

ACTINI SAS

BIOPHARMA DIVISION

Clear Process

for a Clean World

Continuous, Decontamination and Inactivation Systems



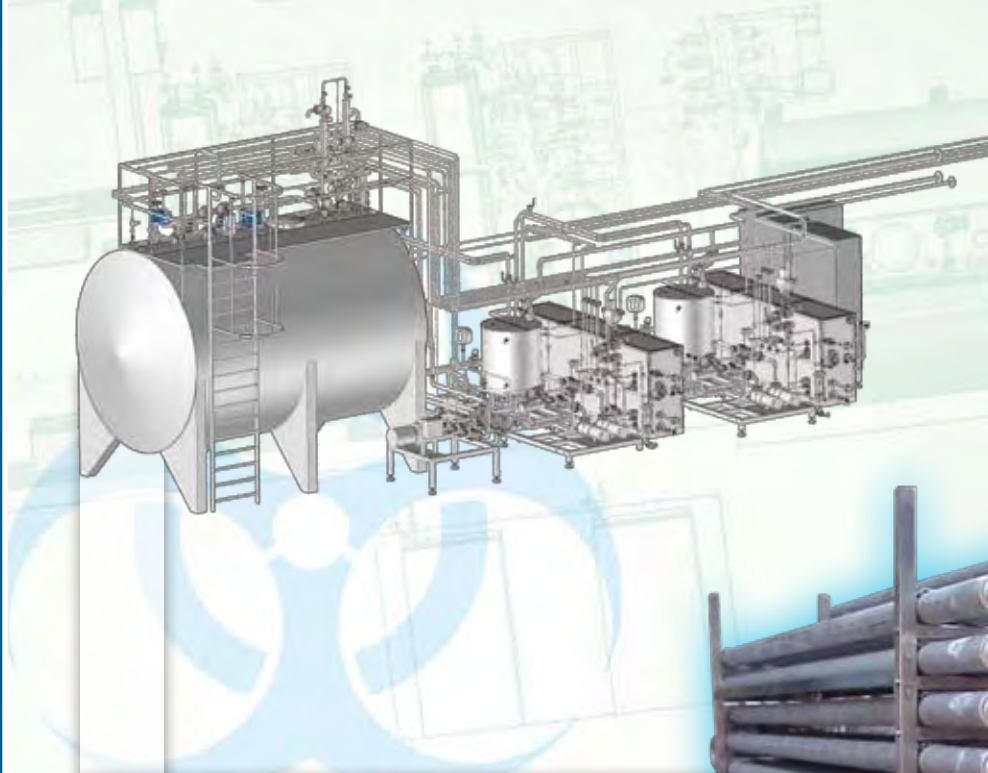
www.actini.com



BIOWASTE DECONTAMINATION SYSTEMS

ACTINI has years of experience in designing and manufacturing thermal systems to decontaminate hazardous infectious waste for

BSL CONTAINMENT 1 2 3 4



MAIN features

MAIN features

- **Continuous Technology**
- Pre-engineered solutions
- **FAST TRACK** construction
- Designing - Manufacturing and Documentation **STANDARDS**
- **Reduced** commissioning time
- **Short validation time** for a reduced time-to-market
- **cGMP** guidelines

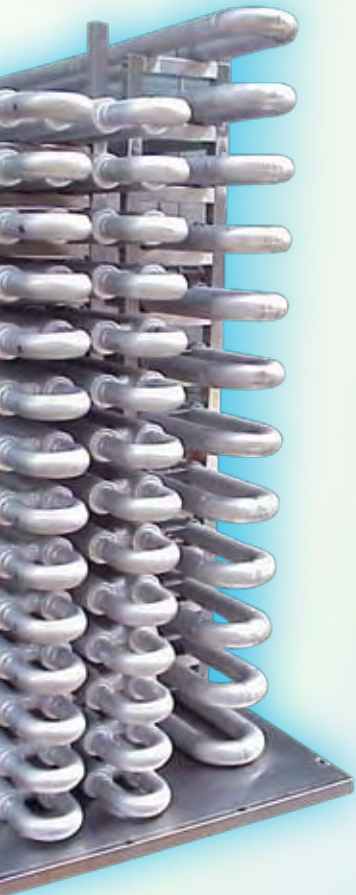
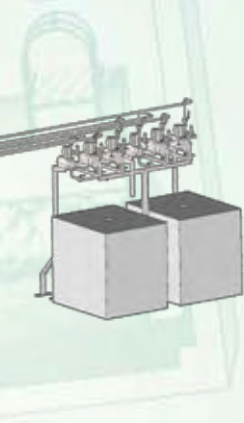


DESIGN features

DESIGN features

- Compliant with **European and American standards**
- **Modular Concept** assembled and tested at our facilities
- Compliant with the **highest containment requirements**
- Electrical or steam operated units
- **High quality components**
- **ACTINI Biological Waste Decontamination Systems** are validated by major vaccines manufacturers and engineering companies





For Each Capacity a CONTINUOUS TECHNOLOGY

STANDARD RANGE			
	CAPACITY	ENERGY	DIMENSIONS (mm)
LAB RANGE	250 L/DAY	ELECTRICAL	1,500 x 800 x 2,000
	500 L/DAY		1,500 x 1,600 x 2,000
BIOFACILITY RANGE	150 - 500 L/HOUR	ELECTRICAL	1,400 x 2,600 x 2,450
	1,500 - 2,500 L/HOUR	STEAM	1,900 x 3,300 x 1,900
	5,000 - 6,000 L/HOUR		2,400 x 3,500 x 2,000
	10,000 - 12,000 L/HOUR		1,700 x 4,200 x 3,600 MAIN SKID 1,700 x 3,000 x 2,800 CIP SKID

SELF CONTAINED Monobloc Skid



1
CIP AND
STARTING TANK



2
REDUNDANT HIGH SECURITY
PUMPING SYSTEM



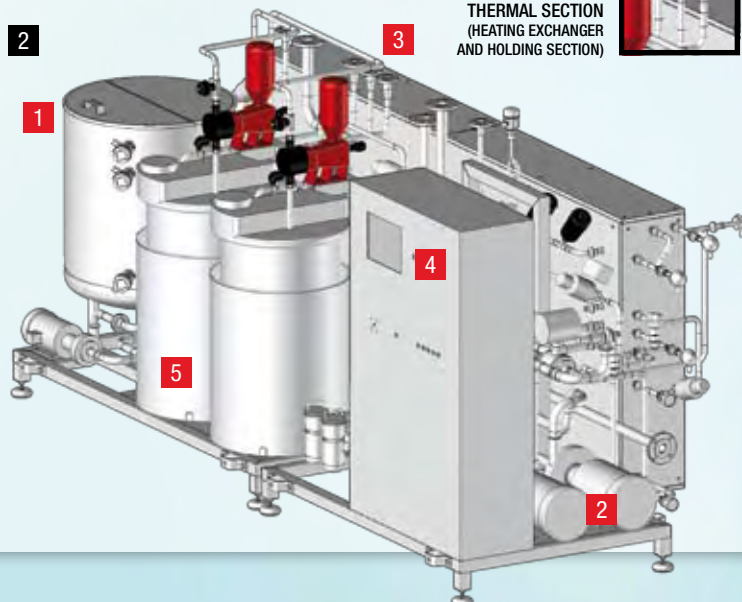
3
THERMAL SECTION
(HEATING EXCHANGER
AND HOLDING SECTION)



4
POWER AND CONTROL CABINET
(INCLUDING PLC AND TOUCH SCREEN)



5
CLEANING SOLUTIONS
STORAGE TANKS



CONTINUOUS TECHNOLOGY

Validated by the major Vaccines
Manufacturers

NOVARTIS VACCINES

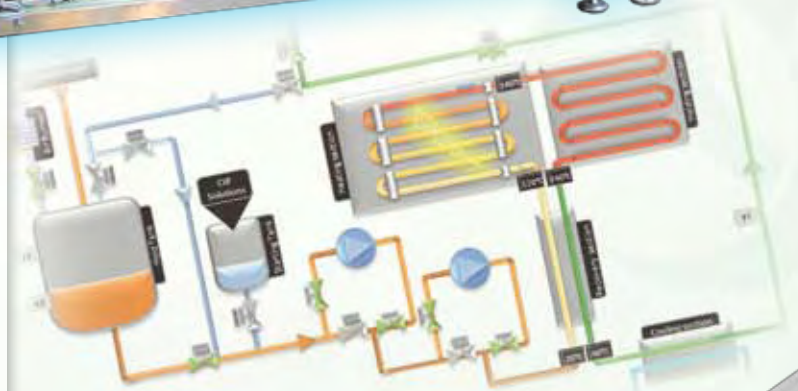
GLAXOSMITHKLINE

MERIAL

PFIZER

SANOFI PASTEUR

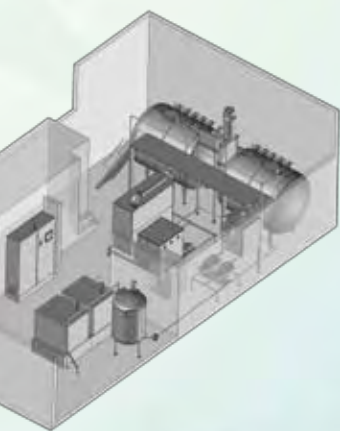
A new Approach to treat **LARGE VOLUMES** of Biowaste



FLEXIBILITY

FLEXIBILITY

- **Processing of large volumes** in a very short time
- **Level controlled system** (automatic start-up and shut-down)
- **Long decontamination cycles** (no fouling thanks to the monotubular design)
- **Double pumping systems** for an easier service (no production stops)
- **Reduced maintenance**
- **Choice of the most appropriate energy:** steam operated or ACTIJOULE® electrical systems



SPACE optimization

SPACE optimization

- **Placement in tight spaces**
- **Possible remote location** of the collecting tank
- **Compact footprint** particularly appreciated for revamping or extension projects



SAFETY

SAFETY

- **Continuous control** of the critical parameters (temperature / holding time) to ensure effective decontamination
- **PLC and hardwired** controlled sensors
- **Process integrity** (SIL 2 - SIL 3)



COST effectiveness

COST effectiveness

- **Reduced energy consumption**
- **Low water consumption**
- **Reduced validation requirements**
- **Shorter delivery time**

Our validated
STANDARD
for your
turnkey
project



LAB DECONTAMINATION UNITS

- Virology Lab
- Research Lab
- Disease Department
- Control Disease Center
- Vet Lab

BSL CONTAINMENT

3 4

Designed for the **SAFETY** **OF THE LABORATORY STAFF**



NO CONTACT

NO CONTACT with hazardous liquid during operation

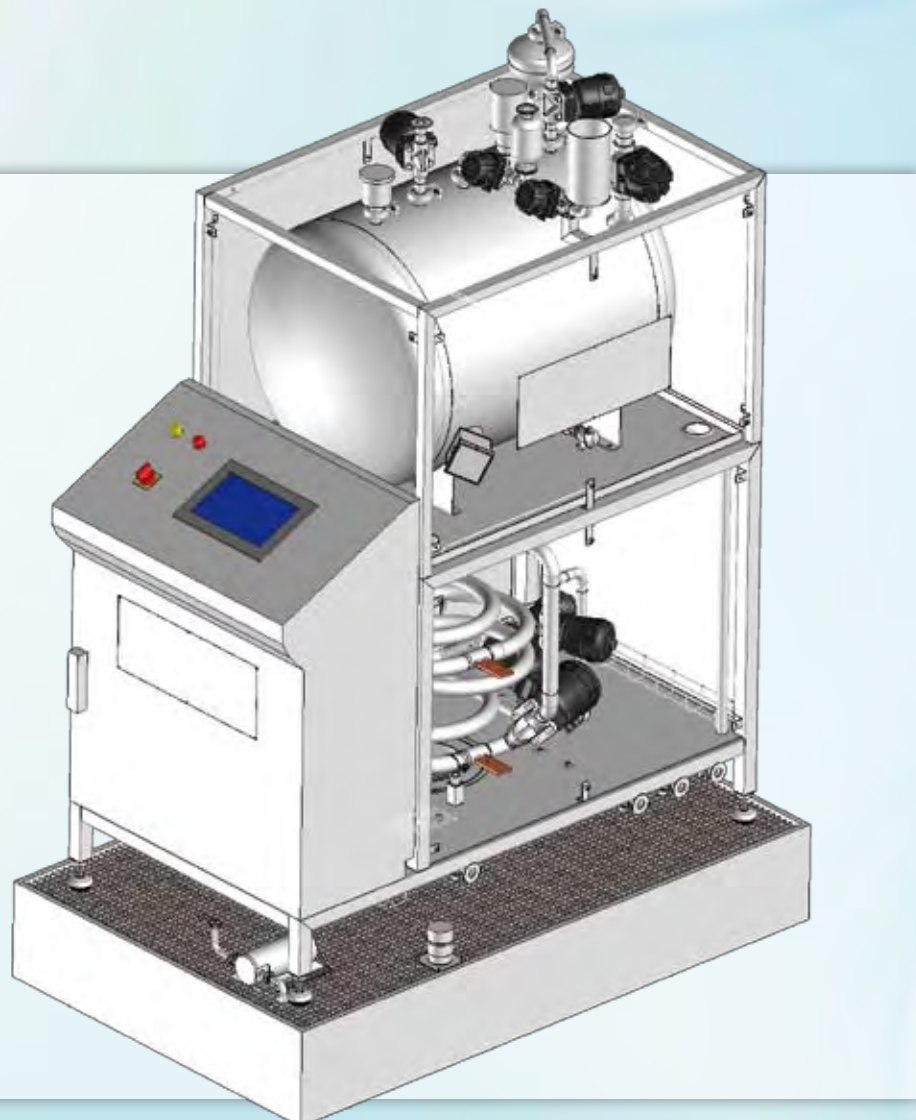
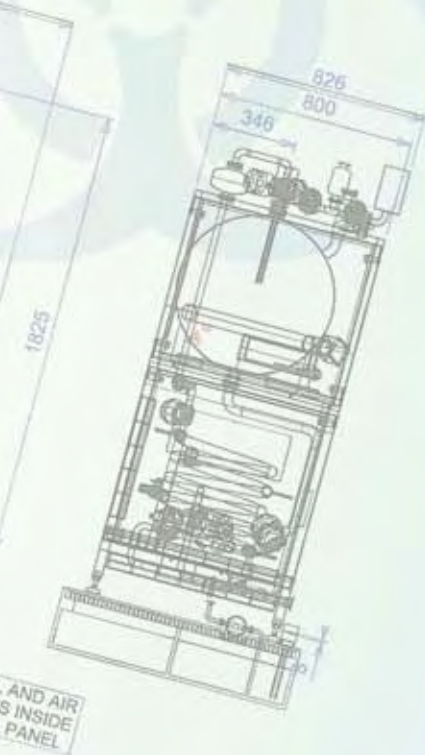
- **PLC-controlled treatment** (automatic start according to the storage volume) and cleaning
- **Sealed unit** (buffer tank and treatment section inside the system)
- **Leak detection system:** alarms and visual control with Plexiglas viewing panels
- **Automatic stop** of the waste discharge in case of energy failure
- **Recording** of the treatment cycles
- **No servicing**



DESIGNED for LAB environment

DESIGNED

- **Centralized collecting and treatment of liquid** from different sources: sinks, showers, washers, sterilization units, process waters... from a single lab room to large multi-user facility
- **Compact design:** placement in tight space
- **Plug and run system**
- **Environment friendly system**



1
CENTRALIZED
BIOWASTE COLLECTING

2
REDUNDANT
TEMPERATURE SENSORS,
HARDWIRED SECURITIES

3
ACTIJOULE® ELECTRIC
HEATING SYSTEM
(7 TO 14 KVA)

4
PROTECTIVE
RETENTION BASIN

OUR PHILOSOPHY

Provide you with proven technology and perform the best services to reduce validation costs, shorten the time-to-market of your products and allow your staff working in safe conditions.



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Project Management

Manufacturing

Commissioning

Training

Tests

Qualification



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