## Mesh Style Tip Protectors-

## Validation for Compatibility with Hydrogen Peroxide Sterilization

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**Objective:** To validate the efficacy of Mesh Style tip protectors with vaporized hydrogen

peroxide sterilization.

## **Materials:**

STERRAD® Hydrogen Peroxide Sterilizer Surgical Instruments

V-PRO™ Hydrogen Peroxide Sterilizer Steriking® Tyvek® Peel Pouches

Mesh Style Tip Protectors Biological Indicators

## **Procedure:**

• Surgical instruments were fitted with the appropriate sized mesh style tip protectors.

- The instruments were placed in Steriking® Tyvek® sterilization pouches.
- A biological indicator (BI) of at least 1.0x 10<sup>6</sup> *Geobacillus* stearothermophilus spores was applied to the most difficult to sterilize and accessible areas on the test sample.
- STERRAD: The sterilization pouches were placed in the STERRAD® 100NX® hydrogen peroxide sterilizer and tested for functional compatibility using the Standard cycle and sterilization efficacy using the Express cycle.
  - The Standard and Express cycles used are defined by ASP as the 'worst case' for functional compatibility and sterilization efficacy respectively, for their complete line of sterilizers. Therefore the validation applies to all currently marketed STERRAD® machines and cycles.
- V-PRO: The sterilization pouches were placed in the V-PRO maX<sup>™</sup> hydrogen peroxide sterilizer and tested for functional compatibility using the Lumen cycle.
- Lumen Cycle is most aggressive of the three processes available with the V-PRO maX low-temperature sterilizer.

**Results:** Functional compatibility and Sterility was achieved in all runs with Mesh Style tip protectors.

**Conclusion**: Healthmark's Mesh Style Tip Protectors are functionally compatible and permeable to vaporized hydrogen peroxide, allowing proper sterilization of instrument tips in all currently marketed STERRAD® and V-PRO machines and cycles.

