

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)

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



Touch Screen

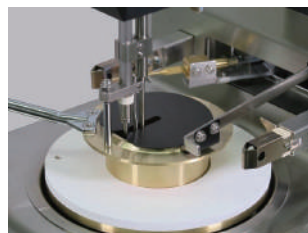
- 7-inch color LCD touch screen for simple, intuitive operation.



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.



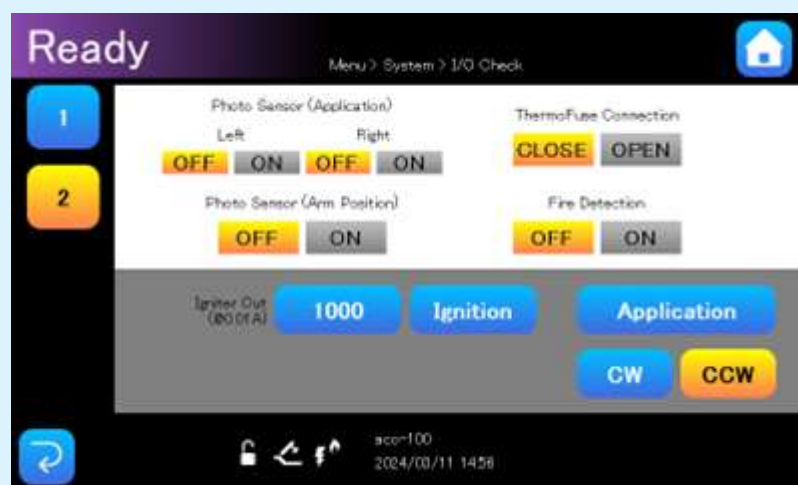
Electric Ignition

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, 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	Platinum Resistance Thermometer (100 Ω)
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

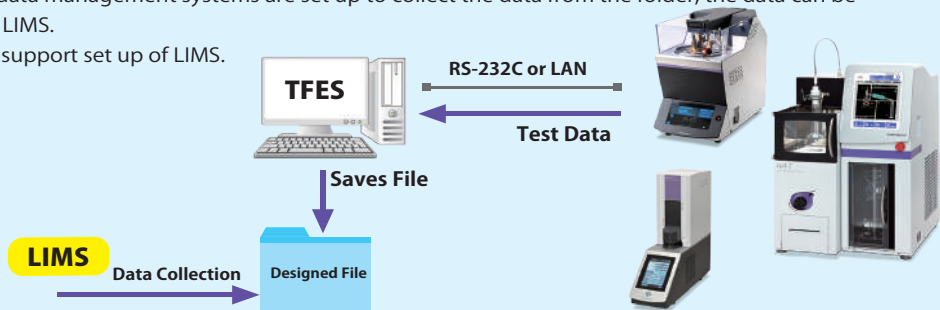
*Extra parts may be necessary depending on the initial configuration of the instrument.
TANAKA reserve the right of changes without prior notice.

Data File Export System (TFES)

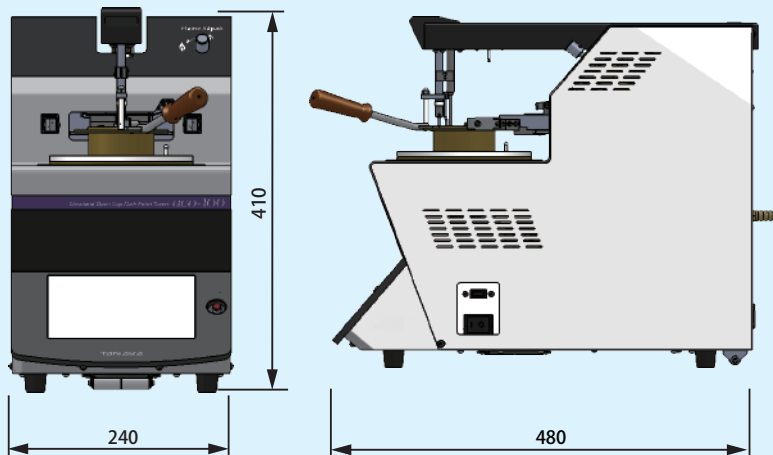
Tanaka File Export System (TFES) is a PC software that collects test data from Tanaka instruments and saves it to a designated folder as a text or CSV file.

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 $\phi 15 \times \phi 9.5, 1.5\text{m}$	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
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)	1	

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 $\times \phi 50$ 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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