

# 自动表/界面张力仪— BZY100&BZY200 SURFACE TENSIOMETER – BZY100&BZY200



## Suitable for quality control, Fast measurement, Friendly interface, High repeatability

Using a 4.3-inch touch screen, all operations and information are completed or displayed on the screen.

It can be used to measure the surface interfacial tension of liquids.

Simple and fast operation.

Automatic measurement with high repeatability can be achieved for the set measurement conditions.

As a leader in the field of interface chemistry in China, our company has developed various scientific measuring instruments with high precision and intuitive operation concept. We combine long-term industry experience and high-quality manufacturing processes to achieve high accuracy and repeatable operation of measuring equipment.

One such product is the BZY100 & BZY200 surface tensiometers, which are widely used in quality control processes related to surface interfacial tension, such as emulsifier or wetting agent and cleaning agent testing. It is reliable, easy to use, independent of computers and other equipment, and can provide accurate and reliable analysis when testing a large number of samples. BZY100 & BZY200 are controlled by automatic motor to realize fast switching of accurate surface tension measurement.

#### High quality and reliable quality:

Due to the use of precise mechanical sensors and a motorized sample stage with high-precision stepping, the values measured by the hanging ring method and the hanging plate method are accurate and reliable.

#### Quick measurement preparation:

The open sample area is spacious and equipped with a smooth and precise sample stage, which is very convenient for measurement preparation during use . The equipped magnetic lock air shield prevents disturbed airflow during measurement from affecting the measurement.

# Smart measurement routines supported by the processor:

The built-in measurement program can control the motorized sample stage, ensuring that the measurement process is freeofhuman interference and can be accurately repeated. The sample stage is automatically raised and lowered, and other measurable measurement parameters can also be adjusted as needed.





### Easy handle a variety of daily tasks

The machine has built-in memory, which is convenient to save multiple sets of data.

Password management function to ensure data traceability and prevent data modification and accidental deletion.

Real-time display of measurement curves, multiple sets of data can be saved, external printers supported, and Chinese/English exchange operations supported.

## **Operates without an external PC**

BZY100 & BZY200 surface tensiometers use two measurement methods and built-in data memory, so they can be used independently to meet the needs of various purposes. The instrument is lightweight, easy to install, and can be moved quickly.

#### **Extensive data management options**

In addition to displaying the results directly on the 4.3-inch touch screen, the BZY100 & BZY200 also provide a wealth of data management options, equipped with easy-to-manage large-space data storage for quick access to all results. In addition, the measured data, together with all important parameters, can be printed out.

## **Application field**

1) Oil aging test, especially transformer oil (ASTM D-971)

2) Determination of Surfactant Effectiveness in Wetting Agents and Cleaners Test Surfactant Solution Concentration.

3) Canning approval and cleaning validation in the food industry.

4) Interfacial tension measurements for quality control and optimization of emulsifiers.

5) Cooling lubricant surface tension test.

## **Measurement methods**

 $\star$  Use the Du Nouy ring method and the Wilhelmy plate method to measure the surface tension and interfacial tension.

Manual testing of critical micelle concentration.
(CMC)





## Ensure compliance with the latest codes and standards

We attach great importance to the repeatability and standardization of the measurement results, the BZY100 & BZY200 are designed to comply with all GB/T, EU, ISO, DIN and ASTM standards for surface and interfacial tension. Satisfies partially valid norms and standards ASTM D971 Standard Test Method for Oil-Water Interfacial Tension Using the Lifting Ring Method ASTM D1331 Standard Test Method for Surface and Interfacial Tension of Surfactant Solutions ASTM D1417 Standard Method for Testing Synthetic Rubber Latex DIN EN 14210 Surfactants - Determination of the interfacial tension of surfactant solutions by the

stirrup or ring method

DIN EN 14370 Surfactants - Determination of surface tension

ISO 304 Surfactants - Determination of Surface Tension by the Pull Film Method

ISO 1409 Plastics/rubber - Polymer dispersions and rubber latexes (natural and synthetic) - Determination of surface tension by the ring method

ISO 4311 Anionic and nonionic surfactants - Determination of critical micelle concentration - Determination with hangers, stirrup rings or rings

surface tension method

OECD 115 OECD Guidelines for Testing Chemicals: Surface Tension of Aqueous Solutions

ISO 6889 Surfactants - Determination of surface tension by the pull film method

# Simple and friendly test interface, all information is clear at a glance





Model	BZY100	BZY200
Test Method*	Du Nouy Ring Method & Wilhelmy Plate Method	
Test Range	0—1000mN/m	0—1000mN/m
Resolution	0.1mN/m	0.01mN/m
Operation Method	Automatic lifting and lowering of sample stage Automatic measurement	
Display Method	4.3-inch touch screen data direct reading	
Data Method	Support data storage/view/print	
Measure Time	Normally within 60 seconds	
Data Output**	RS232 (Printer)	
Dimensions	28*20*36cm(L*W*H)	
Net Weight	8kg	
Power Supply	110V or 220V 、 30W	

Ring size: Pt wire radius is 0.185mm, ring radius is 9.55mm, ring circumference is 60mm.

\*Note: The plate/ring test method needs to be specified when ordering. The standard configuration is to choose one from the other. If the budget is sufficient, it is recommended to configure both the plate and the ring. \*\*Note: The printer is not included in the standard configuration, please purchase it as required.