ascott

Corrosion Test Chambers & Accessories












testing climate resistance to the limit

ascott

Testing climate
resistance to the limit



ascott Leading by Design

For more than 25 years Ascott has been leading the way in the design, manufacture and delivery of innovative and high quality corrosion test chambers. During this time we have been selected to supply many well-known customers throughout the world and, in doing so, have established an international reputation for ourselves as the brand to be trusted.

Salt Spray Corrosion Test Chambers

Salt spray (also known as salt fog or salt mist) continues to be the corrosion test of choice for comparing actual product performance with expectations – usually in accordance with international test standards. This is, therefore, a very popular test for quality auditing.

Cyclic Corrosion Test (CCT) Chambers

CCT combines traditional exposure to salt spray with a variety of other controlled climates, including variable temperature & humidity, to create an accelerated simulation of service life conditions, according to customer requirements. CCT is, therefore, particularly well suited to predicting product service life expectancy.

Atmosfär Corrosion Test Chambers

Based on the Ascott CCT chamber, the Atmosfär is equipped with additional features to enable it to comply with the specific automotive test requirements of Ford and Volvo. Most notably this includes the application of salt spray from a high-level 'swaying' spray bar, vertical high velocity air drying and refrigerated dehumidification.

Free choice of canopy color

All Ascott chambers are offered with a choice of canopy color at no extra cost. The standard range of colors are shown. Colors are a representation only.



Information online Ascott website www.ascott-analytical.com

Salt Spray Corrosion Test Chambers

Ascott salt spray test chambers are offered in two model ranges: *Standard* & *Premium*.

Standard models are designed for continuous salt spray tests, conducted at a single user-adjustable temperature, such as ASTM B117, ISO 9227, JIS Z 2371 etc. They may be used with pH neutral salt solutions (NSS) or test solutions acidified by the addition of Acetic Acid (ASS) or Cupric Acid (CASS).

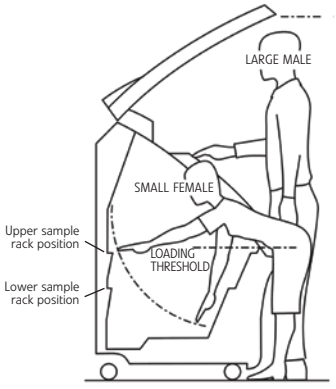
Premium models can perform the same basic salt spray tests as *Standard* models, but in addition are equipped with extra features which enable them to undertake 'modified' tests such as ASTM G85. Here conventional salt spray is usually combined with one other climate, in a two-part cycle. For example: salt spray and condensation humidity (SWAAT) or salt spray and drying (PROHESION).



Premium 120 Ltr
salt spray chamber



Standard 1000 Ltr
salt spray chamber



Salt Spray Corrosion Test Chambers

Performance

Temperature range	Adjustable from ambient to +50°C/+122°F
Salt spray fall-out rates	Adjustable from 0.5 to 2.5 ml per 80 cm^2 per hour
Wetting mode (Premium chambers only)	Adjustable from ambient to +50°C/+122°F
Drying mode (Premium chambers only)	Adjustable from ambient to +50°C/+122°F

Features

Standard models

- 'Easy Open' pneumatically operated canopy.
- Touch-screen monochrome operator control interface.
- Dry seal gasket prevents wetting operator's clothes, etc.
- Low loading threshold for loading and unloading.
- Canopy color choice.
- Interior viewing window.
- Automatic purge of the chamber interior before opening.
- Salt solution reservoir.
- Set of sample racks.

Premium models

Premium models have the same features as *Standard* models plus:

- Touch-screen, full color user control interface, using intuitive icons for ease of programming and use.
- RJ45 communications port for connection to a local area network (LAN) for logging and remote programming via a computer running optional Ascott software (ACC120).
- A real-time, user configurable 'clock' to enable different test samples to have their exposure time monitored separately, with alarms to warn when preset test times have been completed.
- Immersion heater housed in the base of chamber enables high humidity condensation conditions to be created, if required.



Premium 2000 Ltr salt spray chamber



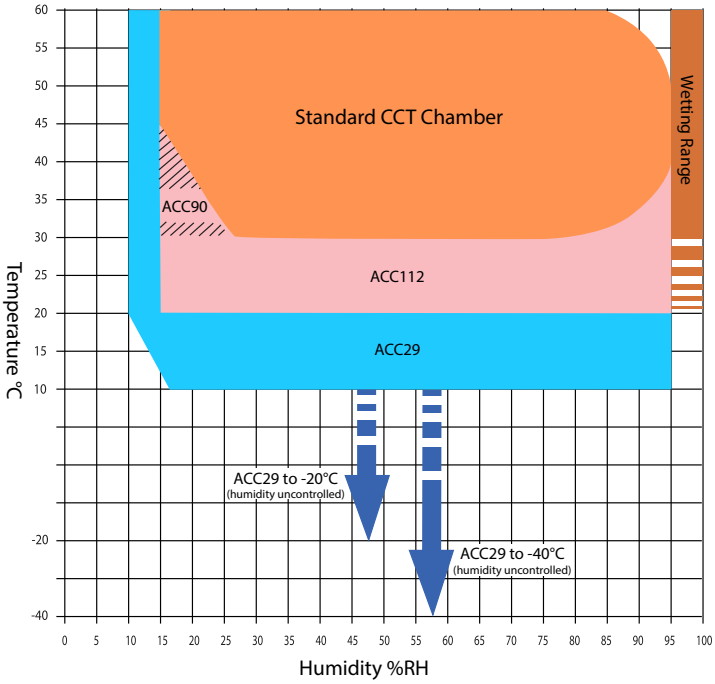
Cyclic Corrosion Test (CCT) Chambers

Ascott CCT chambers are designed to be flexible enough to comply with as many different CCT specifications as possible. As standard they come with the ability to create 4 distinct climates:

1. Salt spray
2. Condensation humidity (wetting)
3. Air drying
4. Controlled humidity.

These may be programmed to occur in any sequence and be repeated automatically. A wide range of optional accessories enable additional climates to be added to further extend the number of climates and conditions that can be created.

Graph showing standard range of temperature/humidity control for a CCT chamber and how this may be extended by the addition of optional accessories.





1000 Ltr CCT chamber



CCT chamber control panel

Cyclic Corrosion Test (CCT) Chambers

Performance

Wetting mode	Temperature range Humidity range	Adjustable from ambient to +70°C/+158°F Fixed at 95% - 100% RH
Salt spray mode	Temperature range Salt spray fall-out rates	Adjustable from ambient to +50°C/+122°F Adjustable from 0.5 to 2.5 ml per 80 cm^2 per hour*
Drying mode	Temperature range Humidity range	Adjustable from ambient to +70°C/+158°F Uncontrolled
Controlled humidity mode	Temperature/humidity range	See graph on page 6

* Option ACC01 increases fallout rate up to 5.5 ml per 80 cm^2 per hour.

Features

All Ascott cyclic corrosion test chambers feature:

- 'Easy Open' pneumatically operated canopy.
- Dry seal gasket prevents wetting operator's clothes, etc.
- Low loading threshold for loading and unloading.
- Canopy color choice.
- Interior viewing window (unless refrigeration option is supplied).
- Automatic purge of the chamber interior before opening.
- Set of sample racks and a separate salt solution reservoir.
- Touch-screen, full color user control interface, using intuitive icons for ease of programming and use.
- RJ45 communications port for connection to a local area network (LAN) for logging and remote programming via a computer running optional Ascott software (ACC120).
- A real-time, user configurable 'clock' to enable different test samples to have their exposure time monitored separately, with alarms to warn when preset test times have been completed.
- A large capacity memory for complex multi-step test programmes to be programmed and stored, so that a wide range of different test profiles can be undertaken.



2000 Ltr CCT chamber



Atmosfär Test Chambers



Atmosfär chambers have been specifically designed for fully automatic testing in accordance with highly demanding laboratory-accelerated corrosion tests which have become increasingly popular in some sectors of the automotive industry. These tests are cyclic in nature and comprise of exposure under controlled and varying conditions of temperature and humidity, with intermittent spraying of a salt solution directly on to the samples under test, from a high level swaying spray bar.

Such tests include:

- Ford CETP 00.00-L-467
- Volvo VCS 1027,149 (ACT-1)
- Volvo VCS 1027,1449 (ACT-2)
- Volvo STD 423-0014
- Volvo STD 1027,1375
- ISO 16701
- Scania STD 4319

For added flexibility, Atmosfär chambers also retain the ability to perform conventional salt spray tests and Cyclic Corrosion Tests (CCT) in accordance with a wide range of international test standards.



1 The air system collection tube is easily removed.



2 The combined air dispersal and oscillating spray bar unit simply lifts out.



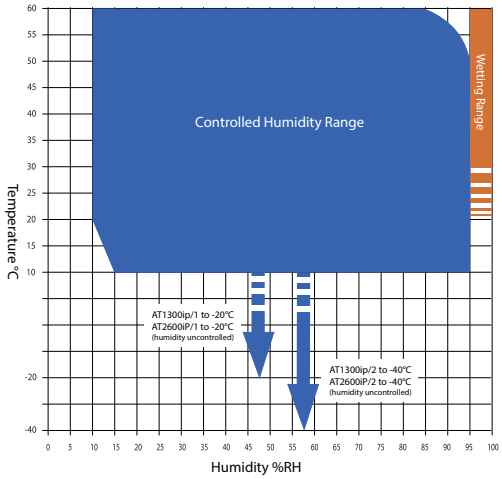
3 The Atmosfär chamber is now ready for other types of corrosion testing.

Atmosfär Test Chambers

Performance

Wetting mode	Temperature range Humidity range	Adjustable from ambient to +70°C/+158°F Fixed at 95% - 100% RH
Oscillating salt spray mode	Temperature range Salt spray fall-out rates	Adjustable from ambient to +50°C/+122°F Adjustable from 5 to 10 Ltrs/m^2 per hour
Conventional salt spray mode	Temperature range Salt spray fall-out rates	Adjustable from ambient to +50°C/+122°F Adjustable 0.5 to 2.5 ml per 80 cm^2 per hour
Drying mode	Temperature range Humidity range	Adjustable from ambient to +70°C/+158°F Uncontrolled
Climatic mode	Temperature/humidity range	See adjacent graph

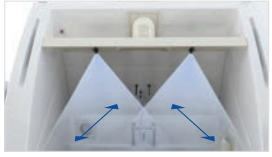
Operating range graph



Features

Swaying spray bar

Set high in the chamber, spray nozzles oscillate backwards and forwards to produce a fan shaped spray pattern that ensures test samples are 'swept' uniformly with spray of salt solution.



Separate air conditioning unit

Combines refrigeration and dehumidification to extend the range of temperature and humidity control (down to -20°C/-4°F or -40°C/-40°F depending on the model) under programmable control.

High velocity vertical air-flow

High velocity air, from the separate air conditioning unit, passes vertically though the test samples, evenly from top to bottom, during the climate controlled testing phase.





MAG-DRIVE™ - magnetically coupled spray bar drive system

Enables quick spray bar removal from the chamber if conventional salt spray testing is required. With no drive shaft passing through the chamber wall, there is no risk of salt solution leakage and it is safe as it will stall if the spray nozzles are obstructed.

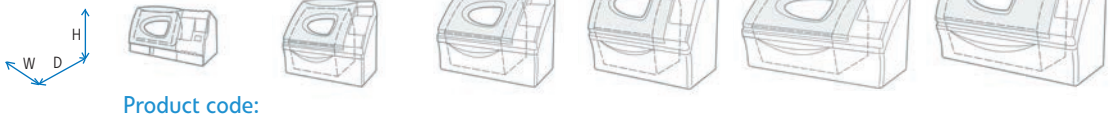
Adjustable sample racks

Accommodates variable thickness test panels up to 6mm/0.25" thick. Angle adjustment from vertical to up to 20° from vertical depending on test panel thickness. Design minimizes standing moisture accumulation.

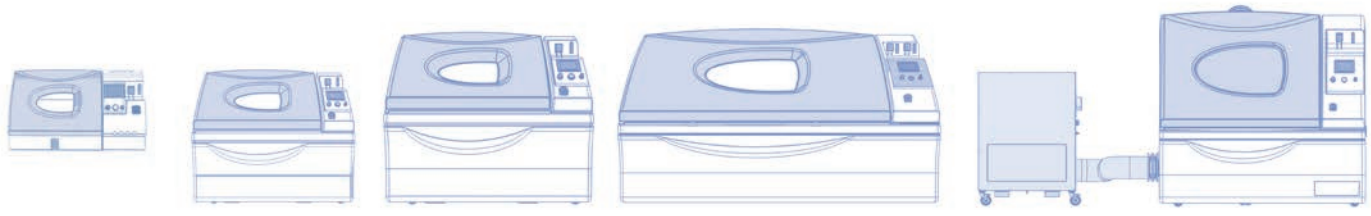


Test Chamber Specifications

Salt Spray & Cyclic Corrosion Test (CCT) Chambers



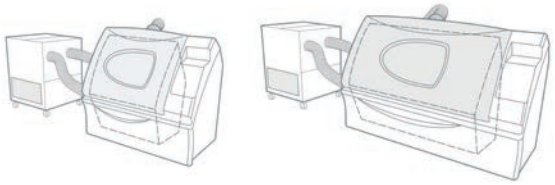
Product code:						
Standard salt spray chambers	S120iS	S450iS	S1000iS	S1300iS	S2000iS	S2600iS
Premium salt spray chambers	S120iP	S450iP	S1000iP	S1300iP	S2000iP	S2600iP
Cyclic corrosion test chambers	-	CC450iP	CC1000iP	CC1300iP	CC2000iP	CC2600iP
Chamber capacity	120 Ltrs./4.2 cu.ft	450 Ltrs./15.8 cu.ft	1000 Ltrs/35.3 cu.ft	1300 Ltrs/45.9 cu.ft	2000 Ltrs/70.6 cu.ft	2600 Ltrs/91.8 cu.ft
Chamber weight (estimated, without optional accessories)	76 kg	190 kg	255 kg	285 kg	330 kg	355 kg
Mounting format	Bench top	Floor standing	Floor standing	Floor standing	Floor standing	Floor standing
Loading threshold	280mm/11"	800mm/31.5"	800mm/31.5"	800mm/31.5"	800mm/31.5"	800mm/31.5"
Chamber external dimensions, max W	1315mm/51.8"	1660mm/65.4"	2025mm/80.0"	2025mm/80.0"	2885mm/113.6"	2885mm/113.6"
D	680mm/26.8"	840mm/33.1"	1145mm/45.0"	1156mm/45.5"	1145mm/45.0"	1156mm/45.5"
H	800mm/31.5"	1510mm/59.5"	1720mm/67.5"	1906mm/75.0"	1720mm/67.5"	1906mm/75.0"
Chamber internal dimensions, max W	715mm/28.2"	1010mm/39.5"	1300mm/51.2"	1300mm/51.2"	2160mm/85.0"	2160mm/85.0"
D	490mm/19.3"	640mm/25.0"	980mm/38.5"	980mm/38.5"	980mm/38.5"	980mm/38.5"
H	490mm/19.3"	1140mm/45.0"	1320mm/52.0"	1528mm/60.2"	1320mm/52.0"	1528mm/60.2"
Salt solution reservoir ext. dimensions W	integral	460mm/18.1"	560mm/22.0"	560mm/22.0"	560mm/22.0"	560mm/22.0"
D	integral	620mm/24.5"	620mm/24.5"	620mm/24.5"	620mm/24.5"	620mm/24.5"
H	integral	675mm/26.6"	675mm/26.6"	675mm/26.6"	675mm/26.6"	675mm/26.6"
Salt solution reservoir capacity (for extra capacity, see optional accessory ACC02)	40 Ltrs/10.5 US gal	80 Ltrs/21 US gal	115 Ltrs/30.4 US gal	115 Ltrs/30.4 US gal	115 Ltrs/30.4 US gal	115 Ltrs/30.4 US gal
Removable slotted sample racks to suit upper mounting position.	4 racks each with 23 angled slots	6 racks each with 28 angled slots	8 racks each with 46 angled slots	8 racks each with 46 angled slots	16 racks each with 46 angled slots	16 racks each with 46 angled slots
	Each with 3mm (1/8") wide slots, angled at 15 degrees from vertical					
Chamber construction	Glass reinforced plastic, Polypropylene & PVC parts.					
Color	9 standard colors to choose from.					
Electricity supply						
Standard salt spray models	1 phase	1 phase	1 phase	1 phase	1 phase	1 phase
Premium salt spray models	1 phase	1 phase	1 phase	1 phase	3 phase	3 phase
CCT models	-	3 phase	3 phase	3 phase	3 phase	3 phase
	Voltage (VAC) and frequency (Hz) dependant on country/region of installation.					
Water	The air saturator, humidity generator and salt solution reservoir all require separate connections to a continuous, pressurized deionized/distilled water supply of 0.5–5.0 bar (7.3–73 psi).					
Air	Clean dry & oil free, 4.0 to 6.0 bar (58-87psi) with 240 Ltrs (8.5cu.ft) per minute flow.					
Exhaust	3m (10ft) exhaust pipe is provided which should be terminated outside building.					
Drain	3m (10ft) drain pipe provided which should be terminated into floor level drain.					
Operating environment conditions	Indoors, with ambient maintained at +18 to +23°C (+64 to 73°F), 85% max RH (non-condensing).					



Test Chamber Specifications

Atmosfär Test Chambers





Atmosfär test chambers	Product code:	AT1300iP/1	AT1300iP/2	AT2600iP/1	AT2600iP/2
Minimum controlled temperature		-20°C/-4°F	-40°C/-40°F	-20°C/-4°F	-40°C/-40°F
Chamber capacity		1300 Ltrs/45.9 cu.ft	1300 Ltrs/45.9 cu.ft	2600 Ltrs/91.8 cu.ft	2600 Ltrs/91.8 cu.ft
Chamber weight (estimated, without optional accessories)		340 kg	340 kg	440 kg	440kg
Mounting format		Floor standing	Floor standing	Floor standing	Floor standing
Loading threshold		800mm/31.5"	800mm/31.5"	800mm/31.5"	800mm/31.5"
Chamber external dimensions, max	W	2025mm/80.0"	2025mm/80.0"	2885mm/113.6"	2885mm/113.6"
	D	1316mm/51.8"	1316mm/51.8"	1316mm/51.8"	1316mm/51.8"
	H	1965mm/77.4"	1965mm/77.4"	1965mm/77.4"	1965mm/77.4"
Chamber internal dimensions, max	W	1300mm/51.2"	1300mm/51.2"	2160mm/85.0"	2160mm/85.0"
	D	980mm/38.5"	980mm/38.5"	980mm/38.5"	980mm/38.5"
	H	1500mm/59.0"	1500mm/59.0"	1500mm/59.0"	1500mm/59.0"
Refrigeration unit Separate unit, one supplied, to be located to the rear or left hand side of the Atmosfär chamber	W	1510mm/59.4"	1510mm/59.4"	1510mm/59.4"	1510mm/59.4"
	D	1550mm/60.0"	1550mm/60.0"	1550mm/60.0"	1550mm/60.0"
	H	1055mm/41.5"	1055mm/41.5"	1055mm/41.5"	1055mm/41.5"
Salt solution reservoir 115 Ltrs/30.4 US gal Separate unit, one supplied to deliver salt water to the conventional salt spray atomizer	W	560mm/22.0"	560mm/22.0"	560mm/22.0"	560mm/22.0"
	D	620mm/24.5"	620mm/24.5"	620mm/24.5"	620mm/24.5"
	H	675mm/26.6"	675mm/26.6"	675mm/26.6"	675mm/26.6"
Salt solution reservoir 160 Ltrs/42.2 US gal Separate unit, one supplied to deliver salt water to the spray bar	W	840mm/34.0"	840mm/34.0"	840mm/34.0"	840mm/34.0"
	D	500mm/19.7"	500mm/19.7"	500mm/19.7"	500mm/19.7"
	H	790mm/31.1"	790mm/31.1"	790mm/31.1"	790mm/31.1"
Removable slotted sample racks to suit lower rack mounting position		1 set of 8 racks each with 24 slots	1 set of 8 racks each with 24 slots	1 set of 16 racks each with 24 slots	1 set of 16 racks each with 24 slots
		Each with variable width slots (up to 6mm/0.25") & variable angle (up to 20° from vertical) & carrying handle.			
Chamber construction		Glass reinforced plastic, Polypropylene & PVC parts.			
Color		9 standard colors to choose from.			
Electricity supply		Two 3-phase electrical supplies are required (one for the chamber and one for the separate air conditioning unit). The voltage (VAC) and frequency (Hz) are dependent on country/ region of installation (to be confirmed at the time of ordering).			
Water		The air saturator, humidity generator and salt solution reservoir all require separate connections to a continuous, pressurized deionized/distilled water supply of 0.5–5.0 bar (7.3–73 psi).			
Air		Clean dry & oil free compressed air, 4.0 to 6.0 bar (58-87psi) with 240 Ltrs (8.5cu.ft) per minute flow. Two separate supplies are required, one for the chamber and one for the separate salt solution reservoir.			
Exhaust		3m (10ft) exhaust pipe is provided which should be terminated outside building.			
Drain		3m (10ft) drain pipe provided which should be terminated into floor level drain.			
Operating environment conditions		Indoors, with ambient maintained at +18 to +23°C (+64 to 73°F), 85% max RH (non-condensing).			

Test Chamber Optional Accessories

Optional facilities required for some CCT test standards

- Standard salt spray chambers
- Premium salt spray chambers
- Cyclic corrosion test chambers
- Atmosfär chambers

F Factory fitted only
A Available separately

□ Available in a variety of sizes/ configurations – further details available on request.

♦ Accessories separate to the chamber, require their own space and require connection to the chamber and/or other external services. Details available upon request.


ACC90


ACC112


ACC29


ACC31


ACC42


ACC46

Facility	Product code	Description	Notes
For testing to Renault D17 2028 (ECC-1) Control at ambient Control to 0°C/32°F Control to -20°C/-4°F Control to -40°C/-40°F	ACC01/see below ● F ♦ ACC01/1 ACC01/2 ACC01/3 ACC01/4	A kit of all necessary items to equip the chamber for compliance with ECC-1. Includes options ACC80/2 and ACC90/2 Includes options ACC112/2 and ACC112/INT/2 Includes options ACC29/3 (-20°C/-4°F option) and ACC29/INT/2 Includes options ACC29/4 (-40°C/-40°F option) and ACC29/INT/2	Only suitable for the 1000 Ltr chamber as approved by Renault. Not suitable for use with option ACC46. This option dissipates heat which will need to be accounted for on installation.
Interface for ACC90	ACC80/see below ● F ACC80/1 ACC80/2 ACC80/3 ACC80/4 ACC80/5	Pre-equips the chamber for connection to an ACC90 dehumidification unit (available separately). For 450 Ltr chamber For 1000 Ltr chamber For 1300 Ltr chamber For 2000 Ltr chamber For 2600 Ltr chamber	
To extend the range of humidity control (only) below ambient	ACC90/see below ● A ♦ ACC90/1 ACC90/2 ACC90/3	Delivers dehumidified air to enable humidity control at, or just below ambient conditions, Refer to graph on page 6. For 450 Ltr chamber For 1000/1300 Ltr chambers For 2000/2600 Ltr chambers	Requires the chamber to be pre-equipped with option ACC80.
Interface for ACC112	ACC112/INT/see below ● F ACC112/INT/1 ACC112/INT/2 ACC112/INT/3 ACC112/INT/4 ACC112/INT/5	Pre-equips the chamber for connection to an ACC112 midi dehumidification unit (available separately). For 450 Ltr chamber For 1000 Ltr chamber For 1300 Ltr chamber For 2000 Ltr chamber For 2600 Ltr chamber	
To extend the range of humidity and temperature control below ambient	ACC112/see below ● A ♦ ACC112/1 ACC112/2 ACC112/3	A freestanding, mid-size, air conditioning unit, to enable controlled climates to be created within the chamber below the ambient conditions of the room in which it is located. Refer to graph on page 6. For 450 Ltr chamber For 1000/1300 Ltr chambers For 2000/2600 Ltr chambers	This option dissipates heat which will need to be accounted for on installation. All versions require the chamber to be pre-equipped with option ACC112/INT.
Interface for ACC29	ACC29/INT/see below ● F ACC29/INT/1 ACC29/INT/2 ACC29/INT/3 ACC29/INT/4 ACC29/INT/5	Pre-equips the chamber for connection to an ACC29 air conditioning unit (available separately). For 450 Ltr chamber For 1000 Ltr chamber For 1300 Ltr chamber For 2000 Ltr chamber For 2600 Ltr chamber	Chambers equipped with this option are not fitted with canopy windows.
To extend the range of humidity and temperature control below freezing	ACC29/see below ● A ♦ ACC29/1 ACC29/2 ACC29/3 ACC29/4 ACC29/5 ACC29/6	A freestanding air conditioning unit to extend the range of humidity and temperature control. Refer to graph on page 6. For 450 Ltr chamber to -20°C/-4°F For 450 Ltr chamber to -40°C/-40°F For 1000 - 1300 Ltr chambers to -20°C/-4°F For 1000 - 1300 Ltr chambers to -40°C/-40°F For 2000 - 2600 Ltr chambers to -20°C/-4°F For 2000 - 2600 Ltr chambers to -40°C/-40°F	Refer to graph on page 6. This option dissipates heat which will need to be accounted for on installation. All versions require the chamber to be pre-equipped with option: ACC29/INT.
For test to SAEJ2334 and some GM tests	ACC30 □ ● F ♦	Fixed high level nozzles which spray salt water directly down onto the test samples under programmable control. A separate reservoir holds the salt water to be sprayed, at ambient temperature.	
For some Volvo & GM Tests	ACC31 □ ● F ♦	Oscillating spray nozzles, set high in the chamber which sway backwards and forwards, to produce a fan shaped pattern of salt spray which 'sweeps' over the test samples located beneath, to wet them uniformly. A separate reservoir holds the salt water to be sprayed at ambient temperature	Only available for 1300 & 2600 Ltr CCT chambers.
For tests requiring water fog humidity	ACC32 □ ● ● F ♦	Provides high humidity conditions (95 -100% RH) by spraying water as a fog. Includes an additional reservoir for the water to be sprayed, fog atomizer(s) and associated equipment.	
Interface for ACC34	ACC34/INT □ ● F	Pre-equips the chamber for connection to an ACC34 liquid immersion facility (available separately).	Not suitable for use with option ACC46 or ACC10/110.
For tests requiring liquid immersion	ACC34 □ ● A ♦	For automatically immersing test samples held at low level inside the chamber with salt water heated to a user adjustable temperature up to +50°C/+122°F.	Requires the chamber to be pre-equipped with option: ACC34/INT.
For tests requiring wall wash	ACC42 □ ● ● F	Comprises of a water spray rig to automatically wash the internal walls of the chamber with water. Both wash time and duration are user programmable.	
For testing to ASTM G85 annex A4	ACC46 □ ● ● F	Designed to meet the requirements of ASTM G85 annex A4, this optional accessory comprises of a chamber-mounted dispersion tube, through which SO2 gas is introduced, at a user adjustable rate and for a programmable duration.	User must provide SO2 gas cylinder and connector. Not suitable for use with: ACC01, ACC10, ACC20, ACC34/INT and ACC92.
For tests requiring different salt spray solutions	ACC86 □ ● ● F ♦	Enables different salt spray climates to be created which can be individually programmed to occur within any test program.	Additional salt solution reservoirs, atomizers etc, are included.

Test Chamber Optional Accessories

Optional accessories providing external services


ACC02/1


ACC02/3


ACC06


ACC04


ACC92


ACC20


ACC96


ACC24

Accessory	Product code	Description	Notes
Additional salt solution reservoir	ACC02/ see below ● ● ● ● A ♦ ACC02/1 ACC02/2 ACC02/3	Translucent with graduated scale for viewing contents, hinging lid for filling & cleaning, mounted on castors. For 80 Ltr/21 US gal capacity model For 115 Ltr/30 US gal capacity model For 160 Ltr/42 US gal capacity model	
Air compressor	ACC04 ● ● ● ● A ♦	Provides continuous supply of oil free compressed air to enable functioning without connection to a local compressed air supply.	
Deionizer	ACC06/ see below ● ● ● ● A ♦ ACC06/1 ACC06/2 ACC06/3	Provides high purity water for topping up chamber air saturator, humidity system and for making up salt solution. For small model For medium model For large model	Must be regenerated or replaced when exhausted.
Waste water trough	ACC20 ● ● ● ● F ♦	Where a local floor level drain is unavailable ACC20 provides a tank into which the chamber drain outlet is terminated. When full, waste water is automatically pumped to a remote drain located up to 10m/32ft horizontally & 3m/10ft vertically.	Not suitable for use with option ACC46.
Trolley	ACC24 ● ● A ♦	Converts the bench standing 120 Ltr size chamber to floor standing. Mounted on lockable castors. There is space underneath for 1 x ACC02/1 reservoir (available separately).	For use with 120 Ltr size chamber only.
Exhaust salt scrubber	ACC92/ see below ● ● ● ● A ♦ ACC92/1 ACC92/2 ACC92/3 ACC92/4	Removes the majority of highly corrosive salt fog from the chamber exhaust where it is not possible to vent this outside the building. Non-recirculating - total loss of water used to condense the salt fog - for salt spray chambers. Non-recirculating - total loss of water used to condense the salt fog - for CCT chambers. Recirculating - reuses some of the water used to condense the salt fog, to minimize waste - for salt spray chambers. Recirculating - reuses some of the water used to condense the salt fog, to minimize waste - for CCT chambers.	Not suitable for use with option ACC46.
Air agitation of salt solution	ACC96 ● ● ● ● A ♦	Uses compressed air bubbles to aid dissolving salt within the salt solution reservoir to create a thoroughly mixed salt solution.	Not available for 120 Ltr models. Can only be supplied fitted to ACC02.

Optional accessories that provide data measurement and recording


ACC40/1


ACC28

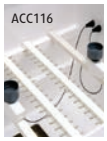

ACC100


ACC108

Accessory	Ascott ref.	Description	Notes
Hand held pH meter	ACC11 ● ● ● ● A	Digital pH meter, for measuring the pH of salt solution fallout over range 0-14 pH with a resolution of 0.01 pH.	
Hand held temperature & humidity probe	ACC28 ● ● ● ● A	A hand-held thermo-hygrometer for checking the chamber temperature and humidity. Range: -40 to +85°C & 0 to 100% RH.	Requires any size entry port (see ACC10).
Re-transmission of temperature & humidity signals	ACC36 ● ● ● F	Re-transmission of chamber temperature & humidity as 2 x 0-10VDC signals via external socket. For remote data logging.	
Paperless type chart recorder	ACC40/ see below ● ● ● F ACC40/1 ACC40/2	Paperless chart recorder, coupled to a temperature and humidity sensor, for recording the chamber conditions. Data can be stored on integral USB drive and/or downloaded to a computer running appropriate software (see option ACC41). For 2 pen type For 12 pen type	Recorder is free-standing for 120 Ltr chambers, & chamber mounted for other models.
Software for paperless chart recorder ACC40	ACC41 ● ● ● A	Software for paperless chart recorder (separate option ACC40). Enables monitoring and graphical storage of chamber temperature and humidity profiles.	Requires a suitable computer.
Temperature data logger	ACC50 ● ● ● ● F	A battery powered, chamber mounted temperature data logger. Continuously records chamber air temperature. Logs can be downloaded to a computer with appropriate software (provided).	
Temperature & humidity data logger	ACC52 ● ● ● ● A	A hand-held data logger for monitoring chamber temperature and humidity using a combined temperature/humidity sensor.	Requires any size entry port (see ACC10).
Salt solution reservoir low level alarm	ACC70 ● ● ● ● F	Operates if the salt solution level falls below requirement for approximately 18 hours testing at 1-2ml/hour fall-out rates. Sounds audible alarm and displays warning message.	
Hand-held salinity refractometer	ACC100 ● ● ● ● A	A drop of the salt solution is placed on the viewing window, and its salinity read against a scale, graduated in % sodium chloride, to give an accurate reading in the range 0 to 28%.	
Salt solution consumption sensor	ACC102 ● ● ● ● F	A liquid flow sensor to measure the flow of salt solution from the reservoir to the atomizer. Displays as instantaneous consumption in ml per min and total consumption in ml.	
Fallout measuring kit	ACC108 ● ● ● ● A	Comprises of 4 x 100ml measuring cylinders and 4 x 100mm funnels, for manually collecting and measuring salt spray fall-out inside the chamber, during salt spray testing.	

Test Chamber Optional Accessories

Optional accessories providing automation



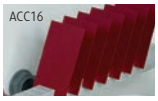


Accessory	Product code	Description	Notes
SIM card connectivity	ACC114 ● ● ● F	A SIM card reader, integrated into the chamber. Can be configured to send SMS messages to user nominated cellular phones, when specified alarm conditions arise.	Excludes SIM card which user must procure and fit locally.
Electronic Catchpots®	ACC116 ● ● ● A	Electronic Catchpots to collect and measure fall-out when salt spray testing. Can be displayed as a passive fall-out rate (ml/hour) or configured to control the salt spray delivery system automatically. Maximum per chamber : two for 120 to 1300L chambers and four for 2000 & 2600L chambers.	To be ordered singularly.
Logging software	ACC120 ● ● ● A	When loaded on a suitable 'Class C' network connected computer, this allows logging of chamber variables, such as temperature and humidity, and editing of chamber programs.	Must be installed on a suitable computer (not supplied).

Optional accessories that are additional chamber fittings

















Accessory	Product code	Description	Notes
Entry ports	ACC10/ see below ● ● ● ● F ACC10/1 ACC10/2	Sealable entry port through the chamber's left hand wall to enable the connection of external equipment. 35mm/1.37" diameter 110mm/4.33" diameter (see notes)	Not suitable for ACC46. ACC10/2 is not suitable for 120 Ltr or Atmosfär chambers or ACC34/INT.
Variable angle slotted sample racks	ACC14 □ ● ● ● ● A	Accommodates variable thickness test panels up to 6mm/0.25" thick. Adjustable angles from vertical to 20° from vertical dependant on panel thickness).	Variable angle slotted sample racks are not available for 120 Ltr chambers.
Mesh type racking	ACC15 □ ● ● ● ● A	Removable mesh type racking for testing small components. Locates on the shelf supports inside the chamber.	Lower level racks are not available for 120 Ltr chambers.
Fixed angle slotted sample racks	ACC16 □ ● ● ● ● A	Each slot is 3mm/1/8" wide and a fixed angle of 15 degrees from vertical. Typically used for testing standard panels/coupons.	Lower level racks are not available for 120 Ltr chambers.
General Motors Test Plate Kit	ACC16/6 □ ● ● ● ● A	10 specially designed Polycarbonate test plate holders and nylon fixings, for mounting General Motors test plates in accordance with the requirements of GMW14872 - in an existing Ascott slotted sample rack, ref ACC16.	The slotted sample rack is not included.
Rod type sample racks	ACC17 □ ● ● ● ● A	For suspending small test samples hung beneath, or supporting larger test samples placed on top.	Lower level racks are not available for 120 Ltr chambers.
Spiked type sample racks	ACC18 □ ● ● ● ● A	For suspending test samples from the 10mm/0.4" dia x 55mm/2" long spikes, equally spaced on both sides of the rack.	Lower level racks are not available for 120 Ltr chambers.
Reinforced false floor	ACC19 □ ● ● ● ● A	Removable reinforced false floor, providing a horizontal platform over the chamber base for supporting large/heavy test samples.	Note: only fits Atmosfär chambers if air collection duct is removed.
Interior illumination	ACC26 □ ● ● ● F	Illuminates the chamber interior when a control panel push-button is pressed.	Not suitable for use with ACC29/INT.
Manual filling air saturator	ACC66 ● ● ● ● F	Enables air saturator to be manually filled and periodically topped up with water by hand as an alternative to the automatic fill and top up provided as standard.	Note: adds 75mm/3" to chamber external width.
Insulated window cover	ACC82 □ ● ● ● A	Removable insulated cover shaped to match the window aperture. Reduces condensation on the inside of the window during testing and improves thermal efficiency.	
Compressed air coupling	ACC94 ● ● ● ● F	A control panel mounted, quick release coupling for connection of an air pressure gauge (not supplied) for checking/calibrating the chamber's air pressure gauge.	
Atomizer airflow optimizer	ACC106 ● ● ● ● A	An airflow anemometer with adaptor, to enable the chamber atomizer airflow to be checked and optimized.	
Vertically operating canopy	ACC110 □ ● ● ● ● F	Special design of canopy opens to a vertical position enabling access from above (e.g. by hoist) for large and/or heavy test samples.	

Optional service and spares kits





Accessory	Product code	Description	Notes
1 year consumables spares kit	ACC12/1 ● ● ● ● A	A kit of consumables sufficient for up to 1 year..	
3 year chamber service & spares kit	ACC12/2 ● ● ● ● A	Initial kit of spare parts for servicing & maintaining the chamber for up to 3 years from its first use, or its last service.	
6 year chamber service & spares kit	ACC12/3 ● ● ● ● A	A comprehensive kit for servicing and maintaining the chamber for up to 6 years from its first use, or its last service.	

Corro-Salt® salt for salt spray testing

- Highest purity salt for serious testing
- For all salt spray testing including the stringent ASTM B117
- Available in 25 kg drums or bags
- 25 kg drums are supplied with a scoop to maintain purity when handling



Despite the fact that salt is a commonly occurring compound, pure sodium chloride (NaCl) is much more difficult to come by. Because of its hygroscopic nature, which tends to make salt coagulate and solidify, most granulated salt has anti-caking agents added. However, the addition of these agents is prohibited by most salt spray test standards.

For example, the world's most popular salt spray test standard; ASTM B117, prohibits the addition of anti-caking agents, and also limits other impurities, as follows: total impurities < 0.3%, halides excluding chloride < 0.1%, copper < 0.3ppm - so the salt must be very pure indeed, with the limit for copper in particular set at an extremely low level. Other national and international test standards for corrosion testing are similarly demanding in their specifications.

To ensure compliance with the highest standards, Ascott has had Corro-Salt independently analysed by an UKAS* accredited laboratory.

*UKAS = United Kingdom Accreditation Service.

Specifications

Typical analysis

Total impurities	< 0.1 %
Bromide	< 0.01 %
Fluoride	< 0.01 %
Iodide	< 0.01 %
Copper	< 0.3 ppm

Ordering information

Code	Description
SALA530	25 kg drum of salt with scoop
SALA500	25 kg bag of salt

Bulk quantities available upon request.

Order Corro-Salt

1 Ascott Shop website www.ascottshop.com

2 By email: sales@ascott-analytical.com

3 By telephone: +44 (0) 1827 318040



Ascott Worldwide

Ascott are represented worldwide by a network of authorized distributors/agents, who have been fully trained in all aspects of our products, including technical support and maintenance. Please contact us for further details.

All Ascott chambers are CE marked.

Catchpots® is a trademark of Ascott Analytical Equipment Limited
Prohesion® is a trademark of Croda Mebon Ltd

It is the policy of Ascott Analytical Equipment Ltd to protect its products by means of patents, registered trademarks and registered designs. The information contained herein was correct at time of going to press and is subject to change without notice.

© 2015 Ascott Analytical Equipment Ltd

Issue B

Local representative:

novasys group pty ltd

po box 1150 mountain gate 3156 australia
31/756 burwood hwy ferntree gully 3156 australia
t: +61 3 9752 3766
f: +61 3 9752 3977
email: sales@novasys.com.au
website: www.novasys.com.au

ascott

North American Office

Ascott Analytical Equipment
37000 Plymouth Road
Livonia, MI 48150, USA
phone: +1 248-306-0394
fax: +1 248-306-0396
email: info@ascott-analytical.com
web: www.ascott-analytical.com

European Office

Ascott Analytical Equipment Limited
6-8 Gerard, Lichfield Road Industrial Estate
Tamworth, Staffordshire, B79 7UW, Great Britain
phone: +44 (0) 1827 318040
fax: +44 (0) 1827 318049
email: info@ascott-analytical.com
web: www.ascott-analytical.co.uk