



UNIVERSE

AUTOMATED CLEVELAND OPEN CUP FLASH POINT ANALYZER AZA1279

The AZA1279 Automated Cleveland Open Cup Flash Point Analyzer is a fully automated, microprocessor-controlled system designed for precise determination of flash points of petroleum products using the Cleveland Open Cup (COC) method.

Engineered in full compliance with ASTM D92, the instrument delivers accurate, repeatable, and traceable results, making it ideal for laboratories where safety, regulatory compliance, and high-throughput testing are critical.

Standards Compliance

- ASTM D92 (Cleveland Open Cup)

Measurement Capability

- Flash Point Range: Ambient to 400°C
- Suitable for high flash point petroleum products
- Automatic flash detection with high sensitivity

Applications

- Petroleum refineries and fuel terminals
- Lubricant and base oil manufacturers
- Biofuel and alternative fuel testing laboratories
- QA/QC laboratories
- Regulatory and inspection agencies





UNIVERSE Functional & Advanced Control Specifications

Function	Specification
Heating System	Cartridge heater, 300 W
Heating Rate	Adjustable, 5 to 17 °C/min
Cooling Options	Peltier: +10°C to +110°C (air-cooled to +25°C); Optional refrigerated circulator: -30°C to +110°C
Stirring System	Stepper motor controlled, 5-100 RPM
Ignition System	DC motor-driven; selectable electric / gas igniter
Ignition Control	0.5 to 5°C dipping intervals; precise gas flow control; auto gas ignition; 3-step electric igniter intensity
Arm Mechanism	DC motorized swing arm with integrated sensors and igniter
Flash Detection	Thermal sensor
Fire Detection	UV sensor
Auto Calibration	Automatic before each run



UNIVERSE Measurement & Sensor Specifications

Parameter	Specification
Sample Temperature Sensor	PT100 Class A, SS / Glass (-100°C to +150°C)
Bath Temperature Sensor	PT100 Class A, disk type (-100°C to +200°C)
Ambient Pressure	Built-in sensor
Pressure Range	700–1100 hPa

Safety & Protection System

Condition	System Response
Over-temperature	Alarm + automatic shutdown
Sensor failure (sample/bath)	Test abort with error indication
Ignition failure	System alert; ignition disabled
Arm malfunction	Test halted
Fire detection	Immediate shutdown with alarm
Abnormal operation	Fail-safe shutdown



UNIVERSE Technical Specifications

Parameter	Specification
Model	AZA1279
Test Method	Cleveland Open Cup (COC)
Standard	ASTM D92
Flash Point Range	Ambient to 400°C
Heating Rate	5 to 17 °C/min (adjustable)
Sample Volume	70 ml
Display	7" color touchscreen
Data Output	USB export
Power Supply	220 V ±10%, 50/60 Hz
Dimensions	400 × 300 × 350 mm
Weight	Approx. 10 kg

UNIVERSE