



# PINNACLE™

Monitor for  
**AUTOMATED**

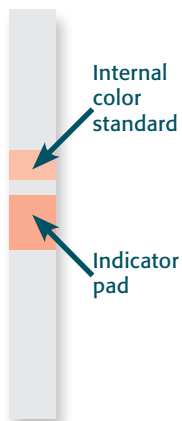
## Enzymatic Cleaning Process

For use in monitoring the cleaning efficacy of medical washer disinfectors and ultrasonic cleaners using enzymatic detergents.

### Instructions For Use

Product Code  
**5176**

#### PINNACLE Test Strip (unused)



#### Strip Holders

Resin Strip Holder (open view)

Channel for strip

Windows on both sides of the strip holder facilitate exposure of the test strip

Stainless Steel Strip Holder

Hook

Slide ends of PINNACLE AEC strip behind the crimped tabs

#### Decontamination Area – DIRTY Side

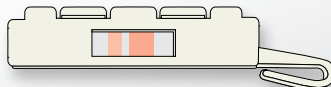
**1**



Remove a PINNACLE AEC test strip from bottle and, using a permanent marker, write the equipment identification, date, time and location, if applicable, on the strip handle.

**2**

#### Assembled Test Device



Center the indicator pad and internal color standard within the window of the holder



Slip ends of the PINNACLE AEC strip behind the crimped tabs

Insert the strip into the channel of the holder. Make sure the indicator pad and internal color standard are centered within the window of the holder.

**3**

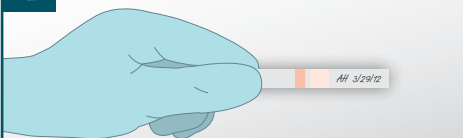


Securely attach the test device inside the **middle or lower instrument baskets** or on the **perimeter** of the washer-disinfecter rack making sure there is no contact with the spray arm. For ultrasonic cleaners, **securely attach to instrument basket**.

The indicator pad and internal color standard should not be obstructed by surgical instruments. Run wash cycle.

#### Post-Wash Assembly Area – CLEAN Side

**4**



Make sure pads are facing up when interpreting results.

After the wash cycle is complete, unhook the holder from the basket or rack and remove the test strip.

Ensure the pads of the test strip are **facing up** and interpret results. The two pads can be compared wet or dry, preferably dry.

If the two pads are very similar in color when wet, blotting the strip by **firmly** pressing the pads face-down onto a paper towel can enhance interpretation.

**5**

#### OPTIMAL CLEANING CONDITIONS

**PASS**

6:40 am Beli 3 1/27/12

The indicator pad is lighter in color than the internal color standard.

#### SUBOPTIMAL CLEANING CONDITIONS

**FAIL**

8:15 am AmSCO #2 3/14/12

Feb 4-12 9:40 am Tutt #6

The indicator pad is similar to or darker than the internal color standard.

Compare color of the larger indicator pad to the smaller internal color standard.\* Record results. The strip can be archived for up to 2 years or discarded according to federal, state and local regulations.

For **FAIL** results, check the following:

- Insufficient detergent concentration or delivery
- Insufficient cycle time and/or main wash cycle temperature not reached
- Spray arm(s) partially clogged or immobilized
- Detergent degraded or expired

Refer to the PINNACLE Reference Guide for additional information.

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





# Reference Guide

for Product Code 5176

## PINNACLE™

Monitor  
for

**AUTOMATED**

Enzymatic  
Cleaning Process

**If the PINNACLE Monitor for AEC yields a “FAIL” result, refer to the tables below to identify the possible cause/correction.**

***For easier interpretation, blot the strip by firmly pressing the pads facedown onto a paper towel.***

### Test Result: Some color loss but the color of the Indicator Pad is similar to or darker than the internal color standard.

SOURCE	POSSIBLE REASON	CORRECTION
Insufficient detergent concentration or delivery	Concentrations of less than the recommended dosage can result in impaired cleaning performance.	Consult detergent manufacturers' instructions for use. Check for clogged or obstructed tubing/lines.
Insufficient cycle time and/or main wash cycle temperature not reached	Using less than the recommended cycle time and/or main wash temperature can lead to impaired cleaning performance. The test device is not to be used with cart washers and other low temperature cycles such as for plastic ware.	Verify cycle settings are compatible with enzymatic detergent manufacturers' recommendations. Check temperature for wash cycle.
Spray arm(s) partially clogged or immobilized	An immobilized or clogged spray arm will not deliver enough detergent to the instrument trays.	Consult manufacturers' instructions on cleaning or repairing spray arm(s).
Detergent degraded or expired	Prolonged use, improper storage, extending the use life or expiration date of the enzymatic detergent causes degradation of the active ingredients.	Replace with new enzymatic detergent solution and re-test.
Placement of test device	Obstructions in front of the test pads can result in less than optimal exposure to the detergent.	Place new test device into tray or on rack, ensuring proper placement without obstructions.

### Test Result: No color loss; the color of the Indicator Pad is darker than the internal color standard.

SOURCE	POSSIBLE REASON	CORRECTION
No detergent delivered or no active enzyme present	No enzymatic detergent was present or a non-enzymatic detergent was used.	Check detergent solution used. Check for clogged or broken hoses/lines or spray arms. Contact service technician.
Loss of water pressure or mechanical failure	Detergent was not distributed throughout the washer or insufficient impingement.	Contact service technician.

***After corrections are made, re-test to ensure appropriate results are obtained with the device. Follow hospital procedures for reprocessing loads.***



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