Scientific Presentation Integrated BI & CI Technology For The Human Health

LISTER BIOMEDICAL CO., LTD.

Steam Sterilization

LISTER currently offer three major solutions to ensure that the product is effectively sterilized of steam sterilization: **Pre-control**, **Loads control** and **Pack control**.

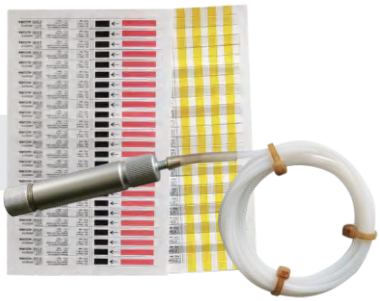
Pre-Control

Performed after a warm-up cycle at the beginning of every day, the vacuum-assisted steam sterilizer is in operation, the Pre-control Test verifies the vacuum-assisted sterilizer effectively removes air.

1. Type 2 Bowie Dick Test Pack

Non-luminal Units
LBD10

Units:100pcs/ctn



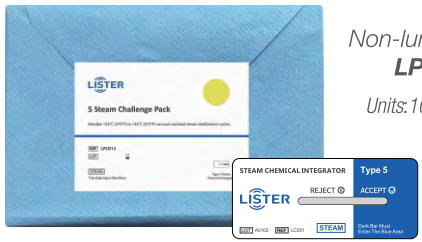
Luminal Units
LPCD11-3.5

Units:50packs/ctn

Loads Control

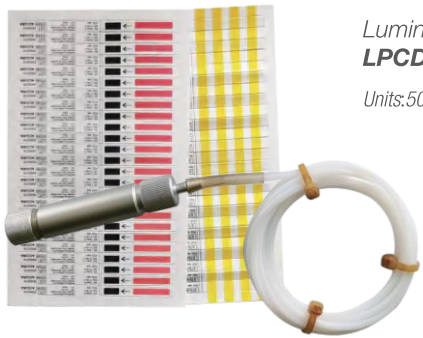
Monitoring Tool	Frequency
Type 5 CI + PCD	Every batch the sterilizer is run
BI+PCD	Every day the sterilizer is used
BI + Type 5 CI + PCD	For implant load or emergency use load

1. Type 5 CI + PCD



Non-luminal Units
LPCD12

Units:100packs/ctn



Luminal Units
LPCD11-5.0

Units:50packs/ctn

2. BI+PCD

Non-luminal Units
LPCD23/24/25
Units:100packs/ctn

3. BI + Type 5 CI + PCD

Non-luminal Units
LPCD20/21/22
Units:100packs/ctn

4. BI

LBS020
Units:50pcs/box

Chemical Indicator
Unsterilized
Sterilized

LBS060

LBS180

NOTE: If you decide to produce PCD devices that meet the standards yourself, you can also purchase BI and Type 5 CI separately.

● Pack Control

The LISTER products listed below are used for Pack-control:

1. Type 1 CI

External
LST1250/1950/2550
Units:LST1250:80 Rolls/ctn;
LST1950:50 Rolls/ctn;
LST2550:40 Rolls/ctn

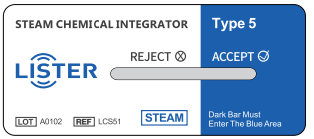
Unsterilized
Sterilized

2. Type 4 CI

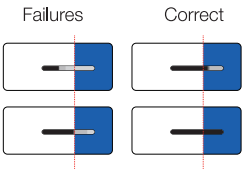
Internal
LCS40
Units:200pcs/pack

Unprocessed
Correct

3. Type 5 CI



Internal & Batch Control
LCS51



Units:500pcs/pack

EO Sterilization

LISTER currently offer two major solutions to ensure that the product is effectively sterilized of EO sterilization: **Loads control** and **Pack control.**

Loads Control

Batch control scheme includes biological indicators (BI), chemical indicators (Type 5 CI), and process challenge devices (PCD).
The LISTER products listed below are used for Batch-control:

1. BI

LBE180

Units:50pcs/box

Chemical Indicator

Unsterilized

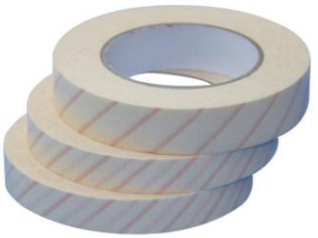
Sterilized

NOTE: A PCD device of certain difficulty is currently under development.A type 5 CI for EO sterilization is currently under development.

Pack Control

The LISTER products listed below are used for Pack-control:

2. Type 1 CI



External

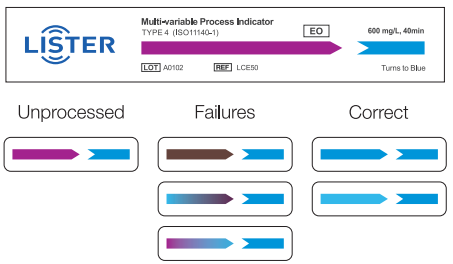
LET1250/1950/2550

Units:LET1250:80 Rolls/ctn;
LET1950:50 Rolls/ctn;
LET2550:40 Rolls/ctn

Unsterilized

Sterilized

3. Type 4 CI



Internal

LCE50

Units:200pcs/pack

VH_2O_2 Sterilization

LISTER currently offer two major solutions to ensure that the product is effectively sterilized of VH_2O_2 sterilization: **Loads control** and **Pack control.**

Loads Control

Batch control for VH_2O_2 sterilization is the process by which the load is monitored and released based on the result of a Biological Indicator (BI) in a process challenge device (PCD). A PCD contains BI should be used every batch the sterilizer is run, for routine sterilizer efficacy testing.

1. BI

LBH020

Units:50pcs/box

Chemical Indicator

Unsterilized

Sterilized

LBH060

LBH180

Pack Control

The LISTER products listed below are used for Pack-control:

2. Type 1 CI

External

LHT1250/1950/2550

Units:LHT1250:80 Rolls/ctn;
LHT1950:50 Rolls/ctn;
LHT2550:40 Rolls/ctn

Unsterilized

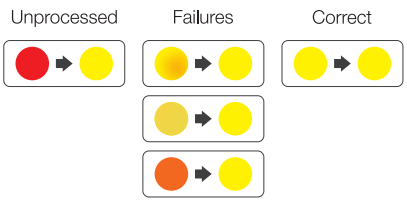
Sterilized

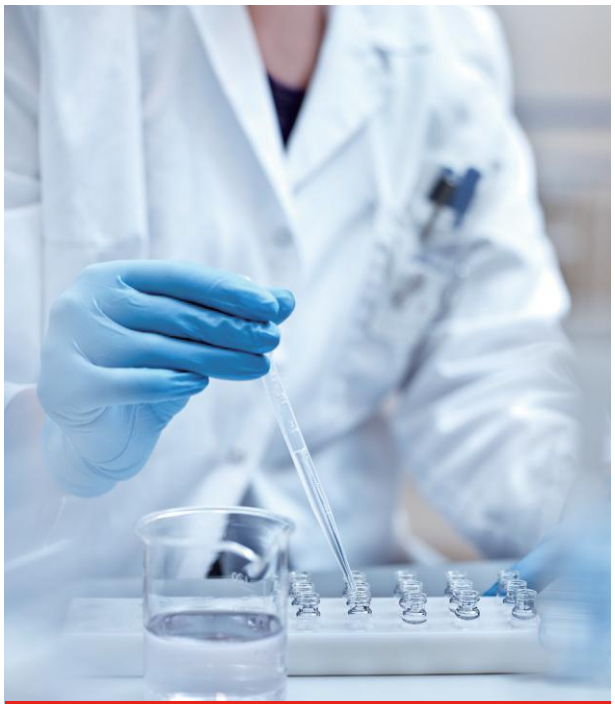
3. Type 4 CI

Internal

LCH40

Units:200pcs/pack





FORM Sterilization

LISTER currently offer two major solutions to ensure that the product is effectively sterilized of FORM sterilization: **Loads control** and **Pack control.**

Loads Control

Batch control for FORM sterilization is the process by which the load is monitored and released based on the result of a Biological Indicator (BI) in a process challenge device (PCD). A PCD contains BI should be used every batch the sterilizer is run, for routine sterilizer efficacy testing.

1. BI

Units:50pcs/box

Chemical Indicator

Unsterilized

Sterilized

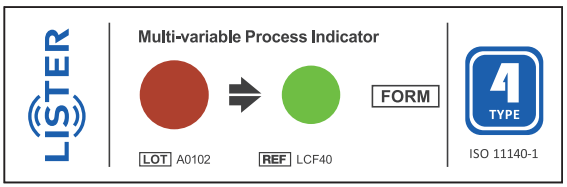
LBF020

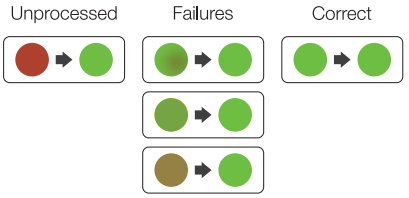
LBF060

Pack Control

The LISTER products listed below are used for Pack-control:

2. Type 4 CI



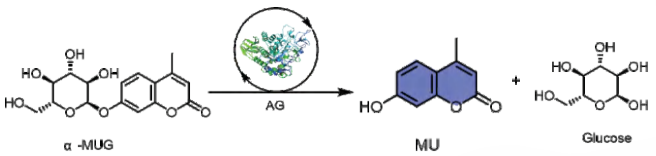


Internal
LCF40

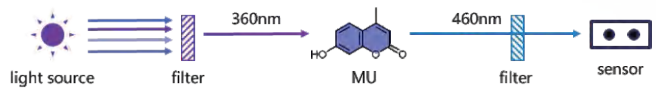
Units:200pcs/pack

Automatic Biological Reader

The working principle of an automatic biological reader is based on the following chemical reaction:



Firstly, after the spore is revived, it will immediately search for an energy source (sugar). In the natural environment, sugar exists in complex polysaccharide forms that microorganisms cannot transport and absorb. Enzyme AG is a powerful assistant for spores, helping them cut complex polysaccharides into monosaccharides. α-MUG is a disaccharide composed of glucose and fluorescent substance MU. The recovery culture medium in the BI glass tube contains an appropriate amount of α -MUG.



When the culture medium is in full contact with the bacterial carrier, the surviving spores will command AG to cut α-MUG, and release MU. Individual MU will emit 460nm fluorescence under 360nm light irradiation. Automatic biological reader will determine whether the spores are alive based on the received fluorescence intensity.

The LISTER Automatic Biological Reader listed below:

BIOPT2

BIOPT4

Feature Description:

- Scan the code to obtain information, More Convenient
- Mobile app remote control, More Freedom
- Scan the code to obtain information, More Convenient
- LISTER 2.0 Reading Program, More Accurate

LISTER | www.listerbiomed.com