

INSPISSATOR

Model ZENITH-INSPI-MAX
Model ZENITH-INSPI-S



ZENITH-INSPI series inspissators provide valuable resource to tuberculosis detection and treatment labs. Media containers, bottles, petri dishes, tubes with culture medium can be inspissated quickly and effectively in large batches.

Two different models of our inspissators (INSPI-MAX and INSPI-S) are capable of inspissating from 170 to over 700 McCartney bottles in a single load. The INSPI-MAX has three trays that can load anywhere from 250 to 700 bottles during one run and has been designed for repositories and hospitals which handle large samples. For smaller labs, INSPI-S can inspissate up to 170 bottles in one load.

Zenith inspissators are low cost units and have been designed in collaboration with National JALMA Institute for Leprosy & Other Mycobacterial Diseases, Agra, Indian Council of Medical Research, which is a Government of India research organisation. The institute is at the forefront of tuberculosis research in India. Instrument usage reference can be had from Dr. Vishwa Mohan Katoch, Secretary, Department of Health, Government of India.

Model ZENITH-INSPI-MAX

The INSPI-MAX has three trays that can load anywhere from 250 to 700 bottles during one run and has been designed for repositories and hospitals which handle large samples.

Built of rust-proof stainless steel sheet.
Inside chamber, body and water bath made of stainless steel.

Inside chamber: 25" (width) x 21" (depth) x 32" (height).
Outside body: 29" x 25" x 52". With heavy duty roller wheels.

Three stainless steel wired trays are provided to hold media bottles. These trays are removable from main unit for easy loading of media bottles. Trays are positioned at an angle of 20 degree approx. to provide slope to media.

Inspissating capacity of 3" x 1" (approx. size) of McCartney media bottles is about 450 bottles in three trays with single layer of bottles in each tray. Capacity can be increased to 600 by loading more bottles in each tray in two-three layers. Bottles are at angle of about 20 degree.

Air circulating fan (water sealed) ensures uniform temperature inside the Inspissator.

Two water heaters: 2 kW each (total 4 kW) running at 220VAC, 50Hz.

Two spare heaters are additionally provided for emergency use in case of failure of one of the working heaters.

Temperature range is from 5 C above ambient temperature to 95 C.
Temperature is settable by the user.
Accuracy of inner temperature is better than 2 C.
Least count of controller is 1 C. Sensor used is Pt100.



Model ZENITH-INSPI-S

Designed for smaller labs, INSPI-S can inspissate up to 170 bottles in one load.

Built of rust-proof stainless steel sheet. Outer body and tray are made of stainless steel. Tray size: 31" x 24" (80x60cm). Outer body: 41" x 26" x 16" (104x65x40cm)

A single tray of stainless steel is immersed in water such that the water just touches the bottom of the tray. The tray has a set of slopes to provide an angle of 8-10 degree to the media containers. Water temperature is maintained through a heater and stirrer. The tray also heats up to the water temperature and temperature uniformity is maintained in the water, tray and media containers. The total heat up time is less than 2.5 hours.

For user and operation safety, we provide fixed cut-out fuse and miniature circuit breaker at the back of the controller unit..



The controller is digital, with an LED/LCD display to indicate set and actual temperature. User input is taken through a dial and button. Resolution is 0.1C, uniformity is better than 0.5C and working temperature is 85C. Temperature range for the controller is from ambient plus 5C to 90C. The controller is a composite unit of 1.5kW heater, controller, sensor and stirrer. It is easily removable for servicing. We also provide two spare heaters for emergency use in case of failure of the working heater during usage. A constant water level setup ensures that the heaters never run dry and that evaporation losses are compensated. Tank capacity is about 50 litres.



Display showing Control Parameters



Close-up of Media Bottles in Tray

Optional Accessories:

- Voltage Stabilizer
- Spare sets of trays
- Stainless steel trays for storing bottles
- Spare water heaters
- Deionisers and distillation plants for distilled water to be used with inspissator



Inspissated Media Bottles with Slope

What We Manufacture

Gel Doc Systems

Gel documentation systems, Transilluminators, electrophoresis systems



Bioreactors / Fermentors

for microbial and cell culture



Photomicrography System

for microscopy imaging

Cooling / Heating Dry Baths

peltier based dry baths for heating/cooling



Shakers & Stirrers

innovative shakers and stirrers



Clean Room Equipment

laminar air flow systems

Peristaltic Pumps

sterile and precise dosing of liquids



Analytical Instruments

pH, conductivity, spectrophotometers etc.

Heating & Cooling Systems

ovens, incubators, B.O.D., water baths, etc.

Generic Lab Instruments

vacuum pumps, autoclaves, centrifuges, balances, distillation units, etc.



Who We Represent

Olympus

Microscopes, Imaging systems and related accessories



TotalLab

Software for 1D & 2D gel analysis, proteomics, data-mining etc.



What We Can Do For You

Custom Instrument Design

You may be in need of a customised instrument not available with any other company. It could be for education or for your research or an industrial testing lab.

ZENITH ENGINEERS can offer you expert consultancy for designing and producing such an instrument. It doesn't matter if your need is just for one such instrument.

We are keen on working on design projects with institutions and companies that need innovative and customised solutions for scientific research and applications.