

NON-TECHNICAL MAINTENANCE GUIDE  
**STERILIZATION EQUIPMENT**



**BETA STAR** LIFE SCIENCE EQUIPMENT

# NON-TECHNICAL GUIDE TO DIAGNOSING STERILIZER PROBLEMS

## IN-HOUSE MAINTENANCE CHECKLIST GUIDE

Steam sterilizers (autoclaves) require regular preventative maintenance inspections, calibration, and preventative maintenance part replacements to operate at maximum efficiency and help to prevent costly downtime. To further limit downtime between routine maintenance visits, the Beta Star Service team created the following list of questions to help our operators recognize when to schedule a maintenance inspection before it is too late.

It is important that anyone who uses the sterilizer pay close attention to the way it operates daily. When sterilizer operations change, such as cycle length, it is important to ask why. Operators need to pay attention to cycle printouts, sounds during operation, sounds in standby, and visible changes to door gaskets and door movement.

## TYPICAL QUESTIONS AND RESPONSES

**Q: Are you noticing longer cycle times?**

*R: Longer cycle times are frequently caused by a clogged drain line or problems with the vacuum system. If the sterilizer drain screen is clear from debris, contact your service provider.*

**Q: After the completion of a dry cycle, is the product still wet?**

*R: Wet loads can be caused by a clogged drain line, dry time settings that are too short, or a vacuum system problem. If the sterilizer drain screen is clear from debris, call for service or to modify your dry time settings.*

**Q: Have there been changes in your Biological Indicator (BI) Test results?**

*R: There are many reasons such as incorrect cycle parameters or mechanical problems that could be causing this problem. Please call for service.*

**Q: Is the sterilizer door operating differently than it used to?**

*R: If the door is no longer operating smoothly, it could be caused by one of several problems. One of the problems could be related to door gasket operation. Any signs that pieces or chunks of the gasket are coming off or if it looks like sections are being shaved off is not normal. With any problems related to the door or door gasket, call for service.*

**Q: Can you hear water consistently running down the drain while in standby mode?**

*R: Audible sounds of water running down the drain during cycle is completely normal, but it is not normal during standby mode. The Temperature Control Valve used for quenching the steam condensate going to drain may have failed. Please call for service.*

**Q: Are there any water puddles around the front or sides of the sterilizer?**

*R: The presence of pooling water in any substantial size is not normal and it is likely that you have a leak that should be repaired immediately. Call for service.*

**Q: Is there a high pitched or whining sound when the sterilizer is in use?**

*R: If the unit has a booster pump, a high pitch sound can be due to multiple positions with the vacuum system. If the problem persists, call for service.*

**Q: If your sterilization system was supplied with a small air compressor, is it rapidly cycling on and off?**

*R: Frequent on/off cycling of an air compressor can indicate faulty valve operation a bad pressure switch, or multiple air leaks. Please call for service.*

**Q: Does it sound like air is leaking or flowing all the time, even in standby?**

*R: You may be able to seek assistance from your facility maintenance team to tighten connection points to repair air leaks. Air leaks are not normal and there should only be periodic air flow as valves are operated throughout the sterilization cycle. If leaks cannot be repaired in-house, call for service.*

**Q: Is your printer light blinking instead of staying on all the time?**

*R: This is not normal and there are different blinking patterns to indicate different problems. Verify that there was not a simple paper misfeed. If that is not the problem, call for service.*

