

CW CCT

CYCLIC CORROSION TEST CABINETS



CW SPECIALIST EQUIPMENT LIMITED



CERT No. 3102

CYCLIC CORROSION TEST

Pioneering designs have made **CW** the UK leader in the manufacture of accelerated corrosion and environmental test cabinets. The **CW** CCT range maintains this tradition being designed to deliver the precise environmental test conditions demanded by modern industry and to do so time after time after time. Their reliability, ease of operation and robust construction has led to their use worldwide in all major sectors of automotive manufacture as well as the paint, plastics, packaging, electronics, aerospace, military and offshore industries.

OPERATING MODES

The **CW** CCT cabinet provides a full range of environmental test conditions including:

- Conventional salt spray/salt fog
- High humidity, 98% RH, at constant or cyclic temperatures
- Dry heat - ambient to 70°C
- Forced air drying
- Dwell and ramp functions
- Variable humidity option, 10%-98% RH, from ambient to 70°C

With its user-friendly, IBM compatible programme logic controller, any one or any combination of these conditions can be selected, programmed in any sequence and for any pre-set time. CCT cabinets can also be used in single mode as a:

- Cyclic Prohesion[®] Cabinet
- CASS Cabinet
- Conventional Salt Spray/Salt Fog Cabinet
- Humidity Cabinet



STANDARDS AND ACCREDITATION

CW CCT cabinets conform to all leading corporate, national and international standards including:

- ISO 7253
- ToyotaTSH 1555G
- Ford EU B 153-2
- BS 3900 F12
- VDA 621-415, VW-1210-C
- Renault 3C
- JIS-K 5622-7
- SWAAT + Mastmaasis
- Honda 5100Z
- ASTM B117
- Rover RES 30 CT 107
- GM 9540 P
- DIN 50.021
- Nissan M0007, CCT I, II & IV
- Unichem 692 & 741

All cabinets are **CE** marked and have calibration traceable to NAMAS (UKAS). Certificates of conformance are supplied.

DESIGN BENEFITS

CCT cabinets, with their clean, functional design are manufactured from high quality materials selected specifically for this application:

- Specially formulated fire retardant GRP with high chemical and temperature tolerance
- Corrosion resistant construction throughout
- Wet or dry seal option
- 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
- Ergonomically designed control panel
- Security keylock system to prevent unauthorised programme access
- Transportation in areas of restricted access is made easier due to the compact design aided by removable lids and base frames

CABINETS - CCT

PRECISE CONTROL

CW CCT cabinets are designed for ease of operation. All units incorporate a microprocessor controller with the capacity to hold up to 20 unique programmes with unlimited event entries. Rapid programme selection, manual over-ride and the facility to create new programmes to meet a specific need puts the operator in total control. A standard RS 232 port and software package permits remote programming, control and data logging.

The ability to monitor cycles, events and functions is made possible by the comprehensive package of control and display features:

- Temperature recorder with ON/OFF control for individual tests
- Full visual display of all events, cycles and test conditions
- Programme run hour counter with 'End of Test' facility
- Accurate salt solution flow control via a variable speed, heavy duty peristaltic pump and flow meter. This ensures precise collection rates and eliminates atomizer blockage
- Air regulator and gauge to control and monitor the air pressure required for precise salt spray rates

OPTIMUM OPERATION

Effective corrosion testing requires rapid transition between test regimes with minimum fluctuation. In **CW**'s CCT cabinets these criteria are assured by:

- Sophisticated atomiser ensuring even distribution of salt spray and precise collection rates throughout the chamber
- Automatic self filling humidifier system for compressed air saturation. Overheating and low water protection. Fully adjustable water temperature control with digital display. Dry/moist air facility included
- Air purge to remove corrosive air bourn salt fog prior to sample inspection
- Mobile, external salt solution reservoir with integral filter system. 114 litres capacity giving approximately 10 days continuous operation. Optional low level alarm system available. Easy access for filling and sterilisation to prevent excessive growth of algae
- Internal humidification system for high humidity generation, 98% RH, with automatic level control. Variable humidity option available
- Sample racks designed to accept panels supplied as standard. Special racks for sample suspension available on request



CW

PRODUCT RANGE

In addition to the CCT range **CW** also manufactures:

SALT SPRAY CABINETS

A range that meets all international and corporate standards.

HUMIDITY CABINETS

For high humidity conditions with constant or cyclic temperatures.

HUMIDITY CONDITIONING CABINETS

These provide 10% to 98% variable RH, plus variable temperatures between 20°C and 65°C.

PROHESION® CABINETS

The original cabinet now widely used for cyclic weathering tests on industrial and marine coatings.

CONDENSATION CABINETS

This range operates to BS 3900F4, ISO 6270 and the Cleveland Condensation Test.

SALINE SOAK CABINETS

Units can be used as either Saline or Water Soak cabinets. Suitable for testing large samples.

SULPHUR DIOXIDE CABINETS

The Kesternich SO₂ corrosion test cabinets are bench mounted, with a 300 litre capacity.

COMBINATION SALT SPRAY / HUMIDITY CABINETS

Units can be used in either salt spray or humidity mode.

CASS CABINETS to ASTM B368.

SPECIAL PURPOSE

To meet specified customer requirements.

WORLDWIDE REPRESENTATION

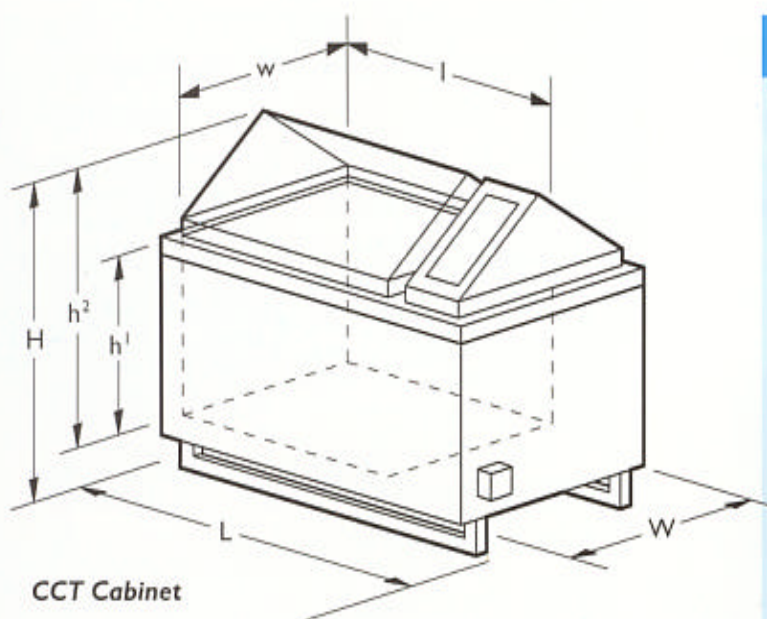
CW cabinets are installed worldwide and the company is represented in:

Australia	India	Netherlands
Belgium	Indonesia	Singapore
China	Italy	South Africa
Denmark	Iran	Spain
France	Israel	Taiwan
Germany	Japan	Thailand
Greece	Korea	Turkey
Hong Kong	Malaysia	USA

QUALITY ASSURED

All **CW** cabinets are manufactured to BS EN ISO 9002. Subject to agreed maintenance procedures a two year warranty is available - generally UK only. The standard warranty is one year.

		STANDARD MODELS			
		SF/200/CCT 200 litres	SF/450/CCT 450 litres	SF/1000/CCT 1000 litres	SF/2000/CCT 2000 litres
SIZE EXTERNAL MAXIMUM (mm)	L	1030	1370	1960	2400
	W	700	930	1335	1200
	H	1050	1130	1410	1645
SIZE INTERNAL MAXIMUM (mm)	l	610	825	1465	2000
	w	510	635	1040	1000
	h ¹	455	620	720	850
	h ²	660	875	1065	1175
SAMPLE RACKS	QUANTITY	4	6	8	12
	CAPACITY - STD. PANELS 150 X100	76	132	344	516
SERVICES REQUIRED	POWER SUPPLY: 230 VOLTS 50/60 Hz SINGLE PHASE OTHER VOLTAGES AVAILABLE ON REQUEST			380 VOLTS 50/60Hz 3 PHASE	
ELECTRICAL	13 AMP	13 AMP	32 AMP	16 AMPS PER PHASE	
COMPRESSED AIR	TYPE Clean, dry and oil free FLOW 3.5 cfm at 15 psi PRESSURE 30 to 60 psi (2 to 4 BAR) CONNECTION 10mm ID Plastic pipe			90 to 120 psi 6 to 8 BAR	
WATER	TYPE De-ionised or mains water below 50mg/litre TDS PRESSURE 30 to 60 psi (2 to 4 BAR) CONNECTION 10mm ID Plastic pipe				
DRAIN	36mm OD Plastic pipe to liquid waste. Air breather / vent pipe connected to drain to atmosphere				



OPTIONAL ACCESSORIES

- LOW RESERVOIR ALARM
- EXTERNAL SALT FOG COLLECTION VESSELS
- SALT FOG CONDENSER VENTING SYSTEM
- VARIABLE HUMIDITY - 15%RH to 98%RH with controlled temperature.
- COMPRESSOR - available for continuous use or stand-by function; high specification, oil free.
- COMPRESSOR SWITCH - for automatic switch-over to stand-by or regular air supply.
- DE-IONISER & WATER FILTERS - recommended for areas with hard water or high total dissolved solids (50mg/litre TDS).
- ENTRY PORTS - for cable access to monitoring equipment or power introduction.
- SPECIAL RACKING - to support components/samples in test area as required.