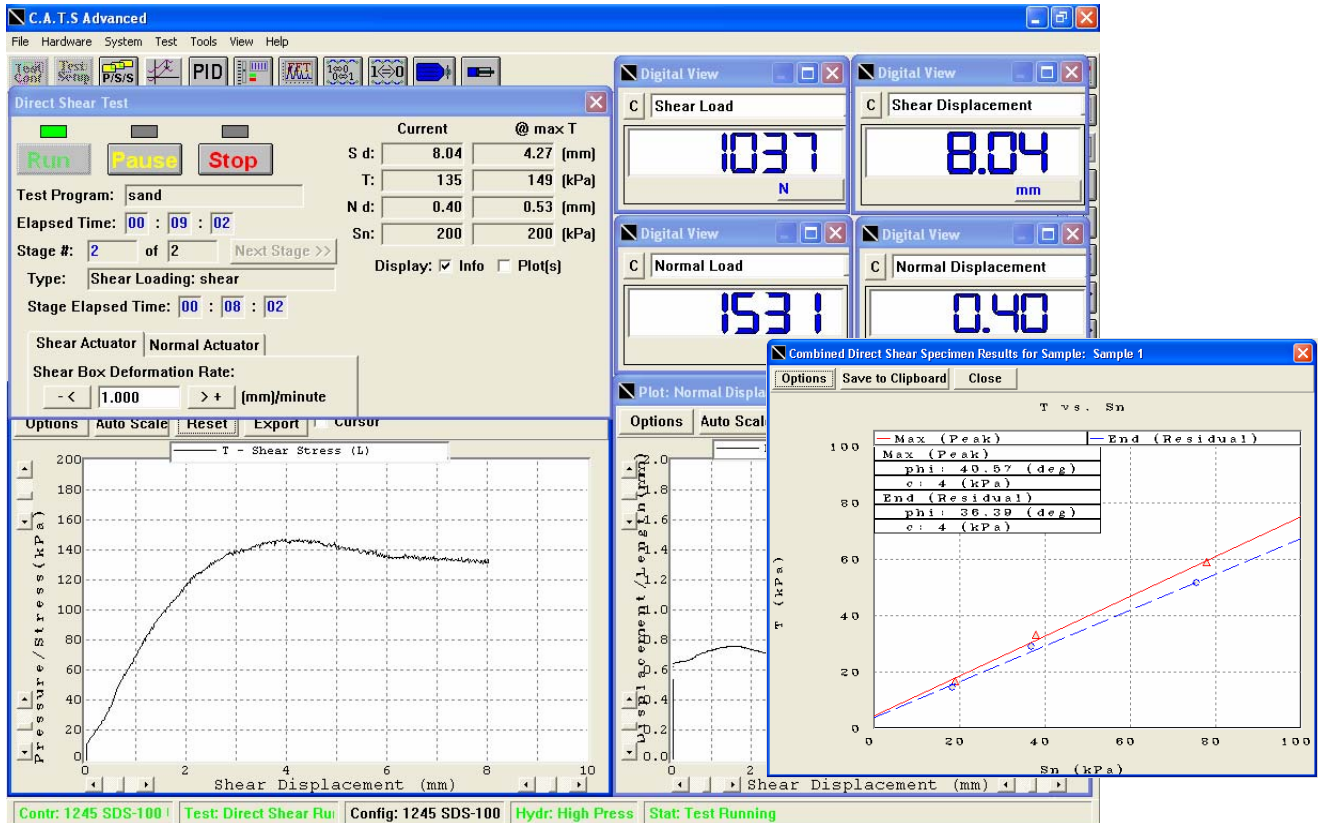


Direct Shear Software Module (CATS-DSH)



- Complete automatic test setup including Multi-Stage procedures
- Modification of stress or deformation rates during testing
- Automatic real-time specimen area corrections
- Easy to setup and conduct direct shear tests
- Automatic calculation of Friction Angle and Cohesion Intercept for peak and residual values
- Export data to Excel™ or other Windows™ programs
- Compatible with most soil & rock direct shear test systems

DESCRIPTION

The new GCTS DSH software is part of the CATS 32 bit Windows® software, which coupled with our new SCON electronics, is the most advanced Geotechnical software available today. This software has simplified the operation of direct shear systems allowing the user to directly program test calculated parameters in the units of interest based on the specimen dimensions. These parameters are calculated in real time and are available for display, graph and/or control. The test parameters include σ_n - Normal Stress, τ - Shear Stress, and A_c - Corrected Area. The software is able to handle cylindrical specimens with circular, rectangular or elliptical cross-sections. The software can

also handle square and rectangular as well as irregular (user defined) specimens, and is able to keep track of the specimen area changes automatically.

The Consolidation stage allows the user to consolidate a specimen. The Shear Loading stage is easy to setup and allows the user to perform shear loading on the specimen while allowing the user to change the stress and/or deformation rates for all of the controlled axis (Shear and Normal axis) during testing. The user can perform Normal Stiffness Controlled test with this stage, either keeping the normal stiffness constant or making it a function. If none of these stages fit the users need, the Universal stage of the DSH module of the CATS software allows the user to establish a custom test procedure. Direct Shear Multi-Stage test programs can be easily defined and automatically executed.

After testing is done, the DSH module allows the user to calculate the Friction Angle and Cohesion Intercept for user selected samples. The software calculates and graphs both, the peak and residual friction angles and cohesion intercepts.

The GCTS Direct Shear testing systems have been designed to take full advantage of our new software and electronics so that all test stages can be automatically performed from beginning to end with minimal user intervention.

For the full specifications regarding the DSH software, please see the Direct Shear brochure.