

## **AUTOMATED CONSOLIDATION TEST**

ALF-SSC-20



## **General Features:**

- Electromechanical load frame
- High-precision 5~20 kN load cell
- Digital dial gauge
  - o 12.5 mm travel at 0.01 mm precision
  - o 25 mm travel at 0.001 mm precision
  - o 50 mm travel at 0.001 mm precision
- Variable axial displacement rate:
  - o 0.00 ~ 20.00 mm/min
- Touch screen LCD to enter test details
- Fully automated consolidation test up to 3200 kPa axial stress
- GeoCons analysis software to capture data and analyse consolidation data
- Other tests:
  - Swelling pressure test

## **Accessories**

GEO-ATC	Temperature control add-on
S-CAC-01	Consolidation cell 100 mm ring
S-CAC-02	Consolidation cell 75 mm ring
S-CAC-03	Consolidation cell 50 mm ring
S-ETUCS	Accessories for UCS test
S-BPP-63	Back pressure consolidation cell with 63 mm ring
T-DDG-12D	12.5 mm digital dial gauge 0.01 precision
T-DDG-25D	25 mm digital dial gauge 0.001 precision
T-DDG-50D	50 mm digital dial gauge 0.001 precision
GeoCons	1D-Consolidation & Free Swell/Swelling Pressure tests add-on module
GeoCons Pro	Stress-Controlled & Strain-controlled control add-on module to carry out advanced tests
GeoUCS	Unconfined compressive strength test add-on module
GeothermoLab	Temperature controll add-on module

ALF-SS-20 is an automated consolidation test equipment with a 20 kN electromechanical actuator. The loading frame runs with an axial displacement rate of 0.00 mm/min to 20.00 mm/min. The system has a touchscreen LCD to enter test data.

ALF-SS-20 also has an external digital adjusting unit that can start/stop the test and move the load platen at high speed upward and downward. These functions can also be done from the touchscreen display too.

ALF-SS-20 can also be used to carry out swelling pressure or free swell tests. This device is controlled using GeoCons analysis software for carrying out consolidation, swelling pressure and free swell test. This device can also be equipped with optional accessories to carry out UCS test and back pressure consolidation and permeability tests.

GeoCons software can also be upgraded to GeoCons Pro to carry out repeated load at 0~5 Hz, consolidation test with stresspath controlled and/or mix of deformation-controlled and stress controlled- tests.