

Most commercially available Biological Indicators are designed for healthcare applications and are not well suited for many manufacturing situations. Manufacturers and validation specialists require unique tools where spore strips and ampoules are not suitable because of size, packaging or carrier material. In addition to our line of Healthcare BIs, Mesa offers a line of Industrial Use BIs to address the unique requirements of the medical device and pharmaceutical industries.

### Woven Cotton Threads

**Length: 19mm Diameter: 1.5mm**

Threads have been used at the interface of a syringe and plunger to show sterilant penetration and efficacy at that point. Other uses include placement in tubing and small vials.

Bio-threads are 100% cotton, 3/4" long-- and are inoculated with *B. atrophaeus*.

The device/lumen into which the thread is inserted affects its resistance characteristics.



### Polyester Sutures

**Length: 5cm Diameter: 0.15mm**

A polyester suture is desirable in situations where more flexibility and a small diameter is necessary. Polyester sutures are easy to handle and can be wrapped around or inside objects to aid in sterilization validation of a variety of situations and products.



### Paper Discs

**6mm**

Paper discs have been used to validate sterilization of contact lenses in steam where placement of a strip was impossible due to its size. They are also suitable for EO, Dry Heat (up to 180 °C) and radiation sterilization.

### Packaging

Cotton threads and Sutures are individually packaged in Tyvek®/Mylar pouches. Paper discs are bulk packed in plastic bags (no primary packaging).