MANITOWOC ICE
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Preventative Maintenance

Subject: IYF1400C Indigo NXT Ice Machines

DETAILED DE-SCALING AND SANITIZING PROCEDURES

Manitowoc recommends a Factory Authorized Service company or Distributor Authorized Service Dealer perform thorough preventative maintenance prior to restoring service of the Manitowoc ice machine, storage bin or dispenser. Section 4 (Maintenance) of the Installation, Operation and Maintenance manual should be followed to ensure proper cleaning and sanitizing steps are completed.

Water system components including the water inlet valve, water pump and dump valve may require removal for inspection or replacement depending on the potable water quality and the length of time the components had no use. Water cooled ice machines may require the condenser be cleaned and the refrigeration water regulating valve evaluated for proper performance. This is also a good time to replace water filtration, replenish AuCS chemical and replace the Luminice bulb if these Manitowoc accessories are used.



1. Remove front panel.

Use a Phillips screwdriver to loosen the screw(s) securing the door. Do not remove screw(s) completely; they are secured to prevent loss.



2. Turn ice machine off.

After ice has fallen from the evaporator, turn the ice machine OFF by pressing the power button.



3. Disconnect main power at the service disconnect or breaker.

⚠WARNING

Do not begin cleaning other parts of the ice machine until line voltage is disconnected from the ice machine and if applicable dispenser.



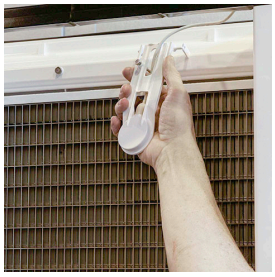
4. Empty ice bin.

Use an ice scoop to remove all ice from the storage bin or dispenser.



5. Remove splash shields (2).

Grasp the top center of splash shields. Lift up and then out.



6. Remove the ice thickness probes (2).

Compress the hinge pin on the top of the ice thickness probe.
Pivot the ice thickness probe to disengage one pin then the other.

The ice thickness probe can be cleaned at this point without complete removal. If complete removal is desired, disconnect the ice thickness control wiring from the control board.



7. Remove the water trough shield.

Grasp the water trough shield in the center and the left end.
Flex the water trough shield in the center and pull the left end forward until clear of the side wall. Repeat for the right end.
Pull water trough shield forward to remove.



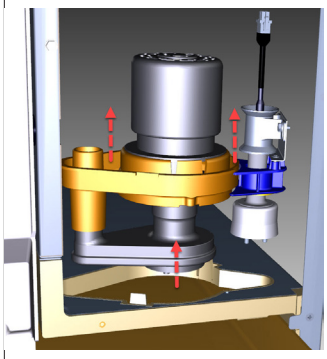
8. Remove the water distribution tubes (2).

Loosen the two outer screws (do not remove screws completely; they are retained to prevent loss) of the left and right water distribution tubes. Pull forward on each distribution tube to release from slip joint. Remove the water distribution tubes.
Disassemble each distribution tube by loosening the two (2) middle thumbscrews and dividing the distribution tube into two pieces.



9. Remove Ice dampers (2).

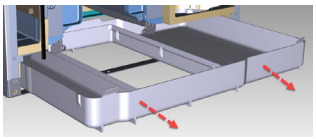
Disengage the front and rear pins of the left damper and right damper.



10. Remove the water pump and water level probe assembly.

The water pump and water level probe are removed from the front right side of the machine. Pull up on the water pump and water level probe assembly to disengage.

The water pump and water level probe can be descaled and sanitized at this point without complete removal. If complete removal is desired, disconnect at the molex connectors.



11. Remove water trough.

Once the water pump and water level probe are removed; slide the water trough forward-out of the ice machine.

⚠WARNING

Wear rubber gloves and safety goggles (and/or face shield) when handling ice machine cleaner / descaler or sanitizer.



Cleaner / Descaler (9405463) and Sanitizer (9405663) Usage

Important

Ice machine cleaner / descaler is used to remove lime scale and mineral deposits. Ice machine cleaner / descaler should be used every six months, although in cases of extremely hard water conditions it may be necessary to descale more often. For the range of water hardness allowed for potable water standards, it should not be necessary to descale more frequently than every two months. Use of an approved filtration system with a polyphosphate scale inhibitor is highly recommended for all ice machine installations and will significantly reduce the need to descale in hard water applications.

Ice machine sanitizer disinfects and removes algae and slime. Sanitizer must be used a minimum of once every six months.



⚠ CAUTION

Do not immerse the water pump motor or electrical connector in liquids. Only soak the water pump impeller and impeller housing. Do not immerse above the red line on the graphic.

Notice

Electrical connectors must never be exposed to any liquids.



12. Remove scale deposits from removed parts.

Mix 16 oz Manitowoc ice machine cleaner / descaler (9405463) with one gallon of potable water in a three-compartment sink.
Place the plastic parts in the solution and allow to soak for 10-15 minutes. Use a soft bristle brush on heavy scale or mineral buildup as required.



13. Clean scale deposits from surface areas of ice machine.

Use a clean towel or sponge soaked in cleaner / descaler solution to wipe ice machine surfaces, including the sides walls, base (area above water trough), and the bin or dispenser.



14. Rinse Surface Areas of Ice Machine.

Use a clean towel or sponge soaked in potable water to wipe ice machine surfaces, including the sides walls, base (area above water trough), and the bin or dispenser.



⚠ CAUTION

Do not soak the water pump motor in rinse water or sanitizer solution. Be sure to only rinse/soak the water pump impeller and impeller housing. Do not immerse above the red line on the graphic.

Notice

Electrical connectors must never be exposed to any liquids.



15. Rinse and sanitize plastic parts.

Mix two ounces of ice machine sanitizer (9405663) with three gallons of potable water in a three-compartment sink.
Add five gallons of clear potable water to third sink compartment. Remove plastic parts from cleaner / descaler solution & rinse in clear potable water.
Place the plastic parts in the sanitizer solution and allow to soak for at least one minute.



16. Sanitize surface areas of ice machine.

Use a clean sanitizer-soaked towel to sanitize ice machine surfaces, including the side walls, base (area above water trough), and the bin or dispenser. Spray surfaces with sanitizer solution and wipe down. Manitowoc sanitizer is classified as a no rinse sanitizer - Do not rinse sanitized surfaces.

Notice

When re-installing the water level probe, ensure the rubber gasket is sealed against the base of the ice machine and that any electrical connectors or wires remain free from moisture.

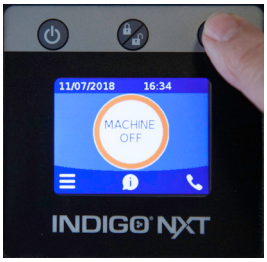
17. Reinstall plastic evaporator parts.

Return the parts to the ice machine and reassemble. (Perform Steps 5 to 11 in reverse order).



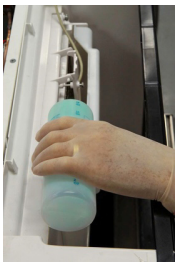
18. Restore power to the ice machine.

Restore power to the ice machine (and dispenser if applicable) at the circuit breaker.



19. Press CLEAN button.

Follow the screen prompts to start the clean cycle. Wait until the prompt to add cleaner is displayed (approximately 2 minutes) then continue with next step.



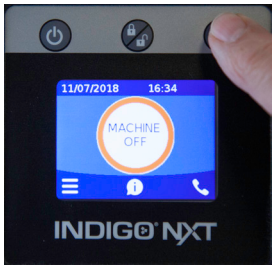
20. Add Manitowoc cleaner / descaler (9405463) to water trough.

Add 9 ounces of cleaner / descaler by pouring between the evaporator and water curtain. The bottle is marked with 2 oz (60ml) graduations.



21. Allow clean cycle to run.

The ice machine will automatically run through a wash cycle and several rinse cycles. The entire cycle lasts approximately 30 minutes. Countdown clock will let you know duration and time remaining.



22. Press the CLEAN button.

Follow the screen prompts to start the sanitize cycle. Wait until the prompt to add sanitizer is displayed (approximately 2 minutes) then continue with next step.

	**23. Add Manitowoc sanitizer (9405663) to the water trough.** Add 12 ounces (355ml) of sanitizer by pouring between the evaporator and water curtain. The bottle is marked with 2 oz (60ml) graduations.
	**24. Press the POWER button.** After the sanitizing cycle is complete, press the power button to return to making ice.
	**25. Reinstall front panel and tighten screws.**