CPT Equipment

The Cone Penetrometer Technology (CPT) provides cost-effective, real-time data for use in the characterization of the subsurface. The cone penetrometer consists of a steel cone that is hydraulically pushed into the ground while in situ measurements are continuously collected and transported to the surface for data interpretation and visualization.


CPT equipment (Geomil, Nederland, photo in Romania)

The electric cones can measure the cone resistance (q_c) – 100KN, the local sleeve friction (f_s) – 22.5kN and the inclination (i) - 25^0, and the pore pressure (u) 0.5 – 20MPa.

Compression type cones with:

- $10cm^2$ tip base surface area dimension
- 60^0 nose angle
- $150cm^2$ friction jacket surface

The cones are equipped with tempered high quality steel parts and have state of the art load cells and electronic circuit boards. The complete product range complies with the ISSMCE and most other international standards.

The complete electrical CPT system with surface A/D conversion comprises:

- Electric cone,
- Pushing clamp,
- Data acquisition system (8 analogue and 4 digital channels) for A/D conversion and automatic recording,
- PC-technology based computer (laptop or industrial computer) for automatic recording of the CPT data,
- Software.