

## ZF1800A Full-automatic Total Migration Tester



### Application

ZF1800A full-automatic migration tester is applied for determining the dissolution amount of packaging materials in different simulant soaking solutions.

- 1) Tableware, cans, food packaging films, tubes, etc.
- 2) Made from polyethylene(PE), polystyrene(PS), polypropylene(PP) or chlorinated polyvinyl chloride(CPVC).

Evaporate and dry the soaking solutions to obtain residues migrated from the specimen. The residues analysis and weighing refer to dissolution indexes in application requirements of packaging products.

The machine conforms to guidelines GB 31604.8-2016, GB 31604.1-2015, GB/T 5009.156-2016, GB/T 9740-2008, GB/T 23949-2009, YBB 00342002-2015, YBB 00102005-2015, YBB 00082002-2015.

## Features

### 1. Individual cooling and heating systems

- One chamber for heating and another cooling to save the time of alternating cold and heat.
- Automatic temperature control and dehumidification.
- Control temperature and humidity when weighing to ensure constant test conditions.

### 2. Built-in system of water bath

- Automatic water bath evaporation: water feeding, water-level detection, temperature control, evaporation and drainage.
- Automatic systems for alarming overheat and dryout. The multiple protections are to define the safe range of water temperature, water consumption for water bath, soaking solution consumption and exhaust gas.

### 3. Solution recycling system

- Evaporate the solution in a fully enclosed chamber and auto-recycle the exhaust gas.
- Avoid solution leakage to protect the operator.

### 4. Nitrogen filling protection

- Fill N<sub>2</sub> as carrier gas to support rapid evaporation testing.

### 5. Convenient operation

- Integrated testing process of water bathing, drying, weighing and evaporating. The built-in operation system with embedded ARM system is combined with touch screen to handle the mainframe.
- Unattended constant weighing and prior constant weighing of test dish effectively shorten the test time.
- Auto-feeding, auto-judgment and auto-stop.
- 18 test dishes can serve different specimens at the same time and come out independent test results.

## 6. More security consideration

- Adopt water heating instead of electric heating. Heating system is set out of the test chamber and therefore would not cause high-voltage spark in evaporation chamber.

## Specifications

<b>Test range</b>	0.2mg/dm <sup>2</sup> -167g (residue weight)/dm <sup>2</sup>
<b>Resolution</b>	0.1mg/dm <sup>2</sup>
<b>Scale parameters</b>	Measurement range: 0~200g Resolution: 0.1mg
<b>Temperature control range of water bath</b>	Room temperature~100℃
<b>Temperature control range of heating chamber</b>	Room temperature~117.9℃
<b>Temperature control range of cooling chamber</b>	0~35℃
<b>Temperature precision</b>	±0.5℃
<b>Chamber temperature uniformity</b>	±5℃
<b>Quantity of samples</b>	1-18pcs (with independent test results)
<b>Constant weighing time</b>	2h(conventional)
<b>Evaporating dish volume</b>	0-200ml
<b>Dimensions</b>	Mainframe: L×W×H 178cm×93cm×145cm Recycling system: L×W×H 120cm×88cm×170cm
<b>Power</b>	220V, 50Hz, 5000W

## Configuration

### A. Spare parts

NO.	Name	Remark	Quantity
1	Balance module	0~220g	2 PCS
2	Rotary tray	19 holes	1 PC
3	Evaporation beaker	Φ85mm	40 PCS
4	Funnel	Φ85mm	40 PCS
5	Cup cover	Auxiliary funnel	20 PCS
6	Standard weight	200g	1 PC
7	Power cable		1 PC
8	Recovery system control line		1 PC
9	Air switch		1 PC
10	Gas pipe	Φ8mm	1 PC
11	pressure reducing valve		1 PC
12	Cleaning spray	400ml	1 PC

#### B. Optional parts

NO.	Name	Unit	Quantity	Remark
1	Nitrogen generator			Optional
2	Air compressor			Optional

Note: GBPI is always committed to product innovation and performance improvement, accordingly product technical specifications would be changed without notice.