



Product Code

UTS-0300	Front Loading Oedometer (Consolidation)
UTS-0302	Bench for Consolidation, 3 Oedometer Capacity
UTS-0307	Consolidation Cell for High Pressure, Ø 50 mm
UTS-0309	Consolidation Cell for High Pressure, ASTM Ø 63.5 mm (2.5")
UTS-0313	Consolidation Cell for High Pressure, BS/EN, Ø 75 mm
UTS-0315	Consolidation Cell for High Pressure, Ø 101,6 mm (4")
UTS-0320	Consolidation Cell for High Pressure, Ø112,8 mm
UTGM-0120	Analog Dial Gauge, 30x0.01 mm
UTGM-0148	Digital Dial Gauge 25x0.01 mm, LCD display
UTGM-0152	Digital Dial Gauge 12.7x0.001 mm, LCD display
UTGM-0060	Linear Potentiometric Displacement Transducer, 10x0,001mm
UTGM-0062	Linear Potentiometric Displacement Transducer, 25x0,001mm
UTGM-0072	High Accurate Strain Gauge Based Displacement Transducer, 10x0,001 mm
UTGM-0078	High Accurate Strain Gauge Based Displacement Transducer, 50x0,001 mm
UTCU-0320	Interface Unit with 4 Channel for Data Acquisition
UTCU-0325	Interface Unit with 8 Channel for Data Acquisition
USOFT-0300	Utest Software for Consolidation Test

Standards

BS 1377:5; ASTM D2435, D3877, D4546; AASHTO T216;
CEN ISO/TS 17892-5

The UTS-0300 Front Loading Oedometer is rigidly constructed to ensure minimum frame distortion. The frame is designed to load the specimen through a lever arm assembly and one of three alternative beam ratios as 9:1, 10:1 and 11:1. The beam is fitted with a counter balance weight and beam support jack. The cell platform will accept the complete range UTEST consolidation cells and is fitted with a central spigot to ensure accurate centering of the cell under the loading.

The UTEST fixed ring consolidation cells are manufactured from corrosion-resistant materials and conform to the requirements of the relevant standards. An integral water reservoir is incorporated in the cell which allows the specimen to be inundated when required. All cells are supplied complete with upper and lower porous disc, pressure pad and cutting (specimen) ring.

The One-dimensional consolidation test is used to determine the consolidation characteristics of soils of low permeability.

Tests are carried out on specimens prepared from undisturbed samples. Data obtained from these tests together with classification data and a knowledge of the soils loading history, enables estimates to be made of the behavior of foundations under load. Consolidation cell, dial gauge or displacement transducer and data logger, bench, weights, apparatuses for prepare consolidation samples and calibration disc should be ordered separately.



Data Acquisition & PC Software



UTG-0320

4 or 8 channel interface units for data acquisition (UTCU-0320 or UTCU-0325) are used for recording displacement data over time.

- High resolution : 260.000 points.
- Serial port for PC and printer connection.
- CPU card by microprocessor 32 bit ARM risk architecture.
- 4 or 8 analogical channels for displacement transducers.

Utest Consolidation Software (USOFT-0300) is developed according to ASTM D2435, D3877, D4546, BS 1377:5 and AASHTO T216 standards to be used with UTCU-0320 and UTCU-0325.

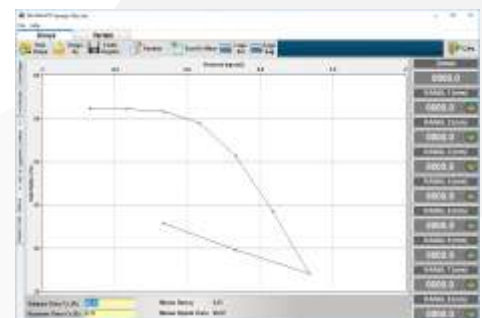
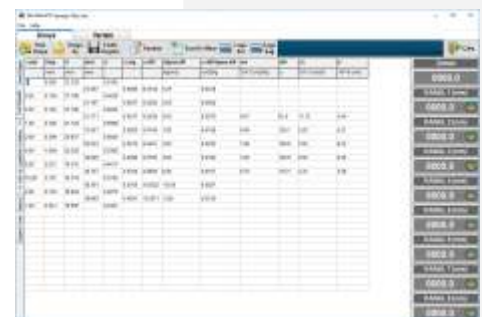
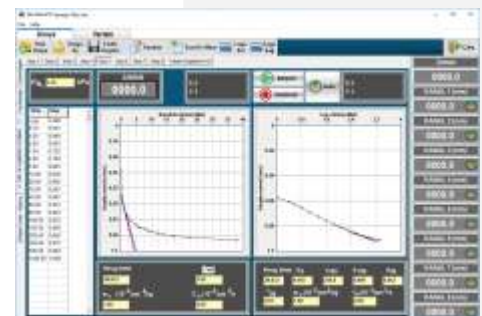
Displacement transducers are connected to interface unit and interface unit is connected to PC by RS232 serial output. The software is capable monitoring the change of displacement data over time.

User can initiate and end data recording process by using the software. The user can determine and assign different time intervals (or select fixed time intervals) and stresses for the calculation of the consolidation test data.

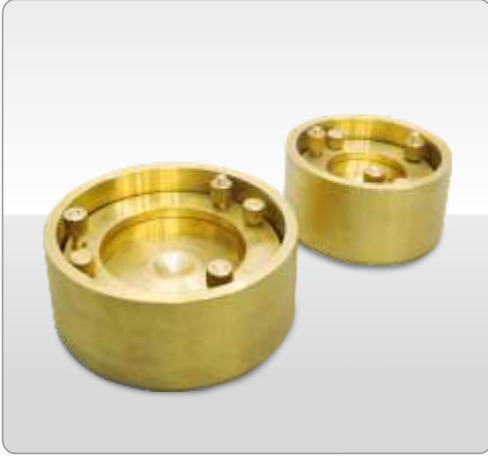
The consolidation software has different data recording columns each assigned to the consolidation cells and they can be set to different normal load (stress) values. The user can also manually enter the vertical displacement data to these columns for correction.

The graphs of time-displacement pairs are drawn in both square-root time and logarithmic time scales. In addition to these visualizations, the software can calculate required parameters such as v_t90 , v_t50 , v_t100 , m_v , C_v , etc. according to the related standards indicated above. Recorded data, graphs, calculations and all other generic data can be exported to Microsoft Excel for further evaluation.

- Customizable User Interface
- Graphical outputs and reports can be saved as MS Excel worksheet
- Flexibility in edit report and graph templates



Dimensions	750x850x1400 mm (3 pcs UTS-0300 + UTS-0302+UTS-0376 +Accessories)
Weight (approx.)	180 kg (3 pcs UTS-0300 + UTS-0302 + UTS-0376 +Accessories)



Product Name	UTS-0307 (Ø 50 mm)	UTS-0309 Ø 63,5 mm (2,5")	UTS-0313 (Ø 75 mm)	UTS-0317 Ø101,6 mm (4")	UTS-0321 Ø112,8 mm
Spare Cutting Ring	UTS-0308	UTS-0312	UTS-0314	UTS-0318	UTS-0322
Upper and Lower Porous Disc	UTS-0330	UTS-0331	UTS-0333	UTS-0335	UTS-0338
Calibration Disc, stainless steel	UTS-0339	UTS-0341	UTS-0343	UTS-0345	UTS-0347
Apparatus for Prepare Cons. Sample	UTS-0358	UTS-0359	UTS-0360	UTS-0362	UTS-0364

Sets of Weight for Consolidation

UTS-0368	16 kgf Set	(2) 5 kg	(1) 2 kg	(2) 1 kg	(3) 0,5 kg	(2) 0,25 kg	-----
UTS-0370	32 kgf Set	(1) 10 kg	(3) 5 kg	(2) 2 kg	(1) 1 kg	(3) 0,5 kg	(2) 0,25
UTS-0372	50 kgf Set	(3) 10 kg	(2) 5 kg	(3) 2 kg	(2) 1 kg	(3) 0,5 kg	(2) 0,25
UTS-0374	64 kgf Set	(4) 10 kg	(3) 5 kg	(2) 2 kg	(3) 1 kg	(3) 0,5 kg	(2) 0,25
UTS-0376	80 kgf Set	(6) 10 kg	(2) 5 kg	(3) 2 kg	(2) 1 kg	(3) 0,5 kg	(2) 0,25



UTS-0348

Code	Slotted Weight
UTS-0380	125 g
UTS-0382	250 g
UTS-0384	500 g
UTS-0386	1 kg
UTS-0388	2 kg
UTS-0390	5 kg
UTS-0392	10 kg
UTS-0394	4 kg
UTS-0396	8 kg