[Overview]

The automatic distillation tester, ADM-2E, automatically performs distillation test of fuel oil and other similar petroleum products based on the "Test Method for Distillation of Petroleum Products" under ASTM D86 and JIS K2254, K2435 and K2421. Its condenser tube has a shape to be immersed in a liquid bath exactly along with the JIS test method.

Based on the achievements and experiences by our previous models, the heating and refrigeration performance of a condenser tube as well as a receiver chamber has been well upgraded thanks to the new powerful refrigerator.

Our distillation tester is widely used in Japan by many research and quality control laboratories of petroleum refining companies as well as by not a few automobile manufacturers and governmental inspection sectors. Applications using this tester also include BTX, solvents and various types of chemical products.

[Features]

Versatile display and 48 programs

Test conditions can be selected and set on a menu screen. Test progress can be confirmed and data processing mode can be selected on the display. 48 programs are built in as test conditions for your choice.

Alert display

More than 20 error messages are available as alert for operation error, inadequate input, catching fire of sample oil, mechanical or electrical error, etc.

• 100% correction function

When applying the V.CHK function, sample amount is read and 100% correction is done from 50mL, so the equivalent result as that of normal distillation can be obtained in half a time compared with a conventional method.

Making distillation curves and data management

Distillation curves are printed by a built-in printer. In addition, when using an optional GP (plotter by PC), distillation curves in more detail can be plotted on a plain paper with the scales of 0 to 300°C or 0 to 400°C. The curve data can be saved into a memory of GP for your management of data.



Safety function

Receiver chamber and cylinder can be purged by noncombustible gas (such as N2 gas). In case an earthquake with seismic intensity of 5 or more (Japanese scale) takes place, distillation is automatically stopped by a seismic sensor. 3 sensors of catching fire are equipped at the heating part, and in case oil sample catches fire, it will be effectively extinguished by a special spray nozzle and a shield.

[Specifications]

| Measuring range | 0 to 300°C (corresponding to the JIS B7410 DIST-7 thermometer) |
|------------------------------|--|
| | 0 to 400°C (corresponding to the JIS B7410 DIST-8 thermometer) |
| | 0 to 300°C (corresponding to the mercury thermometer with true |
| | temperature/submersion lines |
| Temperature display | Distillation temperature, receiver chamber temperature & condenser |
| | tube temperature; To be displayed at 0.1°C unit |
| Temperature sensor | Special type platinum resistance sensor |
| Distillation speed | 4.5 ±0.5 mL/min. or 9.0 ±1.0 mL/min. |
| Data display | LCD of 40 characters x 16 lines: |
| | Such screens of the names of 12 programs (menu), condition setting, |
| | test progress and data processing, etc. can be displayed. |
| Data output | Printer output (110mm paper width): |
| | Specified mode/report form, 1% data, distillation curve, curve drawing |
| | during distillation, copy printing of LCD display |
| | RS-232C output: |
| | 2 ports equipped (for plotter and PC) |
| Test end setting | By E.P. (end point), CUT (Vol., temp., time) or D.P. (dry point) |
| Dry point detection | Visual detection (using its exclusive switch, with preliminary alert) |
| | * Automatic detection by program is also possible. |
| Loss correction | By selecting drawing method or interpolation |
| Over distillation collection | To be corrected to 100% when recovery rate exceeds 100%. |
| Barometric collection | To be automatically done by a built-in barometer |
| Alert display | Available for operation error, inadequate setting, failure, etc. |
| Safety function | Detection and extinction of sample oil's catching fire |
| Heater | Nichrom heating element, 1kW |
| Refrigeration of heater | Cooling by fan with timer |
| Temperature of condensation | Controllable for 0 to 60°C by Peltier element |
| tube | |
| Temperature of receiver | Controllable for 15 to 40°C by Peltier element |
| chamber | |
| Power supply | 100V AC, 50/60Hz, 13A + 6A |
| | (Supplied with an outer transformer for local voltage) |
| Dimensions and weight | 460(W) x 530(D) x 590(H) mm, Net approx. 65kg |

^{*} Specifications are subject to change without prior notice according to technical improvement.

Made by:

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