MINIFLASH TOUCH
World Class 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 2719, 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.

- **Unique 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 contaminations in those samples.

- **Extended Temperature Range**
  The possibility of external cooling for the MINIFLASH FLPH TOUCH allows to cover a wide temperature range from 0 to 400°C. The range of all MINIFLASH analyzers is optimized to maximize the life time of Peltier temperature control.

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

- **Maximum Safety**
  Only 1-2 ml of sample are required for testing the flashpoint in a continuously closed cup - without an open flame!

- **Ease of Use**
  MINIFLASH TOUCH menu navigation is intuitive, no training is required for testing flash point, hassle free communication with USB, LAN, LIMS and PC is assured. In addition the analyzer allows to enable remote control and user rights management.

- **Flexibility for all applications**
  Almost any flash point method within varying environmental conditions can be simulated by controlling parameters like the heat rate, ignition energy and atmospheric oxygen.

OFFICIAL ASTM FLASHPOINT COMMITTEE STATEMENT
"There is no statistically significant bias observed between ASTM D7094 and ASTM D93 Procedure A."
### AVAILABLE METHODS
- ASTM D6450 & D7094
- Excellent correlation to ASTM D93, D56, ISO 2719, ISO 13736, IP 170
- Excellent correlation to ISO 3679 & 3680
- Dilution Flashpoint Testing
- Go / No Go Flashpoint Testing
- Fast screening methods

### FEATURES MINIFLASH TOUCH
- Intuitive Menu Navigation on Large Color Touch-Screen
- Runs on Microsoft® Windows® software
- 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)
- Unique combustion analysis
- Unlimited number of methods and results
- Automatic ignition cleaning program

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

### TECHNICAL DATA

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
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<tbody>
<tr>
<td>Temperature Range</td>
<td>FLP: 0 to 200°C (32 to 390°F) FLPH: 0 to 400°C (32 to 750°F)</td>
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<tr>
<td>Temperature Stability</td>
<td>+/- 0.1°C (0.18°F)</td>
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<tr>
<td>Sample Volume</td>
<td>1 ml (ASTM D6450) or 2 ml (ASTM D7094)</td>
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<tr>
<td>Safest Technology</td>
<td>Electric Arc Ignition Continuous Closed Cup Technology No open flame, no hazardous vapors Flash detection by built-in pressure sensor</td>
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<tr>
<td>Fast Sample Throughput</td>
<td>10 samples per hour</td>
</tr>
<tr>
<td>Interfaces</td>
<td>3x USB, 1x LAN, 2x PS/2, 1x VGA</td>
</tr>
<tr>
<td>Power Supply</td>
<td>100/110/230 V AC, 50/60 Hz, 150 W (optional car adapter for field use)</td>
</tr>
<tr>
<td>Dimensions (WxHxD)</td>
<td>253 x 368 x 277 mm (10 x 14.5 x 10.9 inch)</td>
</tr>
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<td>Weight</td>
<td>12 kg (26 lb)</td>
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**Principle of Operation:**

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