

ROWE CONSOLIDATION

FLOWTRAC II OR III

The hydraulic consolidation system (Rowe Cell system) is used because of its multiple drainage (up to eight conditions) options as well as the capability to test large diameter samples using water pressure on a flexible diaphragm. Furthermore, free strain and equal strain can be applied on the top of the sample through a flexible platen or a rigid one. The FlowTrac II or III flow pumps automate the entire consolidation test using conditions specified, with typical completion in 24 to 48 hours. The system automatically initializes, back pressure saturates, and consolidates incrementally without intervention by the user.

- Volume capacity of 200, 250 or 750 cc
- Pressure options of 150 or 200 psi
- Built in safety features
- Smart and sophisticated technologies to simplify testing
- Repeatable, reliable, and accurate results you can trust
- Real-time and remote test parameter changes for quality control
- Convenient reporting and data export
- Faster, smarter, better: designed with full automation and manual control options
- Easy upgrade to perform additional test types
- Designed and manufactured in the USA

Applicable Test Standards

- ASTM D2435, D4186
- BS 1377-6
- ISO/TS 17892-5



Standard Rowe Consolidation System

ROWE CONSOLIDATION FLOWTRAC II OR III



TECHNICAL SPECIFICATIONS	Typical Test Output (example)
PRESSURE/VOLUME CAPACITY	
150 psi (1035 kPa); 200 cc (6.7 fl oz) 200 psi (1400 kPa); 250 cc (8.5 fl oz) 200 psi (1400 kPa); 750 cc (25.4 fl oz)	HYDRAULIC CELL CONSOLIDATION TEST Consolidation Phase Step 4 of 9 Stress: 100 kPa
MOTOR	1
Micro-stepper system with built-in controls	2
FLOW RATE	
Min speed 0.0003 cc/min 0.00001 fl oz/min Max speed 1054 cc/min 36 fl oz/min	
POWER	6
110/220 V, 50/60 Hz, 1 phase	۰ ۱۰۰۰۰ ۰۰۰۰ ۰۰۰۰ ۰۰۰۰ ۰۰۰۰ ۰ ۰۰۰
DIMENSIONS	
FlowTrac II FlowTrac III 203 x 406 x 470 mm 203 x 457 x 260 mm (8 x 16 x 18.5 in) (8 x 18 x 10.25 in)	
WEIGHT	5
FlowTrac IIFlowTrac III14 kg (30 lbs)11 kg (25 lbs)	6
NCLUDED	Typical Test Output (example)
GeoNet-U USB 2.0 network adapter and cable to link to PC/laptop RCON software module to automatically run and report tests	HYDRAULIC CELL CONSOLIDATION TEST
ACCESSORIES	Summary
Rowe Cell Options: - Sample diameter 63.5 mm (2.5 in) sample height 30 mm (1.2 in) - Sample diameter 150 mm (6 in) sample height 50 mm (2 in)	
WARRANTY	
12 month warranty; extended warranties available	4
	Strain, %
User Friendly Interface	б 6-
RCON	
e View Run Calibrate Control Report Options Help Project Specimen WaterContent Read Table TestParameters Initialization Saturation Consolidation Table	8
Start Phase: Consolidation Consolidation Consolidation	10
	Before Test After Test Current Verifical Effective Stress: 100 kPa Water Content, % 19.10 14.96
Overburden Pressure: 100 kPa	
Preconsolidation Pressure: 70 KPa	Preconsolidation Stress: 70 kPa Dry Unit Weight, N/m ³ 13223 14265
Preconsolidation Pressure: 70 KPa	Preconsolidation Stress 70 kPa Dry Unix Weight Nim³ 13223 14255 Compression Ratio: 0.3 Saturation. % 535 4941 Damente: 153 zmm Void Ratio 0.33 0.79
Preconsolidation Pressure: 70 KPa	Preconsultation Stress: 70 kPa Dry Unit Weight Nim ³ 13223 14255 Compression Ratio: 0.3 Saturation: % Saturation: % S3 52 49.41 Diameter: 153 am Height: 43.56 mm Void Ratio 0.33 0.73 LL· PL· PE· GS: 2.80 Void Ratio 0.33 0.73
Preconsolidation Pressure: 70 KPa	Preconsolidation Stress: 70 kPa Dry Unit Weight, Nim ³ 13223 14255 Compression Ratio: 0.3 Saturation, % 53.52 48.41 Diameter: 151.3 m Height: 43.56 mm Void Ratio 0.83 0.73 LL···· PL··· PL··· GS: 2.60 053.2 0.73

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