





# TESTER PETROLEUM EQUIPMENT BJL1BA1 (BPTL-218)



# **TESTER PETROLEUM EQUIPMENT BJL1BA1**

FULLY AUTOMATIC QUENCHING MEDIUM COOLING PERFORMANCE TESTER

This instrument is a fully computer-automated product that replaces earlier chart recorders. It simplifies operation, reduces manual procedures, and ensures more accurate results. The system consists of a main unit, a computer-controlled automatic testing system, a heating furnace, and a stirring system. Users only need to place the sample into the test cup and press the "Start" key on the computer; the instrument will automatically measure and save the results.

Over the years, testing methods for quenching media have evolved from the magnetic method, five-second method, and hot wire method to today's cooling curve method, transitioning from relative backwardness to advanced technology and becoming increasingly scientific and rational. The introduction of computer-automated testing has further perfected this technology, enabling fast, precise, and reliable evaluation.



Microcomputer temperature control system automatically detects the laboratory temperature and calculates the heating rate

based on the working environment to ensure temperature accuracy. The instrument housing is made of cold-rolled steel plate, treated with electrostatic spraying and high-temperature baking for easy cleaning and corrosion resistance.

The high-temperature furnace uses Swiss-imported electric heating wires as heating elements, ensuring uniform temperature and long service life.

The furnace chamber features an 8-hole cyclic heating , avoiding the common issue of heating wire burnout.

The furnace body is made of stainless steel.

#### **SPECIFICATIONS**

Model	BJL1BA1
Old Model	BPTL-218
Applicable Standards	SH/T 0220, JIS K2242 (or optionally ISO 9950)
Heating Method	Electric heating wire
Temperature Control Range	80 ± 2°C, 810 ± 2°C
Control Method	Digital Display PID Automatic Temperature Control
Temperature Control Accuracy	0.5%
Displayed Data	Process curve, cooling rate curve, characteristic temperature
Result Determination	Automatic calculation
Operating Environment	Indoor use only
Temperature	0 ~ 45°C
Relative Humidity	≤ 80%
Power Supply	AC 220V ±10% / 50Hz
Total Power	< 2 kW
Dimensions	415 x 455 x 700 mm³
Net Weight	< 40 kg
Alt Name	Fully Automatic Quenching Medium Cooling Performance Tester

### **FEATURES**

Microcomputer temperature control system automatically detects the laboratory temperature and calculates the heating rate based on the working environment to ensure temperature accuracy.

The instrument housing is made of cold-rolled steel plate, treated with electrostatic spraying and high-temperature baking for easy cleaning and corrosion resistance.

The high-temperature furnace uses Swiss-imported electric heating wires as heating elements, ensuring uniform temperature and long service life.

The furnace chamber features an 8-hole cyclic heating, avoiding the common issue of heating wire burnout.

The furnace body is made of stainless steel.

The low-temperature furnace uses mold-formed construction and aluminum bath conduction to prevent samples from splashing into the heater and causing fires.

The furnace chamber connection adopts a standard slide rail design, allowing sliding for easy maintenance.

The inner holes of the furnace chamber are equipped with anti-signal interference slots to prevent electromagnetic interference during testing, which could disrupt data collection by the silver probe.

Standard test probe testing complies with experimental standards.

Automatic test probe release requires no manual intervention.

When the furnace temperature reaches the set value, the computer prompts automatically and initiates the test.

Testable media: oils, water, quenching fluids, salt-alkali solutions, rolling cooling fluids, cutting fluids, etc.

Data acquisition uses a high-speed data acquisition card.

The instrument features an overtemperature alarm function.

Results are displayed in both curve and data formats.

Parameters are adjustable.

Stirring rate can be adjusted for different samples.

Capable of storing 500 sets of result data.

Allows simultaneous comparison of three sets of test curves.

Enables querying of any temperature or time data from the test.



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