FLASH POINT

GRABNER INSTRUMENTS

MINIFLASH TOUCH

Embrace the New Age in Flashpoint Testing

MINIFLASH TOUCH is the latest addition to the Grabner Instruments line of portable flashpoint testers, and combines all of the field-proven advantages of the MINIFLASH tester line with a new convenient touch-screen design. The touch-screen runs on a Microsoft® Windows® platform, the analyzer offers full compatibility with network, PCs and LIMS, user access control, new flashpoint methods and additional features for standard and advanced users.

KEY FEATURES

- **Advanced Flash Point Methods**
  Measurements are performed according to the safest flash point methods ASTM D6450 and D7094. The results are rated equivalent to ASTM D93/ISO 2719 Pensky Martens Method and are in excellent correlation with the standards ASTM D56, ISO 13736, IP 170. Also available are methods for simulation of ISO 3679 and ISO 3680 testing, fuel dilution measurement for used oil analysis and fast screening programs.

  OFFICIAL ASTM FLASHPOINT COMMITTEE STATEMENT
  "There is no statistically significant bias observed between ASTM D7094 and ASTM D93 Procedure A."

- **Combustion Analysis ™**
  Sometimes samples contain small concentrations of flammable compounds, which do not show a definite flashpoint. MINIFLASH TOUCH detects even very small flames and graphically visualizes the presence of sample contamination.

- **Peltier Protection Technology ™**
  For a quick sample turnaround and extended instrument life time Grabner Instruments developed fast thermoelectric regulation of heating and cooling. This technology allows to extend the measuring temperature to well above 400°C and optimizes Peltier performance and lifetime.

- **Automatic ignition cleaning program**
  This method removes tenacious residuals from the ignition system.

- **Maximum Safety**
  Ignition Protection Technology ™ is intrinsic to the MINIFLASH design. Only 1-2 ml of sample are required for testing the flashpoint - without an open flame! The continuously closed cup design, automatic explosion probing and a controlled air feed protect against fire and offensive fumes - for unmatched safety in flashpoint testing.

- **Ease of Use**
  MINIFLASH TOUCH features intuitive menu navigation, no training is required. Hassle free communication with USB, LAN, LIMS and PC is assured.

- **Flexibility for all applications**
  Almost any flash point method can be simulated by controlling the parameters heat rate, air feed and ignition.

AMETEK®
OIL & GAS

AVAILABLE METHODS

- ASTM D6450 & D7094
- Excellent correlation to Pensky Martens Method - ASTM D93, ISO 2719, DIN 51758, IP 34, JIS K 2265 TAG Closed Cup Method - ASTM D56 Abel Closed Cup - ISO 13736, IP 170

- Excellent correlation to Equilibrium and Small Scale Methods EN ISO 3679/3680, ASTM D3828 A/B, IP 523/IP 524
- Fuel Dilution Flashpoint Testing
- Flash / No Flash methods
- Fast screening methods

MINIFLASH TESTER LINE

- Maximum Safety
- No open Flame
- 1-2 ml Sample Size
- Automatic Stand-Alone Operation
- Fast and Accurate
- Easy to use, Easy to clean

- Portable for Field Use
- US D.O.T, RCRA, NAVY, NATO approved
- Approved for various ASTM specifications for fuels and oils
- World wide market leader for the flavors and fragrance industry

FEATURES MINIFLASH TOUCH

- Intuitive Menu Navigation on Large Color Touch-Screen
- Runs on Microsoft® Windows®
- Full network, PC and LIMS integration via LAN
- USB printer support
- USB data transfer
- Extended FLPH temperature range (0-400°C with external cooling)
- User Rights Management (GLP)

- Unlimited number of methods and results
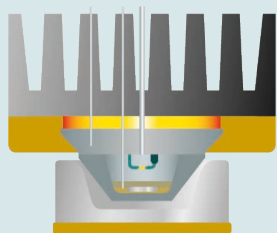- Automatic ignition cleaning program

Peltier Protection Technology ™

Ignition Protection Technology ™

Combustion Analysis ™

TECHNICAL DATA

Principle of Operation

Temperature Range	FLP: 0 to 200°C (32 to 390°F) FLPH: 0 to 400°C (32 to 750°F)
Temperature Stability	+/- 0.1°C (0.18°F)
Sample Volume	1 ml (ASTM D6450) or 2 ml (ASTM D7094)
Safest Technology	Electric Arc Ignition Continuously Closed Cup Technology No open flame, no hazardous vapors Flash detection by built-in pressure sensor
Fast Sample Throughput	Up to 12 samples/hour, depending on method
Interfaces	3x USB, 1x LAN, 1x VGA
Remote Control	Remote Control via Web-Browser (no remote control software required)
Power Supply	100/110/230 V AC, 50/60 Hz, 150 W (optional car adapter for field use)
Dimensions (WxHxD)	253 x 368 x 277 mm (10 x 14.5 x 10.9 inch)
Weight	12 kg (26 lb)

Your distributor: