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## **DIST-86S SEMI-AUTOMATED DISTILLATION ANALYZER AZA1283**

The AZA1283 Dist-86S Semi-Automated Distillation Analyzer is a precision-engineered instrument designed for determining the distillation characteristics of petroleum products and volatile organic liquids in accordance with international standards. Combining manual operational flexibility with automated measurement and monitoring, the AZA1283 offers an optimal balance between control, accuracy, and cost-efficiency—making it ideal for laboratories that require reliable ASTM D86 testing without full automation complexity.

### **Standards Compliance**

- ASTM D86
- ISO 3405
- IP 123

### **Measurement Capability**

- Temperature Range: 0°C to 400°C
- Temperature Accuracy:  $\pm 0.1^\circ\text{C}$
- Sample Volume: 100 mL (standard)
- Real-time monitoring of vapor temperature and recovered volume

### **Applications**

- Petroleum refineries (gasoline, diesel, kerosene testing)
- Fuel quality control laboratories
- Petrochemical and blending facilities
- Research & development laboratories
- Regulatory and inspection agencies





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### System Features

#### Semi-Automated Operation

- Operator-controlled setup and procedural steps
- Automated temperature measurement and volume detection
- Real-time monitoring of distillation progress
- Flexible control for different sample types

### Heating & Cooling System

Function	Specification
Heating System	Programmable electric heater
Heating Control	Manual + controlled ramp adjustment
Cooling System	Built-in condenser water bath
Condensation	Continuous vapor condensation with stable cooling

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### Measurement & Sensor Specifications

Parameter	Specification
Vapor Temperature Sensor	High-precision ( $\pm 0.1^{\circ}\text{C}$ )
Volume Detection	Optical sensor (real-time)
IBP Detection	Automatic via optical sensing
Display	Digital real-time display

### Safety & Protection System

Condition	System Response
Over-temperature	Alarm + heater shutdown
End point reached	Automatic heating stop
Abnormal operation	System alert
Cooling failure	Operator alert

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## UNIVERSE Technical Specifications

Parameter	Specification
Model	AZA1283
Method Compliance	ASTM D86, ISO 3405, IP 123
Operation Mode	Semi-automated
Temperature Range	0°C to 400°C
Temperature Accuracy	±0.1°C
Volume Detection	Optical sensor
Cooling System	Water bath condenser
Display	Digital
Power Supply	220 V AC, 50 Hz

### What's Included

- 1 × AZA1283 Distillation Unit
- 1 × ASTM D86 Glassware Set (Flask, Cylinder, Thermometer)
- 1 × Condenser Assembly
- 1 × User Manual
- 1 × Calibration Certificate

### Optional Accessories:

- Digital data logging module
- External temperature verification kit
- Spare glassware set