

PINNACLE FAQ's

(Answers to the most common questions from SPD staff)

August 30, 2023

- 1) Where can PINNACLE be used? The PINNACLE MONITOR for Automated enzymatic cleaning (PINNACLE AEC) tests the cleaning efficacy of automatic washers (such as washer disinfectors, cart washers) and ultrasonic cleaners when using enzymatic detergents. This test responds to all the major factors affecting the cleaning process (enzyme concentration and activity, cycle time, temperature and mechanical action).
- 2) How does PINNACLE work? A PINNACLE AEC test(s) responds to the enzymatic cleaning process in washers and ultrasonics. This test has a dyed protein in an indicator pad which changes color during the wash cycle in response to enzyme activity and concentration, cycle time, temperature and mechanical action. At the end of the cycle, the color of the larger indicator pad is compared to the reference pad. PASS results occur when the indicator pad is lighter than the reference pad (see PASS/FAIL examples in the product IFU).
- 3) Does PINNACLE test cavitation in Ultrasonic Units? Yes, PINNACLE AEC responds to cavitation in ultrasonic units and cavitation is required to achieve a PASS result. Placing PINNACLE AEC tests in a sonic unit containing an enzymatic detergent will not produce PASS results if the sonic unit is not turned on (soaking only).
- 4) What detergent brands can PINNACLE be used with? PINNACLE AEC can be used with all brands of protease type enzymatic detergents used for medical instrument cleaning. Adjustments in dosage, cycle time and temperature may be required when using detergents with lower enzyme concentration or activity. Use of Pinnacle MEC has been confirmed with these detergents. ([link](#))
- 5) What does a FAIL result mean? A FAIL result indicates insufficient enzymatic activity due to low or no enzymes present, or an issue with the mechanical aspects of the cleaning unit (cycle time, temperature, or mechanical action). Refer to reference guide to aid in corrections.
- 6) Do I need to run PINNACLE in an empty cycle? No. PINNACLE AEC can test the cleaning equipment during an actual cycle containing instruments because it doesn't contain any chemicals that could contaminate the instruments (unlike most other cleaning verification tests).
- 7) I just tested my washer with PINNACLE AEC and got FAIL results, my current test always PASSes. Why?? Multiple factors affect enzymatic cleaning. Unlike some other instrument tests, PINNACLE AEC requires an adequate amount of enzymatic activity at favorable temperature ranges to achieve PASS results The FAIL result you observed indicates a deficiency that the other

test is not able to respond to.

- 8) Can temperature affect PASS result with PINNACLE? Yes, temperature of the cleaning solution can affect overall enzymatic activity. Lower temperatures reduce enzyme activity which may produce a FAIL result. In addition, the temperature may be too hot and degrade or deactivate the enzymes. Temperatures above 60° C may see reduced enzyme activity. Always check the detergent manufacturers' recommendation for best results.
- 9) Does hard water affect the results with PINNACLE AEC? Water hardness can affect enzyme activity. Detergent Manufacturers usually add sequestering agents to their formulations to counteract Calcium or Magnesium in water and reduce the effect of Hard water on the cleaning efficiency. Serim Monitor for Hardness test strips can be used to test your incoming water supply and ensure your detergent is formulated for your needs.
- 10) How is PINNACLE Monitor for Manual Enzymatic Cleaning (PINNACLE MEC) different than PINNACLE AEC? PINNACLE MEC is a quick a dip and read test to confirm the presence of active enzymes and the only test available for testing enzymatic detergents in manual cleaning solutions (sink). This test confirms the presence of active enzymes and ensures correct dilution of your enzymatic detergent. This test also prevents using a detergent with degraded enzymes due to age or shipping and storage conditions. This test provides PASS/FAIL results within 90 second.