

## Automated Pensky-Martens Closed Cup Flash Point Tester

# *apm-8fc*

### Ergonomic

- Color coordinated display and switches for high visibility and intuitive operation
- Universal design

### Versatile

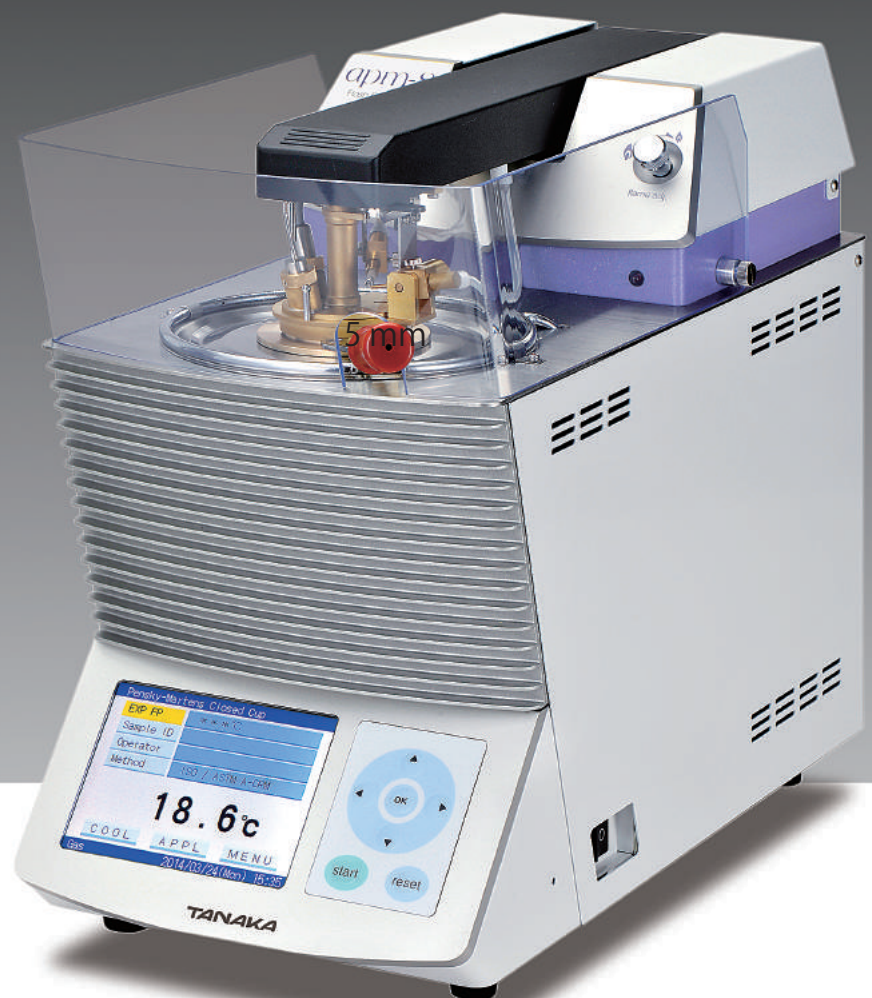
- USB port for USB flash drive or keyboard
- Password protection
- Enhanced data storage

### Robust

- Premium design and high quality finish suited for many years of reliable use

### Safe

- Enhanced safety with fire containment system



## Compact Design

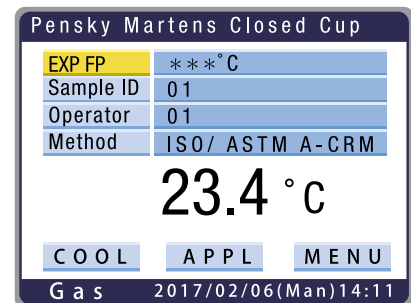
The all-in-one design is much lighter than the old model, APM-7, by approximately 30 % and consumes very little bench space.

## Single Action Setting

The cup cover is permanently mounted on a swing-arm assembly, which allows an easy handling of the test cup cover. Due to this design, the hot cup cover right after completion of a test can also be lifted with ease. The swing arm assembly can be raised to a vertical position, ensuring easier cleaning of the test cover.

## Easy Operation

Select a test mode and enter the expected flash point; while the instrument executes the test, you are free to do other lab work. The instrument follows the exact procedures prescribed in the test method, and the completion of the test cycle is signaled by beeps. The test result is brightly shown on the color LCD module.



## Data Handling

The unit is designed to store up to 200 test results and export to an optional printer or to a LIMS through an RS-232 port or USB memory stick.

## Interchangeable Ignition Source

apm-8fc is equipped with both gas and electric igniter as the ignition source. It only takes a few minutes to switch from gas to electric or vice versa.



Gas Ignition



Electric Ignition

## USB Port

A USB port allows connecting USB keyboard for easy entering of sample and operator ID. USB memory stick can be utilized to export data to a PC or to save/copy/upload test parameters.



Connection of USB Keyboard



Connection of USB Stick

## Password Protection

By setting password by the administrator, the device is protected against inadvertent change of parameters by operators.

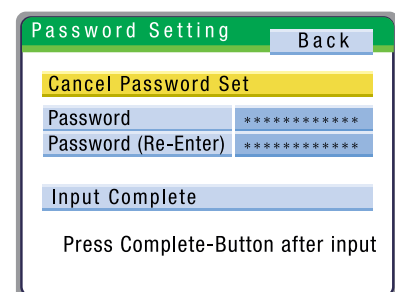
## Draft Protection Shield

A fire-resistant "FM4910" conforming cover insures the flame integrity. This material shall meet the numerical criterion of each index.

- (1) FPI (Fire Propagation Index)  $\leq 6$
- (2) SDI (Smoke Damage Index)  $\leq 0.4$

## Fire Containment System

In case the sample accidentally catches fire, the instrument will automatically spray fire containment gas ( $N_2$  or  $CO_2$ ) to extinguish the



# Specifications



Product	Automated Pensky-Martens Closed Cup Flash Point Tester
Model	<i>apm-8fc</i>
Test Methods	ASTM D93 (Procedures A, B, & C ), ISO 2719 (Procedures A, B, & C ), ISO 15267, IP34, JIS K 2265-3
Measuring Range	Ambient to 370 °C
Test Mode	ISO/ASTM A-normal / SPE / CRM, ISO/ASTM B-normal / SPE, ISO/ASTM C-normal / SPE, ISO 15267, and User Custom modes (SPE: Search mode for unknown samples CRM: Mode for verifying instrument with CRM's)
Heater	Band heater : 530 W @115 V or 500 W @230 V
Sample Heating/Cooling Method	Forced air cooling by fan
Display	5.7 inch (117 x 88 mm) color LCD with LED back light
Stirring	100 or 250 rpm (Freely selectable in Custom mode)
Temperature Sensor	PT-100 in stainless steel sheath
Flash Detection	CRC Thermocouple
Ignition Source	Gas ignition with automatic lighting or electric ignition (Interchangeable)
Barometric Correction	Built-in barometric pressure sensor
I/O Port	RS-232C = 1 channel (for PC or Optional Printer) USB = 1 channel (for USB keyboard or USB Memory stick)
Safety Functions	Automatically shuts off and the problem is reported by buzzer and display in case: ( a ) EFP + 20 °C or 370 °C is reached ( b ) Temperature sensor is found defective ( c ) Flash detector is found defective ( d ) Electric igniter is blown ( e ) Thermofuse is blown ( f ) Built-in battery is found drained out ( g ) Arm is not set in place ( h ) Stirring motor is stopped, or way (no display) ( i ) Control computer runs away (no display)
Fire Containment System	In case sample catches fire, containment gas (N <sub>2</sub> or CO <sub>2</sub> ) is automatically blown to sample cup to contain the fire. (Containment gas must be prepared by user)
Gas Supply (When gas ignition is used)	LP gas or natural gas (Max. pressure :10 kPa / 1.45 psi)
Power Consumption	AC 100 to 120 V, 800 VA (max) 50/60 Hz AC 220 to 240 V, 800 VA (max) 50/60 Hz
Electricity Consumption	170 Wh for 1 test (about 60 min), 64.26 g CO <sub>2</sub> (@ 0.378 kg CO <sub>2</sub> /1 kWh)
Dimension (W × D × H)	230 x 470 x 390 (mm)
Weight	16 kg

Note: Specifications and appearance are subject to change for product improvement without prior notice.

## Standard Accessories

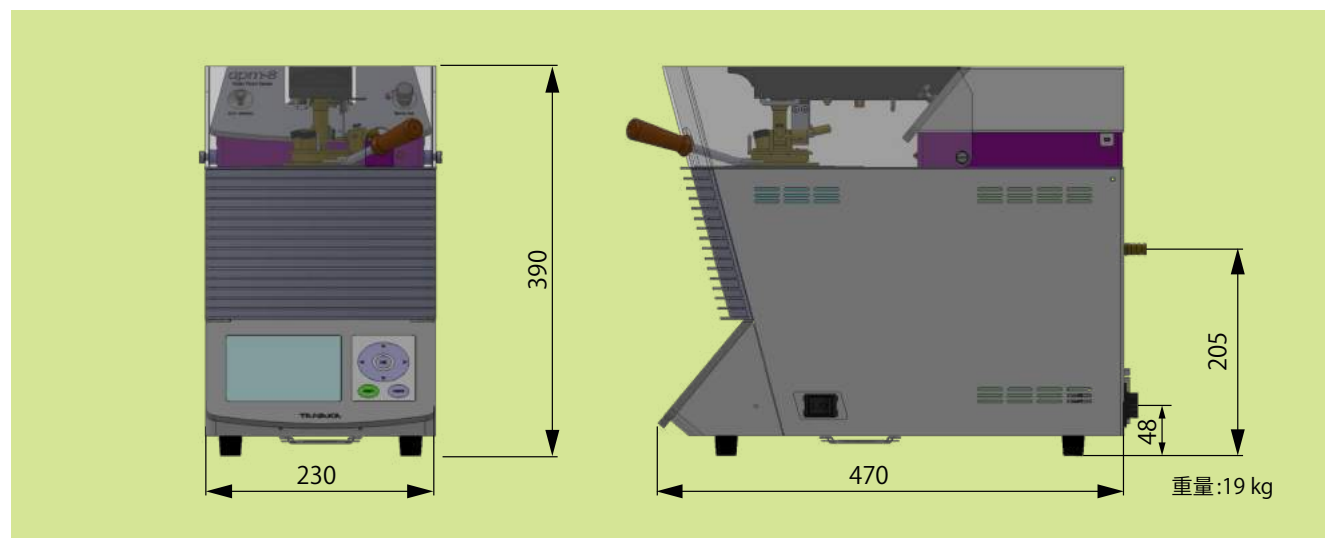
Code No.	Part Name	Qty	Remarks
1001261	Test Cup Assembly for apm	1	Refer to Standard Accessories
1000711	Thermofuse	1	Pack of 5, with Insulation Tube
1000449	Gas Hose $\phi 9.5 \times \phi 15$	1	
1000361	Gas Hose Band	1	
1000900	Electric Igniter, EI-8	1	
1001332	Windscreen for apm-8	1	
1006672	AC Power Cord	1	2.0m for 100 to 120 V
1006151	AC Power Cord	1	2.5m for 220 to 240 V
	USB Stick	1	Instruction & Maintenance

## Optional Accessories

Code No.	Part Name	Remarks
1006018	Printer NEX-C200R01 100V	Print out test data and instrument settings
1006019	Printer NEX-C200R05 200V	
1006696	Mini USB Keyboard	For entering Sample/Operator ID

## Suggested Spares for 2 years

Code No.	Part Name	Qty	Remarks
1001261	Test Cup Assembly for apm	1	Refer to Standard Accessories
1000711	Thermofuse	1	Pack of 5, with Insulation Tube
1000900	Electric Igniter, EI-8	5	
1001314	Temperature Sensor	1	
1001294	Flash Detector	1	



Distributed by

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