BONDTECH
MEDICAL WASTE
& BIOLOGICAL CONTAMINATED WASTE TREATMENT SYSTEMS

FULLY AUTOMATED & SEMI AUTOMATED OPTIONS AVAILABLE

BONDTECH
TREATMENT TECHNOLOGY
Toll Free: 1 (800) 414-4231
Email: sales@bondtech.net

DESIGN • ENGINEERING • FABRICATION • CONTRACTING
**Bondtech** has been supplying high vacuum/high pressure autoclave systems to the waste treatment industry for over thirty (30) years.

**Bondtech** has made a total commitment to provide a reliable as well as a durable autoclave system.

**Bondtech** is the world’s largest supplier of autoclave systems for the medical waste/biological waste industry. Our ability to provide high quality equipment at competitive prices has made us the proven leader in the autoclave/sterilization market and it has given us the respect of the industry.

**Services We Offer:**

- Turnkey Site Design
- Engineering
- Permitting
- Environmental Impact
- Equipment
- Autoclaves
- Shredders
- Compactors
- Material Handling
- Supplies
- Waste Bins
- Autoclavable (High Temperature) Bags
- Medical Waste Containers
- Spare Parts
- Technical Support
- Preventative Maintenance
- Calibration
- Operator Certification Training

Direct: (606) 677-2616  ·  Toll Free: (800) 414-4231  
1278 Highway 461  ·  Somerset KY 42503
**Bondtech Corporation** is the world leader in the design, engineering and manufacturing of high-tech autoclave systems for disinfection and sterilization of infectious wastes and biological wastes.

**Waste Types Include:**
- Infectious
- USDA/APHIS
- Medical
- Food
- International/Foreign Origin
- Biological Contaminated

**Process Description**

*Bondtech Treatment Technology Systems* are designed for high vacuum and high pressure capability. Bondtech proprietary designed autoclaves are subject to a pre-vacuum cycle, saturated steam cycle and a post-vacuum cycle to facilitate faster and more uniform penetration of steam into the medical waste to be treated.

*Bondtech autoclave’s* high vacuum is achieved by using a proven proprietary vacuum system design. Bondtech autoclaves are supplied with a locking ring, quick opening door which is used in the most sophisticated aerospace autoclaves, and designed with safety in mind. In this particular design, the door is stationary and the locking ring is mounted on the periphery of the vessel and is rotated through a short arc by hydraulic cylinders located on the side of the vessel.
**Bin Loading:** Autoclave bins are loaded with infectious waste and are transferred into the autoclave vessel for treatment. This process can be performed by an automated or semi-automated conveying system.

**Treatment:** The autoclave is controlled by the state-of-the-art programmable logic controller (PLC) with modem hook up capabilities for online support. The autoclave can be manufactured with an automatic or semi-automatic material handling system.

**Record Keeping:** Bondtech Autoclave Systems have an automated chart recorder and/or strip recorder, at the control panel which continuously records and generates the temperature, vacuum and pressure data. This information is maintained on permanent, hard copy records for each load of medical waste treated, further complying with quality control and satisfying environmental regulatory requirements. In addition Bondtech provides the capability to export digital data to provide historical record keeping.

**Unloading:** Once the cycle is completed, a green light will be illuminated indicating the door is ready to be opened. The operator will then unload the autoclave and the bin dumper will empty the bins into a compactor or a shredder.

**Shredders:** Bondtech shredders are heavy duty, single or double stage shredders to meet required particle size. Each knife configuration has been designed to suit the material for maximum throughputs and optimum size.

**Advantages and Waste Volume Reduction:**
After autoclaving and compaction the waste volume is reduced in excess of 75%. Further volume reduction can be realized with the installation of an optional post-treatment shredder. The major advantages of steam sterilization are the low costs associated with this process as well as the reliability of this well-known technology.
Bondtech has designed, supplied, and installed over 1,500 autoclave systems worldwide for various applications. Today, Bondtech Treatment Technology systems are processing over 6 million pounds (3 million kg) per day (over 1 million + tons per year) of medical waste.

**BTT PLC Control System**

Bondtech Corporation’s high performance control and data acquisition systems have been thoroughly proven in high-tech aerospace manufacturing plants.

The BTT PLC control system is designed to provide maximum flexibility to address any site specific waste treatment requirements.

**BTT systems** can be configured with the following options:
- Color Graphics Display illustrating real time data and autoclave cycle conditions.
- Weight Scale Integration
- Hard Drive Data Acquisition

The Following Features Have Made Bondtech the Worldwide Leader in Biomedical Waste Autoclaves:

- Ruggedly Designed and Built for Commercial Use.
- Hydraulic Quick Opening Door/with Safety Pin Interlock.
- Vacuum Pump or Vacuum Ejector for High Vacuum Operation.
- Temperature Probes for Added Protection Assurance.
- Programmable Control Systems.
- Recorders.
- Packaged and Modularized for Easy Installation.
- Volume Reduction Achieved by the Vacuum Cycle and the Heat Cycle and Further Reduced by Shredding.
- Weight Reduction at Time of Final Disposal Achieved by Removal of Moisture.
- Built in Strict Accordance with the ASME Boiler and Pressure Vessel Code, Section VIII, Division 1.

World Wide Installations
Bondtech has installed autoclaves on all Continents.
Today, landfills across the world, where medical waste is regulated, accept autoclaved medical waste. Medical waste that is properly autoclaved is rendered noninfectious and safe for disposal at sanitary landfills. The autoclaved medical waste does not generate any leachate characteristics (heavy metals, etc.), as found in ash generated by incinerators.

To maximize landfill space, autoclaved medical waste can be safely compacted to achieve over 75% volume reduction. Further reduction can be realized by installation of an optional shredder. The shredding process is performed only after the waste has been treated by the Bondtech Autoclave System. Today the bulk of the medical waste treatment capacity is by autoclave technology.

The steam autoclave is the most popular and effective medical waste treatment technology. Unlike the incinerator, the autoclave technology does not generate any hazardous combustion air pollutant emissions, such as hydrochloric acid, carbon monoxide, dioxin/furans, metal (particulate matter), etc.

The autoclaved medical waste byproduct is sanitized and safe for landfill disposal. More than 90% of the newly permitted North American commercial medical waste facilities since 1990 employ state of the art autoclave technology by Bondtech.

Bondtech Corporation is the world's largest supplier of commercial medical and USDA waste autoclave treatment systems, we process more waste than any other technology worldwide.

In an effort to assist our customers with the reliable equipment as well as a one-stop accountable supplier, Bondtech also offers the following auxiliary equipment and accessories.

- Shredders for biomedical waste, sharps and paper destruction
- Reusable medical waste containers
- Aluminum and stainless steel bins
- Red bags and Chemo bags
- Compactors and balers
- Bin Dumpers
- Autoclave bags
- Scissor lifts
- Boilers and more

Visit us on the Web! www.Bondtech.net
Field Installation and Repairs

Bondtech has been installing and repairing autoclaves for more than 30 years. We are able to work with any type of autoclave fast and effectively. We can supply you a new autoclave and field install it on a timely basis.

Bondtech field service is first class and covers, but is not limited to the following:
- New or Used Autoclave Installations
- New or Used Autoclave Start-up
- Autoclave shell code welding and repair
- Vessel integrity testing as per ASME requirements
- On-site inspections
- Misc. field work and modifications as per customer’s requirements
- Field installation of Hodge or Harris Quick opening doors
- Hodge or Harris Quick opening door re-wedging, and roller replacement/repair
- Hodge or Harris Hydraulic cylinder repair or replacement
- On-Site Operations

Support Service

There are various options for this service, and you may pick one that best suit your needs:

**Standard**
Service is provided Monday-Friday, 8:00am – 5:00pm EST. Our Service Technicians will work with you to provide technical and troubleshooting advice via telephone or remote desktop support (if available).

**Preferred**
One day on-site service support. This service is scheduled and can be provided outside working hours (additional charges may apply). Our Service Technicians will work directly with you to troubleshoot your issues. A Report of Findings and/or Inspection Report will be provided.

**Exclusive**
Three Day on-site startup and training. After purchase of a new or refurbished system, we can provide supervision during the installation of the system. Once the installation is complete, our technicians will train operators on the control systems and preventative maintenance. We will provide preventive maintenance service and operator’s training once a year for 3-years from the time of commissioning.

**Emergency**
Required service with Less than 24-hour notice.

All Service Plans include Telephone Support

Bondtech Field Service Features

- 24-48 hour emergency service
- Reduction of downtime
- Experienced and professional
- Extended service life
- Cost Effective
- Sole source responsibility

SALES@BONDTECH.NET
Bondtech designs and manufactures shredders and size reduction systems for safe disposal of hazardous, medical and pharmaceutical waste.

Bondtech provides effective solutions to assist with the on-going problem of medical and hazardous waste disposal. With proven technology and over 30 years of experience, Bondtech provides 2-shaft and 4-shaft shredders that destroy and reduce medical waste, rendering it “unrecognizable”. The 2-shaft line of shredders are designed for volume reduction. The 4-shaft line of shredders are designed to deliver small, uniform particle size.

**HAZARDOUS MATERIALS PROCESSED**

- Red Bag Waste
- Boxed Medical Waste
- Sharps Containers
- General Hospital Waste
- Dry Solid Waste
- Drums With Contents
- Solids and Liquids
- Aerosols
- Household Hazardous Waste

**SAFETY, EFFICIENCY & CUSTOMIZATION**

- Class I, Divisions 1 & 2 Environments
- Inert gas purging
- Oxygen monitoring
- Fire detection and suppression
- Deflagration vents
- Double door airlocks
- Explosion-proof motors and controls
- Video monitoring
- Complete operator control system

Bondtech’s Dual Shaft technology has been employed to process full drums and extract liquid contents from solids and metals, then repackage or contain certain materials depending on the application and customer need. These systems can include class 1, Div 1&2 environments, oxygen starved processing chambers, explosion proof motors and controls, double airlock systems, fire detection and suppression, deflagration vents and more. They are typically designed to meet specific customer requirements.
Ever melted those cheap liners and bags when autoclaving? Is cleaning your messy autoclave carts a bother? Protect your investment! Get Bondtech’s high heat and easy to install “PRO-TECH” liners for your autoclave carts or other high temperature lining purpose.

The Bondtech “PRO-TECH” liners provide several advantages to enhance your operation:

- Utilizing will extend the life cycle of every cart
- Reduce wear and tear on your dumper by dumping the treated waste easily.
- Enhance perception of clean/safe operation: Maintain carts free of debris.
- Eliminate a potential source of nuisance odors.
- Eliminate labor required to periodically remove waste debris from carts.
- Consistent full capacity utilization, eliminating waste build-up inside carts.
- Reduce occupational exposure, potential injuries related to cleaning waste from carts.

Bondtech’s “PRO-TECH” liners are custom made to meet our customer’s specifications.

Optional customization options include:

- Size
- Gauge
- Printed / Unprinted
- Temperature Strips
- Color
Features

- Shredding and sterilization in a closed and compact system, built-in shredder easy to disassemble.
- Fully Automated Process
- Low Maintenance Cost: Patented technologies of easily disassembled shredder
- Low Operation Cost
- On-Site Treatment
- Patented Odor Control

Advantages

- Shredding prior to Sterilization
- Hospitals
- Medical Waste Treatment Facilities

Process

Capacities

- 100-2500 Liters/Cycle (26-660 Gallons)
- 12-300 Kgs/Cycle (26-661 Lbs./Cycle)
- Daily Disposal Capacity 0.2-5 Tons

WWW.BONDTECH.NET
Single Deposit Containers (SDC)

Single Deposit Container is a versatile, “Point of Use”, reusable medical waste container. Its high volume capacity for needles, lab waste, IV bags, and tubing keeps waste collection costs at a minimum.

- FDA (501K) Certification
- US DOT Markings: Compliant with HM-200 regulations and state environmental health agencies
- OSHA Markings: Compliant with OSHA Exposure Control Plan

**Single Deposit Container Dimensions (Tapered to nest and stack)**

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Length</th>
<th>Width</th>
<th>Height</th>
<th>Weight w/lid</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 gal</td>
<td>18”</td>
<td>13”</td>
<td>16”</td>
<td>5.5 lbs</td>
</tr>
<tr>
<td>17 gal</td>
<td>18”</td>
<td>13”</td>
<td>24”</td>
<td>7 lbs</td>
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</tbody>
</table>

**Lids**

- **Locking Transport Lid**: Standard locking transport lid allows three full containers to be stacked.
- **Lab Lid**: Two-piece lid allows easy waste disposal and is designed primarily for lab use.
**Medical Waste Containers**

All containers meet all D.O.T. regulations.

**Med770 - 200 Gallon Red**
- Leak-proof, Spill-Proof
- Tamper-Proof
- Puncture Resistant
- Reinforced
- 4” Rubber Wheels Standard

*Additional Sizes Available*

**Med360 - 96 Gallon Red**
- Stackable
- Roto-Lock for Tamper Proofing
- Easy to Handle
- Dimension 24”W x 35” D x 43” H
- Slim Line Design
- 8” Rubber Wheels Standard

*Additional Sizes Available*

**18-38 Gallon Containers**
- Durable Design
- Snap fit lid
- Resistant to leaks and punctures
- Nesting bins and lids
- Stackable, Easy to Handle
- Injection molded handles for manual handling

**Med18**
- 18 Gallon Red
- 18.9”W x 18.9” D x 15.25” H

**Med28**
- 28 Gallon Red
- 18.9”W x 18.9” D x 22.9” H

**Med38**
- 38 Gallon Red
- 18.9”W x 18.9” D x 32.5” H

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1278 Highway 461 • Somerset KY 42503
Model: MED-T-1B (Capacity: 1.0 L)

<table>
<thead>
<tr>
<th>Product Size (cm)</th>
<th>pcs/ctn</th>
<th>Carton Dims (cm)</th>
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</thead>
<tbody>
<tr>
<td>11x10x15.5</td>
<td>60</td>
<td>37x32x41</td>
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</table>

Model: MED-T-4.6A (Capacity: 4.6 L)

<table>
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<th>Product Size (cm)</th>
<th>pcs/ctn</th>
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</thead>
<tbody>
<tr>
<td>22x11.5x28</td>
<td>20</td>
<td>50x25x24.5</td>
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</tbody>
</table>

Model: MED-T-5 (Capacity: 5.0 L)

<table>
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<tr>
<th>Product Size (cm)</th>
<th>pcs/ctn</th>
<th>Carton Dims (cm)</th>
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</thead>
<tbody>
<tr>
<td>15.5x13x21</td>
<td>50</td>
<td>67x22x47.5</td>
</tr>
</tbody>
</table>

**MED-T**

- Novel quadrate shape
- Leak Proof and Puncture Resistant
- Wide, clear and practical opening for easy and safe disposal
- Counterbalanced door for hands-free disposal
- Built-in needle removal
- Ergonomically-designed handle on the side/lid
- Temporary closure & definite closure
- Secure perimeter lock for safe usage and transportation
- Easy manipulation
- Comprehensive label details
- Safe to human health and environment

PH: (606) 677-2616  MWCONTAINER@BONDTECH.NET  WWW.BONDTECH.NET
Manual Steam Clean

The Bondtech Steam Clean utilizes a heavy duty steam gun with the capability to mix detergent into the steam stream to help remove residual traces of oils and grease. The Bondtech Steam Clean features a mixing system and detergent tank to hold concentrated detergent. The detergent is then sent to the steam gun on demand to be mixed with the steam flow triggered by the operator. It flows thru the gun and is mixed with the steam and onto the item to be cleaned. The deluxe gun has several optional attachment brushes that can be utilized to power thru the grease and grime assisting in its removal. The Bondtech Steam Clean is equipped with a manual steam/water mixing station to feed clear tempered rinse water thru the gun to complete the cleaning of the item.

Cabinet Washer

- Cleans Container in Seconds!!
- High Volume low pressure cleaning
- Easy Operation and Maintenance
- Three Stage Filtration of Recirculated Water! Makes for easy cleaning of debris

Flow Thru Washer

- Clean a 96 Gallon Container every 45 SECONDS!!!
- Designed with the operator in mind for ease of operation
- Removes grease and contaminants in seconds
- We offer “FAST” response to your need of parts and service
- All parts used are of the highest of quality
- Backed with our ONE YEAR Warranty

WWW.BONDTECH.NET
**Reusables Sharps Wall Mount**

Our new Wall Mount fits our MW Containers reusable container, regardless of whether you are using our Canteen Style Lid or our Mailbox Flipper Lid! It is sleek, attractive, and exceptionally strong!

**Mailbox Style Lid**

Our Mailbox Style Lid has a slide on mechanism and fits our MW Containers reusable container perfectly! It’s stronger than other versions of this style of lid and is sturdy and flexible.

**Canteen Style Lid**

Our Canteen Style Lid is unique! With it’s slide on mechanism, it perfectly fits our MW Containers reusable container. It has a screw on cap that is the only one of it’s kind and is 8 times stronger than the industry standard for caps.

**3 & 4 Gallon Reusable Sharps**

- Twice as Thick as a disposable Container
- Fits in Competitors Wall Mounts
- Will fit in Competitors wall mounts!
- Has a slide on mechanism for lids

**3 Gallon**

- Holds 2.75 gallons of medical waste/sharps

**4 Gallon**

- Holds 3.75 gallons of medical waste/sharps

Available in Red or White

*Custom Colors available to suit your needs*

**Our new Wall Mount fits our MW Containers reusable container,**

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SELF CONTAINED
COMPACTORS

- ELECTRICAL FEATURES ON ALL MODELS
- UL LISTED CONTROL PANEL
- ONLY MAJOR BRAND ELECTRICAL COMPONENTS USED
- WEATHER TIGHT ELECTRICAL ENCLOSURE

RamGuide System
The Self-Contained cross cylinder ram features side mounted full length Ultra-High Molecular Weight (UHMW) guides to support the ram providing uncompromising longevity and reliability.

Door Protector
Prevents roll-of hoist cable from contacting the door frame, preventing bend doors and leaking seals.

SubFloor Sump
Self-Contained Container Sub Floor is separated from the container floor to form a tunnel to allow liquids to drain from behind the ram when emptying.

Programmable Relay Controls
Self-Contained Container are designed to use a readily available non-proprietary programmable relay.

Single Piece Side Sheet & Floor
Our manufacturing plant uses a 30 foot 500 ton press break to form sides and floors allowing no vertical seems.

RearGate Hinge & Seal
Self-Contained Compactors have a full door and a 3 point door latch that provides excellent compression and sealing properties.

RustInhibiting Primer
Self-Contained Compactors are primed with rust inhibiting red oxide primer to reduce corrosion.

Lockable Door Latch
Hopper door can be locked preventing unauthorized usage.
OUR 315,000 SQ. FT. STATE OF THE ART MANUFACTURING FACILITY IN SOMERSET, KY

OUR 100,000+ SQ. FT. FACILITY IN SALISBURY, NC

OUR PEOPLE MAKE ALL THE DIFFERENCE!
BONDTECH TREATMENT TECHNOLOGY OFFERS:

**Control Systems**
- PLC or PC Control Systems
- On-Line Troubleshooting - PLC Networking
- External Data Link Integration Capabilities
- One Network Connectivity
- Window Programming
- High Speed Processing

**High Vacuum System**
- Proprietary Vacuum Technology
- Effectively Controls Nuisance

**High Pressure/Temperature**
- Ensures Effective Medical Waste Treatment
- & USDA/APHIS Waste Treatment

**Experience**
- Manufacturer of Autoclave Systems since 1983

**Service**
- Turn-Key Installation
- Start-Up and Training
- Testing and Calibration
- Maintenance Services

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TREATMENT TECHNOLOGY

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WWW.BONDTECH.NET
Industries Served by Bondtech Include:

- Circuit Boards
- Infectious Waste
- Aerated Concrete
- USDA Waste
- Food Waste
- Textiles
- Biological Contaminated Waste
- Aerospace Composites
- Plastics
- Medical Waste
- Wood Treatment
- APHIS Waste
- Foreign Origin Waste
- Glass Lamination

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Fax: 1 (606) 676-9157

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