Data acquisition can also be done automatically via an electronic control unit, and the stratigraphic columns' export is compatible with other GeoStru applications.

The stratigraphic interpretation can be carried out at the user's choice, automatically or customized, based on the user's experience.

The layers can also be inserted with a simple mouse click, and their graphics can be chosen from a lateral database that the user can customize by adding their own bitmaps to existing ones.

The application allows the insertion of the water table as well as the possible verification of soil liquefaction and the calculation of parameters of shallow and deep foundations (bearing capacity).

NEW VERSION IMPLEMENTATIONS
Processing of the characteristic geotechnical parameters with a double system:
1. On instrumental readings with normal statistical distribution;
2. On geotechnical parameters using the new CVSoil software.
Display of the tests performed on a geographical map.

INSTRUMENTS
A database of the more common instruments in use is included:

DEEP DRILL, CPT SUNDA DOLMEN ELECTRONIC, GOUDA, PAGANI, Dynastar Tecnotest, WISSA, V.D. BERG (CPT HYSON 200 kn VAN DEN BERG, CPT HYSON 100 kN VAN DEN BERG, CPT HYSON 100 kN VAN DEN BERG, CPT MINI CRAWLER 100 kN VAN DEN BERG, CPT MIDI CRAWLER VAN DEN BERG), FUGRO F5CW/V, TECNO PENTA , Piezocones, Seismic module for S-CPTu tests.
Nevertheless, new instruments can be added and existing ones can be modified or deleted.

TESTS MANAGEMENT
Static Probing allows simple and immediate management of the tests carried out on site: it is possible to insert new tests at any point, assigning the test date, the X and Y position, the Z and the investigated depth, and the water table depth. For each site, it is possible to archive an indefinite number of tests and, for each test, perform the processing with the different correlations proposed. Each test will be easily identifiable on the screen thanks to the legend and the display of the tip and side resistance charts.

**DATA INPUT AND LAYER MANAGEMENT**
Diagrams of tip and side resistance develop progressively in response to user entry of tip and side resistance readings. Data input may also occur from the electronic data collection device on the instrument.

STRATIGRAPHY MANAGEMENT (Classification of Soils)
Stratigraphy can be produced automatically according to the lithologic interpretations of classical authors:

- Begemann (1965);
- Schmertmann (1969-1978);
- Searle (1979);

- Douglas & Olsen (1981);
- **Robertson (1986,1990) (A, B, SBT).**
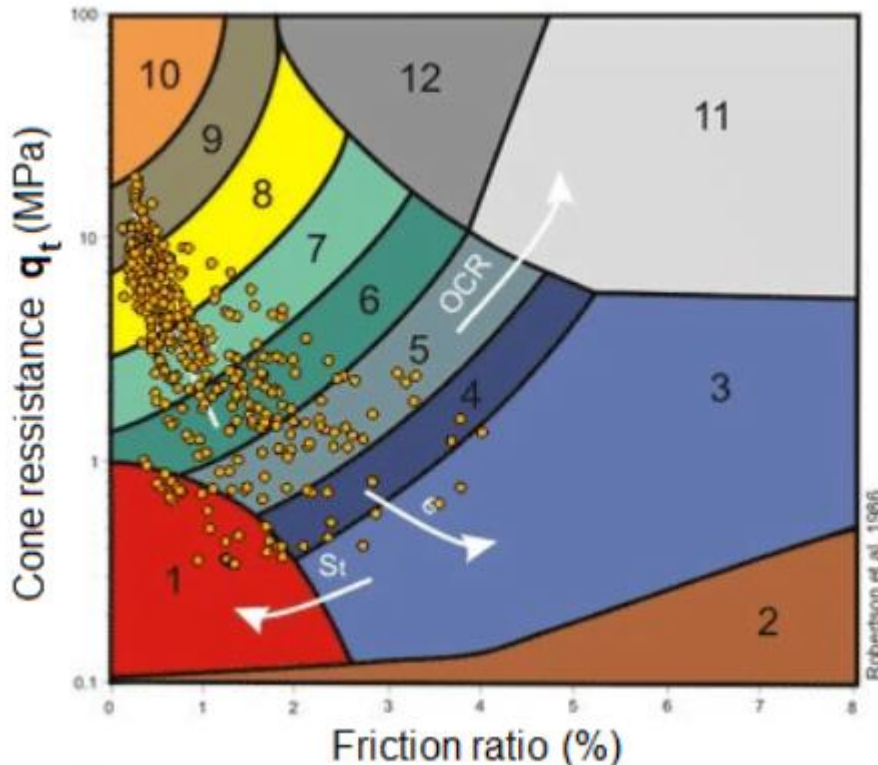
According to more recent authoritative ones in the field of research, or according to personal criteria acquired by the user as the fruit of experience.

EXPORT RESULTS

The results of the processing are exported in tabular and graphic form. For each test, tables are created in which the results of the elaborations chosen by the user are reported, preceded by the identification data of the test (order number, date, etc.) and by the characteristics of the instrument used, as well as the data relating to the construction site (project title, location, technician, etc.). Tables can be associated with charts. For graphic completeness, it will be possible to build the stratigraphic column corresponding to each test.

The following geotechnical values are calculated:

- The angle of friction;
- Volume weight;
- Total and effective lithostatic load on the average layer level;
- Relative density Dr;
- Compaction grade;
- Average Nspt value;
- Shear stress-strain modulus;
- Undrained cohesion;
- Vertical permeability;
- Lateral pressure – Ko Coeff.;

- OCR Over consolidation Ratio;
- Compression index Cc;
- Coefficient of consolidation Cv;
- Compressibility factor on the load graph Cm;
- Average Compressibility factor on the load graph Crm;
- Confined consolidation (edometric) modulus compressibility;
- Young's modulus (E25 – E50);
- Undrained Stress-strain modulus Eu for cohesive soils;
- Cohesion and drained friction for cohesive terrains (Erminier's method);
- Liquefaction.