

Pile load tests are generally performed on test piles ("load-deformation test") or works piles ("proof test") to determine the performance and evaluate the capacities of foundations.

PILE LOAD TESTS



I&C Italia can provide vertical or horizontal loading tests, compression and tension load tests for different type of foundations:

- large diameter piles
- micropiles
- instrumented piles

Our services are:

- ⇒ piles instrumentation (supply and installation of vibrating wire strain gauges, tell tales, borehole rod extensometers, pressure cells...)
- ⇒ technical assistance for reaction system installation
- ⇒ installation of measuring apparatus and load application system
- ⇒ data acquisition and report preparation





Displacement transducers



Hydraulic cylinder



Data logger

Multichannel datalogger, 15 bit**Hydraulic cylinders F.P.T**

Capacity up to 1100 ton

Stroke 250 mm

Hydraulic pump

Manual/Electric

Max. pressure 700 MPa

Pressure transducers

Range 0-600 bar

Accuracy $\pm 0.5\%$ F.S.**Electrical displacement transducers**

Linear potentiometer type

Range 0-100 mm

Accuracy $\pm 0.3\%$ F.S.**Dial gauges**

Range 0-50 mm

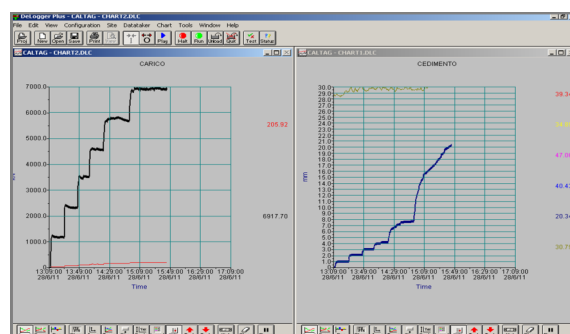
Accuracy $\pm 0.2\%$ F.S.

DATA PROCESSING

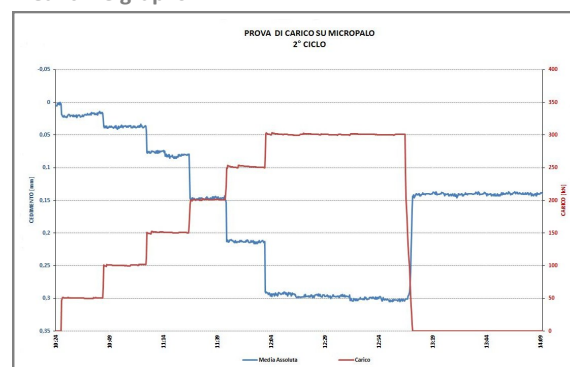
Data can be simultaneously displayed during the test: load and individual displacement in real time, average settlement, etc. Afterwards a technical report of results including data tables and graphs is produced.



Data acquisition system



Real-time graphs



Applied load and settlement versus time

Ingegneria & Controlli Italia S.r.l.

Sede legale
Sedi operative

- TORINO - Via Donati, 14
- TORINO
Interporto Sito km 20+500 Tang. Sud - Prima Strada, 5 - 10043 Orbassano - Tel. 011 3975311 - Fax 011 3493790
- BERGAMO
Via Gramsci, 5 - 24042 Capriate San Gervasio - Tel. 02 92864185 - Fax 02 92864187
- TERAMO
Viale Crispi, 17 - 64100 Teramo - Tel. 0861 411432 - Fax 0861 411442
- ROMA
Via Piave, 15 - 00187 Roma - Tel. 345 53 85 753