



POLYTEKPROM

Medical Waste Sterilization Systems

Sterilize to Protect Nature

Medical Waste Sterilization Systems
for sterilizing infectious and
contaminated waste from hospitals,
clinics, and veterinaries.

Protect Nature and Prevent pollution.





ENJOY THE BENEFITS...

- **Sterilize infected waste and protect the environment.**
- **Safer for patients, employees, and society.**
- **Minimize risk of liability.**
- **User-friendly and automated.**
- **Convenient remote access and monitoring.**
- **Low investment cost**
- **Upto 85% of waste size reduction.**
- **Compact footprint and zero emmissions.**
- **Affordable consumables and wear parts.**
- **Prevents transportation of infectious medical waste to treatment centers.**

- **Integrated durable Shredder.**
- **Proven direct steam sterilization method.**
- **8log10 Microbial Inactivation.**
- **Destruction of sharp objects.**
- **Sterilization Report as per International Standards (Robert Koch Institute & STAATT Level IV etc.).**
- **TUV certified CE compliance.**
- **No chemicals required.**



Suitable for various settings:

- **Hospitals**
- **Clinical labs**
- **Dialysis clinics**
- **Veterinaries**
- **Biotech and Pharmaceutical**
- **Blood banks**





Technical Features

Sterilization Unit is Engineered for Durability Safety

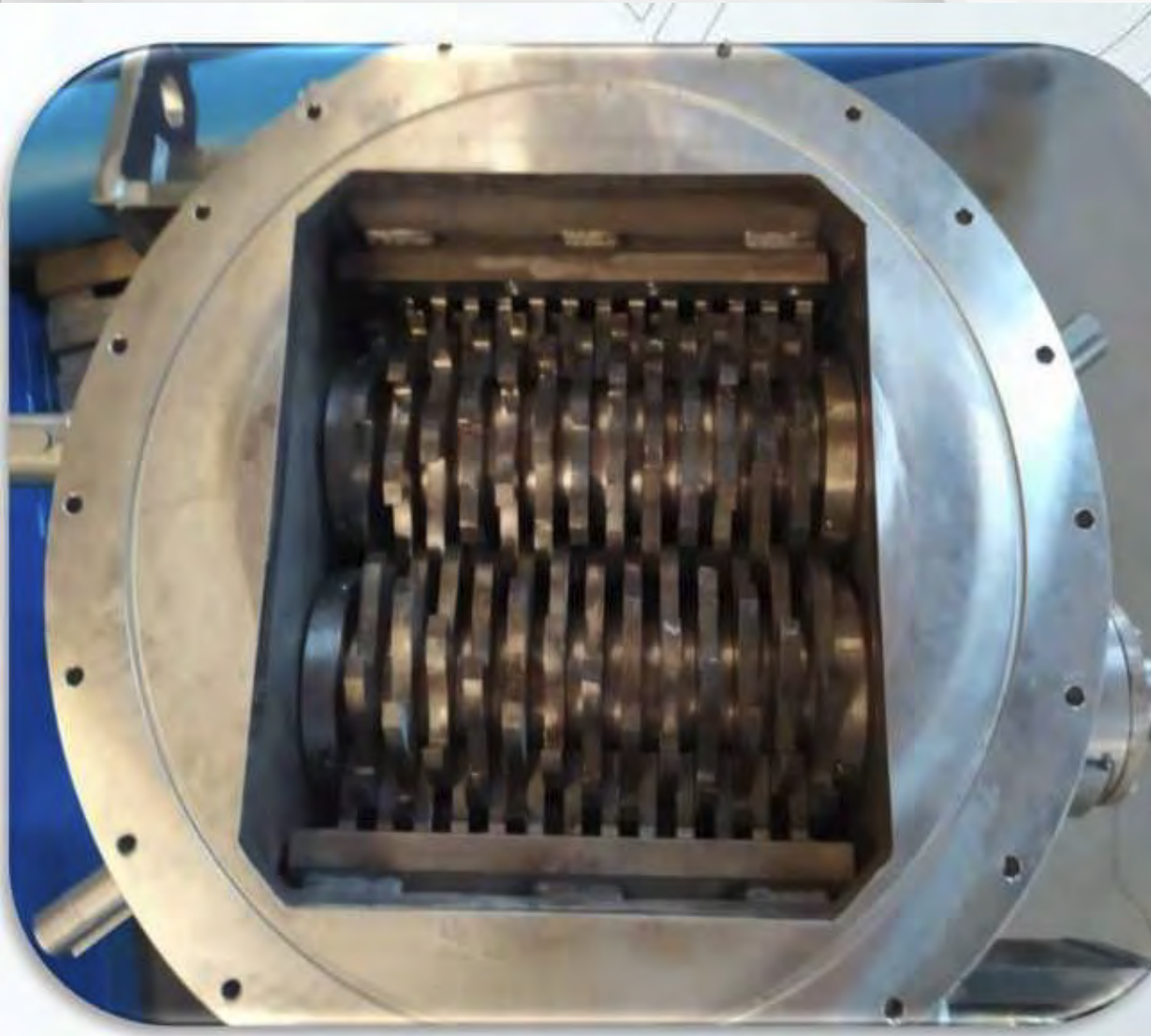
Certain engineering calculations are employed to determine the safe range of thickness for pressurized sterilization unit.

- **European-origin certified steel (AISI 316L & Special P Series) is used, which is suitable for pressure vessels.**

- **Thanks to the high-quality raw material, Polytekprom machines provide longer lifetime, greater durability, and improved safety.**



Strong & Long Lasting Shredder

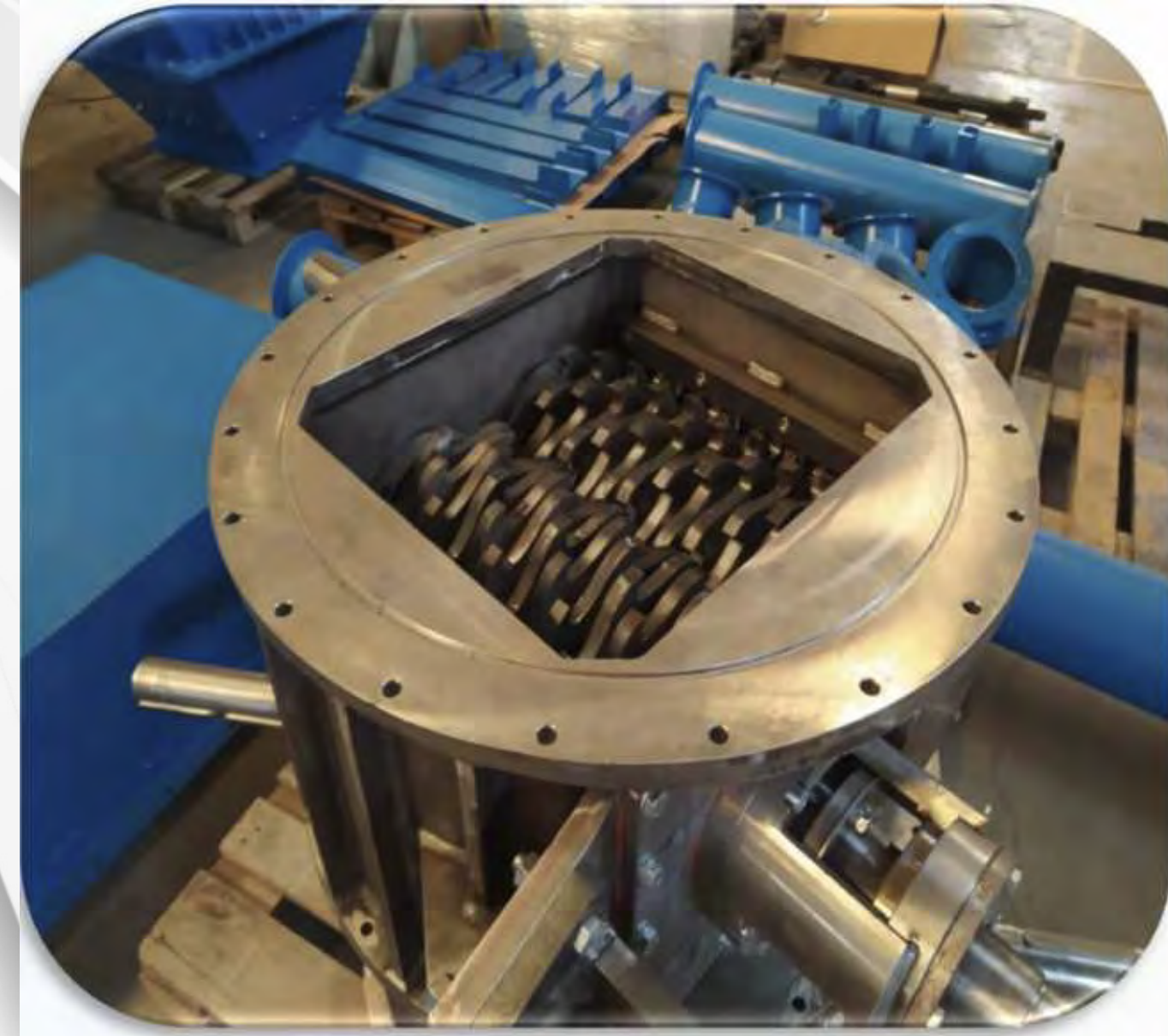


In an ideal world, only medical waste would be fed to the machine.

However, in reality, various types of materials, including metals, can end up in the waste stream.

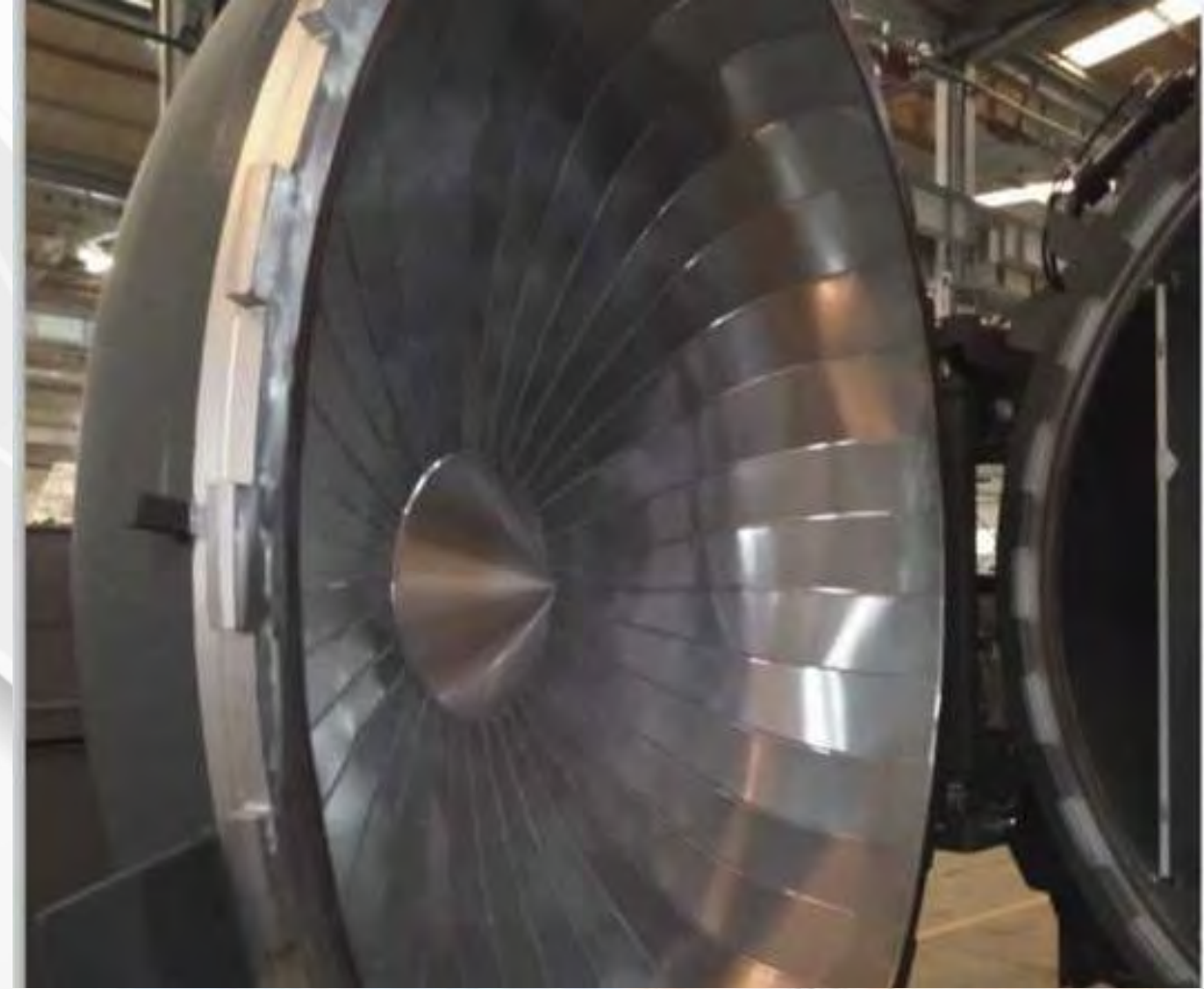
If your shredder is not strong enough, be prepared, as it may get damaged quickly.

Polytekprom shredder holds firm with its robustness and, as a result, serves for a longer time.



Safest Door System: Bayonet

- Doors are the most crucial components of autoclaves.
- We utilize the safest door type, known as *Bayonet*, ensuring the highest level of safety.
- Additionally, we have integrated Sick brand Safety PLC to control all safety switches and sensors, along with a Safety Locking Interlock Mechanism, further enhancing your safety. Finally, there is a manual switch to open the door when needed.
- In short, our door is designed to provide the utmost safety.



Automation System: Siemens Touch Panel

In today's world, the key word is "simplicity."

We prioritize 100% European quality production and European OEM brands like SMC, Festo, Telemecanique, etc.

Our systems offer remote access to PLC via the internet, making troubleshooting a breeze.

With our user-friendly design, your operator only needs to push a button at the beginning of the process, and then everything continues in an automated cycle.

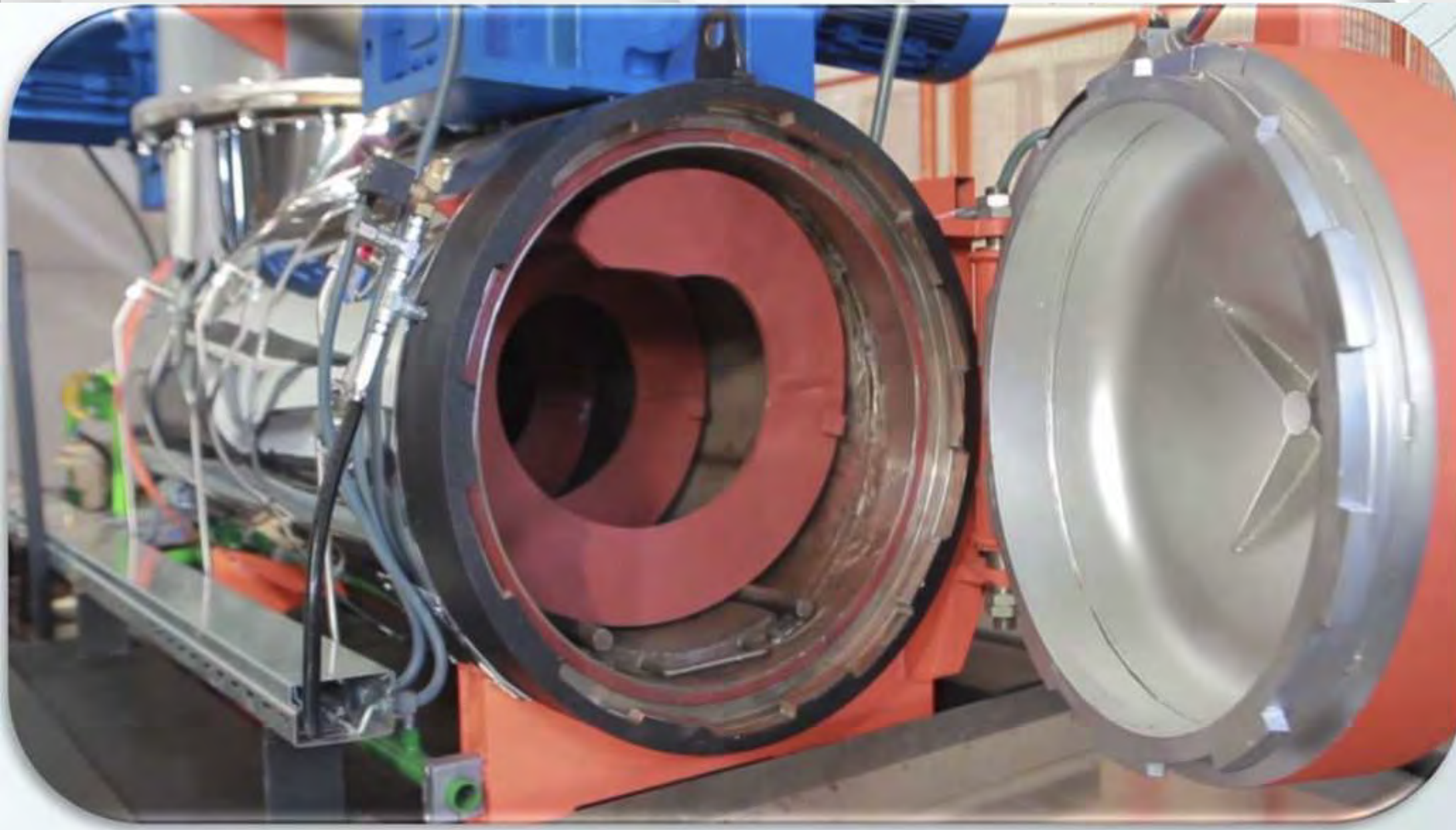


Automatic Discharge

If your machine relies on "Gravity Force" for discharging sterilized medical waste, your operator will have to manually scrape it off from the interior walls of the machine using a shovel at the end of the process.

Fortunately, we have a solution for this issue. Our "Archimedes Screw" design prevents waste from sticking to the interior walls of the machine.

Thanks to our Automatic Discharge option, your operator won't need to scrape off anything manually. The process becomes seamless and hassle-free.



Preventative Maintenance

- Our top priority is to lower your operational costs.
- During installation, we will provide training for your operators on daily, weekly, and monthly maintenance.
- Our local service provider may take care of the annual maintenance of your machine on demand.
- With regular preventative maintenance, you can rest assured that your machine will always be in good shape and condition.





Models & Details

MWS100C

Small yet effective...



Operation Principle: Fully automatic, pre-shredded, pressured, direct steam sterilization method

Sterilization Capacity: 10 - 15 kg/h depending on density of waste

Feeding Unit Volume: 100 lt.

Autoclave Volume: 120 lt.

Sterilization Pressure: 3,5 - 4 bars

Autoclave Steel: AISI316L stainless steel

Shredder Type: Double shaft, integrated

Shredder Frame Steel: AISI316L stainless steel

Shredder Power: 4 kW, autoreverse when blocked

Bodywork: Carbon steel, powder coated

Condense Discharge: 2" discharge after sterilization

Vacuum Pump: Monoblock, 0,75 kW

Filter Cassette: Carbon, Textile, HEPA

PLC & HMI: Siemens

Dimensions: 1000*1725*2335 mm

Weight: App. 1300 kg.

Types of Input:

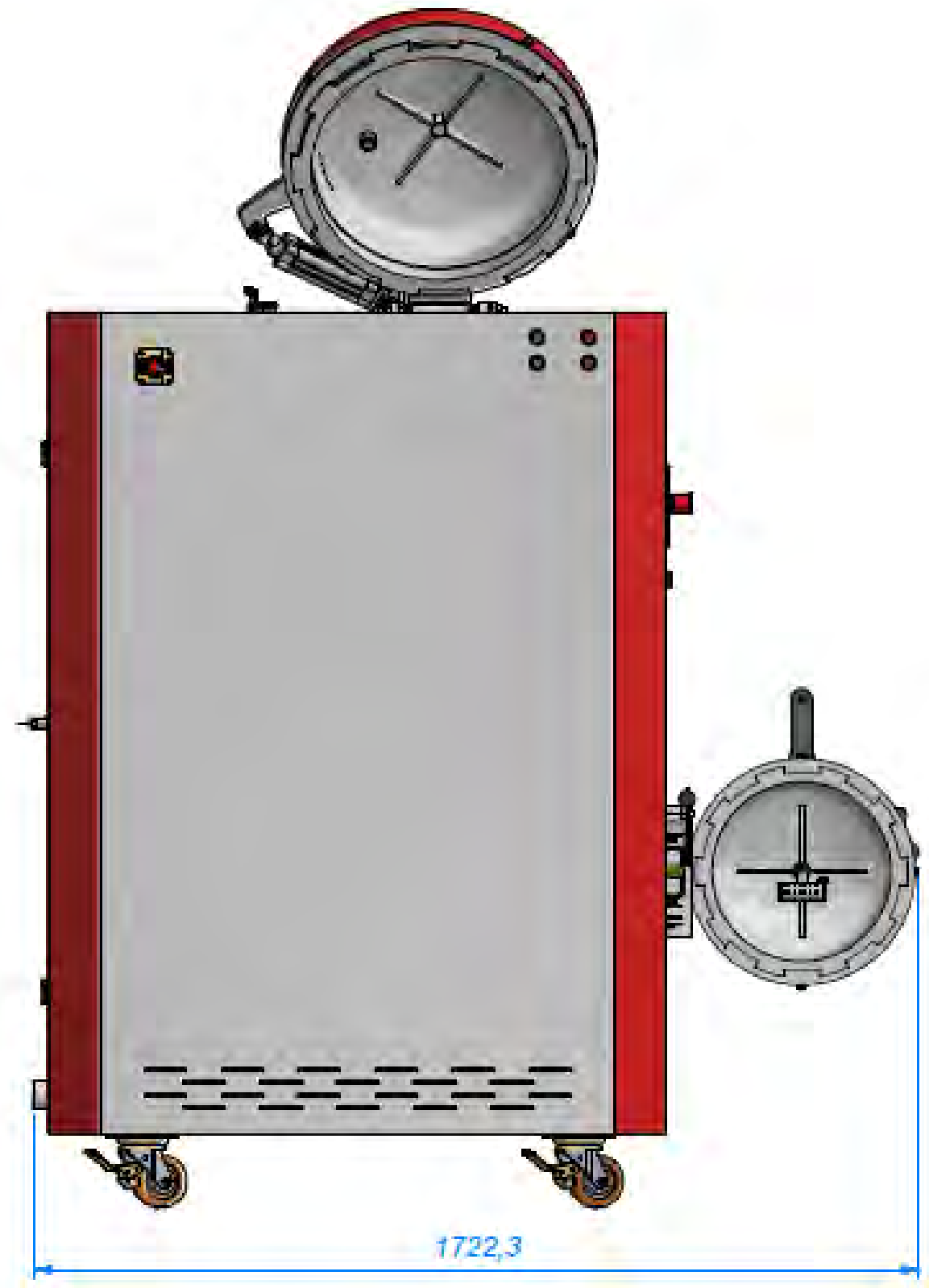
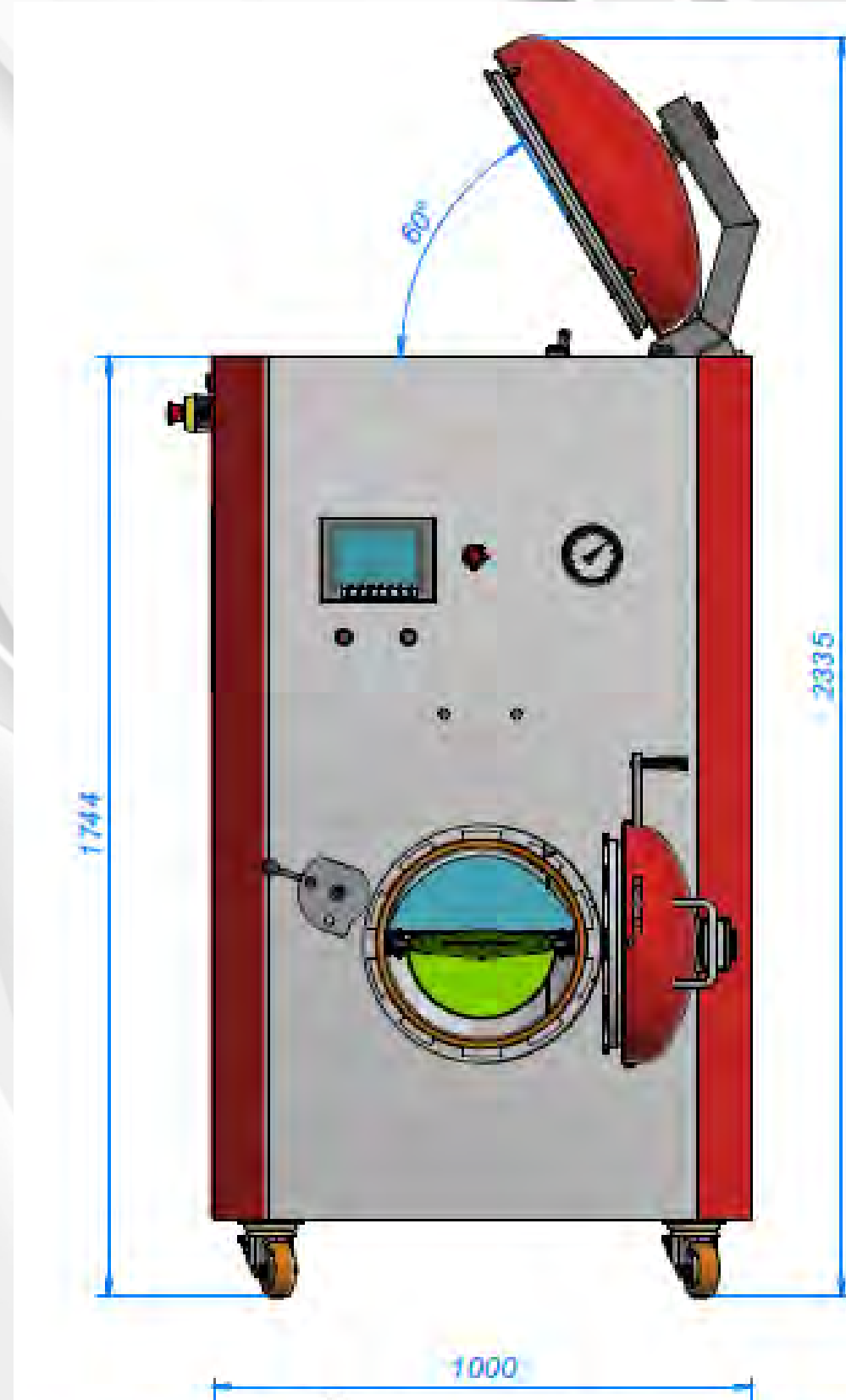
- **Infectious Waste:** Blood bags and blood preserves, dressings, plaster casts, disposable clothing, medical masks, diapers.
- **Sharp Waste:** syringes, needles, disposable scalpels and blades etc.

Automation:

- Siemens/Mitsubishi drivers with Profinet communication for shredder.
- Internet connection is required for remote access. The remote connection module is provided.
- Time, temperature, pressure and pressure discharge functions are automatically controlled via PLC.
- Audial and visual alarm alerts for malfunctions
- Advanced maintenance module.
- Alphanumeric print-out during cycle

MWS100C - Dimensions

Small yet effective...



MWS200C

Small yet effective...



Operation Principle: Fully automatic, pre-shredded, pressured, direct steam sterilization method

Sterilization Capacity: 20 - 30 kg/h depending on density of waste

Feeding Unit Volume: 200 lt.

Autoclave Volume: 250 lt.

Sterilization Pressure: 3,5 - 4 bars

Autoclave Steel: AISI316L stainless steel

Shredder Type: Double shaft, integrated

Shredder Frame Steel: AISI316L stainless steel

Shredder Power: 4 kW, autoreverse when blocked

Bodywork: Carbon steel, powder coated

Condense Discharge: 2" discharge after sterilization

Vacuum Pump: Monoblock, 0,75 kW

Filter Cassette: Carbon, Textile, HEPA

PLC & HMI: Siemens

Dimensions: 2000*2800*2500 mm

Weight: App. 2000 kg.

Types of Input:

- **Infectious Waste:** Blood bags and blood preserves, dressings, plaster casts, disposable clothing, medical masks, diapers.
- **Sharp Waste:** syringes, needles, disposable scalpels and blades etc.

Automation:

- Siemens/Mitsubishi drivers with Profinet communication for shredder.
- Internet connection is required for remote access. The remote connection module is provided.
- Time, temperature, pressure and pressure discharge functions are automatically controlled via PLC.
- Audial and visual alarm alerts for malfunctions
- Advanced maintenance module.
- Alphanumeric print-out during cycle

MWS250L

Solution for Clinics



Operation Principle: Fully automatic, pre-shredded, pressured, direct steam sterilization method

Sterilization Capacity: 20 - 40 kg/h depending on density of waste

Feeding Unit Volume: 250 lt.

Autoclave Volume: 450 lt.

Sterilization Pressure: 3,5 - 4 bars

Autoclave Steel: AISI316L stainless steel

Shredder Type: Double shaft, integrated

Shredder Frame Steel: AISI316L stainless steel

Shredder Power: 7,5 + 11 kW, autoreverse when blocked

Automatic Loading: Optional

Automatic Discharge: Included

Condense Discharge: 2" discharge after sterilization

Vacuum Pump: Monoblock, 0,75 kW

Filter Cassette: Carbon, Textile, HEPA

PLC & HMI: Siemens

Dimensions: 3000*3300*2700 mm (without feeder)
3000*3300*4000 mm (with feeder)

Weight: App. 2500 kg.

Types of Input:

- **Infectious Waste:** Blood bags and blood preserves, dressings, plaster casts, disposable clothing, medical masks, diapers.
- **Sharp Waste:** syringes, needles, disposable scalpels and blades etc.

Automation:

- Siemens/Mitsubishi drivers with Profinet communication for shredder.
- Internet connection is required for remote access. The remote connection module is provided.
- Time, temperature, pressure and pressure discharge functions are automatically controlled via PLC.
- Audial and visual alarm alerts for malfunctions
- Advanced maintenance module.
- Alphanumeric print-out during cycle

MWS500L

Mid-Sized Hospitals



Operation Principle: Fully automatic, pre-shredded, pressured, direct steam sterilization method

Sterilization Capacity: 50 - 70 kg/h depending on density of waste

Feeding Unit Volume: 500 lt.

Autoclave Volume: 600 lt.

Sterilization Pressure: 3,5 - 4 bars

Autoclave Steel: AISI316L stainless steel

Shredder Type: Double shaft, integrated

Shredder Frame Steel: AISI316L stainless steel

Shredder Power: 7,5 + 11 kW, autoreverse when blocked

Automatic Loading: Included

Automatic Discharge: Included

Condense Discharge: 2" discharge after sterilization

Vacuum Pump: Monoblock, 0,75 kW

Filter Cassette: Carbon, Textile, HEPA

PLC & HMI: Siemens

Dimensions: 3200*3600*4200 mm (with feeder)

Weight: App. 2800 kg.

Types of Input:

- **Infectious Waste:** Blood bags and blood preserves, dressings, plaster casts, disposable clothing, medical masks, diapers.
- **Sharp Waste:** syringes, needles, disposable scalpels and blades etc.

Automation:

- Siemens/Mitsubishi drivers with Profinet communication for shredder.
- Internet connection is required for remote access. The remote connection module is provided.
- Time, temperature, pressure and pressure discharge functions are automatically controlled via PLC.
- Audial and visual alarm alerts for malfunctions
- Advanced maintenance module.
- Alphanumeric print-out during cycle

MWS1000L

Hospital Solution



Operation Principle: Fully automatic, pre-shredded, pressured, direct steam sterilization method

Sterilization Capacity: 100 - 130 kg/h depending on density of waste

Feeding Unit Volume: 1000 lt.

Autoclave Volume: 600 lt.

Sterilization Pressure: 3,5 - 4 bars

Autoclave Steel: AISI316L stainless steel

Shredder Type: Double shaft, integrated

Shredder Frame Steel: AISI316L stainless steel

Shredder Power: 7,5 + 11 kW, autoreverse when blocked

Automatic Loading: Included

Automatic Discharge: Included

Condense Discharge: 2" discharge after sterilization

Vacuum Pump: Monoblock, 0,75 kW

Filter Cassette: Carbon, Textile, HEPA

PLC & HMI: Siemens

Dimensions: 2800*4200*5200 mm (with feeder)

Weight: App. 3000 kg.

Types of Input:

- **Infectious Waste:** Blood bags and blood preserves, dressings, plaster casts, disposable clothing, medical masks, diapers.
- **Sharp Waste:** syringes, needles, disposable scalpels and blades etc.

Automation:

- Siemens/Mitsubishi drivers with Profinet communication for shredder.
- Internet connection is required for remote access. The remote connection module is provided.
- Time, temperature, pressure and pressure discharge functions are automatically controlled via PLC.
- Audial and visual alarm alerts for malfunctions
- Advanced maintenance module.
- Alphanumeric print-out during cycle

MWS2500L

Solution for Big Hospitals



Operation Principle: Fully automatic, pre-shredded, pressured, direct steam sterilization method

Sterilization Capacity: 250 - 300 kg/h depending on density of waste

Feeding Unit Volume: 2500 lt.

Autoclave Volume: 1500 lt.

Sterilization Pressure: 3,5 - 4 bars

Autoclave Steel: AISI316L stainless steel

Shredder Type: Double shaft, integrated

Shredder Frame Steel: AISI316L stainless steel

Shredder Power: 22 + 30 kW, autoreverse when blocked

Automatic Loading: Included

Automatic Discharge: Included

Condense Discharge: 2" discharge after sterilization

Vacuum Pump: Monoblock, 0,75 kW

Filter Cassette: Carbon, Textile, HEPA

PLC & HMI: Siemens

Dimensions: 5500×8500×6500 mm (with feeder)

Weight: App. 10000 kg.

Types of Input:

- **Infectious Waste:** Blood bags and blood preserves, dressings, plaster casts, disposable clothing, medical masks, diapers.
- **Sharp Waste:** syringes, needles, disposable scalpels and blades etc.

Automation:

- Siemens/Mitsubishi drivers with Profinet communication for shredder.
- Internet connection is required for remote access. The remote connection module is provided.
- Time, temperature, pressure and pressure discharge functions are automatically controlled via PLC.
- Audial and visual alarm alerts for malfunctions
- Advanced maintenance module.
- Alphanumeric print-out during cycle

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