

Portable Autoclave 21 L, Jointless Stainless Steel

Operating Manual

Laboratory Equipment

Intended use

A portable electric steam autoclave for sterilizing heat- and moisture-tolerant instruments, glassware, dressings and media in clinics, laboratories and field settings.

Intended users

Trained clinical, dental, veterinary and laboratory staff. For use by trained healthcare professionals. Follow your facility's protocols and applicable regulations.

Read this manual completely before first use and keep it with the product. This document provides general operating, care and safety guidance. Where the product is supplied with manufacturer labeling or instructions, those take precedence. For questions, a replacement copy, or a digital copy of this manual, email sales@scimedstore.com.

1. Safety

Safety warnings and cautions

- Connect only to a properly grounded outlet with the supply voltage marked on the unit.
- Unplug before cleaning, inspection or moving. Do not let liquids enter the housing, and do not operate with wet hands or a damaged cord.
- This is a pressure vessel. Never open the lid while there is any pressure in the chamber; the gauge must read zero and steam must be fully released.
- Never block or tamper with the safety valves or steam release valve.
- Always add water to the required level before heating; never heat the unit dry.
- Wear heat-resistant gloves and eye protection when unloading; surfaces, steam and contents are very hot.
- Do not sterilize sealed containers, flammable, volatile or corrosive materials.
- Do not leave the autoclave unattended while it is heating or under pressure.

2. Package contents

- Autoclave
- Electrical fitting
- Cord
- Plugs
- Tripod stand

Check contents on receipt. Report missing or damaged items to sales@scimedstore.com within 48 hours of delivery.

3. Specifications

Chamber capacity	Approx. 21 L
Chamber size	Approx. 12 in x 12 in
Interior	Jointless SS 304, argon-arc welded, polished crevice-free
Pressure gauge	Dial, up to 20 psi
Hydraulic test	30 psi per ASME (per listing)
Safety devices	Spring-loaded safety valve, dead-weight safety valve, steam release valve
Gasket	Jointless neoprene

4. Unpacking and setup

- 1 Place the autoclave on the tripod stand or a firm, level, heat-resistant surface away from flammable materials.
- 2 Check the gasket is clean, seated correctly and undamaged.
- 3 Check that the pressure gauge reads zero and the safety and steam release valves are clean and free.
- 4 Add clean water (distilled or demineralized water is recommended) to the level required for the unit.
- 5 Connect the electrical fitting and cord to a grounded outlet with the correct supply voltage.

5. Operation

Loading

- 1 Clean and dry items before sterilization.
- 2 Wrap or pack items as required by your facility's sterilization procedure.
- 3 Place items in the chamber without overloading so steam can circulate.
- 4 Add chemical or biological indicators as required by your facility.

Running a cycle

- 1 Close the lid and tighten the closures evenly.
- 2 Open the steam release valve and switch on the heater.
- 3 When steam flows steadily from the valve to purge the air, close the steam release valve.
- 4 Allow pressure to rise and run the cycle at the pressure, temperature and time set by your facility's validated sterilization protocol, without exceeding the gauge working range.
- 5 Watch the gauge during the cycle and control heat as needed to hold the set pressure.

Ending the cycle

- 1 Switch off the heater.
- 2 Let the pressure fall naturally until the gauge reads zero.
- 3 Open the steam release valve slowly to release any remaining steam.
- 4 Loosen the closures evenly and open the lid away from your face.
- 5 Allow items to dry and cool before handling; check indicators and record the cycle.

6. Cleaning and disinfection

- Unplug and allow the unit to cool fully before cleaning.
- Drain water after use and wipe the chamber dry.
- Clean the chamber with mild detergent and water; avoid abrasive pads and chlorine-based cleaners on stainless steel.
- Wipe the gasket and lid seating surface clean.
- Wipe the outside with a damp cloth; do not let water enter the electrical parts.

7. Maintenance and storage

- Inspect the gasket regularly and replace if cracked, hardened or leaking.
- Check that the safety valves and steam release valve move freely; keep them free of scale.
- Change water regularly and descale the chamber if deposits form.
- Have the pressure gauge and safety devices checked periodically by qualified personnel.
- Store clean, dry and with the lid slightly open.

8. Troubleshooting

Problem	Likely cause	What to do
Pressure does not rise	Steam release valve open, lid not sealed or low water	Close the valve, check gasket and closures, check water level
Steam leaking around the lid	Gasket dirty, worn or misaligned	Cool down, clean or replace the gasket and tighten closures evenly
Safety valve releases steam	Pressure above working range	Reduce heat; if repeated, stop use and have the unit checked
Items wet after cycle	Overloading or not allowed to dry	Load less and allow drying time before removal
No heating	No power or electrical fault	Check outlet and cord; if still no heat, contact service
Gauge does not return to zero	Gauge fault	Do not open under doubt; let unit cool fully, then have the gauge replaced

9. Disposal

- Decontaminate the unit before disposal.
- Recycle stainless steel parts as metal and electrical parts per local electrical waste rules.

10. Warranty and support

Products are covered by SciMed's standard warranty (12 months from purchase unless a different period is stated on your invoice). Warranty terms: scimedstore.com/pages/warranty.

Support, spare parts and additional copies of this manual: sales@scimedstore.com. Please include your order number and a photo of the product or issue.

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