

# MeCo™ Validation Accessory

The MeCo system is a Mesa Labs and Tyglar high end solution for all current issues concerning the placement of thermocouples and Mesa biological indicators during the validation of steam sterilization processes in the pharmaceutical/biotech industry.

The MeCo system is available in 2 different types, MeCo Flat and MeCo Round.

MeCo functions as a device for the standardization of the sterilization validation process. It protects the BI during the cycle, reduces the use of tape, and enhances reproducibility of the thermocouple (TC) and biological indicator (BI) placement throughout the cycle.

## Features / Specifications:

- Length: circa 95 mm
- Disposable Single Use device
- Flexible in longitudinal direction
- Animal Derivatives Free
- USP Class VI material
- Suitable for use in saturated steam cycles up to 1 hour at 134°C.
- Compatible with 3 and 7 stranded TC, TC is fixated at the measuring tip reducing damage or stress.
- MeCo is produced in ISO 9001 compliant environment.

## Precautions:

- Store out of direct sunlight.
- Store at room temperature.
- After the TC fixation, perform a manual check.
- **Care should be taken to not damage the thermocouple. Please use 2mm Hex Torque Screwdriver (0.02Nm).**
- Attach the MeCo Strip immediately after removing the liner from the tape.
- Use the MeCo Strip on a degreased and dry surface.
- Despite the flexibility of this device, it is not recommended to place MeCo behind a bend in piping; any use behind bends will be the user's responsibility.



## MeCo Round

*MeCo Round can be used in pipelines with the aid of the MeCo Pusher.*

Available in 4 sizes  
0.75" (¾) piping  
1.00" (1) piping  
1.50" (1 ½) piping  
2.00" (2) piping



## MeCo Flat

*MeCo Flat can be used on flat or concave surfaces with the aid of the MeCo Strip.*

# MeCo Flat Assembly

1. Insert Mesa biological indicator into MeCo Flat Body.

Flat Cap



Flat Body



Biological Indicator

2. Snap MeCo Flat Cap onto open end of MeCo Flat body.

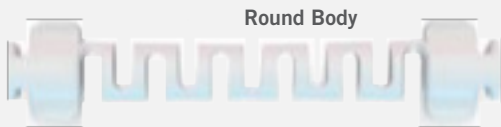


Flat Body and Flat Caps

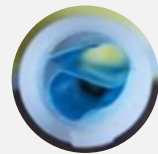
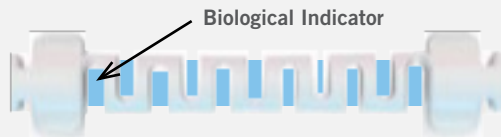
[Click this link to see the video.](#)

# MeCo Round Assembly

1. Insert Mesa biological indicator into MeCo Round Body in a S-shape with the MeCo Roller or basic tool.



Round Body



S-shape Insertion

2. Snap MeCo Round Screw Cap on one end of MeCo Round Body and MeCo Round Pusher Cap on the opposite end.

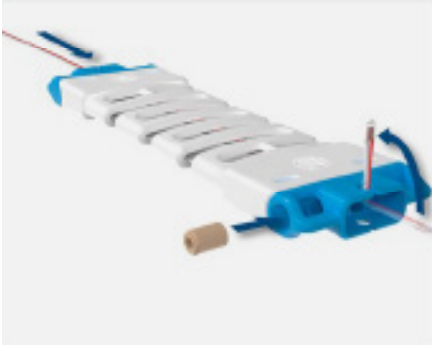


[Click this link to see the video.](#)

# MeCo Instructions for Use

## MeCo Flat BEFORE SIP-CYCLE

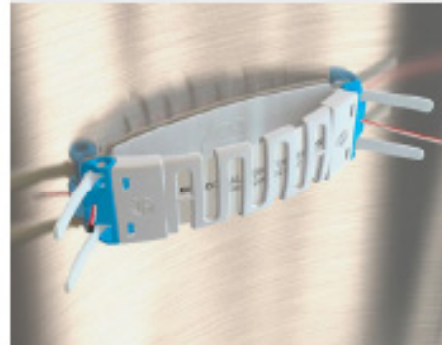
- Insert thermocouple through MeCo Flat
- Tighten screw
- Bend thermocouple and snap it into C opening (if applicable)
- Use 2mm Hex Torque Screwdriver (0.02Nm) to prevent damage to the thermocouple



- Pull 4 legs of MeCo Strip through 4 corners of MeCo Flat



- Remove liner from adhesive layer of MeCo Strip
- Position MeCo against surface



## MeCo Flat AFTER SIP-CYCLE

- Remove MeCo Flat from surface, together with MeCo Strip
- Detach MeCo Flat from MeCo Strip by pulling the 4 legs out of the openings on the corners of MeCo Flat



- Unclip thermocouple from C opening and straighten it
- Loosen screw
- Remove thermocouple from MeCo Flat (if applicable)



- Open MeCo Flat by breaking it open at 2nd S-turn
- Remove sporestrip with help of forceps



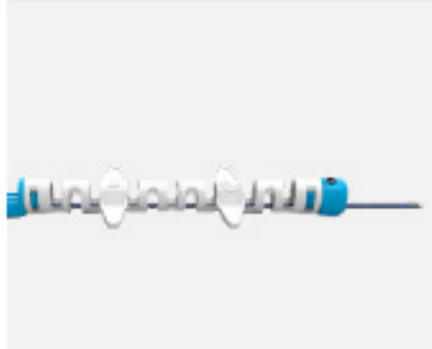
## MeCo Round

BEFORE SIP-CYCLE

- Break off the appropriate length of MeCo Pusher starting from segment 1
- Insert thermocouple through opening of smart gasket
- Insert thermocouple through last opening of MeCo Pusher



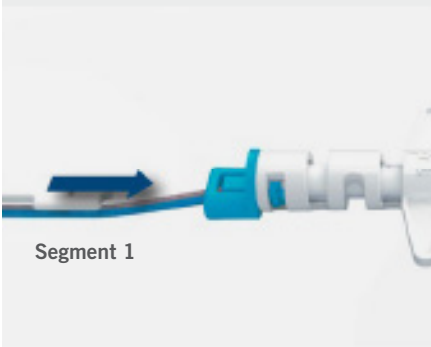
- Select correct MeCo Round model (0.75", 1", 1.5", 2"), according to pipeline to be tested
- Insert thermocouple through MeCo Round



- Tighten screw
- Use 2mm Hex Torque Screwdriver (0.02Nm) to prevent damage to thermocouple



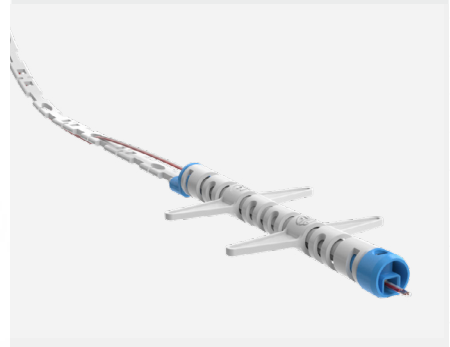
- Attach Segment 1 of MeCo Pusher to the MeCo round by clicking it
- Hold the end of Segment 1 to eliminate stress on pusher



- Weave thermocouple through C-openings of MeCo Pusher tightening at the same time



- Push MeCo Round into piping using MeCo Pusher
- Position smart gasket and close with a clamp



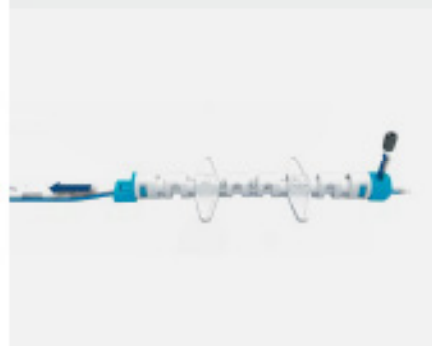
## MeCo Round

AFTER SIP-CYCLE

- Remove clamp and smart gasket
- Remove MeCo Round from piping, by pulling MeCo Pusher



- Loosen screw
- Remove thermocouple from MeCo Round



- Open MeCo Round by breaking it open at 2nd S-turn
- Remove sporestrip with help of forceps



# MeCo will save time and bring you peace of mind.

Different sizes of thermocouples can be attached to MeCo, up to 3 mm to reduce damage or stress to the thermocouples.

## Part Numbers

Item	Part Number
MeCo Flat	MC-FLT
MeCo Round 2"	MC-RND2.00
MeCo Round 1.5"	MC-RND1.50
MeCo Round 1"	MC-RND1.00
MeCo Round 0.75"	MC-RND0.75
Mesa Spore Strip	SGMS/6

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