

Volatility

LIQUID PETROLEUM PRODUCTS



Automatic Vacuum Distillation Analyzer

HDV 632

ADVANTAGES

- **Unparalleled precision and accuracy**
- **Displays Atmospheric Equivalent Temperature (AET)**
- **Compact footprint and built-in cooling system conserve bench space**
- **Stand-alone or network operation**
- **Simple to operate and maintain**

Since no one knows what the future will bring, the HDV 632 doesn't limit your vacuum distillation testing options to the current test method. Choose ASTM D 1160 or **define and save your own custom programs**. Naturally, you can add, delete, and revise custom tests as your products and test needs evolve.

The HDV 632 **controls temperature, distillation rate, and pressure with microprocessor precision**. Volume measurements are made with digital accuracy, and test program selection is a simple "point and click" operation. Choose from an extensive library of built-in programs or your own predefined tests.

The HDV 632 incorporates everything needed for fully automated distillation testing, yet **uses only 0.33 square meters (3.25 sq. ft.) of bench space**. In fact, it even features built-in refrigeration systems—one for the cold trap plus a heater/cooler for the condenser bath—so you **don't even have to run hoses to an external water supply or chiller system**.

METHOD

ASTM D 1160

HDV 632: Highly precise, reliable analysis

EASY TO USE, PRECISION ANALYSIS

- Initiate tests with only a few clicks and keystrokes
- Digital stepper motor and near-infrared (NIR) sensor combine for ultra-precise volume measurement
- Dual transducer sensing system provides accurate, precise pressure measurements over a broad range of distillation pressures, including atmospheric pressures
- Digital, proportional pressure control eliminates transducer calibration and provides precise pressure regulation
- Easily removable receiver graduate eliminates need for any fluid connection
- Automatic cleaning sequence runs sufficiently long to clean the column and cool system for next distillation

ULTIMATE FLEXIBILITY, PERFORMANCE

- Custom distillation curves record results at additional volume and temperature points or stop testing at a specific volume/temperature point
- Allows pressure transducer placement at top of condenser column or at top of vapor column
- Enables receiving compartment temperature control at setpoints from +10° to +80°C
- Automatic sensor prevents sample from foaming into column during pressure reduction sequence
- Automatically calculates required sample weight based on sample density, and adjusts distillation results for weighing errors
- Provides results in tabular, graphic, or customized format
- Stores data internally or exports to LIMS

POWERFUL, PC-DRIVEN CONVENIENCES WITH HLIS

- Controls and monitors up to 2 units from a single computer, enabling quick view of operation status and measurement values
- Network ready; automatic or on-demand data transfer to external computer, network, or LIMS
- Built-in electronic calibration, self-test, system diagnostics
- Sophisticated Windows-based database management organizes product test parameters and results for easy retrieval
- Scroll through complete database or filter records by criteria
- Password protection with five access levels
- Fractionated distillation capabilities with software upgrade


RUGGED, RELIABLE OPERATION

- Withstands aggressive solvents and extensive operation
- Error logs automatically signal problems and provide convenient reports for verification and troubleshooting
- Expert sales and service from PAC's worldwide network of factory trained authorized representatives
- Quality construction and reliable operation backed by a limited parts and service warranty
- Intensive customer training at your site or ours

SPECIFICATIONS

Ordering Information	Model HDV 632 Automatic Vacuum Distillation Analyzer
Standard Test Method	ASTM D 1160
Performance	<p>Sample Temperature Measurement: Auto calibrating sample thermometer circuit with integrated precision fixed resistors; 10 point on-screen calibration</p> <p>Condenser Temperature Control: 0° to 80°C operating temperature; liquid jacket, mechanical refrigeration and electric heat independent of receiver; programmable for temperature ramping during distillations</p> <p>Mechanized Volume Measurement: Digital infrared meniscus follower, unaffected by ambient light; precision stepper motor, resolution to 0.05 ml; calculated as function of motor steps, confirmed by optical detector; self-calibrating Automatic—proven algorithm controls temperature in the flask; heater conforms to CE safety specifications; "Follow the heat curve" software function permits manual adjustment; distillate receiver provides independent temperature control with programmable temperature ramping during distillations</p> <p>Distillation Rate Control</p>
Documentation	Local display; parallel output port standard; RS-232 serial output port standard; PC and printer optional; compatible with HLIS for Windows®
Diagnostics & Calibration	Real time status display and control for all mechanical and electrical systems locally or with optional PC network; 10 point on-screen calibration of resistance thermometer; recovery volume calibration with dry reference graduate
Electrical Requirements	230 VAC (115 VAC with transformer), 3100 watts, 50/60 Hz
Dimensions	49 cm W x 63 cm D x 103 cm H (19.3 x 24.8 x 40.5 inches)
Weight	104 kg (230 lbs)
OPTIONAL ACCESSORY	
HLIS for Windows®	Herzog Laboratory Information System. Operates up to 2 Herzog automatic distillation analyzers with central measurement program and test results storage and database management. All data collected/stored by HLIS automatically transmits by RS 232 to external LIMS. User may customize output format using preferred field delimiters. System PC can function as workstation on LAN and move/share data via file transfer or Dynamic Data Exchange (DDE) with other Windows applications.

Due to continuing product development, specifications subject to change at any time without notice.

All Herzog products are  compliant.

FOR ADDITIONAL INFORMATION

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