



KORDON TIP PRODUCT CATALOG

Perfect Sterilization Systems



Tıp Sağlık Araç ve Gereçleri

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Kordon Tip Ltd was found in Izmir, TURKEY. We are continuing our activities at our factory in the Izmir Ataturk Organized Industrial Zone since 1998. As Kordon Tip Ltd, we contribute to our country's economy by bringing out contemporary and modern products by our pioneering and innovative studies with AXIS brand. We have domestic and foreign solutions with our dealer network and our technical service have Turkish Standards Institute Service Qualification, Ministry of Industry and Trade, After Sales Service Qualification Certificates. Our core business is *Ethylene Oxide Sterilizers* and its consumables, we also enriched our line with CSSD products. Since we are a manufacturer it is easy to meet customer demands and needs with our experience in medical sector.

Steam Sterilization Control Products
Steam Chemical & Biological Indicators

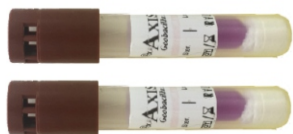
AXIS STEAM BIOLOGICAL INDICATORS & AMPOULES



Product Code: AX20

AXIS self-contained biological indicators were developed to control the steam sterilization process. Biological indicator contains bacterial spores on a filter paper carrier packaged within a plastic tube and a cap. Inside the tube, there is a sealed-glass ampoule of specially-formulated culture medium containing a color indicator which change color when spores grow.

AXIS biological indicators produce visual results within 24 hr ,3 hr ,1 hr ,30 min and 20 min at 60±2 °C. The biological indicators can be placed into the sterilization chamber with the materials to be sterilized in an appropriate package according to sterilization practice.



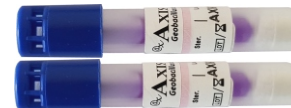
Product Code: AX220



Product Code: AX221



Product Code: AX222



Product Code: AX223

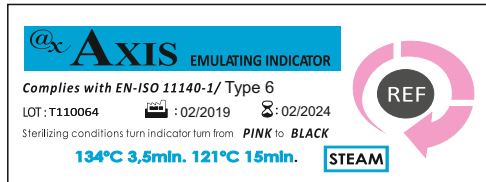


Product Code: AX224

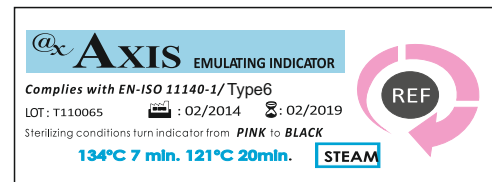
Code	Organism	Process	Result	Packing	Incubator
AX20	<i>Geobacillus stearothermophilus</i>	Steam	24 hr	100 pcs	AXDL-100
AX220	<i>Geobacillus stearothermophilus</i>	Steam	3 hr	50 pcs	AXRD-100
AX221	<i>Geobacillus stearothermophilus</i>	Steam-gravity	1 hr	50 pcs	AXRD-100
AX222	<i>Geobacillus stearothermophilus</i>	Steam	1 hr	50 pcs	AXRD-100
AX223	<i>Geobacillus stearothermophilus</i>	Steam	30 min	50 pcs	AXRD-100
AX224	<i>Geobacillus stearothermophilus</i>	Steam	20 min	50 pcs	AXRD-100
AX225	<i>Geobacillus stearothermophilus</i>	Steam	instant	50 pcs	AXRD-100

*Available in different populations, packaging, and configurations. Custom BIs are also available

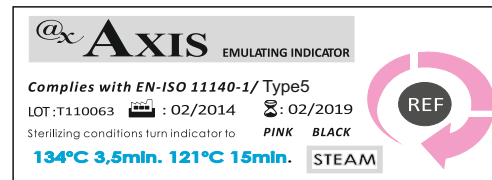
AXIS STEAM CHEMICAL INDICATORS



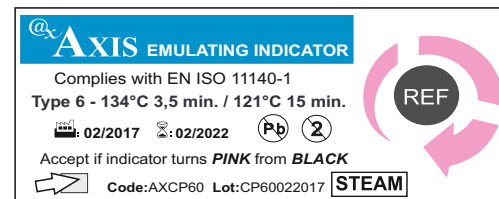
Type 6 Product Code: AXCP60



Type 6 Product Code: AXCP70



Type 5 Product Code: AXCP90



Adhesive Type6 Product Code: AXCP450

The use of Chemical Indicator is part of an effective quality assurance program and assists in the detection of potential sterilization process failures that could result from incorrect packaging, incorrect loading or malfunctions of the sterilizer. Chemical indicators change color rapidly when a given parameter is reached. An internal chemical indicator should be placed in every sterilization package to ensure the sterilization agent has penetrated the packaging material and actually reached the instruments inside.

Steam Chemical Indicator Type 5 & Type 6

The steam chemical indicator is designed to evaluate parameters of the sterilization process on the location and to give instant read-out. AXIS Steam Chemical Indicators are in compliance with EN-ISO 11140-1:2014. Can be used in all steam sterilizers as an internal pack monitor. Indicators are manufactured as Type 5 and Type 6. Works between 121°C-134°C.

Type 6 has options of giving results in 3,5 min. or 7 min. Since the optimum sterilization cycle has been attained, the indicator turns to reference color and the indicator preserves its final color at least 6 months.

The contents of each pack must be exposed to several critical parameters of the sterilization process. These critical parameters for Steam are:

- Saturated Steam
- Time
- Temperature

before sterilization



successful sterilization

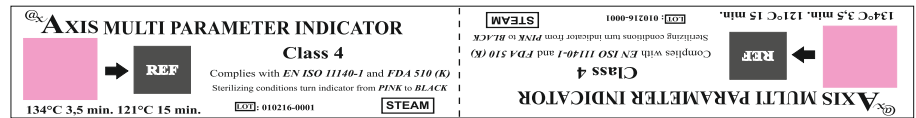


unsuccessful sterilization
(the color change is different than the reference color)



AXIS MULTI-PARAMETER STEAM CHEMICAL INDICATORS

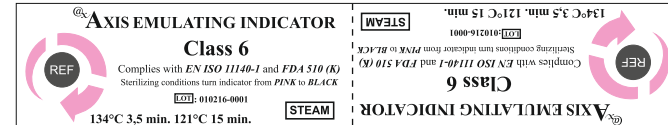
TYPE 4



Product Code: AXSDC4



TYPE 6

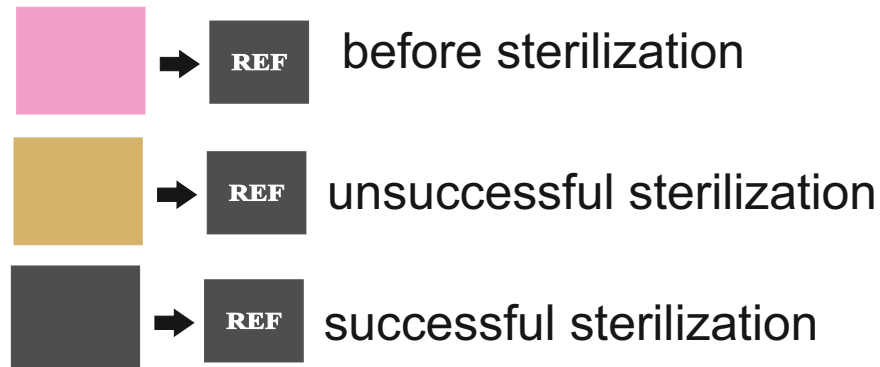


Product Code: AXSDC6

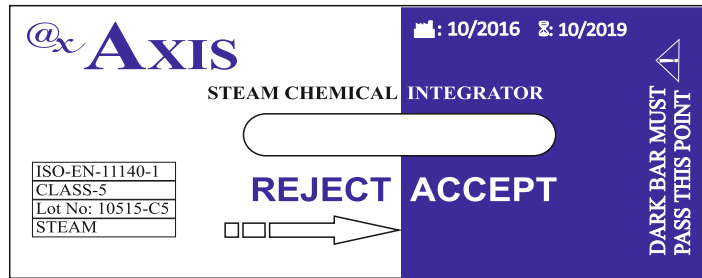


Adhesive / Double Sided / Multiparameter / Writable Back Side

The multivariable indicator for steam sterilisation processes monitors critical parameters to ensure proper sterilisation has occurred. Place a Type 4 or Type 6 multi parameter chemical indicator within each package or bag/tray that will be sterilised by steam. For rigid containers, there should be at least 2 test strips diagonally opposite in each corner to ensure that the cycle has reached all areas of the machine. Once the cycle is over, the user must analyse the results. If the ink has changed into another color (as specified), the items have been processed correctly. Alternatively any different colors (as specified) indicates a failure in the sterilisation cycle.



AXIS STEAM CHEMICAL INTEGRATOR



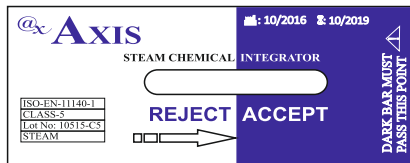
Product Code: AXCP15

Axis Steam Chemical Integrators can be used inside each load to monitor time, temperature, and steam exposure conditions and can provide the necessary sterilization assurance.

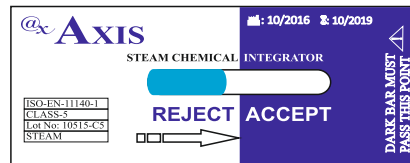
Axis Steam Chemical Integrators are chemical indicators consisting of a paper and a steam temperature sensitive chemical pellet contained in a paper/film/foil laminate.

The chemical pellet melts and moves as a dark color along the paper .
Moving front ink technology provides easy to read 'Accept or Reject' result.

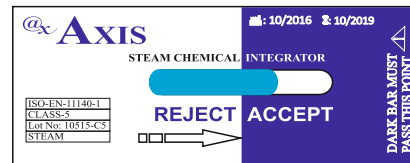
Steam Chemical Integrators can be used for load control monitoring of all 121°C-134°C steam sterilization cycles.



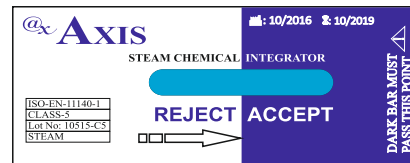
Unprocessed Indicator



Unacceptable Sterilization



Acceptable Sterilization



Acceptable Sterilization

Eto Sterilization Control Products
Eto Chemical & Biological Indicators

AXIS ETHYLENE OXIDE BIOLOGICAL INDICATORS



Product Code: AX10

AXIS self-contained biological indicators were developed to control Ethylene Oxide sterilization process. Biological indicator contains bacterial spores on a filter paper carrier packaged within a plastic tube and a cap. Inside the tube, there is a sealed-glass ampoule of specially-formulated culture medium containing a color indicator which changes color when spores grow.

AXIS biological indicators produce visual results within 48 hr or 4 hr at 37 ± 2 °C. The biological indicators could fit into the sterilization chamber with the materials to be sterilized in an appropriate package according to sterilization practice.

After the incubation, a color change of the indicator media means a sterilization failure and sterilization conditions must be reviewed.

A positive control indicator ensures that the correct incubation conditions were met. Axis biological indicators are certified for species, population, purity, resistance (D value, Z value, and survival/kill data) and developed / manufactured under ISO 13485:2016 certificated system.



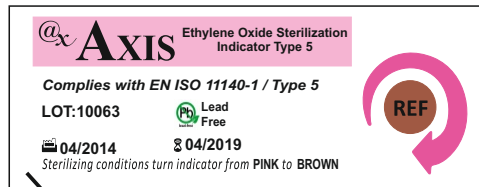
Product Code: AX110

Code	Organism	Process	Result	Packing	Incubator
AX10	<i>Bacillus atrophaeus</i>	Eto	48 hr	100 pcs	AXDL-100
AX110	<i>Bacillus atrophaeus</i>	Eto	4 hr	50 pcs	AXRD-100

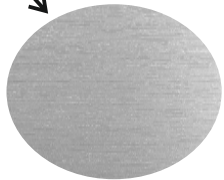
*Available in different populations, packaging, and configurations. Custom BIs are also available

AXIS ETHYLENE OXIDE CHEMICAL INDICATORS

Ethylene Oxide Chemical Indicator Type 5



Product Code: AXCP30



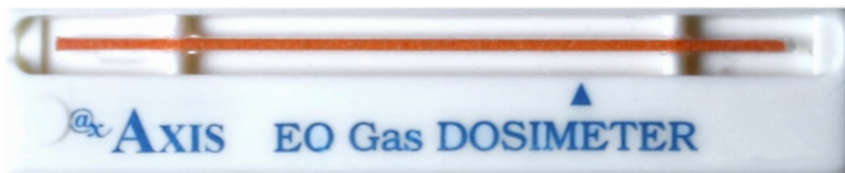
aluminum backside

Ethylene Oxide chemical indicator is designed to monitor all critical parameters of Ethylene Oxide sterilization (time, temperature, gas concentration, and humidity). Place inside every pouch or pack to be sterilized.

This product is designed for use in Ethylene Oxide sterilizations. Easy to read color change.

- Vivid color change provides immediate verification of exposure to sterilant
- Ease color comparison
- Traceable results and valuable documentation

The Axis EO Gas dosimeter assure that sterilization with the EO Gas process can be carried out reliably, four important parameters must be controlled: the concentration of sterilant gas, the length of exposure to the gas, relative humidity and the temperature that correlated to biological kill according to EN ISO 11135 standard. The orange bar in the indicator column will turn blue in proportion to the dose of sterilizing gas, thus providing immediate graphic evidence that the conditions necessary for sterilization.



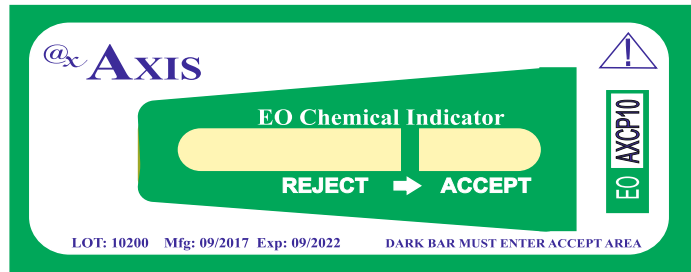
Product Code: AXCP380

To be considered sterile, the color change from orange to blue of the bar must extend at least to the full scale thus indicating that a dose of 750 mg/liter-hours has been received.

Dosimeter integrates the effects of time, temperature, humidity and gas concentration of EO in contact with it. To validate and to ensure sterilization, the triangular pointer (▲) on the dosimeter has been placed to indicate at least 750 mg/liter-hours of exposure EO gas.

To satisfy the need of obtaining results in a shorter period of time and to obtain them economically from inside each pack sterilized by EO, various types of chemical integrators were developed. Not all these integrators are able to monitor the full spectrum of conditions present inside an EO sterilizer. Some indicate the presence of EO gas, a few are able to indicate a lack of adequate moisture.

AXIS ETO CHEMICAL INTEGRATING INDICATOR



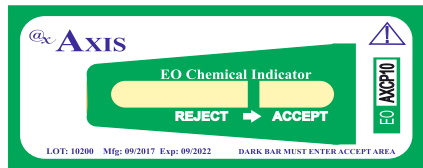
Product Code: AXCP10

Ethylene Oxide Chemical Integrators are chemical indicators consisting of a paper and a chemical pellet contained in a paper/film/foil laminate.

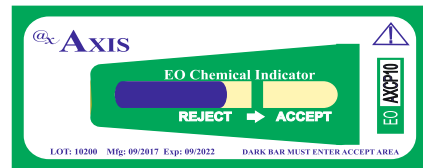
The chemical pellet melts and moves like a dark color along the paper. Moving front ink technology provides easy to read 'Accept or Reject' result. Ethylene Oxide (EO) gas and moisture enter the unsealed side of the integrator and changes the strip color.

The moving of the blue color is influenced by all the critical parameters of Ethylene Oxide sterilization.

- Advanced integrator technology that is easy to read and use
- Convenient size fits in all packs
- For use in all standard Ethylene Oxide sterilization cycles
- Safe and compatible with all pack
- Conforms to ANSI/AAMI/ISO 11140-1:2014 and EN ISO 11140-1:2014



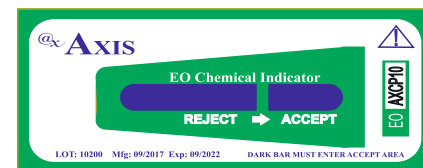
Unprocessed Indicator



Unacceptable Sterilization



Acceptable Sterilization



Acceptable Sterilization

Plasma Sterilization Control Products
Plasma Chemical & Biological Indicators

AXIS PLASMA BIOLOGICAL INDICATORS



Product Code: AX91

AXIS self-contained biological indicators were developed to control Plasma sterilization process. Inside the tube, there is a sealed-glass ampoule of specially-formulated culture medium containing a color indicator which turns to a dramatic color change when spores grow.

AXIS biological indicators produce visual results within 24hr, 1hr and 20 min at 60±2 °C. The biological indicators could fit into the sterilization chamber with the materials to be sterilized in an appropriate package according to sterilization practice.

After the incubation, a color change of the indicator media means a sterilization failure and the sterilizer or the sterilization condition must be a review. A positive control indicator ensures that the correct incubation conditions were met. Axis biological indicators are certified for species, population, purity, resistance (D value, Z value, and survival/kill data). AXIS biological indicators are developed and manufactured under ISO 13485:2016 certificated system.



Product Code: AX92

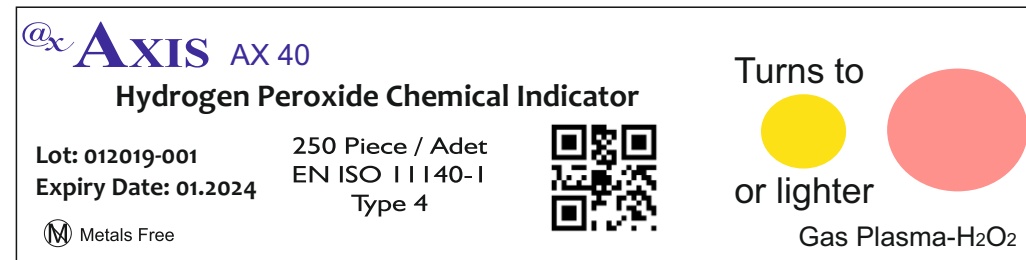


Product Code: AX93

Code	Organism	Process	Result	Packing	Incubator
AX91	<i>Geobacillus stearothermophilus</i>	Steam	24 hr	100 pcs	AXDL-100
AX92	<i>Geobacillus stearothermophilus</i>	Steam	1 hr	50 pcs	AXRD-100
AX93	<i>Geobacillus stearothermophilus</i>	Steam	20 min	50 pcs	AXRD-100
AX95	<i>Geobacillus stearothermophilus</i>	Steam	instant	50 pcs	AXRD-100

*Available in different populations, packaging, and configurations. Custom BIs are also available

AXIS PLASMA CHEMICAL INDICATORS



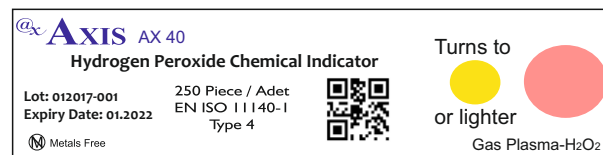
Product Code: AX40

Internal pack monitor for use with Hydrogen Peroxide/Gas Plasma sterilization processes.

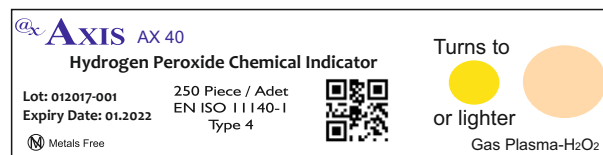
The water based and non-toxic chemical indicator in compliance with ISO 11140-1:2014 will show a clear and accurate color change after successful hydrogen peroxide gas plasma sterilization.

The indicator strips can be used in every pack and will provide assurance of sufficient hydrogen peroxide gas penetration into the packs.

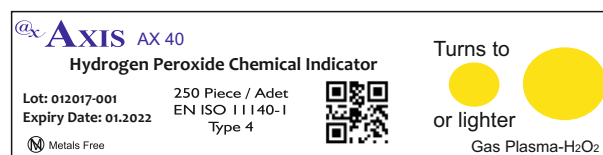
before sterilization



unsuccessful sterilization



successful sterilization



Formaldehyde Sterilization Control Products
Formaldehyde Chemical & Biological Indicators

Formaldehyde Biological Indicators



Product Code: AX100

AXIS self-contained biological indicators were developed to control the Formaldehyde sterilization process. Inside the tube, there is a sealed-glass ampoule of specially-formulated culture medium containing a color indicator which turns to a dramatic color change when spores grow.

AXIS biological indicators produce visual results within 48 hr or 1 hr at 60 ± 2 °C. If the sterilization process fails, the indicator medium color will change color after incubation, this indicates the presence of living *Geobacillus stearothermophilus* spores.

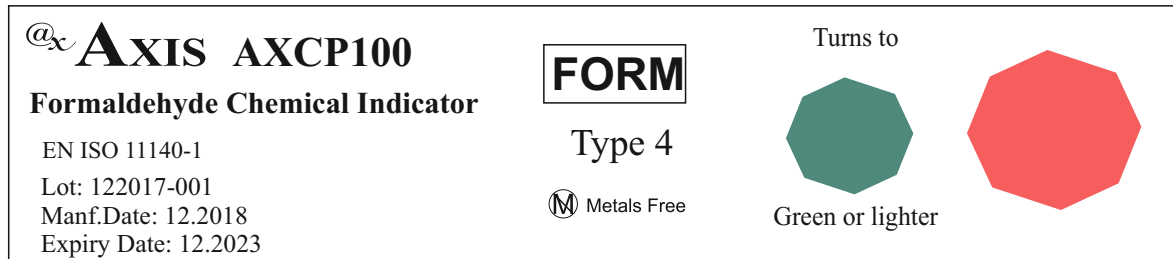


Product Code: AX101

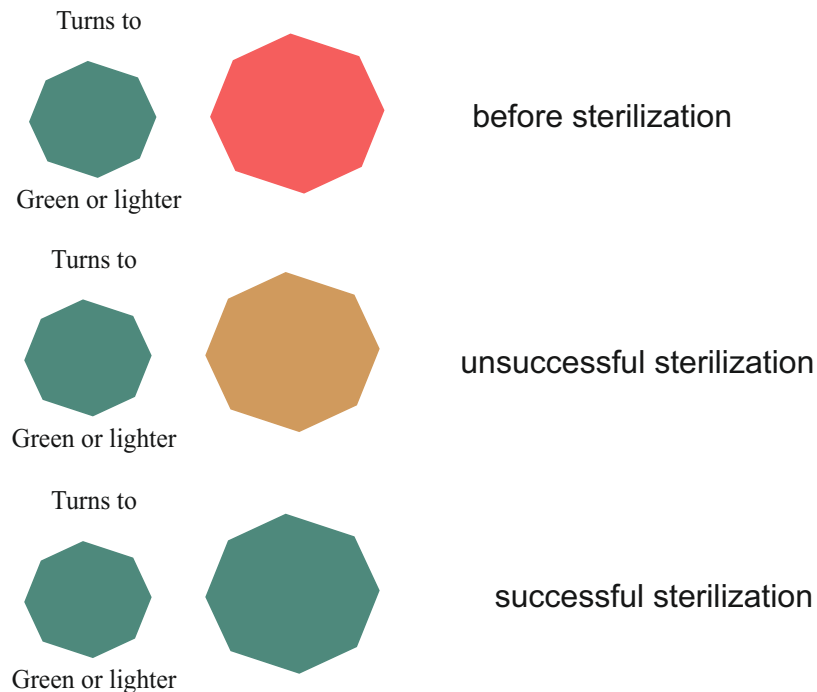
Code	Organism	Process	Result	Packing	Incubator
AX100	<i>Geobacillus stearothermophilus</i>	Formaldehyde	48 hr	100 pcs	AXDL-100
AX101	<i>Geobacillus stearothermophilus</i>	Formaldehyde	1 hr	50 pcs	AXRD-100

*Available in different populations, packaging, and configurations. Custom BIs are also available

AXIS FORMALDEHYDE CHEMICAL INDICATOR



PRODUCT CODE: AXCP100



AXIS Formaldehyde Chemical Indicators demonstrate exceptional performance and are customized for the Formaldehyde sterilization processes and provide a distinct color change.

Indicator changes when processed Formadehyde.
ISO 11140-1 Type 4 indicator

Dry Heat Sterilization Control Products

Chemical & Biological Indicators

AXIS DRY HEAT BIOLOGICAL INDICATORS



AXIS self-contained biological indicators were developed to control Dry Heat sterilization process.

AXIS biological indicators gives visual results within 48 hr at 37 ± 2 °C.

The biological indicators could fit into the sterilization chamber with the materials to be sterilized in an appropriate package according to sterilization practice.

Used to evaluate the efficiency of Dry Heat sterilization processes

Essential in performing sterilization cycle validation during Dry Heat sterilization processes

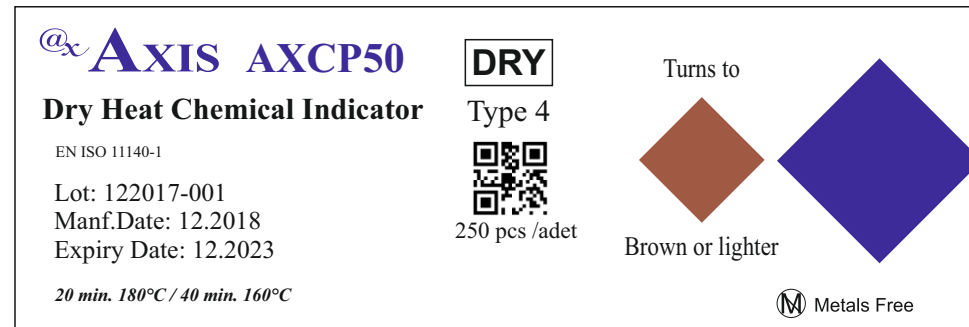
Easy to use and require minimal training

Product Code: AX50

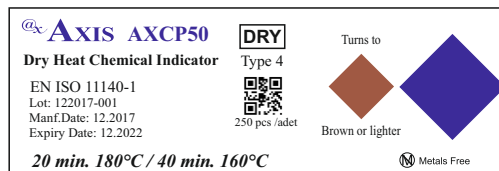
Code	Organism	Process	Result	Packing	Incubator
AX50	<i>Bacillus atrophaeus</i>	Dry Heat	48 hr	100 ad	AXDL-100

*Available in different populations, packaging, and configurations. Custom BIs are also available

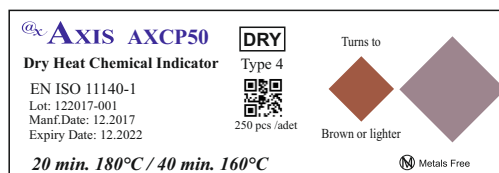
AXIS DRY HEAT CHEMICAL INDICATOR



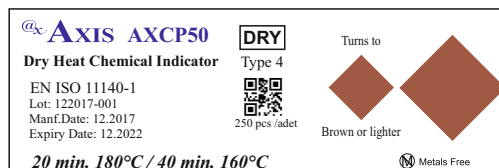
PRODUCT CODE: AXCP50



Prior to Use



Invalid Result



Valid Result at 160-180°C for 1 hour

AXIS Dry Heat chemical indicators are manufactured to monitor whether dry heat has penetrated to the point of placement of the strip within a pouch, instrument wraps, and other items requiring dry heat sterilization by reacting to two critical process variables (time and temperature). Internal chemical indicators should be used inside each pack to be sterilized.

Provides distinct color change when exposed to the dry heat sterilization process. An internal chemical indicator should be used within each package or try to be sterilized. Does not contain any harmful chemicals.

- Lead & latex free
- Irreversible color transition
- ISO 11140-1 Type 4 indicator

Moist Heat Sterilization Control Products Biological Indicator

AXIS MOIST HEAT BIOLOGICAL INDICATORS



Product Code: AX70

AXIS self-contained biological indicators are specially designed has been specifically designed for monitoring of Moist Heat decontamination processes, such as microwave and radiofrequency radiation processes intended for medical waste disposal treatment.

AXIS biological indicators produce visual results within 48 hr at 37±2 °C.

Used to evaluate the efficiency of Moist Heat sterilization processes
Essential in performing sterilization cycle validation during Moist Heat sterilization processes
Easy to use and require minimal training

Code	Organism	Process	Result	Packing	Incubator
AX70	<i>Bacillus atrophaeus</i>	Moist Heat	48 hr	100 pcs	AXDL-100

*Available in different populations, packaging, and configurations. Custom BIs are also available

Biological Indicator Incubators
Dual & Rapid Incubators

AXIS DUAL INCUBATOR



Product Code: AXDL-100



Product Code: AXDL-300

4 point comparison of temperature reading against reference thermometer.

AXIS Dual Incubators are specially designed to incubate Self Contained Biological Indicators (SCBIs). The incubators are available in temperatures for Steam, Plasma, Formaldehyde, Dry Heat, Moist Heat and Ethylene Oxide sterilization process.

AXIS Dual Incubator has 128x64 OLED Screen.

For Steam, Plasma and Formaldehyde indicators operate at 60°C.
For Ethylene Oxide, Dry & Moist Heat indicators operate at 37°C.
Available for either 120 or 220V electric supply.

Axis Incubators has an automatic readout system.
The individual wells for each SCBI maintain a controlled temperature for reliable incubation.

- Compact size requires minimal workspace.
- Automatic temperature control provides consistent operation.
- Ease of use
- 46 metal positions
- 39 positions for self-contained ampoules
- 7 position for Protein Pen
- A special hole for the external thermometer.
- One ampoule crusher for BI's.
- The incubator is pre-set at 37±2°C or 60±2°C.

Code	Organism	Process	Duration / Program
AX20	<i>Geobacillus stearothermophilus</i>	Steam	24 hr
AX10	<i>Bacillus atrophaeus</i>	Eto	48 hr
AX21	<i>Geobacillus stearothermophilus</i>	Steam	48 hr
AX91	<i>Geobacillus stearothermophilus</i>	Steam	24 hr
AX100	<i>Geobacillus stearothermophilus</i>	Formaldehyde	48 hr
AX50	<i>Bacillus atrophaeus</i>	Dry Heat	48 hr
AX70	<i>Bacillus atrophaeus</i>	Moist Heat	48 hr

AXIS RAPID INCUBATOR

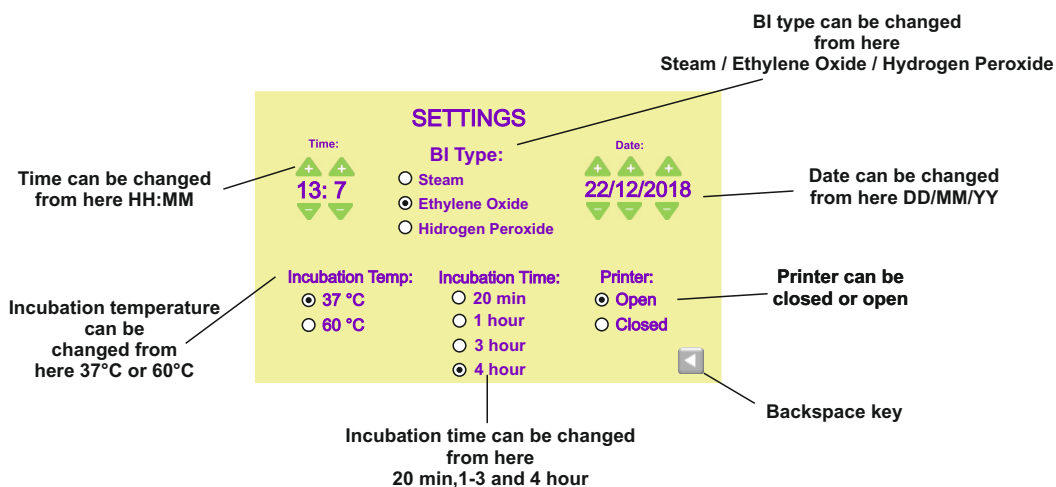
AXIS Rapid Incubators are specially designed to used with Rapid Readout Biological Indicators. The incubators are available in multi-temperatures for Steam, Plasma, Formaldehyde, Ethylene Oxide, Dry & Moist Heat sterilization process. For Steam, Plasma & Formaldehyde; operate at 60°C, For EO, Dry & Moist Heat; operate at 37°C. Available for either 120 or 220 V electric supply.

The remaining incubation time of each position is displayed on the 7" LCD touch screen.

Axis incubators have an automatic readout system and a printer to record the results. AXIS Incubators are small, tabletop incubators designed to process Self Contained Biological Indicators. The individual wells for each BI's maintain a controlled temperature for reliable incubation. Compact size requires minimal workspace. 10 metal positions to incubate Rapid/Super Rapid Readout Self-contained biological indicators. 1 ampoule crusher. Allows selecting between two different incubation temperatures, BI type, date, temperature, incubation time and printer options.



Product Code: AXRD-100



Code	Organism	Process	Duration / Program
AX110	<i>Bacillus atrophaeus</i>	Eto	4 hr
AX220	<i>Geobacillus stearothermophilus</i>	Steam	3 hr
AX221	<i>Geobacillus stearothermophilus</i>	Steam	1 hr
AX222	<i>Geobacillus stearothermophilus</i>	Steam	1 hr
AX223	<i>Geobacillus stearothermophilus</i>	Steam	30 min
AX224	<i>Geobacillus stearothermophilus</i>	Steam	20 min
AX225	<i>Geobacillus stearothermophilus</i>	Steam	instant
AX92	<i>Geobacillus stearothermophilus</i>	Plasma	1 hr
AX93	<i>Geobacillus stearothermophilus</i>	Plasma	20 min
AX95	<i>Geobacillus stearothermophilus</i>	Plasma	instant
AX101	<i>Geobacillus stearothermophilus</i>	Formaldehyde	1 hr

Sterilization Control Products

Chemical Indicators

AXIS DOCUMENTATION LABELS AND LABELERS

Axis Documentation Labels are chemical indicators designed for track and control sterilization processes. On the labels there is an ink printed chemical indicator which is defined as Type 1 according to EN ISO 11140-1 standards. Provides minimum risk of errors, easy and quick packaging and labeling.

Axis documentation labels manufactured under ISO 13485 and ISO 9001 quality systems. Labels can be used in Steam, Plasma and EO Gas sterilization processes, allowing all packs to be labeled prior to sterilization. Compatible with all manual traceability systems, it is very suitable to hospital, clinic and for both large and table top sterilizers. After sterilization, the label is peeled off and reapplied to either patient or department records as evidence of an effective process.

Axis Label Gun is a 3 title handheld labeler. Using the highest technology and best materials. It can be easily replaced due to major mechanical or material deficiencies. Label and ink roller can be changed easily.

AXIS Labeler has 3 line with each has 11 digits and Compatible with 28x29 mm labels.



ABCDEFGHIJ
 ↑↑↑↑↑↑↑↑↑↑
 TUVWXYZ123
 ↓↓↓↓↓↓↓↓↓↓
 KLMNOPQRS
 ↑↑↑↑↑↑↑↑↑↑
 4567890- /

Product Code: AXCP300

Easy read area
 Duplex adhesive
 Compatible with Axis Labeller
 600 pcs in a roll for Eto&Steam
 400 pcs in a roll for Plasma

AXKR0916
Pink → brown

09.09.2016

AXIS ↑ STEAM ↓ AD10
ISO11140-1 Class 1

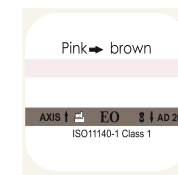
09.09.2016

For the 1st line user can write;
 -User Name
 -Sterilizer Number or
 -Lot Number

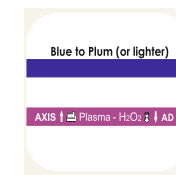
Process Indicator

For the 2nd line user can write;
 -Sterilization Date

For the 3rd line user can write;
 -Expiration Date



Product Code: AD20



Product Code: AD30



Product Code: AD10

AXIS DOCUMENTATION SPOT CHEMICAL INDICATORS



AXIS self-adhesive Ethylene Oxide, Steam, Dry Heat and Hydrogen Peroxide indicator spots designed for track and control sterilization processes. After exposure, the spot indicator will change color allowing differentiation between processed and unprocessed loads. The indicators are designed to be attached to the packaging of equipment to be sterilized. Use an indicator on each item, pack, peel pouch, or tray intended for the sterilization process.

The transition color may vary depending on the load configuration, length, type and conditions of exposure. Determine if the load was successfully sterilized by examining a biological indicator, or re-sterilize the load using a new chemical indicator.

Product Code: AXSI10

Ethylene Oxide Spot Indicator



Product Code: AXSI30

Hydrogen Peroxide Spot Indicator



Product Code: AXSI20

Steam Spot Indicator



Product Code: AXSI40

Dry Heat Spot Indicator



Code	Process	Packing
AXSI10	<i>Ethylene Oxide</i>	1000 pcs/roll
AXSI20	<i>Steam</i>	1000 pcs/roll
AXSI30	<i>Dry Heat</i>	1000 pcs/roll
AXSI40	<i>Hydrogen Peroxide</i>	1000 pcs/roll

AXIS BOWIE&DICK TEST PACK

National and International Standards demand that vacuum-assisted steam sterilizers must be tested at the beginning of each working day. Axis “Bowie & Dick Test Pack” concept allows you to fulfill this requirement with minimum effort and with the highest level of quality.

Test packs help to determine sterilization malfunctions at an early stage. A chemical indicator is located in the center of each pack.

A uniform change of the indicator sheet indicates that all the air was removed and replaced by steam.

Performed after a warm-up cycle at the beginning of every day, the Bowie-Dick (Air removal) Test verifies the sterilizer effectively removes air.

The process indicator on the pack label clearly indicates if the pack has been used or not.

The test cards can be stored for the recording purpose. Back side of the indicator card is writable to provide safe and correct recording.



Designed to detect the presence of residual air in steam sterilizers. Type 2 daily air removal test. Controls quality of the steam supply including;

- Air removal
- Steam Penetration
- Time
- Temperature
- Non-condensable gases
- Superheated steam
- Wet steam

Code	Sheet	Packing
AXCP130	200 Sheet	Wrapped
AXCP140	200 Sheet	Boxed
AXCP150	400 Sheet	Boxed
AXCP160	400 Sheet	Wrapped

**Individual test sheets (AXCP131) are available for preparing your own test pack.*

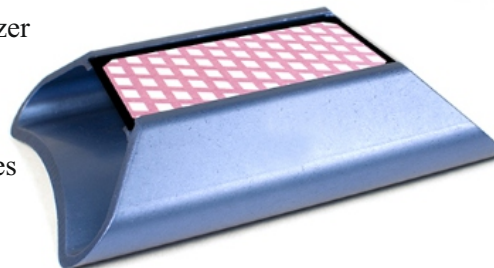
AXIS BOWIE&DICK GREEN CARD



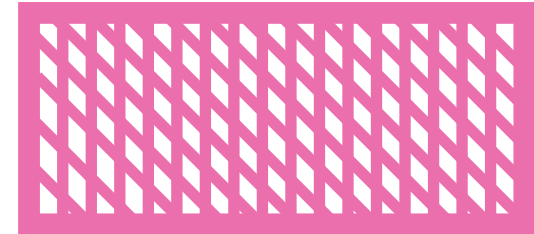
Product Code: AXGC10

Designed to detect residual air and to monitor the effectiveness of the air removal system in pre-vacuum steam sterilizers. The Bowie-Dick test is conducted each day in an empty sterilizer prior to processing any loads.

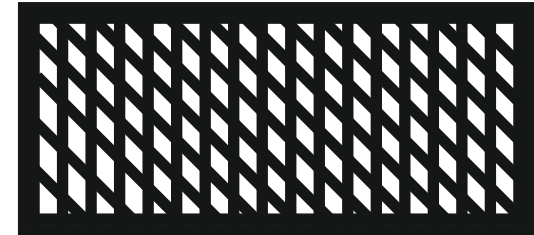
- Complete color change after 3.5 minutes at 135°C
- Superior ink chemistry aids interpretation
- The metal ring allows Green Card to be attached to a rack in the sterilizer and holds the card in place during the sterilization cycle
- Cycle information can be recorded on the back of the card
- Permanent color change
- Can be used as a permanent record when stored away from light sources



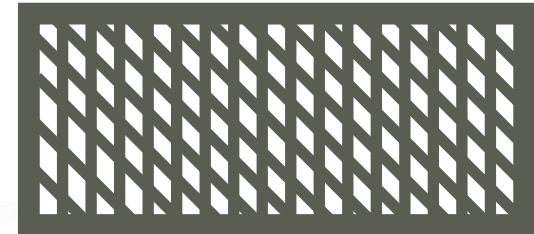
Before Process



Successful Process



Unsuccessful Process



The AXIS Green Card Bowie-Dick Test indicator will change from pink to black when exposed to steam sterilization cycle with acceptable vacuum cycles.

AXIS HELIX TEST AND APPARATUS

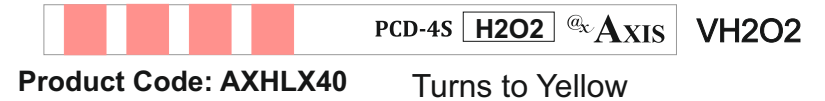
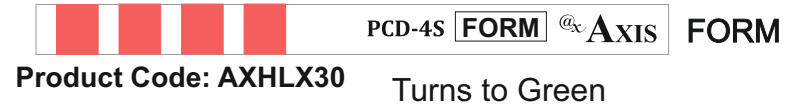
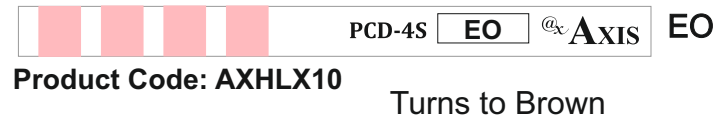
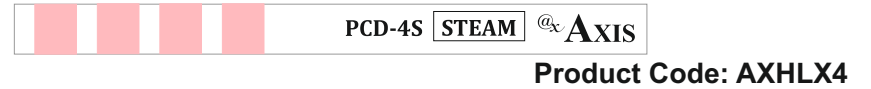
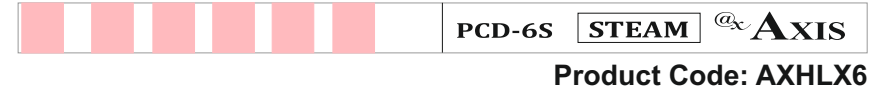
These self-adhesive chemical indicators (which allow recording) designed to be used in Helix-PCD system. There are different types of indicator according to the sterilization process selected: Steam, Ethylene Oxide, Formaldehyde & Hydrogen Peroxide. If the 4 bars change to the final color, the result is successful, so the sterilizer is working correctly. If one bar is different to the final color, it shows a bad sterilizing agent penetration, therefore an equipment malfunction. The Helix-PCD device and the indicators are manufactured, calibrated and designed according to EN ISO 11140-1 and EN ISO 11140-4 standards.

Advantages

- The high sensibility of detection
- A single final color for all conditions
- Manufactured with lead-free ink
- Metals-free



Product Code: AXHELIX-4.5
4.5m & 1.5m apparatus are available



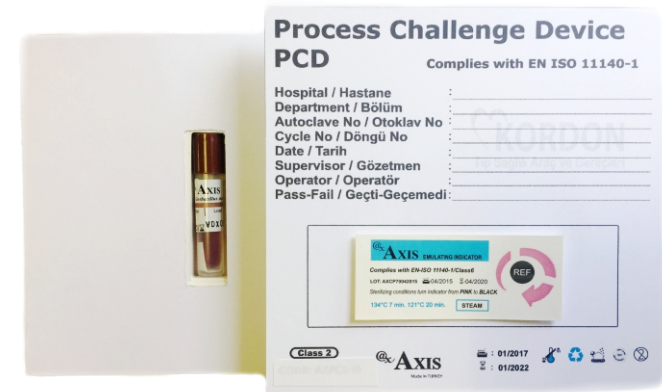
Code	Process	Feature
AXHLX4	Steam	4 bar
AXHLX6	Steam	6 bar
AXHLX10	EO	4 bar
AXHLX30	Formaldehyde	4 bar
AXHLX40	Plasma	4 bar

AXIS PROCESS CHALLENGE DEVICE / PCD

AXIS Process Challenge Device / PCD is a device designed to simulate a load to be sterilized, and to pose a challenge to the sterilization process. These devices are used to evaluate the effective performance of the process. Allows release of routine loads, specially implants. Furthermore, it allows to perform the routine monitoring and periodic validation of the sterilizers (after repair, installation, relocation).

Each pack consists of a stack of porous cards holding a Self-Contained Biological Indicator (SCBI) tube that contains a population of *Geobacillus stearothermophilus* ATCC 7953 spores soaked on a carrier as well as growth indicator medium contained in a glass ampoule. The pack also contains a moving front integrator indicator or emulating steam chemical indicator Class 6. The Process Challenge Device / PCD also includes a card that ease the sterilization condition tracking and monitoring. The purpose of the BI is to test the efficacy of the sterilizer and is done at least weekly, preferably daily.

PCD with Emulating Class 6 Steam Indicator



Product Code: AXPCD10

PCD with moving Integrating Indicator



Product Code: AXPCD20

AXIS AUTOCLAVE TAPES



Code	Size	Process
AXE19	19mm x 50 m	EO
AXE25	25mm x 50 m	EO
AXO19	19mm x 50 m	Steam
AXO25	25mm x 50 m	Steam
AXE12	12mm x 50 m	EO
AXO12	12mm x 50 m	Steam

*different sizes and colors are available upon request

Axis autoclave tapes are a safe solution for closing all wrapping materials.

This chemical indicator tape has stripes that change color after exposure to Steam and Ethylene Oxide sterilization conditions to provide immediate identification of processed items.

The autoclave tapes also provide a clean peel from the wrapping material.

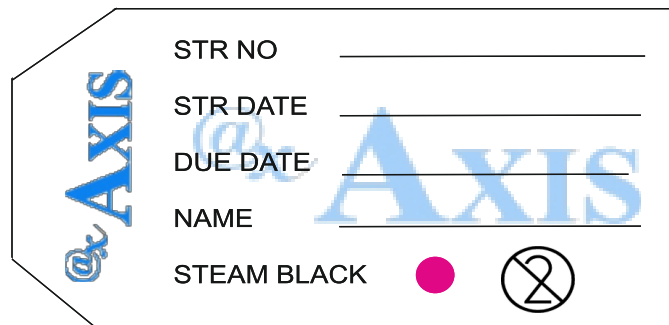
The process indicator ink shows an easy and accurate color change and indicates if the pack is been processed

The easy-to-read color change quickly identifies processed packs from unprocessed packs.

Steam and Ethylene Oxide tapes process indicators turn to darker color when exposed to proper sterilization conditions.

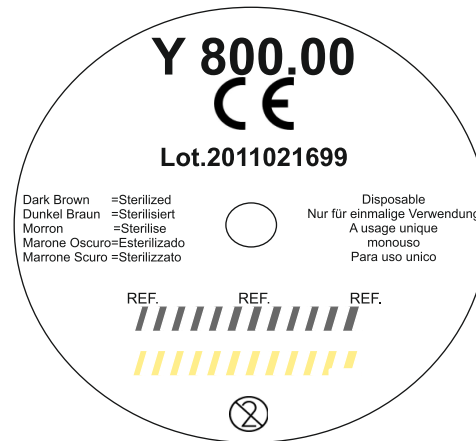
It is important to note that the presence of autoclave tape that has changed color on an item does not ensure that the product is sterile, as the tape will change color upon exposure only.

AXIS CONTAINER INDICATOR LABEL & FILTER

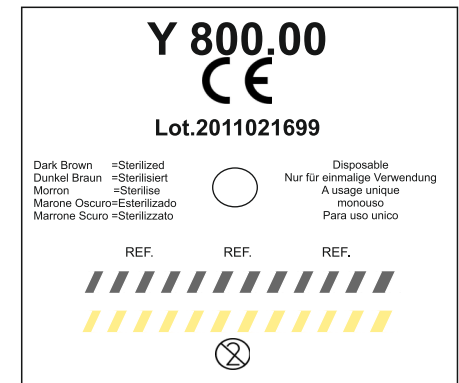


Product Code: AXCP200

- Produced from 180 gr/sqm paper.
- Suitable for steam sterilization processes.
- Can be fully recycled.
- Steam indicator conforms to ISO 11140 - Type 1
- Clear color transition of the indicator
- Each box includes 100 container label.



Product Code: AXRF10



Product Code: AXRF20

- Compatible with all standard containers.
- Manufactured as a round, square and rectangle forms.
- Resistant to 134°C
- A Type 1 chemical indicator dot is provided on the container indicator label which can ease tracking
- When required parameters are provided chemical indicator change color.
- Order unit: a pack of 100 pcs

AXIS CONTAINER LOCKS



Product Code: AXCP220

Product Code: AXCP250

Containers are sealed with standard lock with plastic seals for single use, these can be open only by cracking.

The plastic seals will be introduced prior to sterilization in the cross hole of the lock and closed between thumb and forefinger.

Safeguarding the container against unauthorized opening.

Prevents opening by unauthorized staff.

Only by breaking the seal the container can be opened.

The easiest method of quickly identifying or marking instruments, trays, trolleys or other equipment.

- Tamper resistant
- Quick and simple to attach
- Economic
- Disposable
- Can easily break with hand
- Autoclavable
- Order unit: a pack of 100 pcs

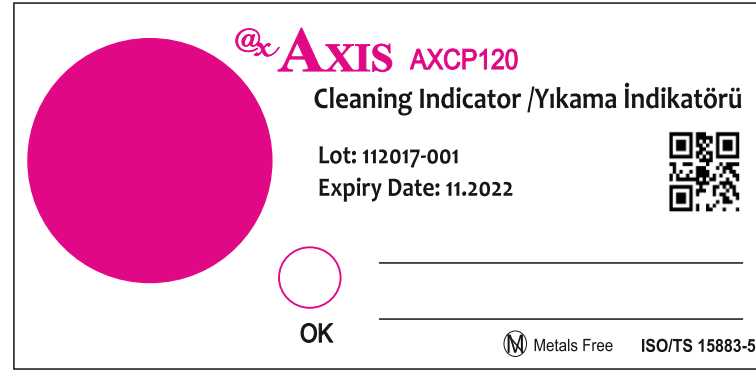
*****Container lock with indicator is available Product Code: AXCP220**

STEAM	ISO 11140-1 Class1	LOT:
Green=Sterilized		REF:
@x AXIS		
		
		

Product Code: AXCP210

- Compatible with all standard containers
- Provided with a chemical indicator dot as one strip.
- Resistant to 134°C
- There is a Type 1 chemical indicator dot is provided on the container indicator
- When required parameters are provided chemical indicator change color.
- Single indicator ink formulation gives a result for steam sterilization.
- Each box contains 100 container indicator label.

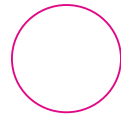
AXIS CLEANING INDICATOR



Product Code: AXCP120

Washer Disinfection Monitoring System;

- Cost-effective
- A simple method for monitor washer effectiveness
- Easy to record
- Possible to quantitatively measure washer effectiveness using the color difference meter.
- Indicator insertion is easy just insert the indicator into the holder (indicator will not be displaced by water flow)
- Indicator holder made of stainless steel (reusable)



Good Washing Process



No Good as Less Detergent



No Good as Less Water Stream as not Well Working
Spray-arm etc.



Holder Product Code: AX-WIH01

PROTEIN RESIDUE TEST KIT



Product Code: AXCP121

Axis Protein Residue Test Kit is a chemical test used to detect levels of protein on a processed load that cannot be seen by visual inspection.

Axis Protein Residue Test Kit can detect residual proteins left on the surfaces of hard to clean dental and surgical instruments. For use with washer disinfectors, ultrasonic baths and manual cleaning.

***The kit contains disposable
24 cotton swab and 24 test tube***



Prior use



No protein detection



Protein Residue
In case of high level of
protein even test liquid
can be turn into purple color.

***1 microgram accuracy in
10 seconds***

No incubation required

***From transparent light
brown to purple color change***

ULTRASONIC CLEANING TEST



Product Code: AXCP122

Axis Ultrasonic Cleaning Test is designed for routine control and monitoring ultrasonic cavitation effectiveness of ultrasonic washing machines operating at frequencies equal or greater than 35 kHz, at temperatures ranging from 18°C to 70°C.

When the cavitation energy is adequate, vibration of the glass pearls triggers a color change in the solution, from green to yellow.

Does not require a special holder to be used

Ultrasonic washers should be checked daily and weekly than results should be recorded



Not exposed



Failure



Correct Process / Cavitation

The color change from green to yellow is a positive result and this indicates the presence of cavitation energy suitable for washing.

CLEANING EFFICIENCY INDICATOR



Product Code: AXCP125

Axis Cleaning Efficiency Indicator enables you to verify the cleaning efficacy of washer-disinfectors during routine operation check.

The routine use of this test will help ensure that your washer is performing at a consistent level, enhancing the routine visual inspection of instruments.

If unfavorable results do occur, users must check quality/ quantity of detergent, cleaning time, temperature as well as general condition of the washer.

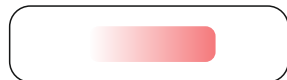
Ready-to-use (single use product)

Test provides efficient and reliable results

Transparent cover to enable visual check



Before Use



Poor Cleaning Efficiency

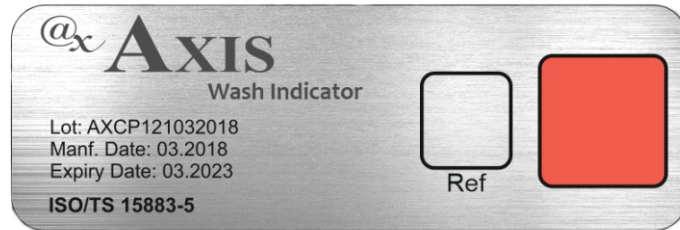


Poor Cleaning Efficiency

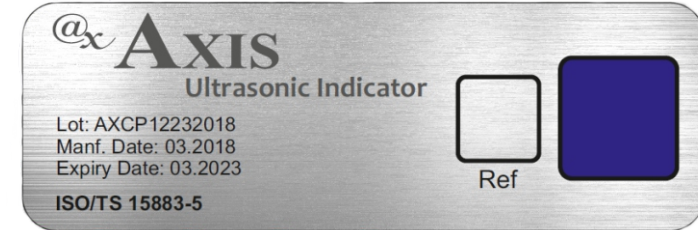


Perfect Cleaning Efficiency

AXIS WASH & ULTRASONIC INDICATOR

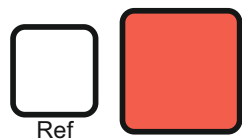


Product Code: AXCP123

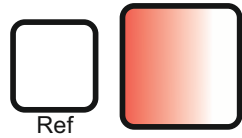


Product Code: AXCP124

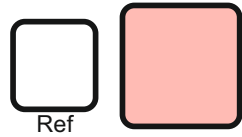
Designed for monitoring Washer and Ultrasonic Washer device efficiency.



Prior Wash



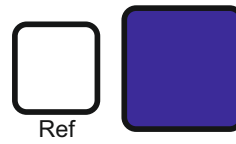
Invalid Result



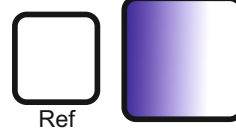
Invalid Result



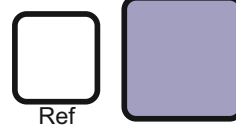
Valid Result



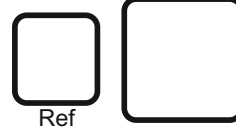
Prior Wash



Invalid Result



Invalid Result

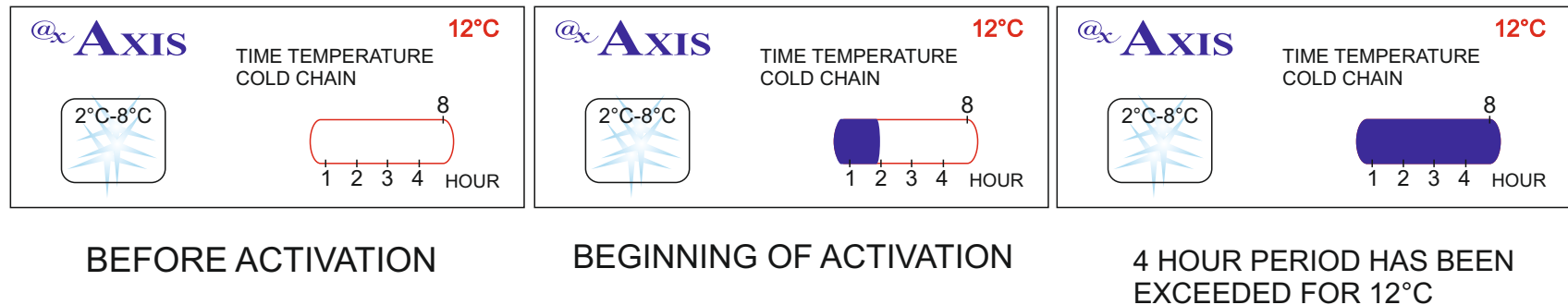


Valid Result



Holder Product Code: AX-WIH02

AXIS TTI - TIME TEMPERATURE INDICATOR



Product Code: AXCP20

The TTI is shelf stable and can be stored at room temperature prior to application.

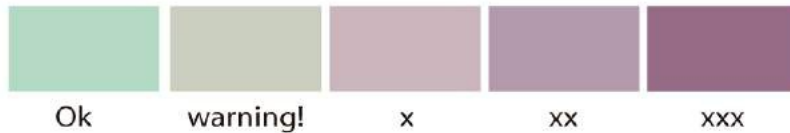
Use these indicators on:

- Vaccines and pharmaceuticals
- Photographic chemicals and supplies
- Electronic components and products
- Frozen, refrigerated and fresh food
- Live plants and animals
- Blood/plasma products
- Chemicals
- Adhesives

Time Temperature Indicator (TTI) is a determinant that shows the duration over maximum temperature of advised storage conditions for time temperature goods such as vaccine, medicine or other goods needed. TTI is also a kind of determinant that warns end consumer by following the elapsed time for goods that are non-recyclable, exposed to short-term or long-term temperature.

Corruptions can occur and fall into disuse by reason of temperature changing during the transportation or storage processes. It cannot be possible to know these corruptions occur one time or more. But, the most important issue, in these circumstances, is that manufacturer exactly knows the exposure duration of the goods over maximum temperature values (2°C-8°C).

AXIS PROTEIN AND ALLERGEN PEN



Product Code: AXCP210



High sensitivity pen system for the detection and quantification of surface proteins and allergens. High absorption swab that allows the collection of samples on different types of surfaces.
Detection limit: 1µg. Sensitivity: 0.3µg.

Protein pen is a highly absorbent pen system for the detection and quantification of surface proteins and allergens. It allows to carry out a quantitative measurement of the micrograms of protein in the sample

7 positions for protein detection pen is available in AXIS AXDL-100 Dual Incubator.

AXIS STARTER KIT-STEAM AXCST-01



Test Steam Autoclave before starting sterilization with Bowie Dick Test Pack to ensure sterilizer safety.

**THIS STARTER KIT IS HELP USER TO
CONTROL STEAM STERILIZATION
PROCESSES EFFICIENCY.
USER DEPENDS ON THEIR REQUIREMENTS CAN
CHOOSE BETWEEN CHEMICAL AND BIOLOGICAL
INDICATORS AND IMPROVE THEIR
STERILIZATION RELIABILITY.**



Product Code: AX20

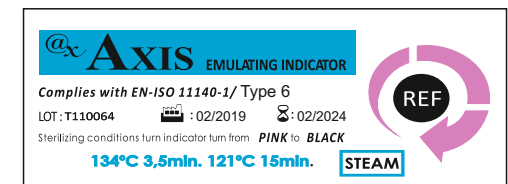
Product Code: AXDL-100

Place Steam Bi's inside the load to control steam parameters. Bi's have also chemical indicators on their label that change color with efficient sterilization conditions meet.



Product Code: AXSI20

User can choose between varieties of chemical indicators depends on their need. Spot, emulating, integrator, documentation indicators.

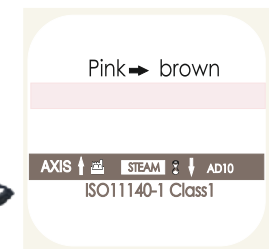


Product Code: AXCP60

Documentation labels provide easy tracking of the loads. After sterilization labels can be store for tracking.

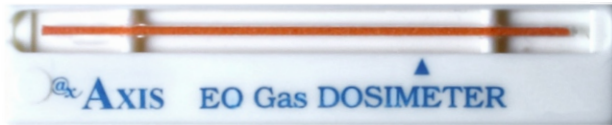


Product Code: AXCP300



Product Code: AD10

AXIS STARTER KIT-EO AXCEO-01



Product Code: AXCP380

The Axis EO Gas dosimeter assure that sterilization with the EO Gas process can be carried out reliably, four important parameters must be controlled: the concentration of sterilant gas, the length of exposure to the gas, relative humidity and the temperature that correlated to biological kill according to EN ISO 11135 standard.

**THIS STARTER KIT IS HELP USER
TO CONTROL ETHYLENE OXIDE
STERILIZATION PROCESSES EFFICIENCY.
USER, DEPENDS ON THEIR REQUIREMENTS
CAN CHOOSE BETWEEN CHEMICAL AND BIOLOGICAL
INDICATORS AND IMPROVE THEIR STERILIZATION
RELIABILITY.**



Product Code: AXDL-100

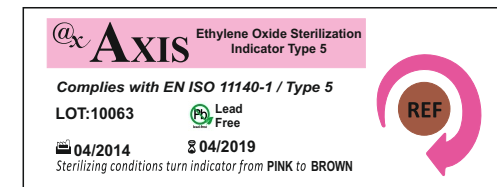
Place Bi's inside the load to control Eto parameters. Bi's have also chemical indicators on their label that change color with efficient sterilization conditions meet.



Product Code: AX10



User can choose between varieties of chemical indicators depends on their need. Spot, emulating, integrator, documentation indicators. Product Code: AXSI10



Product Code: AXCP60

Documentation labels provide easy tracking of the loads. After sterilization labels can be store for tracking.



Product Code: AXCP300



Product Code: AD20

AXIS INDUSTRIAL USE OF BI'S

Standard Biological Indicators (BIs) are easy to use and are available for industrial or healthcare use. However, some manufacturing situations require a modified or specialty Biological Indicator to assist in validating the sterilization process. Manufacturers and validation specialists require unique tools where spore strips and ampoules are not suitable because of size, packaging or carrier material. Axis offers a full line of Industrial Use BIs to address the unique requirements of the medical device and pharmaceutical industries



Paper spore strips

Paper spore strips are available in our standard one and one-half inch length and 2mm x 10mm micro-strips sizes and can be used in any sterilization method compatible with paper products.

Product Code: IBI-100 for ETO

Product Code: IBI-200 for Steam



Threads

Threads (Length: 19mm Diameter: 1.5mm) 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.

Product Code: IBI-700

Biological Indicator has been designed for monitoring Steam sterilization processes at temperatures between 121°C and 134°C. The device consists of a glass ampoule containing spores of the non-pathogenic microorganism *Geobacillus stearothermophilus* ATCC 7953. The culture medium has been specifically designed to change its color when microbial growth occurs. The spore population contained in the biological indicator is killed after an efficient steam sterilization cycle.

Product Code: AX21



Steel Disc

Discs have advantages over spore strips due to their size. Different materials may be compatible only with specific modes of sterilization. Discs can be used to monitor various sterilization methods. Several types and sizes of discs are available.

Product Code: IBI-400

Paper Disc

Paper discs (6mm) 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).



Product Code: IBI-300



Polyester Sutures;

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.

Product Code: IBI-500

Steel Coupons

Intended to use in dry heat ovens at depyrogenation temperatures.



Product Code: IBI-600

AXIS ETO GAS STERILIZERS

AXIS ETO GAS STERILIZERS



Benchtop Model AX-60

AXIS offers a high technology gas diffusion sterilization system. Putting what ever you wish to be sterilized into the Liner bag along with the Gas Cartridge, Humidity Chip and Dosimeter and seal on any film sealing machine. When Liner Bag put in the sterilizer and press the button on the sterilizer, the sterilization is begin. The sterilized materials are useable after sterilization and aeration period.

This sterilizer's most superior specification is offer work without risk of failure. Because there are minimum parts in the sterilizer which necessary. It doesn't require the use of water, air pressure, vacuum source or drain line. Montage and carry are easy.

AXIS use below 1/10 gas amount compare to it's competitors. It works with only 5 and 11 gr of cartridges.

With respect of sterilization, date, time, function, documentation, etc. are print out via the mini printer.

It is possible to sterilize catheters up to 220 cm in straight position thanks to long size liner bags.



Products Code: AX-160

MODEL	VOLUME	IN			OUT		
		Width	Hight	Depth	Width	Hight	Depth
AX 60	60 LT	35 cm	35 cm	49 cm	37 cm	41 cm	61 cm
AX 135	135 LT	35 cm	35 cm	110 cm	37 cm	41 cm	122 cm
AX 160	160 LT	53 cm	68 cm	48 cm	60 cm	84 cm	60 cm
AX 200	200 LT	62 cm	55 cm	60 cm	70 cm	84 cm	69 cm
AX 225	225 LT	69 cm	55 cm	60 cm	76 cm	84 cm	69 cm
AX 400	400 LT	62 cm	111 cm	60 cm	69 cm	141 cm	70 cm
AX 450	450 LT	69 cm	111 cm	60 cm	75 cm	141 cm	70 cm
AX 1000	1000 LT	83 cm	177 cm	70 cm	90 cm	207 cm	81 cm
AX 2000	2000 LT	173 cm	177 cm	70 cm	181 cm	207 cm	83 cm
AX 4000	4000 LT	173 cm	177 cm	136 cm	181 cm	207 cm	149 cm
AX 6000	6000 LT	248 cm	177 cm	136 cm	256 cm	207 cm	149 cm
AX 9000	9000 LT	374 cm	177 cm	136 cm	382 cm	207 cm	149 cm



- High technology
- Useable capacity from 60 lt up to 9000 lt
- 100% EO
- Negative pressure working system
- Sterilization and Aeration in same cabinet
- 100% safe
- Microcomputer controlled
- Practical, easy use
- Modular, able to add sterilization bags
- Low gas consumption
- Cabinet safety pressure measurement
- Instantaneous monitoring
- Robust construction, working without risk of failure
- Inox inner and outer surface
- Easy installation, no drain, water or pressure air are necessary

AX-200 Model Sterilizer

AXIS ETO GAS STERILIZERS



AX-1000 Model Sterilizer

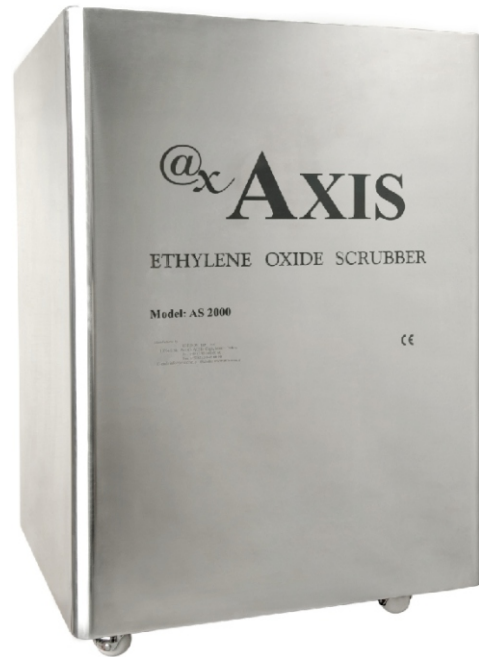
Axis offers the latest technology in industrial gas diffusion sterilization systems. This type of system is ideal for the requirements of industrial sterilization. The items to be sterilized are placed into the liner bag along with the sterilizing ampoule, humidity chip and sealed with a tie-wrap. The sterilization is started by simply pressing the ampoule and the sterilized materials are useable after the sterilization and aeration period. A sterilization cycle as little as 4 hours is available.

Only 24 grams of ethylene oxide gas is used per cycle and there is no need for water, pressurized air or drainage lines, thus avoiding the need for heavy construction. Simple to install and operate – its robust construction means there are virtually no maintenance requirements and you can be assured of the reliability.



AX-6000 & AX-9000 Model Sterilizer

AXIS ETO GAS STERILIZER SCRUBBER



Product Code: AXSC01



The Axis Online Ethylene Oxide Scrubbers has been designed to work with all models of Axis AX series sterilizers. It uses online installation technology of exhaust line of sterilizer and provide simply connections usage without tools. The scrubber body and hoses; made of stainless steel and consist of 50 kg ion exchange activated carbon which capable to abate 1,800 pcs 24 gram EO Gas cartridges, extracting over 98% of the ethylene oxide in the exhaust air stream.

AXIS INDUSTRIAL ETO GAS STERILIZERS



Axis Industrial type of Ethylene Oxide Sterilizer is the fastest way to sterilize all kinds of medical equipment which are heat-sensitive or susceptible to moisture. Sterilization can be performed for medical equipment in their original packaging and does not need extra packaging.

Sterilizers using EtO cylinders which are available on the market and allows loading goods by pallets. A pair of the automatic sliding door provides easy loading, unloading, let to clean the chamber by forced air circulation after the post operation and pass through option for clean room operations. To eliminate pressure risk, security lock jaws have been installed on the sterilizer's door.

TECHNICAL SPECIFICATIONS:

MATERIAL OF CASE BODY: STAINLESS STEEL

STERILIZING TEMPERATURE: 0-100 °C

STERILIZING PRESSURE: -0,8 / +0,8 BAR

PRE-VACUUM: -0,8 BAR

STERILIZING HUMIDITY: 20-100%RH

EO CONCENTRATION: 250-1200 mg/L

STERILIZING TIME: 0,5-12 HOURS

AERATION TIME: 0-99 HOURS

TIMES OF AIR CHANGE: 0-99

ETHYLENE OXIDE WASTE GAS
TREATMENT: STANDARD

STEAM GENERATOR: 28 kW

Specifications	Inside Size (LxWxH) cm	Outer Size (LxWxH) cm
AX-3 / 3m³	150 x 135 x 170	300 x 295 x 240
AX-7 / 7m³	300 x 135 x 170	345 x 295 x 240
AX-10 / 10m³	450 x 135 x 170	495 x 295 x 240
AX-15 / 15m³	675 x 135 x 170	720 x 295 x 240
AX-20 / 20m³	900 x 135 x 170	945 x 295 x 240
AX-25 / 25m³	1075 x 135 x 170	1120 x 295 x 240
AX-30 / 30m³	1300 x 135 x 170	1345 x 295 x 240
AX-35 / 35m³	1500 x 135 x 170	1545 x 295 x 240
AX-45 / 45m³	1950 x 135 x 170	1995 x 295 x 240

AXIS ETO CARTRIDGE STORAGE CONTAINER



Product Code: AXC-STR

- **100% Leakproof**
- **Different customized sizes are available**
- **Resistant to fire and pressure**

AXIS Ethylene Oxide storage containers are manufactured to be stored all types of Ethylene Oxide cartridge in safe. 100% liquid and gas tight structure. Manufactured from Anodized Aluminum which do not react with ethylene oxide. It is resistant to heat. In order to prevent leakage of ethylene oxide body and cover portions of containers are manufactured separately and without welding.

Filter etc. are not available.

Head gasket is manufactured from special silicone-based material which is suitable for ethylene oxide. Safely protects EtO gas cartridges.

Cover has a lock mechanism which provides pressured compression to the body to prevent any leakage.

Locking mechanism of the cover Part and other components are made of the electro-polishing process applied stainless steel.

A locking mechanism works as a door handle, is in a folder type allows cover closure and removal in a prompt and secure manner.

It is resistant to fire and pressure

It is resistant to the effect of chemical solution and can be washed in an appliance washer.

There are sections on the container interchangeable labels and the labels can be located.

The container has a cover system which will interfere factors causing by powder, liquid, light, heat, air inlet-outlet and so on contaminations.

Containers are produced in 465x280x260 mm, 580x280x260 mm, 465x280x490 mm and 580x280x490 mm sizes, 2 mm thick.

AXIS PORTABLE SEALED CONTAINER WITH FULLY AUTOMATED CARTRIDGE ACTIVATION



AAC/SM
465x280x260mm



AAC/S
580x280x260mm



AAC/M
465x280x490mm



AAC/L
465x280x640mm



AAC/XL
580x280x490mm

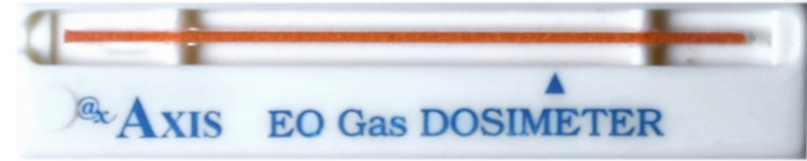
Axis sterile containers are designed to protect the sterile state of medical devices, surgical devices, surgical instruments and electro-surgical instruments used for surgical operations, sterilized within the sterilizer, during transport and storage; wire baskets, silicone lawns, textile products, filters, labels, plastic seals, chemical indicator, biological indicator, dosimeter and moisture chip holders, automatic cartridge activator, electro-mechanical valve, observation window, such as are supported with a large number of accessories.



AAC/IND
790x570x420mm

AXIS ETHYLENE OXIDE STARTER KIT

This Kit is help users to have all basic essentials for starting Ethylene Oxide Sterilization Process. The quantities defined according to sterilizer capacity and volume of the sterilization. This Kit ingredients will provide easy and practical use for customers.



Dosimeter



**Ethylene Oxide
Exposure Adhesive Label**

SK-60 & SK-135 / for 60 and 135 liter sterilizers		
Code	Item	Quantity
ARQ-5	5 g Ampoule & Liner Bag	25 pcs
ARQ-11	11 g Ampoule & Liner Bag	25 pcs
AX-1800	Ethylene Oxide Monior and Alarm Device	1 pc
AX 10	Ethylene Oxide Biological Indicator	100 pcs
AD 01	Dosimeter Indicator	50 pcs
AD 02	Dosimeter Tracking Form	50 pcs
AD 03	Ethylene Oxide Exposure Adhesive Label	600 pcs
AH 01	Humidity Chip	50 pcs
AXFR10200	Sterilization Reel 10cmx200m	1 pc



**Ethylene Oxide Monitor
and Alarm Device**



Ethylene Oxide Gas Ampoules



Sterilization Reel



**Ethylene Oxide
Biological Indicator**

AXIS ETO AMPOULES & AMPOULE BASED CARTRIDGES



Ethylene oxide (EO) sterilization is the most common industrial sterilization technique for medical devices. It is a relatively 'cold' sterilization technique and offers high compatibility with most materials used in the manufacture of medical devices, such as plastics, polymers, metals and glass. Its lethality is driven by a chemical reaction (alkylation) with the DNA of bacteria, viruses, molds, yeasts and even insects.

The robust design and polyurethane body make the Ethylene Oxide Gas cartridge one of the most reliable tool for releasing the ethylene oxide gas.

Operator safety is ensured by the double protection of the trigger via a plastic lock and a safety seal.

- Low temperature
- High efficiency – destroys microorganisms including resistant spores
- Large sterilizing volume/ chamber capacity
- Non-corrosive to: plastic, metal and rubber materials

AX series plastic cartridges

Cartridges & Ampoules

Code	Active Ingredient	Shield	Net Content
AX11	100%	Polyurethane	11 g
AX15	100%	Polyurethane	15 g
AX20	100%	Polyurethane	20 g
AX22	100%	Polyurethane	22 g
AX24	100%	Polyurethane	24 g
AQ5	100%	Nylon	5 gr
AQ11	100%	Nylon	11 gr
AQ15	100%	Nylon	15 gr
AQ20	100%	Nylon	20 gr
AQ22	100%	Nylon	22 gr
AQ24	100%	Nylon	24 gr



AQ series ampoules

AXIS ETO AMPOULES & AMPOULE BASED SETS

Putting materials to be sterilized into the Liner bag along with the Gas Cartridge, Humidity Chip and Dosimeter and seal on any film sealing machine user can easily do sterilization.

When Liner Bag put in the sterilizer, press the button/break the ampoule and the sterilization will begin.

The humidity chip consist of water and hydrophobic and water-permeable material which prevents the damp inner water from directly contacting items to be sterilized during the gas sterilization process.

There are at least three stages in a typical EtO sterilization cycle:

- Preconditioning
- Sterilization
- Aeration

Cartridge & Ampoule Sets

Code	Ingredient	Shield	Net Content	Set Includes
AR11	AX11	Polyurethane	11 g	Liner bag+humidity chip+dosimeter
AR15	AX15	Polyurethane	15 g	Liner bag+humidity chip+dosimeter
AR20	AX20	Polyurethane	20 g	Liner bag+humidity chip+dosimeter
AR22	AX22	Polyurethane	22 g	Liner bag+humidity chip+dosimeter
AR24	AX24	Polyurethane	24 g	Liner bag+humidity chip+dosimeter
ARQ5	AQ5	Nylon	5 gr	Liner bag+humidity chip
ARQ11	AQ11	Nylon	11 gr	Liner bag+humidity chip
ARQ15	AQ15	Nylon	15 gr	Liner bag+humidity chip
ARQ20	AQ20	Nylon	20 gr	Liner bag+humidity chip
ARQ22	AQ22	Nylon	22 gr	Liner bag+humidity chip
ARQ24	AQ24	Nylon	24 gr	Liner bag+humidity chip

*80% less gas consumption than the competitors



AR series sets including;
Eto Cartridge + Liner Bag + Humidity Chip +
Dosimeter + Dosimeter Tracking Form + Tie-Wrap



AQ series sets including;
Eto Cartridge + Liner Bag + Humidity Chip + Tie-Wrap
*dosimeter is optional

AXIS EO ALUMINUM CARTRIDGES



Model	Diameter	Height	Net Content
AL 7	22 mm	58 mm	11 g $\pm 10\%$
AL 25	22 mm	75 mm	25 g $\pm 10\%$
AL 67	35 mm	105 mm	67 g $\pm 10\%$
AL 100	35 mm	165 mm	100 g $\pm 10\%$
AX 67	38 mm	105 mm	67 g $\pm 10\%$
AX 100	38 mm	165 mm	100 g $\pm 10\%$
AX 127	38 mm	165 mm	127 g $\pm 10\%$
AX 134	38 mm	165 mm	134 g $\pm 10\%$
AQ 70	45 mm	178 mm	170 g $\pm 10\%$
AQ 120	50 mm	133 mm	120 g $\pm 10\%$
AQ 130	50 mm	133 mm	130 g $\pm 10\%$
AQ 170	45 mm	180 mm	170 g $\pm 10\%$
AQ 200	50 mm	174 mm	200 g $\pm 10\%$
AQ 230	50 mm	174 mm	230 g $\pm 10\%$

Axis provides Ethylene Oxide in aluminum cartridges with controlled quantities and packed under strict safety regulation that meet the requirements of the variety of existing equipment.

Ethylene oxide of high pureness.

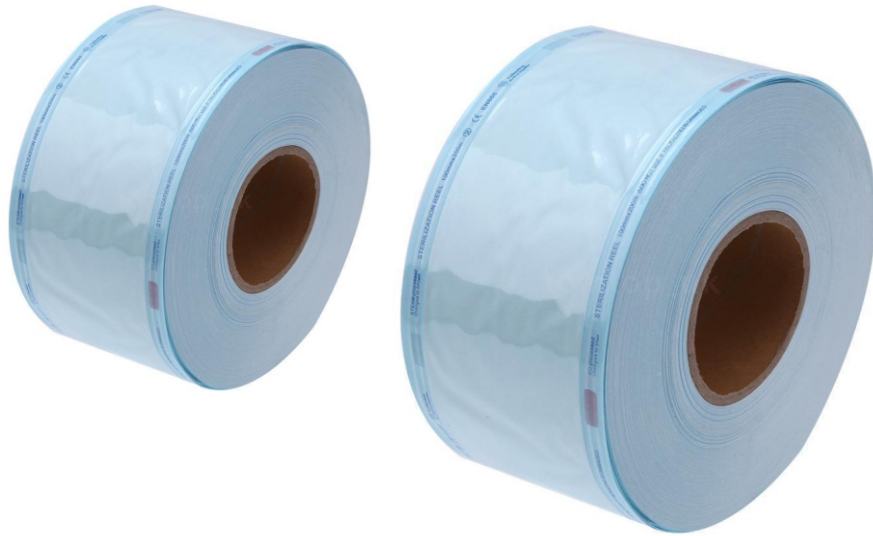
Single-use cartridges.

High effectiveness as a bactericide, fungicide and antivirus.

Compatible with any sterilizer in the market uses aluminum cartridges.

AXIS MEDICAL PACKING PRODUCTS

AXIS STERILIZATION REELS



All process indicators on reels are water-based and non-toxic inks and meet or exceed the requirements of ISO 11140-1 standard and provide accurate and clear color change after the sterilization process.

- Strong seal-strength, visible sealing lines.
- Clean fiber-free opening.
- All materials comply with international standards.
- Conformity with EN 868-5

Axis medical packaging provides safe and reliable sterile barrier systems for medical devices, pharmaceutical solutions and other healthcare products.

Extra reinforced layered film to avoid tear during opening. Transparent, multilayer co-polymer colored film allows easy identification. Superior barrier with 60 gsm or 70 gsm medical kraft paper. Can be easily sealed with all sealing machines. Non-toxic accurate, process indicators for Steam and Ethylene Oxide gas conforming to the ISO 11140.

Formaldehyde (FORM) and Hydrogen peroxide (Plasma) indicator available upon request.

Code	Sizes	Pcs / Box
AXFR50200	50mm x 200 m	12 pcs
AXFR75200	75mm x 200 m	8 pcs
AXFR100200	100mm x 200 m	6 pcs
AXFR150200	150mm x 200 m	4 pcs
AXFR200200	200mm x 200 m	4 pcs
AXFR250200	250mm x 200 m	2 pcs
AXFR300200	300mm x 200 m	2 pcs
AXFR350200	350mm x 200 m	2 pcs
AXFR400200	400mm x 200 m	2 pcs

AXIS STERILIZATION POUCHES

Medical Sterilization Pouches are used by medical device and pharmaceutical manufacturers for packaging a wide variety of terminally sterilized medical devices, particularly those that are low-profile and lightweight. Packaging is an important step in the sterile processing of reusable medical devices.



- maintain sterility until opened

- high-barrier property first class medical craft paper in 60 gr/m2, 70 gr/m2

- Water based and appropriate to the norms ISO 11140 non-toxic process indicators

- Easy opening, non-tearing

CODE	SIZE
AXBR050250	50mm*250mm
AXBR075150	75mm*150mm
AXBR075200	75mm*200mm
AXBR075250	75mm*250mm
AXBR075300	75mm*300mm
AXBR75400	75mm*400mm
AXBR100200	100mm*200mm
AXBR100250	100mm*250mm
AXBR100300	100mm*300mm
AXBR100400	100mm*400mm
AXBR120250	120mm*250mm
AXBR120350	120mm*350mm
AXBR150200	150mm*200mm
AXBR150300	150mm*300mm
AXBR200300	200mm*300mm
AXBR200400	200mm*400mm
AXBR250300	250mm*300mm
AXBR250380	250mm*380mm
AXBR300400	300mm*400mm
AXBR300500	300mm*500mm
AXBR400400	400mm*400mm

AXIS MEDICAL CREPE, WRAP & SMS WRAP PAPERS



Crepe Paper

Basically, for wrapping medical devices to be sterilized. It is considered a single-use product and can be sterilized by Steam, Ethylene Oxide or Formaldehyde.

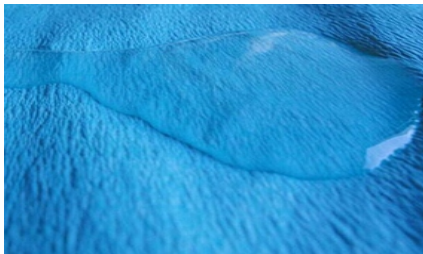
- Soft and malleable
- Excellent bacterial barrier
- Liquid repellent
- Wide range of sizes

Wrap Paper

Strong and resistant to tears, the fabric is still soft, so it's easy to drape. Naturally low linting, it helps maintain the integrity of the sterile packs and the surface is friendly to sterilization tape. Suitable for Steam, EtO, FO and radiation

SMS Wrap Paper

Perfect air permeability has a very low shrinkage rate after the steam sterilization process. Can be used in steam and plasma sterilization, available in 45gsm. Good Handling Strength. Suitable For Steam EO and Plasma Process.



Crepe paper



Wrap paper



SMS Wrap paper

CREPE PAPERS		
CODE	Size	Units per Box
AXKR040040	40cmx40cm	500
AXKR050050	50cmx50cm	500
AXKR060060	60cmx60cm	500
AXKR080080	80cmx80cm	250
AXKR090090	90cmx90cm	250
AXKR100100	100cmx100cm	250
AXKR120120	120cmx120cm	200
AXKR140140	140cmx140cm	200
AXKR160160	160cmx160cm	200

WRAP PAPERS / SMS PAPERS		
CODE	Size	Units per Box
AXSMS040040	40cmx40cm	500
AXSMS050050	50cmx50cm	500
AXSMS060060	60cmx60cm	500
AXSMS080080	80cmx80cm	250
AXSMS090090	90cmx90cm	250
AXSMS100100	100cmx100cm	250
AXSMS120120	120cmx120cm	200
AXSMS140140	140cmx140cm	200
AXSMS160160	160cmx160cm	200

WRAP PAPERS		
CODE	Size	Units per Box
AXWR040040	40cmx40cm	500
AXWR050050	50cmx50cm	500
AXWR060060	60cmx60cm	500
AXWR080080	80cmx80cm	250
AXWR090090	90cmx90cm	250
AXWR100100	100cmx100cm	250
AXWR120120	120cmx120cm	200
AXWR140140	140cmx140cm	200
AXWR160160	160cmx160cm	200

**custom sizes and colors are available*

AXIS HEADER BAG

Some medical devices and procedure kits are packaged in film-film packages or foil pouches because they require a barrier to light, oxygen or moisture. These packaged medical devices and procedure kits cannot be sterilized with Ethylene Oxide without the use of a header bag or breather patch made of porous packaging material. Header bags made with Tyvek enable Ethylene Oxide sterilization of medical devices within film-film packages and foil pouches because Tyvek allows the moisture and heat from EO sterilization to pass in—and out—of the package.

In addition to enabling Ethylene Oxide sterilization, headers made with Tyvek have superior puncture resistance compared to headers made with medical-grade paper. Header bags also offer superior moisture resistance and microbial barrier compared to those made with medical-grade papers.



Code	Size	Unit per Box
AXHB2530	25cm x 30 cm	500
AXHB2535	25cm x 35 cm	500
AXHB3040	30cm x 40 cm	500
AXHB3045	30cm x 45 cm	500
AXHB3550	35cm x 50 cm	500
AXHB4050	40cm x 50 cm	500
AXHB4055	40cm x 55 cm	500
AXHB4060	40cm x 60 cm	500
AXHB5070	50cm x 70 cm	500

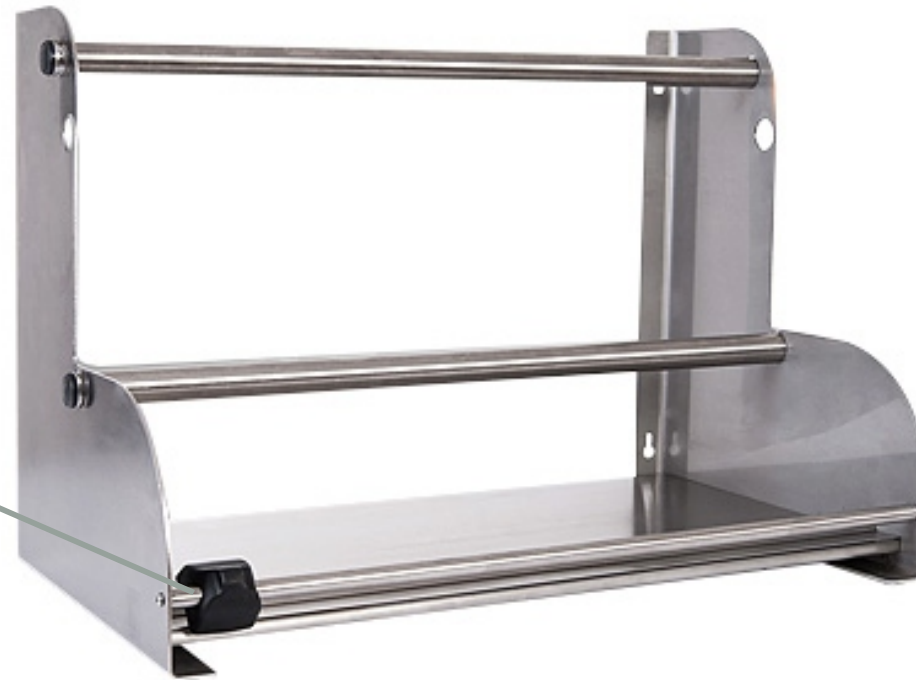


AXIS STERILIZATION REEL HANGER & CUTTER



Hanger and Cutter Spare Blade

Product Code: AX-1310



Product Code: AX-1300

Axis Reel Hanger & Cutter has two separate sections.
It is suitable for all kind of sterilization reels.

- Made of stainless steel
- Easy to use
- Strong durability cutting system does not generate paper dust
- Almost life-time circular blade
- Blade sharpens itself while working
- Product size: 60x38x45 cm
- Two Separate Sections.
- Suitable for all kind of Sterilization Reel.
- Can be used as a tabletop or hanged on the wall.

AXIS SEALING MACHINE



Product Code: PXS-300

Silicon Belt Product Code: PXS-345

Teflon Belt Product Code: PXS-355

Technical Details

- The device automatically seals sterilization reels
- The outer and inner surfaces are completely stainless steel
- With the optional removable conveyor, you do not need to hold the packages during the closing process.
- The closing speed can be set infinitely at 0-12 m / min
- It has a closing width of 12 mm and makes a very strong bonding with the type of barrier in sterilization rollers.
- Roller wheel system can cover any size of roll.
- Electronic control card, 4 conveyor belts, 20 teflon bands, screwdriver-key-ring set are provided free of charge as spare part
- It weighs 27 kg in dimensions of 38x84x32 cm.

AXIS AUTOMATIC SEALING AND PRINTING MACHINE



Product Code: AXPS-100

- Automatic Control Function and Continuous Operation
- Advanced Flat Ceramic Heating Elements
- 7" LCD Color Touch Screen
- Adjustable Printing System
- Closure width 12mm
- Operating Environment: 0-40 ° C
- Power: 500W
- 560 × 260 × 220 mm, weigh 18 kg.

Technical Details

The device has capability automatically sealing and printing on the back of reels.

7" colored capacitive LCD touch screen, in-built Android operation system, graphical operation interface, in-built clock, and automatic storage function.

Built-in printer, adjustable print font width, easy to print more content to the relatively narrow paper and plastic bags. The user can print; sterilization date, expiration date, lot no, operator, etc. on packages.

Auxiliary design of cooling systems provides fast temperature rising.

Automatically adjustable fixed-force system, suitable for sealing paper-plastic bags, 3D papers, and paper-paper bags.

The sealing length is unlimited; the device has efficient continuous sealing, reliable sealing quality, proper structures, and convenient operation.

Advanced flat ceramic heating elements provide high temperature, long life, and high efficiency.

Sealing speed 10 m/min; using light-control technology to achieve sealing print automatically detected.

Sealing width is 12 mm

Equipment size: 560 × 260 × 220 (mm) Weight: 18 kg.

AXIS SEALING & CUTTING MACHINE



Product Code: AXCS-100

Technical Details

The device manually cuts and seals sterilization reels

- Double heating,
- Adjustable temperature,
- High-temperature protection,
- Low-temperature automatic alarm,
- Overcurrent protection
- Fast temperature rising rate,
- Constant performance and easy handling
- Double cutter blade for straight cutting
- Seal width: 8mm
- Maximum Seal width: 300mm
- Temperature error: $\leq 2\%$
- Power: 500W
- Voltage: 220V 50Hz
- Weight: 9 kg
- Device Measurements: 450x390x240 mm

AXIS AUTOMATIC SEALING MACHINE



Product Code: PXS-400

- Closure width: 12 mm
- Closing Margin: 0 ~ 35 mm
- Power: 500 W
- Weight: 15 kg
- Device Measurements: 482 x 242 x 157 mm

Technical Details

The device automatically seals sterilization reels.

The sealing temperature can be set digitally.

Thanks to the fast heating system, it can reach 180°C in 40 seconds.

Advanced flat ceramic heating elements have a very long service life.

With $\pm 1^{\circ}\text{C}$ accuracy, it can shut off at 60 ~ 220°C.

The closing speed is 10 m/min.

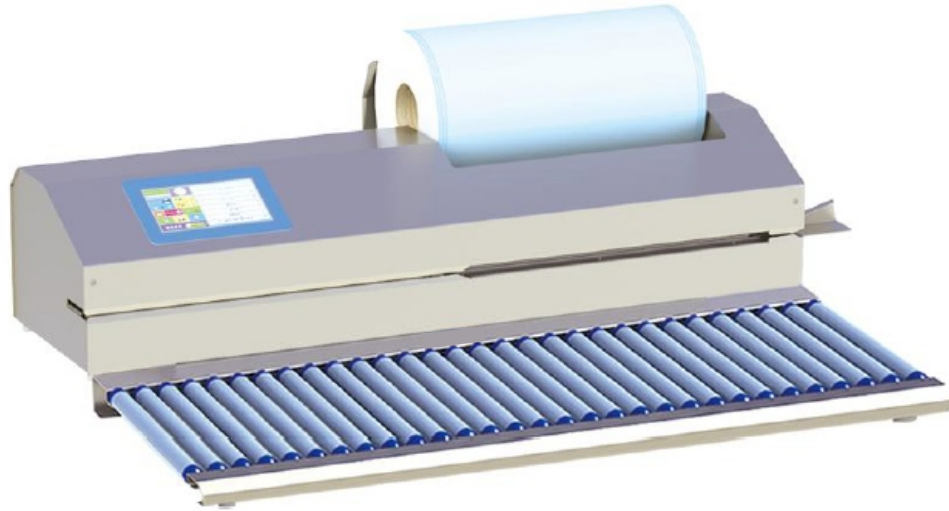
It has a closing width of 12 mm and makes a very strong bonding with the type of barrier in sterilization reels.

Reel wheel system can cover any size of the roll.

It has an automatic cooling system.

It measures 480 × 240 × 150 mm and weighs 15 kg.

AXIS AUTOMATIC REEL CUTTING & SEALING MACHINE



Product Code: AXCS-200

- Sealing Width: 12mm
- Cutting Width: $\leq 400\text{mm}$
- Cutting Length: $\geq 50\text{mm}$
- AC Power Supply: $220\text{V} \pm 10\%$ 50Hz
- Power: 600W
- Weight: 34kg
- Overall Dimensions: $962 \times 280 \times 230\text{mm}$

Technical Details

With Axis Automatic Cutting and Sealing Machine the user only need to set up the length and quantity of the paper-plastic pouches and start the program. The machine will automatically complete the process.

Paper-plastic pouches with different widths could be loaded into the machine at the same time to improve working efficiency by cutting off the edges simultaneously.

Multi-purpose machine: Cutting and sealing of paper-plastic pouches can be done separately or at the same time.

7" colored resistive LCD touch screen, graphical operation interface, in-built clock, and automatic storage function.

The inbuilt LCD touch screen can be used to set up or change the operating parameters of the machine

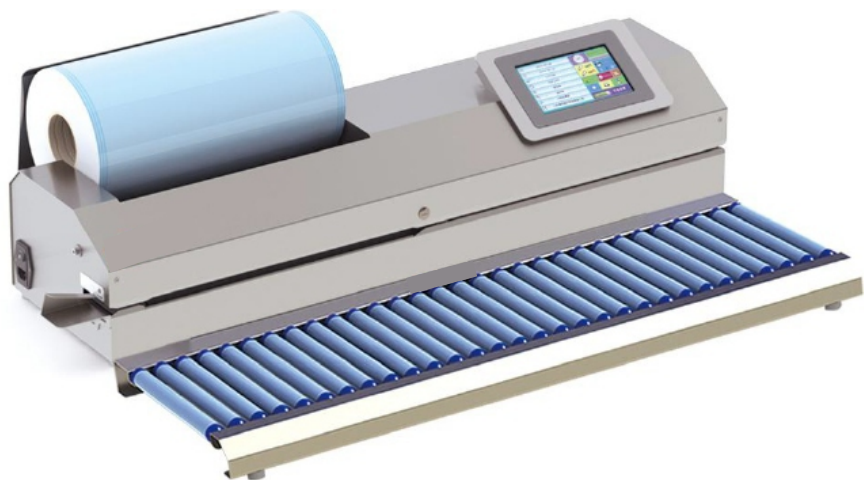
It can reach 180°C in 40 seconds thanks to the fast heating system.

Safe operation: if the sealing temperature exceeds the setting range for more than $\pm 4^{\circ}\text{C}$, the machine will automatically stop working, which effectively guarantees the sealing quality and safety.

Automatic failure alarm and detection during working

Roller and multifunction work tables are optionally available.

AXIS AUTOMATIC CUTTING,SEALING AND PRINTING MACHINE



Product Code: AXCPS-200

Technical Details

- Automatic feeding, cutting, sealing, and printing. You only need to set up the length and quantity of the paper-plastic pouches as per the requirements and start the program, then the machine will automatically feed, cut, seal the pouches and print out all the selected parameters.
- Built-in printer, adjustable print font width, easy to print more content to the relatively narrow paper and plastic bags,
- Sterilization date, expiration date, lot no, operator, etc. can be print on packages.
- 7"colored capacitive LCD touch screen, in-built Android operation system, graphical operation interface, in-built clock, and automatic storage function.
- Auxiliary design of cooling systems and set up the joint working temperature, reduce temperature sealing the waiting time.
- Temperature controlled by a microcomputer, accuracy $\pm 1\%$, random setup of working - temperature 60~220 °C.
- The high-speed increase of temperature: only 40 seconds required from room temperature to 180°C; high efficient and energy saving.
- Safe operation: If the sealing temperature outranges the setting range for more than $\pm 4^{\circ}\text{C}$, the machine will automatically stop working, which effectively guarantees the seal quality and safety.
- Advanced flat ceramic heating elements

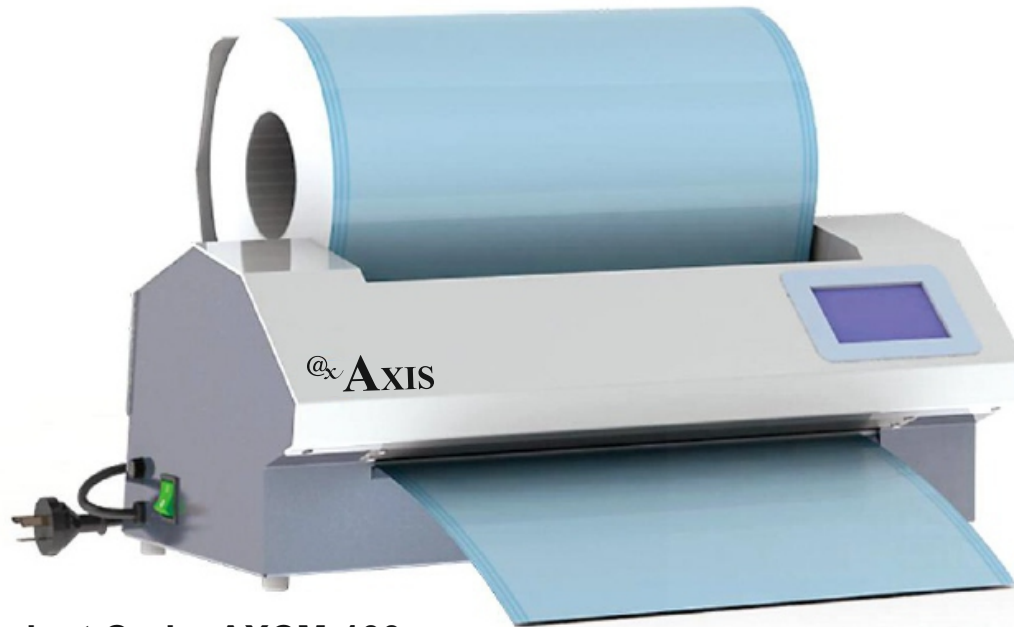


Product Code: AXCPS-300

The machine has two printing heads to realize 2-line printing

Cutting width ≤ 400 mm
Cutting Length: ≥ 50 mm
Cutting Speed: 10 m / min
Closing Margin: 0 ~ 35 mm
Printer Type: Needle Printer
Ambient Temperature: 10 ~ 40°C
Power: 600 W

AXIS AUTOMATIC STERILIZATION REEL CUTTER



Technical Data

- 4.3" colored LCD touch screen
- Cutting Width: ≤ 400 mm
- Cutting Length: ≥ 50 mm
- Cutting Speed: 7.5 ± 0.5 m/min
- Power: 100W
- Weight: 20kg
- Overall Dimensions: 540×280×230mm

Product Code: AXCM-100

- Axis Automatic Reel Cutter has 4.3" color LCD touch screens with human interface, simple operation and reliable performance.
- The application of unique roll-cutting technique has effectively prolonged the service life of the blades.
- The cutters integrate automatic feeding with automatic cutting of the paper-plastic pouches with different widths and the parameters such as cutting length and quantity can be set up easily.
- Automatic cutters are ideal alternatives to manual cutters due to their nicer look, simple and easy operation, time and labor saving, high efficiency and high performance.
- They are widely used in the sterilization and supply centers of the hospitals to cut various paper-plastic pouch packaging.

AXIS SEAL CHECK

Axis Seal Check is used to control the sealing machine whether if it meets the sealing standards or not. Axis Seal Check; visibly show the sealing machine results and quality so that the sealing problems can be found quickly and can be used to ensure the sealing parameters, requirements, and the quality. Two types of leak testing are available;

- 1-High temperature paper-plastic Seal Check test and
- 2-Tyvek Low-Temperature Seal Check Test

High-temperature paper-plastic Seal Check test should be used for high-temperature steam sterilization or for bags to be closed in ethylene oxide sterilization.

Tyvek low-temperature Seal Check test should be used for low-temperature plasma sterilization. For this reason, the appropriate Axis Seal Check should be selected according to the material of the bags.

According to the second part of ISO-11607 quality requirements for sealing, the sealing line must meet the following requirements:

- Full sealing must be provided;
- There should not be breakage or opening;
- There should be no perforation or tearing;
- There should be no delamination or decomposition;



	Sealing Machine	Approval	Date	Remarks
Seal Check				

Product Code:

High temperature paper-plastic Seal Check Test: AXSC-300

Tyvek Low Temperature Seal Check Test: AXSC-400

AXIS MISCELLANEOUS PRODUCTS

AXIS PROTECTIVE KIT



Protective Gloves
Product Code: AXCP1700



Protective Apparel
Product Code: AXCP1500



Protective Glass
Product Code: AXCP1600



Protective Boot
Product Code: AXCP1900

Apparel

Provide strong, lightweight liquid splash protection for law enforcement, emergency medical services (EMS) technicians and military personnel responding to an incident involving chemical, biological or radioactive agents. Product is lightweight and flexible, and can be folded into small packages for easy storage and portability.

Gloves

Designed to deliver optimal results in wet or dry work environments where chemical resistance is crucial. No inner cotton flocking, reducing risk of lint contamination and making it ideal for use in production areas sensitive to the introduction of external impurities

Sandpatch finish gives the glove a smooth surface that decreases indirect costs thanks to fewer rejects of fragile parts

Fully reusable, with an unequaled abrasion resistance

Provides superb comfort for the wearer

Pollyboot

It protects your feet's health by its breathing structure. It has heat isolation. It provides safety with its steel toe cap and steel midsole.

Polly boot has antistatic feature.

It has strong preference in almost every sector, where safety footwear are required.

Eyewear

Product helps diffuse pressure over the ear for a secure, comfortable fit.

Protects eyes from any liquid or unwanted objects.

AXIS ETO ALARM & MONITOR

Applications include chemical and medicine (hospital sterilization facilities) and other areas where leakage or generation of ethylene oxide is possible. Measures the Ethylene Oxide concentration in air at the 0-99 ppm range

Fixed system installation continuously monitoring a given area
Instrument checks sequence 220V 50Hz power source
Reading can be viewed instantaneously on display
Two-year limited warranty include a sensor
Visual and Audible Alarm (>85 dB(A))
Adjustable alarm threshold
Microprocessor controlled
Up to 5-year sensor life
External alarm output
High reliability
Economic



Product Code: AXCP-1800

AXIS PROTECTIVE MASK & FILTER



The protective mask is the efficient yet low-cost full face breathing mask intended for price-conscious users not wishing to compromise on comfort or quality.

The mask body is made from durable and skin-friendly EPDM, with double-layer face seal and triple sealing edges which provides a secure and comfortable seal for every type of face.

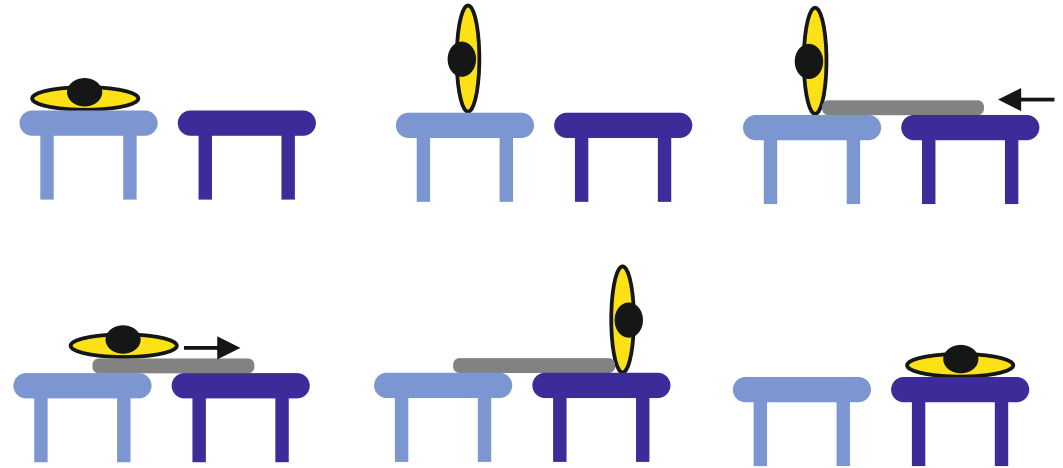
One size fits all which simplifies logistics and stocking. The barcode on the inside simplifies the recording and maintaining of the mask inventory.

The efficient ventilation system with separate inner mask prevents the lens from fogging and ensures good vision.

AXIS ROLLBOARD PATIENT TRANSFER SYSTEM



PRODUCT CODE
ROLLBORD : ROLL
MINI ROLLBOARD : ROLL-M



This product is projected in order to be used at surgery rooms. By the help of this roll bord the patient can be transferred to his bed easily after surgery. There is a special cloth on the surface so the patient will be transferred safely without moving. This surface cloth turns on the inside material and allows the patient transfer. Also this transfer can be made by one or two persons.

Easy to clean allows
X-RAY lights compatible
Flexible in order to carry easily
Length - 1800 mm
Width - 500 mm
Height - 20 mm
Patient Capacity - 230 kg
Weight of Product - 2,5 kg

AXIS AUTOCLAVE CLEANING POWDER

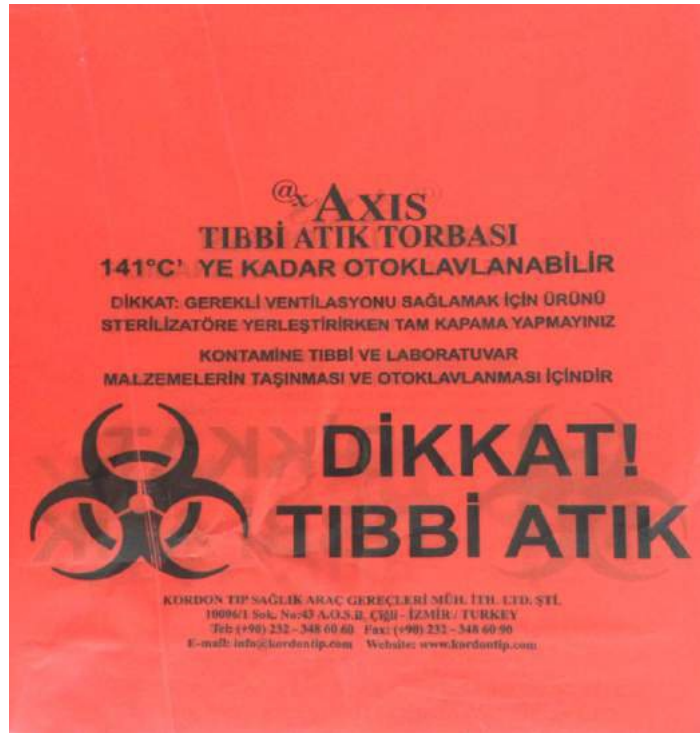


Product Code: AXCP390

Sprinkle powder along the bottom of the COLD autoclave chamber.
Start a sterilization cycle
Wipe inside of chamber with damp cloth or sponge.

Autoclave cleaner powder is simply the easiest way to keep autoclaves clean and free of water deposit build-up. Designed specifically for steam sterilizers, Autoclave cleaner powder effectively cleans and descales the reservoir, chamber and tubing in minutes.

AXIS AUTOCLAVABLE BIOHAZARD BAG



Product Code: AXCP400

- Autoclavable up to 141°C (285°F)
 - Polyethylene
 - Waterproof
- Resistant to tear and puncture

AXIS Autoclavable Biohazard Bags are ideal for processing of biohazardous materials which require autoclaving prior disposal. They provide a safe handling and efficient solution for your biohazard waste management.

High integrity plastic bag withstands 141°C (285°F) maximum autoclave temperature and is designed to resist puncture, tears and leaks.

Autoclavable Biohazard Bags will not melt or soften when autoclaved properly and meet all your biohazardous waste collection, storage and biohazard disposal requirements.



AXIS SILICONE GASKET SPRAY



Prevents cracks and breakage on the gasket. Increases lubrication. Spray has an antistatic effect. It does not hold dust. Spraying is easy to use. When applying on the gasket, there is no need for an extra apparatus. It does not leave marks. It is resistant to high temperature of 240 degrees. The product does not harm human health during use. The product does not contain gaseous, acid, flammable, abrasive and health-damaging chemicals that damage the ozone layer.

Area of Use: Steam autoclave cover gasket,

- table top flash gasket,
- ethylene oxide sterilizer door gasket,
- disinfectant devices cover gasket
- and all kinds of hospital equipment's gaskets and silicone surfaces.

Spray evenly to the cleaned surface. Wipe it off with a soft, clean cloth.

AXIS PACKING STATION



Product Code: AXWS-1000

- For entire sterilization required places
- 1 drawer,
- Roll handle apparatus with medicine box
- Dimensions 1400x600x1490 mm
- 304 grade stainless steel,
- Flexible production in different designs and dimensions

AXIS WORK STATION



Product Code: AXWS-2000

- For entire sterilization required places
- 304 grade stainless steel,
- Removable side baskets
- Two pieces medical roll bars,
- Shelve with rotary roll cutter
- Shelves on sides for paper, drug, instrument, roll etc.
- Optional light with magnifying glass
- Flexible production in different designs and dimensions
- Dimension (WxDxH):700x1400x900/1800 mm