

**COMPRESSION MACHINE 2000KN  
PUMP AND CONTROLLER UPGRADE  
KIT  
101-C0063-65**

**MatCivTest**  
MATERIAL CIVIL TEST EQUIPMENT

## UPGRADE YOUR OLD LOAD FRAME TO THE LATEST PUMP AND CONTROLLER SYSTEM

### 101-C0063-65 -UPGRADE KIT HYDRAULIC UNIT DUAL "SEMATRON TOUCH SERIES V4" CONTROLLER

For a dual compression and combined flex frame unit.  
Includes dual electrical solenoid valves to switch between the compression and flex machines

The load measurement and control: is carried out between 4% and 100% of the capacity with class 1.

Control Unit Features: is "Sematron Touch Series V4" advanced controller:

Loading, unloading, load control, deformation control, constant load increase adjustable kN/Sec, or mm/min pace rates (requires extras sensors).

Piston release load automatically at sample break, for simple strength test – ramp loading, 1kHz data acquisition and control capability.

(PID) control with double loop, automatic gain feature for different sensors, automatic calibration function, extra channel for a 2nd load sensor.

Display Unit: 10 inch touch screen LCD.

Built-in software, 4 GB (extendable) internal memory to save test graphics and settings

USB/LAN port to transfer results and connect with internet and PC.

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

PC Software: supplied which allows controlling machine with computer, PC software allows same features and menus as Machines display.

### EXAMPLE OF SYSTEM UPGRADES



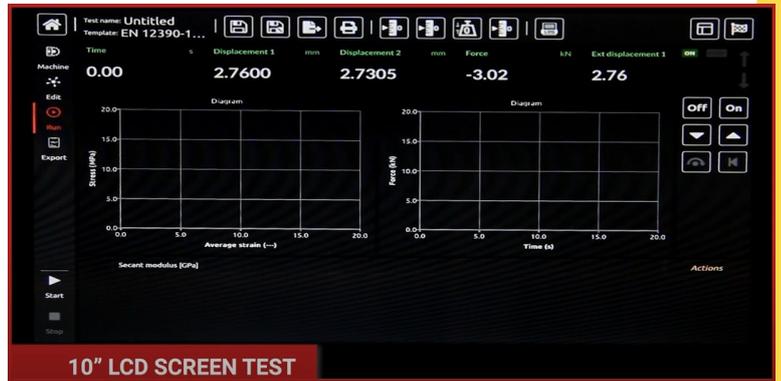
[www.matcivtest.com.au](http://www.matcivtest.com.au) - visit for links to our stock range  
Phone: +61 (0) 418 246 108 - Email: [sales@matcivtest.com.au](mailto:sales@matcivtest.com.au)  
Australian Head Office: 122 Young Street, Annandale NSW 2038

## 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.

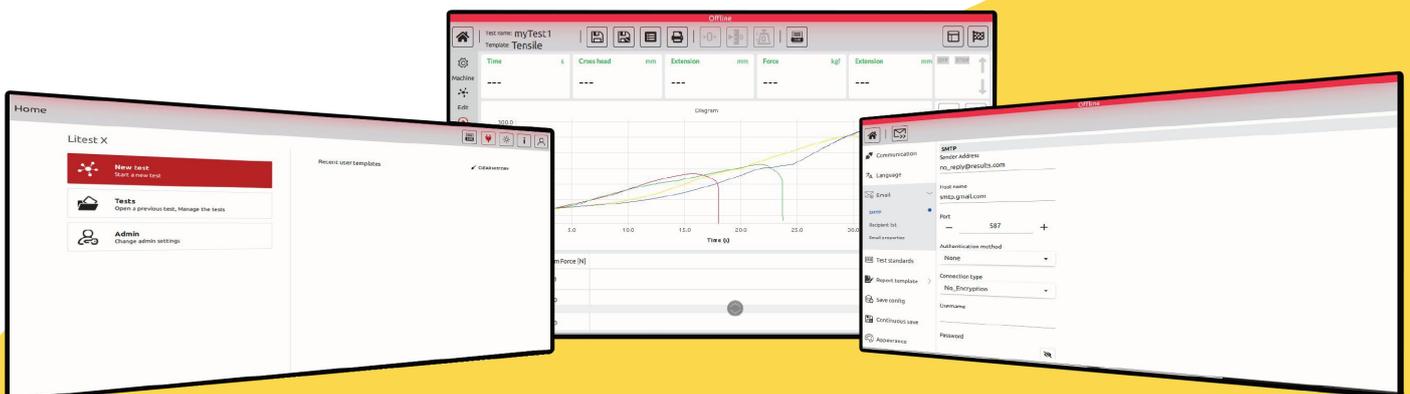


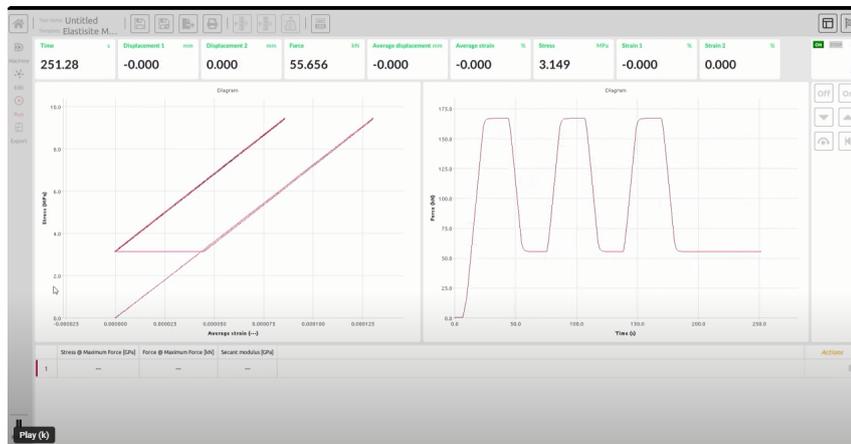
### PC Interface

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





## Control System Specification

### 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
- $\pm 10$  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