

Automatic Distillation of Petroleum Products

test method

The sample is evaporated and condensed under controlled conditions, and observations are made of the temperatures at which various percentages are recovered and/or the percentages recovered at specific temperatures.

atmospheric distillation tester

- Conforms to ASTM D86, D850, D1078, EN ISO 3405, IP 123 and related specifications
- One-button start function executes completely automatic sample distillation testing
- Flask positioning function eliminates uncertain factors caused by positioning errors
- Automatic fire extinguishing system, dual flame detection, and automatic fire extinguishing function
- High-efficiency compressor cold circulation system provides high speed cooling, improving efficiency and shortening measurement interval time.

The Koehler Atmospheric Distillation Tester is designed to perform optimal distillation analyses of gasolines, kerosene, diesels, organic solvents, and benzene products to ensure conformity to rigid quality control standards. The tester automatically performs distillation testing, stores result data internally, and allows for data exportation through multiple functions.

An advanced model is available with automated machine-vision dry-point detection. This feature replaces manual observation by automatically identifying the dry point and recording synchronized video images, enabling efficient review, improved consistency, and complete traceability.

ordering information

catalog no.	description
K45750	Automatic Atmospheric Distillation Tester without Dry Point Detection, 110-230V 50-60Hz
K45750-DP	Automatic Atmospheric Distillation Tester with Dry Point Detection, 110-230V 50-60Hz

additional accessories

K45750-7	200 mL Flask
K45750-11	Orifice 32mm
K45750-12	Orifice 25 mm
K45750-13	Flask Fixing Sleeve 200mL
K45750-14	O-ring Flask fixing sleeve 200mL
K45750-15	Calibration Box

included accessories

Atmospheric Distillation Zeolite (Pack)
Condenser Wiper
125mL Flask
Orifice Plate 38 and 50
Temperature Sensor
Bottomless Measuring Cylinder
Oil Receiver (qty. 2)
Silicone Tube to Flask (qty. 4)
Measuring Cylinder Seat
Power Cord



K45750-DP Automatic Atmospheric Distillation Tester with Dry Point Detection

specifications

Conforms to the specifications of:

ASTM D86, D850, D1078, EN ISO 3405, IP123 and 195, DIN 51751, NF M07-002, GB/T 6536, and GB/T 3146.1

Steam Temperature:

Range: 0 - 450°C
Temperature Accuracy: $\pm 0.1^\circ\text{C}$

Sample Volume:

Range: 0 - 103%
Resolution: 0.01 mL
Accuracy: ± 0.1 mL

Condenser Temperature:

Range: -5 - 65°C
Accuracy: $\pm 0.1^\circ\text{C}$

Distillation Rate:

Range: 2 - 10 mL/min
Resolution: 0.1 mL/min

Recovery Chamber Temperature:

Range: 0 - 60°C
Accuracy: $\pm 0.1^\circ\text{C}$

Ambient Air Pressure:

Range: 1 - 130 kPa
Resolutions: 0.01 kPa
Accuracy: ± 0.1 kPa

Safety:

Built in Flame Detector Units (2)
Built-in Fire Extinguisher (air supply needed)

Data Storage / Export:

Internal storage of 1000 test results (expanded storage capacity as needed)
USB Port, RJ45 Ethernet, RS232 and WIFI exportation methods
Capacity to connect to LIMS and LAN

Electrical Requirements:

110 - 230V, 50-60Hz