

Solidly-based innovation

PANDA[®] 2

- Variable energy light weight dynamic cone penetrometer
- Compaction control and soil investigation
- System devised and developed by SOL SOLUTION



NF P 94-105 standard

Dimensions (in cm): L 62 x W 50 x H 23 Weight: 21 kg



Soil investigation

- Soil studies (buildings, houses, pylons, stands)
- Preliminary investigations (roads, pipes,...)
- Diagnosis and assessments (voids, disorders, ...)
- Investigation on sites with remote or restricted access (slopes, basements, mountains, confined sites)
- Horizontal or sloping soundings
- Correlation with other investigations techniques
- Reproducibility of soundings (results)

PANDA® WIN software used for soil investigation



- Customizable geological cross-section
- Elevation
- GPS connection available
- Water level can be entered
- Various scales and measurement units (depth, pressure, linear, log....)



Sloping soundings





Compaction control

- PANDA® 2 complies with the NF P 94-105 French Standard for quality compaction control (dynamic cone penetrometer procedure)
- PANDA® 2 complies with sanitation regulations (Fascicule 70, COFRAC, Water Agencies....)
- Complete layer's thickness monitoring
- Compaction homogeneity control
- Trench compaction control (narrows, sewerage...)
- Compaction control of all types of embankments (roads, earthworks, dams, dykes...)
- Full height control in one single operation

PANDA® WIN software used for compaction control



The penetrograms obtained (cone resistance according to depth) can be compared to a standardized norm.

France: GTR classification and Q2, Q3, Q4, Q5 quality compaction levels.

International: different soil classifications are available (USCS, AASHTO, DIN 1896, PG3,...) and choice amongst various percentages of the Standard or Modified Optimum Proctor.

Anomalies calculation is automatically done by the PANDA® WIN software according to the NF P 94-104 French standard.

All data (reference and refusal curves and anomalies calculation) are directly accessible and viewable in situ on the Dialog Terminal screen.



Normalized hammer

PANDA® 2 principle

The test consists in manually driving a cone down into the soil to the desired depth.

For each blow, PANDA® measures the driving variable energy and the depth and calculates instantly the soil resistance q_d.

The penetrograms can be viewed in-situ on the Dialog Terminal screen; the data are then transferred and processed thanks to the PANDA[®] WIN software. Anvil with gages bridge (measure of the driving energy)

Option: Mechanical rod extractor



Option: Automatic hammering machine

Central acquisition unit CAU (measure of the driving depth)

Dialog terminal DT (calculation of the soil resistance)



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