

Common Problems with Inaccurate Level Monitor Readings

This document provides a description of how ice or frost buildup on the transducer or fog in the top part (neck area) of cryogenic vessel contributes to inaccurate level monitor readings.

Locators and Locator Plus Cryogenic Storage Vessels with Ultrasonic Level Monitor

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Inaccurate Level Monitor Readings

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- Problem: Level monitor alarm sounds intermittently, unit measuring liquid level incorrectly.
- Cause: Ice or frost buildup on the transducer.
- Solution: Remove the cover w/monitor from the vessel and place in room for approximately two hours, or until no ice is visible on the transducer or tube. Note: Do not use an external heat source (i.e. heat gun) to accelerate the thawing process as it can damage the cork.

Make sure lid is standing upright on the cork to allow moisture to drain out of the cover w/monitor. Wipe any moisture away from the inside of the tube and face of the transducer with a clean soft cloth. Place cover w/monitor back on unit. (Remember to press "Reset " button)

- Problem: Level Monitor measuring "Full" after removing samples and replacing lid.
- Cause: Fog in top part (neck area) of cryogenic vessel.
- Solution: The density of the fog that is formed after removing the lid and assessing samples is dependent on the humidity of the room where the cryo-vessel is located. The fog dissipates after about fifteen minutes and at this time, the level monitor will take an accurate reading of the liquid nitrogen level.

The photo below shows a top view a Locator with lid and level monitor and a view of the lid removed and the bottom view where the ice and fog forms which this information covers.

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