



## Herzog OptiFlash® Pensky Martens

Easy, Safe and Accurate Flash Point Determination

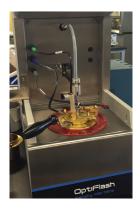
- Innovative instrument design for improved ease of use and easy cleaning
- Excellent analysis performance and robustness
- High safety standards with preventive fire detection & safety monitoring system
- @ Complies with ASTM D93, EN ISO 2719, IP34, JIS K2265 and GB/T261 methods

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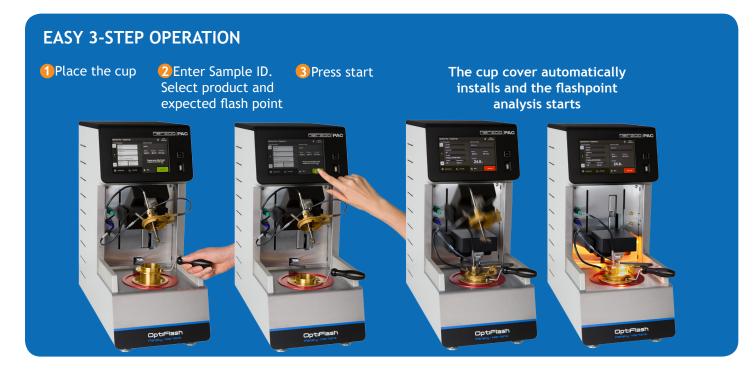
# OPTIFLASH®, THE BENCHMARK IN FLASH POINT DETERMINATION

PAC's Herzog OptiFlash is the new benchmark in flash point analysis, fully designed to meet today's expectations on user convenience, quality and safety compliance. The Optiflash accurately detects flashpoint up to 400°C for petroleum products, biodiesels, solvents, chemicals, fluxed bitumen and food and beverages. The OptiFlash is fully compliant with leading global standards.





A manual lift-arm version is available with or without the fire suppresion system



### **KEY ADVANTAGES**

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#### HIGH SAFETY STANDARDS

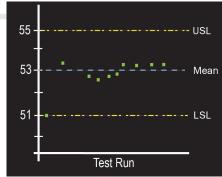
- Built-in fire extinguisher:
  - Ultra fast optical fire detector
  - Fire detection in extended range around test cup
  - External inert gas (CO2, N2...) connection
- Detect "Flash" outside the cup
  - Test aborted with warning message
  - Closing the shutter stops the flame
  - No need to activate fire extinguisher
- Safety monitoring system:
  - Safety pre test interval to avoid fire
  - Over heating protection
  - No sample drops from stirrer going into heater block



Optical fire detecting system covers entire hot area

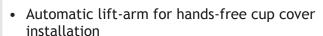
#### PROVEN PERFORMANCE

- Robust hardware design for improved parts lifetime and low maintenance:
  - Hands-free operation minimizes risk to damage the igniter
  - Continuous monitoring the ignitor allows preventive actions to avoid down-time
  - More rugged metal sample thermometer
- Built-in quality control (QC) functions:
- Automatic QC procedure with QC chart on the instrument screen for trend monitoring
- Calibration monitoring of the Pt100 and pressure sensor remind user if recalibration is necessary
- Automatic diagnostic help maintenance team in case of instrument failure



Quality control charts allow monitoring the instrument performance

#### IMPROVED EASE OF OPERATION



- No need for the user to handle Pt100, Flash Point Sensor, Ignitor and Shutter Drive
- · Straightforward user interface:
  - Easy sample ID input with alpha numeric keypad
  - Option to enter user name, sample description or a note
  - Get Pass/Fail display by defining Min and Max values for the flash point result for the different products
  - Supports multiple languages



Lift-arm and touch-screen make it easy to operate

#### **EASY CLEANING**

- Simple push button to disconnect cup cover from lift arm
- Allows external cleaning for the cup cover
- · Remove the shutter without any tools
- Large tilt angle of the cup cover allows easy cleaning for Pt100 and stirrer
- Easy cleaning for high viscous samples with stand-by temperature to keep the sample hot and liquid at test end



Easy disconnection, for easy and external cleaning of the cup-cover





#### **SPECIFICATIONS**

Standards ASTM D93 Methods A,B&C, ISO 2719 A,B&C, EN ISO 2719 A,B&C, IP 34 A,B&C, JIS K 2265 and GB/T261 Configuration			
			Automated Pensky Martens flash point analyzer OptiFlash Flash point measuring range 30°C to 400°C
		Heating System	Heater band for uniform heating of the heater block, Test method or user-defined heat rate from 0.5 to 12 °C/min.
Temperature Measurement	Intelligent Pt 100 probe with built in calibration, 10 calibration points Glass or metal Pt 100, temperature range -50°C to +450°C, resolution 0.1°C		
Sample Stirrer	Automatic stirrer, test method or user-defined RPM from 0 to 300 RPM		
Ignition Source	Intelligent electric igniter with automatic power management over life time or automatic gas ignition with gas flame monitoring, test method or user-defined Test Interval from 0.5°C to 5°C		
Barometric Pressure Sensor	Built-in sensor for automatic correction of flash point, pressure units mbar, hPa, kPa, mmHg or Torr		
Flash Detection System	Unique thermal flash point detection which can detect flash point for all sample types		
User Interface	7" colored touch screen, alpha numeric data input, barcode reader		
Result Documentation	500 results, 200 products, user defined result reports for printer and LIMS		
Printer	Any printer with USB interface and PCL5 or higher. Automatic print out		
LIMS interface	Ethernet or RS232, used defined data string, automatic LIMS transfer		
Data Export	USB memory stick, import into Excel		
QC-Functions	Automatic QC-sample handling and QC-chart		
Safety Features			
Fire Extinguisher	2 built-in fire sensors for detection of fire or just flash outside of the cup Fire extinguishing system with external inert gas, alarm relay to link OptiFlash to a lab alarm system		
Safety pre-test	Safety pre-dips can detect high volatile contamination in normally high flash point samples and avoid a risk of fire		
Alarm Functions	Automatic detection of method or safety violations. User selects test termination or alarm message		
Password Protection	Different access levels for operator, service or lab manager		
Calibration and Diagnostics	User defined calibration intervals. Automatic diagnostic functions		
Operating Requirements			
Electrical	115VAC ±10% or 230VAC ±10% with automatic switching; 50-60Hz; 1100 W		
Ambient Conditions	Operating temperature: 10°C to 35°C; Humidity: 80% rel. at 35°C		
Storage temperature	-15°C to +55°C		
Dimensions & Weight	25 cm (9.85") wide, 51 cm (20.1") deep, 56 cm (22") tall, 25kg, (55 lb)		
Options & Accesories			
Options	Automatic lift arm, fire extinguishing system with ultra fast optical sensor		
Accesories	Printer, barcode reader, metal temperature sensor		

Continuing research and development may result in specifications or appearance changes at any time

#### **ABOUT PAC**

PAC develops advanced instrumentation for lab and process applications based on strong **Analytical Expertise** that ensures **Optimal Performance** for our clients. Our analyzers help our clients meet complex industry challenges by providing a low cost of ownership, safe operation, high performance with fast, accurate, and actionable results, high uptime through reliable instrumentation, and compliance with standard methods.

#### **HEADQUARTERS**

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