SOILMATIC — SOIL TESTING EQUIPMENTS

Software EDS

The Software EDS.EXE of Soilmatic line of Proeti, is a program that allows acquisition, process and analysis of data generated during a test. It also allows the control of the test machine.

El software, depending on the number of purchased licenses, has predetermined and configured test, following desired Standard. Nevertheless you could create new test and modify existing ones.

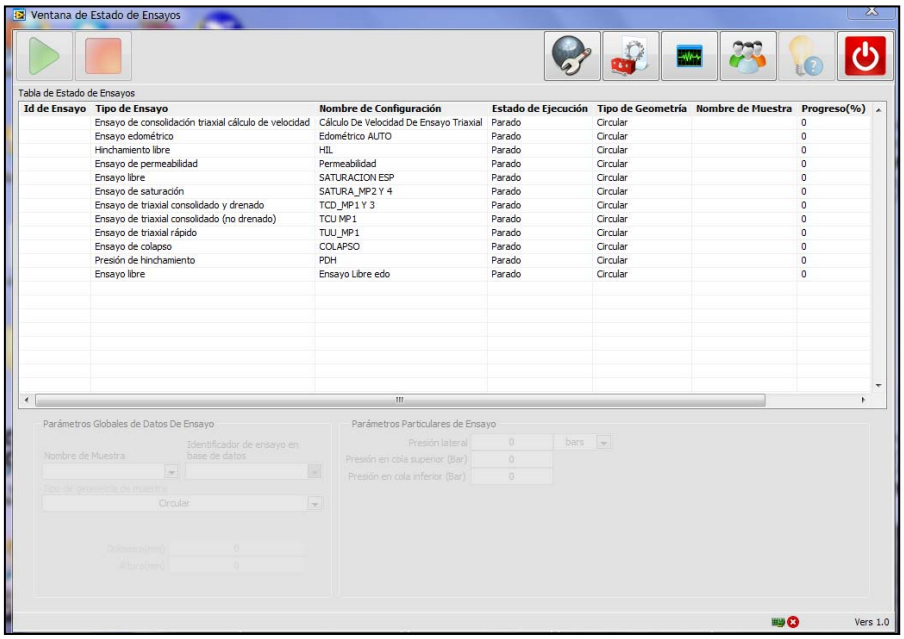
Test configuration allows to you create data acquisition sequences, linear or customized. You also could record and register data with customized frequency and time, and modify these parameters during the test.

"Events" option will allow to you add new readings to already programmed frequencies. For example, you could record additional readings each 5 N, activate a continuous recording of data when it reached a point of deformation, end the test, etc.

The software can execute at the same time multiple test, and allow simultaneously display them.

During test execution you could stop or pause at any time, and restart them easily with any problem.

EDS software is the most advanced tool to control geotechnical test and soil mechanics.



The software is multilingual and Works with user selection.

An administrator can access and control all software parameters. He will be able to create new profile user and restrict the permission to access some menus.

For example, create a user that only can execute test but no modify configuration of them, or an user that just can access the calibration sensors menu.

The program is designed as well to allow remote control of it.

At the end of the tests, the software analyze and process the data, generating a report in Word format (customizable) or export to Excel files if desired.

Test

The software has a test menu, when the user is able to

- Create a new test
- Delete test
- Modify test
- Create a free test

Another software characteristics

- Back-up system of configuration of sensors, test, etc. Just with a “click” on the mouse you will be able to save the system information.
- Automatic saving of test data in case of power cut, allowing restart the test.
- Export data to .txt or Excel.
- Multilingual

Sensors

- The software has a sensor menu where you can
- Create new sensors
- Delete sensors
- Calibrate sensors
- Edit the calibration of sensors

The software, under license, allows execute pack or test:

S0232 – OEDOMETER TESTS

Consolidation test.
Free swell test.
Swell pressure test.
Collapse test.

S0233A – Shear tests.

Consolidation test.
Direct shear test.
Direct residual shear test.

S0235 – Compression Tests.

Simple compression test
CBR penetration test.

S0231 – Free tests

Free test.

S0233 –Direct shear tests

Consolidation test.
Direct shear test (circular / square specimens)
Direct shear residual test.

S0234 Triaxial tests

Triaxial saturation test.
Consolidation triaxial test.
UU test.
CU test.
CD test.
Permeability test.

S0236 – CBR test.

CBR swell test.
CBR penetration test.

PACK OF LICENSES IN ORDER TO EXECUTE AUTOMATIC TEST.

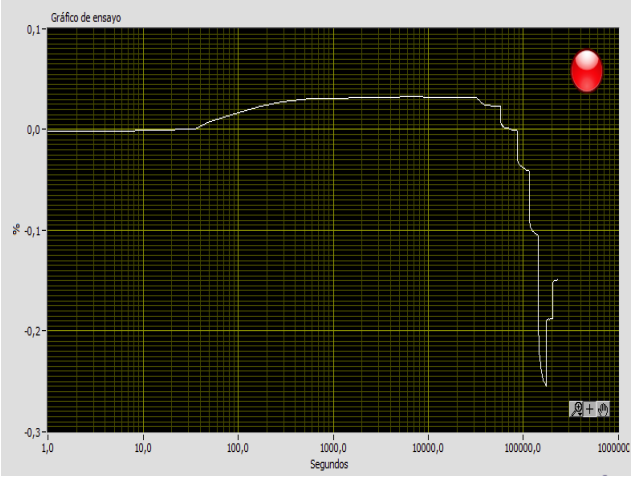
EDS SOFTWARE AND OEDOMETER PACK OF TEST

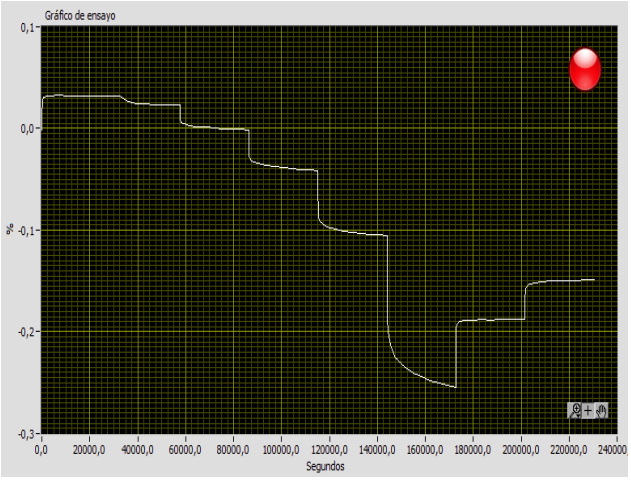
The “EDS” software for soil tests is the most advanced in the market.

You will be able to configure test so as to comply with desired Standard Method, to program continuous data recording at predetermined values or by events. You will also be able to perform any type of test using the “free test” tool that makes possible to configure test to meet your needs using the required sensors. You will be able to include additional strain or pressure sensors in order to monitor interstitial pressure during consolidation. This and other utilities make EDS Software an integral solution and a powerful tool.

EDS Software records data with user customized configuration and displays real time results. Graphics display live sensors one by one or all of them at the same time. You will be able to choose between linear or logarithmic time scales.

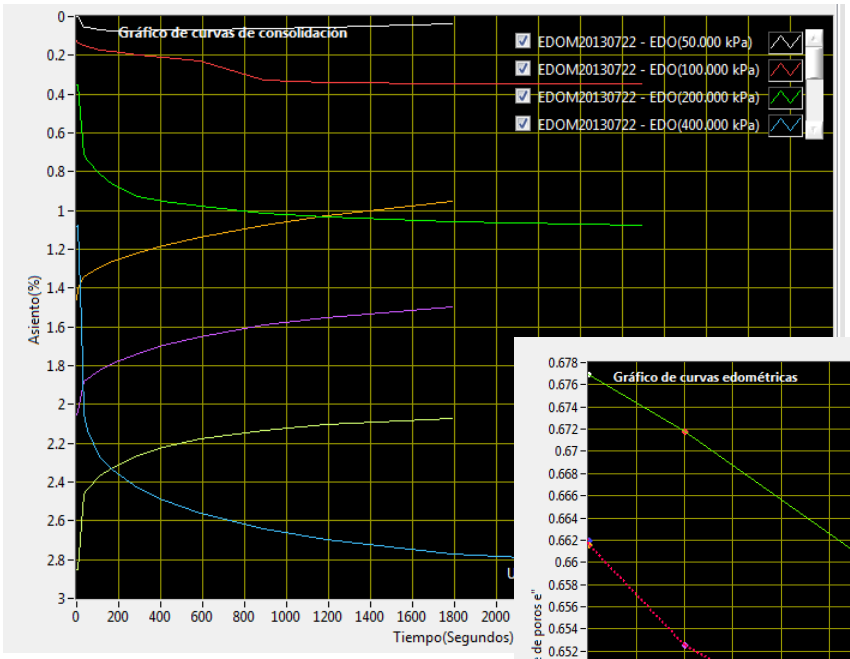
EDS also has event utilities making possible to accelerate or decelerate data acquisition, test and data recording finish, alarm activation, etc. All data are recorded and stored for later analysis.



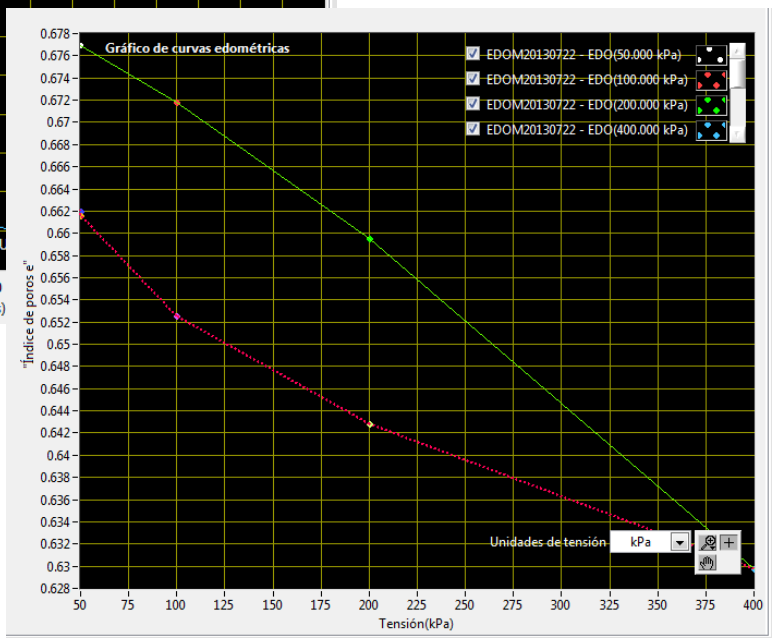


The results and graphics are printed in Word file format or can be exported to Excel.

The software allows the user to program “n” load steps that can be either incremental or decremental. It is also possible to configure their length. To start the test, simply place the simple on the test area and press the “start” button. The software controlling the test performance will apply the previously set load / unload steps. For example: if six load steps and two unload ones have been programmed, the system will start increasing loads and keeping them during the desired lapse of time. Once a load step is finished, the system will automatically proceed to the next load increment and so on until test completion. It is also possible to assign events to the test if desired; therefore, once a predefined value is reached the system will automatically move on to the next load / unload step.



Consolidation



Oedometric Graphic

As Soilmatic oedometer is conceived to automatically move on to predefined steps, an incremental consolidation can be completed in 24 or 48 h if desired.

EDS software record strain readings from a displacement transducer and applied load readings from a force transducer. This one allows the system to apply and maintain predefined loads and load increments.

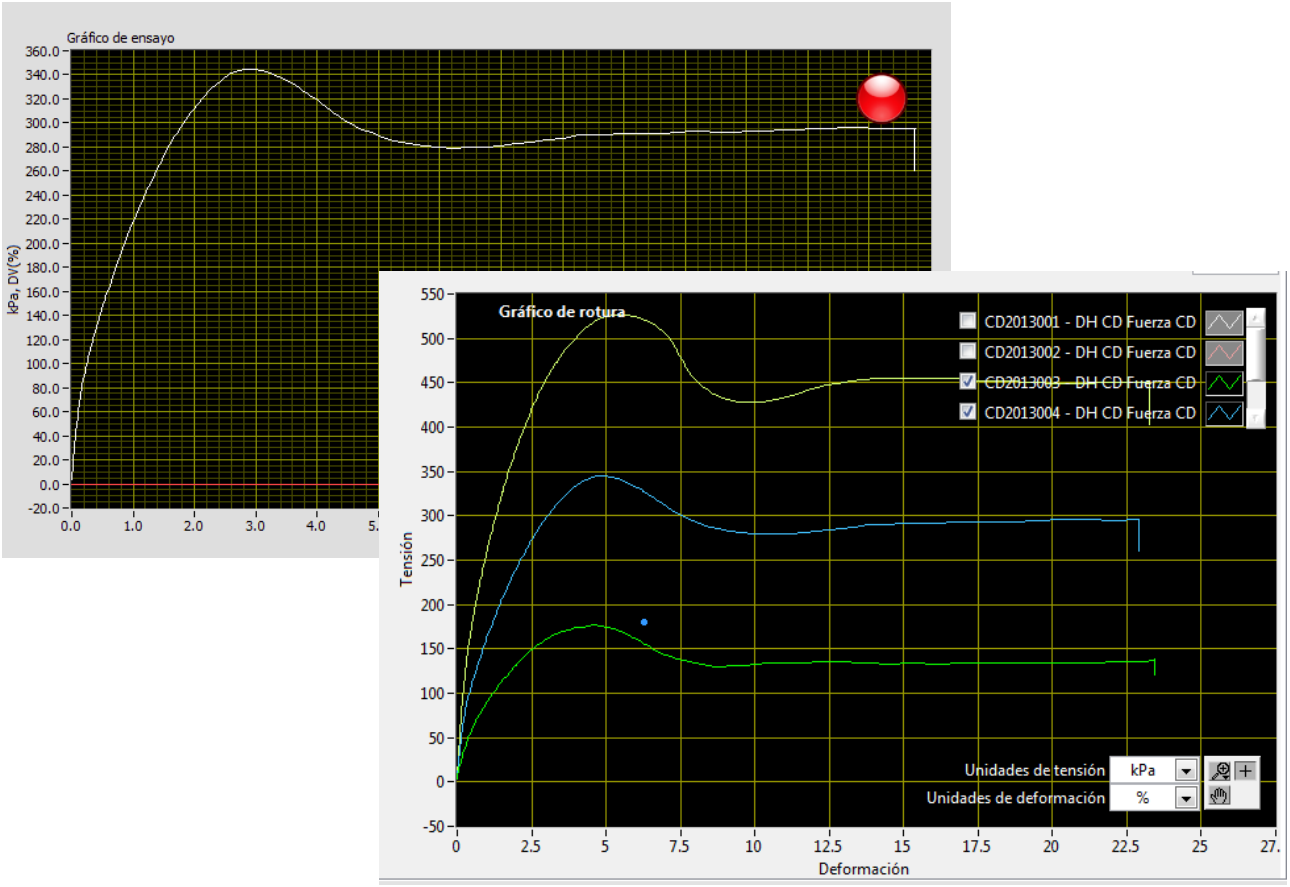
Test results are displayed on the PC screen in real time and stored for later automated processing.

EDS Software allows you to:

- View test performance on the PC screen in real time.
- Analyze test results with post analysis software.
- Directly print reports with Word or export them to Excel.
- Software allows you to pause and resume a test or to easily carry on with it after a power cut.
- The system displays total test duration and remaining time to completion.
- If desired, the system will automatically finish test.
- With a single PC, you will be able to control as many automated oedometers as you wish.
- Software will control all the oedometers connected to the computer in an independent, automatic and simultaneous way.

SOFTWARE EDS AND PACK OF DIRECT SHEAR TESTS

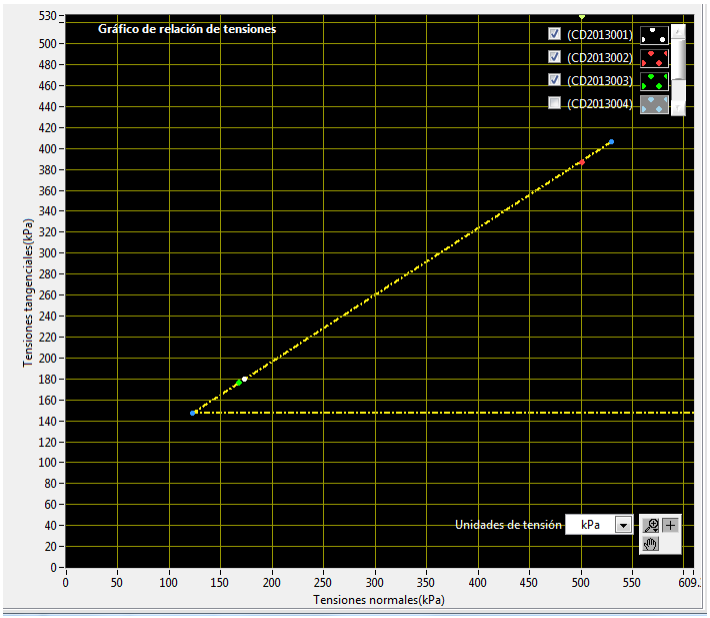
EDS software for direct shear test is the most advanced that you can find. You will be able to configure tests so as to comply with the desired Standard Method, to program continuous data recording at predetermined values or by events. You will be able to perform any type of test using the “free test tool” that makes possible to configure test to meet your needs using the required sensors. You will be able to include additional strain or pressure sensors in order to monitor interstitial pressure during consolidation. This and other utilities make EDS Software an integral solution and a powerful tool.



EDS software records data with user customized configuration and displays real time results. Graphs display live sensors one by one or all of them at the same time. You will be able to choose between linear or logarithmic time scales. EDS also has event utilities making possible to accelerate or decelerate data acquisition, test and data recording finish, alarm activation, etc. All data are recorded ad stored for later analysis. Test results and graphs are printed in Word file format or can be exported to Excel.

EDS software record the horizontal and vertical strain readings from two displacement transducers as well as the applied load readings (horizontal and vertical) from two force transducers.

The results are displayed on the PC screen in real time and stored for later automated processing.



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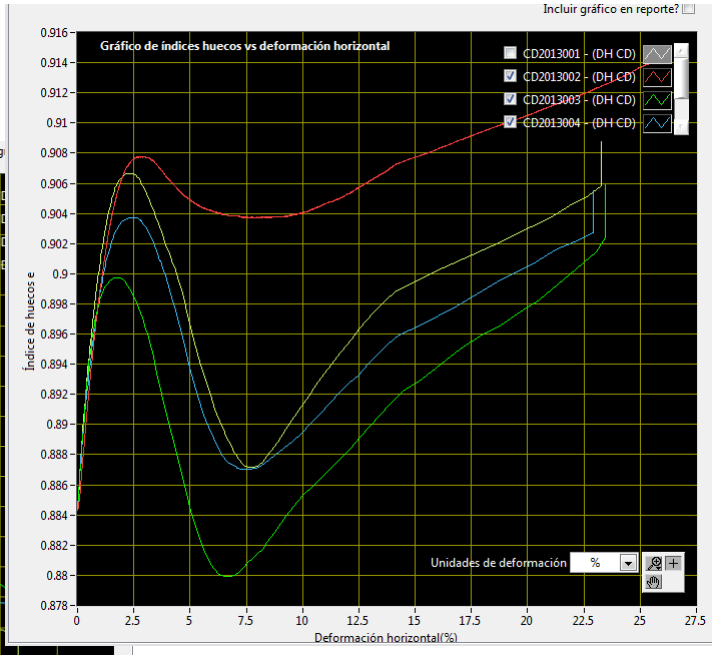
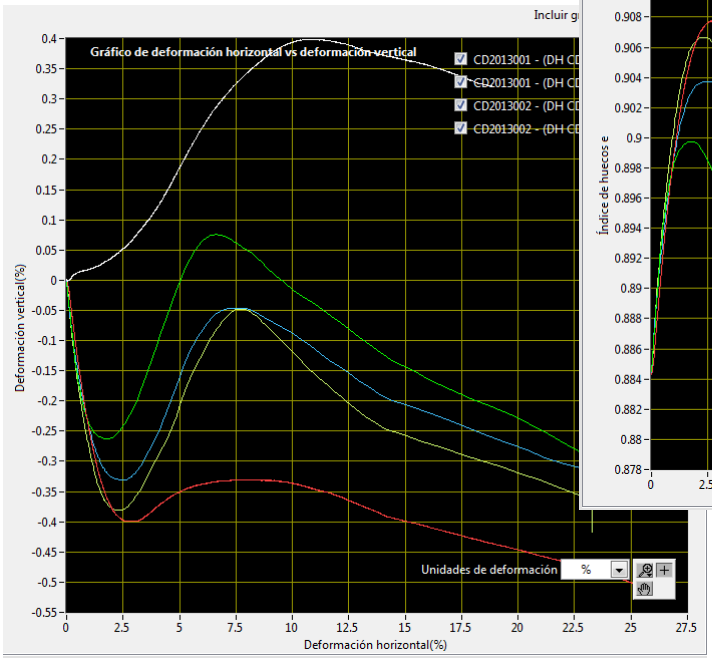
EDS software allows you to:

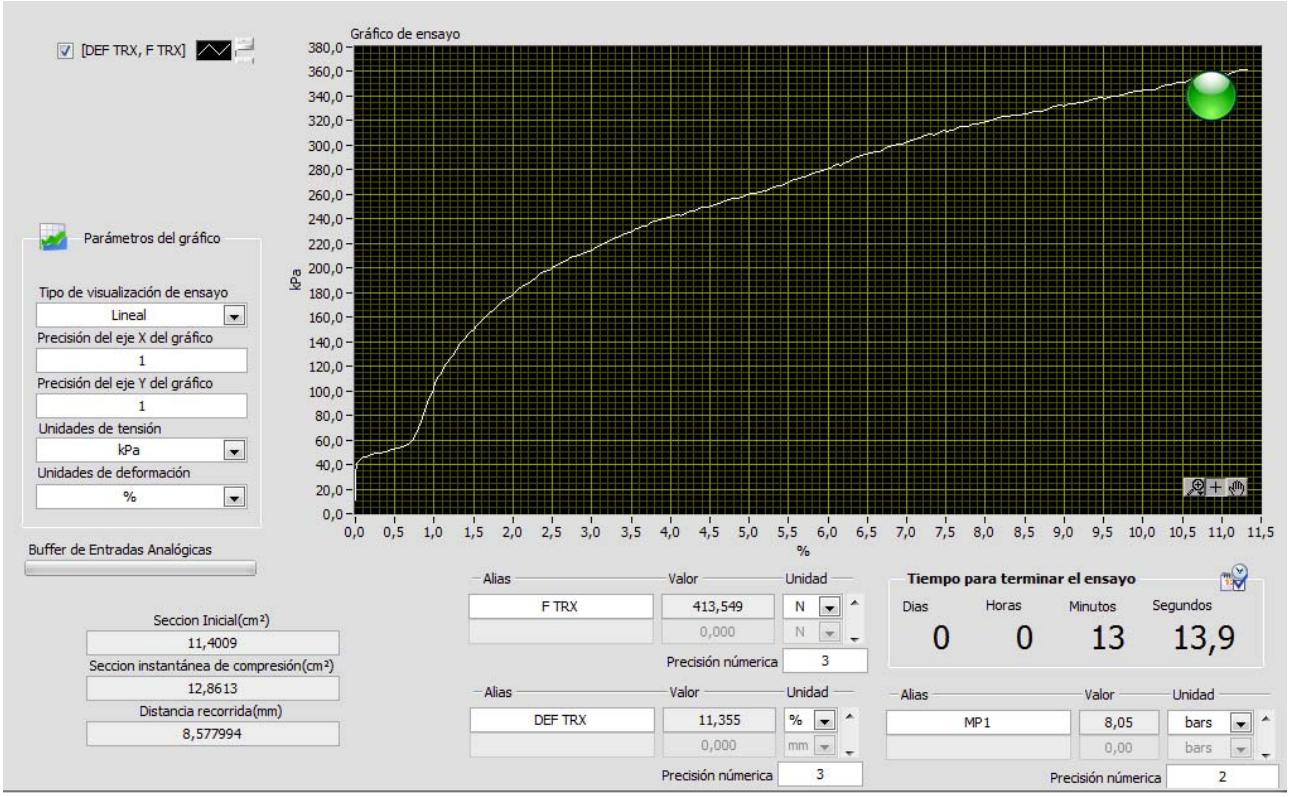
- View test performance on the PC screen in real time.
- Analyze test results with post analysis software.
- Directly print reports with Word or export them to Excel
- Software allows you to pause and resume a test or to easily carry on with it after a power cut.
- The system displays total test duration and remaining time to completion.
- If desired, the system will automatically finish test.
- With a single PC, you will be able to control as many shear test systems as you wish. Software will control all the devices connected to the pc in an independent, automatic and simultaneous way.





EDS SOFTWARE AND PACK OF TRIAXIAL TESTS

Multi-task control and data acquisition. You will be able to, for example, carry out a triaxial test and saturation at the same time, or both quick triaxial and a permeability tests.



DURING DATA ACQUISITION

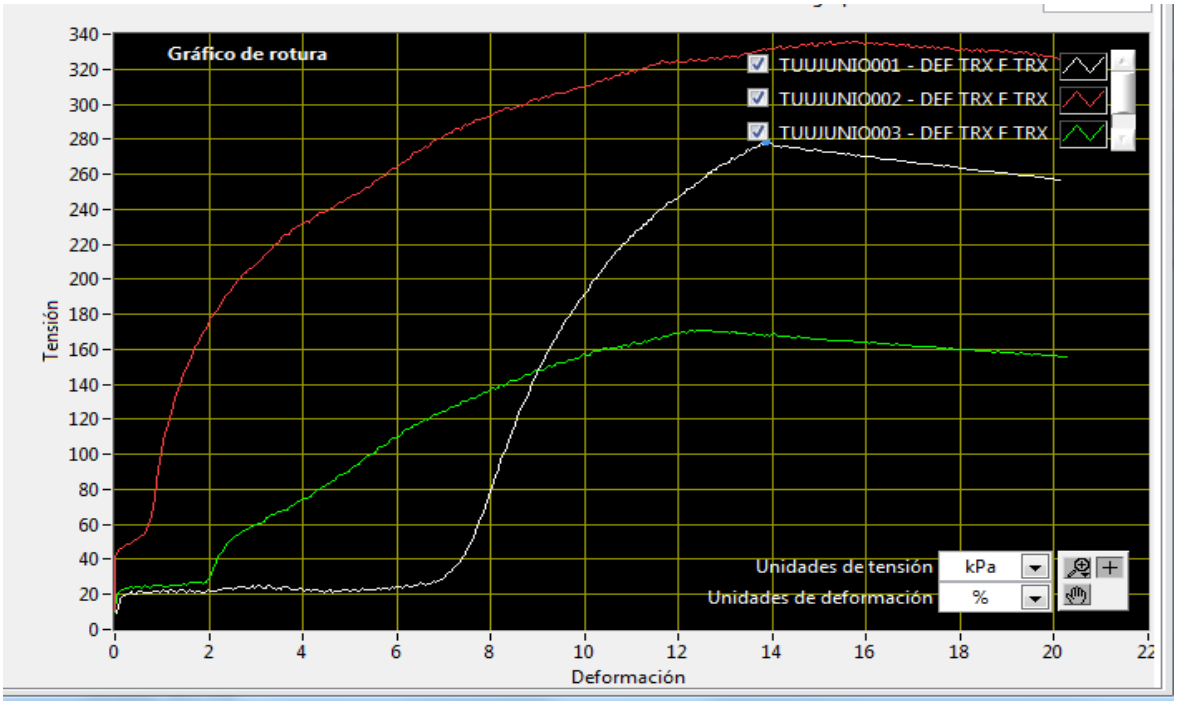
Once the sample is in place and the test conditions are configured, the system will entirely perform the desired test (triaxial, consolidation, saturation or permeability) from beginning to the end. The triaxial system is controlled by our leading-edge EDS software that automates permeability, saturation, consolidation (isotropic and anisotropic) and the triaxial test itself.

The system is a compact and complete unit containing everything required to perform fully automated test. Independent PID controls are used to accurately apply velocity and / or pressure.

The software application will allow you to open several windows at the same time displaying the different tests that are being carried out at that time.

Real time graphs with acquired data.

You will be able to activate or deactivate the sensors display without data loss.
You will be able to change graph units, for example: display values in bars, kg/cm2 or KPa, etc.



Likewise, it is possible to choose between linear or logarithmic time scales.
Graphs have an auto function that adjusts it to its real size. It is possible to zoon and enlarge areas of interest or change the way in which data are displayed, toggle between dots and lines, view minimum and maximum values, etc.

Virtual display with elapsed and remaining time.
Even configuration allowing the user to stop test accelerate data acquisition, activate alarms, etc.

Software makes it possible to define values in order to finish test depending on force, strain, stoke ,pressure, volume, etc.