

EQUIPMENT SPECIFICATIONS – CORRECTIONAL PACKAGE CORRECTIONAL FOOD SERVICE



As presented by the
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1.0.0 Introduction

It is the hope of The Association that this document will provide some standardization and basic specification guidelines for equipment to be sold into correctional institutions. Although not all areas of equipment will be covered, we hope to provide guidelines for equipment used in receiving and storage, refrigeration, prep, production, distribution and service, warewashing and waste management.

It must be kept in mind that the specifications provided in this document are guidelines and not hard, fast rules. Every institution is different and has specific needs for its correctional package. It is the responsibility of the operator, the consultant, the manufacturer's representative, the equipment manufacturer and the vendor to determine what options best suit each operation. It must also be understood that it is not the intent of this document to tell a manufacturer how to make a specific piece of equipment. The food service equipment industry has made great strides in providing equipment that is structurally sound and safe to operate; The Association is confident that all know about secure fasteners, etc. What will be provided here are items that need to be available in a "corrections package". The safety, security and good order of the institution and its personnel are our first order of business.

- 1.0.1 **NSF/ANSI; Energy Star; LEED; UL®; ETL; ASME; :** It is also the assumption of The Association that most, if not all, manufacturers are familiar with the above noted organizations and their standards and are making every effort to be compliant in all cases as they apply. It is the responsibility of the operator to assure these certifications, as required, are being met.
- 1.0.2 **Energy efficiency:** Again, different institutions may have differing requirements. It is the responsibility of the operator to make all parties involved aware of the efficiency requirements of their institution. Requirements may be heat recovery, use of LED bulbs only, pilotless gas appliances, reduced water usage, etc.

1.1.0 General Specifications: "If it sticks out, cover it up or it WILL get knocked off!"

- 1.1.1 **Exposed Fasteners:** All exposed fasteners shall be tamper proof and require the use of a special tool for removal; should the fastener and tool be proprietary, two tools must be provided with each piece of equipment. These tools must be designed to be attached to a key chain/ring.
Hex head cap screws and bolts requiring wrenches for installation and removal may be used. Fasteners with the nut welded in the inside of the equipment are acceptable however, the nut must be accessible should the weld give out.
- 1.1.2 **Operating Controls:** Either knob or touch pad controls may be used depending on manufacturer and institution. All controls must be behind a hinged or sliding, lockable protective cover. The cover shall have a piano or continuous hinge or standard door hinge, depending on the weight of the cover. The cover must be lockable by either a key type lock (not recommended but determined by operator) or a hasp/padlock. The hasp provided by the manufacturer, the padlock by the operator.
Should a window be necessary in the cover, it must be made of .25" thick, high impact, clear polycarbonate and must be fastened to the cover so as not be easily removed.
- 1.1.3 **Motors:** All motors must be enclosed with protective covers retained by tamper resistant fasteners. Protective covers must be removable for ease of service.

- 1.1.4 **Exposed switches, fuses, circuit breakers, or similar controls:** Shall be protected by a lockable cover or cover secured by approved fasteners.
- 1.1.5 **Name plates and other forms of identification:** Shall be permanently affixed, non-removable, and in an **easily accessible location** – it should not be necessary to remove anything to view the name plate. The name plate must also include any necessary information (model #, serial #, manufacture date, etc.) needed for ordering parts of service. All information should be stamped/engraved onto the plate so as not to wear away with prolonged use.
- 1.1.6 **Water:** It is recommended that all water used in production, warewashing, etc., be softened to 0 grains hardness. If this is not feasible, water to equipment such as combi-ovens, coffee makers or steamers must be filtered to remove minerals, etc.
- 1.1.7 **Seismic Activity:** Many areas are subject to seismic activity. Local codes should be checked and adhered to.

1.2.0 Shelving, Dunnage Racks, Utility Carts

- 1.2.1 **Shelving:** Shelving is available in many different materials – stainless steel, aluminum, polycarbonate, etc. Shelving is available in one piece construction or must be assembled on sight. The operator, with the assistance of the sales person/manufacturers rep need to determine which type is best suited to the needs of the institution. More than one type and differing weight limits may be needed in a single institution. One piece shelving with three or four bar shelves should be sold with optional non-porous, cleanable shelf liners as should units requiring assembly. Load limits should be easily visible and permanently affixed to the shelving units.
- 1.2.2 **Dunnage Racks:** Dunnage racks are available in different materials but, for corrections use, it is recommended that they be made of welded tube aluminum or polycarbonate, depending on where they will be used and the amount of weight they will need to support. On any unit over 4' in length, support legs should be placed no more than 3' apart and must raise the shelf a minimum of 6" above the floor; leg placement must eliminate any deflection at the center of the rack. Leg end caps are recommended for tube aluminum racks to protect the flooring. Load limits should be easily visible and permanently affixed to the rack.
- 1.2.3 **Utility Carts:** Utility carts are available in a large range of materials and material handling ability. It is the responsibility of the operator, working with the sales rep, to determine which material – steel, stainless steel, aluminum, molded plastic, etc. – and shelf weight capacity best suits the operator's needs. Load limits should be easily visible and permanently affixed.
 - a. **Handles:** In a corrections environment the handles are always in danger of coming off and, when they do come off, in danger of becoming weapons. Following are recommendations:
 - 1. On steel, stainless steel and aluminum carts the handle should be affixed with a triangular support that is fully welded to the handle and the frame. The cross bar must not be removable. With no triangular support the handle must be welded in such a manner as to be an integral part of the framing.
 - 2. With molded plastic carts the handle and cross bar must be molded into the top shelf – it should not be necessary to mechanically attach the handle to the unit.
 - b. **Casters:** Casters should be slightly oversized to 1) handle the total weight capacity of the cart and 2) to withstand the rigors of a correctional environment. Swivel, non-swivel, both with locking option, should be available in a configuration as requested by the operator.

1.3.0 Refrigeration

1.3.1 **General Note – Refrigerant:** ONLY EPA approved and locally accepted refrigerants will be used in any refrigeration equipment and must comply with the most recent EPA standards and/or local requirements.

1.3.2 Walk-in, Roll-in, Roll-through Refrigerators and Freezers

- a. Doors shall be lockable with either a manufacturer supplied key lock or a handle designed to accommodate an extended shank padlock. Type of lock determined by operator and padlock supplied by operator.
- b. All access doors will be supplied with an interior lock release system – keyed to prevent accidental or purposeful entrapment of an individual within the unit. There should also be an interior alarm activator should someone be locked in the unit and the lock release system fail.
- c. Doors shall be self-closing and available and, as an option, wide enough to accommodate pallets and pallet movers.
- d. Non-transparent doors – *walk-ins only* – must have a window no less the 12” w x 12”h that is located above the center point of the door. The window should be made of industrial grade, non-glass material. Doors may also be constructed with clear, non-glass, industrial grade material that can withstand the rigors of a correctional kitchen. Suggested thickness, at least ½ “. The final determination is up to the operator.
- e. Evaporator units shall have a guard over the fan that does not allow for the insertion of anything larger than a human finger. A cover shall be provided for the back of the evaporator unit allowing for sufficient air flow but not for “stashing” contraband items. Mesh should be no more the ½” x ½” and should be anodized aluminum or stainless steel. The mesh shall be attached with tamper resistant screws.
- f. Shelf brackets / slides: Reference NSF/ANSI – 2 2015 Section 7.7.
- g. Temperature controls should be behind a lockable cover or require a special tool, provided by manufacturer, to adjust the temperature.
Or, based on operator preference, units may have pre-set, non-adjustable temperatures set at the factory.
- h. All evaporator, drain and refrigerant lines shall be securely attached to the wall if exposed. Floor drains should be available as required by code.
- i. Interior lighting shall be recessed and covered by a framed, break resistant, transparent or translucent material. Cover must be removable with use of a special tool, provided by manufacturer, for cleaning and service. If lighting cannot, for design reasons, be recessed, the fixtures must be protected from encounters with hard objects: recommendation; ½ x ½ mesh enclosure.
- j. Other potential options:
 1. Remote temperature monitoring with remote print capabilities; Wi-Fi or cabled, HACCP compliant.
 2. Wireless/cabled temperature adjustment.
 3. External temperature indicator
 4. High temperature, lost power and door open audio alarm.

1.3.3 Reach-in and Reach-through Refrigerator/Freezer

- a. The unit shall be supplied with a mesh cover that includes the entire refrigeration area, top and all sides. Should the design and construction of the side panels not allow for this, all

open areas of the refrigeration area (top and back) must be covered with a framed, mesh cover. Mesh should be not more than ½" x ½" anodized aluminum or stainless steel. Mesh must be removable for cleaning and service needs.

- b. **Doors** shall be lockable with either a manufacturer supplied key lock or a handle designed to accommodate an extended shank padlock. Operator will determine which locking system best fits their needs. Should the purchase be for more than one unit, all units must be keyed alike.
- c. All access doors will be supplied with an interior lock release system to prevent accidental or purposeful entrapment of an individual within the unit.
- d. Doors will be self-closing and removable only with the use of a special tool. Handles shall be one piece and permanently affixed.
- e. External temperature monitoring must be available (digital or dial) and must be under a lockable cover, as are any external controls.
- f. Interior lighting, if available, must be either recessed in the cabinet or protected from breakage.
- g. Other potential options:
 - 1. Remote Wi-Fi temperature monitoring
 - 2. Wireless temperature adjustment
 - 3. High temperature alarm

1.4.0 Food Prep

1.4.1 **Mixers:** Mixers are categorized by type as planetary or spiral; planetary are universal in application; spiral mixers are used primarily for dough applications.

- a. Controls shall be under a lockable cover.
- b. Bowl guards shall be either wire or solid, the choice to be made by the operator. Bowl guards (planetary mixer) shall be removable for cleaning purposes. **The mixer will not operate if the bowl guard is not in place and securely fastened.** Hinges on spiral mixer bowl guard shall be continuous with hinge pins welded at each end to prevent removal. **Mixers will not operate if bowl guard is not in place and securely fastened.**
- c. **Floor** models shall be provided with a means to secure to facility floor. Table/counter models shall be provided with a means to secure to mounting surface.
- d. Levers and handles shall be constructed with non-removable knobs.
- e. "Shift-on-the-fly" must be available for all units sold to corrections facilities.

1.4.2 **Bowl Cutters (not recommended for correctional use), Shredders, Peelers, Food Processors**

- a. Shall have limited access guards or covers for controls – timers, switches, etc.
- b. Handles and knobs shall be either fully welded or secured with tamper proof fasteners.
- c. All **must not operate** if the lids, cover, blade covers or blade assemblies are not properly attached and securely fastened.
- d. For use by inmate labor, bowl cutters will have a cover for the entire bowl assembly as well as a blade cover. A small opening is acceptable for removal of finished product while blades are operating. Again, use of this appliance is not recommended in a correctional facility.
- e. Blades shall be removable only with a special tool for **supervised** cleaning and sanitizing.

1.4.3 **Slicers**

- a. Slicer **will not operate** if knife cover is not in place and securely fastened.
- b. Chute shall be attached to support arm using bolts as opposed to knobs.

- c. Sharpener should be removable for cleaning and storage.
- d. Threaded base and legs should be available for bolt down.

1.5.0 Sinks

1.5.1 Three Compartment / Utility

- a. Sink bowls shall be stainless steel – gauge to be determined by operator – and large enough to accommodate a full size sheet pan placed flat in the sink basin.
- b. Sink bowls shall be either drawn (molded – not recommended) or have continuously welded seams (recommended). Determination by operator.
- c. Each sink bowl shall be equipped with a rotary waste water valve with connected overflow. Drain lever assembly shall extend to the front of the bowl but not further than the brace and be supported by a stainless steel bracket continuously welded to the sink. Swivel faucet heads shall not be removable without the use of special tools.
- d. Braces shall be provided between all legs, continuously welded at connecting points and located 12" above the floor.

1.5.2 Power Wash Three Compartment

- a. Controls shall be under lockable cover.
- b. **See** above (1.5.1) for other minimum requirements.

1.6.0 Dough Rollers and Sheeters: Available in counter top and floor models with casters.

- a. Controls shall be under a lockable cover
- b. There shall be an emergency shut-off switch and guard/kill above the pin point.
- c. **Something to work for:** Roller break-away should something (a hand) with a stiffer consistency than dough be fed into the machine.

1.7.0 Production

1.7.1 Convection Ovens

- a. Controls shall be under lockable cover.
- b. Shall be provided with NSF approved stainless steel, adjustable, bolt down legs.
- c. Convection fan **shall not be activated** by a pin protruding from the oven door.
- d. All access doors will be supplied with an interior door release system to prevent accidental or purposeful entrapment of an individual within the unit.
- e. Oven door shall have shatter proof viewing window.
- f. Any internal meat/product thermometers must not be removable.

1.7.2 Combi Ovens

- a. **Can** be either boiler or boiler-less design. The operator will select steam production method.
- b. All should come with a method for de-liming. Boiler models will have either an automatic or manual flush system.
- c. De-liming port, if applicable, shall have a lockable cover.
- d. Controls shall be under lockable cover.
- e. Convection fan **shall not be activated** by a pin protruding from the oven door.

- f. All access doors will be supplied with an interior door release system to prevent accidental or purposeful entrapment of an individual within the unit.
- g. Oven door shall have a shatter proof viewing window.
- h. Any internal meat/product thermometers must not be removable.

1.7.3 **Horizontal Rotating Deck Oven**

- a. Controls/temperature indicator shall be under a lockable cover.
- b. Shall have a hasp/padlock system for service panel access.
- c. Shall have a protected viewing window
- d. Interior lighting will be protected
- e. Shall have an interior alarm/system-stop button should an individual be trapped inside.

1.7.4 **Proof Boxes**

- a. Can be either insulated or non-insulated based on needs of the operation.
- b. If equipped with a see-through door, door material will be shatter proof, industrial grade material.
- c. Controls will be under lockable cover.

1.7.5 **Vertical Rotating Roll-In Rack Ovens**

- a. Controls shall be under lockable cover.
- b. Access door(s) shall be equipped with an interior door release system to prevent accidental or purposeful entrapment within the unit.
- c. The door shall have a protected viewing window that is at least ½ the height of the door.
- d. Interior shall have an “alarm” button which activates an external alarm and causes a system shut down.
- e. The circulation fan motor and rack lift/drive assembly shall be under a lockable security cover unless enclosed as an integral part of the oven.
- f. Interior lighting must be either recessed under a shatter proof cover or, if not recessed, protected from damage.

1.7.6 **Griddles**

- a. Mobile griddles, in all power models, should have an easily cleanable power cord/gas hose with a restraining cable at least 1' shorter than the power/gas hose to prevent damage should cord/gas hose not be disconnected.
- b. All exposed controls will have a hinged, lockable cover. Lock type determined by operator.
- c. Any removable accessories, shelves, cutting boards, etc., shall be attached with welds, tamper proof fasteners or attached to the unit using a metal tether, chain or other similar device.

1.7.7 **Kettles:** Floor, counter, stand mount; steam, gas or electric; gravity drain, pumpable; tiltable, with or without agitator.

- a. All controls shall be under a lockable cover.
- b. Drain valve covers, strainers or other similar removable object shall be attached to the unit with either a non-corrosive tether or chain.
- c. Models with agitators shall have a torque sensor to stop agitation should excess torque pressure be placed on the agitator. Excess torque defined as anything causing more torque than properly prepared instant mashed potatoes, **or**

1. Agitator shall have a “ramp-up” process from the stopped position to prevent excess torque being placed on the agitator arm, should the agitator be set at full speed when activated
- d. Tiltable countertop or stand mount models shall have a graduated tilt mechanism to prevent rapid or sudden full tilt of the kettle.

1.7.8 **Braising Pans / Tilt Skillets**

- a. All controls shall be under lockable cover.
- b. Tilting mechanism shall be either crank or hydraulic. Hydraulic units shall have a back-up fly wheel to allow tilting or lowering of the cooking area should the hydraulic system fail.
- c. Cabinet doors on the unit (stand) are not recommended. Should the operator deem them necessary they must be lockable.
- d. Drain valves, drain valve covers, strainers or other similar removable parts shall be attached to the unit with either a non-corrosive tether or chain. Tilt mechanism crank handle/wheel must be fastened with either security type/tamper resistant fasteners or a non-corrosive tether or chain.
- e. Burner assemblies (gas models) or other non-steam heating elements must be protected on top, bottom and all sides to prevent “splash up” damage or bad return air system “blow outs”.
- f. If burner assemblies are removable they must be secured to the unit with a non-corrosive tether.
- g. For units with casters, or any movable unit, a restraining cable at least 1’ shorter than the power/gas lines must be available to prevent damage to power/gas lines while moving the unit.

1.7.9 **Steamers**

Pressure/Compartment

- a. All controls shall be under a lockable cover.
- b. Shall be supplied with wheel type compartment door closers that are not removable without the use of special tools.
- c. Doors shall be lockable. Lock type determined by operator.
- d. De-liming port, if applicable, shall have a lockable cover.
- e. Base shall be open. If not available with open base, access doors must be lockable.

Pressure-less / Convection

- a. All controls shall be under a lockable cover.
- b. Doors shall be lockable. Lock type determined by the operator.
- c. De-liming port, if applicable shall have a lockable cover.
- d. Base shall be open. If not available with open base, access doors must be lockable.

1.7.10 **Ranges / Cook Tops – gas / electric / Induction**

- a. Induction cook tops/ranges are not recommended for corrections kitchens unless use will be constantly supervised by civilian staff or used exclusively by civilian staff.
- b. All controls shall be under lockable cover or, if knobs, protected with a rod type limiter across the front.
- c. Gas models shall be pilot-less ignition.
- d. Cooking grates shall be secured to the cook top (tether, chain, etc.) to prevent unauthorized removal.

- e. All other removable parts (crumb trays, grease pans, etc.) shall be secured to the unit with tether or chain.

1.7.11 Tumble Chillers

- a. All controls shall be under lockable cover.
- b. Unit shall not operate unless lid is securely in place.
- c. There shall be an emergency lid release and alarm activator in the water chamber.
- d. The unit shall provide HACCP/local health department/institution procedure temperature monitoring information storage and/or transmission.

1.7.12 Blast Chillers

- a. All controls shall be under lockable cover.
- b. Doors shall be lockable. Lock type determined by operator. A hasp/padlock or handle designed to accommodate a longer shank padlock are recommended.
- c. There shall be an emergency door release with alarm in the interior of the unit.
- d. Temperature probes with non-flexible tips must be firmly mounted to the interior wall of the unit and be equipped with an alarm (if available) should one be removed. Non-flexible probes must be completely enclosed by a lockable cover.
- e. Temperature probes with a flexible tip: flexible tips must be attached to probe handle in such a manner as to eliminate damage to the probe should they be improperly removed from product.

- 1.7.13 **Fillers and Pumps:** Given the number of parts that must be removed for cleaning/sanitizing, any corrections safety/security add-ons must be determined by the operator and vendor/manufacturer.

- 1.8.0 **Ventilation Hoods:** This system is critical to the efficient operation of any kitchen. The size and scope should be determined through consultations with architect, consultant, building manager, local code authority and operator to provide maximum exhaust with minimum effect on +/- room pressure and HVAC effectiveness.

- 1.9.0 **Fire Suppression Systems:** This will be determined by area being covered and local code. Liquid/water systems should never be placed over a deep fryer or any area where there is hot grease.

1.10.0 Temperature Controlled Carts

- a. The operator will determine where he wants the heating units for these carts. There are several designs available and the operator must choose the one that best fits his operation and quality of workers that will be using the carts.
- b. Controls shall be under lockable controls.
- c. Heated temperature may be adjustable with a minimum set of 150°. Single temperature carts should be preset at a minimum of 150°.
- d. If refrigerated, temperature may be adjustable with a minimum set of 34° and preset to that.
- e. If refrigerated, it shall be charged with environmentally safe ANSI/ASHRAE Standard 34-1992 Safety Group Classification (A1) 450A refrigerants.

- f. Units shall be one side accessible unless otherwise specified by the operator. Doors shall be secured to prevent opening during transport. Padlock/hasp locking system shall be standard.
- g. A restraining cable at least 1' shorter than the power cable shall be attached to the power cord to prevent damage to the cord should they be moved away from the outlet without being unplugged. Power cords should be a minimum of 8' in length. There should be a means to secure the cord to the cart when not in use.
- h. Casters shall include one lockable set and be rated to support 100# more than the loaded weight of the cart.
- i. The doors shall be magnetic closure. The doors shall not have gaskets for all-heated carts and shall have gaskets for carts with refrigeration.
- j. Each door shall have three 12-gauge hinges
- k. Units shall not have any areas to hide / store contraband
- l. Units shall have a full perimeter bumper that extends beyond all hinges and other cart hardware.
- m. Bumper shall have reinforcing carriage bolts to prevent easy removal of protective vinyl strip.
- n. Units shall have a minimum of 1" thick of high-density insulation on top, bottom, sides and doors. Dual temperature carts shall have a divider wall between the two compartments with a minimum of 1" thick high-density insulation
- o. A temperature thermometer shall be positioned to get a good approximation of the inside temperature and have an outside display of the temperature
- p. Other potential options:
 - 1. Padlock for door latch tethered permanently to the cart
 - 2. Removable snap-in heating unit
 - 3. Top rail on cart roof
 - 4. Push/pull handles
 - 5. Full perimeter top bumper
 - 6. Tow chasis
 - 7. Brake assist
 - 8. Floor lock
 - 9. Shelves / racks
 - 10. Welded hinges

1.11.0 Steam Tables and Custom Fabrication

1.11.1 Stationary

- a. Under unit storage doors shall be provided with a standard padlock/hasp locking system
- b. Controls shall be under lockable cover. Knob controls must be protected by a rod type limiter.
- c. Heaters shall be concealed and protected from "splash up". Gas units shall be pilotless ignition.

1.11.2 Mobil/Portable

- a. Under unit storage doors shall be provided with a standard padlock/hasp locking system.
- b. Controls shall be under lockable cover. Knob controls may be protected by a rod type limiter.
- c. Heaters shall be concealed and protected from "splash up".

- d. Cords on electric units shall be equipped with a restraining cable to prevent damage to the cord and the unit. Cords shall be a minimum of 8' in length. There should be a means to clip attach the cord to the unit when not in use.

1.12.0 Dish Machines

1.12.1 Flight Type

- a. Controls shall be under lockable cover. Start and stop buttons shall be at both ends of the machine and protected from accidental breakage – rod type protector, cover with access holes, etc.
- b. Any exposed mechanical parts on the top of the machine – piping, back-flow valves, meters, gauges, etc. – shall be enclosed in a framed mesh cage – mesh not to exceed ½" x ½". Mesh shall be removable for service and cleaning needs.
- c. Solid panels should only be on that part of the machine that houses the actual washing cavities. All external areas below the base of the wash chamber should be available enclosed in a framed, removable mesh screen which reaches to 6" above the floor. Mesh will be removable, with special tools, to allow for service and proper air movement.
- d. Doors shall be of the manufacturers design. Swing-out doors shall be mounted with welded heavy duty hinges mounted to the frame to mitigate damage done by swinging on the door (yes, this happens). The machine will not operate should any door not be properly closed. Doors should be insulated.
- e. Curtain hooks shall be welded in place.
- f. Drain valves shall be located on the front (door side) of the machine and protected from damage: protruding step plate, rod type protector, etc.
- g. Tracks should be designed to prevent splash back when sheet pans and other large objects are being washed.
- h. Load end opening should be available large enough to accommodate a sheet pan placed on the belt vertically.
- i. Belts should be available in varying designs to accommodate the many different styles of serving trays used in corrections.
- j. **Something to work for:** Unit shall be equipped with an internal shut down mechanism, or a weight sensor on the track to prevent serious injury to an individual caught inside the machine. This may sound unnecessary but it has happened. Given the attitudinal change in inmates, this needs to be available.

1.12.2 Rack Machines – Door / Rack Conveyor

Door Type – single tank

- a. Controls shall be behind a lockable cover.
- b. Lower, non-wash tank section shall be completely enclosed with either removable stainless steel panels or framed, mesh panels.
- c. Unit will not operate if door not properly closed.
- d. Curtain hooks, if any, will be welded in place.

Rack Conveyor – multi tank

- a. Controls shall be behind a lockable cover.

- b. Any exposed mechanical parts on the top of the machine – piping, back flow valves, meters, gauges, etc., shall be enclosed in a framed mesh cage. Mesh shall be removable for service and cleaning.
- c. Area below the wash tank shall be completely enclosed (see 1.12.1-c).
- d. Swing – out doors shall have welded, heavy duty hinges. (see 1.12.1-d).
- e. Curtain hooks shall be welded in place.
- f. Drain valves shall be on the front (door side) of the machine and protected from damage (see 1.12.1-f)

1.13.0 Waste Management: There are many different methods of waste management: all garbage to a dumpster to the land fill (not recommended), farm hall-away (again, not recommended due to vermin and insect issues), pulpers, digesters, disposals, etc.

1.13.1 Disposals

- a. Controls shall be behind a lockable cover and mounted above or away from the work area.
- b. There must be at least a 12” offset between the grinding unit and the sink bottom entry point.
- c. Unit must not just hang from the offset – must be supported by legs firmly attached to the grinding unit.
- d. Plumbing, vacuum breaker, etc., must be below the work surface.
- e. **Something to work for:** A weight and/or motion sensor: *Weight sensor* detects product being dumped into unit prior to the unit being turned on and begins operation. *Motion Sensor* detects the approach of the operator and turns the unit on prior to product being dumped. Either one of these will prevent excessive strain on the grinding unit caused by product being dumped before the unit is operational.

1.13.2 Pulpers / Digesters

- a. Controls shall be behind a lockable cover and, if design permits, mounted above or away from the unit.
- b. Grinding unit must be inaccessible from the feed side of the unit.
- c. Neither type will operate unless *all covers* – grinding unit, auger chute, digester chamber, etc. – are securely in place.
- d. All pumps, motors, etc., shall be protected by either stainless steel panels or framed wire mesh screens securely attached, yet removable for service or cleaning.
- c. Digesters should have an “all stop” – lid release button on the inside of the chamber.
- d. Drain valves and piping shall be protected from damage.

1.13.3 Dehydrators

- a. The operator will determine if he wants the unit to be condenser with a drain or vented based on which best fits their operation.
- b. Controls shall be behind a lockable cover. Both input and output doors shall have integral automatic mechanical locks.
- c. Dehydrator shall not operate unless both doors are securely closed and automatically locked. Simple pad locks not acceptable.
- d. All process equipment shall be protected by 304, 18-8 stainless steel panels with access doors for routine maintenance. Panels shall be attached with security duty fasteners directly to stainless steel tubular frame. Painted steel frames shall not be acceptable. Exterior shell of unit shall be completely sealed to eliminate storage of contraband.

- e. Dehydrators shall have an “all stop” – button outside of the control panel.
- f. Drain tubing, if required, shall be protected from damage.
- g. Temperature shall reach a minimum of 185F and shall have UV lamp(s) for greater destruction of bacteria and odors. Water discharge and dry biomass material shall be sterilized by the machine.
- h. Dehydrators shall not require the addition of enzymes, water or any other compound.
- i. Other potential options:
 - 1. Machine activation shall require pass code or RFID key to prevent unauthorized operation.
 - 2. Controls shall provide food waste reduction data to the institution.
 - 3. All exterior components including door handles, lifting struts, fan guards, etc. shall be fully welded to dehydrator to prevent removal for weaponization.