

# Cold Behavior

LIQUID PETROLEUM PRODUCTS



## AUTOMATED Pour and Cloud Point Analyzer

### ADVANTAGES

- **Automates pour and cloud point analyses with microprocessor precision**
- **Provides unparalleled precision and accuracy**
- **Stand-alone or networked operation**
- **Simple to operate and maintain**

### HCP 852

Standardized methods for pour point and cloud point determinations demand extremely precise methodology and procedures. Sample preheating, sample handling, and bath cooling all must be controlled to the very limits of human capability...with final determinations ultimately relying on the subjectiveness of the human eye.

The HCP 852 Automated Pour Point and Cloud Point Analyzer removes human error from the equation. The **only automatic analyzer that performs measurements exactly according to their respective ASTM test procedures**, it controls each step with microprocessor precision. **Sophisticated robotics** control all sample movement. And to complete the process, a **high resolution CCD video camera detection system** simultaneously examines the entire sample for movement (pour point) and crystal formation (cloud point).

### METHODS

ASTM D 97  
ASTM D 2500  
IP 15  
IP 219  
ISO 219  
ISO 3015  
DIN ISO 3016  
DIN EN 24015

# HCP 852

## ASTM D 97 and D 2500 by the book... automated!

### SOPHISTICATED POUR & CLOUD POINT DETECTION

- Highly sensitive CCD video camera and 12 individual light sources detect slightest variations in sample movement or consistency
- Fast, automated pour point test cycles repeat every 3°C until test jar holds horizontally for 5 seconds without sample surface movement
- Cloud point testing performs in 1°C intervals until wax crystals form
- Automatically signals end of test and heats sample jar to facilitate cleaning
- Optional video monitor enables on-screen viewing of wax formation and sample movement

### FULL FLEXIBILITY, THOROUGH DOCUMENTATION

- Installs as a stand-alone unit, or allows multiple analyzer networking with one unit assigned as the network's control station
- User programmed test parameters, which can deviate from standard procedures, enable customized performance
- Results display on digital readout and automatically output to printer; data export capabilities
- Reports high resolution cloud point with accuracy of 0.5°C (32.9°F)
- Last flow point temperature provides valuable insight for additive blending composition


### DEPENDABLE OPERATION AND SUPPORT

- Continually self-monitors for proper operation during test process
- Comprehensive diagnostic program checks key components and assemblies
- Instrument bath and sample temperature RTDs easily calibrate to appropriate ASTM thermometers
- Quality construction and reliable operation backed by a limited parts and service warranty
- Expert sales and service from PAC's worldwide network of factory trained authorized representatives
- Intensive customer training at our site or yours

### SPECIFICATIONS

<b>Ordering Information</b>	Model HCP 852 Cloud & Pour Analyzer
<b>Standard Test Methods</b>	ASTM D 97 Pour Point ASTM D 2500 Cloud Point IP 15, IP 219, ISO 219, ISO 3015, DIN ISO 3016, DIN EN 24015
<b>Optical Detection System</b>	CCD video camera
<b>Performance</b>	Measuring Range -80 to +50°C (-112 to 122°F) Sample Heating ASTM or user-defined Sample Cooling ASTM or user-defined; temperature steps, constant rate, or delta temperature Initial Test Temperature ASTM or user-defined Test Frequency ASTM or user-defined
<b>Test Programs</b>	4 total; unit ships with 2 preprogrammed ASTM methods; remaining programs may be defined by user
<b>Documentation</b>	°C or °F; local display; parallel and RS-232 serial output ports standard; printer available as accessory (see below)
<b>Utility Requirements</b>	Electrical 115/230 VAC, 50/60 Hz, 350 watts External Cooling Unit User-supplied. Cold behavior instruments require a circulating, low temperature bath capable of operating at a minimum of 20°C below the lowest measuring range. A single bath may be capable of connection to multiple Herzog instruments
<b>Dimensions</b>	23cm (W) x 42cm (D) x 59cm (H) (9.1 x 16.5 x 23.2 inches)
<b>Weight</b>	25 kg (55 pounds)
<b>Accessories</b>	Printer Video Monitor, for on-screen viewing of test progress Monitor Rack Monitor Cables

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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