

Automated Distillation Tester

ad-7

Ergonomic, Premium and Versatile

ad-7 automatically performs distillation test of petroleum products as well as narrow boiling range samples. 10.4 inch LCD with touch panel has been adopted for easy and intuitive operation. Peltier system is employed for cooling/ heating of the condenser and cylinder room. Premium design for extended pro use.



User-friendliness

- 10.4 inch(*) Color LCD.* 4 times larger than previous model.
- Intuitive operation by Touch Panel.
- Advanced data management software; tdas (Tanaka Data Acquisition System).

Safety

- Fire Containment system: Heater shuts down when ultraviolet sensor detects a fire, and CO₂ gas flows into the heater room (if connected to CO₂ source).
- Flask Catcher reduces the risk of breaking vapor tube of flask.
- Overheat protection: Heater shuts down automatically at the upper end of the temperature scale.

Versatility

- 200 test modes
- 5,000 test results
- RS-232C, USB port, Ethernet

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Specifications

Standard	JIS K 2254, JIS K 0066, JIS K 5601-2-3, JIS K 2435-1/2/3 ASTM D86-12, ASTM D850, ASTM D1078, ISO 3405, ISO 918, IP123, IP195, GOST2177
Test ranges	Selectable from 0 °C to 300/450 °C (fuel oil) or 0 °C to 200/450 °C (ASTM D850, D1078 with optional accessories)
Program control	Sequence control by microcomputer
Display	TFT-LCD 10.4" Color Touch-Screen with universal design GUI
Printer	Built-in, Thermal type (Paper width:80 mm, Print width:72 mm)
Barometric correction	Automatic correction by barometric pressure sensor or manually input
Temperature unit	0.1 °C or 0.2 °F
Temperature sensor	For Vapor: Pt100 For Heater: Thermocouple For Condenser: Pt100 For Receiver room: Pt100
Heater	24 V 600 W Low Mass and Low Voltage Heater, Spiral Type
Heater cooling system	Forced air cooling by propeller fan
Condenser	Brass tube (Standard) or Stainless (Option)
Condenser temperature control	Electronic cooling & heating by Peltier coolers : 0 ~ 69.9 °C
Receiver temperature control	Electronic cooling & heating by Peltier coolers : 10 ~ 50 °C
IBP detection	Photoelectric detection by Infrared LED and phototransistor
Liquid level detection	Photoelectric detection by Infrared LED and phototransistor Distillation rate: 4.5 %/min at factory (Selectable from 2 to 9 % with 0.5 % increment) Control method : PID Control
Test mode	Up to 200 test modes can be recorded
Dry point detection	Manual detection by visual confirmation Or automatic detection by Dry Point Sensor (Option, CRC thermocouple)
Safety features	(1) Overheat protection activates at the upper end of the temperature scale. ⇒ Heater shuts down. Reports by audible alarm and display. (2) Self-diagnosis for sensor break, test condition and incorrect operations. ⇒ Heater shuts down. Reports by audible alarm and display. (3) Warning device for fire ⇒ Heater shuts down. Reports by audible alarm and display. CO ₂ gas flows into the heater room if connected to CO ₂ line.
Communication port	RS-232C x 1ch : For LIMS Ethernet x 1ch : For tdas or LIMS USB x 1ch : For Flash Memory or Firmware update
Data storage	Up to 5,000 test results can be stored.
Power source	AC100V-240V 50 / 60 Hz 15 A
Size (W x D x H)	430 x 520 x 710 (mm)
Weight	55 kg

Specifications subject to change without prior notice.

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