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 25% 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.

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STERILWAVE® EQUIPMENT & OFFER

Compact solutions for on-site waste management:

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

- **STERILWAVE® 440**
  - Capacity: 70kg/h*
- **STERILWAVE® 250**
  - Capacity: 50kg/h*
- **STERILWAVE® 100**
  - Capacity: 20kg/h*

NEW

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

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*with a waste density of 1L=0.1kg
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 | Dry | Waste output | Weight Reduction | Volume Reduction | Immediate installation | Zero effluents | Zero pressure
|-------------------------|-----|--------------|------------------|-------------------|------------------------|---------------|
| STERILWAVE®             | ✓   | ✓            | ✓                | ✓                 | ✓                      | ✓             | ✓
| Autoclave               |     | ✓            |                   |                   |                        |               | ✓
| Incineration            | ✓   | ✓            |                   |                   |                        |               | ✓
| Chemical treatment      | ✓   | ✓            |                   |                   | (some models required) |               | ✓

8log10 microbial inactivation
No pressure during the process
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
Up to 110°C

Unloading inert waste

80% volume reduction
25% weight reduction
Compacts, inert & dry waste

RDF*: Refuse-Derived Fuel

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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

Cost effective
No more storage
Robust equipment, easy maintenance

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

Solution adapted to:

✓ Every medical waste producers

✓ 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.

TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>STERILWAVE® 100</th>
<th>STERILWAVE® 250</th>
<th>STERILWAVE® 440</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste capacity</td>
<td>200L/h</td>
<td>500L/h</td>
<td>880L/h</td>
</tr>
<tr>
<td></td>
<td>Up to 20kg/h*</td>
<td>Up to 50kg/h*</td>
<td>Up to 70kg/h*</td>
</tr>
<tr>
<td>Vessel capacity</td>
<td>100L</td>
<td>250L</td>
<td>440L</td>
</tr>
<tr>
<td>Average cycle time</td>
<td>30’</td>
<td>30’</td>
<td>32 - 35’</td>
</tr>
<tr>
<td>Dimensions (L x W x D)</td>
<td>1 x 1 x 1 m</td>
<td>1,6 x 1,1 x 1,5 m</td>
<td>2 x 1,1 x 2 m</td>
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<tr>
<td>Weight</td>
<td>700 kg</td>
<td>1200 kg</td>
<td>1400 kg</td>
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<tr>
<td>Recommended working area</td>
<td>8 sq.m</td>
<td>10-12 sq.m</td>
<td>15-20 sq.m</td>
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<tr>
<td></td>
<td>Ceiling height: 2m</td>
<td>Ceiling height: 2.2 m</td>
<td>Ceiling height: 3m (3.85m with automatic loading option)</td>
</tr>
<tr>
<td>Electricity</td>
<td>400V/ 3-Phase, 63A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>Grinding by rotating blades and heating by microwaves</td>
<td></td>
<td></td>
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</tbody>
</table>

OPERATING DATA

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

*with a waste density of 1L=0.1kg
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