

PNEUMATIC CONSOLIDATION APPARATUS STC-3F

STANDARD: ASTM D2435, ASTM D4546, AASHTO T216

The pneumatic consolidation apparatus STC-3F is a pneumatic load frame used for stress-controlled consolidation testing. It applies loads instantaneously and to maintain any set load, regardless of sample compression occurring within the loading interval. It is compact and easy-to-use, its small footprint saves valuable lab counter space.





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FEATURE

- It adopts double-acting cylinder with electromagnetic reversing valve, can move in both directions, and realizes stress servo closed-loop control through force sensor.
- Equipped with a 2-channel independent air pressure controller. The two test positions are independently controlled.
- The two sets of digital displacement sensors can be powered by button batteries or by the acquisition system. LCD display can display in and mm units. Connect to the built-in acquisition system to measure the axial displacement change in real time.
- The host shell is made of all-steel, with a powder-sprayed surface, and the frame is made of stainless steel, the side wall of the consolidation cell container is made of transparent plexiglass.
- The software can automatically obtain soil compression coefficient av, rebound modulus ES, consolidation coefficient Cv, initial consolidation pressure Pc and other consolidation test data through computer control of the equipment. Through the data processing function, time square root curve, time logarithm curve, e-p curve, e-lgp curve, CV-P (T90) curve, CV-P (T50) curve, H-P curve, etc. can be obtained.

TECHNICAL SPECIFICATIONS

Axial load	0-10kN
Force sensor	0-10kN, accuracy +/-0.1%F.S., 2 sets
Specimen size	Ø50mm×H.20mm
Air pressure control range	0.001MPa-0.9MPa
Display	LCD screen, resolution 240*128
Data acquisition	Built-in multi-channel 16-bit AD data acquisition system
Displacement sensor	0-12.7mm, resolution 0.01mm