

## **Automatic Interfacial Tension Tester (0.1mN/m ; 1 mg)**

### **BGD 234-1**

#### **Product Description**

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This instrument is designed in accordance with ISO 6295, ISO 1409, ASTM D1417, EN 14370, and other test methods for measuring interfacial tension of petroleum products between oils and water (Ring Methods).

It is suitable for determining interfacial tension between mineral oils and water under non-equilibrium conditions (liquid-liquid interface). It can also be used to determine the surface tension of various liquids (liquid-gas interface).



#### **Standards**

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- ISO 6295
- ISO 1409
- ASTM D1417
- EN14370

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### **Technical Specification**

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- Equipped with an advanced electromagnetic balanced force sensor, the instrument provides highly precise and reproducible testing results
- A large (5") touch screen displays the current environmental temperature, current tension, peak tension, equivalent tension, etc., making it easy to operate.
- Built-in testing methods include both platinum ring and platinum plate, allowing the operator to choose either or both
- Fully automatic operation eliminates all human error. The platinum plate locks the liquid interface automatically, the platinum ring shows the tension curve, and peak tension is locked automatically. The screen directly displays the tension values without any conversion
- Automatic full-range calibration includes weight calibration, pure water tension, and ethanol tension
- An elaborate ball screw lift system operates without noise, and its rising and falling speed can be adjusted
- The lifting bracket is designed for easy installation and disassembly of the platinum ring and platinum plate
- The operator can calibrate the force value at any time using a standard weight
- One-button peeling function ensures no drift at zero point and stable data display
- Automatic compensation for environmental temperature: using water and ethanol as standards, the tester automatically converts the sample's tension value to the equivalent at 20°C

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## Main Technical Parameters

Ordering Information	BGD 234-1	BGD 234-2
Measurement range	0-1000	0-1000
Resolution (mN/m)	0.1	0.01
Accuracy (mN/m)	0.1	0.01
Repeatability (mN/m)	0.1	0.01
Balance precision (g)	0.001	0.0001
Testing Methods	Design platinum plate and platinum ring, either one or both	
Operation Methods	Touch operation, sample plate lifts automatically, converts automatically	
Showing Method	5 inch coloured touch screen	
Weighing System	Electromagnetic Balance	
Automatic Calibration	Yes	
Data Processing Software	Optional	
Mini-printer interface	Optional	
Testing Time (sec)	In 10 sec for platinum plate; 50 sec for platinum ring	

## Disclaimer

The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Whilst we endeavour to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or condition of the product or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development