

# S220(x) Focused-ultrasonicator Instrument Maintenance

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## NaDCC Instrument Cleaning Protocol

### Purpose

An instrument cleaning procedure should be performed monthly to prevent biological growth in the water bath, degas, and water conditioning system (WCS).

### Caution

Wear protective gloves when handling NaDCC tablets.

Use the 'Degas Pump On/Off,' button on the Run Screen, as instructed below:

### Instructions

1. Turn off the chiller.
2. Turn off the WCS and disconnect hoses from the side of the water tank.
3. Raise the transducer assembly out of the water tank.
4. Empty, rinse, and fill the tank with DI water to 10 on "Fill" side of label. Place tank back in instrument.
5. Dissolve (2) NaDCC 3.3 G tablets in the water tank.
6. Reconnect hoses to the side of the tank and turn on the WCS.
7. Lower transducer assembly into tank and click 'Degas Pump On.'
8. Operate the WCS and degas pump for approximately 5 minutes.
9. Turn off the WCS and disconnect hoses from the side of the water tank.
10. Click 'Degas Pump Off' and raise the transducer assembly out of the tank.
11. Empty, rinse, and place the empty tank back in the instrument.
12. Reconnect hoses to the side of the tank and turn on the WCS. The solution is purged from the WCS and tubing.
13. Lower the transducer assembly into the tank and click 'Degas Pump On.' The solution is purged from the degas pump and tubing. The degas pump automatically turns off.
14. Turn off the WCS and disconnect hoses from the side of the water tank.
15. Raise the transducer assembly out of the tank.
16. Empty, rinse, and fill tank with DI water to 10 on "Fill" side of label. Place tank back in instrument.
17. Reconnect hoses to the side of the tank and turn on the WCS.
18. Lower the transducer assembly into the tank and click 'Degas Pump On.'
19. Operate the WCS and degas pump for approximately 5 minutes.
20. Click 'Degas Pump Off' and raise the transducer assembly out of the tank.
21. Repeat rinse steps, 16-20, two more times for a total of 3 rinses.
22. Turn off the WCS and disconnect hoses from the side of the tank.
23. Empty, rinse, and fill tank with DI water to level indicated by consumable. Place tank back in instrument.
24. Lower the transducer assembly into the tank and click 'Degas Pump On.'
25. Reconnect hoses to the side of the water tank. Keep the chiller and WCS turned off.
26. Allow the water to degas for 15 minutes before chilling the water.
27. Turn on the chiller and WCS.

## S220(x) Focused-ultrasonicator Instrument Maintenance

Maintenance of the instrument’s water tank, degas, and water conditioning system are required to keep the instrument free of particles, gases, and biological growth.

The WCS filter and UV lamp should be replaced annually. Filter and UV lamp replacements are included with annual PMs.

After the monthly cleaning procedure has been performed, the instrument and WCS should be left on to keep the water clean. The chiller can be turned off or set to ambient temperature, when idle.

If the instrument is not in use, empty the water tank, dry the tank and transducer with a lint free cloth, and turn off the instrument, chiller, and WCS.

If the instrument will be idle for more than 2 weeks, refer to the User’s Manual for the shutdown instructions.

### Monthly Cleaning Protocol Performed

Date	Name

### Annual WCS Filter and UV Lamp Replaced

Date	Name