

*Automated Cleveland Open Cup Flash Point Tester*

*aco-100 / aco-100as*

**Simple  
Reliable  
Robust**



- Enhanced Safety Functions
- Interchangeable between Gas and Electric Ignition
- User-Friendly
- Skimmer Mechanism (Asphalt Version)

## ● Skimmer Mechanism (Asphalt Version)

For aco-100as (Asphalt version), a mechanism for removing film-like formations on the surface of sample when heated.



### Touch Screen

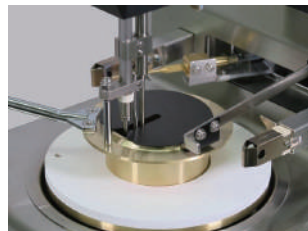
- 7-inch color LCD touch screen for simple, intuitive operation.



## Fire Extinguishing Auxiliary Shutter

Activates when:

- The fire point has been detected.
- The thermal fuse is damaged or disconnected due to heat.
- The forced stop switch was pressed.



Activated fire extinguishing auxiliary shutter

## Switching

- Ignition source can be changed from Gas to Electric or vice versa.



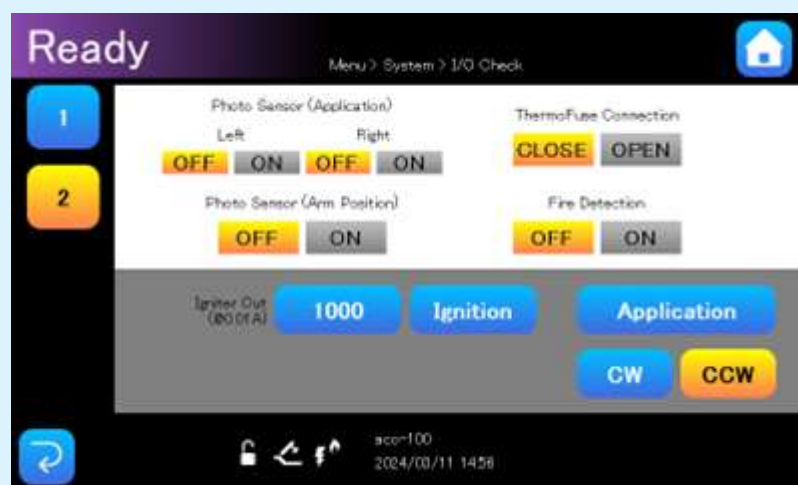
Electric Ignition

## Emergency Switch

- Additional emergency switch at front panel for increased safety.

## I/O Check

Test operation and fault diagnosis can be performed.



# Specifications



Product Name	Automated Cleveland Open Cup Flash Point Tester aco-100 / aco-100as
Test Methods	ASTM D92, ASTM D8254, IP 36, JIS K 2265-4, ISO 2592, AASHTO T48
Measuring Range	Ambient to 400 °C
Test Mode	Preset Test Modes: ASTM, JIS, and ISO (Compliant with Various Test Procedures) Custom Test Modes: Customizable Modes for Various Testing Conditions
Display	7 inch touchscreen color LCD display
Temperature Sensor	PT-100 in stainless steel sheath
Flash Detection	Flame ion current detection method with double ring as an electrode (Double Ionization Rings)
Ignition Source	Gas ignition: Test flame automatic ignition Electric ignition: Electric Igniter *
Barometric Pressure Correction	Barometric pressure correction automatic calculation
Safety Function	①Overcut (overheat prevention) • Expected flash point +30 °C (No flash) • 400 °C (No flash) ②Fault diagnosis • Disconnection of Temperature Sensor • Insulation failure of Flash Detectors • Disconnection of Igniter etc.
External Output	USB x 2, Ethernet x 1
Power Supply	AC100 V to 120 V 50 / 60 Hz 1400 VA AC220 V to 240 V 50 / 60 Hz 1300 VA
Operating environment	Temperature: 10 °C to 35 °C (Diurnal variation is less than 10 °C) Humidity: 80 % RH or less (no condensation)
Dimension	W 240 mm x D 480 mm x H 410 mm
Weight	18 kg
Minimum Footprint	W 340 mm x D 580 mm x H 700 mm

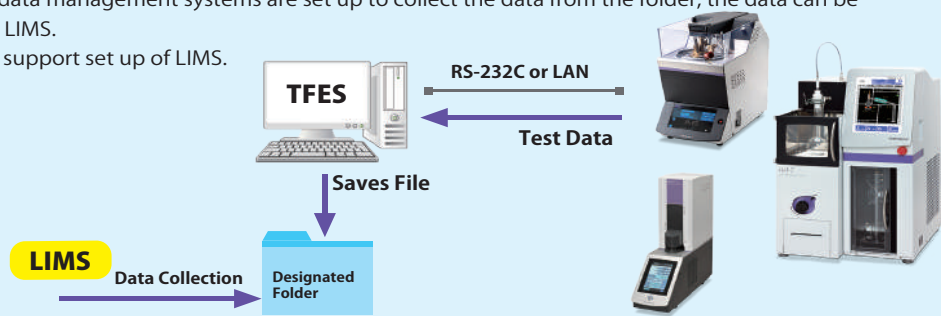
\*Extra parts may be necessary depending on the initial configuration of the instrument.  
TANAKA reserve the right of changes without prior notice.

## Data File Export System (TFES)

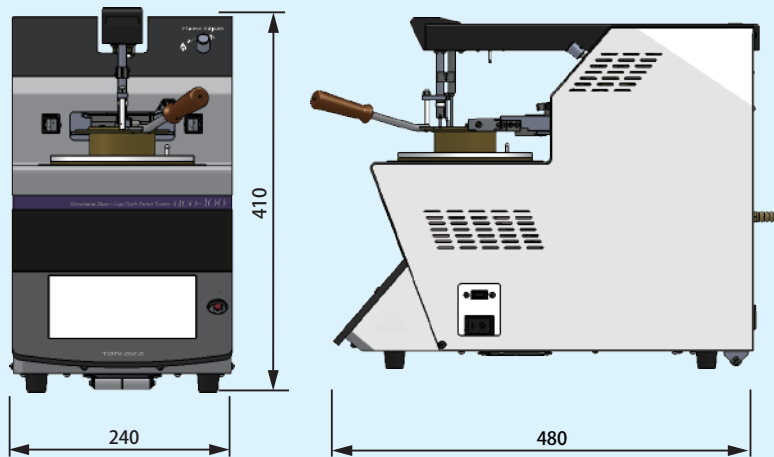
Tanaka File Export System (TFES) is a PC software that collects test data from Tanaka instruments and saves it to a designated folder as a text or CSV file.

If a LIMS or other data management systems are set up to collect the data from the folder, the data can be incorporated into LIMS.

\*Tanaka does not support set up of LIMS.



## Dimensions



## Standard Accessories

Code No.	Part Name	Qty	Remarks
1007421	Test Cup Assembly for aco (with Handle)	1	
1000711	Thermofuse (Pack of 5, with Insulating tube)	1	
	Gas Hose $\phi 15 \times \phi 9.5$ , 1.5m	1	with Gas Hose Band
1007076	Electric Igniter for aco-100 (for Electric ignition source)	1	for Electric ignition only
1001010	Heating Plate (Upper) for ACO-5, 7, aco-8, aco-100	1	
	Test Flame Nozzle Assembly	1	for Electric ignition only
	Igniter Holder, pair (for Gas ignition)	1	for Electric ignition only
1007184	Electric Igniter for aco-100 (for Gas ignition source )	2	for Electric ignition only
1005824	Position Adjustment Jig for ACO-5,7,aco-8, aco-100	1	
1006922	AC Power Cord 100 V to 120 V 2 m (L type)	1	
1006930	AC Power Cord 220 V to 240 V 2 m (L type)	1	
	USB Flash Drive (Instruction & Maintenance Manual)		

## Optional Accessories

Code No.	Part Name	Qty	Remarks
1005593	Printer NEX-C200U01 AC100 V to 120 V	1	
1005594	Printer NEX-C200U05 AC220 V to 240 V	1	
1005861	Printer Roll Paper W58 × $\phi 50$ for AKV-202, RX, NEX-C200	1	
1007260	Electric Ignition Upgrade Kit for aco-100 (Gas to Electric)	1	Necessary parts when changing from Gas to Electric
1007074	Asphalt Upgrade Kit, aco-100 to aco-100as	1	Necessary parts when changing to Asphalt Version

## Suggested Spares for 2 years

Code No.	Part Name	Qty	Remarks
1007421	Test Cup Assembly for aco (with Handle)	1	
1000711	Thermofuse (Pack of 5, with Insulating tube)	1	
1007076	Electric Igniter for aco-100 (for Electric ignition source)	5	
1007184	Electric Igniter for aco-100 (for Gas ignition source )	5	
1001018	Temperature sensor for aco-8, aco-100	1	

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# TANAKA

**Tanaka Scientific Limited**

7-10-3, Ayase , Adachi-ku, Tokyo, 120-0005 JAPAN  
 TEL : +81-3-3620-1711 E-mail: overseas-group@tanaka-sci.com  
 FAX: +81-3-3620-1713 URL : www.tanaka-sci.com