

Innovative. Smart. Trusted.

We're your partner for sterilization products. POSSTEX SES)

CROSSTEX INDUSTRIAL

Crosstex | Industrial is a division of Crosstex International, a Cantel Medical Company (NYSE:CMN). We are a leading global manufacturer of infection control and sterilization assurance products. We create high quality, innovative products, the majority of which are manufactured in the United States. Our broad range of products include the following key product lines: Biological Indicators, Chemical Indicators, Quality Control Test Suspensions, Sterilization Pouches and Tubes, Custom Indicator Labels, Face Masks and High Level Disinfectants.

Our global market segments include medical device, pharmaceutical, contract sterilizer, laboratory, food and beverage and biotechnology companies which we serve through a worldwide distribution network. With eleven manufacturing/distribution facilities around the world - eight in the United States and three internationally - Crosstex Industrial services the global infection control community in an efficient and timely manner.

Crosstex's infection control and sterilization assurance products are manufactured in FDA regulated facilities certified to ISO 13485:2012. Globally, Crosstex maintains a comprehensive list of accreditations and certifications.

Sales, Service and R&D Office Manufacturing Facilities

959 Illinois Avenue, Suite B Maumee, OH 43537 **USA**

6789 W. Henrietta Road Rush, NY 14543 **USA**

31 Water Street Cuba, NY 14727 **USA**

Visit our websites at: SterilizationProducts.com or crosstex.com (567) 803-1220 | (800) 860-1888 Fax: (419) 666-1715

Email: ProductOrders@crosstex.com

Table of Contents

Biological Indicators

Self-Contained Biological Indicators • SporeView® SCBIs	3
Incubators	3
Inoculated Carriers & Biological Indicators • Steel Spore Discs • Glass Fiber Spore Discs • Spore Wires	4
Spore Suspensions	5
Prepared Culture Media	5

Chemical Indicators

Chemical Indicator Strips	.5
Chemical Process Indicators	6
Indicator Tapes	. 6

Packaging

Tyvek [®] Sterilization Pouches	.7
Tyvek® Roll Stock Tubing	.7
Heat Sealers	.7

SporView® and Steri-Coil™ are registered trademarks and trademarks of SPSmedical Supply Corp., a wholly owned subsidiary of Crosstex International, Inc.

Tyvek® and Mylar® are registered trademarks of E.I. du Pont de Nemours

Trypticase® is a registered trademark owned by Becton, Dickinson and Company.



SporView® Self-Contained Biological Indicators

Crosstex SporView[®] Self-Contained Biological Indicators (SCBIs) for monitoring Vaporized Hydrogen Peroxide (VH₂O₂) sterilization processes provide fast, visible, consistent and reliable results offering peace of mind for assurance of effective sterilization. Use of Crosstex's distinctively designed SCBI system reduces the possibility of contamination and minimizes the potential for false positives associated with post-exposure transfer. Crosstex SporView[®] SCBIs consist of a thermoplastic

vial and a white cap, a crushable glass ampule with an exclusively formulated Trypticase® Soy Broth (TSB) modified with pH indicator, and a glass fiber disc inoculated with *Geobacillus stearothermophilus* spores.

- Reduced incubation time of 24 hours
- Visually distinct positive results from purple to yellow
- Chemical Indicator on label provides instant indication of exposure
- Smaller size, 8.4 mm x 45.5 mm, designed to fit in challenging sterilization areas
- Compliant with ISO 11138-1



Geobacillus stearothermophilus Cell Line 7953 18 month shelf life

Crosstex Code	Population	Incubation Time	Quantity	
VH50	10 ⁶	24 hours	50/box	



Digital Dry Block Incubator

The Crosstex Digital Dry Block Incubator is designed for convenient and reliable incubation of SporView[®] SCBIs.

- The electronically-heated aluminum block holds up to 10 units
- 13 mm well size
- Temperature and incubation time are displayed digitally
- Adjustable temperature (5°C to 70°C) and incubation time (0 to 99h 59m)
- Reaches set point temperature in 15 minutes or less
- Transparent lid included to ensure consistent temperature and to protect the units
- 12 month limited warranty

Digital Dry Block Incubator

Crosstex Code	Voltage	Plug Type
INC-13A	110-220V	North & South America
INC-13E	110-220V	Europe
INC-13U	110-220V	United Kingdom
INC-13AC	110-220V	Australia & China



Standard Dry Block Incubators

The Crosstex Standard Dry Block Incubators are available with 11 mm well sizes designed for use with SporView[®] SCBIs.

- Compact design allows for minimal counter space to be utilized
- Aluminum block holds up to 15 units
- Built-in vial crusher
- 5 year limited warranty

Standard Dry Block Incubators

Crosstex Code	Iemperature	Voltage	Plug Type
NDB-060	55°C to 60°C	110V	North & South America
NDB-060-E	55°C to 60°C	220V	Europe
NDB-060-A	55°C to 60°C	220V	Australia & China



Biological Indicators

Inoculated Carriers & Biological Indicators

Crosstex manufactures a comprehensive product line of Inoculated Carriers and Biological Indicators (BIs) for use in monitoring Vaporized Hydrogen Peroxide (VH₂O₂) sterilization and high level disinfection processes. The BIs are designed for monitoring processes whether placed directly into the chamber for sterilization or positioned in areas of a room which are the most difficult to disinfect.

- Convenient shelf packages of 100 units per box
- Bacillus atrophaeus and Geobacillus stearothermophilus product configurations available
- Products are accompanied by a Certificate of Analysis and are certified with population, purity, and resistance characteristics (D value)



Steel & Glass Fiber Spore Discs

- Glass Fiber Spore Discs are 9 mm in diameter and are packaged in Tyvek®/Mylar®
- Steel Spore Discs are 6 mm in diameter and are available packaged in easy-to-access Tyvek®/Mylar® or Tyvek®/ Tyvek® pouches (Please inquire for bulk & other packaging)

Spore Wires

- 40 mm x 1.5 mm and packaged in bulk
- Rigid structure which allows for easy insertion and removal from a device

Glass Fiber Spore Discs

Bacillus atrophaeus Cell Line 9372 12 month shelf life

Crosstex Code	Packaging	Population	Quantity
GFTN-06	Tyvek®/Mylar®	10 ⁶	100/box

Geobacillus stearothermophilus Cell Line 7953 24 month shelf life

Crosstex Code	Packaging	Population	Quantity
GFTS-06	Tyvek®/Mylar®	10 ⁶	100/box

Steel Spore Discs (Sterilization)

Bacillus atrophaeus Cell Line 9372 12 month shelf life

Crosstex Code	Packaging	Population	Quantity
SDN-06	Tyvek®/Mylar®	10 ⁶	100/box

Geobacillus stearothermophilus Cell Line 7953 19 month shelf life

Crosstex Code	Packaging	Population	Quantity
SDS-06	Tyvek®/Mylar®	10 ⁶	100/box

Steel Spore Discs (Disinfection)

Bacillus atrophaeus Cell Line 9372 12 month shelf life

Crosstex Code	Packaging	Population	Quantity
TTN-06	Tyvek®/Tyvek®	10 ⁶	100/box

Geobacillus stearothermophilus Cell Line 7953 19 month shelf life

Crosstex Code	Packaging	Population	Quantity
TTS-06	Tyvek®/Tyvek®	10 ⁶	100/box

Spore Wires

Geobacillus stearothermophilus Cell Line 7953 19 month shelf life

Crosstex Co	de Description	Packaging	Population Quantity
SWH-06	Braided Steel	Bulk	10 ⁶ 100/box

Spore Suspensions

Crosstex manufactures Spore Suspensions utilized in VH_2O_2 sterilization processes. The Spore Suspensions are pure suspensions of spores with known resistance characteristics and a variety of population levels standardized per 0.1 mL. The Spore Suspensions allow for direct inoculation of products, typically to verify sterility of devices which are most difficult to sterilize. They can also be used for a variety of other microbiological tests including cleaning effectiveness studies, Bioburden percent recovery and Bacteriostasis/Fungistasis (BF) testing.

- Each vial contains 10 mL of suspension. Diluent contains 20%
- Pharmaceutical grade glass vials with screw cap and septum
- Spore Suspensions require storage under refrigerated conditions (2°C to 8°C)
- Each vial of Spore Suspension is accompanied by a Certificate of Analysis detailing the source, assayed population, resistance characteristics and expiration date
- ISO 11138-1 Compliant



Spore Suspensions

Geobacillus stearothermophilus Cell Line 7953 24 month shelf life

Crosstex Code	Population per 0.1 mL
VGS-106H	10 ⁶
VGS-107H	10 ⁷
VGS-108H	10 ⁸

Prepared Culture Media

Crosstex Prepared Culture Media consists of an exclusively formulated Trypticase® Soy Broth (TSB) modified with pH indicator. Prepared Culture Media for use with both Geobacillus stearothermophilus (GMBCP-100) and Bacillus atrophaeus (GMBTB-100) are available. A reduced incubation time for VH₂O₂ processes has been validated when Crosstex Biological Indicators are used in conjunction with Crosstex's Prepared Culture Media.

- Reduced incubation time of 24 hours when used with Geobacillus stearothermophilus (GMBCP-100) and 48 hours when used with Bacillus atrophaeus (GMBTB-100)
- Visually distinct results:
 - Purple media transitions to yellow when positive for Geobacillus stearothermophilus growth
 - Blue/Green media transitions to yellow when positive for Bacillus atrophaeus growth
 - 13 mm x 100 mm flat bottom tubes of Type I borosilicate glass with screw caps
 - Each lot is accompanied by a Certificate of Analysis and is certified with growth promotion capabilities using Geobacillus stearothermophilus Cell Line 7953 or Bacillus atrophaeus Cell Line 9372

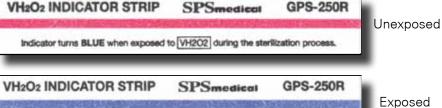
Prepared Culture Media

12 month shelf life

Crosstex Code	Volume	Quantity
GMBCP-100	5 mL	100 tubes/box
GMBTB-100	5 mL	100 tubes/box



Chemical Indicators



Indicator turns BLUE when exposed to VH2O2 during the sterilization process.

Chemical Indicator Strips

24 month shelf life

Crosstex Code	Description	Dimensions	Quantity
GPS-250R	VH ₂ O ₂ CI Strip –Type 4	101 mm x 15 mm (4" x 0.75")	250/box

Chemical Indicator Strips

Crosstex VH₂O₂ Chemical Indicator Strips are certified to meet chemical indicator specfications for pack monitoring when used in VH₂O₂ sterilization processes. Crosstex evaluates the performance of every lot in state of the art equipment to ensure consistent and reliable performance.

- Provide a distinct color change from red to blue upon exposure to VH₂O₂ processes
- Demonstrate exceptional performance in the most widely used VH₂O₂ steril-
- Manufactured with synthetic material
- ISO 11140-1 Type 4 Compliant

Chemical Process Indicators

Crosstex Vaporized Hydrogen Peroxide (VH_2O_2) Chemical Process Indicators (CPIs) meet performance specifications as outlined in ISO 11140-1 Sterilization of health care products - Chemical indicators - Part 1: General requirements, for Type 1 Process Indicators. CPIs provide a fast and reliable visual check on items that were exposed to VH_2O_2 .

- Consistent color transition
- No light sensitivity issues
- Permanent pressure-sensitive adhesive
- Room temperature storage (15°C to 30°C)
- Each shipment is accompanied by a Certificate of Analysis to ensure product quality and consistency

Chemical Process Indicators

21	month	shalf	lifa

Crosstex Code	Description	Indicators Per Roll	Unexposed	Exposed
CPI-P03	Circle Indicator Label 12.7 mm with imprinted text "BLUE IS H ₂ O ₂ EXPOSED"	5,000	BLUE 15 H,O, M _{POS} R	BLUE 15 H,O, M,POSEP
GPL-2000R	Circle Indicator Label 9 mm	2,000		

Indicator Tape (Red to Yellow)

Crosstex VH₂O₂ Tape (red to yellow option) is designed to aid in distinguishing processed from unprocessed loads. The tape consists of a strong custom-made white polyester substrate with a pressure sensitive adhesive which adheres to Tyvek[®], plastic, woven, treated woven and non-woven wraps. The adhesive allows for secure seals yet is easy to remove.

- Latex & Lead free
- Tape will change color from red to yellow when exposed to 2.3 mg/L \pm 0.4 mg/L of VH $_2$ O $_2$ at 50°C for 6 minutes exposure time or longer
- Can be written upon
- Long shelf life of 36 months
- Each shipment includes a Certificate of Analysis for assurance of product quality and performance
- ISO 11140-1 Type 1 Compliant



Indicator Tape (Red to Blue)

Crosstex VH_2O_2 Tape (red to blue option) is to be used as an external chemical indicator for packages to be sterilized in VH_2O_2 sterilization processes. This is a process indicator that indicates the package has been exposed to VH_2O_2 during the sterilization process.

- Each roll comes in its own dispenser box; just tear off appropriate length, remove liner and secure to wrap
- Tape will change color from red to blue when exposed to 2.3 mg/L \pm 0.4 mg/L of VH $_2$ O $_2$ at 50°C for 6 minutes exposure time or longer
- 15 month shelf life
- ISO 11140-1 Type 1 Compliant





Indicator Tapes

Crosstex Cod	de Description	Dimensions	Quantity
TAP-H48	VH ₂ O ₂ Tape (red to yellow)	19 mm x 55 m (3/4" x 60 yds)	48 rolls/box
HT-048	VH ₂ O ₂ Tape (red to blue)	19 mm x 55 m (3/4" x 60 yds)	24 rolls/box

Tyvek® Sterilization Pouches

Crosstex Tyvek® Sterilization Pouches include a chemical indicator for verification of exposure and will maintain sterilization of instruments for up to 24 months.

- Single-use pouches for sterilizing reusable instruments
- Self-seal and heat-seal styles, as well as a range of sizes to accommodate most instruments
- Manufactured with Tyvek® material for superior tear strength and puncture
- Pouches and rolls feature a convenient built-in green indicator that will turn yellow when exposed
- Meet ISO 11607 standards for pouch performance



Tyvek® Self Seal & Heat Seal Sterilization Pouches

Crosstex Code	Description	Size	Process	Quantity
TSP-180	Self-Seal Tyvek® Pouch	3.5" x 5.25" (9 x 13 cm)	VH_2O_2	200/bx, 10/cs
TSP-181	Self-Seal Tyvek® Pouch	$3.5'' \times 9'' (9 \times 23 \text{ cm})$	VH_2O_2	200/bx, 10/cs
TSP-182	Self-Seal Tyvek® Pouch	$4'' \times 24''$ (10 x 61 cm)	$VH_2^-O_2^-$	200/bx, 4/cs
TSP-183	Self-Seal Tyvek® Pouch	5.25" x 10" (13 x 25 cm)	VH_2O_2	200/bx, 10/cs
TSP-184	Self-Seal Tyvek® Pouch	5" x 15" (13 x 38 cm)	$VH_2^-O_2^-$	200/bx, 10/cs
TSP-185	Self-Seal Tyvek® Pouch	7.5" x 13" (19 x 33 cm)	$VH_2^-O_2^-$	200/bx, 5/cs
THP-282 THP-283	Heat-Seal Tyvek® Pouch Heat-Seal Tyvek® Pouch	4" x 9" (10 x 23 cm) 6" x 12" (15 x 30 cm)	VH ₂ O ₂ VH ₂ O ₂	200/bx, 10/cs 200/bx, 10/cs



Steri-Coil™ Pouch Dividers

Crosstex Code	Dimensions	Quantity
SCD-001	3.5" x 3.5" x 20"	Each
SCD-012	2.5" x 6"	Each



Tyvek® Roll Stock Tubing

Manufactured to the same performance standards as our pouches, Crosstex Tyvek® tubing is designed to be cut to any length prior to packaging and then mechanically sealed or taped closed.

- Manufactured with Tyvek® material
- Comes in roll form for custom sizing
- Ideal for long or odd shaped instruments
- Individually packaged in 100 foot (30 meter) rolls

Tyvek® Roll Stock Tubing

Crosstex Code	Size	Process	Quantity
TST-004	4" x 100 ft (10 cm x 30 m)	VH_2O_2	10 rolls/cs
TST-006	6" x 100 ft (15 cm x 30 m)	VH_2O_2	10 rolls/cs

Heat Sealers

Compact and easy to operate, each heat sealer comes with instructions for use. Heat sealers are available in 18" (46 cm) and 24" (61 cm) sizes and are ready to use after a short warm up period.

- 1/2" (1.3 cm) seal in approximately two seconds
- If object exceeding 1/8" (3 mm) thickness is in the sealing area, the heat sealer will not operate, providing protection to employees
- Temperature setting can be changed to properly seal paper/poly and Tyvek® packaging products, as well as dust covers

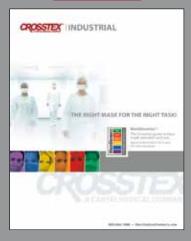
Heat Sealers		
Crosstex Code	Size	

Crosstex Code	Size	Quantity
MHS-002	18"	Each
MHS-003	24"	Each

Our Product Literature

















CROSSTEX* | INDUSTRIAL

959 Illinois Avenue, Suite B Maumee, OH 43537 USA SterilizationProducts.com crosstex.com (567) 803-1220 | (800) 860-1888 Fax: (419) 666-1715 Email: ProductOrders@crosstex.com