

STANDARD OPERATING PROCEDURES
DIVISION OF COMPARATIVE MEDICINE
UNIVERSITY OF SOUTH FLORIDA

SOP#: 1118.3

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TITLE: Amsco® Eagle Autoclave Model #2021
SCOPE: Research and Animal Care Personnel
RESPONSIBILITY: Facility Manager, Surgical Core Manager, Professional and Administrative Staff
PURPOSE: To Outline the Proper Procedures for Use and Maintenance of an Amsco® Eagle Autoclave Model #2021

I. PURPOSE

1. This procedure outlines the use and maintenance of the model #2021 Amsco® Eagle autoclave unit used to sterilize surgical instruments, solutions, food, water, bedding, and equipment used for research and husbandry, located in room 1335 MDC.

II. RESPONSIBILITY

1. It is the responsibility of the Facility Manager in conjunction with the Surgical Core Manager to ensure that equipment is appropriately cleaned, maintained in good working order, and available for research personnel as requested.
2. It is the responsibility of the veterinary professional, administrative, and managerial staff to ensure that all research and technical staff using this equipment are adequately trained and experienced.

III. EQUIPMENT USE

Note: Operator should be familiar with **SOPs #1002 Autoclave Sterilization, #1006 Sterilization, and #1007 Verify Indicators** before operating this unit.

1. Open blue water valve located on top right of autoclave.
2. Turn on both white switches marked *Power* and *Control* located on the middle control panel.
3. Open the valve located on the bottom left side of autoclave so that it is parallel with the water line. This valve has a green card attached to it. Opening this valve allows water to flush mineral sediment away from the heater coil.
4. Valve should remain open for at least 5 minutes or more.

5. Close valve.
6. Allow unit to warm up until jacket pressure = 20 psi.
7. Replace temperature recorder chart with a new one. Place old chart into the autoclave record book, date and initial.
8. Place items to be autoclaved into chamber. Items should not be tightly stacked and arranged to facilitate the circulation and penetration of steam.
9. Manually set sterilize time with the timer dial.
10. Manually set drying time with the drying timer dial.
11. Close door firmly and turn handle clockwise to tighten.
12. Push appropriate button for sterilization. *Liquids* for sterilizing liquids in bottles or *Gravity* for sterilizing all other materials. The unit is now operating and will heat to the temperature and time selected developing a pressure of approximately 20 psi.
13. Examples of times and temperatures for the applications listed:
 - a. Rodent caging with bedding- sterilize 70 min.@ 250⁰, dry 10 min.
 - b. Water bottles (empty)- sterilize 70 min.@ 250⁰, dry 10 min.
 - c. Microisolator lids- sterilize 50 min.@ 250⁰, dry 10 min.
 - d. Transport boxes- sterilize 20 min.@ 250⁰, dry 10 min.
 - e. Surgical instruments- sterilize 30 min.@ 250⁰, dry 10 min.
 - f. Gowns, gauze- sterilize 30 min.@ 250⁰, dry 10 min.
 - g. Biohazard caging- sterilize 70 min.@ 250⁰, dry 10 min.
14. A buzzer will sound when the cycle is complete indicating the load is finished.
15. After the pressure in the chamber reaches zero the door can be opened by turning the handle counterclockwise and the load carefully removed.

Caution: Autoclave unit and contents may be hot, wear appropriate protective equipment.

16. After the last load for the day is finished, turn off both *Power* and *Control* buttons and close the blue water valve on top of the unit.

IV. MAINTENANCE

1. Periodically inspect and clean chamber if materials spill (e.g. food, bedding)
2. Keep outside of unit clean by using a stainless steel cleaner.
3. Autoclave units are tested and verified as to proper function in accordance with **SOP #1002**, this verification is recorded on the **Autoclave Sterilization Record**, and records are maintained in accordance with **SOP #010**.

4. Routine maintenance and non-routine service is performed by an authorized subcontractor and is documented in writing.
5. Equipment that functions without deficiency, receives regular preventative maintenance, and successfully passes verifications, is considered certified.

V. REFERENCES

Refer to manufacturer's instructions for additional information

Approved:

Date: