

Technical Specification



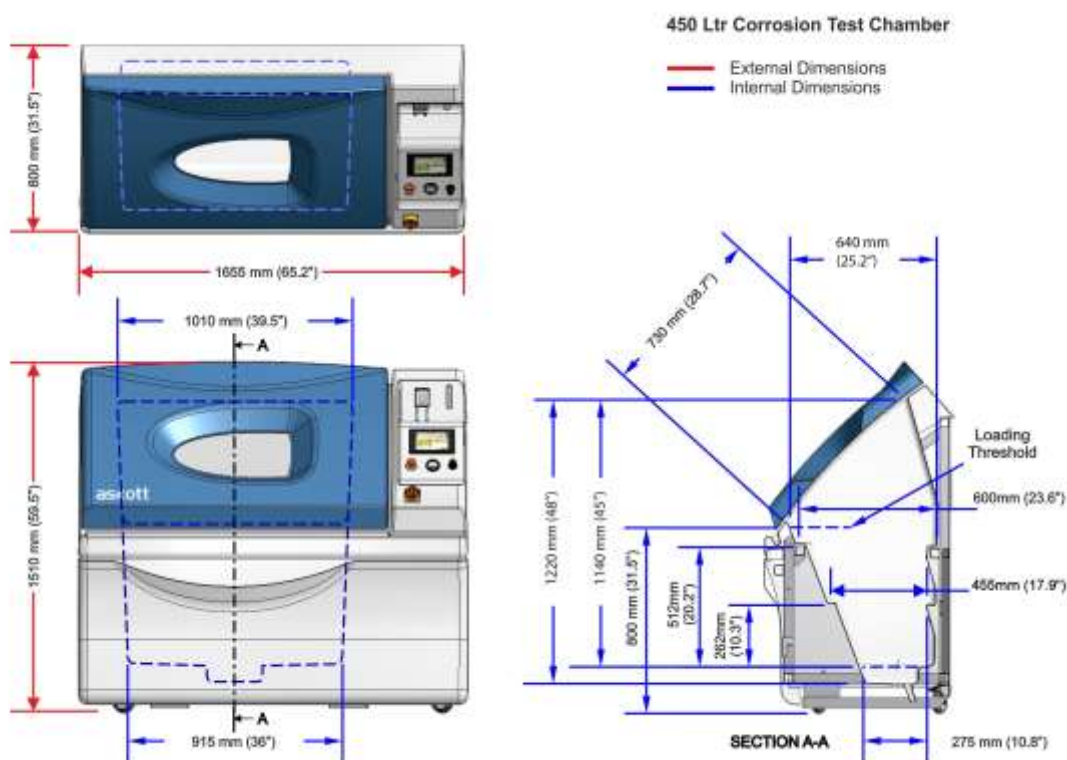
This model will pass through a 850mm wide door aperture for ease of installation.

Model Range & Ref.:
Premium range, model ref. S450iP

Product Description
Floor standing salt spray chamber

Nominal Capacity:
450 Litres / 15.8 cu.ft.

Dimensions:



** Note: excludes pipes, cables, etc. for connecting to external service utilities*

Salt Solution Reservoir capacity
(additional capacity can be provided, see optional accessory ACC59)

90 Litres / 23 US Gallons

Performance

Note: Cross section diagrams are of a 1000L model, for illustration purposes only.

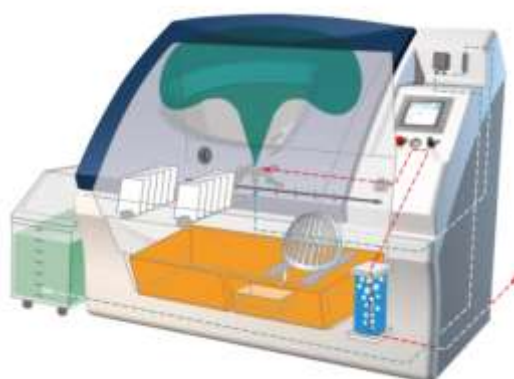
Salt spray mode

Chamber Temperature range:
Adjustable from ambient to +50°C/122°F

Humidity range;
Fixed at 95-100% RH

Salt fog fallout rates:
Adjustable from 0.5 to 2.5ml per 80cm² per hour

Air saturator temperature range:
Adjustable from ambient to +63°C/145°F



Condensation humidity mode

Chamber Temperature range:
Adjustable from ambient to +50°C /122°F

Humidity range:
Fixed at 95-100% RH



Air drying mode

Chamber Temperature range:
Adjustable from ambient to +50°C/122°F

Humidity range:
Uncontrolled – will reduce to as low as possible



Test Standards Complied with

For a full summary of this chambers test standard compliance please visit our website at: www.ascott-analytical.com

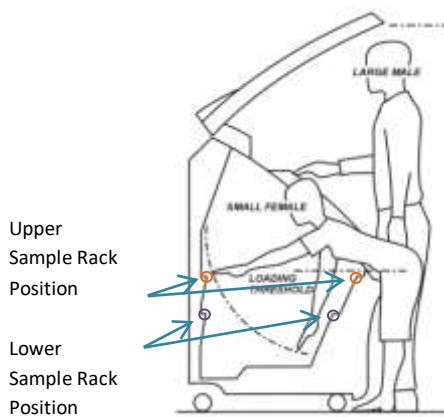
Chamber Tolerances

Temperature Control accuracy $\pm 0.5^{\circ}\text{C}$

Temperature fluctuation within workspace $\pm 0.5^{\circ}\text{C}$

Temperature variation across workspace $\pm 0.5^{\circ}\text{C}$

Construction



- All plastic construction giving a high quality, durable and corrosion resistant finish.
- High and low level positioning for sample racks enabling small and/or large test samples to be accommodated
- Various type of removable load support racks available to enable a large number of samples to be either placed onto the racks or suspended beneath.

- A low front loading threshold, to ease loading and unloading of samples, especially from the back of the chamber.
- The chamber automatically purges before the canopy opens to minimise the risk of highly corrosive salt fog escaping into the laboratory.
- Large 90L/23 US Gallon capacity salt solution reservoir with transparent front, enabling continuous unattended salt fogging for periods of up to 5 days (additional capacity can be provided if required).
- Dry seal canopy gasket, so no more wet clothes when loading and unloading chamber!
- The canopy is pneumatically operated for ease of opening and closing the chamber safely, at the push of a button.



Operation & Control

- ☑ Salt spray pre-humidification via an air saturator, ensuring salt spray is moist and will not clog atomiser jet. The reservoir is filled automatically for continuous unattended testing.
- ☑ Peristaltic pumping of salt solution enabling salt to be delivered at a precisely metered rate.
- ☑ Digital precision temperature controls, guarantees accuracy and repeatability of results.
- ☑ Graduated salt solution flowmeter for quickly assessing and adjusting the salt solution flowrate.
- ☑ Wall mounted heater mats enabling uniformity of temperature through the chamber with maintenance free durability.
- ☑ Air saturator low water and over temperature protection for fail safe operation.

Key Features

Touch screen full colour controller

This Human Machine Interface (HMI) features a full colour 'touch' activated screen, with a high definition display, and a 'menu' driven icon based, commands. In addition to standard continuous salt spray testing, this enables it to be readily programmed for automatic testing.



Multi-step, complex test cycles can be programmed easily, as well as single set point steady state control in any operating mode

Digital Set & Display of Temperature

The chamber and air saturator temperatures are monitored by PT100 precision temperature sensors and displayed digitally, to a resolution of 0.1°C, alongside the desired set temperatures.

Condensation humidity testing capability

Enables the chamber to be used for condensation humidity testing, as well as salt spray testing. Includes a display of relative humidity (%RH) in HMI, measured using a novel design of salt resistant humidity probe.

Temperature graphical logging facility



Graphical logging of actual temperature achieved in the chamber, compared to the set temperature required, over time. This provides at-a-glance monitoring of chamber performance and the ability to play back and review the chambers performance over the past 168 hours, at the control panel HMI

Calibration Certificate



A calibration certificate for the chamber temperature and humidity controller will be provided which will be fully traceable to UK national standards. Single point temperature and humidity calibration is provided free of charge, as standard. Additional points may be available on request at extra cost.

90L Salt Solution Reservoir

A 90 Litre/ 23 US Gallon capacity salt solution reservoir. With a graduated scale in litres, a lid for ease of filling and cleaning.

Automatic Air Purge Facility With Canopy Interlock

At the touch of a button on the control panel HMI, automatic purging of the chamber interior is initiated. This disperses any salt fog, to minimise the risk of highly corrosive salt fog escaping from chamber into the laboratory. After a pre-set period of purging the chamber canopy can be opened.

Timed test stop facility

Allows the convenience of pre-programming a stop time, at which point the chamber automatically stops testing.

Interior Viewing Window



The chamber canopy incorporates a window, as standard, which enables visual checking of the samples inside the chamber, whilst under test. Interior illumination is also available as an optional accessory (Ref.: ACC26).

Ethernet Communications Port

Enables the chamber to be programmed & monitored via a remote computer, running appropriate software (Ascott optional accessory; ACC120).

Consumable spares kit



A pack of consumable spares, comprising of: 5 packs of salt solution filters, 2m peristaltic pump tubing 1x humidity sensor Filter cap & O Ring, Salt Filter Housing Tube & replacement air filter.

Alternative canopy colour – Ref.: ACC60/**(see below)

As standard, and unless otherwise specified, chambers will be fitted with a blue coloured canopy (RAL 5005). By specifying this 'no cost' option, the canopy colour can be changed to one of the following colours:

Note: Colours shown are for representation purposes only.



Blue (RAL 5005)



Grey (RAL 7035)



Light Green (RAL 6027)



Mauve (4005)



Orange (RAL 2009)



Red (RAL 3003)



Red/Violet (RAL 4002)



Turquoise (BS5252 16-E-56)



Yellow (RAL 1028)

Other colours may be available on request and subject to additional charges. If any canopy colour, other than the blue colour fitted as standard, is required, then this must be clearly stated on customer purchase orders.