

ACONS – Automatic Consolidation

Related Standards: BS 1377-5 : 1990; ASTM D4235-04; AS 1289.6.6.1; XP PG4-090-1

VJ Tech take pride in simplifying procedures for all modern day laboratories, saving our clients time and money. The design and manufacture of our ACONS system achieves this once again.

The Automatic CONSolidation System is simple and easy to use, specifically designed to carry out the Oedometer test.

Features

- Large LED Graphic display
- Simple 16 key operation
- Computer controlled operation – daisy chained to enable multiple tests to be run simultaneously and independently*
- On board calibration and linearisation
- No weights required
- Fully automatic loading and unloading sequences*
- Automatic load application can nearly halve test time*
- Space saving – far smaller footprint than conventional dead weight system

* When used with CSODO software



VJT9100 - ACONS Automatic Consolidation Testing System

VJT-csODO: Clisp Studio Oedometer Software

Features

- User defined data logging intervals
- User defined loading & unloading increments
- Automatic loading (subject to software)
- On screen measurement of T50 & T90 values
- Live Tabular display of logged and calculated data
- Live Graphical display of logged and calculated data
- User defined views/graphs/tables
- Standard predefined presentation reports
- Export of data to Excel & test script export and import
- Customised reports (at additional cost)



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Ordering Information

VJT9100	ACONS Automatic Consolidation Testing System
VJT0650A	ACONS Pneumatic Loading Consolidation Frame, complete with built in pneumatic force controller

Accessories

VJT0110-MIT	Digital Dial Gauge, 25 mm X 0.001 mm with 2 metre cable
VJT0271	Displacement transducer, 25 mm with cable and 5-pin DIN plug
VJT0284	Transducer Bracket for LSCT transducer
VJT1010-1D	Single Channel digital dial gauge interface for PC
VJT1010-4D	Four Channel digital dial gauge interface for PC
VJT0545	Air Compressor 10 Bar, with 50 litre receiver and 2.5HP motor
VJT0545F	Filter for air compressor, with autodrain for clean air supply
VJT-csODO	Clisp Studio Consolidation Software

Specifications

Sample Diameter	50 mm	75 mm	100 mm
Maximum Load	8000 kPa	3500 kPa	2000 kPa
Maximum Frame Capacity	15kN (with 8000 kPa air pressure input)		
Resolution	1 N		
Power	110/240V AC 50/60 Hz		
Dimensions (W x D x H)	200 x 200 x 430 mm		
Weight	29.1 kg		

You can use any of our Consolidation Cells; other manufacturer's cells may be used with a special adaptor, which can be obtained from VJ Tech on request.

The ACONS supports all VJ Tech's range of data loggers either with LSCT or Digital dial gauge transducers for the measurement of sample settlement.



Multiple ACONS running from one PC



Consolidation Cell

Consolidation Cells

Our fixed ring cells are made from corrosion-resistant material. The soil sample is placed on the lower porous disc with the cutter ring surrounding it. The cell ring then clamps down the cutter ring and the pressure pad (which has the upper porous disc attached to it) is placed over the sample. The whole of this assembly is enclosed within a Perspex cylinder.

Cell Accessories

	50 mm Sample	2.5" Sample	75 mm Sample	100 mm Sample
Complete Cell	VJT0655	VJT0660	VJT0665	VJT0665-100
Upper Porous Disc	VJT0656	VJT0661	VJT0666	VJT0666-100
Lower Porous Disc	VJT0657	VJT0662	VJT0667	VJT0667-100
Cutting Ring	VJT0658	VJT0663	VJT0668	VJT0668-100
Calibration Disc	VJT0659	VJT0664	VJT0669	VJT0669-100

Note: Alternative/custom sample sizes on request.