Every chamber is specially designed to be within the relative international standard for each kind of test. This characteristic is extremely important for obtaining accurate and realistic results. The EQUILAM chambers are widely used for several industrial sectors, such as automotive, paint and varnish, aerospace, military, electronic, chemical industry, as well as universities and education institutes.

**EQUILAM CHAMBERS CHARACTERISTICS**

All of the chambers were designed to meet a specific standard. We recommend that the specific corrosive agent should be used for each chamber, as there are several kinds of them. For instance, the Salt Spray Chamber should never be used as a Cass Test Chamber, or the Kesternich-SO₂ chamber should never be used as a Humid Chamber, since the chemical combination of the chambers affects the test results.

**SALT SPRAY**

**SS 600e • SS 600 • SS 1000e • SS 1300 • SS 3000**

The SS series chamber creates a saturated humid atmosphere with NaCl, which is completely controlled. The conventional Salt Spray has an indirect heating system that involves the whole chamber with a water jacket, according to the standards.

**STANDARDS:**
ASTM B 117; DIN 50021-SS; JIS Z 2371; BS 3900;
AFNOR - A 05 - 101; DIN EN ISO 9227; ABNT - NBR 8094;
BSI - 7479; MIL 810F.

**CORPORATIVE STANDARDS:**
Volkswagen/Audi; Ford; GM; Fiat; Honda; Nissan; Peugeot; Renault; Citroën; Yamaha; Embraer.

**CYCLIC CORROSION TEST**

**SS 600 G1 • SS 1300 G1 • SS 1500 G1 • SS 3000 G1**

The SS G1 series creates different corrosive atmosphere conditions in which the samples are exposed to, such as: Salt Spray – Fog Mode, Saturated Humidity, Drying – Forced Air, Drying – Natural Air, Prohesion, Rest, Gas Injection (SO₂) – optional, according to ASTM G 85 – A.5.

**STANDARDS:**
ASTM D 5894; ASTM G 85; MIL - STD 810F - Method 509.4;
SWAAT Test; PSA Peugeot Citroën B 217130 Ap. 3.
The custom CCT Series was developed in order to meet the specific standards of each customer.

**STANDARDS:**

**MAIN FEATURES:**
- Programmable Logic Controller – PLC
- Touch Screen
- The programs are unlocked and the test specifications can be changed and stored by the user.
- Friendly Software – easy to program.

The CASS/ASS test chambers are made of a special resin which stands the aggressiveness of acid environments and high temperatures, which improves the equipment's useful life.

**STANDARDS:**
ASTM B 368, DIN 50021 - CASS - ASS, ISO 9227, ABNT NBR 8824, ABNT NBR 8823, SWAAT Test;

**CORPORATIVE STANDARDS:**
Volkswagen/Audi; Ford; GM; Fiat; Honda; Nissan; Peugeot; Renault; Citroën; Yamaha; Embraer.

The SSUM and KEQUM series chambers create a controlled saturated and humid atmosphere which is heated, simulating extreme relative humidity climate.

**STANDARDS:**

*The KEQUM chambers might also attend the DIN 50958 – Corrodkote standard.

The KEQ series chambers create an acid and humid atmosphere completely controlled. The samples are exposed to that atmosphere, which simulates the actual conditions, such as: gases from engines, heating systems, industrial atmosphere, acid rain, and others.

**STANDARDS:**
DIN 50018, DIN EN ISO 6988, ASTM G 87, ABNT-NBR 8096
ULTRAVIOLET CHAMBER

EQUV Series

The chamber is totally made of stainless steel and simulates the ultraviolet irradiation A or B through 8 fluorescent 40W lamps. It was designed for testing samples at accelerated weathering, reproducing atmospheres with UVA/UVB irradiation (heat/humid) with condensation/thermal shock, simulating the effects of sunlight, rain and dew over the samples. Therefore, the EQUV Chamber performs degradation and aging of the samples, causing bright loss, color loss, turbidity, resistance loss, blisters, disintegration and oxidation. This way, the chamber helps the development of new materials and the improvement of those which are already used by making them more resistant to a high levelled incidence of UVA and UVB, rain and dew environment. The EQUV Chambers are used very often by the Paint, Automotive, Plastics, Wood and Adhesives industry, by research institutes, universities, and on.

STANDARDS:

BLISTERING TANK

QCT Tank

This equipment tests the paint layer exposed to the blister phenomenon on paints through humidity/temperature. The Blistering Tank is able to expose 8 samples (85mm x 165mm each) simultaneously. In addition, it features a controller and a digital indicator of temperature. This chamber is completely made of fiber glass.

STANDARDS:
Renault–Peugeot D 27 1571, and others.

IMMERSION TANK

This equipment was designed for immersion tests in deionized water tank or NaCl solution tank (for any other solutions, please contact us). It is completely made of Fiber Glass. The chamber digital microprocessor regulates the temperature and the deionized water supply, which feeds the chamber automatically.

STANDARDS:
Renault–Peugeot; Citroën D27 1327; ASTM, DIN, JIS; etc.

XENON CHAMBER

XEQUM Series

The XEQUM chambers were developed in order to simulate humid atmosphere with solar irradiation. The Xenon chambers simulate the aging process over the samples, which causes bright loss, resistance loss, disintegration etc. This way, the chamber helps the development of new materials and the improvement of those which are already used by making them more resistant to solar beams and humidity. These chambers are used very often by Paint, Automotive, Plastics, Wood, Pharmaceuticals, Cosmetics and Adhesives industry, research institutes, universities, and on.

STANDARDS:

OZONE CHAMBER

EQOT Series

The Ozone test chamber is specially designed for determining the accelerated deterioration of a wide number of materials, as rubber, plastics, and on.

STANDARDS:
**ENVIRONMENTAL CHAMBER**
- Shaker • Vibration
- Microhardness Tester • Hardness Tester
- Freezers

**ROCKWELL • BRINELL HARDNESS TESTER**
- Fully automatic.
- Load Cell

**FREEZERS FOR LABORATORIES**
- -10°C to -45°C
- -30°C to -60°C
- -60°C to -85°C

**ENVIRONMENTAL CHAMBER**
- Thermal Shock
- Dust Test • Stress Test
- Burn-in • Drive-in • Walk-in
- Altitude

**MICROHARDNESS TESTER • HARDNESS TESTER**
- Vickers • Knoop • KC

**AUTOMATIC HARNESS SYSTEM**
- Eliminates the human error.
- Micro Vickers • Vickers
- Brinell • Knoop • Martens

**HORIZONTAL FLAMABILITY CHAMBER**

**ROCKWELL HARDNESS TESTER**
- Surface – standard
- Rockwell for plastics

**METALOGRAPHIC SAMPLES PREPARATION / MATERIALS FOR METALOGRAPHY**

**VERTICAL FLAMABILITY CHAMBER**

**USE OUR LABORATORY**

EQUILAM also performs corrosion tests for other companies. Our laboratory will be soon achieving the ISO IEC 17025.

**EQUILAM ALSO OFFERS:**
- Brim and Carbon Determiner
- Fusion Point Equipment
- Analytical Scales
- Precision Scales
- Double Boiler – Ultrathermostatic / Special - Ultrasonic
- Heating Plates with Magnetic Agitation
- Water Deionizers – Distillers
- Hardness Tester – Shore A, C, D, DO, O, OO

- Dry-Heat Sterilizer
- Muffle and Tubular Furnace
- Layers and Wall Thickness Tester
- pH Tester (Portable and desktop)
- Measure Microscopes – Stereoscopes – Biologic – Metalographic
- Microscopes – Stereoscopes and Metalographics
- Hardness, weight, thickness and other standards.

For further information please visit www.equilam.com, where you are able to download our equipment catalogues in PDF format.