

## Condensation-water Test

For some polymer materials used in outdoor, enough experience indicates the corrosion caused by moisture (especially by condensation) is more serious than any other factor. So, testing coating film resistance to humidity is an important method to evaluate coating corrosion resistance.

ISO 6270: 2007 series standards are test method standards which are used to evaluate the coatings film resistance to humidity, consists of three parts as below:

**Part 1:** Paints and varnishes -- Determination of resistance to humidity -- Part 1: Condensation (single-sided exposure)

**Part 2:** Paints and varnishes -- Determination of resistance to humidity -- Part 2: Condensation (in-cabinet exposure with heated water reservoir)

**Part 3:** Paints and varnishes -- Determination of resistance to humidity -- Part 2: Condensation (in-cabinet exposure with heated and bubble water reservoir)

In order to meet the needs of different fields and customers, **BIUGED INSTRUMENTS** designs and manufactures different types condensation-water Climatic Chambers according to different standards.

## Single-sided Exposure Condensation Chamber

**BGD 875 Single-sided Exposure Condensation Chamber** offers a test condition for determining the resistance of paint films, paint systems and related products to conditions of condensation in accordance with the requirements of coating or product specifications.

It is applicable to coatings, both on porous substrates such as wood, plaster and plasterboard and on non-porous substrates such as metal. It provides an indication of the performance likely to be obtained under severe conditions of exposure where continuous condensation occurs on the surface. The procedure can reveal failures of the coating (including blistering, staining, softening, wrinkling and embrittlement) and deterioration of the substrate.

This tester is fast, easy to use and affordable. It uses 100% condensing humidity to simulate and accelerate damage caused by rain and dew on metals, paints, and organic materials. It accelerates over natural exposures by increasing moisture temperature. The tester replaces water immersion and ordinary (non-condensing) humidity tests.

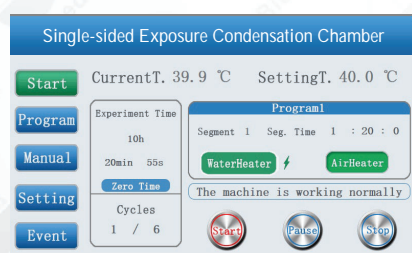
◆ Operator can set three different working conditions: humidification, natural cooling, dry and its corresponding temperature & running time. Any program including total test time and cycle times can be set freely.

- ◆ Automatic water supply
- ◆ Protector for water temperature ceiling

### Main Technical Parameters:

- ★ The angle between test panel and the level :  $(60 \pm 5)^\circ$
- ★ Test Specimens Capacity: 40 pcs  
(150mm x 70mm standard size)
- ★ Temperature Range of Working Room: RT~60°  
(Dry or condensation)
- ★ Overall Size: 1350mm x 550mm x 1295mm (L x W x H)
- ★ Weight: 130KG
- ★ Power: 220V 50Hz/60Hz; Max. power of machine: 2.0kW
- ★ **Ordering Information:**

BGD 875--- Single-sided Exposure Condensation Chamber



Operation Menu