Automatic Vacuum Distillation of Petroleum Products



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 shoe 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.

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.

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.

K87170

Automatic Vacuum Distillation

System

