

Advantages:

Easy to use:

• Fully automated batch process • By one-day trained operators • Low maintenance system

Reliable:

• Equipped with safety systems Shredding and sterilization occur in a closed and compact system No intermediate handling of the waste

Effective:

• Renders the waste unrecognizable • Pre-shredding permits an effective sterilization to the core of the waste 80% volume reduction of treated waste

Environmentally responsible:

 Clean and Environmentally friendly technology

- No hazardous emissions Chemical-free process
- No Radiation
- Allows on-site treatment of waste

Economical:

• Easy to install on hospital sites: no external transport needed for waste treatment. • Cost reduction in the treatment and management of infectious waste

 Reduces the waste producer's liability created by off-site treatment process

ECODAS A Global Presence



ECODAS process can be used by various healthcare facilities or their medical waste treatment service providers.

We are the leader in providing an alternative medical waste treatment technology in many countries around the world. Through our distributors in Europe, Africa, America and Asia, our international activities represent 70 % of our turnover.

We have references in the following countries: Argentina, Algeria, Brazil, Cyprus, Denmark, Egypt, France, Guyana, Honduras, Hungary, Iran, Japan, Koweit, Lebanon, Morocco, Mexico, Poland, Russia, Saint-Lucia, Slovekia, Spain, Tunisia, United Kingdom...

Countries in which ECODAS systems are installed

ECODAS process has been tested by Pasteur Institute of Lille and approved by the Higher Council of Public Health of France since 1994, under the supervision of the Ministry of Health and the Ministry of the Environment.

ECODAS Systems are designed and manufactured in accordance with the following norms: **ASME** (The American Society of Mechanical Engineers), MLSE (China), CE (European Directives), MHLW (Japanese Ministry of Health, Labor and Welfare), UC (POLAND), and GOSSTANDART (Russia).

The quality assurance of ECODAS systems is executed following **ISO9001** standards.



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ENGINEERED SOLUTIONS FOR **HEALTHCARE & THE ENVIRONMENT**

SHREDDING AND STERILIZATION OF MEDICAL WASTE











ЕИСІИЕЕRED SOLUTIONS FOR НЕАLTHCARE & THE ENVIRONMENT

Taking control of your waste



ENGINEERED SOLUTIONS FOR HEALTHCARE & THE ENVIRONMENT

Our Solution: Safety in One Step

Medical Waste is often used to describe wastes generated during the diagnosis and treatment of humans or animals, and it is capable of producing infectious diseases. Medical Waste includes cultures and stocks, pathological wastes, blood products, sharps, tissue paper, plastic, glass, etc...

Healthcare facilities must monitor and eliminate the generated waste without endangering the public health and the environment.

ECODAS has developed an innovative, fully enclosed and automated system to sterilize medical waste, reduce its volume, and render its components unrecognizable. *Our patented* process combines shredding, direct heated steam, and high pressure to achieve complete sterilization of infectious materials. The final treated waste is harmless and safe to dispose of as ordinary municipal waste.



Three models available with different capacities to suit your needs: **ECODAS T300, T1000 and T2000.**





We design, manufacture and supply automated solutions for medical waste treatment worldwide. For more than twenty years, the ECODAS team has developed a wide expertise in pressurized thermal machine manufacturing for the textile, food processing and medical waste industries, providing high value solutions based on advanced technologies.

ECODAS is adopting a sustainable development strategy by creating robust systems while using recyclable components from the world's leader manufacturers.

into small pieces and features a unique reversing system to avoid jamming. Heating: Saturated pressurized steam raises the temperature to 138°C (280 F), and the pressure to 3.8 bar (55 psi). **Sterilization:** The pressurized heated steam comes into direct contact with the shredded material, 8Log₁₀ reduction of the infectious load is achieved by maintaining 138°C/3.8 bar for 10 minutes. **Cooling:** Temperature is lowered 5 to 80°C by spraying cool water onto the double lacket of the treatment vessel. Simultaneously, the unit returns to ambient pressure. Draining: The steam is condensed to water and discharged with the cooling water to the sanitary sewer system Vacuum: The remaining residual steam is vented out through a vacuum pump. 8 Unloading: A digital signal informs the operator that all safe operating conditions have been met. The condition unlocks the unit and allows gravity nloading of the treated waste into a container. °C 1 **(4)** 5 67 8 2 140 120 100 80 60

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T 2000 Sterilisation Cycle

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5 10

The ECODAS Treatment Cycle

Loading: The contaminated waste is automatically loaded into the upper chamber at the top of the unit.

> **Shredding:** After the loading cover is sealed, the heavy-duty shredder cuts the material



Sample of Treatment Cycle Report ECODAS T2000 Cycle nº 111294 Date 25.01.2002 Time 13.41 Waste Pres Temp °C har Loading 13.41 62 0.0 Step time 3.30 Shredding 13.45 62 0.0 Step time 21.00 Heating 14.06 61 0.0 Heating 14.07 120 1.5 Heating 14.08 135 3.5 Heating 14.09 138 4.0 Step time 4.13 Standing 14.10 138 4.0 Standing 14.11 138 4.0 Standing 14.12 138 4.0 Standing 14.13 138 4.0 Standing 14.14 138 4.0 Standing 14.15 138 4.0 Standing 14.16 138 4.0 Standing 14.17 138 4.0 Standing 14.18 138 4.0 Standing 14.19 138 4.0 Step time 10.00 Cooling 14.20 136 3.7 Cooling 14.21 134 3.4 Cooling 14.22 130 2.9 Cooling 14.23 125 2.1 Cooling 14.24 75 0.5 Cooling 14.25 Step time 5.00 Draining 14.25 75 0.0 Step time 4.40 Vaccum 14.30 75 - 0.4 Step time 2.50 75 Unloading 14.32 Step time 2.10 0.0 Date 25.01.2002 Time 14.35 Cycle Time 53 mn Cycle OK

ACCURATE RECORD KEEPING