

**CLEVELAND OPEN CUP FLASH POINT**

## 13811-3 SETA SEMI-AUTOMATIC CLEVELAND OPEN CUP TESTER

ASTM D92; IP 36; EN ISO 2592; BS 2000 Parts 36 & 403 (obs); NF T60-118; FTM 791 1103.7; JIS K2265; AASHTO T48

- Ambient to 400°C temperature range
- Variable ramp rate
- Electrically driven sweep arm

SUPPLIED WITH: instruction manual and mains lead.



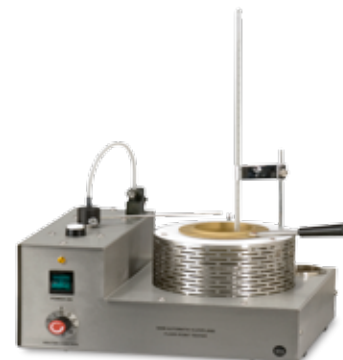
CALIBRATION & VERIFICATION MATERIALS



SETAPLUS EXTENDED WARRANTY AVAILABLE

The 13811-3 comprises an electrically heated sample cup, variable ramp rate controller, and a button-operated, electrically driven sweep arm with test jet.

The test flame uses either mains gas or can operate from a 13667-0 Portable Gas Tank.



13811-3 (Thermometer supplied separately)

### ACCESSORIES - Cleveland

#### OPTIONAL

- 13663-0 SETARAMP CONTROLLER, for optional automated temperature control.
- 13815-0 PROBE ASSEMBLY, for use with 13663-0, (Cleveland).
- 13666-0 BUTANE REFILL CONTAINER, pack of 10.
- 13667-0 PORTABLE GAS TANK, with on/off switch regulator and ignitor. Suitable for use with Butane refill 13666-0 containers.
- 71001-0 SETA-VENT, portable fume extractor and draught excluder, excluding flexible ducting.
- 99910-0 PORTABLE DIGITAL BAROMETER, 750 to 1150 mbar absolute, (for details see page 145).
- 45000-0 SETAPLUS EXTENDED 12 MONTH WARRANTY

#### THERMOMETERS:

ASTM11C/IP28C or ASTM 11F/IP28F

#### CALIBRATION, VERIFICATION & TRAINING

- 99880-0 FLASHCHECK, pack of 3, (for details see page 156).

### SPECIFICATIONS

Temperature range:	Ambient to 400°C
Power:	600W maximum
Ramp Rate:	Variable, manually controlled
Voltage:	110/120V, 50/60Hz 220/240V, 50/60Hz
Size (HxWxD):	33 x 31 x 29cm
Weight:	6.5kg

### CONSUMABLES - Cleveland

2 Years/2000 Tests	Qty
13730-005 SILICONE RUBBER TUBE, 4 metres. ....	1
13800-001 TEST CUP.....	1

## 13663-0 SETARAMP CONTROLLER

- Automated temperature control for Seta 13811-3 and 13661-3 testers
- Programmable
- Audible prompt

and set points. An audible prompt is given at each test temperature interval.

*Note: Ramp temperature may be difficult to control during Cleveland tests when testing liquids with a viscosity >800cSt at 25°C.*

13663-0 is an automated temperature control unit for Seta 13811-3 and 13661-3 flash point testers.

The start temperature, ramp rate (°C/min) and test temperature interval (°C) are entered by the operator via a keypad. A digital display shows the parameters set, and the temperature of the sample.

Setaramp overrides the flash tester's on-board controller, giving more accurate ramp rates

### SPECIFICATIONS

Ramp rate:	Variable, user definable (within the time and temperature limits of the flash point tester), automatically controlled
Voltage:	110/120V, 50/60Hz 220/240V, 50/60Hz
Size (HxWxD):	6 x 34 x 32cm
Weight:	3kg



13663-0

## 71001-0 SETA-VENT

- Draught shield with fume extractor

*Note: Flexible ducting is not supplied.*

The Seta-Vent is suitable for use with any of the Seta range of Flash Point Testers, and is ideal for use where undesirable fumes need to be removed or where protection from air currents is required.

The unit incorporates fan and controller and can be dismantled for easy storage when not in use.

### SPECIFICATIONS

Vent tube:	50mm outside diameter
Voltage:	110/120V, 50/60Hz 220/240V, 50/60Hz
Size (HxWxD):	52 x 52 x 40cm
Weight:	8kg



71001-0

### FLASH POINT ACCESSORIES