

MEDICAL WASTE STERILIZATION SYSTEMS



Vertisa has been founded in 2007 with having Central Office in USA and Manufacturing facilities in Turkey and in Romania. Vertisa USA central office responsible for representation and after sales services is located in Orlando, FL. USA. Vertisa established modern Medical Waste Sterilization Facilities in more than 60 locations and in more than 30 countries around the world. We are the most experienced group in Turkey in both waste treatment and the management of the sterilization facilities. We collect monthly average 600 Tons of medical waste from all the health care facilities in 14 provinces and dispose them in modern medical waste sterilization facilities operated by our company. Within our organization, we have doctors, engineers and trained personnel who are inquisitive and environmentally-conscious.

WHO WE ARE



ENVIRONMENTALLY FRIENDLY

- No hazardous emission
- No chemicals involved in the processes
- No radiation involvement or exposure
- Clean and environmentally friendly technology
- Low energy consumption



SAFE & MODERN

- Using the latest technology
- All safe equipments
- There is no waste contact between operations.
- Auto loading and Discharging option



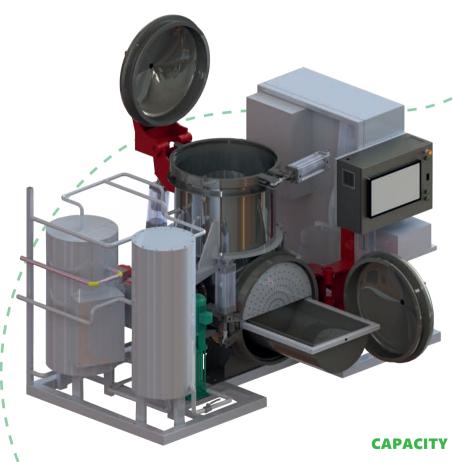
EASY TO USE

- Operators can be trained quickly
- Computer aided application
- Fully automatic operations
- Instant data transfer via internet

MANUFACTURING FACILITIES WORKS UNDER RIGUROUS STANDARDS:

ISO 9001 ISO 14001 ISO 13485 STAATT4 (USA) EN285 (EU) Machinery Directives 2006/42/EC Low Voltage Directive 73/23/EEC Directive of Pressurized Equipments (2014/68/EU). Electromagnetic Compatibility 2004/108/EC DIN 58951 Esterilizers designed for laboratories (Germany)





P-50

20 kg/h

HOSPITAL USE
COMPACT STERILIZER
WITH INTEGRATED SHREDDER

ADVANTAGES

- **Compact design** •
- **Fully automated**
- **User friendly interface**
- Hospital usage intended
- **Electrical steam generator**
 - Minimal sound
 - Odor minimized
 - No vibration
 - Minimal water usage •
- No waste water produced
 - **Easily transported**

P-100 P-150

35 kg/h 55 kg/h

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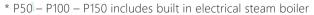
TECHNICAL FEATURES	P-50	P-100	P-150
Size (L x W x H) (mm)	2400x1250x1700	2400x1350x1800	2400x1450x1900
Weight (Kg)	2100	2680	2930
Air Pressure (Bar max)	8	8	8
Electrical connection required (Kw)	30	30	35-45*

WORKING CHARACTERISTICS	P-50	P-100	P-150
Sterilizing Capacity (Kg/ Hour)	15-20	25-35	45-55
Process Volume Capacity (Lt.)	75	150	290
Average Waste Density (Kg/m3)	00 -150	100-150	100-150
Average Cycle Time (Min.)	30-45	30-45	30-45
Maximum Steam Flow (Kg/Hour)	100	140	170
Sterilization Efficiency (SAL)	8 Log10	8 Log10	8 Log10
WORKING CHARACTERISTICS	P-50	P-100	P-150
Steam (Kg)	6	7	8
Electricity (Kw)	1.2	1.5	1.7
Water (Lt)	None	None	None

None



Special Consumables



^{**} Electrical consumption of the sterilizer only

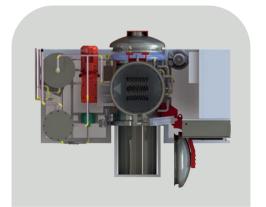
None



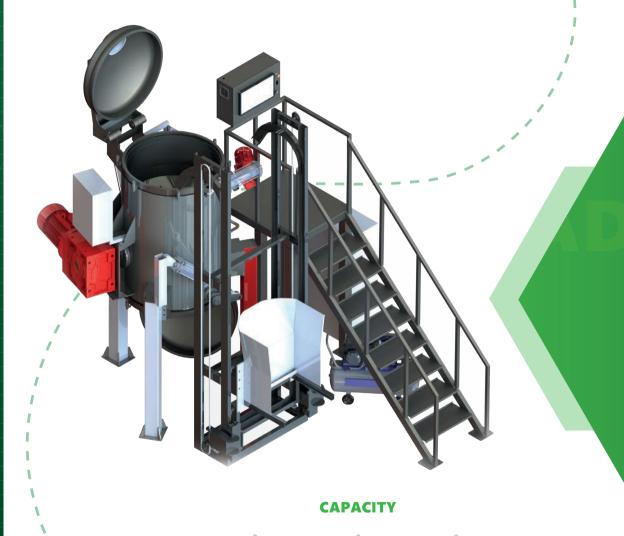
None







^{***} Water consumption of inteP-1000grated steam boiler: 7 – 12 Lt./ Cycle Note: Odor Central System. Vacuum Pump Available and Optional. All Systems can be customized to customer specification



STERILIZATION AND TREATMENT FACILITY

ADVANTAGES

- Industrial design •
- Integrated shredder
 - Fully automated •
- **User friendly interface** •
- Minimal maintenance •
- 8 LOG10 sterilization
 - Large capacities •
 - **Odor minimized** •
 - No water usage •
- **Automatic waste elavator**
 - Anti Jam shredder •
 - **Long shredder lifetime** •

P-300 100 kg/h **P-500** 150 kg/h **P-1000** 250 kg/h

P-2000 450 kg/h

TECHNICAL FEATURES	P-300	P-500	P-1000	P-2000
Size (L x W x H) (mm)	2000 x 2000 x 3600	2250 x 2250 x 4200	2500 x 2500 x 5500	3000 x 3000 x 6400
Weight (Kg)	2200	2500	2900	4600
Air Pressure (Bar max)	8	8	8	8 /
Electrical connection required (Kw)	15	19	20	35

WORKING CHARACTERISTICS	P-300	P-500	P-1000	P-2000
Sterilizing Capacity (Kg/ Hour)	80-100	150-175	200-250	350-450
Process Volume Capacity (Lt.)	400	750	1400	2800
Average Waste Density (Kg/m3)	100 - 150	100-150	100-150	100-150
Average Cycle Time (Min.)	30	35-45	35-45	45-60
Maximum Steam Flow (Kg/Hour)	270	320	470	700
Sterilization Efficiency (SAL)	8 Log10	8 Log10	8 Log10	8 Log10

WORKING CHARACTERISTICS	P-300	P-500	P-1000	P-2000
Steam (Kg)	11	15	20	40
Electricity (Kw)	4	5	9	15
Water (Lt)	None	None	None	None
Special Consumables	None	None	None	None













CAPACITY A-75 A-150 A-300 A-500 A-1000 1000 kg/h 75 kg/h 150 kg/h 300 kg/h 500 kg/h

STERILIZATION AND TREATMENT FACILITY

ADVANTAGES

- Industrial design •
- **Separate shredder**
 - Fully automated •
- **User friendly interface** •
- Minimal maintenance •
- **Vaccuum sterilization** •
- **Extra large capacities**
 - **Odor minimized** •
 - No water usage •
 - Auto waste elavator •
 - Anti Jam shredder •
- Long shredder lifetime •

TECHNICAL FEATURES	A-150	A-300	A-500	A-1000
Size (L x W x H) (mm)	2200 x 1500 x 1500	3000 x 2000 x 2000	3500 x 2250 x 2250	6000 x 2500 x 2500
Weight (Kg)	1850	2800	4600	2680
Air Pressure (Bar max)	8	8	8	8 /
Electrical connection required (Kw)	17	19	35	35

WORKING CHARACTERISTICS	A-150	A-300	A-500	A-1000
Sterilizing Capacity (Kg/ Hour)	150	300	500	1000
Process Volume Capacity (Lt.)	870	2000	3500	7500
Average Waste Density (Kg/m3)	100-150	100-150	100-150	100-150
Average Cycle Time (Min.)	30	40	45	45
Maximum Steam Flow (Kg/Hour)	290	380	670	950
Sterilization Efficiency (SAL)	8 Log10	8 Log10	8 Log10	8 Log10

WORKING CHARACTERISTICS	A-150	A-300	A-500	A-1000
Steam (Kg)	13	32	45	70
Electricity (Kw)	4	7	11	16
Water (Lt)	None	None	None	None
Special Consumables	None	None	None	None



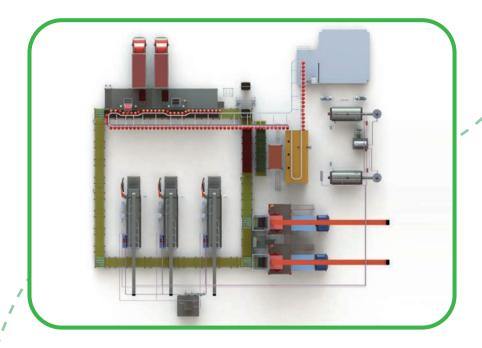














GENERAL PROPERTIES

- Small Space Needed.
- Volume Reduction
- Minimal Impact
- No Water Use
- Completely Automated
- User Friendly Interface

GENERAL ADVANTAGES

- Autoclave made of stainless steel 321 rust resistant.
- Odor control and reduction (Deodorant).
- Safety systems controlled by PLC INDUSTRIAL
- 60 80 % Volume Reduction.
- Air cooling system (Patent Pending).
- Touchscreen for easy operation of each step during the process.

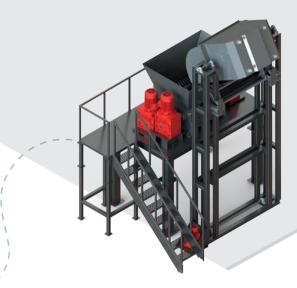






PROMED SYSTEM CONTROL PANEL

Touch screen control panel with intuitive operation, allows the visualization of process variables such as time, waste temperature, chamber pressure, phases, etc.



INTERNAL / EXTRENAL SHREDDER

Vertisa's shredders are specially designed for medical waste grinding applications.

Our custom built solution consist of double our four-shaft mechanism with grinding claws that are built from the strongest material ever known to be used for this applications. The shredder is controlled by a PLC unit that changes rotation when the shafts meet a certain amount of resistance. Anti-jam protection standard of all our shredders.

STEAM BOILERS



Our STATE OF THE ART highly efficient, fully cylindrical 3 PASS Scotch-type boilers have large water volumes in order to meet sudden steam injections. Vertisa's steam boilers are highly preferred in the steam production industry due to their ease of maintenance and high effiency.



ADVANTAGES

- Specially designed for
- PROMED sterilizers
- 3 Pass scotch type
- 97% efficiency
- Wet back efficient design
- PLC controlled

- LPG/LNG/NG/Diesel/Fuel Oil
- Dual stage burners
- Special insulation
- Stainless steel cover
- Fully automated functioning
- Insulated chimney
- High security























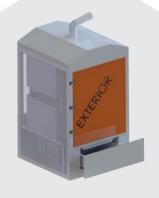




PREFAB. STERILIZERS



TRANSPORT TRUCKS

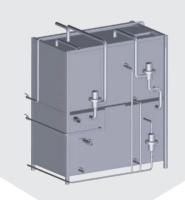


BIN WASHERS





STEAM/WATER RECYCLING



ELEC. STEAM BOILERS



CONT. LOADERS/SKIPPERS









PROMED P300



PROMED P1000



PROMED P2000



PROMED A150



PROMED A500



PROMED A1000



PROMED CONTROL PANEL



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