

**ODEOMETER AUTOMATIC
CONSOLIDATION MACHINE
101-S0083-01**



ODEOMETER AUTOMATIC CONSOLIDATION MACHINE

Standard: Meets: - ASTM D2435 - ASTM D3877 - ASTM D4546 - BS 1377:5 - AASHTO T216

Specification

- Machine comes with automatic electromechanical type loading frame (10 KN)
- deformation measurement sensor absolute type with 10mm measurement length
- S-type load cell
- Consolidation cell 50 mm diameter with porous stones
- Pace rates
 - ◇ 0.0001mm/min up to 40mm/min,
 - ◇ adjustable ramp load between 0.05 kN/Sec – 5 kN/Sec
 - ◇ 1kHz data acquisition and control capability
 - ◇ Display of machine is 10inch touch screen LCD



Control Unit: Control unit of machine is “Sematron Touch V4” advanced controller, control unit allows constant load, loading, unload-load control, deformation control, displacement control from 0.0001mm/min up to 40mm/min, adjustable ramp load between 0.05 kN/Sec – 5 kN/Sec, feasible for consolidation test, 1kHz data acquisition and control capability which allows accuracy in control and reading load/deformation, special close loop (PID) control with double loop, automatic gain feature for different sensors, automatic calibration function.

Display Unit: Display of machine is 10inch touch screen LCD with capacitive touch, easy to use - user friendly built-in software, ready to use without any PC, 4 GB (extendable) internal memory to save test graphics and settings, USB port to transfer results from LCD, LAN port to connect machine with internet and PC, communication between control unit (Sematron Touch V4) by CAN-bus,

Save results in pdf and excel format, print result feature directly from LCD – feasible to attach all HP printers also allows mini printer (optional),

Email results directly from LCD, software update feature by USB, all possible measuring units are available (N, kN, lb etc.), automatic zero point correction, high control stability, password protected calibration menu, password protected user levels to avoid change in settings by operator.



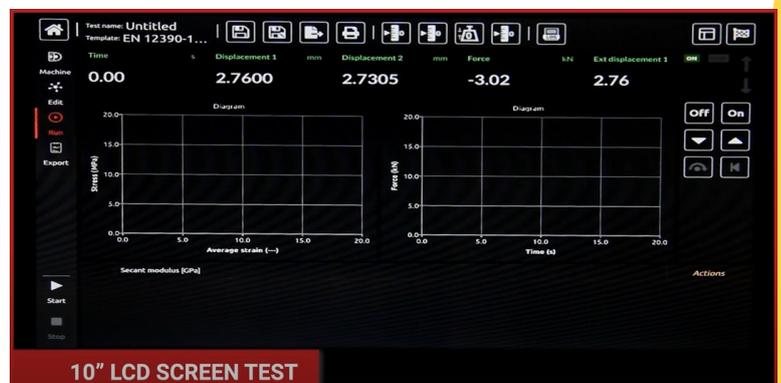
101-S0083-10 Consolidation Cell

Control System Features

Machine Interface

The control system is easy to use with its user-friendly interface and is compatible with all Sensor devices.

10.1 inch touch panel as standard and other options available. Provided with special Universal testing software installed and templates enable test run in a few simple touches.

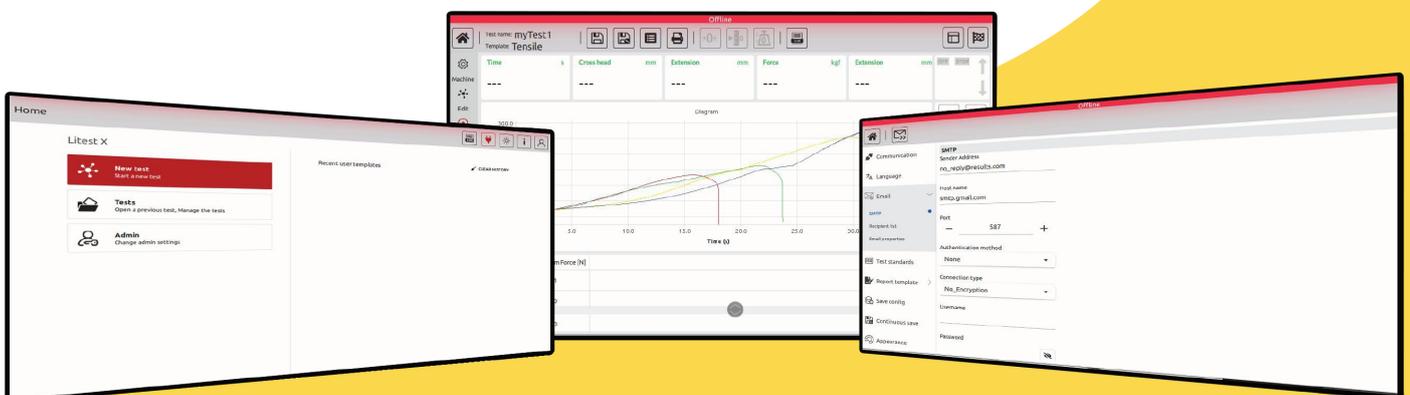


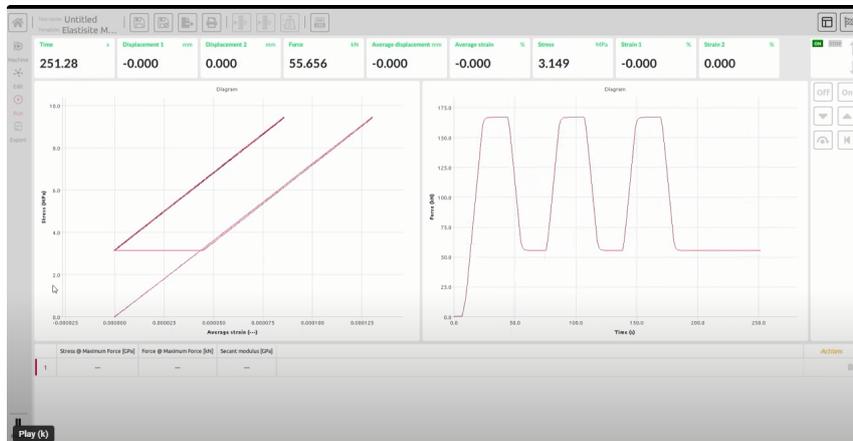
PC Interface

The machine can directly Interface to a PC using USB

The system can be driven from the PC using the advanced software provided.

The images Below are from a PC controlling the machine





Universal digital measurement and control electronics for testing machines

- Analog input amplifier with DC supply and 24-Bit resolution
- Test frequency up to 100 Hz
- Measurement and control frequency up to 1 kHz
- Configuration, calibration and control tuning with PC software
- Suitable for all kind of static and dynamic testing
- 3 channels independent incremental digital sensors
- 4 separated fully differential analogue channels
- Analog amplifier Input range: +/- 5 mV to +/- 10 V
- Adjustable filter time with up to 1000ms @ 1 ms system time
- Operating unit remote-control based on RS-485 communication
- Safety emergency system
- 8 channels logical sensors with SI units
- 8 channels controller parameters
- 8 channels linearization each channel up to 12-points
- 4 channels calculated sensors
- 16 channels Universal digital IO
- Control IO feature with selectable functions
- Synchronous Serial Interface input
- ± 10 V analog and digital command output
- Serial interface for external electronics • Monitoring of safety relevant drive signals
- Support of position limit switches
- Grip control feature
- Supply and monitor of drive control signals
- Ethernet and USB communication
- Firmware updating capability