



# Salt Spray Corrosion Test Cabinets

Test both components and coated test panels across  
the whole spectrum of industry.

[www.cw-spec.com](http://www.cw-spec.com)



C&W cabinets are widely used to test both components and coated test panels across the whole spectrum of industry. The design ensures that they meet or exceed the requirements laid down in all major national, international and corporate standards. Pioneering designs have made C&W the UK leader in the manufacture of accelerated corrosion and environmental test cabinets.

The C&W Corrosion Test Cabinets are designed to continuously deliver the precise environmental test conditions demanded by modern industry. Through their reliability, ease of operation and robust construction, C&W salt spray cabinets have gained worldwide acceptance with applications in all major sectors of automotive manufacture as well as the paint, surface and coatings, chemical, electronics, aerospace, military and offshore industries.



Sophisticated lucite atomiser for baffle free mist generation ensuring precise fallout throughout the chamber.



Accurate salt solution flow control via a variable speed, heavy duty peristaltic pump and flowmeter. This ensures precise collection rates and eliminates blockage.

## Optimum Operation

Effective corrosion testing requires close operational control and total accuracy. In C&W's salt spray cabinets these criteria are assured by:

- ✓ Easy access for filling and sterilisation to prevent excessive growth of algae.
- ✓ Mobile External Salt Solution Reservoir with integral filter systems. 114 litre capacity, giving up to 14 days continuous operation depending on model size.
- ✓ Air regulator and gauge to control and monitor the air pressure required for precise salt spray distribution.
- ✓ Flowmeter to accurately monitor salt solution flow.
- ✓ Sample Racks are supplied as standard to accept panels or suspend samples.
- ✓ Optional low level alarm system available.

## Precise Control

- ✓ Cabinet temperature control: "Soft touch" waterproof membrane keypad control panel with user friendly tactile keypads giving full digital test display.
- ✓ Range ambient to 55°C. +/- 1°C.
- ✓ Temperature Control by N.T.C. Sensor.
- ✓ Humidifier: Automatic self-filling humidifier tower for compressed air saturation and heating with digital display of temperature set point. Range: Ambient to 65°C +/-1°C. Tower includes incoloy heater, over temperature protection and air diffusers to create bubble formation of air within the tower to produce totally saturated and heated air. With low water level protection.
- ✓ Programme Control: The microprocessor controller has the capacity to store up to seven different test programmes.
- ✓ Cycle run and cycle left counter with end of test facility.
- ✓ Intermittent test facility for spray/dry/air purge cycles.
- ✓ Fully adjustable salt spray/dry cycles from continuous and 0 to 9999 minutes.
- ✓ Air Purge: to remove corrosive air borne salt prior to sample inspection. This can be done manually or it can be included in a program to work automatically.



## Standards

### British/ISO/EN Standards:

EN-ISO 7253, BS 3900 F12, BS 3900 F4, BS 2011 Part2:1 ka,  
EN 60068.2-52 kb, BS 5466, BS 7479, BS 3900 F18, ISO 20340, ISO  
11 997, ISO 9227, ISO 3768.

### German Standards:

DIN 50021, VG 95332/4, VG 95210/2

### American Standards:

ASTM B117, ASTM D5894, ASTM G85 (1,2,3+5), ASTM B368,  
SAE J2334

### French Standards:

NFX 41-002, CT. UOI OIA, NFA 91-101, PNX 14-002

### Japanese Standards:

JIS Z 2371, JIS H 8502, JASCO M 6009

### Corporate Standards:

Ford, Jaguar, Land Rover, G.M, Toyota, Honda, Nissan, Renault,  
Peugeot, Citroen, Volvo, VW, Audi, BMW



## Warranty

*Subject to agreed maintenance procedures a two year warranty is available. The standard warranty is one year.*



**Corrosion resistant construction throughout.**



**Low maintenance - high quality.**

## Design Benefits

All C&W cabinets with their clean , functional design are manufactured from high quality materials selected specifically for this application:

- ✓ Specially formulated fire retardant glass reinforced polyester (GRP) with high chemical and temperature tolerance – ivory white in colour.
- ✓ Apex lids are formed in a range of composite materials depending on test requirements and supported by gas springs to ensure smooth operation and an effective seal when closed. Fully insulated.
- ✓ Ergonomically designed control panel.
- ✓ Over-temperature protection – factory set.
- ✓ Installation in areas of restricted access is made easier due to the compact design aided by wheels and removable lids.

## Cabinet Variants

C&W manufactures a wide range of corrosion cabinets including conventional salt spray cabinets, cyclic prohesion cabinets, CASS cabinets, combination salt spray/humidity cabinets and combination salt spray/ prohesion-humidity cabinets.

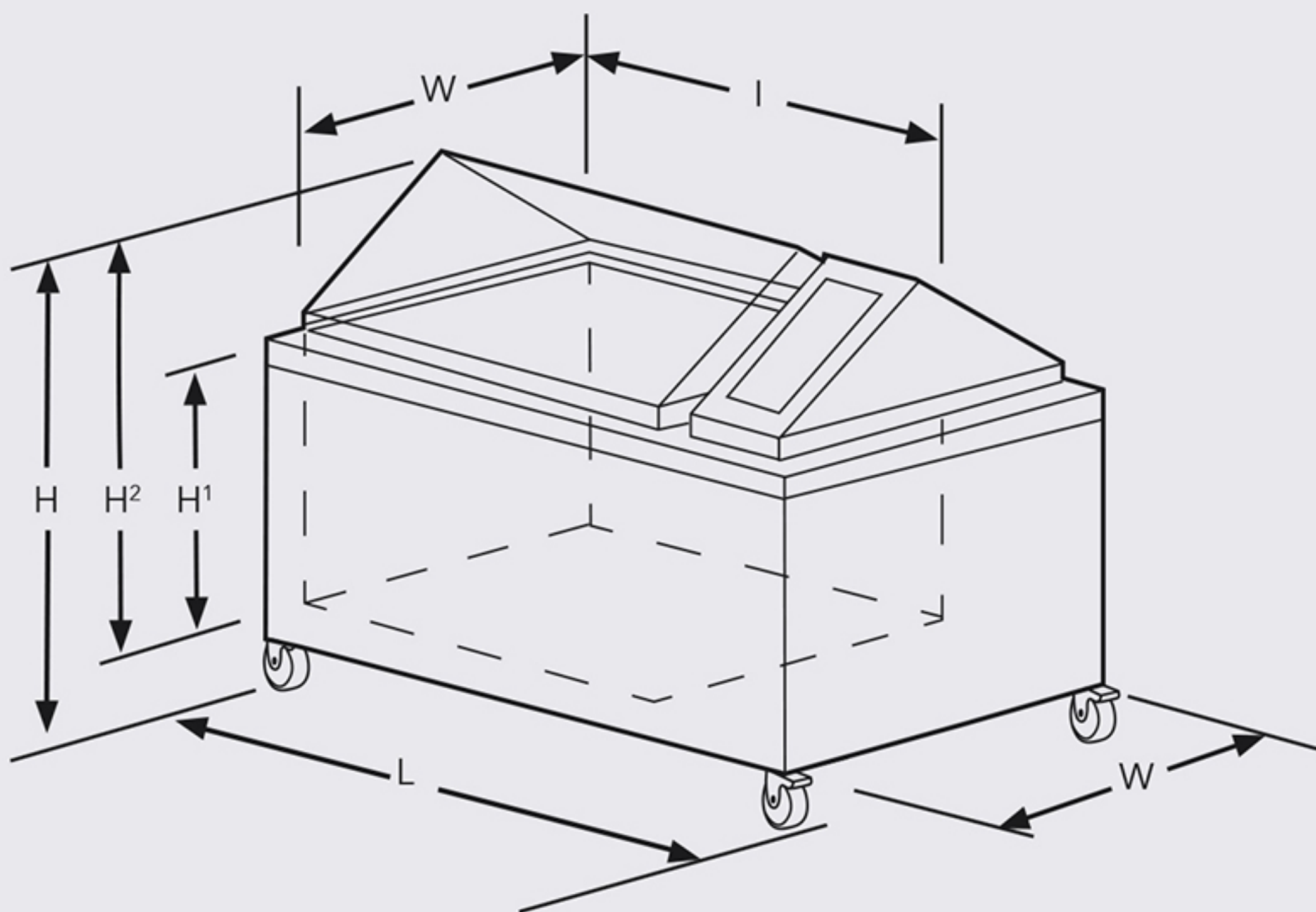
- ▶ **Combination salt spray/cyclic prohesion cabinets**  
These cabinets perform both standard salt spray and cyclic Prohesion® functions independently, an ideal solution when space is at a premium and test requirements do not justify separate test cabinets for each function.
- ▶ **CASS Cabinets**  
Developed to carry out all standard salt spray and high temperature CASS tests typically employed when corrosion testing chrome plating on steel and plastic.
- ▶ **Prohesion®**  
Prohesion® cabinets, originally developed by C&W, simulate natural weathering and provide a realistic method of accelerated corrosion testing for heavy duty industrial, marine and structural steel coatings.
- ▶ **Combination salt spray/humidity cabinets**  
This variant operates as a standard salt spray cabinet but with the added benefit that it can be switched on to operate as a humidity cabinet. When in the salt spray mode all given standards can be achieved. In humidity mode the cabinet will operate between 30°C and 80°C with a constant RH of 95-100% saturation.





## Technical Specifications

Models	CW1001 100 litre	CW1002 200 litre	CW1004 450 litre	CW1007 750 litre	CW1010 1000 litre	CW1020 2000 litre
External Dimensions	L	1000 mm	1030 mm	1370 mm	1740 mm	2750 mm
	W	600 mm	700 mm	930 mm	1230 mm	1220 mm
	H	645 mm	1035 mm	1115 mm	1365 mm	1630 mm
Internal Dimensions	I	600 mm	610 mm	825 mm	1120 mm	2000 mm
	W	450 mm	510 mm	635 mm	870 mm	1000 mm
	H <sup>1</sup>	375 mm	455 mm	620 mm	780 mm	850 mm
	H <sup>2</sup>	565 mm	660 mm	875 mm	1070 mm	1175 mm
Panel Capacity	72	80	132	210	344	516
Power Supply Amp	13	13	13	13	20	3 Phase 380 V 50/60Hz
Style	Bench Mounted	Floor Mounted				
Compressed Air	Type: Clean, dry, oil free Pressure: 2 to 4 bar (30 to 60 psi)		Flow: 3.5cfm at 15 psi Connection: 10 mm ID plastic pipe			6 to 8 bar (90 to 120 psi)



Power Supply	230 V 50/60Hz single phase, other voltages on request
Water Type	De-ionised or mains water below 50mg/litre TDS
Water Pressure	2 to 4 bar (30 to 60 psi)
Water Connection	10 mm ID plastic pipe
Drain	36 mm outside diameter plastic pipe to liquid waste with air breather / vent pipe connected
Reservoir With Lid	Supplied on castors with internal solution filter 500 mm x 620 mm x 540 mm (L x W x H)

## Optional Accessories

- + Compressor switch – for automatic switch-over to stand-by or regular air supply.
- + Entry ports – for cable access to monitoring equipment or power induction.
- + External salt fog collection vessels.
- + Compressor – available for continuous use or stand-by function: high specification, oil free.
- + De-Ioniser & water filters – recommended for areas with hard water or high total dissolved solids (50mg/litre TDS).
- + Special racking – to support components/samples in test areas as required.
- + Low reservoir alarm.
- + Salt fog condenser venting system.

All cabinets are CE marked and have calibration traceable to international standards. Certificates of Conformity are supplied on request. Due to continuous development we reserve the right to introduce improvements and /or modify specifications without prior notice.