



UNIVERSE WATER IN BITUMINOUS MATERIAL (DEAN-STARK) AZA0936

The AZA0936 Water in Bituminous Materials (Dean–Stark) Apparatus from Azalab is a precision laboratory system designed for the accurate determination of water content in bituminous materials, including asphalt, road oils, cut-back asphalts, and related petroleum-based binders.

Water contamination in bitumen significantly affects performance by causing poor adhesion, stripping, foaming during mixing, and reduced pavement durability. Utilizing the internationally accepted Dean–Stark azeotropic distillation method, the AZA0936 ensures reliable, repeatable, and standards-compliant moisture determination, making it essential for modern quality control laboratories.

Key Functional Features

- PStandard Dean–Stark Distillation System

Globally accepted method for bitumen moisture determination

- High-Quality Borosilicate Glassware

Resistant to thermal shock and chemical attack

Long service life under repeated heating cycles

- Precision Graduated Receiver

Direct and accurate reading of water volume

Fine graduation (typically 0.1 ml resolution)

- Efficient Reflux Condenser

Ensures complete condensation

Minimizes solvent loss

- Controlled Heating System

Electric heating mantle or hot plate

Uniform and stable distillation conditions





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TECHNICAL SPECIFICATION

Parameter	Specification
Model	AZA0936
Test Method	Dean–Stark (Azeotropic Distillation)
Application	Water content in bituminous materials
Distillation Flask	500 ml / 1000 ml (borosilicate)
Receiver Trap	5 / 10 / 25 ml (graduated)
Graduation	Typically 0.1 ml
Condenser	Water-cooled (Liebig / West type)
Heating System	Electric mantle / hot plate
Glassware	Borosilicate
Standards	ASTM D95, EN 1428, AASHTO T55
Power Supply	230V, 50/60 Hz
Design	Bench-mounted modular

Standards Compliance

- ASTM D95 – Water in Petroleum Products & Bituminous Materials
- EN 1428 – Water content in bituminous binders
- AASHTO T55 – Water by distillation
- IP 74
- IS 1448 (Part 53)