

Test Standard Chamber Compatibility Guide



Testing climate resistance **to the limit**

Welcome to the Ascott Test Standard Chamber Compatibility Guide

This corrosion test guide is designed to make selecting a chamber a simple task. All you need to do is;

- Select the test standards you require from pages 4 to 9 for the tests that you want to perform.
- Referring to the key, select the appropriate chamber model and size, and any necessary optional accessories.
- Request the relevant quote from your local Ascotts sales representative, or via our website www.ascott-analytical.com/chamber-selector/

Salt Spray & Cyclic Corrosion Test Chambers



Standard Salt Spray Chamber (S..iS)

Ascotts standard salt spray chamber with designation S...iS are available in 6 sizes, 120L, 450L, 1000L, 1300L, 2000L & 2600L. They are designed to run continuous salt spray tests conducted at a single user adjustable temperatures, such as ASTM B117, ISO 9227, JIS 2371 plus many more.

The chambers can be used for Neutral salt spray test solutions (NSS) or acidified solutions with the addition of Acetic Acid (ASS) or Cupric Acid (CASS).



Premium Salt Spray Chamber (S..iP)

Ascotts Premium salt spray chamber with designation S...iP are available in 6 sizes, 120L, 450L, 1000L, 1300L, 2000L & 2600L. They can perform the same basic salt spray tests as standard models, but can combine this to run a 2 part test cycle, either salt spray followed by drying , salt spray followed by wetting (condensate humidity).

They can also be programmed to run single salt spray, drying or condensate humidity profiles.



Cyclic Corrosion Test Chambers (CCT)

Ascotts Cyclic Corrosion chambers are designed to be flexible, with many accessories available to comply with as many cyclic corrosion tests as possible.

The CCIP range is available In 5 sizes , 450L, 1000L, 1300L, 2000L, 2600L and can be fitted with over 100 accessories, making them one of the most flexible chambers available on the market.

As standard the chamber comes with the ability to create four distinct climates, salt spray, wetting (condensate humidity), drying and controlled humidity. These can be programmed in any sequence, for any period of time and can be repeated automatically.

Atmosfär Test Chambers

Atmosfär chambers have been designed specifically for fully automatic testing in accordance with highly demanding test profiles from the world's top automotive manufacturers. The Atmosfär chamber is available in 2 sizes, 1300L or 2600L and is fitted with certain accessories to accommodate the test standards from FORD, V0LV0, SCANIA plus many others. There are different temperature ranges available, Lite from 20°C, or sub-zero from -20°c or -40°c.



AtmosfärLite

The AtmosfärLite is fitted as standard with an external cooling unit, allowing temperatures as low as to 20°C, psychrometric humidity control for RH 90% and above, and a high level swaying spray bar which sprays salt solution directly on the samples below. The chamber can be fitted with various accessories to extend the testing capability.



Atmosfär Premium Lite

The Atmosfär Premium Lite, is the latest generation upgrade to the AtmosfärLite chamber. The chamber is manufactured with certain accessories fitted as standard, to meet the widest range of test standards on the market. This chamber is the ideal choice for future proofing compliance for test standards performed at +20°C to +80°C.



Atmosfär

The Atmosfär Chamber is fitted as standard with the same accessories as the AtmosfärLite , but with an external sub-cooling unit, allowing test temperatures as low as -20°C or -40°C dependant on the model ordered. The chamber is supplied with an insulated canopy to improve the efficiency of the chamber at low levels , and can reach internal temperature of +70°C.



Atmosfär Premium

The Atmosfär Premium Chamber is the Rolls Royce of the corrosion test world, this chamber offers the greatest flexibility and covers the majority of test standards including climatic tests from Volkswagen PV1200 & PV1209. The chamber is fitted with a package of accessories as standard, including options for sub cooling to either -20°C or -40°C, up to +80°C. This enables the chamber to run tests from HONDA, VDA, HYUNDAI, KIA, and Volkswagen as standard. The Atmosfär Premium Chamber is truly without equal is truly without equal in the world of corrosion testing.

Test Standard Chamber Compatibility

est Standard /pe	Origin	Test Standard Method	SiS	SiP	ССТ	AtmosfärLite	Atmosfär	Atmosfär Premium Lite	Atmosfär Premium	ACC01	ACC25	ACC29	ACC32	ACC34	ACC112	ACC47	ACC30	ACC90	ACC4
	Australian	AS 2331 M 3.13 Cycle A			٠	•	•	٠	٠							•		ĺ	٠
	Australian	AS 2331 M 3.13 Cycle B			•	•	•	•	٠							•			•
	Australian	AS 2331 M 3.13 Cycle C			•	•	•	•	٠							•			•
	Australian	AS 2331 M 3.13 Cycle E			•	•	•	•	•										
	BMW	AA-0129	•	•	•	•	•	•	•										
	BMW	AA-0213 (AA-P 224)		•	•	•	•	•	٠										
	BMW	AA-0224 (AA-P 175)			•	•	•	•	•										
	BMW	AA-0324 (AA-P 184)	•	•	•	•	•	•	•										
	Fiat	Fiat 50493			•	•	•	•	•							•			
rds	Fiat	50180 method A1	•	•	•	•	•	•	٠										
Automotive Test Standards	Fiat	50180 method A2	•	•	•	•	•	•	٠										
est St	Fiat	50180 method A3	•	•	•	•	•	•	•										
ive T	Ford	FORD CETPOO.OO-L-467				•	•	•	•										
omot	Ford	FLTM BI 103-01	•	•	•	•	•	•	•										
Aut	Ford	FLTM BI 123-03			•	•	•	•	•										
	General Motors	GM9540P			•	•	•	•	•				•				•		
	General Motors	GMW14872			•	•	•	•	•				•				•		
	General Motors	GM4298P	•	•	•	٠	•	٠	٠										
	General Motors	GM4465P	•	•	•	•	•	•	•										
	German	VDA 233-102			•		•		•		•	•							
	Honda	ССТ Н/В			•	•	•	•	•							•			•
	Honda	Honda 5100Z Basic Mode			•		•		•			•				•			•
	Honda	Honda 5100Z Simple Mode			•	•	•	•	•							•			•
	Honda	Honda 5100Z Structure Mode			•		•		•			•		••		•			•

					Ascot	t Chambers (full	descriptions	on pages 2–3)		Optional Accessories (full descriptions on pages 10–11)										
est Standard ype	Origin	Test Standard Method	SiS	SiP	CCT	AtmosfärLite	Atmosfär	Atmosfär Premium Lite	Atmosfär Premium	ACCO1	ACC25	ACC29	ACC32	ACC34	ACC112	ACC47	ACC30	ACC90	ACC4	
	Hyundai/KIA	Hyundai CCT-A			٠	۲	•	•	۲							•			٠	
	Hyundai/KIA	Hyundai CCT-B			•		•		٠			•				•			•	
	Hyundai/KIA	Hyundai CCT-C			•		•		•			•		••		•			٠	
	Hyundai/KIA	Hyundai CCT-D			•		•		•			•		••		•			•	
	Jaguar Land Rover	TPJLR.52.265				•	•	•	•											
	Jaguar Land Rover	JNS 30.16.03	•	•	•	•	•	•	٠											
	Jaguar Land Rover	TPJLR.52.252	•	•	•	•	•	•	•											
	Japanese	JASO M 609			•	•	•	•	٠							•			•	
	Japanese	JASO M 610			•	•	•	•	٠							•			٠	
	Japanese	JIS H 8502 M4			•	•	•	•	٠											
ards	Japanese	JIS H 8502 M5			•	•	•	•	•											
Automotive Test Standards	Mazda	MCT-2M (MES MN 601G)			•	٠	•	•	٠							•				
est S	Mazda	MCT-3M (MES MN 601G)			•	•	•	•	٠							•			•	
ive T	Nissan	CCT-1			•	•	•	•	٠							•			•	
Dimot	Nissan	CCT-2			•	•	•	•	٠							•			•	
Auto	Nissan	CCT-4			•	•	•	•	٠							•			٠	
	Nissan	CCT-5			•	•	•	•	•					••		•			•	
	Nissan	NES M0007 Method A	•	•	•	•	•	•	٠											
	Nissan	NES M0007 Method B			•	•	•	•	٠							•			•	
	Nissan	NES M0140	•	•	•	•	•	•	٠											
	Nissan	NES M0158			•	•	•	•	•					••		•			•	
	Porsche	PPV 4017			•		•		•			•								
	Renault	D17 2028			•	٠	•	•	٠	•										
	Renault	Renault ECC-1			•	•	•	•	٠	•										
	Renault	RNES-G-00005			•	•	•	•	٠	•										
	Renault	RNES-G-00006			•	•	•	•	•							•			•	

					Ascott (hambers (See fu	ll descriptior	s on pages 2–3)		Optional Accessories (See full descriptions on pages 10–11)											
est Standard ype	Origin	Test Standard Method	SiS	SiP	ССТ	AtmosfärLite	Atmosfär	Atmosfär Premium Lite	Atmosfär Premium	ACCO1	ACC25	ACC29	ACC32	ACC34	ACC112	ACC47	ACC30	ACC90	ACC4		
	Renault	RNES-G-00007			•	•	•	•	٠							•			٠		
	Renault	D17 1058	•	•	•	•	•	•	•												
	Scania	Scania STD 4319				•	•	•	•												
	Scania	Scania STD 4445				•	•	•	•												
	Toyota	Toyota TSH1555G Method A+B			•	•	•	•	•					••		•					
	Toyota	Toyota TSH1555G Method C			•	•	•	•	•							•					
	USA	SAE J 2334 Method A			•	•	•	•	•				•	•							
	USA	SAE J 2334 Method B			•	•	•	•	٠				•				•				
rds	USA	SAE J 2334 Method C			•	•	•	•	•		•		••								
anda	USA	SAEJ J2635			•	•	•	•	•												
est St	Volkswagen (VW)	PV 1078			•		•		•			•				••					
ive T	Volkswagen (VW)	PV 1200			•		•		•			•				••					
Automotive Test Standards	Volkswagen (VW)	PV 1209			•		•		٠			•				••					
Aut	Volkswagen (VW)	PV 1210			•	•	•	•	•									•			
	Volvo	VDA 621-415			•	•	•	•	•									•			
	Volvo	Volvo STD 1027,1375				•	•	•	•												
	Volvo	Volvo STD 1027,14				•	•	•	٠												
	Volvo	Volvo STD 423-0014				•	•	•	•												
	Volvo	Volvo STD 4233				•	•	•	•												
	Volvo	Volvo VCS 1027,1449 ACT-2				•	•	٠	•												
	Volvo	Volvo VCS 1027,149 ACT-1				•	•	٠	٠												
	Volvo	STD 5711,102	•	•	•	•	•	•	•												
S	Military	MIL-STD-202	•	•	•	•	•	•	٠												
American Test Standards	Military	MIL-STD-750 method 1046	•	•	•	•	•	•	•												
Ame st Sta	Military	MIL-STD-810G		٠	•	•	•	•	٠												
Ţ	USA	ASTM D2247		•	•	•	•	•	•												

		Ú	hambers (See fu		Optional Accessories (See full descriptions on pages 10-11) ACC01 ACC25 ACC29 ACC32 ACC34 ACC112 ACC47 ACC30 ACC90 ACC42											
dard SiS	SiP		AtmosfärLite	Atmosfär	Atmosfär Premium Lite	Atmosfär Premium	ACCO1	ACC25	ACC29	ACC32	ACC34	ACC112	ACC47	ACC30	ACC90	ACC
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annex A1 🔹	•	•	•	•	•	•										
annex A2		•	•	•	•	•										
annex A3	•	•	•	•	٠	•										
annex A4	•	•	•	•	•	•										
annex A5	•	•	•	•	٠	•										
50 •	•	•	•	•	٠	•										
5 •	•	•	•	•	٠	•										
0-35 Pt3 CN2	•	•	•	٠	٠	•										
053 method 36	•	•	•	•	٠	•										
33 method 14 🛛 🔴	•	•	•	•	٠	•										
art F12 🛛 🔴	•	•	•	•	٠	•										
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t2.1 Ka	•	•	•	•	٠	•										
t2.1 Kb		•	•	•	٠	•										
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est Standard ype	Origin	Test Standard Method	SiS	Sip	ССТ	AtmosfärLite	Atmosfär	Atmosfär Premium Lite	Atmosfär Premium	ACC01	ACC25	ACC29	ACC32	ACC34	ACC112	ACC47	ACC30	ACC90	ACC4
йhс	German	месной DIN 50 017-КК		•	•	•	•		Prennum										
	German	DIN 50 017-KTW			•	•	•	•											
	German	DIN 50 021-CASS				•	•	•	•			-			_				
	German	DIN 50 021-ESS	•	•	•	•	•	•	•										
	German	DIN 50 021-SS	•	•	•	•	•	•	•										
	German	VDA 621-421 (Changing Climate)			•	•	•	•	•										
	German	VDA 621-421 (Constant Climate)			•	•	•	•	•										
	German	VG 95 210	•	•	•	•	•	•	•			_							
	ISO / IEC / EN	EN 13523-8	•	•	•	•	•	•	•										
	ISO / IEC / EN	EN 60068-2-11	•	•	•	•	•	•	•										
S	ISO / IEC / EN	EN 60512-11-6	•	•	•	•	•	•	•										
Idard	ISO / IEC / EN	EN ISO 4541			•	•	•	•	•										
t Star	ISO / IEC / EN	EN ISO 7253	•	•	•	•	•	•	•										
European Test Standards	ISO / IEC / EN	IEC 60068-2-11	•	•	•	•	•	•	•										
opeal	ISO / IEC / EN	IEC 60068-2-52 Methods 1-2			•	•	•	•	•										
Eur	ISO / IEC / EN	IEC 60068-2-52 Methods 1-6			•	•	•	•	•									•	
	ISO / IEC / EN	IEC 60068-2-52 Methods 7-8			•	•	•	•	•							•			•
	ISO / IEC / EN	ISO 16701				•	•	•	•										
	ISO / IEC / EN	ISO 3768	•	•	•	•	•	•	•										
	ISO / IEC / EN	ISO 3769	•	•	•	•	•	•	•										
	ISO / IEC / EN	ISO 3770	•	•	•	•	•	•	•										
	ISO / IEC / EN	ISO 6270-2 (AHT)			•	•	•	•	•										
	ISO / IEC / EN	ISO 6270-2 (AT)			•	•	•	•	•										
	ISO / IEC / EN	ISO 6270-2 (CH)		•	•	•	•	•	•										
	ISO / IEC / EN	ISO 7253	•	•	•	•	٠	•	•										
	ISO / IEC / EN	ISO 9227	•	•	•	•	•	•	•										

					Ascott C	hambers (See fu	ll descriptior		Optional Accessories (See full descriptions on pages 10–11)											
Test Standard Type	Origin	Test Standard Method	SiS	SiP	CCT	AtmosfärLite	Atmosfär	Atmosfär Premium Lite	Atmosfär Premium	ACCO1	ACC25	ACC29	ACC32	ACC34	ACC112	ACC47	ACC30	ACC90	ACC42	
د	ISO / IEC / EN	ISO11997-Cycle A			•	•	•	•	•							•			•	
pean	ISO / IEC / EN	ISO11997-Cycle B			•	•	•	•	•									•		
European Test Standards	ISO / IEC / EN	ISO11997-Cycle D			•	•	•	•	•							•				
Te	ISO / IEC / EN	IS014993			•	•	•	•	•							•			•	
ts sa	Australian	AS 2331 meth.3.1	•	•	•	•	•	•	•											
Other Test Standards	Australian	AS 2331 meth.3.2	•	•	•	•	•	•	•											
88	Australian	AS 2331 meth.3.3	•	•	•	•	•	•	•											
ъ К	Japanese	JIS H 8502 M1	•	•	•	•	•	•	•											
Japanese Test Standards	Japanese	JIS H 8502 M2	•	•	•	•	•	•	•											
Japai st Sta	Japanese	JIS H 8502 M3	•	•	•	•	•	•	•											
<u>a</u>	Japanese	JIS Z 2371	•	•	•	٠	•	•	•											
KEY		omplies with Test Standard w omplies with test standard w	-				-	est standard with 12 or ACC29 on CCT		ed. (Fully co	omplies v	with test	standard	with 450	L Capaci	ty chamb	er and al	bove.	

Partners in environmental testing for automotive manufacturers around the world



Accessory Descriptions

ACCO1 – Kit for Renault ECC-1 / D17-2028 Compliance

A comprehensive kit of all necessary accessories to equip an Ascott chamber for compliance with Renault D17-2028 & RNES-G-0005 which is more commonly known as ECC-1.

The kit includes ACC42 Wall Wash system, ACC47 Rapid Transition Heater Blower system, ACC82 Insulated Window Cover, ACC102 Salt Solution Consumption Indicator, ACC108 Fallout Measuring Kit and ACC25 an increased Salt Fog Fallout system to achieve the required fallout of Sml/80cm²/hour.

The Ascott ECC1 Kit has been approved by Renault as compliant.

Note: Kit supplied as standard on all Atmosfär Premium models.



ACC25 – Additional Atomisers for Increased Fallout Rates

Additional salt spray atomiser(s) and associated pump(s) fitted to the chamber, to generate higher fall-out rates of 2.0 to 5.5ml/80cm²/hour, which

is required during the salt spray phase of test standards VDA 233-102, Renault D17 2028 (ECC1), SAE J 2334 Method C and RNES-G-0005.

Note: Option ACC25 is not required if option ACC01 is ordered with a chamber, and is it fitted as standard on all Atmosfär Premium models.

ACC29 – Refrigeration & Humidity Control Unit

. Avai

A separate free standing air temperature and humidity conditioning unit (ATCU), capable of refrigerating a CCT or an Atmosfär chamber down to -20°C or -40°C

The ATCU is connected to the chamber by corrosion resistant insulated rigid and inlet 6 outlet connections (separate optional accessory ACC29/INT).

Ascott manufacture different variations of ATCU to suit many customer applications, please speak with your Ascott sales representative for the correct solution for your requirements.

- Available with air cooled or water cooled connections
- Available with or without psychrometric humidity control (Psychrometric is recommended for extended humidity periods 90%RH and above)
- Available with temperature range down to -20°C or -40°C.

Note: All versions of ACC29 require the chamber to be pre-equipped with option: ACC29/INT/****.

ACC32 – Water Fog Humidity Generation



This option provides a second solution line, independent pumping and delivery system and additional reservoir. It is most commonly used with

water to create high humidity conditions (95 -100% RH) by spraying water as a fog, this is a requirement of some standards such as SAE J 2334, GMW 14872 & GMW9540P.

ACC34 – Liquid Immersion



Under programmed control, heated immersion liquid (usually salt water heated to a user adjustable temperature up to +50°C/+122°F) is

automatically pumped from the holding tank into the chamber, immersing the test samples. The liquid is automatically returned to the holding tank at the end of the immersion period.

This option can be fitted to any Ascott CCT or Atmosfär chamber and can be programmed to immerse the samples at any point during the test. Immersion is a requirement of standards Hyundai CCT-C, CCT-D, Honda 5100Z & ASTM G44.

Note: All versions of ACC34 require the chamber to be preequipped with option: ACC32/INT/****.

ACC112 – Midi Dehumidification Unit



This option provides a free standing, air circulating, chiller / dehumidifier unit. It takes air from within the main chamber, chills and dehumidifies this air, and returns it to the chamber by corrosion resistant insulated rigid and inlet 6 outlet

connections (separate optional accessory ACC112/INT).

This therefore reduces the minimum operating temperature and humidity range that can be achieved inside the chamber to 20°C, which would otherwise be the same as the temperature and humidity of the room in which the chamber is located.

Note: All versions of ACC112 require the chamber to be pre-equipped with option ACC112/INT/****.

ACC47 – Blower Heater Add On Accessory

Ascott offers two versions of the ACC47 Blower Heater add on Accessory :

- ACC47/1-7 enables a rapid transition from salt spray at +35°C to drying at +70°C within 30 minutes.
- ACC47/8-11 enables an Ultra-rapid transition from salt spray at +35°C to drying at +70°C within 15mins, and to also achieve a maximum operating temperature of +80°C.



The blower heater assists in increasing and decreasing the chamber temperature and also decreasing humidity process values, which is a requirement of test standards such as JASO M609

, CCT-1, and IEC 60068-2-52. This is achieved by introducing ambient air from the local area in which the equipment is located by means of a forced air blower and ball valve.

Note: ACC47 is already fitted as standard with ACC01 & ACC80 accessories, and fitted to all Atmosfär Premium Chamber as standard.

Cyclic Corrosion Test Profiles

ACC30 – Salt Spray (Vertically Down)



This option comprises of multiple spray nozzles situated at high level inside a cyclic chamber through which salt water is sprayed directly onto the samples

on test beneath. The spray time is adjustable and can be programmed to occur automatically at pre-determined point(s) during the test. The salt water to be sprayed is held within a separate 160 Litre capacity holding tank, at ambient temperature (a heated holding tank can be quoted on request). This test is a requirement of some automotive CCT standards, such as; GM9540P & SAEJ2334.

Note: This option is performed by the oscillating spray bar which is fitted to all Atmosfär Chambers as standard

ACC42 – Wall Wash Facility



This option comprises of a water spray system to automatically wash the walls with water for a user adjustable number of

minutes, at programmable

points within a corrosion test cycle. This is required for some automotive standards such as Renault D17 2028 or RNES-G-005 or ECC-1. It is also used when rapid cooling is required for JASO M 609, CCT-1, IEC 60068-2-52 and many other test standards.

Note: This accessory is fitted as standard with ACCO1 ECC1 Kit and all Atmosfär Premium Chambers.

ACC90 – Dehumidifier



standing, mains powered, ambient air dehumidifier unit for use with option ACC80. It takes air from the room in which it is located.

dehumidifies this air, and delivers it to the CCT chamber air inlet, via a flexible hose.

This therefore reduces the minimum operating humidity range that can be achieved inside the chamber, which would otherwise be the same as the room in which the chamber is located.

Note: ACC90 requires the chamber to be pre-equipped with ACC80 interface (available separately).

Find the exact chamber for your requirements

Select a standard to test to. and find the perfect Ascott chamber.



www.ascott-analytical.com/chamber-selector/

CCT-1 / JASO M 609 / JASO M 610



CETP 00.00-L-467 (Ford/Volvo ACT-2, VCS1027,1449, TPJLR-52-265)



D17 2028 (Renault ECC1)



P-VW 1200, 1209 & 1210 (vw/Audi)



VDA 233-102



5100Z-SGO-A000 (Honda)





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.

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ascott Corrosion Test Chambers

Testing climate resistance to the limit