



Monitor for AUTOMATED Enzymatic Cleaning Process

WHAT does this product do?

The Serim® PINNACLE™ Monitor for Automated Enzymatic Cleaning Process (AEC) monitors the cleaning efficacy of automated washers, cart washers, and ultrasonic cleaners using enzymatic detergents.

The test incorporates a dyed protein that is bound in the indicator pad. During the wash cycle the color of the indicator pad will change in response to **detergent concentration, enzyme activity and wash cycle time** as well as the **wash cycle temperature and mechanical action**.

WHY should I use this product?

Routine monitoring of cleaning and disinfection processes plays a pivotal role in continually assuring the highest possible quality standards for automated decontamination of medical devices.¹

“Effective cleaning is a multistep process that relies on several interdependent factors: ... quality, concentration and type of detergent or enzymatic cleaner, the washing method ...the time and temperature parameters...and equipment performance.”² A deficiency in any of these areas may reduce overall cleaning efficacy resulting in improperly cleaned instruments. Using a verification test that responds to enzyme activity is critical since enzyme concentration and activity vary by detergent brand and manufacturer.

WHERE do I use this product?

The PINNACLE Monitor for AEC is used with enzymatic detergents in automated washers, cart washers, and ultrasonic cleaners under normal cycle conditions with surgical instruments.

WHEN do I use this product?

The 2017 publication of ANSI/AAMI ST79 standards state that “*Mechanical cleaning equipment should be tested each day it is used and after major repairs.*”² Testing the cleaning units is generally performed at the beginning of a shift.

HOW do I use this product?

1. Write date/time, equipment ID and location (if applicable) on the test strip, then insert strip into holder.
2. Attach the test device to an instrument basket or on the perimeter of the rack of the washer disinfectant making sure there is no contact with the spray arm. For ultrasonic cleaners, securely attach device to the side of the instrument basket; do not place test on the bottom of the sonic unit. The indicator pad and internal color standard should not be obstructed by any surgical instruments.
3. Run wash cycle using enzymatic detergent.
4. At the end of the cycle, remove the test strip and compare the color of the indicator pad to the internal color standard. (See diagram at right.)

PASS – Indicator pad is **lighter in color** than the internal color standard

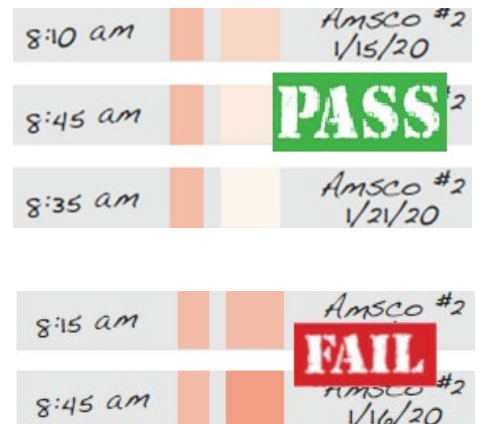
FAIL – Indicator pad is **similar to or darker in color** than the internal color standard



5176 PINNACLE™ Monitor for AUTOMATED Enzymatic Cleaning Process (AEC)

Reusable resin or stainless-steel holders are required for use with PINNACLE AEC Test

The color of the indicator pad will change in response to detergent concentration and, enzyme activity, wash cycle temperature, wash cycle time, and mechanical action.



Diagrams are for illustration purposes only. Always use the internal color standard on the actual test strip to interpret results

P R O D U C T P R O F I L E

Related Products:

PINNACLE Monitor for AUTOMATED Enzymatic Cleaning Process:

5176	PINNACLE AEC Test Strips	1 bottle of 50 test strips
5176H	PINNACLE AEC Resin Test Holders	kit of 10 resin test holders
5176SS	PINNACLE AEC Stainless Steel Test Holders	1 each stainless-steel holder

PINNACLE Monitor for MANUAL Enzymatic Cleaning Process

5179	PINNACLE MEC Test Strips	1 bottle of 50 test strips
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Water Quality Test Strips:

5129	Water Hardness Test Strips	1 bottle of 50 test strips
5209	pH 5 - 12 Test Strips	1 bottle of 100 test strips

PINNACLE™ MONITOR FOR AUTOMATED ENZYMATIC CLEANING

Features	Benefits
Test can be conducted during a normal wash cycle containing surgical instruments	<ul style="list-style-type: none"> Test evaluates “real world” wash cycle that contains soiled surgical instruments Test does not require a special run cycle to determine cleaning efficacy of automated cleaning equipment Test can be conducted at any time
Monitors the cleaning efficacy of automated medical cleaning equipment	<ul style="list-style-type: none"> Only need to inventory one test to monitor the cleaning efficacy of both washer-disinfectors and ultrasonic cleaners
Monitors all variables of the cleaning process	<ul style="list-style-type: none"> Sensitive to all critical factors affecting cleaning including detergent concentration and enzyme activity, wash cycle time, temperature and mechanical action of the unit Responds to cavitation in ultrasonic cleaners
Economically priced	<ul style="list-style-type: none"> Supports daily testing of automated medical cleaning equipment including both washer-disinfectors and ultrasonic cleaners as recommended by AAMI ST79²
Built -in color standard	<ul style="list-style-type: none"> Easy interpretation; color of the indicator pad is directly compared to the internal color standard. Does not require additional reagent test for complete results
Does not react to common wash cycle additives	<ul style="list-style-type: none"> Test does not react with most lubricants or rinse aids
Stable Results	<ul style="list-style-type: none"> The test strip can be kept as a record

References:

- Guideline Compiled by the DGKH, DGSV and AKI for Validation and Routine Monitoring of Automated Cleaning and Disinfection Processes for Heat-Resistant Medical Devices, Zentral STERILISATION, International Journal of Sterile Supply, Suppl. 2, 2007 May Volume 15
- ANSI/AAMI ST79:2010/A2:2017 ‘Comprehensive guide to steam sterilization and sterility assurance in health care facilities’, www.aami.org.



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