How to Descale a Commercial Ice Machine: Preventive Maintenance Schedule for Manitowoc Modular Cubers

This document explains how to descale a commercial ice machine, using the basic clean-and-sanitize procedure for Manitowoc modular cuber ice machines. It covers the cleaner amount for each model, the full clean cycle, manual cleaning of the plastic components, and the return to ice production. Keep the "Installation, Use & Care Manual" supplied with your machine nearby. It provides installation, operation, and maintenance information, along with model-specific instructions and safety guidelines.



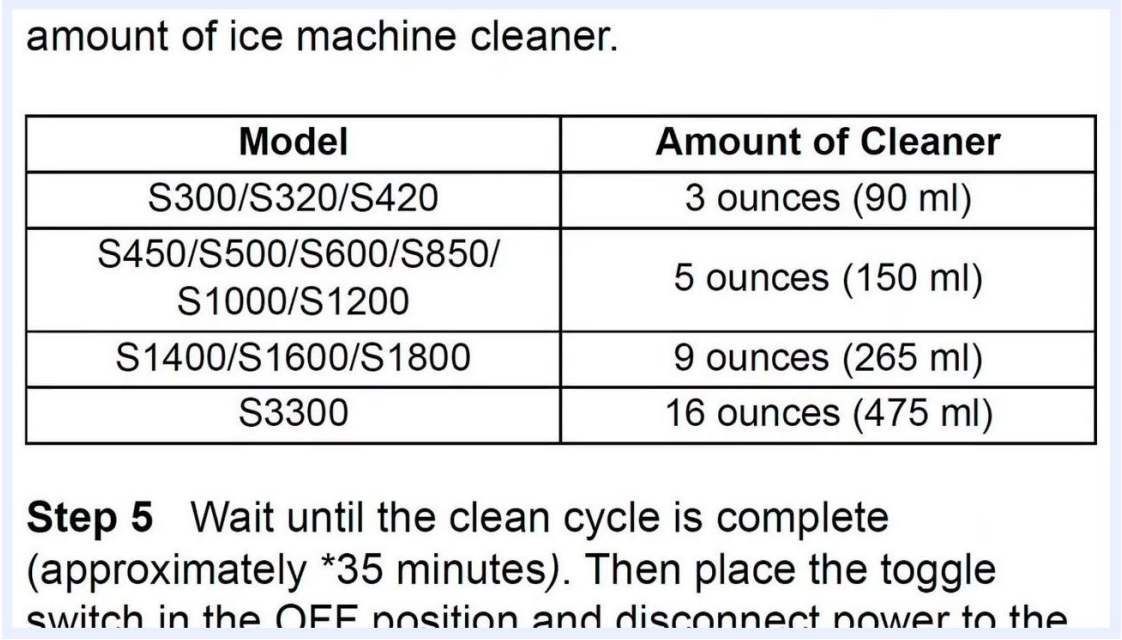
Manual cover for S Model ice machines showing the machine photo and the title "Installation, Use & Care Manual"

Asset inventory

This procedure applies to Manitowoc S Model modular cuber ice machines. Record each unit's location, serial number, owner, and criticality in your site's asset register, because none of these details are specified for the machine.

The cleaner amount depends on the model. Use the recommended amount to clean effectively and avoid damaging the machine.

Model	Cleaner per clean cycle
S300 / S320 / S420	3 ounces (90 ml)
S450 / S500 / S600 / S850 / S1000 / S1200	5 ounces (150 ml)
S1400 / S1600 / S1800	9 ounces (265 ml)
S3300	16 ounces (475 ml)



amount of ice machine cleaner.

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S300/S320/S420	3 ounces (90 ml)
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Step 5 Wait until the clean cycle is complete (approximately *35 minutes). Then place the toggle switch in the OFF position and disconnect power to the

Chart listing Manitowoc ice machine models and the amount of cleaner required for each

Maintenance tasks

Follow these steps in order to descale a commercial ice machine and return it to production.

Step 1: Open the front door

1. Remove the front screw from the front door.

2. Swing the door open. The door is hinged, so you do not need to set it on the floor, which prevents contamination.



Close-up of the evaporator grid, clear and free of ice

Step 2: Turn off the machine

1. Locate the toggle switch at the top right inside the machine.

2. Move the toggle switch to **OFF**. The switch positions are **ICE**, **OFF**, and **CLEAN**.



Person reaching inside the open ice machine to remove the water curtain

Step 3: Remove the water curtain

Carefully remove the water curtain to access the evaporator grid.

Step 4: Inspect the evaporator grid

Check that the evaporator grid is clear of ice. The grid must be free of ice before you start cleaning.

Step 5: Replace the water curtain and start the clean mode

1. Once the grid is clear, place the water curtain back in its original position.
2. Move the toggle switch from **OFF** to **CLEAN**.

3. Listen for water filling the water trough at the bottom of the machine.



Ice machine with the front door swung open, showing the inside compartment and the instructions on the door panel

Step 6: Add the nickel-safe cleaner

Once the trough has enough water, add the measured amount of cleaner from the table in the Asset inventory section. For the S300/S320/S420 models, this is three ounces.

Use only a nickel-safe cleaner. The evaporator grids are nickel-plated, and a cleaner that is not nickel-safe deteriorates the plating and voids your warranty.

Step 7: Run the clean cycle

Allow the machine to complete its clean cycle. This takes approximately 35 minutes.

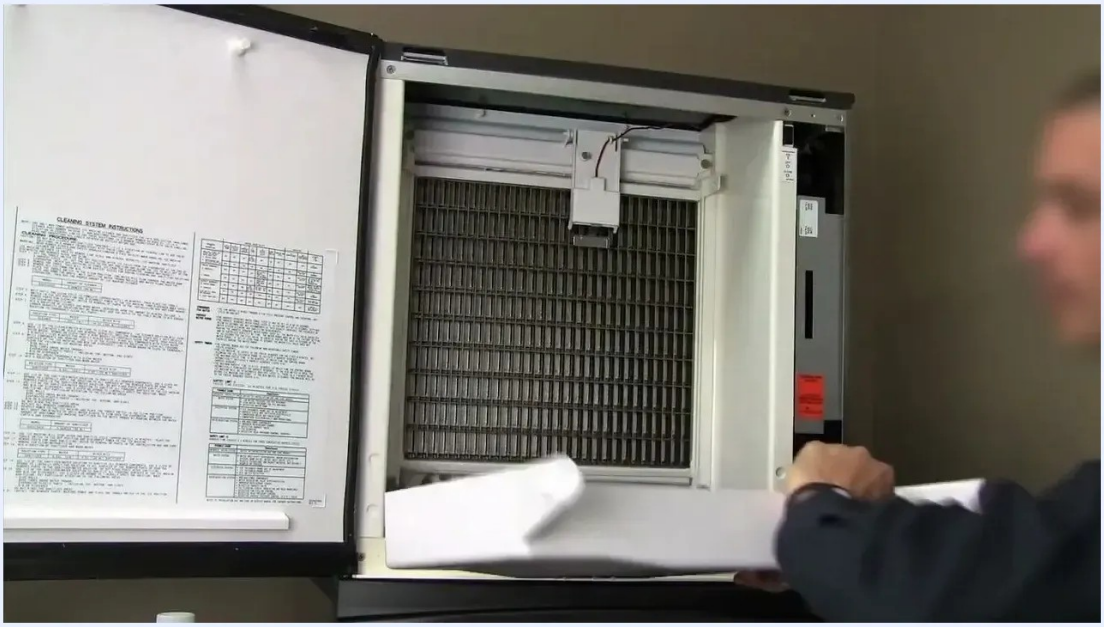
Step 8: Sanitize the machine (optional)

To sanitize, repeat the same procedure with Manitowoc sanitizer instead of cleaner. Add the sanitizer to the water trough and run the clean cycle.

Step 9: Turn off the machine and open the door fully

1. When the clean (or sanitize) cycle finishes, move the toggle switch to **OFF**.

2. Open the front door fully to reach the internal components.



Ice machine with the front door open, exposing the interior for cleaning

Step 10: Remove the internal components

1. **Water curtain:** Pull it out gently. No tools are required.
2. **Water trough:** Cross your arms to make removal easier and safer.
3. **Ice thickness probe:** Carefully detach it from its position.

4. **Water distribution tube:** Loosen the thumb screw on each side of the tube, then pull the tube out.

amount of ice machine cleaner.

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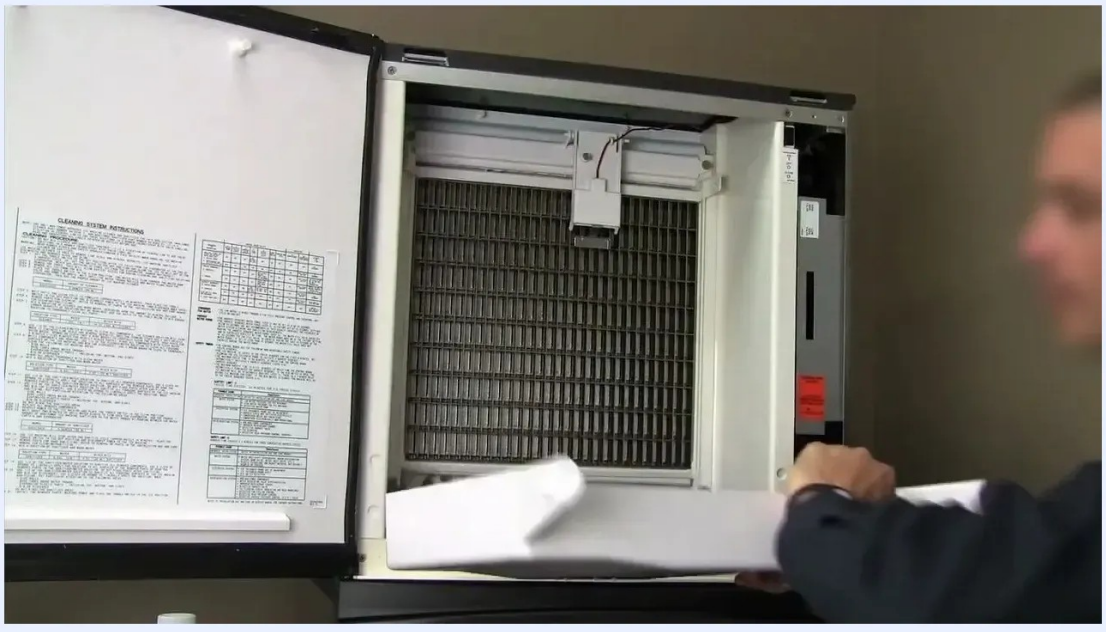
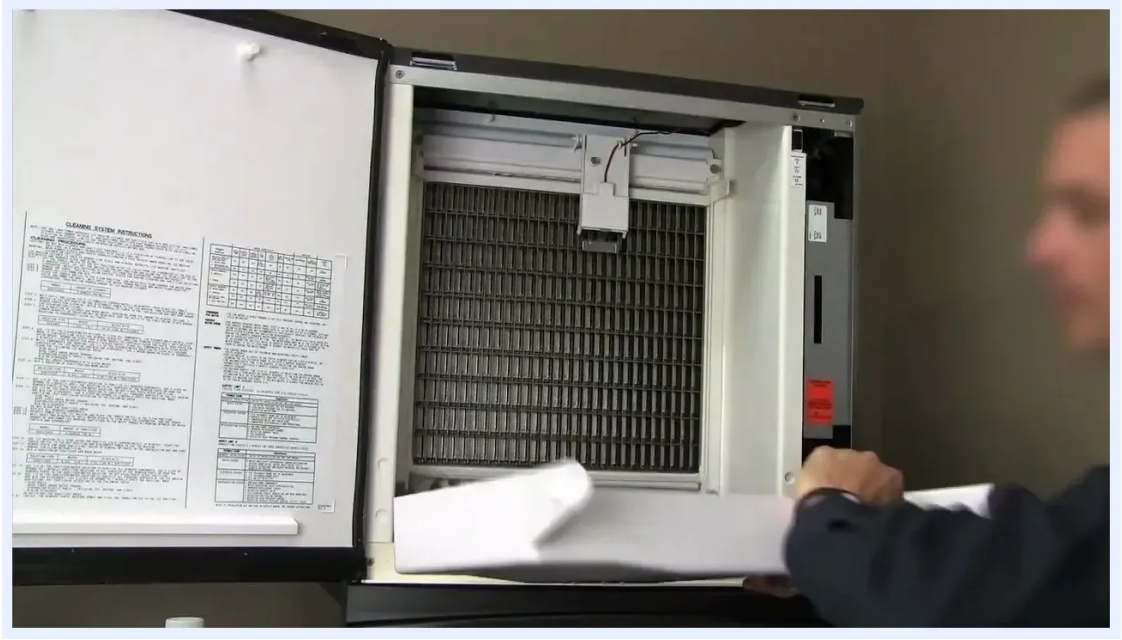
Step 5 Wait until the clean cycle is complete (approximately *35 minutes). Then place the toggle switch in the OFF position and disconnect power to the

Close-up of a technician's hand adding Manitowoc sanitizer to the water trough



Technician crossing arms to remove the water trough



Technician removing the ice thickness probe

Step 11: Clean the plastic components

1. Take the water curtain, water trough, ice thickness probe, and water distribution tube to a sink.
2. Wash each piece thoroughly with mild detergent and warm water.
3. Remove all debris and rinse each part clean.

4. Shake off excess water before reassembly.

amount of ice machine cleaner.

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Technician adding cleaner to the water trough while holding a bottle of Manitowoc cleaner



Technician washing the plastic ice machine components in a sink with a sponge

Step 12: Wipe down the interior

While the components are out, wipe all accessible interior surfaces with mild detergent and a clean cloth or sponge.



Technician wiping down the inside of the ice machine with a sponge

Step 13: Reassemble the machine

1. **Water distribution tube:** Place it in its original position and tighten both thumb screws securely.
2. **Ice thickness probe:** Secure it in its correct location.
3. **Water trough:** Align it with its original position and push it firmly into place until you hear a distinct "snap," which shows it is locked.

4. **Water curtain:** Position it at the front of the machine and reattach it, making sure it is aligned and clicks into place.



Wide view of the open ice machine with the evaporator grid and water curtain in place, ready for cleaning



Technician reinstalling the water distribution tube inside the ice machine



Technician using both hands to press the water trough into place beneath the evaporator grid



Technician reattaching the large plastic water curtain to the front of the ice machine

Step 14: Return the machine to production mode

1. Locate the toggle switch.
2. Move it from **OFF** or **CLEAN** back to **ICE**.

3. Confirm that the machine is in production mode and ready to make ice again.

After cleaning, verify that all components are securely reinstalled and that the machine operates correctly.

Schedule

The source gives a 35-minute clean cycle but no daily, weekly, monthly, quarterly, or annual interval. This section is where your site's descaling cadence belongs, so set it according to your own policy and the Installation, Use & Care Manual.

Task	Cadence	Duration
Clean cycle with nickel-safe cleaner	Set by your site	About 35 minutes
Sanitize cycle with Manitowoc sanitizer (optional)	Set by your site	Same clean cycle, repeated with sanitizer
Manual wash of plastic components and interior wipe-down	Set by your site	Not specified

Safety requirements

Follow these precautions during the procedure:

- Move the toggle switch to **OFF** before you inspect the evaporator grid or remove any component.
- Use only a nickel-safe cleaner, and use the recommended amount for your model.
- Cross your arms when you remove the water trough to make removal easier and safer.

- Do not set the hinged front door on the floor, which prevents contamination.



Close-up of the toggle switch labeled ICE, OFF, and CLEAN

The source does not specify lockout, PPE, hot-surface, electrical, ladder, or chemical-handling requirements. Add those site-specific precautions here, and refer to the Installation, Use & Care Manual for safety guidelines for your model.

Parts and tools

You need the following items:

- Nickel-safe cleaner in the amount listed for your model
- Manitowoc sanitizer, if you sanitize
- Mild detergent and warm water
- A clean cloth or sponge
- A sink for washing the plastic components

No tools are required to remove the water curtain. A screw holds the front door, and thumb screws hold the water distribution tube. The source does not list spare parts.

For more information, troubleshooting, or to order supplies, visit the Food Service Warehouse website at www.foodservicewarehouse.com. For direct assistance, call 1-866-953-3291.



Food Service Warehouse logo, website URL (www.foodservicewarehouse.com), and phone number (1-866-953-3291) displayed on a plain background

Completion records

The source does not define log fields, photo evidence, signatures, or retention. This section is where you define the record for each completed cycle, such as date, technician, model and serial number, products used, and sign-off. At minimum, record the final check that all components are secure and the machine is back in **ICE** mode and operating correctly.

Escalation

The source does not state when to remove the machine from service or whom to notify. This section is where you define those criteria and your internal contacts. For troubleshooting or direct assistance, use the Food Service Warehouse contacts listed in Parts and tools, and refer to the Installation, Use & Care Manual for troubleshooting tips.