



Instrument Description

Sub Folder: Exposure

Humidity/Condensation Testing Cabinets

Principle:

Exposure to high humidity or condensation can cause degradation of coated materials. Knowledge of how a coating resists water is helpful in predicting its service life. With exposure, oxidation of the base substrate, or blistering of the coating can occur, giving an indication of the performance of the coating/substrate.

Failure in testing at 100% relative humidity may be caused by several factors including a deficiency in the coating itself, contamination of the substrate, or inadequate surface preparation. Hence, it is useful for testing coatings alone, or complete coating systems.

Coating systems are determined on a pass or fail system, but the degree of failure can also be performed. A coating system is considered to pass if there is no evidence of water-related failure after a period of time.

Our test chambers are small laboratory cabinets, ranging in size from dedicated 30L through to 256L chambers capable of sub ambient testing.

Current models:



Figure: CREST
Humidity/Condensation cabinets

Typical samples:

Samples that are suitable for humidity testing include coated materials, solar panels, electrical components, adhesives, glazing products, pharmaceutical containers etc.

Standards:

Samples are prepared and tested following international standards including ASTM D 2247 – 02, and I.S EN ISO 6270.

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