

# **DUCTILOMETER TP-0666**

### STANDARD: AASHTO T300, EN 13589, AASHTO T51, ASTM D113, EN13703

Ductilometer TP-0666 is used to determine the cohesive energy and peak force ratio of modified bitumen and polymer-modified emulsified asphalt, evaluating the cohesive properties of relevant bitumens. Cohesive energy and peak force ratio are key indicators for evaluating polymer-modified bitumen in the EU and US respectively, closely related to modifier content. The force ductility test effectively characterizes the cohesive performance of polymer-modified bitumen. The unit can simultaneously conduct four-channel tension testing. It employs a specialized water circulation system, with the refrigeration unit detachable and connected via flexible hoses. This design minimizes the impact of refrigeration unit vibration and water flow on test results.



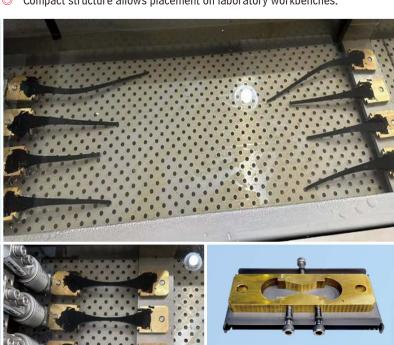




# **DUCTILOMETER TP-0666**

#### **FEATURE**

- O Performs both ductility tests and force ductility tests with dual functionality, reducing testing costs.
- Constructed from high-grade stainless steel with specialized surface treatment for durability and aesthetics.
- © Employs high-precision, high-stability tension load cells with a high protection rating. Tests four specimens simultaneously in a single run.
- Features self-developed control system and software with a user-friendly interface for simplified operation.
- For force ductility tests, software automatically calculates results including peak force ratio and cohesive energy.
- Incorporates a split-type design separating the main unit from the refrigeration unit to eliminate vibration during testing.
- Utilizes a specially engineered water circulation structure to minimize water flow interference with test results.
- O Compact structure allows placement on laboratory workbenches.





#### **TECHNICAL SPECIFICATIONS**

Tension load cell range	490 N
Tension load cell accuracy	±0.1 N
Displacement transducer range	1500 mm
Displacement transducer accuracy	±1 mm
Temperature sensor range:	-50°C ~ 200°C
Temperature sensor accuracy:	±0.1°C
Specimen capacity	4
Tensile speed	50 mm/min(adjustable)
Tensile stroke	Max. 1500 mm
Power supply	220 V, 50 Hz
Main unit dimensions	2350 mm × 550 mm × 430 mm
Main unit weight	200 kg