### AWTA PRODUCT TESTING



## ACCELERATED WEATHERING TESTING



### **AWTA PRODUCT TESTING**

## ENVIRONMENTAL CHAMBER

Environmental chambers can cycle products through extremes of temperature and humidity, simulating the effects of harsh and changing weather.

#### **Test Capability**

- Broad temperature and humidity range (-40°C to 120°C)
- Ability to run automated cyclic tests
- Computer programmable control system
- Monitor your product whilst inside the chamber, if conditions allow
- Large capacity
  - 2m (W) x 1.8m (H) x 3.8m (L)
- Ability to monitor and record conditions inside the chamber during tests
- Flexibility to run cycles 24 hours, 7 days a week



# Accelerated Weathering Services

## SALT FOG & CYCLIC CORROSION

This chamber allows the evaluation of the performance of paints, coatings and products in a harsh and humid, highly corrosive saline atmosphere. Temperature is typically 35°C, which can be varied if required. Products are exposed for specified periods to determine resistance to corrosion.

#### Test Capability

- Corrosion
- · Saline exposures with condensing humidity
- Accelerated ageing to predict product degradation in harsh condition
  - O Temperature and humidity extremes
  - Seaside/coastal
- Metal components
- Effectiveness of paints and coating formulations
- Protection from blistering, flaking and/or rusting
- · Rusting rating to international standards



# Accelerated Weathering Services

## UV & SOLAR RADIATION

UV light and solar radiation cause appearance damage, decomposition or photo degradation of materials.

#### **Test Capability**

- Xenon Arc sophisticated lamps and filter systems simulate solar radiation
  - Light and dark cycling
  - O Temperature and humidity control
  - Rainfall simulation via spray nozzles
- QUV different cycles can be run to best fit the end use of the product
  - Fluorescent UVA or UVB lamps simulate damaging short wave UV light
  - Dew production by condensing humidity with elevated temperature accelerating the effect
  - O Spray cycle if required



# SPECIALISED ACCELERATED WEATHERING TESTING

#### What is accelerated weathering?

UV radiation, temperature, humidity and corrosive environments can damage your product over time. Accelerated weathering simulates this process, making use of technology to rapidly challenge product against the elements.

#### Who needs it?

Product developers, manufacturers and service providers of valuable product that may spend its life in harsh and diverse climate conditions.

#### Industrial applications

- Automotive, transport, marine and aeronautical
- Product development
- Building and construction components
- · Plastics and textile manufacturing
- · Metal components
- Engineering



#### www.awtaproducttesting.com.au

### **AWTA PRODUCT TESTING**

#### Contact

AWTA Product Testing Level 1, 191 Racecourse Road Flemington, VIC 3031, Australia

**Tel: 03 9371 2400** Fax: 03 9371 2499

Email: producttesting@awta.com.au

#### Your testing consultants:

Sean Bassett 03 9371 2421 sean.bassett@awta.com.au

Chris Campbell 03 9371 2424 chris.campbell@awta.com.au





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