

# INNOVATIVE SOLUTION FOR BIOMEDICAL WASTE MANAGEMENT





WWW.BERTIN-MEDICAL-WASTE.COM



# **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:



Biomedical waste contains potentially harmful microorganisms which could infect people



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





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<sup>®</sup> 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.



### A comprehensive offer of services:





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

Operators and maintenance training by certified experts

WWW.BERTIN-MEDICAL-WASTE.COM

WWW.BERTIN-MEDICAL-WASTE.COM



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





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

# **EFFICIENT MICROWAVE TECHNOLOGY**



8log10 microbial inactivation



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



No pressure during the process No irradiation risk



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



No water consumption No steam generator No liquid effluent



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<sup>®</sup> is linked to its innovative microwave technology and high level of treatment respecting both the environment and security processes.

Waste management method	Dry	Waste our Stable	<b>tput</b> Sterilized	Weight Reduction	Volume Reduction	X Immediate installation (no specific construction required)	Zero effluents (no polluting emissions)
<b>STERILWAVE®</b>	1	1	√	1	1	$\checkmark$	√
Autoclave			$\checkmark$		$\checkmark$		
Incineration	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
Chemical treatment			$\checkmark$		Some models		

WWW.BERTIN-MEDICAL-WASTE.COM

# **A 30 MINUTES AUTOMATIC PROCESS IN ONE SINGLE VESSEL**



WWW.BERTIN-MEDICAL-WASTE.COM

# **TECHNICAL SPECIFICATIONS**

# **STERILWAVE® KEY BENEFITS**



#### **SPECIFICATIONS**

Loading Process

Waste capacity	200L/h Up to 20kg /h *	500L/h Up to 50kg /h *	880L/h Up to 70kg /h *	
Vessel capacity	100L	250L	440L	
Average cycle time	30′	30′	32 - 35'	
Dimensions ( L x W x D )	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	
Weight	700 kg	1200 kg	1400 kg	
Recommended working area	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)	
Electricity	400 V 3-Phase 40 A	400V/ 3-Phase, 63A		
Technology	Grinding by rotating blades and heating by microwaves			
OPERATING DATA				
Microbial inactivation	Spore up to 8log10 Virus up to 6log10 STAATT requirements and NFX30-503 compliant		log10	
Volume reduction	Up to 80%			

	STAATTTEQUITETTES and NEXSO-SOS COmpliant
Volume reduction	Up to 80%
Weight reduction	Up to 25%
Final Waste	Unrecognizable, inert, dry, stable

Manual or Automatic (option)

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

## Eco-friendly, economic & safe solution

Safe Microwave technology No pressure in comparison with the autoclave

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

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

easy maintenance

## Solution adapted to:

#### ✓ Every medical waste producers





**CLINICS & HOSPITALS** 

#### ✓ 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.

WWW.BERTIN-MEDICAL-WASTE.COM

WWW.BERTIN-MEDICAL-WASTE.COM

**Eco-friendly** 

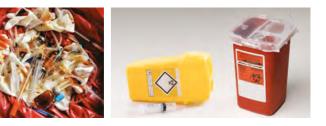
Zero environmental impact On-site treatment – no transport No liquid effluent to drain

#### Easy to use

"Plug and play" system No specific technical qualifications required

1

N







BERTIN MEDICAL WASTE, a brand of CNIM Group, relies on its long history of innovative engineering to develop, produce and market innovative systems and equipment worldwide.

Its mother-company CNIM designs and builds turnkey high-tech industrial facilities and provides expertise, service and operations support in the Environment, Energy, Defence and Industrial sectors.



€634.9 million in

revenues in 2017



A stable family

shareholding



3 000 Employees

1500 Engineers



Quoted on the stock

market since 1986



Global presence on 4 continents

### A worldwide network of distribution





Distributed by:

Bertin Technologies S.A.S • Parc d'Activités du Pas du Lac • 10 bis, avenue Ampère, 78180 Montigny Le Bretonneux, France RCS: 422 511 204 VERSAILLES I SIREN: 422 511 204