

Automatic Vacuum Distillation of Petroleum Products

test method

Determines the range of boiling points for petroleum products that can be partially or completely vaporized at a maximum liquid temperature of 400°C at reduced pressures. The sample is distilled at a controlled, reduced pressure under conditions that are designed to provide approximately one theoretical plate fractionation. Initial and final boiling point is measured and a distillation curve relating volume percent distilled and the atmospheric equivalent boiling point temperature can be prepared.

automatic vacuum distillation system

- Fully Automatic Operation
- Simple to Operate and Maintain
- Vacuum Step Down Inhibits Foaming
- Easy Access to all Components
- Safety Shields and Doors protect Operator
- Turn Key System
- High Precision and Accuracy
- Automatic Cleaning Cycle
- Receiver is Easy to Remove
- PC Control

The Automatic Vacuum Distillation System is designed to make vacuum distillation easy, safe, and affordable. The self-contained unit is controlled by a standard PC. Fully automatic function minimizes the amount of operator time needed for the test.

The latest Windows operating system is included along with a state of the art PC. The Windows -based software is intuitive and guides you through the distillation step by step. All data is saved to the hard drive in standard format that can be easily opened by spread sheets or exported to LIMS. Files can be accessed through portable USB drives, Ethernet connection or written to a CD/DVD. A color printer is provided to print hard copies of the reports. Process diagrams clearly show the current equipment status. Results can be viewed as the distillation proceeds in both tables and graphs. Distillation parameters can be modified at any time during the distillation.

semi-automatic vacuum distillation system

- Automatic Vacuum Control
- Automatic Heat Control
- Vapor Temperature Display
- Pot Temperature Display
- Automatic shutdown for high pot or vapor temperature

The Semi-Automatic Vacuum Distillation System features standard ASTM D1160 glassware enhanced with microprocessor control. The vacuum level, bath temperature and heating rates are programmable with up to 50 stored programs. Vapor temperature, distilling flask temperature and vacuum level are digitally displayed. Optional PC interface allows the distillation to be controlled from a PC and for data to be stored on the PC.



K87180 Automatic Vacuum Distillation System

specifications

Conforms to the Specifications of: ASTM D1160
Distillation Temperature Range: Ambient to 400°C (752°F)
Condenser Temperature Range:
Ambient +5°C to 150°C
Vacuum Range: 1.0 mmHg to 50 mmHg (0.13 to 6.7 kPa)

Electrical Requirements

120 or 220/240 VAC
50/60Hz

Included Accessories

Distillation Column
Mounting Rack
500mL Boiling Flask
Electric Heating Mantle
Lab Jack
Boiler Temperature Probe
Vapor Temperature Probe
200mL Receiver
Clamps
Boiling Chops
Bath for heating of condenser, side arm, and receiver
Automatic Vacuum System
PC for Distillation Control

Dimensions (HxWxD)

91.5 x 94 x 53 cm (36 x 37 x 21 in)
System Weight: 91 kg (200 lb)

ordering information

catalog no. description

K87175 Automatic Vacuum Distillation System
K87180 Semi-Automatic Vacuum Distillation System