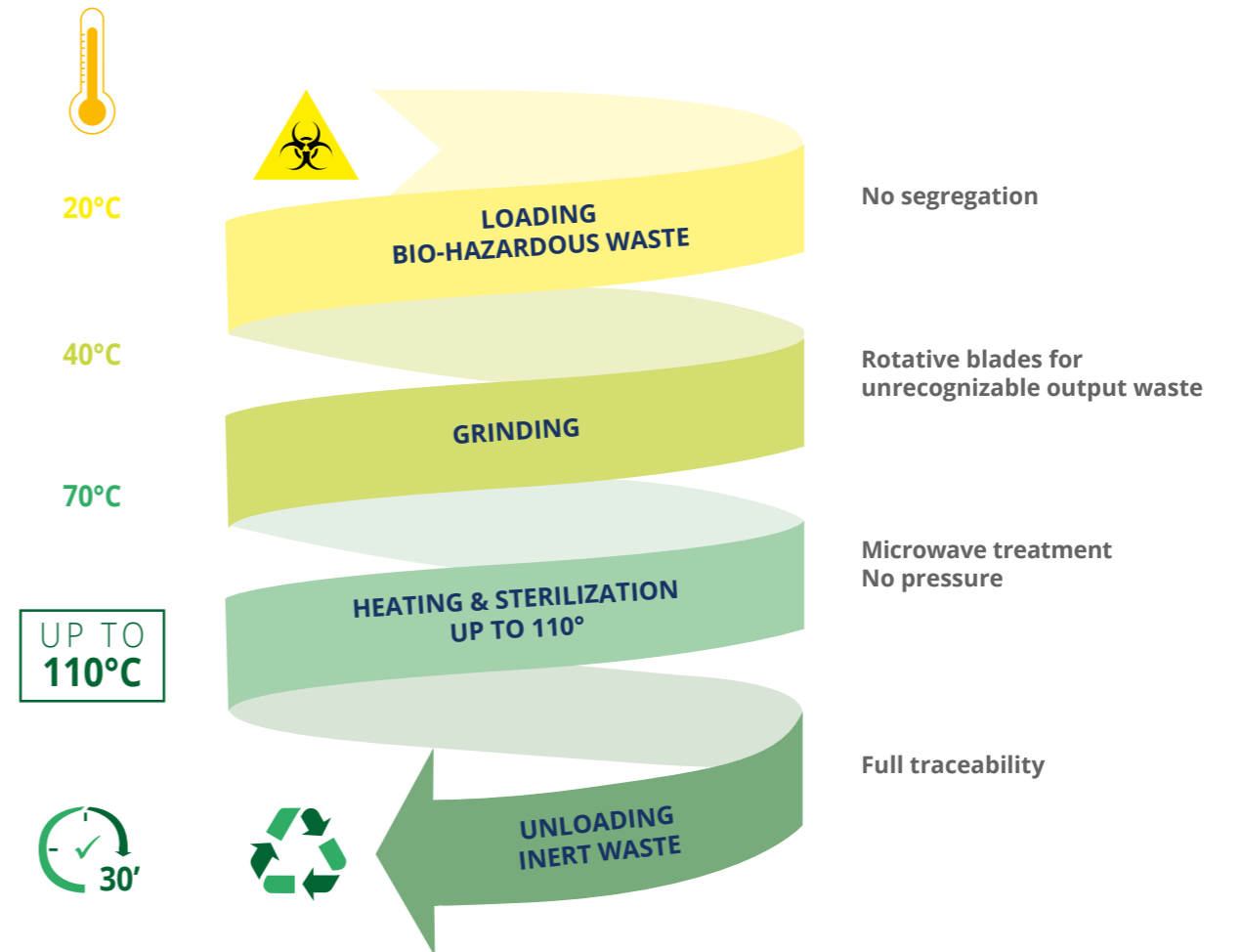
**Easy maintenance**  
Equipment based on mechanical technologies

Sterilwave® has been registered and approved by health & environmental ministries in Europe, Asia, Africa, Middle East and America.

The uniqueness of Sterilwave® is linked to its innovative microwave technology and high level of treatment respecting both the environment and security processes.

Waste management method	Waste output			Weight Reduction	Volume Reduction	Immediate installation (no specific construction required)	Zero effluents (no polluting emissions)
	Dry	Stable	Sterilized				
<b>STERILWAVE®</b>	✓	✓	✓	✓	✓	✓	✓
Autoclave			✓		✓		
Incineration	✓	✓	✓	✓	✓		
Chemical treatment			✓		Some models		

# A 30 MINUTES AUTOMATIC PROCESS IN ONE SINGLE VESSEL



## From infectious waste to municipal waste



\*Refuse-Derived Fuel

# TECHNICAL SPECIFICATIONS



## SPECIFICATIONS

	STERILWAVE® 100	STERILWAVE® 250	STERILWAVE® 440
<b>Waste capacity</b>	200L/h Up to 20kg /h *	500L/h Up to 50kg /h *	880L/h Up to 88kg /h *
<b>Vessel capacity</b>	100L	250L	440L
<b>Average cycle time</b>	30'	30'	32 - 35'
<b>Dimensions ( L x W x D )</b>	1.7 x 1.2 x 1.1 m	1,6 x 1,1 x 1,5 m	2 x 1,1 x 2 m
<b>Weight</b>	700 kg	1200 kg	1400 kg
<b>Recommended working area</b>	8 sq.m Ceiling height: 2m	10-12 sq.m Ceiling height: 2.2 m	15-20 sq.m Ceiling height: 3m (3.85m with automatic loading option)
<b>Electricity</b>	400V/ 3-Phase, 40A	400V/ 3-Phase, 63A	400V/ 3-Phase, 63A
<b>Technology</b>	Grinding by rotating blades and heating by microwaves		

## OPERATING DATA

<b>Microbial inactivation</b>	Spore up to 8log10 Virus up to 6log10 STAATT requirements and NFX30-503 compliant
<b>Volume reduction</b>	Up to 80%
<b>Weight reduction</b>	Up to 25%
<b>Final Waste</b>	Unrecognizable, inert, dry, stable
<b>Loading Process</b>	Manual or Automatic (option)
<b>Process management</b>	Full traceability

\*with a waste density of 1L=0.1kg

# STERILWAVE® KEY BENEFITS

## Eco-friendly, economic & safe solution

**Safe**  
Microwave technology  
No pressure in comparison  
with the autoclave

**Eco-friendly**  
Zero environmental impact  
On-site treatment – no transport  
No liquid effluent to drain



**Efficient**  
Exceed international  
regulatory standards  
Bacterial reduction  
up to 8log10

**Easy to use**  
“Plug and play” system  
No specific technical  
qualifications required

**Cost effective**  
No more storage  
Robust equipment,  
easy maintenance

## Solution adapted to:

### ✓ Every medical waste producers



CLINICS & HOSPITALS



RESEARCH LABORATORIES



COMMERCIAL WASTE SERVICES

### ✓ Any type of medical waste

- Hospital and laboratory waste,
- Solid and liquid medical waste,
- Human and animal pathological waste,
- Sharps and prickly hospital waste with their containers,
- Cultures and stocks,
- Any other waste listed in state and federal regulations as medical waste.



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