



Shred & Steam Sterilizers

Safely Sterilize Regulated Medical Waste, Single-Use Disposables, Animal Bedding, Other Solid Infectious Waste Streams



Take Control of Your Regulated Waste. Reduce Costs, Liability and Environmental Impact.

The Xstream™ system is designed for on-site shredding and steam sterilization of regulated medical waste. The technology is approved in over 450 installations in 82 countries worldwide.


Onsite treatment significantly reduces your environmental and safety footprint. Waste volume is reduced by 80%, offsite transport of hazardous waste is eliminated, hazardous waste handling costs are reduced, and treated material is rendered as common municipal waste, appropriate for recycling and potential reuse. Cost savings ranges from 30% to 50% over hazardous haul-away services. Avoidance of waste incineration also lowers overall energy use and carbon emissions.

Up to
50%
Treatment Cost
Savings


No Chemicals,
Smoke or Carbon
Emissions

80%
Waste Volume
Reduction

Over
10⁶
Sterilization


Simple, Automated
Operation, One
Day Training



Available in Three Product Families:

RMW Xstream™ (Healthcare)

Red bags, sharps, other regulated medical waste.

The RMW Xstream™ system is designed specifically for healthcare facilities, to treat regulated medical waste. Treating medical waste onsite improves safety in handling, reduces operational costs over service contracts, reduces waste volume by 80% and eliminates transportation of hazardous materials.

MODEL	CAPACITY	TIME	ELECTRIC	STEAM	WATER
T-100	100 L (26 Gal)	30 min	1.4 kWh	6 kg (13 lbs)	5 L (1.3 Gal)
T-150	150 L (40 Gal)	30 min	1.4 kWh	9 kg (20 lbs)	15 L (4 Gal)
T-300	350 L (93 Gal)	30 min	1.7 kWh	15 kg (33 lbs)	25 L (7 Gal)
T-700	700 L (185 Gal)	30 min	3.5 kWh	18 kg (40 lbs)	30 L (8 Gal)
T-1000	1100 L (291 Gal)	35 min	4.0 kWh	20 kg (44 lbs)	35 L (9 Gal)
T-2000	2500 L (660 Gal)	45 min	9.0 kWh	40 kg (88 lbs)	50 L (13 Gal)



BIO Xstream™ (BioPharm)

Single-use bioreactor bags, tubing, sterile filters, roller bottles.

Upgraded from RMW models, BIO Xstream™ is designed to protect the interests of biopharma companies. Enhancements include advanced sealing features, additional safeguards in every valve train, control automation upgrades and sterilization of condensate.

- Reduce CO2-heavy treatment services, such as incineration
- Reduce waste transportation volume and costs
- Treated material is rendered as common municipal waste
- Reduces overall material volume by 80%

MODEL	CAPACITY	TIME	ELECTRIC	STEAM	WATER
X-300	350 L (93 Gal)	30 min	1.7 kWh	15 kg (33 lbs)	25 L (7 Gal)
X-700	700 L (185 Gal)	30 min	3.5 kWh	18 kg (40 lbs)	30 L (8 Gal)
X-1000	1100 L (291 Gal)	35 min	4.0 kWh	20 kg (44 lbs)	35 L (9 Gal)
X-2000	2500 L (660 Gal)	45 min	9.0 kWh	40 kg (88 lbs)	50 L (13 Gal)



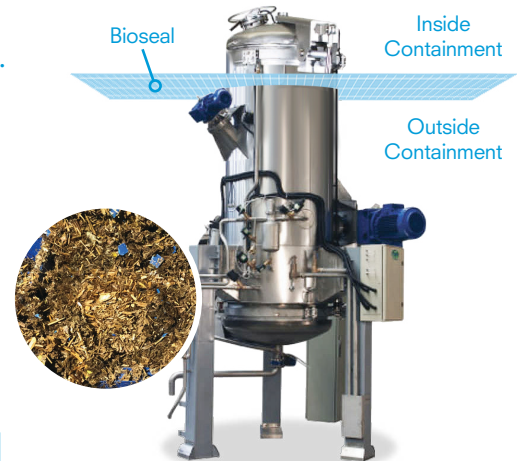
BSL Xstream™ (Containment)

Infectious animal bedding, carcasses and other high containment waste.

Upgraded from BIO models, BSL Xstream™ is designed for the most demanding biosafety application requirements. PRI's engineering expertise in high containment has been applied to this system, adding biosafety design features enabling users to treat solid infectious waste such as animal bedding, infected carcasses and BSL 3/4 lab waste.

- Designed with pressure-tight bioseal
- Fully sealed system with status monitoring for all vessel penetrations
- Temperature mapped using 12 points, to ensure setpoint is achieved
- Integrated sterile vent filtration systems if required
- Multiple liquid discharge options

MODEL	CAPACITY	TIME	ELECTRIC	STEAM	WATER
B-1000	1100 L (291 Gal)	35 min	4.0 kWh	20 kg (44 lbs)	35 L (9 Gal)
B-2000	2500 L (660 Gal)	45 min	9.0 kWh	40 kg (88 lbs)	50 L (13 Gal)



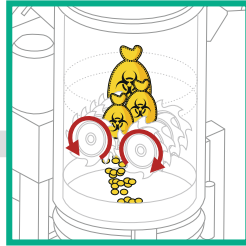
Treatment As Fast As 30 Minutes:

The Xstream™ shreds all material once the vessel lid is closed, prior to the start of the steam treatment cycle to ensure the efficacy of the steam sterilization throughout the load. The system uses directly injected steam and pressure to sterilize throughout the infectious waste, surpassing traditional autoclaving by rendering the waste unrecognizable due to the integrated shredder system. Temperature, pressure and time are continuously monitored and maintained through the integrated control system. Achieves microbial inactivation greater than 10⁶.



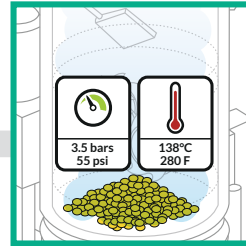
1. LOADING

of waste through the top opening.



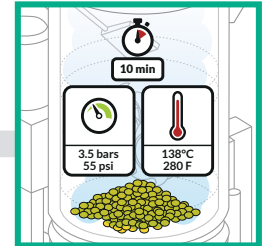
2. SHREDDING

starts once the lid is closed, sealed and locked. Heavy-duty shredder features automatic reverse rotation to prevent jamming.



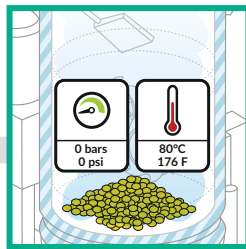
3. HEATING

via steam, raising the temperature to 300° F and pressure at 51 psi.



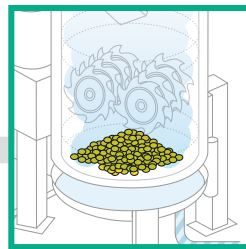
4. STERILIZATION

pressure and heat maintained for 10 minutes (adjustable to meet material density). Inactivation of >10⁶ reduction.



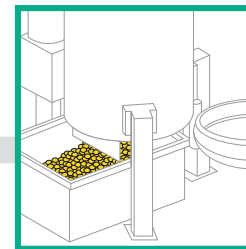
5. COOLING

through the flash tank lowers temperature and pressure to prepare for system opening.



6. DRAINING

of condensate and water into sanitary drain or to an Effluent Decontamination System (EDS) if required.



7. UNLOADING

of the sterilized waste discharged into a waste tote.



Biowaste Sterilization | Solvent Wash & Recovery | Custom Process Skids | Service

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