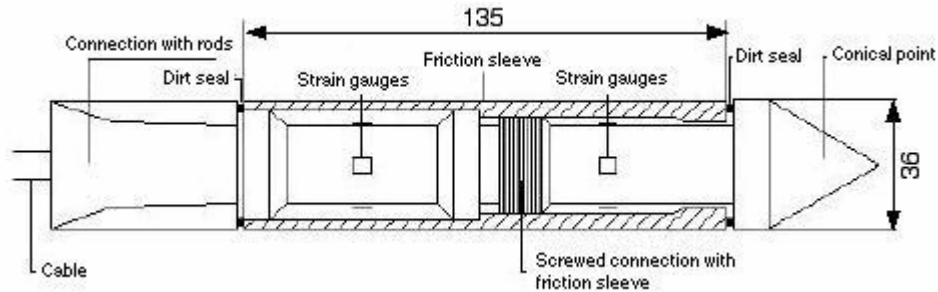


CF Cone



Cone penetration test

The CPT is performed with a cylindrical penetrometer with a conical tip (cone) penetrating into the ground at a constant rate of penetration. During the penetration, the forces on the cone and the friction sleeve are measured. The measurements are carried out using electronic transfer and data logging, with a measurement frequency that can secure detailed information about the soil conditions. The figure below shows an electrical friction cone with cut-away friction sleeve.

Test results

The results from a cone penetration test can in principle be used to evaluate:

- stratification
- soil type
- soil density and in situ stress conditions
- shear strength parameters

The results from cone penetration tests may also be used, directly, for design of piled foundations in sand and gravel. Indirectly it can be used (shear strength) for piles in clay.

The test results are presented as shown in the figure below (for further information see the report tutorial on our website www.lankelma.com):

CPT plots (for further information see the report tutorial on our website www.lankelma.com)

